

EIM Help – Location Template

Version 3.22
November 2023

How to Use This Help

Use this when you fill out your **Location template**. Each row corresponds to a column in the template.

Color Coding

Color coding gives a quick indication of required fields. This information is also in the “Requirements” column.

- **Yellow/Bold** = Required
- **Green** = Required for geographic position info
- **Blue/Bold** = Required for wells

Help Fields

- **Column (Col):** Column heading (A, B, C, etc.) in the EIM template
- **Field Name:** EIM field name
- **Description:** EIM field description
- **Requirements:** Indicates if field is required, conditionally required, or optional
- **Type:** Type of data field, like text, number, date, or time
- **Size:** The maximum number or length of characters allowed
- **Valid Values and Conditions:** Accepted values and format. Longer lists of valid values are at end of document or online.
- **Examples and Comments:** Examples in bulleted lists

General Location Info and Metadata

All locations require general location information and metadata. Some columns are required for all locations, some are conditionally required depending on the type of location, and some are optional. We appreciate getting optional information if you have it.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
A	Location ID	Unique ID to identify the field location in EIM.	Required	Text	15	<p>Free text.</p> <p>Must be unique within EIM.</p> <p>Enter just one location per point on the Earth's surface.</p> <p>Don't enter additional locations for each sample, depth, matrix/source, etc. from that point. Enter that info in the Results template.</p> <p>Borings converted to wells: Don't add a new location where an existing EIM soil boring location later had a monitoring well installed. Ask your Data Coordinator to convert it to a well location.</p>	<ul style="list-style-type: none"> For monitoring well MW4 at Voluntary Cleanup site NW0001, use VCNW0001_MW4. Don't use MW-4. It isn't unique. For soil boring SB08 at hypothetical "Lake Gas Station 111," LakeGas111-SB08 is acceptable and unique. <p>Use a consistent naming convention for all locations. Prefixing with one of these is a good option:</p> <ul style="list-style-type: none"> Facility/Site ID VCP number Cleanup Site ID Site abbreviation or acronym Study ID <p>Well locations can use Well Tag Number (ABC123) since it's unique.</p> <p>Download more help: How to Name and Describe Field Locations.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
B	Location Name	Descriptive name for a field location.	Required	Text	40	Free text	<ul style="list-style-type: none"> ▪ Skagit River at I-5 bridge ▪ VCNW0001 MW4 ▪ Walla Walla WWTP Outfall ▪ UST excavation sample <p>Tip: For wells, you can use the Ecology Well Tag Number, like ABC123, for the Location Name.</p> <p>Download more help: How to Name and Describe Field Locations.</p>
C	Location Setting	General physical setting of a field location.	Required	Text	30	See table of Location Setting valid values (in this document).	For most wells, enter Land These aren't regulatory definitions.
D	Location Description	Short narrative description of field location.	Required	Text	2000	Free text	<ul style="list-style-type: none"> ▪ Skagit River upstream of I-5 bridge, north bank ▪ West side of property ▪ Walla Walla WWTP Outfall on Mill Creek ▪ SW wall of UST excavation <p>Tip: Include details that helps someone find your field location.</p> <p>Cleanup site locations can have more general descriptions.</p> <p>Download more help: How to Name and Describe Field Locations.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
E	Ecology Facility/Site ID	ID of facility or site where the field location exists, from Ecology's Facility/Site database.	Required for cleanup and permit sites and/or if column BK (Is Well Upgradient of a Facility/Site) is Y.	Text	10	<p>Must be a valid Facility/Site ID.</p> <p>Search for Facility/Site ID in Facility/Site Database (online).</p> <p>OR</p> <p>To find Facility/Site ID via the EIM Map, add the Facility/Site layer and use the Identify tool (online).</p>	<ul style="list-style-type: none"> 1529149 4085
F	Is Location A Well	Indicates the field location is a Well.	Required for wells	Text	1	<ul style="list-style-type: none"> Y - yes N - no <p>If "Y," enter additional data in columns AH-BM.</p>	<p>Tip: Temporary Environmental Investigation Wells, or EIWS, are considered wells in EIM as of February 2015, but have fewer data entry requirements. Most are installed by direct push/Geoprobe®.</p> <p>Download more help: Temporary Environmental Investigation Wells.</p>
G	Address	Physical address of field location. Might not be the same as mailing address.	Optional	Text	200	Must be a valid address	<ul style="list-style-type: none"> 424 128th Street NW
H	City	City (or closest city) or area where field location exists.	Optional	Text	40	Free text	<ul style="list-style-type: none"> Seattle Mt. Rainier National Park

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
I	State	State or province where field location exists.	Required if location is outside WA	Text	2	<ul style="list-style-type: none"> ▪ WA - Washington ▪ OR - Oregon ▪ ID - Idaho ▪ BC - British Columbia 	If your location is outside WA, fill in the state code, otherwise EIM won't recognize your coordinates.
J	Zip Code	Zip Code or Canadian Postal Code of the field location's physical address.	Optional	Text	10	Format: <ul style="list-style-type: none"> ▪ XXXXXX ▪ XXXXXX-XXXX ▪ XXX-XXX 	<ul style="list-style-type: none"> ▪ 98123 ▪ 98123-4567 ▪ V0B-1H0
K	County	County where field location exists.	Optional	Text	20	Must be a valid county name.	<ul style="list-style-type: none"> ▪ Pierce ▪ Spokane

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
L	NHD Reach Code	Identifies the waterbody or watercourse on which the field location exists per the National Hydrography Dataset (NHD).	Required for streams, rivers, lakes, or nearshore locations that are represented in the NHD hydrography layer.	Number	14	<p>To find a Reach Code, use the NHD tool in the EIM Map (online).</p> <p>For instructions, download help for Getting NHD info from the EIM Map.</p>	<p>▪ 17100103000305</p> <p>It is important to associate your Location with the correct NHD because the information is used in Washington State's biennial water quality assessment.</p> <p>Not all field locations where surface water samples or measurements are collected will be represented in the NHD hydrography. For example, some small streams are not currently mapped to the NHD and northern Puget Sound is not represented as an NHD waterbody.</p> <p>If viewing your data in Excel, be cautious of auto-reformatting. Excel may convert what you enter to scientific notation. Digits may be lost unless these cells are formatted as Text. For more information about preserving the formatting in this field, download more help: Preserving Values Corrupted by Excel</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
M	NHD Reach Measure	Identifies where on a watercourse the field location exists per the National Hydrography Dataset (NHD). Percent distance from reach start.	Required for stream or river locations	Number	7	0.000 to 100 To find a Reach Measure, use the NHD tool in the EIM Map (online). For instructions, download help Get NHD info from the EIM Map .	<ul style="list-style-type: none"> 57.135 22.344 Important: Associate your Location with the correct position on a watercourse. Waterbodies (like lakes) don't have Reach Measures.

Horizontal Coordinates

Submit **only one type of coordinate system per location**. If you don't have coordinates, get them from the online [EIM map](#), using the Lat/Long tool. Download help for [Getting Lat/Long Coordinates and Elevations from Map](#).

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
N	Coordinate System	Type of coordinates used to enter geographic position of field location into EIM.	Required	Text	8	<ul style="list-style-type: none"> LAT/LONG - Latitude/Longitude in Degrees-Minutes-Seconds or Decimal Degrees SPCS - Washington State Plane Coordinate System UTM - Universal Transverse Mercator 	For LAT/LONG , submit deg-min-sec OR decimal degrees, not both .

Latitude/Longitude Degrees-Minutes-Seconds Coordinates

Submit only one type of coordinate system per location. Fill out this block if you have latitude/longitude degrees-minutes-seconds coordinates.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
O	Latitude Degrees	Degrees measure of the field location's latitude.	Required for LAT/LONG in Deg-Min-Sec	Number	2	45 to 49	Distance north of the equator.
P	Latitude Minutes	Minutes measure of the field location's latitude.	Required for LAT/LONG in Deg-Min-Sec	Number	2	00 to 59	
Q	Latitude Seconds	Seconds measure of the field location's latitude.	Required for LAT/LONG in Deg-Min-Sec	Number	5	00.00 to 59.99	
R	Longitude Degrees	Degrees measure of the field location's longitude.	Required for LAT/LONG in Deg-Min-Sec	Number	3	116 to 125	Distance east or west of Central Meridian (Greenwich England).
S	Longitude Minutes	Minutes measure of the field location's longitude.	Required for LAT/LONG in Deg-Min-Sec	Number	2	00 to 59	
T	Longitude Seconds	Seconds measure of the field location's longitude.	Required for LAT/LONG in Deg-Min-Sec	Number	5	00.00 to 59.99	

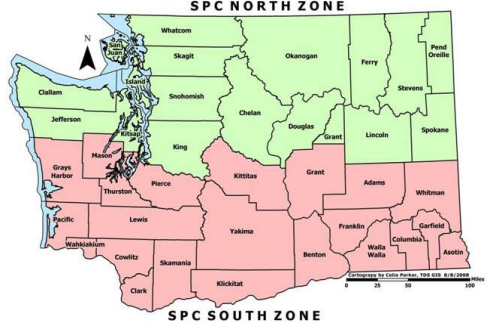
Latitude/Longitude Decimal Degrees Coordinates

Submit only one type of coordinate system per location. Fill out this block if you have latitude/longitude decimal degrees coordinates.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
U	Latitude Decimal Degrees	Decimal degrees latitude coordinate for the field location.	Required for LAT/LONG in Decimal Deg	Number	9	45.000000 to 49.999999	
V	Longitude Decimal Degrees	Decimal degrees longitude coordinate for the field location.	Required for LAT/LONG in Decimal Deg	Number	11	116.000000 to 25.999999 or -116.000000 to -125.999999	

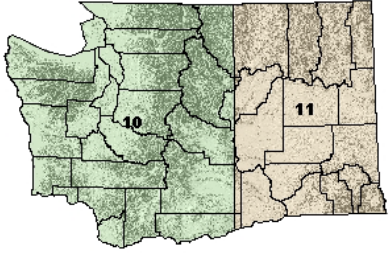
State Plane Coordinate System Coordinates

Submit only one type of coordinate system per location. Fill out this block if you have State Plane Coordinate System (SPCS) coordinates.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
W	State Plane X Coordinate	State Plane Coordinate System E-W coordinate (X-axis) of the field location. In feet.	Required for SPCS	Number	9	<ul style="list-style-type: none"> North Zone: 602913.0 to 2673266.0 South Zone: 575078.0 to 2618128.0 	
X	State Plane Y Coordinate	State Plane Coordinate System N-S coordinate (Y-axis) of the field location. In feet.	Required for SPCS	Number	8	<ul style="list-style-type: none"> North Zone: -33488.0 to 832967.0 South Zone: 15935.0 to 901121.0 	
Y	State Plane Zone	State Plane Coordinate System zone (north or south) of the field location.	Required for SPCS	Text	1	<ul style="list-style-type: none"> N - North S - South <p>Note: Pierce County is South.</p>	 <p>Figure 1: SPCS Zones in Washington State.</p>

Universal Transverse Mercator Coordinates

Submit only one type of coordinate system per location. Fill out this block if you have Universal Transverse Mercator (UTM) coordinates.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
Z	UTM Easting	Universal Transverse Mercator easting coordinate (X-axis) of the field location. In meters.	Required for UTM	Number	8	<ul style="list-style-type: none"> Zone 10: 350000.0 to 731300.0 Zone 11: 271250.0 to 518176.0 	
AA	UTM Northing	Universal Transverse Mercator northing coordinate (Y-axis) of the field location. In meters.	Required for UTM	Number	9	<ul style="list-style-type: none"> Zone 10: 042900.0 to 5454800.0 Zone 11: 5042930.0 to 454795.0 	
AB	UTM Zone	Universal Transverse Mercator zone (10 or 11) of the field location.	Required for UTM	Number	2	<ul style="list-style-type: none"> 10 11 	 <p>Figure 2: UTM Zones in Washington State.</p>

Horizontal Coordinate Metadata

Most columns in this section are required for all locations.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AC	Horizontal Coordinates Represent	General description of what the coordinates represent.	Required	Number	2	<ul style="list-style-type: none"> ▪ 24 - Discrete monitoring point ▪ 25 - Centroid of monitoring area ▪ 26 - Stream segment, can include riparian zone ▪ 27 - Transect, start point ▪ 28 - Transect, center point 	<p>For coordinates that don't represent a discrete monitoring point (25-29), use the Location Description column (Column D) to describe the monitoring area, stream segment, or transect where data were collected.</p> <p>26 applies to a length of stream segment. Only use it when you are collecting data from multiple points within a stream segment and you want all those data to be associated with a single EIM location. It's most commonly used for habitat data.</p>
AD	Horizontal Datum	Model used to project the horizontal position of the field location to a map.	Required	Number	2	<ul style="list-style-type: none"> ▪ 2 - NAD83 (N. American Datum of 1983) ▪ 3 - NAD83HARN (High Accuracy Reference Network) ▪ 4 - WGS84 (World Geodetic System of 1984) 	<ul style="list-style-type: none"> ▪ GPS Unit = Check unit's settings for datum ▪ EIM Map = NAD83HARN ▪ Google Earth = WGS84 <p>Locations using Washington State Plane Coordinate System (SPCS) should only use NAD83 or NAD83HARN.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AE	Horizontal Coordinate Accuracy	Best estimate of horizontal coordinate accuracy for a field location.	Required	Number	2	<ul style="list-style-type: none"> ▪ 1 (± 0.1 ft/0.03 m) ▪ 2 (± 1 ft/0.3 m) ▪ 3 (± 3 ft/1 m) ▪ 4 (± 10 ft/3 m) ▪ 5 (± 20 ft/6 m) ▪ 6 (± 40 ft/12 m) ▪ 7 (± 100 ft/30 m) ▪ 8 (± 180 ft/55 m) ▪ 9 (± 250 ft/76 m) ▪ 10 (± 500 ft/152 m) ▪ 11 (± 1000 ft/300m or more) 	Download more help: Horizontal Coordinate Accuracy .
AF	Horizontal Coordinate Collection Method	Method used to collect the horizontal coordinates for a field location.	Required	Number	2	<ul style="list-style-type: none"> ▪ 8 - Survey, conventional ▪ 13 - Computer map (GIS-based, including EIM or Google Earth) ▪ 16 - GPS consumer unit or unknown (code phase) ▪ 29 - GPS high-end consumer unit (DGPS or WAAS enabled) ▪ 15 - GPS survey-grade unit (carrier phase) ▪ 17 - GPS real time survey-grade (kinematic) ▪ 19 - Paper map interpolation 	For more information about different GPS technologies, download more help: Horizontal Coordinate Accuracy .

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AG	Paper Map Scale	Scale of the paper base map used to determine the geographic position of the field location.	Required only for paper maps	Number	2	See Paper Map Scale valid values (in this document)	Only fill this out if column AF, Horizontal Coordinate Collection Method, is code 19, “Paper map interpolation.”

Elevation and Metadata

Elevation is optional for most locations, except for wells.

For **permanent wells**, we require the blue columns (also see “Requirements” column).

For **Temporary Environmental Investigation Wells (EIWs)**, fill out columns AH-AM if you submit elevations. **Download** the [EIW help document](#) for details.

For **marine and freshwater sediment locations**, fill out columns AH-AJ and AL-AN, if you submit elevations.

For **all other locations**, fill out columns AH-AM, if you submit elevations.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AH	Elevation of	Point at which the elevation at a field location was measured.	Required for wells except for EIWs with GW chemistry only	Text	50	<ul style="list-style-type: none"> ▪ Land Surface ▪ Top of Well Casing ▪ Well Water Level Measuring Point ▪ Sediment Surface 	Note: Use Well Water Level Measuring Point only if the measuring point isn’t the top of casing (like an access port).

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AI	Elevation	The distance of a field location above or below a vertical reference point. In feet or meters.	Required for wells except for EIWs with GW chemistry only	Number	12	-9999999.999 to 0000000.000 to 9999999.999	<ul style="list-style-type: none"> ▪ 356 ▪ - 7.2 <p>Note: This is the elevation of the point specified in column AH (Elevation of).</p> <p>Marine and freshwater sediment surface (or mudline) elevations are measured relative to a reference point like mean sea level (column AN). They are often (but not always) negative values.</p>
AJ	Elevation Units	Units in which the elevation of a field location is expressed.	Required for wells except for EIWs with GW chemistry only	Text	2	<ul style="list-style-type: none"> ▪ FT - feet ▪ M - meters 	
AK	Elevation Datum	Vertical reference point from which elevation was measured at a field location.	Required for wells except for EIWs with GW chemistry only	Number	2	<ul style="list-style-type: none"> ▪ 1 - NAVD88, North American Vertical Datum of 1988 	<p>GPS unit = Check unit's settings for datum.</p> <p>Google Earth and EIM Map = NAVD88.</p> <p>Local datum = You must convert your elevation data to NAVD88 if you used another datum, including local datums.</p> <p>Download more help: Converting Local Elevation Datums to NAVD88.</p> <p>For sediment elevations, leave this column blank. See Sediment Elevation Reference (Column AN).</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AL	Elevation Accuracy	Best estimate of elevation accuracy at a field location.	Required for wells except for EIWs with GW chemistry data only	Number	2	<ul style="list-style-type: none"> ▪ 1 (± 0.1 ft/0.03 m) ▪ 2 (± 1 ft/0.3 m) ▪ 3 (± 3 ft/1 m) ▪ 4 (± 10 ft/3 m) ▪ 5 (± 20 ft/6 m) ▪ 6 (± 40 ft/12 m) ▪ 7 (± 100 ft/30 m or more) 	
AM	Elevation Collection Method	The method used to measure elevation at a field location.	Required for wells except for EIWs with GW chemistry data only	Number	2	<ul style="list-style-type: none"> ▪ 2 - Survey, conventional ▪ 4 - GPS consumer unit or unknown (code phase) ▪ 13 - GPS high-end consumer unit (DGPS or WAAS enabled) ▪ 5 - GPS survey-grade (carrier phase) ▪ 6 - GPS real time survey-grade (kinematic) ▪ 3 - Digital elevation model (DEM), source unspecified ▪ 12 - Digital elevation model (DEM) via lidar ▪ 1 - Bathymetric sounding ▪ 14 - Meter wheel ▪ 8 - Paper map interpolation 	

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AN	Sediment Elevation Reference	Reference point for the depth (elevation) of a marine or freshwater sediment field location.	Required only for marine or freshwater sediment locations with elevation specified in the Elevation column (AI)	Number	2	<ul style="list-style-type: none"> ▪ 1 - Mean Sea Level (MSL) ▪ 2 - Mean High Water (MHW) ▪ 3 - Columbia River datum (CRD) ▪ 4 - Lake Washington Ship Canal Datum (LWSC) ▪ 5 - Mean Lower Low Water (MLLW) ▪ 6 - Minimum Operating Pool (MOP) ▪ 14 - Lake Washington Low Water (LWLW) 	<p>Don't fill this out unless the location is a sediment location (marine or freshwater).</p> <p>If you used a reference point not listed here, contact your Data Coordinator.</p>

Well Water Level Measuring Point and Metadata

For permanent wells, we require blue columns (also see “Requirements” column). Requirements are different for Temporary Environmental Investigation Wells (EIWs). **Download the [EIW help document](#)** for details.

We appreciate getting optional information if you have it.

Measuring Point Diagrams

Diagrams showing what the measuring point columns refer to.

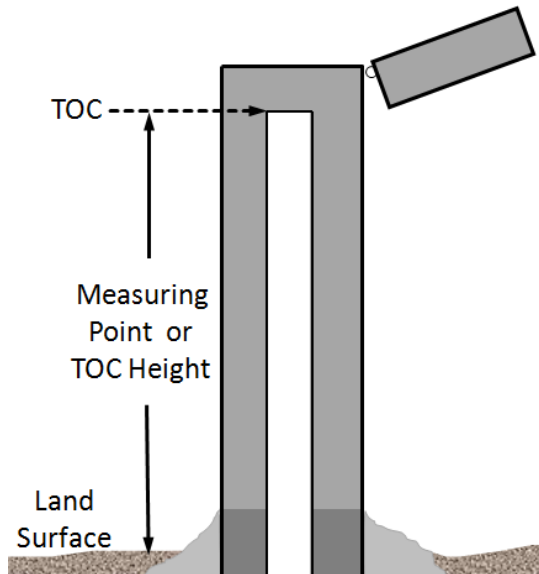


Figure 3: Well with casing stickup.

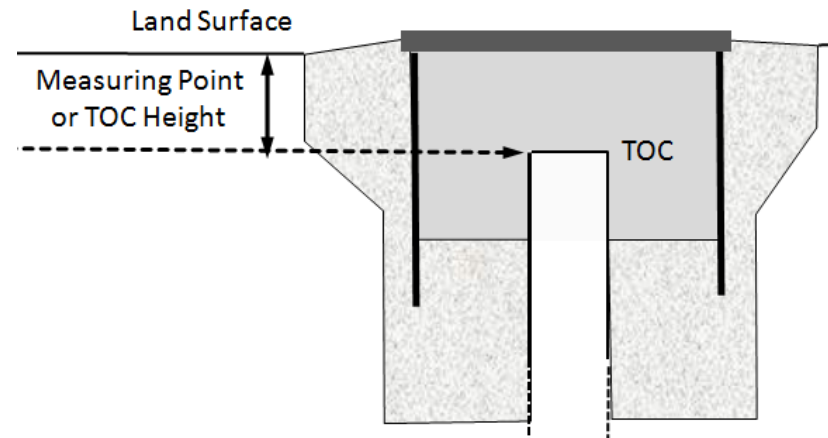


Figure 4: Flush-mount well.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AO	Well Water Level Measuring Point or TOC ID	ID for the point on the well from which water levels are measured. Often top of well casing (TOC).	Required for wells except for EIWs with GW chemistry data only	Text	8	<ul style="list-style-type: none"> ▪ MP1 - measuring point, like an access port ▪ MP2 - use for a secondary measuring point ▪ TOC1 - use when you measure from top of casing ▪ TOC2 - use for a secondary measuring point at the top of casing or when the casing gets cut off 	Tip: If the top of casing gets cut off or you have more than one measuring point, contact your Data Coordinator. They will enter a new Measuring Point ID into EIM for you.
AP	Well Water Level Measuring Point or TOC Description	Description of the point on the well from which water levels are measured. Often top of well casing (TOC).	Required for wells except for EIWs with GW chemistry data only	Text	2000	Free text	<ul style="list-style-type: none"> ▪ Top of casing, notch on north side
AQ	Well Water Level Measuring Point or TOC Height	Distance from the point where the water level was measured to the land surface. Often top of well casing (TOC) or synonymous with "casing stickup."	Required for wells if elevation is measured at land surface except for EIWs with GW chemistry data only	Number	5	Report measuring points below land surface as negative values	<ul style="list-style-type: none"> ▪ 2.8 (above ground) ▪ -0.5 (below ground) <p>Note: This isn't wellhead surface elevation. See the Elevation column (AI) for that.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AR	Well Water Level Measuring Point or TOC Height Units	Units in which the measuring point height is expressed.	Required for wells if Well Water Level Measuring Point or TOC Height is populated	Text	2	<ul style="list-style-type: none"> ▪ FT - feet ▪ M - meters 	
AS	Well Water Level Measuring Point or TOC Start Date	Date on which the measuring point was first used.	Optional	Date	10	Format: MM/DD/YYYY	<ul style="list-style-type: none"> ▪ 03/15/1999 ▪ 12/22/2021

Well Details

For permanent wells, we require blue columns (also see “Requirements” column). Requirements are different for Temporary Environmental Investigation Wells (EIWs). **Download the [EIW help document](#)** for details.

We appreciate getting optional information if you have it.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AT	Well Tag ID	The unique Washington State Department of Ecology well tag ID, consisting of three letters and three numbers (e.g. ABC123).	Required for wells if available	Text	6	Format: ABC123 Leave blank If you don’t have a valid well tag ID and it isn’t practical to get one.	<ul style="list-style-type: none"> ▪ AAB489 ▪ BFR225 <p>Must be the unique number off the Ecology well tag attached to a well. The ID is stamped on an aluminum tag and typically affixed to the well by the driller at the time of construction or later by Ecology staff. The ID is also included on the well log submitted by the driller.</p> <p>If a well isn’t tagged, you can get one from Ecology.</p> <p>Because the Well Tag ID is unique in Washington, you can use it as the EIM Location ID and Location Name.</p>
AU	Well Owner Organization Name	The organization name of the well owner.	Required for wells if available	Text	50	Free text	<ul style="list-style-type: none"> ▪ City of Olympia <p>This information isn’t made public.</p>
AV	Well Owner Last Name	The last name of the well owner.	Required for wells if available	Text	50	Free text	<ul style="list-style-type: none"> ▪ Jones <p>This information isn’t made public.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AW	Well Owner First Name	The first name of the well owner.	Required for wells if available	Text	50	Free text	<ul style="list-style-type: none"> John <p>This information isn't made public.</p>
AX	Ground-water Location Type	The primary use or type of well or monitoring location.	Required for wells	Text	30	<ul style="list-style-type: none"> Dewatering Well Geothermal Well In-Water Piezometer Injection Well - ASR Injection Well – Carbon Sequestration Injection Well - Remediation Irrigation Well Monitoring Well Pumping Well – Remediation Soil Gas Probe Stockwater Well Temporary Well - EIW Water Supply Well - Domestic Water Supply Well - Industrial Water Supply Well - Public Other 	<p>Download more help; EIWs (Temporary Environmental Investigation Wells).</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
AY	Well Completion Depth	The depth of the completed well below land surface. In feet or meters.	Required for wells except for EIWs with GW chemistry data only	Number	5		<ul style="list-style-type: none"> 48.84 20.00 Usually found on the well log.
AZ	Well Completion Depth Units	Units in which Well Completion Depth is expressed.	Required for wells except for EIWs with GW chemistry data only	Text	2	<ul style="list-style-type: none"> FT - feet M - meters 	
BA	Well Completion Type	The type of completion or nature of the openings that allow water to enter the well.	Required for wells except for EIWs with GW chemistry data only	Text	30	<ul style="list-style-type: none"> Cased, Open Interval Uncased, Open Interval Cased, Open-Ended Other 	<p>Does your well have a screen? Use "Cased, Open Interval."</p> <p>If "Other," explain the Completion Type in the Well Construction Comment (column BJ).</p>
BB	Well Open Interval Upper Depth	Distance from land surface to the top of the Well open interval. Includes screens, perforations, etc. In feet or meters.	Required for wells except for EIWs with GW chemistry data only	Number	5		<ul style="list-style-type: none"> 20 <p>Usually, depth to top of well screen. To include more information about this, use Well Construction Comment.</p> <p>For open-ended wells, repeat Well Completion Depth (column AZ) in both Well Open Interval Upper Depth and Lower Depth.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
BC	Well Open Interval Lower Depth	Distance from land surface to the bottom of the well open interval. Includes screens, perforations, etc. In feet or meters.	Required for wells except for EIWs with GW chemistry data only	Number	5		<ul style="list-style-type: none"> ▪ 23 <p>Usually, depth to bottom of well screen. To include more information about this, use Well Construction Comment.</p> <p>For open-ended wells, use Well Completion Depth (AZ) for both Well Open Interval Upper Depth and Lower Depth.</p>
BD	Well Open Interval Units	Units in which the Well Open Interval Upper and Lower Depth is expressed.	Required for wells except for EIWs with GW chemistry data only	Text	2	<ul style="list-style-type: none"> ▪ FT - feet ▪ M - meters 	
BE	Well Maximum Casing Diameter	The inner diameter of the outermost permanent casing used to complete the well. In centimeters or inches.	Optional	Number	5		<ul style="list-style-type: none"> ▪ 2.00 ▪ 2 <p>Report the inner diameter of the well itself and not that of the outer protective casing.</p>
BF	Well Maximum Casing Diameter Units	Units in which Well Maximum Casing Diameter is expressed.	Required if Well Maximum Casing Diameter is populated	Text	2	<ul style="list-style-type: none"> ▪ CM - centimeters ▪ IN - inches 	

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
BG	Well Casing Material	Material from which the well casing is made.	Optional	Text	15	<ul style="list-style-type: none"> ▪ Concrete ▪ Iron ▪ Plastic, other ▪ PTFE/Teflon ▪ PVC ▪ Steel, other ▪ Steel, Stainless ▪ Other 	
BH	Well Construction End Date	Date that well construction was completed.	Required for wells if available	Date	10	Format: MM/DD/YYYY	<ul style="list-style-type: none"> ▪ 01/01/2000
BI	Well Construction Method	The method used to create the borehole and construct the well.	Required for wells if available	Text	2	<ul style="list-style-type: none"> ▪ AP - air percussion ▪ AR - air rotary ▪ BA - bored / augered ▪ CT - cable tool ▪ DR - driven / direct push ▪ DU - dug ▪ HR - hydraulic / mud rotary ▪ JE - jetted ▪ RR - reverse circulation rotary ▪ SO - sonic 	

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
BJ	Well Construction Comment	Comments or other important information about the construction of a well.	Optional	Text	2000	Free text	<ul style="list-style-type: none"> Well constructed by owner. Depth is unknown
BK	Is Well Upgradient of a Facility/Site	Indicates a well that is used to represent upgradient conditions at a particular facility or site, and is (known or assumed to be) unaffected by that site. Doesn't necessarily reflect "pristine" or "natural" conditions.	Optional	Text	1	<ul style="list-style-type: none"> Y - yes N - no Ecology Facility/Site ID is required if populated "Y."	
BL	Aquifer Test Report in EIM	Indicates that an aquifer or pumping test report prepared by a hydrogeologist or engineer has been uploaded to EIM.	For internal use only. Leave it blank			Leave this column blank.	<p>If you want an aquifer test report uploaded to EIM, contact your Data Coordinator.</p> <p>Not for short-term bailer or air lift tests performed by the driller during well construction or development.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Comments
BM	Naturally Flowing Well	Indicates whether an uncapped well would naturally flow due to artesian pressure.	Required for wells if well is naturally flowing	Text	1	<ul style="list-style-type: none"> ▪ Y - yes ▪ N - no 	

Valid Value Lists

Location Setting Valid Values

Note - These aren't regulatory definitions.

Valid Value	Description
Air/Climate	Atmospheric monitoring, including air deposition and precipitation.
Canal/Ditch	Man-made channel or ditch for irrigation, hydropower, overflow, drainage, etc.
Estuary	Area where fresh and salt water intermix, like bay, lagoon, etc.
Estuary-Channel	Estuary channel bottom.
Estuary-NonChannel	Estuary non-channel bottom.
Intertidal	Area between high and low tide extremes.
Lake/Pond/Reservoir	Inland water body, usually fresh.
Land	On or below land surface, including most wells.

Valid Value	Description
Marine	Area beyond the estuarial environment.
Source-ManMade	Industrial, agricultural, stormwater, sewer/septic, discharge/pipe, lagoon, or other source.
Spring/Seep	Where groundwater discharges to land surface.
Stream/River	Channeled, flowing water.
Stream/River-Channel	Stream/River channel bottom.
Stream/River-NonChannel	Stream/River non-channel bottom.
Stream/River-Pool	Stream/River pool bottom.
Stream/River-Riffle	Stream/River riffle bottom.
Subtidal	Area below low tide.
Wetland	Land that is saturated by surface or ground water, either permanently or seasonally.
Other	Use when none of the other categories fit.

[Go back to Location Setting help](#)

EIM Paper Map Scale Valid Values

Valid Value	Description
9	1:25,000
10	1:24,000
13	1:10,000
14	1:12,000
15	1:25,001-1:50,000

Valid Value	Description
16	1:50,001-1:100,000
17	1:20,001-1:25,000
20	1:5,001-1:10,000
21	1:501-1:5,000
22	>1:500
23	<1:500
99	Unknown

[Go back to Paper Map Scale help](#)

Document Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
9/10/2013	2013.01	Changes to EIM data model.	CN
10/13/2017	3.0	Changed versioning system and made formatting updates for new help center.	CN
04/25/2018	3.1	Added “Estuary” and “Stream/River” to definitions under those categories.	CN
10/04/2018	3.2	Retired value “1” (NAD27 - N. American Datum of 1927) from Horizontal Datum (AD) and “Oil and Gas Well” from Groundwater Location Type.	CN
01/23/2019	3.3	Added “Soil Gas Probe” to Groundwater Location Type valid values and “Spring/Seep” to Location Setting valid values.	KC
06/24/2019	3.4	Added link to new Horizontal Coordinate Accuracy help document.	KC
08/06/2019	3.5	Added link to “Cleanup Site Search” for FSID.	KC

Revision Date	Revision No.	Summary of Changes	Reviser(s)
03/19/2020	3.6	Deleted Elevation Accuracy valid value codes 8-11 and updated definition for code 7.	KC
04/09/2020	3.7	Added link to help document in Horizontal Coordinate Collection Method, removed valid value 29 (Transect, end point) from Horizontal Coordinates Represent.	KC
05/08/2020	3.8	Removed unused valid values 2-8, 11, 12, 18, 19 from Paper Map Scale and added Unknown.	KC
06/15/2020	3.9	Updated Location Name info (no longer required but needs to be descriptive) and Location Description (can be more general for cleanup sites). Updated document name for link to "How to Name and Describe Field Locations." Updated links. Increased font size from 10 to 11. Other accessibility edits like breaking apart single table and adding headings.	CN
11/10/2020	3.10	Updated capitalization of "Is Location a Well" to "Is Location A Well" to match the template.	KC
12/03/2020	3.11	Removed an example from Well Construction Comment	KC
04/15/2021	3.12	Fixed typo in heading AO	KC
10/08/2021	3.13	Clarified valid values and conditions for Location ID and added additional examples	KC
03/09/2022	3.14	Updated formatting, added descriptions for help fields, and revised descriptions for lidar and DEM Elevation Collection Methods.	CN
06/08/2022	3.15	Updated link in Ecology Facility/Site ID field for Cleanup Site Search to link for Facility/Site Database.	KC
10/28/2022	3.16	Added blue color and underline to links in paragraph under Horizontal Coordinate section.	KC
11/09/2022	3.17	Added " Note: Pierce County is South" under State Plane Zone	CN
12/30/2022	3.18	Added clarification in bold to "Submit only one type of coordinate system per location." Removed Horizontal Coordinate Collection Method valid value of "4 Address matching – unspecified."	KC
02/06/2023	3.19	In the Type column for Elevation Units, previously said "number", updated it to "text."	KC

Revision Date	Revision No.	Summary of Changes	Reviser(s)
02/23/2023	3.20	Added comment to Horizontal Datum "Locations using Washington State Plane Coordinate System (SPCS) should only use NAD83 or NAD83HARN."	KC
10/13/2023	3.21	Removed location setting valid value "tunnel/shaft/mine", added "including air deposition and precipitation" to the description for Location Setting of "Air/Climate", revised text in the Requirements and Examples and Guidance fields for NHD Reach Code.	KC
11/02/2023	3.22	Updated descriptions for Location Settings Canal/Ditch (added "or ditch") and Source-ManMade (added "septic" and "pipe"). In Valid value lists, added dashes or parens between values and descriptions to create pause for screen readers.	CN