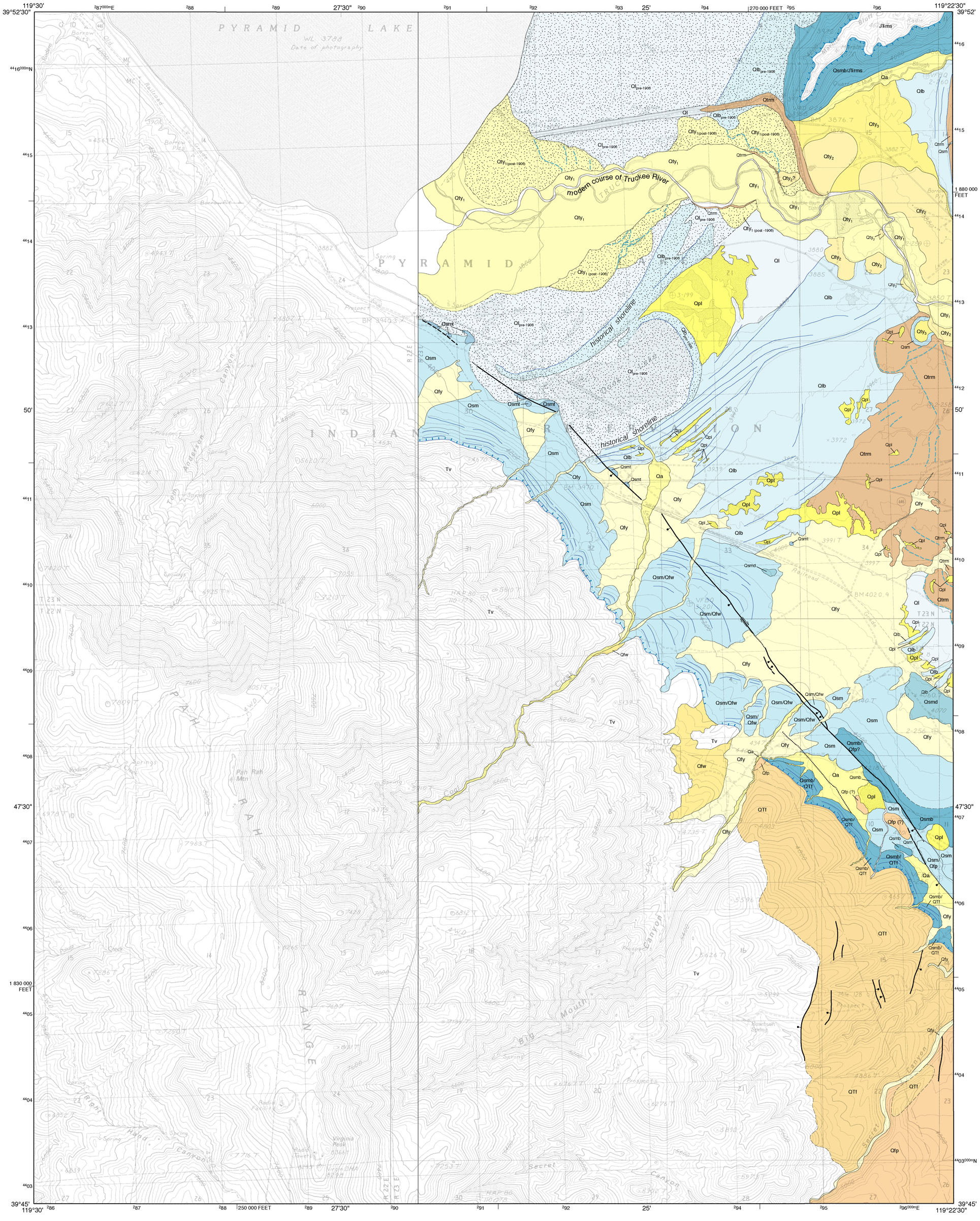
Nevada Bureau of Mines and Geology

Prepared as part of the STATEMAP component of the National Cooperative Geologic Mapping Program in cooperation with the U.S. Geological Survey
Produced in collaboration with the Pyramid Lake Paiute Tribe



FLUVIAL DEPOSITS OF THE TRUCKEE RIVER

Modern course of the Truckee River mapped from June 1994 imagery.

Young terrace deposits of the Truckee River, from youngest to oldest in ascending order above modern river:

- $Qty_{1\ (post\text{-}1906)}$: terraces formed after the historical lowering of lake level in 1906.
- Qty_1 Historically active channels and floodplains.
- Qty_2 Recently abandoned channel and floodplain deposits with remnant channel morphology.
- Qty_3 Abandoned channel and floodplain deposits with subdued, remnant channel morphology. Sand; sandy, pebble to cobble gravel; silt; and sandy mud.
- Qtrm Meander scroll belt deposits of the Truckee River. Sand; sandy, pebble gravel. Consists of several broad, inset, meander platforms formed as the river progressively incised in response to declines in the elevation of Pyramid Lake. Meander scars are visible as subdued, sinuous to arcuate terrace scarps.

ALLUVIAL (SUBAERIAL) DEPOSITS

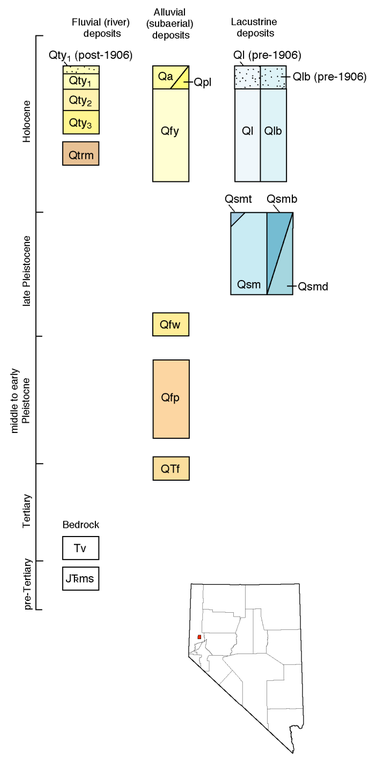
- Qa Recent alluvial deposits in intermittent washes and ephemeral stream channels; sandy, silty, pebble to cobble gravel and gravelly sand. Includes historical river deposits in Mud Lake slough; silt and sandy mud.
- Qpl Playette deposits; silt and mud occurring in small closed depressions on former river floodplain and lake deposits.
- Qfy Young alluvial fan deposits of post-Sehoo age. Sandy, silty, pebble to cobble gravel.
- Qfw Alluvial fan deposits of pre-Sehoo age equivalent to the Wyemaha Formation on adjacent quadrangles. Sandy, silty, pebble to cobble gravel forming large portions of the Pah Rah Mountain piedmont prior to the last rise of Lake Lahontan during the Sehoo lacustral cycle. Shorelines associated with this lake phase are commonly found preserved on Qfw alluvial fans.
- Qfp Alluvial fan deposits of pre-Lake Lahontan age equivalent to the Paiute Formation on adjacent quadrangles. Sandy, silty, pebble to cobble gravel forming large portions of the Pah Rah Mountain piedmont prior to the rise of Lake Lahontan during the Eetza lacustral cycle.
- QTf Alluvial fan deposits forming the highest recognizable alluvial surfaces along the Pah Rah Mountain range front. Sandy, silty, pebble to cobble gravel to gravelly, clayey mud.

LACUSTRINE DEPOSITS

- $Ql_{pre\text{-}1906}$ and $Qlb_{pre\text{-}1906}$: Historical lake deposits and beach berms exposed after lake level recession beginning ~1906.
- Ql Lake deposits of post-Sehoo highstand age (<13 ka). Silt, silty sand, and mud associated with recessional Sehoo lakes and/or subsequent lake rises. Incised by Qtrm meander scrolls hydraulically graded to fluctuating lake levels.
- Qlb Shoreline beach berms associated with Ql lake levels; coarse sand to small pebble gravel.
- Qsm Lake Lahontan deposits associated with the middle, dendritic member of the Sehoo Formation. Thin to thick bedded, silt, silty sand, mud and clay associated with the Sehoo lacustral cycle. Lower member of the Sehoo formation is not exposed in this quadrangle.
- Qsmt Colonies of large (1-3 m) cellular and coralline dendritic tufa heads forming prominent mounds and knobs.
- Qsmd Tufa-bearing deposits of the dendritic member; *in situ* colonies of large (0.5-1 m diameter) tufa and tufa-cemented beach gravel.
- Qsmb Shoreline beach berm deposits associated with the high-stand and recessional middle Sehoo lake levels; sandy, pebble to cobble gravel.

BEDROCK

- Tv Tertiary volcanic rocks, undivided (unmapped).
- JTRms Mesozoic metamorphic rocks (recrystallized limestones and dolomites) at Marble Bluff.



Contact Dashed where approximately located.

Fault Dashed where approximately located, dotted where concealed; ball on downthrown side. Arrows show relative direction of movement.

Middle Sehoo lake (13 ka) highstand shoreline

Intermediate shoreline

River paleomeander trace

PRELIMINARY GEOLOGIC MAP OF THE EAST HALF OF THE PAH RAH MOUNTAIN QUADRANGLE, WASHOE COUNTY, NEVADA

John W. Bell, P. Kyle House, and Richard W. Briggs
2004

Scale 1:24,000

0 0.5 1 kilometer

0 0.5 1 mile

0 1000 2000 3000 4000 5000 feet

CONTOUR INTERVAL 10 METERS

Base map:
U.S. Geological Survey Pah Rah Mountain 7.5' Quadrangle, 1985
Universal Transverse Mercator projection,
1927 North American Datum

Field work 2003 - 2004.

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DRAFT

Preliminary geologic map.
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Will be revised before publication.

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