

EIM Help – Well Water Level Template

Version 3.10
August 2024

How to use this help

This template is for **discrete water levels**. It’s basically a short version of the Results template. Some of the column names are slightly different than the Results template (shown in parentheses).

Use this when you fill out your Well Water Level Template. Each row corresponds to a column in the template.

Color coding

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

- Yellow/Bold** = **Required** if Field Collection Type is **Measurement** (water level) or **Observation** (when you tried to get a water level measurement but couldn’t).
- Blue/Bold** = **Required** if Field Collection Type is a **Measurement** (water level).

Other templates

You can also use the **Results template** to submit discrete water levels. If you have **transducer water levels**, submit them in the **Time Series Results template**. Find them in the [EIM Help Center](#).

Template help

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|-----|------------|-----------------------------------------|--------------------------------------------|----------------|------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A | Study ID | Unique ID to identify the Study in EIM. | Required for Measurements or Observations. | Alpha-numeric. | 20 | Must be valid EIM Study ID. | Use "Study ID" from (1) your Study form or (2) a Study already in EIM. Only submit data to one study at a time. To load data to more than one study, use separate templates for each. |

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|----------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B | Location ID | Unique ID to identify the field Location in EIM. | Required for Measurements or Observations. | Alpha-numeric. | 15 | Must be valid EIM Location ID. | Location IDs are from Column A in your Location template. You will commonly have multiple results records associated with each Location ID. All results records associated with a particular sampling location use that Location ID. |
| C | Study Specific Location ID | Unique ID to identify the field location within a particular Study. Only needs to be unique to the Study, not all of EIM. Can be same as Location ID, an abbreviation of Location ID, or something totally different. | Required for Measurements or Observations. | Alpha-numeric. | 40 | Free text / preferred format. An ID of 8 characters or less displays better on a GIS map. | Ex: If your Location ID for a monitoring well is "CITGO-34586-MW4," your Study-Specific Location ID could be "MW-4." It's often the location identifier that's written on the sample tag or label. Each Location ID must be paired 1-to-1 with a Study Specific Location ID. Once you establish a Location ID/Study Specific Location ID pairing (by submitting data in the Results template), use the same pairing for all future data submittals to your Study. If you aren't sure what Location ID/Study-Specific Location ID pairings were previously used in your Study, download your Results data from EIM Search to view them or contact your Data Coordinator. Download help for "Naming and Describing for EIM Field Locations." |

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|----------|---------------------------------------|-------------------------------------------------------|---------------------------------------------------|----------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D | Field Collection Type | General type of data collection conducted in field. | Required for Measurements or Observations. | Alpha-numeric. | 11 | <ul style="list-style-type: none"> – Measurement - data collected in the field (in-situ) using an instrument. – Observation - record of an unsuccessful measurement or sampling attempt. | <p>For Observations, use only if a sample or measurement was planned or required but not obtained. Download help for "Entering Observations."</p> <p>For Transducer data, use the Time-Series Results template.</p> |
| E | Field Collector | Name or type of organization that collected the data. | Required for Measurements or Observations. | Alpha-numeric. | 15 | <p>Must be a valid EIM Field Collector Code.</p> <p>See table of Field Collector valid values (in this document).</p> | Ex. "Consultant." |
| F | Field Collection Start Date | The date that data collection in the field began. | Required for Measurements or Observations. | Date. | 10 | MM/DD/YYYY. | Ex. "06/23/1999." |
| G | Field Collection Start Time | The time that data collection in the field began. | Required if available. | Time. | 8 | HH:MM:SS or HH:MM (24 hour) in local time. | <p>Ex. "15:22:14."</p> <p>Leave blank for unknown time; don't enter zero. Times of 00:00:00 represent midnight.</p> |
| H | Field Collection Date Accuracy | Indicates how accurate the measurement date is. | Required for Measurements. | Numeric. | 1 | <ul style="list-style-type: none"> – D - day. – W - week. – M - month. – Y - year. – U - unknown. | <p>Most values should be "D."</p> <p>For some older water level measurements, the day wasn't logged.</p> |

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|-----|--------------------------|--------------------------------------------------------------------------------|--------------|----------------|------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I | Field Collection Comment | Comments or descriptive information about the collection of data in the field. | Optional. | Alpha-numeric. | 2000 | Free text. | <p>Ex. "Cows in stream upgradient of sampling site."</p> <p>You can have only one Field Collection Comment per field collection event. A Field collection event is all Measurements collected at the same location, depth, date, time, matrix and source or all Samples collected at the same location, depth, date, matrix and source, and Sample ID. For Samples, this means you can only have one Field Collection Comment per Sample ID.</p> <p>If you enter more than one Field Collection Comment per field collection event, EIM only takes the first one loaded. All Results associated with a specific field collection event have the same Field Collection Comment.</p> <p>If you want to comment about a particular result or group of results within a field collection event, enter it as a Result Comment or Result Additional Comment.</p> <p>Download help for "How to Use EIM's Comment fields."</p> |

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|-----|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| J | 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 Measurements | Alpha-numeric. | 8 | <ul style="list-style-type: none"> – TOC1 when measured from top of casing – TOC2 when measured from a secondary point at the top of casing (like when the casing gets cut off) – MP1 when measured from access port or similar – MP2 when measured from a secondary access port or similar | Use value you submitted in the Location template or that is stored in EIM. |
| K | Water Level Parameter Name (Same as Result Parameter Name in Results template). | Name of the water level parameter used. | Required for Measurements or Observations. | Alpha-numeric. | 254 | <p><u>Measurement</u></p> <ul style="list-style-type: none"> – Water level in well (depth below top of well casing) – Water level in well (depth below measuring point) – Water level in well (depth below land surface) – Depth to product (LNAPL) in well (depth below land surface) – Depth to product (LNAPL) in well (depth below measuring point) – Depth to product (LNAPL) in well (depth below top of well casing) <p><u>Observation</u></p> <ul style="list-style-type: none"> – Water level in well (unable to measure) – Depth to product (LNAPL) in well (unable to measure) | |

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|-----|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------|------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| L | Water Level Value (Same as Result Value in Results template). | Water level depth. | Required for Measurements | Numeric. | 10 | | Ex. "26.2." |
| M | Water Level Value Units (Same as Result Value Units in Results template). | Units of measure associated with the Water Level Value. | Required for Measurements | Alpha-numeric. | 10 | – FT - feet. | Ex. "FT." For water levels measured in meters, contact your EIM Data Coordinator. |
| N | Water Level Qualifier (Same as Result Data Qualifier in Results template). | Standard annotations for documenting issues with Water Level Values. Also used for Observations to explain why a water level measurement wasn't possible. | Required if applicable. | Alpha-numeric. | 3 | See table of Water Level Qualifier valid values (in this document). | Ex. "WLR" (Well site was pumped recently). |

| Col | Field Name | Description | Requirements | Type | Size | Valid Values and Conditions | Examples and Guidance |
|-----|---------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------|----------------|------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| O | Water Level Accuracy | Estimated accuracy of the water level measurement. | Required for Measurements | Numeric. | 3 | Accuracy in feet: – WL2 - +0.01ft. – WL1 - +0.1ft. – WL0 - +1ft. – WL6 - >1ft. | |
| P | Water Level Method (Same as Result Method in Results template). | Method by which the water level was obtained. | Required for Measurements | Alpha-numeric. | 20 | See table of Water Level Method valid values (in this document). | Ex. "GWLMT" (Groundwater level by electric tape measurement). |
| Q | Water Level Comment (Same as Result Comment in Results template). | Additional comments about the water level measurement. | Optional. | Alpha-numeric. | 2000 | Free text. | Download help for "How to Use EIM's Comment fields." |

[Go back to Field Collector help](#)

EIM Field Collector valid values

| Valid Value | Description |
|----------------|-----------------------------------------------|
| Business | Business, Trained Staff.. |
| ConsDistrict | Conservation District |
| Consultant | Consultant, Professional |
| Ecology | WA Dept of Ecology |
| GovFed | Government, Misc. Federal |
| GovLocal | Government, Misc. Local |
| GovState | Government, Misc. State |
| GovTribal | Government, Tribal |
| HealthLocal | Health Dept., Local |
| HealthState | Health Dept., State |
| NGO | Non-Governmental Organization |
| NOAA | National Oceanic & Atmospheric Administration |
| University | University |
| USACE | US Army Corps of Engineers |
| USEPA | US Environmental Protection Agency |
| USGS | US Geological Survey |
| USNPS | US National Parks Service |
| UtilityPrivate | Utility, Private |
| UtilityPublic | Utility, Public |
| Volunteer | Volunteer, Trained |
| WellDriller | Well Driller |
| WellOwner | Well Owner |
| WDFW | WA Dept of Fish & Wildlife |
| WDNR | WA Dept of Natural Resources |

[Go back to Water Level Qualifier help](#)

EIM Water Level Qualifier valid values

| Valid Value | Description |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| WLA | Well water level affected by atmospheric pressure. |
| WLB | Well water level affected by tidal stage. |
| WLC | Well water level affected by ice. |
| WLD | Well was dry during measurement attempt.* |
| WLE | Well was flowing recently. |
| WLF | Well was flowing and could not be measured.* |
| WLG | Nearby well(s) flowing during measurement. |
| WLH | Nearby well(s) flowing recently. |
| WLI | Well site was being injected during measurement. |
| WLJ | Nearby well site(s) being injected during measurement. |
| WLK | Water was cascading down inside of well. |
| WLL | Well water level affected by brackish or saline water. |
| WLM | Well was plugged and not in hydraulic contact with the aquifer.* |
| WLN | Well measurement discontinued.* |
| WLO | Well water level affected by/could not be measured due to obstruction in well.* |
| WLP | Well site was being pumped during measurement. |
| WLR | Well site was pumped recently. |
| WLS | Nearby well(s) being pumped during measurement. |
| WLT | Nearby well(s) pumped recently. |
| WLV | LNAPL (floating product) or other foreign substance on well water. |
| WLW | Well was destroyed and could not be measured.* |
| WLX | Well water level affected by nearby surface-water stage. |
| WLZ | Well water level affected by other conditions. Note: You must add a comment to the Water Level Comment field (column Q) explaining the conditions. |

* Data qualifiers used with Observation Field Collection Types

[Go back to Water Level Method help](#)

EIM Water Level Method valid values

| Valid Value | Description |
|----------------|--------------------------------------------------------------------------------------------|
| GWL-OIL-METER | Product or groundwater level by electronic oil/water interface meter |
| GWL-TAPE-PASTE | Product or groundwater level by measuring tape with hydrocarbon- and water-sensitive paste |
| GWLMA | Groundwater level by airline measurement. |
| GWLMB | Groundwater level by analog (mechanical) recorder. |
| GWLMC | Groundwater level by calibrated airline measurement. |
| GWLMD | Groundwater level by float / digital punch tape. |
| GWLME | Groundwater level, estimated. |
| GWLMF | Groundwater level by float / shaft encoder / data logger. |
| GWLMG | Groundwater level by mechanical pressure-gage measurement. |
| GWLMMH | Groundwater level by calibrated mechanical pressure-gage measurement. |
| GWLML | Groundwater level interpreted from geophysical logs. |
| GWLMM | Groundwater level by manometer measurement. |
| GWLMMN | Groundwater level by nonrecording gage. |
| GWLMP | Groundwater level by pressure transducer. |
| GWLMQ | Groundwater level by downhole mechanical pressure recorder (DST). |
| GWLMR | Groundwater level reported, method not known. |
| GWLMS | Groundwater level by steel tape measurement. |
| GWLMT | Groundwater level by electric tape measurement. |
| GWLUMU | Groundwater level by sonic meter. |
| GWLUMV | Groundwater level by calibrated electric tape measurement. |
| GWLUMZ | Groundwater level by other method. |
| Unknown | Unknown method - only for historic data or results where the method can't be determined. |

Document Revision History

| Revision Date | Revision No. | Summary of Changes | Reviser(s) |
|---------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 09/10/2013 | 2013.01 | Changes to EIM data model | CN |
| 10/18/2017 | 3.0 | Changed versioning system and made formatting updates for new help center. Made everything REQUIRERD instead of a mix of required and required for measurements (old purple color). Moved to Word/PDF from Excel for accessibility reasons. Changed name from Water levels template to Well Water Levels template. | CN |
| 12/06/2018 | 3.1 | Updated descriptions in Water Level Method valid values table from Water level by to Groundwater level by | KC |
| 05/03/2020 | 3.2 | Removed dash from Study-Specific Location ID in Field Name column, added valid value of “Depth to product (LNAPL) in well (unable to measure)” to Water Level Parameter Name. Removed “meters” from Water Level Value Units and added comment about contacting Data Coordinator in examples column. Removed Water Level Accuracy valid values in meters (WL3, WL4, WL5, WL7) and added comment in examples column. | KC |
| 06/17/2020 | 3.3 | 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. | CN |
| 04/21/2021 | 3.4 | Added information about formatting to Field Collection Start Time. | KC |
| 10/11/2021 | 3.5 | Changed color coding from yellow to blue for “Required if Field Collection Type is Measurement”, added 2 water level methods. | CN/KC |
| 11/04/2021 | 3.6 | Clarified that there should only be data for a single study in each water level template. | KC |
| 01/04/2022 | 3.7 | Removed periods from the end of each valid value for Water Level Parameter Name. | KC |
| 12/30/2022 | 3.8 | Added definition for asterisk used in the Water Level Qualifier valid values list on page 9. | KC |
| 10/12/2023 | 3.9 | Added a sentence to the water level qualifier WLZ description: “You must add a comment to the Water Level Comment field (column Q) explaining the conditions.” | KC |
| 08/26/2024 | 3.10 | Updated wording in Well Water Level Measuring Point or TOC ID. Updated description of Field Collection Type of Measurement to “data collected in the field (in-situ) using an instrument” and changed text “For Observations, enter a record only if” to “For Observations, use only if.” Removed sentence “For water levels measured in meters, contact your EIM Data Coordinator” from Water Level Accuracy. | KC |

