

Get Lat/Long Coordinates and Elevations from EIM Map

Version 3.2
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Geographic coordinates are required for all EIM field locations, to represent on a map where data was collected. Additionally, elevation data is required for all well locations. To confirm or acquire this information there is a tool built into our EIM Map Search to generate the necessary coordinate, elevation, and metadata for any point:



The Lat/Long Tool – This tool allows you to find the latitude, longitude and elevation of a single point simply by clicking in the EIM Map Search frame. Additionally, you can build and download a table of coordinate, elevation and EIM Location metadata fields for one or more points.

- Coordinates generated by this tool represent latitude and longitude decimal degrees projected using the North American Datum of 1983, High Accuracy Reference Network (NAD83HARN).
- Elevations generated by this tool are derived from the National Elevation Dataset (NED) (<http://ned.usgs.gov>), returning the best available data for the location of the selected point.
- Elevations generated by this tool are reported in feet, relative to the North American Vertical Datum of 1988 (NAVD88).

To Get Coordinates and Elevations:

1. Go to EIM Search: <https://fortress.wa.gov/ecy/eimreporting/>

2. Click the map:



3. The Tools tab menu will be displayed, by default, towards the top of the map frame.



4. Find your site on the map using option a, b, or both:

a. Zoom In  and  Pan Tools.

b. Select the Find tab  and use the Find menu to zoom to coordinates, an address, Township/Range/Section or map features close to your field location.

 *Zoom in as far as possible to improve the resolution of imagery and the accuracy of your point location.*

5. Select The Lat/Long Tool  from the Tools menu.

6. Click once on the map at the point of your field location. A small, yellow point will temporarily be added to the map:

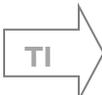


and the Lat/Long Tool information box will appear below the Lat/Long Tool button on the Tool menu. This information box displays the latitude, longitude and elevation values of the point:



7. If you would like to export the coordinate, elevation, and EIM metadata for this point, type a Location ID in the Lat/Long Tool information box in the "Enter Location ID" field (circled in the image below) and click the "Add" button.



 *The value entered into this Location ID field does not have to exactly match the Location ID you use to submit data to EIM; however, if you do enter the Location ID you wish to use at this time, the resulting table values can be used to directly populate the EIM Location Template.*

- This will add a record to the table at the bottom of the map frame (shown in the image below), with the entered Location ID value.

Record #	Location ID	Coordinate System	Latitude	Longitude	Horizontal Datum	Horizontal Coordinate Accuracy	Horizontal Coordinate Collection Method	Elevation of	Elevation	Elevation Units
1	1	LAT/LONG	47.03625	-122.90485	3	6	13	Land Surface	117	FT

- Continue this process until you have clicked all points for which you want coordinates.

TI You can press the **Clear List** button from the Lat/Long table or the Clear All tool at any point to clear the records.

- Click the **Download CSV** button when you have added all of the points for your field location, to save a copy of the table to your computer.

Entering Coordinate and Elevation Information into EIM:

If you have followed the steps above, you now have a table of latitude/longitude decimal degree coordinates for each point you added to the list. You can use these values to populate some of the fields in the EIM Location Template, used to submit Locations to the EIM database. The Lat/Long Tool Download Table stores values in the following fields (shown on the left-hand side of the table below), which correspond to the following (color coded) fields in the EIM Location Template (shown on the right-hand side of the table below):

Lat/Long Tool Download Table			EIM Location Template	
Column	Title	Example Values	Column	Title
A	Location ID	Example-001	A	Location_ID
B	Coordinate System	LAT/LONG	N	Coordinate_System
C	Latitude Decimal Degrees	47.03625	U	Latitude_Decimal_Degrees
D	Longitude Decimal Degrees	-122.90485	V	Longitude_Decimal_Degrees
E	Horizontal Datum	3	AD	Horizontal_Datum
F	Horizontal Coordinate Accuracy	6	AE	Horizontal_Coordinate_Accuracy
G	Horizontal Coordinate Collection Method	13	AF	Horizontal_Coordinate_Collection_Method
H	Elevation of	Land Surface	AH	Elevation_of
I	Elevation	117	AI	Elevation
J	Elevation Units	FT	AJ	Elevation_Units
K	Elevation Datum	1	AK	Elevation_Datum
L	Elevation Accuracy	4	AL	Elevation_Accuracy
M	Elevation Collection Method	12	AM	Elevation_Collection_Method
N	Notes (system-generated, tells you if the elevation service was unavailable)			

Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
2/20/07	1.0	Original Document – named Lat/Long List Builder	CN
8/18/12	2.0	Lat/Long tool revised, now includes elevation finder	CN
8/2/13	3.0	Revised to match new Map Search app.	AO, CN
09/13/17	3.1	Updated terminology of “spreadsheet” to “template”	KC
03/15/22	3.2	Changed column header on table at bottom of page 3 from “Ex. Values” to “Examples Values”, fixed page numbering.	KC