# Gold Maps for Google Earth Pro

WMH Gold Maps for Google Earth Pro are designed to locate areas with high potential for finding placer gold. The following files are included in each state-based package:

- Locations of all mines in the USGS MRDS database that have gold as a primary commodity
- Locations of all PLSS sections that contain active placer mining claims
- Analysis layer that summarizes data for mines and claims by township
- Ranking layer that identifies the top townships by density of placer claims and gold mines

Some state packages will have additional data layers like locations of mining districts.
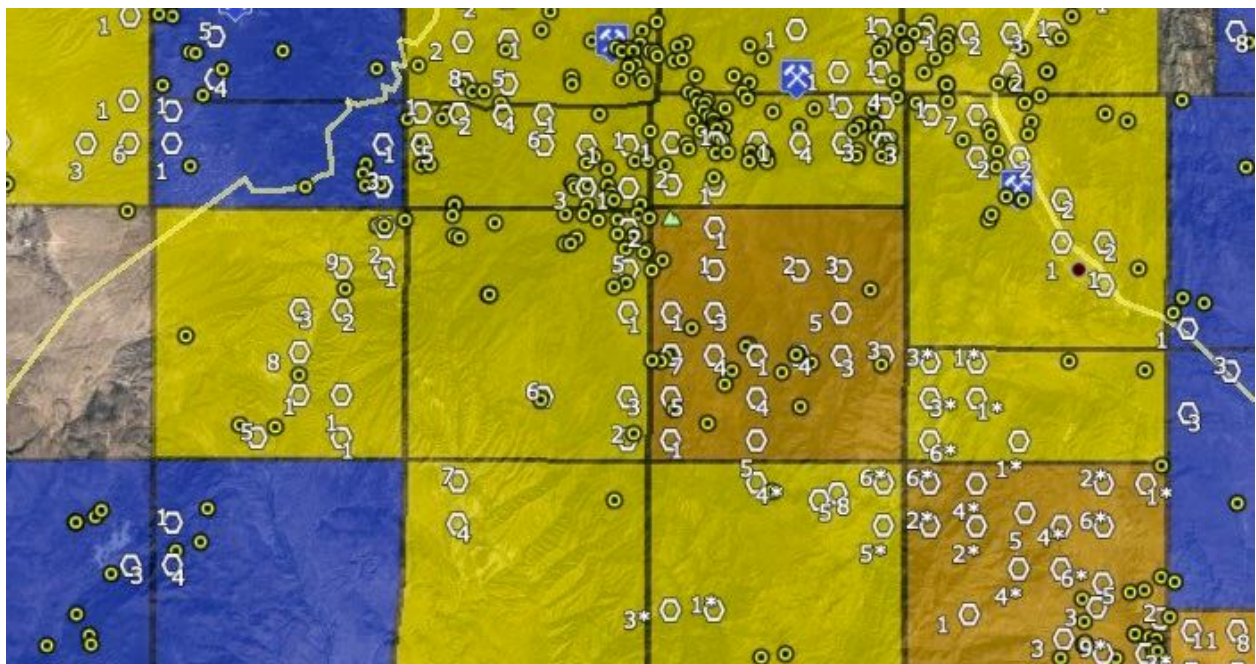
Methodology

The purpose of this map is to visualize related data sets that together illustrate where historical gold mines are located, and where placer gold mining is still occurring today. If you are hoping to find gold either by panning or other placer mining techniques, or by the use of a metal detector, these maps indicate where gold is likely to be found

Important note: it is illegal to prospect for, or mine minerals on a claim held by someone else. Gold claims rarely cover entire sections, so there are plenty of places where the public can still prospect for gold, however it is up to the individual to determine what areas are open for mining.

Quick Start Guide

After downloading and unzipping the Gold Map package, you will see a file in the root directory with a name like Arizona_Gold_Map.kmz (replace "Arizona" with the state you have purchased). Opening this in Google Earth will add all data layers to the "Temporary Places" section of the left panel. Simply check the layers you want to activate to view the data.

Depending on what kind of computer you have, viewing too much data at once will slow Google Earth down significantly. If you are having performance problems, only activate one or two layers at a time. Zooming into an area you are interested in before activating a data layer will also improve performance.

The "KMZ files" part of the package contains the individual KMZ files that were used to create the Arizona_Gold_Map.kmz file. You may be interested in these individual files if you are using apps other than Google Earth.
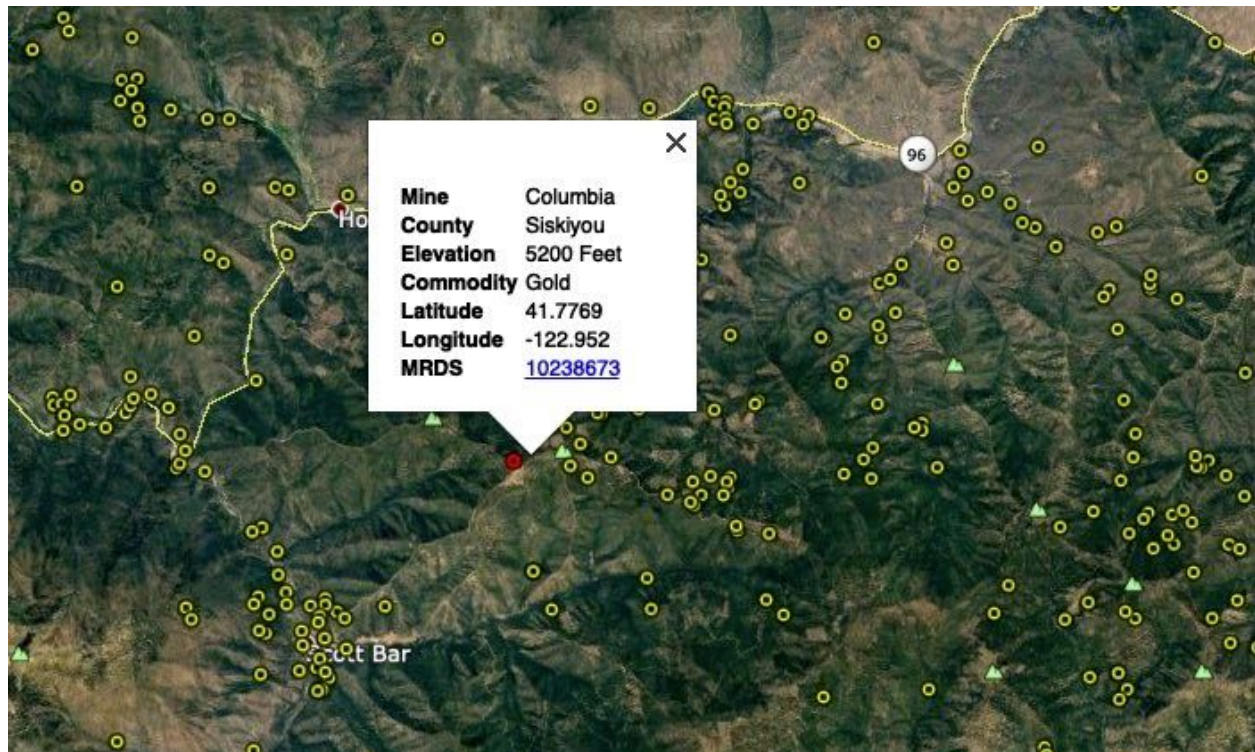
Gold Mine Data

Gold mine data comes in two file formats - CSV and KMZ.

The CSV file contains all gold mines in the state and can be used in GIS, database, or spreadsheet applications. This data can also be imported into Google Earth to create your own custom views.

The KMZ files are ready to use in Google Earth, simply open them and activate the layer and the mines will be displayed.

Note: some states will have the gold mines divided into several KMZ files to avoid performance problems in Google Earth Pro.

Note: the gold mine data included is an unfiltered index from the USGS MRDS database. Many mines in that database have duplicate records which will show up on the map as unique data points.

Placer Claim Data

Placer claim data comes in two file formats - CSV and KMZ. In the CSV and KMZ file directories, the claims file will include a date in the name, this is the date the claims data was retrieved from the BLM LR2000. "Arizona_Placer_Claims_8-1-20.kmz" indicates that the data was distributed on August 1, 2020.

The CSV file contains all PLSS sections that contain placer claims in the state and can be used in GIS, database, or spreadsheet applications. This data can also be imported into Google Earth to create your own custom views.

The KMZ files are ready to use in Google Earth, simply open them and activate the layer and the claim data will be displayed.

The info windows display the number of claims and the MTRS value of the PLSS section that the claims are located in. MTRS is the acronym for Meridian, Township, Range, Section, and represents the grid system used to survey public lands. The MTRS value for each claim marker can be used to shortcut LR2000 claims index search form, saving a lot of time in what is generally a very slow and cumbersome system to use.

See the Claims Research document that was included with this package for more information on how to use this data with the BLM's LR2000 application.
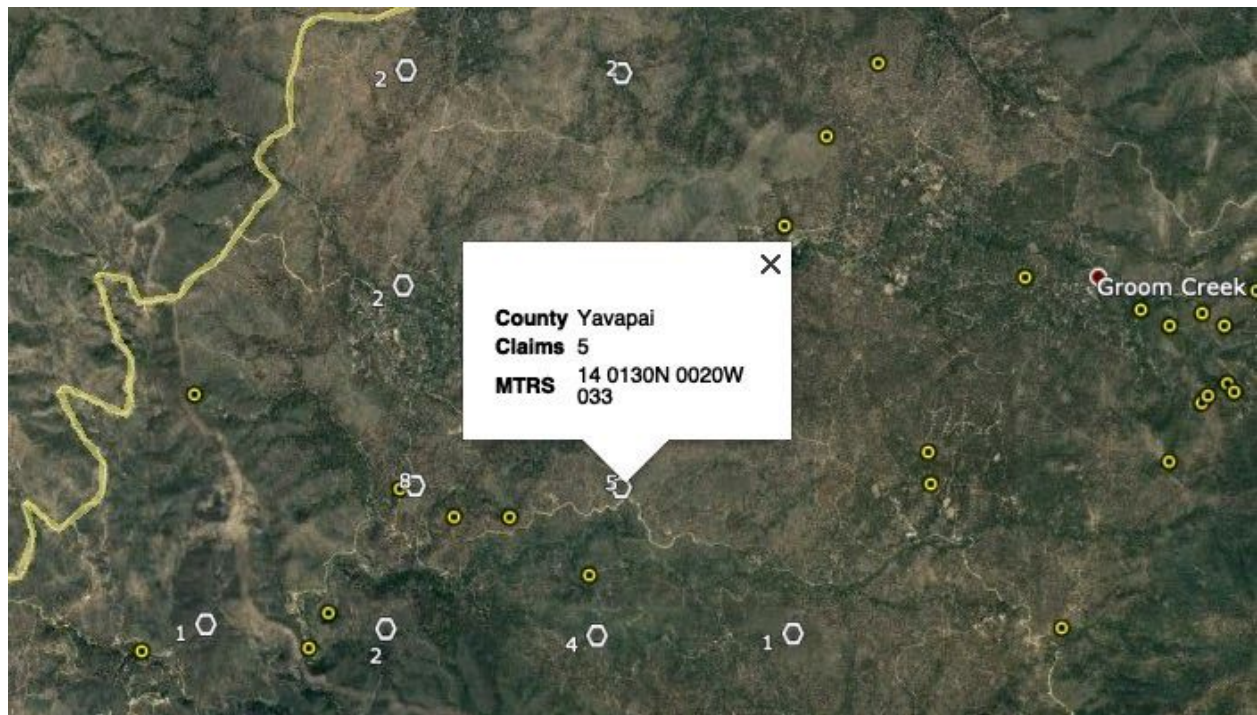
Gold Region Analysis by Township

The township analysis file will have a name in the format of California_Top_Gold_Townships.kmz (replace "California" with the state you have purchased).

This layer identifies which PLSS townships have both active placer claims and historical gold mines. This correlation is valuable for two reasons - first it identifies areas where placer claims are maintained for the purpose of gold mining rather than mining of other surface commodities like gypsum or potash. Second it allows a quick view of the density and distribution of gold mining areas across a state.
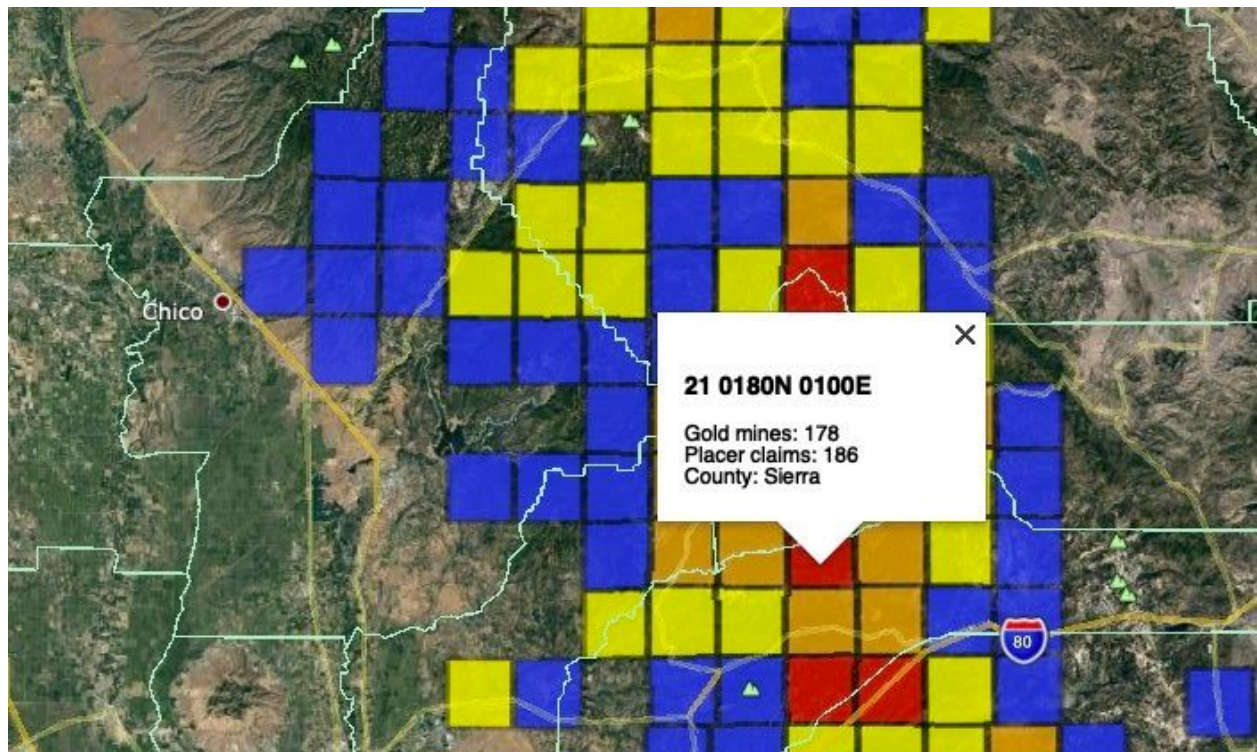
Townships that contain both active placer claims and historical gold mine records will be shaded in one of the following colors based on how many active placer claims are in the township:

More than 100 claims: red

50 - 100 claims: orange

10 - 50 claims: yellow

1 - 10 claims: blue

Clicking on the colored region will open an info window that contains the PLSS township number, the total number of active claims, and the total number of MRDS gold mine records in that township.

The township id number is formatted like "21 0440N 0100W" which is the same format used in the BLM LR2000 application. When doing claims research, these township ID numbers can be copied and pasted directly into the LR2000 search form, greatly speeding up claims research.

Note: in cases where townships straddle county lines, the "County" value in the info window will display the county in which the township's center point resides.

Ranking Townships by Gold Potential

Included in the package is the file California_Top_50.kmz (replace "California" with the state you have purchased). This file ranks the top 50 townships based on the total number of active placer claims in each.

These ranks will help you quickly identify the top gold areas throughout a state. The ranking numbers can be browsed on the map or each individual rank can be selected in the left menu to fly to it on the map.

Ranking numbers use the number of active placer claims exclusively to determine their values, and have not been manually edited to exclude occasional non-gold areas that make the list.

An example is the evaporite areas in Southern California where a small number of old gold mines happen to be at the edge of large industrial surface mining operations. In this case the correlation between active placer claims and the adjacent historical gold mines are coincidental only, and do not indicate an area with strong gold potential.

Areas like this should be easily identifiable and excluded from consideration when researching gold regions.

Note: some townships within a state have equal number of placer claims so the top 50 lists contain many ranks that are "ties", resulting in more than 50 townships being ranked in the list.

Additional Data Files

Some state packages have additional datafiles like the locations of historical mining districts. The sales page for each state package will describe any additional data files that are included.

Notes By State

The following notes are specific to each state package.

California

With over 22,000 historical gold mine locations, California has far more gold-related data than any other state. For the purpose of analysis, it is useful to divide the state into 3 major regions: Northern, Central (Sierra), and Southern.

The California gold mine kmz file has been divided into five parts: Northern, Sierra North, Sierra Central, Sierra South, and Southern.

California Township Analysis

The desert regions of Southern California have large surface mining operations for commodities like borax and potash. These areas will have large land areas covered in placer claims, in some cases having over 500 in a single township.

Some of these townships happen to have a small number of gold mines adjacent to the modern surface mines so by the methodology used to create the township analysis files the maps show these as highly ranked gold areas. However, these are not areas of high gold potential and should be disregarded.

In the statewide rank file, the top three townships are in Southern California and are characterized by these modern surface mines and should be disregarded. Other townships in Southern California have a higher ratio of gold mines to active placer claims, and a determination of whether these are active gold areas, modern surface mines, or a mixture of both will need to be determined through additional research.

To increase the usefulness of the township ranks, four rank files have been included. One is for the entire state - the others are specific to the three major gold regions in the state - Northern, Central (Sierra), and Southern. This allows each region to be analyzed separately for gold potential.