

# *Google Earth - A Prospecting Tool*

Presented by

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# *Introduction*

- B.S. Geology, University of Akron (Akron, Ohio) 1976
- ASQC Certified Quality Engineer in June, 1979
- Quality Assurance Manager for over 30 years
- Served on the board of directors for the Akron/Canton Section of the American Society for Quality for over 25 years
- Retired from Akron Porcelain & Plastics Company in March, 2012
- Moved to Pahrump with wife, Nancy, in March, 2012
- Joined Nye Gold Seekers in May, 2012
- Became an Ambassador for Valley Electric Co-op in June, 2012
- Chairperson for VEA school poster contest committee 2013 – 2017
- Member of Pahrump Valley Rock Hounds
- President of Nye Gold Seekers 2014 – 2016
- Secretary for Pahrump Gold, Gem & Mineral Show – Oct. 2016
- Treasurer for Pahrump Gold, Gem & Mineral Show – Oct. 2017



# *What is Google Earth*

Google Earth is a virtual globe, map and geographical information program that was originally called EarthViewer 3D created by Keyhole, Inc, a Central Intelligence Agency (CIA) funded company acquired by Google in 2004. It maps the Earth by the superimposition of images obtained from satellite imagery, aerial photography and geographic information system (GIS) onto a 3D globe. For more information, go to:  
[https://en.wikipedia.org/wiki/Google\\_Earth](https://en.wikipedia.org/wiki/Google_Earth)



# *How do you get Google Earth*

The product is available for use on personal computers running Windows 2000 and above, Mac OS X 10.3.9 and above, Linux kernel: 2.6 or later, and FreeBSD. Google Earth is also available as a browser plugin. It was also made available for mobile viewers on the iPhone OS, as a free download from the App Store, and is available to Android users as a free app in the Google Play store. On a personal computer, go to: <https://www.google.com/earth/resources>



# *Features of Google Earth*

- ➔ Search panel - Use this to find places and directions and manage search results.
- ➔ 3D Viewer - View the globe and its terrain in this window.
- ➔ Toolbar buttons
- ➔ Navigation controls - Use these to zoom, look and move around.
- ➔ Sign in with your Google account - When you sign in, you can share to Google+ or email what you're viewing in Google Earth.



# *Features of Google Earth (continued)*

- ➔ Street View - Zoom in to the map then drag the pegman to view street-level imagery.
- ➔ Places panel - Use this to locate, save, organize and revisit place-marks.
- ➔ Search in Places - Find your places quickly by searching for them.
- ➔ Layers panel - Use this to display points of interest.
- ➔ Tour Guide - explore interesting places around the world.

For more information, go to:

[https://support.google.com/earth/answer/148176?hl=en&ref\\_topic=4380577](https://support.google.com/earth/answer/148176?hl=en&ref_topic=4380577)



# *Installing a Geologic Map Overlay*

- ➔ The US Geological Service (USGS) publishes maps in KML and KMZ formats for use in Google Earth
- ➔ To choose a US state of interest, go to:  
<http://mrdata.usgs.gov/geology/state/>
- ➔ Choose the state of Nevada, for example, and download:  
nvgeol.kml (22.0M bytes) or  
nvgeol.kmz (6.6M bytes)
- ➔ Double click on the chosen file in the downloaded directory to open it in Google Earth
- ➔ Move the Geologic units of Nevada overlay from “Temporary Places” to “My Places” in Google Earth



# *Geologic Map Overlay Features*

- ➔ Color coded rock formations
- ➔ Detailed descriptions of rock types, age, and names of rock formations
- ➔ Map and unit references



# *Installing a Mining Overlay*

- ➔ The mining sites are obtained from the USGS Mineral Resources Data System (MRDS)
- ➔ To choose a US state of interest, go to:  
<http://mrdata.usgs.gov/mrds/select.php>
- ➔ Choose the state of Nevada, for example, and download the Google Earth file format (“Get Data” button)
- ➔ Double click on the file “mrds-fUS32-1” in the downloaded directory to open it in Google Earth
- ➔ Move the overlay from “Temporary Places” to “My Places” in Google Earth



# *Mining Overlay Features*

- ➔ Key shows symbols for active mines, closed mines, and a designation of “Occurrence , Prospect, or Unknown” minerals
- ➔ Clicking on a symbol pops up a general information window
- ➔ Links in the window provide more detailed information about the minerals mined including the Site Identification, Geographic location, Site characteristics, and Commodities (gold, for example)



# *Installing a Topographic Map Overlay*

- ➔ Go to: <http://www.gelib.com/usgs-topographic-maps-2.htm>
- ➔ Scroll down the page to the button that says: “Download With Google Earth”
- ➔ Double click on the file “usgs-topographic-maps.kml” in the downloaded directory to open it in Google Earth
- ➔ Move the overlay from “Temporary Places” to “My Places” in Google Earth



# *Hands-on Tour*

- ➔ Download Google Earth Pro to your device, if it's not already there
- ➔ Download the Geologic Map, Mineral Resource, and Topographic Map overlays for Nevada
- ➔ Open the overlays
- ➔ Further instructions are provided in the demonstration
- ➔ A helpful resource: <http://rocksfromabove.blogspot.com/p/google-earth-files.html>



*Questions*

*Thank You*

