

Naturally Occurring Asbestos Hazard

AREAS OF RELATIVE LIKELIHOOD FOR THE PRESENCE OF NOA

The geologic diversity in Placer County characterized by a variety of igneous, metamorphic, and sedimentary rocks, many of which have been faulted or sheared, provides many settings that are favorable for the presence of NOA. Chrysotile asbestos and amphibole asbestos are known to be present in parts of Placer County.

This map divides the county into different areas based on the relative likelihood of encountering NOA in some geologic units. These areas are defined as: least likely, moderately likely, and most likely to contain NOA.

-  Area Least Likely to Contain NOA includes those metamorphic, igneous, and sedimentary rocks that are least likely to contain NOA.
-  Area Moderately Likely to Contain NOA includes those metamorphic and igneous rocks that are moderately likely to contain NOA.
-  Area Most Likely to Contain NOA includes ultramafic rock and serpentine rock (serpentine), and associated soils, which are most likely to contain NOA.
-  Areas of Faulting or Shearing are zones of faulted or sheared rock that may locally increase the likelihood for the presence of NOA where they exist in or adjacent to areas most or moderately likely to contain NOA.
-  Mapped Trace of Fault or Shear Zone may locally increase the likelihood for the presence of NOA in areas least likely to contain NOA.

Area Least Likely to Contain NOA includes one or more of metamorphosed sedimentary and non-mafic volcanic rocks, granite rocks, volcanic rocks, alluvium, and glacial deposits. The presence of NOA in any of these geologic units in Placer County comprised partially or totally of metamorphic rock types, was not indicated in the technical documents reviewed in the CGS map compilation. Small bodies of rock or soil with moderate or higher likelihood for the presence of NOA may exist within some of these areas. However, based on available information, the relative likelihood for NOA in these areas is lower than in those areas identified as most or moderately likely to contain NOA.

Area Moderately Likely to Contain NOA contains one or more of metamorphosed mafic volcanic and mafic intrusive rocks, non-metamorphosed mafic intrusive rocks, and structurally complex groupings of intermixed metamorphic rocks of different origins. The geologic units in Placer County comprised partially or totally of these rock types generally have a lower likelihood for the presence of NOA than areas designated most likely to contain NOA. However, NOA is known to be present in these rock types in Placer and nearby counties -- the most likely settings being in fault zones and shear zones that contain slivers of serpentine or high concentrations of the minerals talc and chlorite. Chrysotile asbestos and amphibole asbestos are known to occur in such environments.

Area Most Likely to Contain NOA includes ultramafic rock and serpentine and their associated soils. Serpentine and partially serpentinized ultramafic rock commonly include chrysotile asbestos, and may also contain amphibole asbestos. The associated "ultramafic soils" or "serpentine soils" may also contain asbestos.

Areas of Faulting or Shearing are linear belts of highly fractured and deformed rocks which are potentially favorable environments for the presence of NOA. Placer County contains many mapped fault and shear zones highlighted by stippling on the map where they overlap areas most or moderately likely to contain NOA due to increased likelihood for the presence of NOA above that of unfaulted or unshattered zones. The widths of the stippled areas shown are not meant to indicate the actual width of a fault or shear zone. The width of a fault zone often varies along its length.

A site-specific investigation is required to determine whether bedrock or soil at a particular location contains naturally occurring asbestos.

USE AND LIMITATIONS OF MAP

This map, NATURALLY OCCURRING ASBESTOS HAZARD IN PLACER COUNTY is a derivative of the California Department of Conservation, California Geological Survey (CGS) 1:100,000-scale map RELATIVE LIKELIHOOD FOR THE PRESENCE OF NATURALLY OCCURRING ASBESTOS IN PLACER COUNTY, CALIFORNIA. The 1:100,000-scale map's sources are identified on the map and in its accompanying report, SPECIAL REPORT 190. Users are encouraged to consult this report for further mapping details.

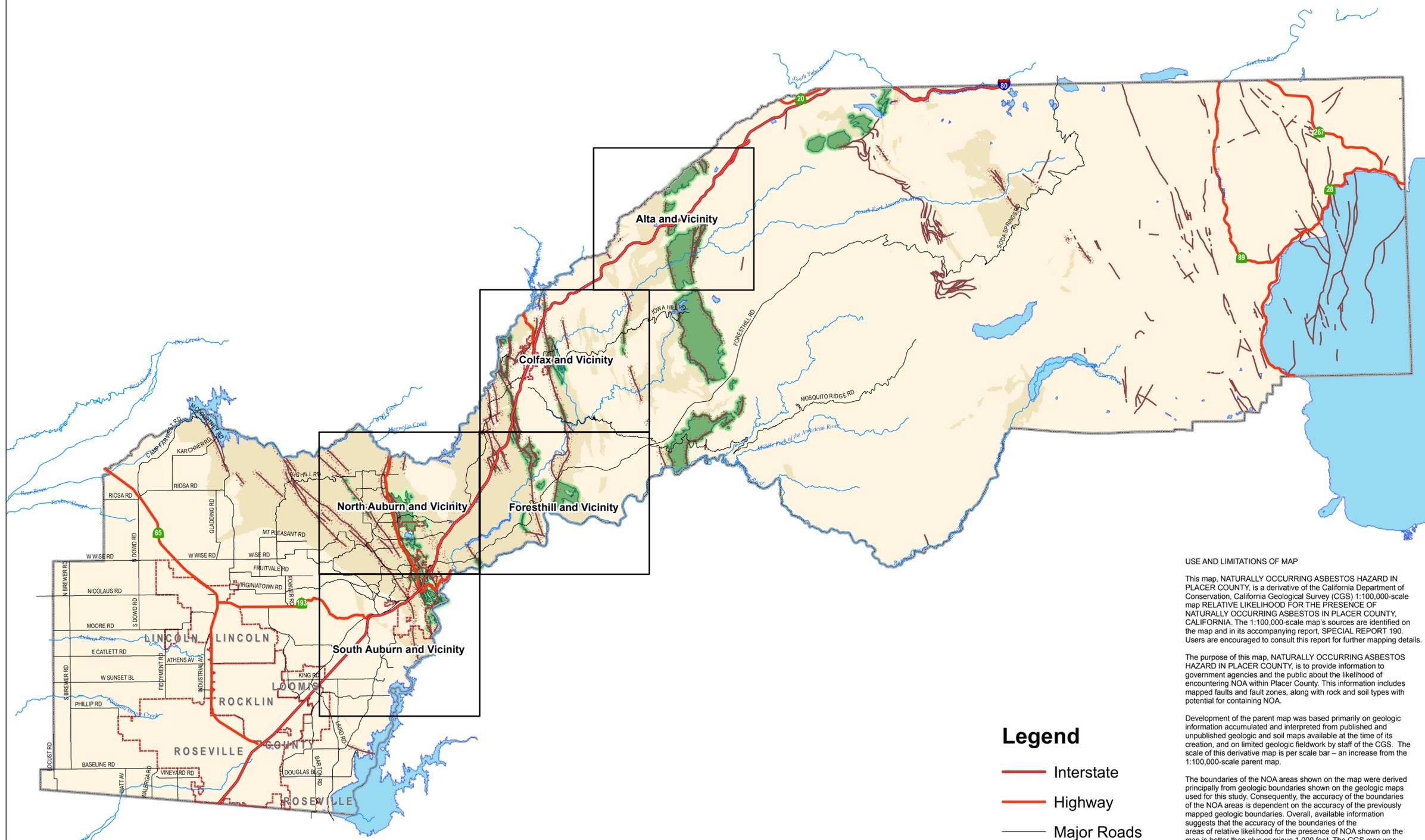
The purpose of this map, NATURALLY OCCURRING ASBESTOS HAZARD IN PLACER COUNTY, is to provide information to government agencies and the public about the likelihood of encountering NOA within Placer County. This information includes mapped faults and fault zones, along with rock and soil types with potential for containing NOA.

Development of the parent map was based primarily on geologic information accumulated and interpreted from published and unpublished geologic and soil maps available at the time of its creation, and on limited geologic fieldwork by staff of the CGS. The scale of this derivative map is per scale bar -- an increase from the 1:100,000-scale parent map.

The boundaries of the NOA areas shown on the map were derived principally from geologic boundaries shown on the geologic maps used for this study. Consequently, the accuracy of the boundaries of the NOA areas is dependent on the accuracy of the previously mapped geologic boundaries. Overall, available information suggests that the accuracy of the boundaries of the areas of relative likelihood for the presence of NOA shown on the map is better than plus or minus 1,000 feet. The CGS map was intended for use and interpretation at 1:100,000-scale and therefore the increase in scale per scale bar may introduce increased boundary inaccuracies. To counter this possibility the boundaries of the "Areas Most Likely to Contain NOA" that are depicted on the derivative map have been provided with a 1,000 foot buffer.

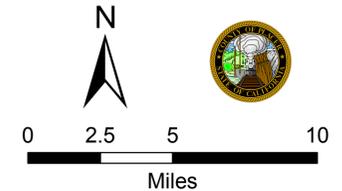
Possibilities exist for the presence of unmapped (previously undiscovered) areas of particular types of rocks, such as serpentine. Possibilities also exist for areas currently mapped as particular rock types to have been misidentified.

A site-specific investigation is required to determine whether bedrock or soil at a particular location contains naturally occurring asbestos.



Legend

-  Interstate
-  Highway
-  Major Roads
-  Major Streams
-  City Limits
-  Placer Boundary
-  Lakes



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