



The Landslide Reporter's Guide

Tips to
Pinpoint
Landslide
Location from
a News Article



Contents

Most of the time, a news article will not give you the exact location for a landslide.

This guide is meant to help you hone in on the location as close as possible so you can input the most accurate location into Landslide Reporter. Using **Google Maps** or **Google Earth** is recommended.

You will be able to find:

- **Landslide location** in geographic coordinates (latitude, longitude)
- **Location accuracy**, as a radius of uncertainty in the landslide's location.



Use Keywords and Photos for Clues - 1



Articles might mention:

- Exact addresses
- Roads or the intersection of two roads
- Mile markers/ milepost markers
- Town, county, province
- Nearby landmarks, buildings, areas, mountains, towns



Use Keywords and Photos for Clues - 2

For example, an article might read:

“A landslide has closed the **westbound lane** of **Landslide Highway at Mudslide Road** in **Montgomery County** *this afternoon.*”

Already you know that the slide has occurred:

- **In Montgomery County**
- **At the intersection of Landslide Highway and Mudslide Road**
- **How much road the slide covered (so you can infer the size of the landslide)**
- *The date of the landslide (same date that the article was written, in this example)*



Use Keywords and Photos for Clues - 3

Photos can give clues to the location too. You can compare the view in Google Maps satellite or street view to the view in the article.



In Google Maps or Google Earth, you can play around with the 3D map to adjust the view further.



A massive May 2017 landslide cut off Highway 1 and access to Big Sur, CA, USA (Source: Google Maps, Monterey County Sheriff's Dept.)

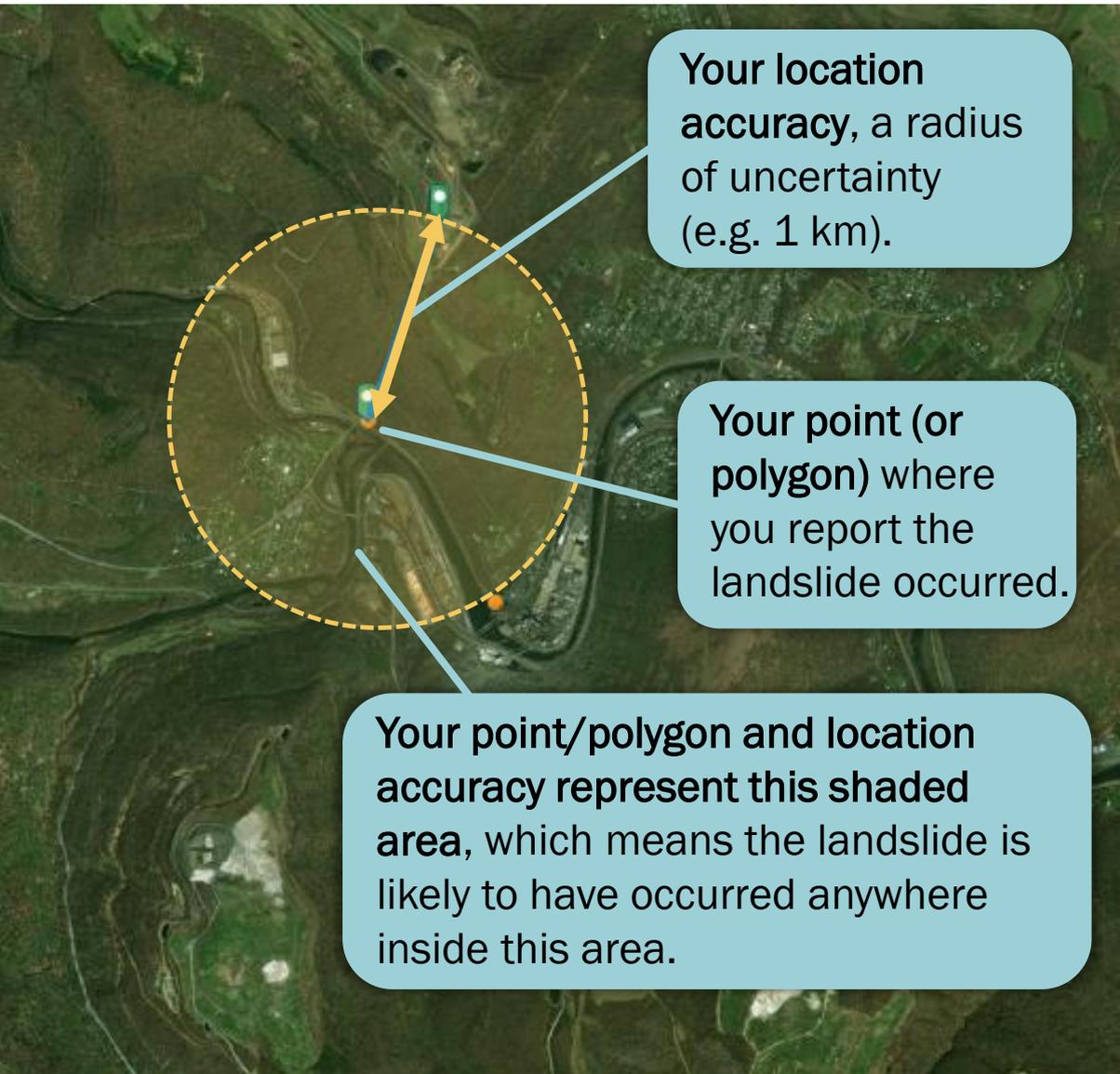




Take Note of Location Accuracy - 1



Location accuracy says how close your location estimate is to the actual location of the landslide.



Your location accuracy, a radius of uncertainty (e.g. 1 km).

Your point (or polygon) where you report the landslide occurred.

Your point/polygon and location accuracy represent this shaded area, which means the landslide is likely to have occurred anywhere inside this area.



Take Note of Location Accuracy - 2

When you don't know the exact location of a landslide,

1. **Center your guess** based on the clues from the news article.
2. **Make sure the guess is reasonable.** (Which sounds more reasonable, “the landslide occurred on a slope” or “the landslide occurred on top of a building”?)
3. Based on location information, **where is the farthest reasonable extent the landslide could have occurred?** Could it have occurred anywhere in the village? Anywhere along the entire stretch of road? Anywhere in the entire forest? That will be the farthest distance that determines the length of the location accuracy.

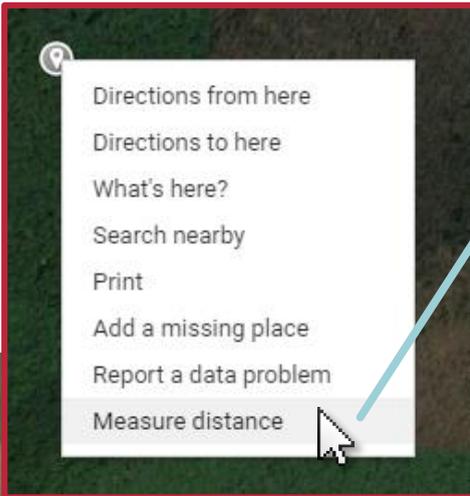


Take Note of Location Accuracy - 3

Measure location accuracy using Google Maps or Google Earth.

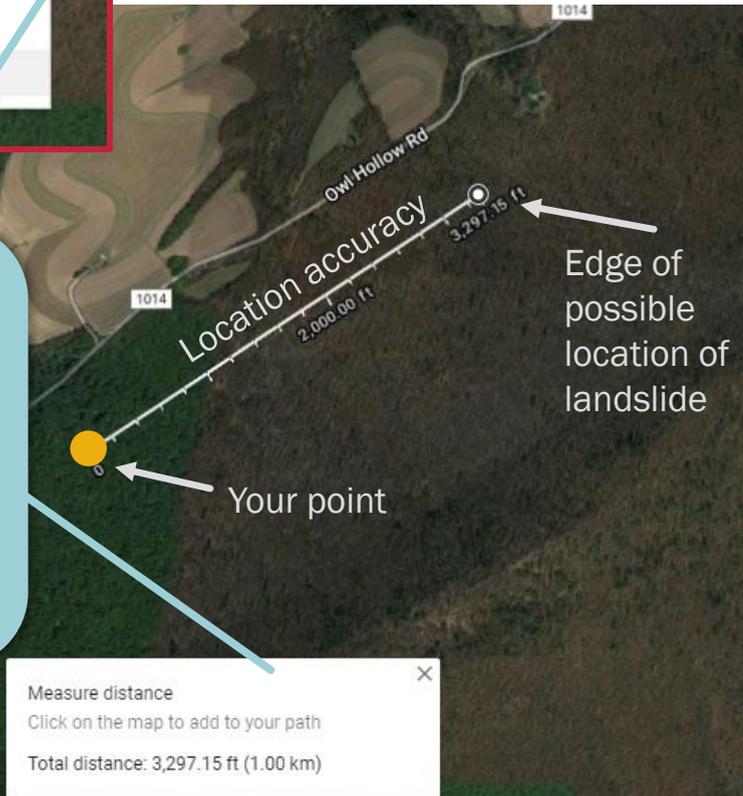


Google Maps



Right-click on the place your landslide occurred and select **“Measure Distance”**.

Use a line segment to draw the location accuracy from your center point and take note of the distance in kilometers (km).





Take Note of Location Accuracy - 4

Measure location accuracy using Google Maps or Google Earth.

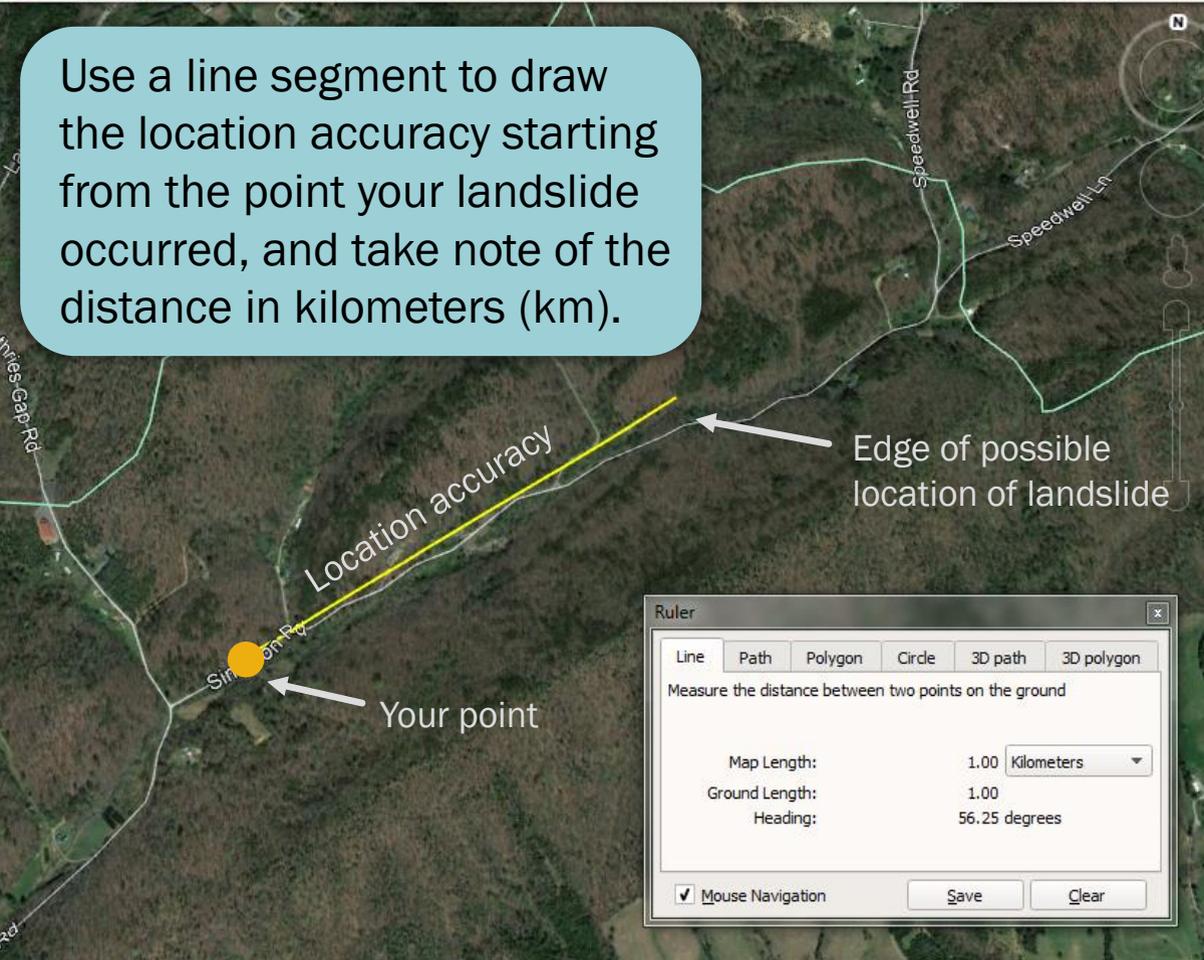


Google Earth



In the Google Earth toolbars, open the ruler menu.

Use a line segment to draw the location accuracy starting from the point your landslide occurred, and take note of the distance in kilometers (km).





Measure Distance to Find a Location - 1



If your article tells you the landslide is a specific number of miles away from a town or road, the best way to locate the landslide is to measure the distance yourself.

For example:

“The landslide occurred on U.S. 101, 5 miles south of Crescent City, CA”

With this information, we can **measure 5 miles along U.S. 101 from the edge of Crescent City** to pinpoint the location of the landslide in **Google Maps** or **Google Earth**.



Note that, when articles give a distance from a location, they usually mean if you were driving down that road, so you should trace distance along the road (see the next page)



Measure Distance to Find a Location - 2



Google Maps

- Directions from here
- Directions to here
- What's here?
- Search nearby
- Print
- Add a missing place
- Report a data problem
- Measure distance

Right-click on the place your landslide occurred and select **“Measure Distance”**.

Click to trace the correct distance along the road.

Note that you can **drag** points to adjust their position or **click** them to remove them.

Drag to change, click to remove

Keep track of the distance measured.

Measure distance
Click on the map to add to your path
Total distance: 5.00 mi (8.04 km)



Measure Distance to Find a Location - 3



Google Maps

- Directions from here
- Directions to here
- What's here?
- Search nearby
- Print
- Add a missing place
- Report a data problem
- Distance to here
- Clear measurement

You have now found the distance and measured the location, so you can right click to clear the measurement.

Click on the map where the landslide should be based on your measurement to mark it.

The latitude and longitude of the point you marked will open.

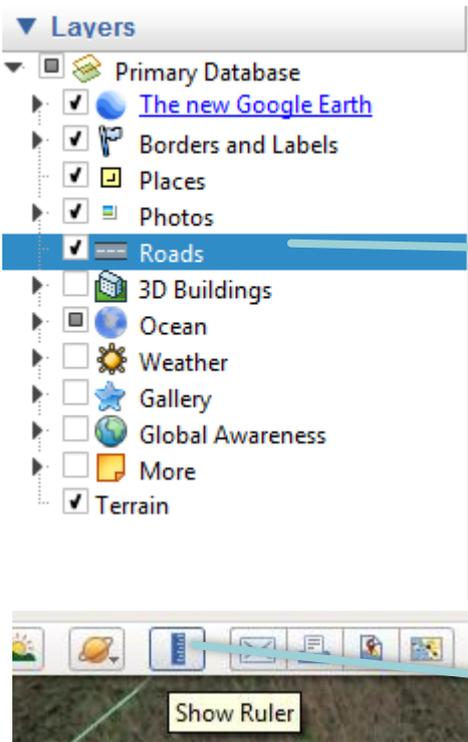
Del Norte County
California
41.698250, -124.120140



Measure Distance to Find a Location - 4

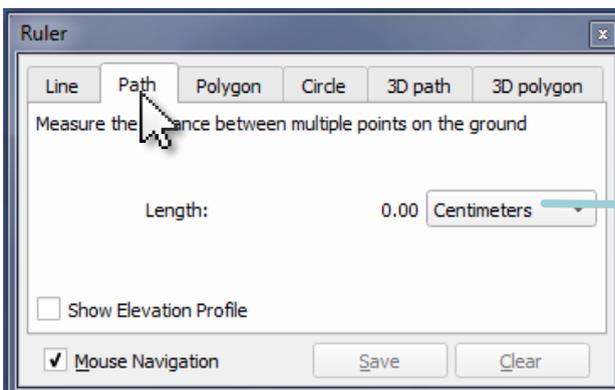
Google Earth

The procedure is the same as Google Maps, but using the Ruler.



On the left Layers menu, make sure **Roads** are checked so they're visible.

In the Google Earth toolbars, open the **ruler** dialog box.



To trace the road, select **Path** from the tabs and change the length to the desired unit.



Copy/Paste the Geographic Coordinates - 1



Once you have found the landslide location in Google Maps or Google Earth, we need to **transfer that location to Landslide Reporter.**

Rather than try to find your location all over again in the Landslide Reporter map, let's copy/paste the geographic coordinates!



Copy/Paste the Geographic Coordinates - 2



Google Maps

Click your landslide location on the map

When the details box opens at the bottom of the screen, click on the coordinates

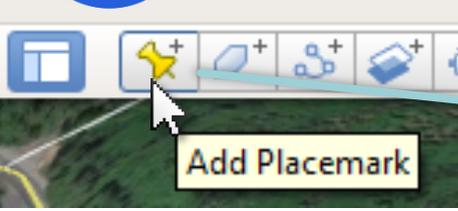
The image shows a Google Maps interface with a satellite view of a forested area. A road labeled 'Redwood Hwy' and '101' is visible. A red location pin is placed on the road. A details box is open at the bottom of the screen, displaying a street view image and the following text: '16607-16995 US-101', 'Klamath, CA 95548', and the coordinates '41.694657, -124.114343'. A blue cursor icon is pointing at the coordinates. A sidebar is also open, showing the same coordinates in a blue header: '41°41'40.8"N 124°06'51.6"W' and '41.694657, -124.114343'. A blue cursor icon is pointing at the coordinates in the sidebar. A text box on the right side of the image says 'On the sidebar that opens, copy the coordinates'. Another text box on the left side of the image says 'Click your landslide location on the map'. A third text box on the right side of the image says 'When the details box opens at the bottom of the screen, click on the coordinates'. The bottom of the image has a teal bar with the text 'landslides.nasa.gov' and the number '94'.



Copy/Paste the Geographic Coordinates - 3



Google Earth



In the Google Earth toolbars, open the placemark menu.

When a placemark appears, **drag** the tip to your exact landslide location.

Untitled Placemark

In the New Placemark window, **copy** both the latitude and longitude coordinates.

Google Earth - New Placemark

Name:

Latitude:

Longitude:

Description Style, Color View Altitude



Copy/Paste the Geographic Coordinates - 4

In **Landslide Reporter**, paste the coordinates copied from Google Maps or Google Earth.

- Click to expand the address menu suggestions, and select the combination of X and Y coordinates that best match your landslide location.

Location

Tap the map to draw the location.

41°42'47.22"N, 124° 7'49.60"W

- Address: Esri World Geocoder (1)

Y:41.713117 X:-124.130444





Copy/Paste the Geographic Coordinates - 4

- Upon selecting the X and Y coordinates from the address suggestion menu, your point will automatically appear on the map.
- Click on the map to refine the location of your circle.

Location

Tap the map to draw the location.

41°42'47.22"N, 124° 7'49.60"W



- Address: Esri World Geocoder (1)

Y:41.713117 X:-124.130444





Complete your Landslide Report



You have now successfully recorded the location of your landslide, and can continue filling out the rest of the Landslide Reporter form.

These are suggestions for one way to find your landslide location, so feel free to use any method that you are most comfortable with.



Remember to adjust the **Location Description** on your landslide report after updating the location on the map.

Event Description

Location Description

US-101, Klamath, California, 95548

Location Accuracy

Select...



Landslide Reporter

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