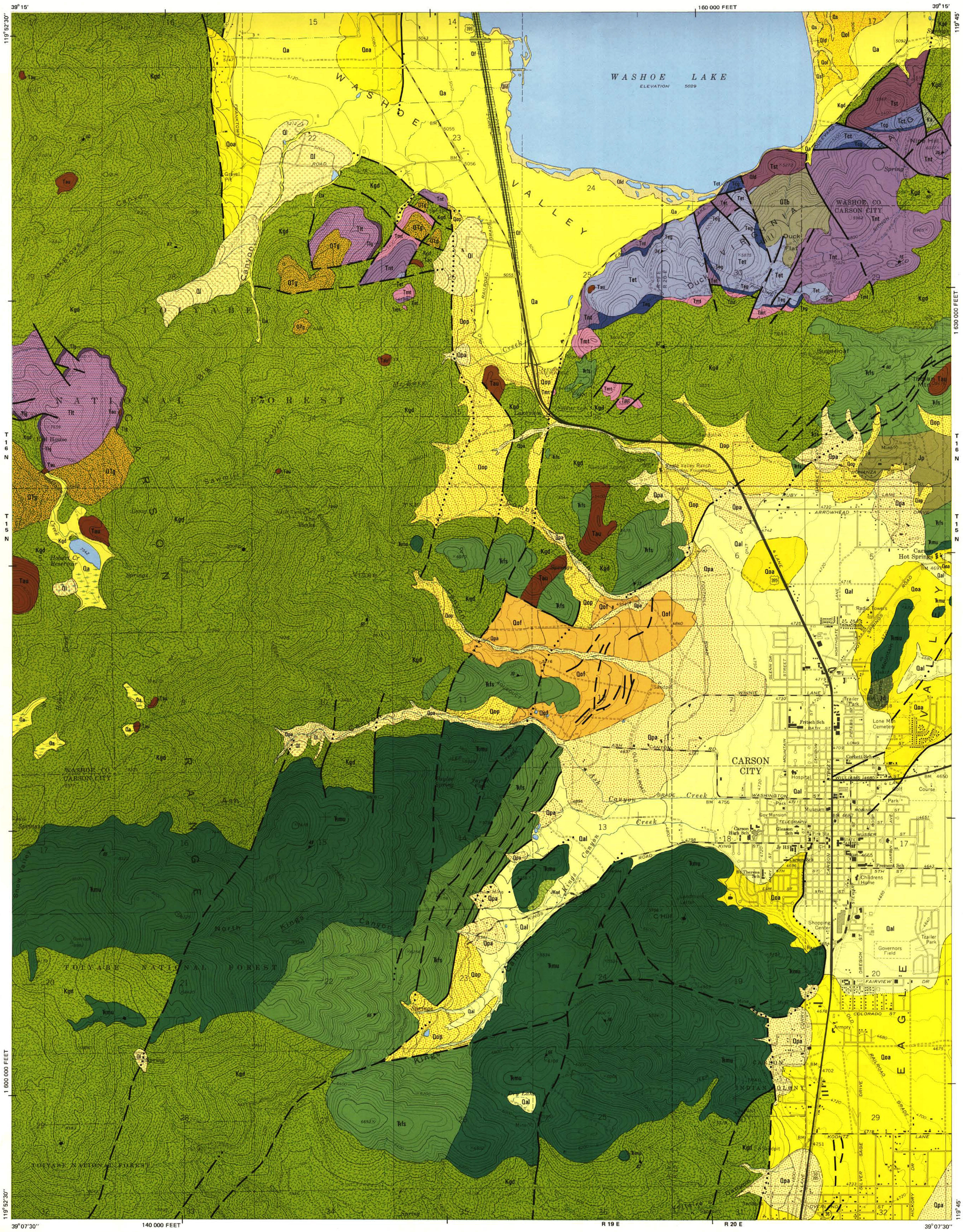
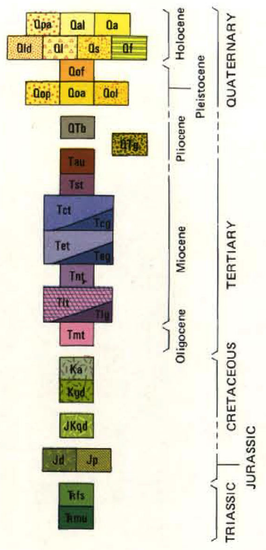
ENVIRONMENTAL SERIES ✧ CARSON CITY AREA

CARSON CITY FOLIO ✧ GEOLOGIC MAP





Qpa **Pediment and alluvial-fan deposits.** Grayish-orange, tan and gray-brown granular muddy coarse sand and sandy gravel in small fans, bajadas, and minor pediment veneers.

Qal **Alluvial-plain deposits of Eagle Valley.** Yellowish-brown to gray, unbedded to poorly bedded, poorly to moderately sorted, fine silty sand, sandy silt, granular muddy coarse sand, and minor sandy gravel. Underlies broad surfaces of low gradient.

Qa **Alluvial-plain deposits of Washoe Valley.** Tan to orange-brown, moderately to poorly bedded, angular to subrounded, fine to coarse granodioritic sand. Underlies gentle slopes and broad areas of low gradient. Fills closed depressions in highland areas. Unweathered.

Qld **Lake deposits.** Tan to yellowish-brown, well-bedded silt and sand; restricted to the margins of Washoe Lake.

Ql **Landslide deposits.** Unsorted fine to coarse debris. Predominantly deeply weathered granodiorite.

Qs **Sand dunes.** White to light-gray, well-sorted, well-rounded quartz and feldspar grains with minor shell fragments. Moderately well developed cross bedding.

Qf **Artificial fill.**

Qof **Older fan deposits of Vicee Canyon.** Medium-brown to light-brown, moderately to poorly sorted sandy large cobble gravel and slightly gravelly medium sand. Weathered. Moderately well-developed soil profile.

Qop **Older pediment gravel.** Grayish-orange to dark yellow-brown small cobble to muddy sandy pebble gravel. Composition similar to nearby bedrock. Deposits slightly eroded, weakly to moderately weathered.

Qoa **Older alluvial-plain deposits.** Moderately sorted, sandy small cobble gravel, slightly gravelly sand and sandy coarse silt. Similar to Qop but finer grained. Weakly to moderately weathered.

Qol **Old lake deposits.** Grayish-brown fine to coarse sand and silt in thin beds. Locally diatomaceous.

QTb **Basaltic andesite flow.** Light greenish gray, sparsely porphyritic, very fine grained, locally flow banded. Orange-red iron-oxide stains on weathered surfaces.

QTg **Pediment gravel.** Yellowish-gray to light-brown bouldery sandy cobble gravel. Most clasts subrounded and consist of all bedrock lithologies.

Tau **Andesite, undifferentiated.** Dark-gray to light-gray flows and intrusives; porphyritic to sparsely porphyritic plagioclase-pyroxene andesite. Some flows contain hornblende phenocrysts up to 1 cm. Weathers gray brown to red brown.

Tst **Santiago Canyon Tuff.** Hornblende-biotite quartz latite crystal-vitric ash-flow tuff. Gray to pale lavender or brownish gray, moderately to strongly welded, and largely devitrified. About 300 m thick.

Tct **Crystal Tuff. Tct:** Pinkish white to light red, weakly welded, devitrified, crystal-vitric rhyolite tuff. Contains chatoyant sanidine. 0-120 m thick. **Tcg:** Underlying bouldery cobble gravel.

Tet **Eureka Canyon Tuff. Tet:** Pale yellowish-white to pale-gray, lavender, and tan rhyolite vitric tuff. Pale yellowish white, devitrified, and weakly welded in most exposures. 0-130 m thick. **Teg:** Underlying interformational bouldery gravel.

Tnt **Nine Hill Tuff.** Pale orange-red, pale-green, and reddish-purple densely welded to stretched, devitrified, very pumiceous vitric tuff. Grades upward into weakly welded to non-welded, pumice-poor vitric tuff. 0-300 m thick.

Tlt **Lenihan Canyon Tuff. Tlt:** Pale-lavender to purplish-tan, moderately to densely welded, devitrified, fine-grained hornblende quartz latite crystal-vitric tuff. 0-300 m thick. **Tlg:** Underlying interformational bouldery gravel.

Tmt **Mickey Pass Tuff.** Tan to reddish-brown, moderately to strongly welded, devitrified biotite quartz latite vitric-crystal tuff. Grades downward into a basal few meters of rhyodacitic crystal-rich virtophyre and upward into pumice and crystal-rich rhyolite. 0-200 m thick.

Ka **Granite aplite.** Yellowish-tan to pinkish-tan, very fine-grained and homogeneous aplite. Occurs locally as veins in Kgd.

Kgd **Hornblende-biotite granodiorite.** Grayish white to gray and greenish gray, medium- to coarse-grained, equigranular to porphyritic, and locally foliated and lineated. Locally grades into quartz monzonite or quartz diorite.

JKqd **Porphyritic quartz diorite.** Grayish-green; plagioclase and hornblende phenocrysts in a fine-grained matrix. Slightly metamorphosed.

Jd **Dacite porphyry.** Pale greenish-gray, fine-grained dacite to quartz latite porphyry. Composed of small euhedral plagioclase phenocrysts set in a fine-grained flinty matrix; small quartz phenocrysts occur locally.

Jp **Phyllite.** Dark gray-brown andalusite phyllite and slate.

Trfs **Felsic schist, undifferentiated.** Gray-white to pale bluish-gray, siliceous, fine-grained, dense and flinty flaser schist and banded flaser gneiss. Rocks in this group represent metamorphosed rhyodacitic/andesitic tuffs, welded tuffs, and breccia.

Trmu **Mafic metavolcanic rocks, undifferentiated.** Grayish-green to greenish-black, fine-grained, sparsely porphyritic, dense and hard metamorphosed mafic andesite flows and volcanic breccia; locally epidote-rich. Includes small, shallow intrusive masses of andesite porphyry and fine-grained diorite.

Contact. Long dashes where approximately located; short dashes where inferred; dotted where concealed.

Fault. Dashed where approximately located; dotted where concealed. Ball on downthrown side.

78 Inclined — Vertical

Foliation. Schistosity in metamorphic rocks; compaction foliation in ash-flow tuffs.

62 Inclined — Vertical

Joints.

Dennis T. Trexler, 1977

Portions modified from Rogers, D. K. (1975) Environmental geology of northern Carson City, Nevada: Univ. of Nevada, Reno, unpub. M.S. thesis and Kirkham, R. M. (1976) Environmental geology of western Carson City, Nevada area: Univ. of Nevada, Reno, unpub. M.S. thesis.

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Scale 1:24,000

0 0.5 1 KILOMETER
0 1000 METERS

0 0.5 1 MILE
0 2000 4000 FEET

CONTOUR INTERVAL 40 FEET
DOTTED LINES ARE 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Topographic base from U. S. Geological Survey Carson City 7½′ quadrangle, 1968

Cartography by Susan L. Nichols

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