Field Name	Field Title	Data Type	Definition
ChannelWidth	Channel Width	Plain Text	The width of the channel where the sample was collected. Default value equals "none" if unknown or not recorded. This field is optional so it could be blank.
CollectionComments	Collection Comments	Plain Text	Comments referring to the lab collection of the sample.
CollectionDepth	Collection Depth	Number	Records the depth or penetration, from the surface in the water or sediment column, at which the sample was collected. Default value equals "-88" if unknown or not recorded.
CollectionDevice Description	Collection Device	Plain Text	Name of the device used to collect the sample (e.g. "MPSL-Eboat_(BigE)", "WPCL-DFG Gill Net 1(50m,1.5")", "Individual Collection by bucket sampler", etc.). Default value equals "Not Recorded" if unknown. A list of possible options is available at this link: CollectionDeviceLookUpList
CollectionMethod Name	Collection Method Name	Plain Text	Refers to the general method used to collect the sample, organism, or field observation. Depending on the data types, different types of collection methods will be stated. Some examples are: "Algae_SWAMP," "BMI_CSBP_Transect", "Sed_Core", "Water_Grab", "Autosampler24h", "Habitat_Generic", etc. The default value of "Not Recorded" is utilized if method is unknown. LabQA samples utilize "Not Applicable." A list of possible options is available at this link: CollectionMethodLookUpList
CollectionReplicate	Collection Replicate	Plain Text	Used to distinguish between replicates created at a single collection in the field. Replicate samples that are collected at the same station and date should either have a value of "2" or "3." Samples collected on different dates, even if they are from the same station, should both have a value of "1." Default value is also "1."
CollectionTime	Collection Time	Date/Time	Refers to the time when the first sample of a sampling event at a specific station was collected in the field. Format equals hh:mm in 24 hour time (e.g. 13:30 for 1:30 pm). Default value equals "00:00" if the time sampling started is unknown.
ComplianceCode	Compliance Code	Plain Text	Unique code referencing the compliance with the associated Quality Assurance Project Plan (QAPP). "Com" is used when all standards are met for the associated QAPP. Default value equals "NR" if unknown. A list of possible options and definitions is available at this link: ComplianceLookUpList

DataQuality	Data Quality	Number	Describes the overall quality of the record by taking the QACode, ResultQACode, ComplicanceCode, BatchVerificationCode, and special circumstances into account to assign one of the following indicators: • "Metadata, QC record"- Not a measurement of environmental conditions • "Passed QC"- Data passed all QC checks • "Some review needed"- Data did not pass minor QC checks, some effort needed to review and defend data if used • "Spatial Accuracy Unknown"- Data missing spatial datum information, data should not be used for fine scale spatial analysis • "Extensive review needed"- Data did not pass QC some critical checks, high level of effort needed to defend data if used • "Unknown Data Quality"- Data was not reviewed by the project. Data will need review before use • "Reject Data"- Data was rejected by the project or data did not pass all critical QC checks. Data deemed unusable
DataQualityIndicator	Data Quality Indicator	Plain Text	Explains the reason for the DataQuality value by indicating which quality assurance check the data did not pass (e.g. BatchVerificationCode, ResultQACode, etc.). If this field contains "Special Rule," this indicates that the data falls into a special circumstance that decreases data quality. This field is left blank for values "Metadata, QC record" and "Passed QC."A full explanation of the data quality ranking can be found at the following link. This link is open to public comments as well: DataQualityEstimator-DecisionTree
Datum	Datum	Plain Text	Represents the associated model of the Earth from which reference points are used to calculate position measurements. GPS devices commonly use datums such as "NAD83" and "WGS84." Default value equals "NR" if unknown. A list of possible options is available at the following site (Note: search the first column in the table for "DatumList"): VariableCodesLookUpList
DigestExtractDate	Digest/ Extraction Method Date	Date/Time	The start date and time the digestion or extraction was performed on the sample. Default value equals "01/Jan/1950 00:00" if unknown or if no digestion or extraction method was performed.
DigestExtractMethod	Digest/ Extraction Method	Plain Text	References the type of digestion or extraction method performed on the sample prior to analysis. Default value equals "Not Recorded" if unknown or if no digestion or extraction method was performed. A list of possible options is available at this link: DigestExtractLookUpList

DilutionFactor	Dilution Factor	Number	Factor by which a sample was diluted and is reported as a whole number. This is equal to the final volume divided by the initial volume of solution (i.e. DF = Vf ÷ Vi). For example, if the DilutionFactor is 100, for every 100 parts of the diluted sample, 1 part is the original sample. The default value is "1," which means no dilution was performed.
DistanceFromBank	Distance From Bank	Number	The measured distance from the stream bank where the sample was taken. Default value is "None" if not applicable, or "-88" if not recorded.
DownStreamLength	Down Stream Length	Number	The measured distance downstream where the recorded sample was taken. Default value is "None" if not applicable.
DW_AnalyteName	DW Analyte Name	Plain Text	A more detailed name for the analyte. This field is included to assist with data reporting.
EventCode	Event Code	Plain Text	Represents the primary reason for the sampling event at a particular station and date (e.g. for water quality, a time series, or bioassessment sampling). A list of possible options is available at this link: EventLookUpList
ExpectedValue	Expected Value	Plain Text	The concentration of the analyte in a reference standard, laboratory control sample, matrix spike sample, or the value expected to be obtained from analysis of the QC sample. This consists of the native sample result concentration plus the spike amount. For surrogate samples, the expected value should be "100", representing 100%.
GroupSamples	Group Samples	Number	An Identifier used to group samples by the project staff. Not a required field.
Hydromod	Hydrological Modification	Plain Text	Indicates if there is any type of alterations in the natural watershed hydrology associated with changes in land cover and use, or notes any observed hydrological modification on the waterbody that was sampled (e.g. "Pipes", "bridges", "ConcreteChannel", etc.). Default value is "NR" if unknown. A list of possible options is available at the following site (Note: search the first column in the table for "HydromodList"): VariableCodesLookUpList
HydroModLoc	Hydrological Modification Location	Plain Text	Codes that refer to the location of the hydrological modification (HydroMod field). A list of possible options is available at the following site (Note: search the first column in the table for "HydromodLocList"): VariableCodesLookUpList
LabAgency	Lab Agency	Plain Text	The organization, agency, or laboratory that performed the analysis on the sample. Default value equals "Not Recorded" if unknown. A list of possible agencies is available at this link: AgencyLookUpList

LabBatch	Lab Batch	Plain Text	A unique code, provided by the laboratory, that represents a group of samples processed together. It groups all environmental samples with their supporting QC samples and is used to verify completeness based on the SWAMP QAPrP. It also identifies all samples digested or extracted together in one batch. When a digestion or extraction is not performed as part of the method, the LabBatch represents all samples within a unique analysis run. Format is "Batch#-AgencyCode" (e.g. "Batch1-SCCWRP").
LabSampleID	Lab Sample ID	Plain Text	An ID assigned by the lab; intended to provide lab-specific identification for an analyzed sample. The format and content is determined by the lab. May have "- Dup," "-MS," or "-MSD" to the end of the ID to help confirm the SampleType and the LabSampleID of the native sample. If the lab does not assign the samples an ID, this column is left blank.
Latitude	Target Latitude	Number	The latitude in decimal degrees of the sample site (should be positive).
LocationCode	Location Code	Plain Text	Describes the physical location in the waterbody and the field survey method used where the sample was collected (e.g. "Transect at 177m from start", "First instance where sample was collected in OpenWater", "second instance where a net (e.g. gill, fyke, dip) was used at the thalweg of the waterbody", "Bank, Left", etc.). Default value equals "Not Recorded" if unknown. A list of possible options is available at this link: LocationLookUpList
LocationDetailBA Comments	Location Detail BA Comments	Plain Text	Comments regarding the location from which bioassesment measures were taken.
LocationDetailWQ Comments	Location Detail WQ Comments	Plain Text	Comments regarding observations about the location from which samples were taken, how the samples were taken, or comments about the samples themselves.
Longitude	Target Longitude	Number	The longitude in decimal degrees of the sample site (should be negative).
MatrixName	Matrix Name	Plain Text	Refers to the sample matrix; the substance in which the analyte is evaluated in or the components of a sample other than the analyte of interest (e.g. "samplewater", "tissue"). Default value equals "Not Recorded" if unknown. A list of possible options is available at this link: MatrixLookUpList
MDL	Method Detection Limit	Number	The Method Detection Limit (MDL) is the detection limit associated with the method used to measure the analyte in the sample. This is the lowest possible calculated level, or the minimum concentration of an analyte that can be reported with a stated level of confidence that the analyte concentration is greater than zero. If an MDL is unknown, then the default value is "- 88" with a QACode of "NMDL."

MethodName	Method Name	Plain Text	Refers to the method used by the laboratory to analyze the sample. Default value equals "Not Recorded" if unknown. A list of possible options is available at this link: MethodLookUpList
Observation	Observation	Plain Text	Observations made in the field where samples were collected.
OccupationMethod	Occupation Method	Plain Text	The means by which a crew entered or occupied the sampling location and collected a sample (e.g. "Walk In", "RV Questuary", "From Bridge", etc.)
ParentProject	Parent Project Name	Plain Text	A larger or on-going project in which the specific project that the samples were collected for is associated with. A list of possible options can be found at this link: ParentProjectLookUpList
PositionWaterColumn	Position Water Column	Plain Text	Position in water column where the sample was taken (e.g. "Surface", "Midcolumn", "Nearbottom"). Use "Not Applicable" if unknown. A list of possible options is available at the following site (Note: search the first column in the table for "PositionWaterColumnList"): VariableCodesLookUpList
PrepPreservationDate	Preparation Preservation Date	Date/Time	Date and time the preparation or preservation was started. Format is "dd/mmm/yyyy hh:mm." Deflaut value is "01/Jan/1950 00:00" if the date and time the process started isn't known or if no process was performed.
PrepPreservation Name	Preparation Preservation Name	Plain Text	References the preparation or preservation method performed on the samples prior to analysis. Default value equals "Not Recorded" if unknown. A list of possible options is available at this link: PrepPreservationLookUpList
Program	Program Name	Plain Text	The name of the program that is associated with the sample. A list of possible options is available at this link: ProgramLookUpList
Project	Project Name	Plain Text	The project to which the sample result is associated. A list of possible options is available at this link: ProjectLookUpList
ProtocolCode	Protocol	Plain Text	Represents the sampling protocol used, which includes the set of methods, methodology and/or specifications, such as "MPSL-DFG_Field_v1.0." Default value is "Not Recorded." LabQA samples will have "Not Applicable." A list of possible options is available at this link: ProtocolLookUpList

QACode	Quality Assurance Code	Plain Text	Codes that indicate data quality by describing any special conditions, situations or outliers that occurred during or prior to the analysis to achieve the result. The default code, indicating no special conditions, is "None." A list of possible options is available at this link: QALookUpList
ResultQualCode	Result Qualifier Code	Plain Text	A code that indicates specific details about the analytical result of the sample, such as if the analyte was detected but not quantifiable or if the result was a field estimation. Default value is "=", which means that the recorded result is the actual result. A list of possible options is available at this link: ResQualLookUpList
Result	Result	Number	Final numeric result of a given analyte, stored as text to retain trailing zeros. The result should be reported with the appropriate number of significant figures. Result may be left blank as long as an appropriate ResQualCode is provided.
ResultsComments	Result Comments	Plain Text	Any comments related to the results or analysis of the sample.
ResultsReplicate	Lab Replicate	Number	Used to distinguish between replicates created in the laboratory. It differentiates the original field sample that was analyzed from all subsequent laboratory duplicates. Default value is "1."
RL	Reporting Limit	Number	Stands for "Reporting Limits" of the sample analyzed is the minimum value below which data are documented as non-quantifiable, as determined by the laboratory. The default value of "-88" is utilized for surrogates, grain size samples, or if no RL was used.
SampleAgency	Sampling Agency	Plain Text	Refers to the organization or agency that collected the sample. Default value equals "Not Recorded" if unknown. A list of possible options is available at this link: AgencyLookUpList
SampleComments	Sample Comments	Plain Text	Used for any notes or comments specifically related to the sampling event at a particular station and/or the verification of GIS station information.
SampleDate	Sample Date	Date/Time	Refers to the date the sample was collected in the field. Default value equals "01/01/1950" for unknown or null values. For samples with collection times that last longer than one day, like autosamplers, the SampleDate is the date in which sampling began.
SampleID	Sample ID	Plain Text	A unique identifier supplied by the sampling agency, and is used to track the sample throughout the sampling and analysis processes. This field can be used to tie a result to the sample.

SampleTypeCode	Sampling Type	Plain Text	Refers to the type or purpose of the sample that is collected or analyzed (i.e. indicates if the sample was used as a control, for calibration purposes, is a combination of multiple samples, used for algae bioassessment, etc.) Default value equals "Not Recorded" if unknown. A list of possible options is at this link: SampleTypeLookUpList
StartingBank	Starting Bank	Plain Text	The bank of the stream from which measurements began (i.e. on the left bank or right bank) A list of possible options is available at the following site (Note: search the first column in the table for "StartingBankList"): VariableCodesLookUpList
StationCode	Station Code	Plain Text	An alphanumeric code that represents the sampling site at which the sample was collected. The format is ###ABC123, where ### is the Hydrologic Unit number and ABC123 is an alphanumeric description of the station. An example is "111EELBRN", which is Hydrologic Unit 111 and an abbreviated code to indicate "Eel River - South Fork near Branscomb." Some stations may have a code that deviates from this format because the program or organization collecting the sample has their own code system. A complete list of stations and station information is available at this link: StationLookUpList
StationName	Station Name	Plain Text	The name of the station at which the sample was collected. A complete list of stations and station information is available at this link: StationLookUpList
StationWaterDepth	Station Water Depth	Number	Depth of the water at the area where the sampling station is located. Default value is "None" if unknown or not applicable.
StreamWidth	Stream Width	Number	Width of the stream where the sample was collected. Default value is "-88" if unknown.
SubmissionCode	Lab Submission Code	Plain Text	A unique batch qualifier code assigned to the LabBatch as a whole by the analyzing laboratory which references the quality of the data in the entire batch. The SubmissionCode should be reviewed by the Project Manager, or other appropriate person, to ensure that the code has been applied based on project-specific data quality objectives and criteria. Default value equals "NR" if unknown. A list of possible options can be found at this link: LabSubmissionLookUpList
SubmittingAgency	Submitting Agency	Plain Text	The organization or agency that is responsible for submission of the data to the database. A list of possible options is available at this link: AgencyLookUpList

TotalReach	Total Reach	Number	Transposed value of the analyte "Length, Reach" which records the total length of a reach that was sampled for bioassessment. If this value was not recorded, then value will be blank or "-88."
Unit	Unit	Plain Text	Indicates the units used in the measurement of the analyte. Chemistry results are indicated by weight of analyte/volume of sample (e.g. "ng/L"). Results from sediment and tissue samples are indicated by weight/weight and includes whether the sample result is reported as wet weight (ww) or dry weight (dw) (e.g. "ng/g ww"). Surrogate recovery results use a unit of "%". Toxicity test results are recorded as percent that survived ("%"), weight of surviving individuals ("mg/ind"), cells per volume ("cells/ml"), reproduction rate ("neonates/adults"), etc. Taxonomic units are indicated by "count" or volume/area (e.g. "um3/cm2"). A list of possible options is available at this link: UnitLookUpList
UnitCollectionDepth	Unit Collection Depth	Plain Text	The units used to measure the CollectionDepth. A list of possible options can be found at this link: UnitLookUpList
UnitDistanceFrom Bank	Unit Distance From Bank	Plain Text	The units used to measure the DistanceFromBank. A list of possible options can be found at this link: UnitLookUpList
UnitStationWater Depth	Unit Station Water Depth	Plain Text	The units used to measure the StationWaterDepth. A list of possible options can be found at this link: UnitLookUpList
UnitStreamWidth	Unit Stream Width	Plain Text	The units used to measure the StreamWidth. A list of possible options can be found at this link: UnitLookUpList
UpstreamLength	Upstream Length	Number	The measured distance upstream where the recorded sample was taken. Default value is "None" if not applicable.

For questions, comments, or concerns regarding these field names and definitions, please send an email with the subject line, "Chemistry Data Dictionary," to: OIMA-Helpdesk@waterboards.ca.gov