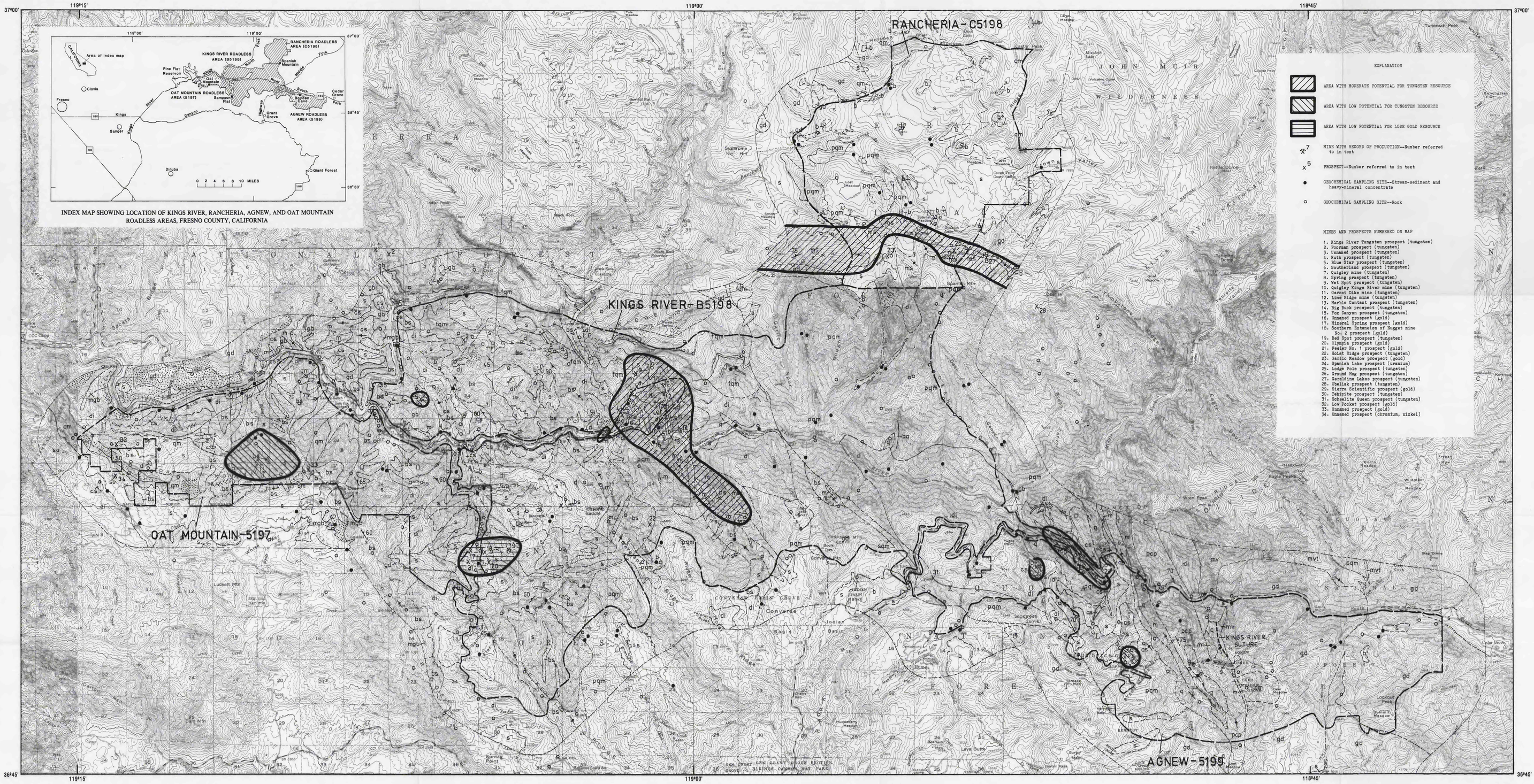
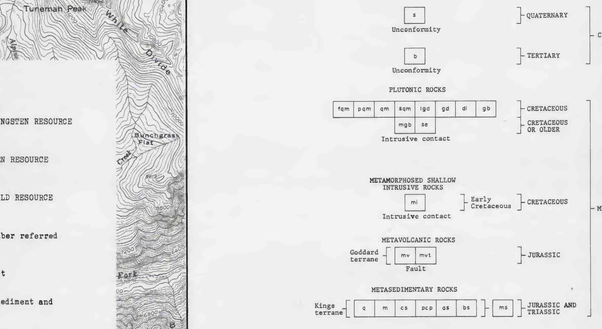


INDEX MAP SHOWING LOCATION OF KINGS RIVER, RANCHERIA, AGNEW, AND OAT MOUNTAIN ROADLESS AREAS, FRESNO COUNTY, CALIFORNIA

Base from U.S. Geological Survey, 1:62,500
Watts Valley, 1943; Patterson Mountain, Tehipite Dome, 1952;
Marion Peak, 1953

Geology mapped in 1981 and 1982

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

s SURFICIAL DEPOSITS (QUATERNARY)--Alluvium, colluvium, talus, stream gravel and sand, glacial deposits, and thick soil with dense brush cover

b OLIVINE BASALT (TERTIARY)--Trachybasalt, locally with leucite and biotite in groundmass

PLUTONIC ROCKS

fqm FINE-GRAINED QUARTZ MONZONITE (CRETACEOUS)--Biotite-quartz monzonite to alaskite, generally fine grained, with 5 percent or less mafic minerals. Locally contains white mica and garnet. Pegmatite dikes locally abundant

pqm PORPHYRITIC QUARTZ MONZONITE (CRETACEOUS)--Biotite-quartz monzonite with abundant potassium feldspar phenocrysts and sparse hornblende. Generally medium grained. Local areas with sparse white mica and garnet

qm QUARTZ MONZONITE (CRETACEOUS)--Biotite-quartz monzonite with sparse hornblende. Generally medium grained, equigranular

sqm SCHISTOSE QUARTZ MONZONITE (CRETACEOUS)--Schistose biotite-quartz monzonite to alaskite, generally fine to medium grained, with 5 percent or less mafic minerals. Abundant crushed and fractured quartz and feldspar augen, with long dimensions parallel to aligned biotite. Locally contains small to large inclusions of calcareous and quartzose metasedimentary rocks

lgd LEUCOGRANODIORITE (CRETACEOUS)--Light-colored biotite-hornblende granodiorite, generally with 4 to 8 percent mafic minerals. Medium grained, equigranular. Locally grades into leucodiorite

gd GRANODIORITE (CRETACEOUS)--Hornblende-biotite granodiorite, generally with 12 to 18 percent mafic minerals. Medium grained, equigranular

di QUARTZ DIORITE (CRETACEOUS)--Hornblende-biotite quartz diorite, generally with 18 percent or more mafic minerals. Medium grained, equigranular. Locally grades into granodiorite

gb GABBRO (CRETACEOUS)--Hornblende-biotite gabbro, generally 50 percent or more mafic minerals. Fine to medium grained, equigranular. Local relict clinopyroxene. Locally grades into metagabbro or quartz diorite

mgb METAGABBRO (CRETACEOUS OR OLDER)--Hornblende metagabbro, schistose, fine to medium grained, generally 22 percent or more mafic minerals. Locally grades into amphibolite or hornblende gabbro

ss SERPENTINITE (CRETACEOUS OR OLDER)--Chiefly moderately to completely serpentinized ultramafic rock

METAMORPHOSED SHALLOW-INTRUSIVE ROCKS

mi METAMORPHOSED INTRUSIVE ROCKS (CRETACEOUS)--Metamorphosed dacite porphyry with minor metamorphosed rhyolite dikes and sills. Fine-grained schistose matrix with abundant plagioclase microcrysts. Intrudes metasedimentary rocks of the Kings terrane

METAVOLCANIC ROCKS

mv METAVOLCANIC ROCKS, UNDIVIDED (JURASSIC)--Chiefly metarhyolite, metarhyodacite, and metadacite tuff with metamorphosed interbedded lava flows, volcanic breccia, volcanic graywacke, and sparse calcareous metasedimentary rocks. Fine-grained schistose matrix with locally abundant medium- to coarse-grained relict volcanic textures and structures. Medium- to thick-bedded. Cut locally by dikes of metarhyolite

mvt METAVOLCANIC TUFF (JURASSIC)--Chiefly hypersthene bearing metadacite tuff. Fine-grained schistose matrix with microagen of fractured and crushed hypersthene representing relict microphenocrysts. Medium- to thick-bedded, locally massive

METASEDIMENTARY ROCKS

q QUARTZITE (JURASSIC AND TRIASSIC)--Metamorphosed quartzite and arkosic quartzite, schistose, with locally abundant moderately appressed folds. Generally medium grained, equigranular, light-colored, medium- to thick-layered. Locally abundant shears. Locally crushed