CEDEN

California Environmental Data Exchange Network

Field Data Submission Guidance Document

Updated May 1, 2012

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List of Acronyms

CEDEN	California Environmental Data Exchange Network
RDC	Regional Data Center

List of Terms

Controlled Vocabulary	Controlled vocabulary refers to codes and associated definitions maintained within CEDEN to ensure comparability between and among data sets. Current controlled vocabulary can be found at: http://www.ceden.us/Metadata/ControlledVocab.php
Data Checker	Web-based automated tool that assists data submitters in examining their data sets against the required LookUp lists, formats and business rules. Each RDC maintains its own data checker.
LookUp Lists	Controlled vocabularies are maintained within the CEDEN database as "LookUp Lists" and are managed through individual RDCs to maintain comparability between RDCs and throughout data sets available through CEDEN. Contact your Regional Data Center if one needs to add new codes to LookUp lists.
Primary Key	Uniquely identifies each row in a table and is comprised of a set of columns. No two distinct rows in a table can have the same combination of column values. Required for record uniqueness.
Data Type	Refers to the type of format required for a specific column heading in CEDEN templates. Data type examples include: integer (whole numbers), text, date and time, and decimal.

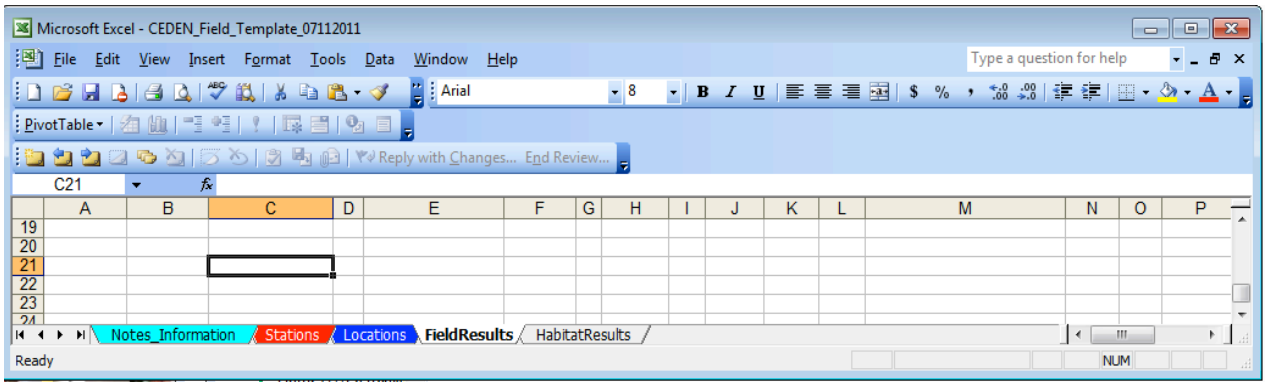
Introduction

This document is designed to provide guidance on reporting requirements for electronic data to be entered in the California Environmental Data Exchange Network (CEDEN) templates. Detailed below are definitions of data elements and rules for formatting field data within the CEDEN field template. Please review the entire Field Data Submission Guidance Document prior to filling out or submitting the CEDEN Field Template. If you have any questions regarding these guidelines, contact your Regional Data Center for help.

Regional Data Center (RDC)	Contact	Phone Number	Email
Central Coast RDC	Mark Pranger	831/241-8178	pranger@mlml.calstate.edu
Central Valley RDC	Melissa Turner	530/756-5200	mturner@mlj-llc.com
San Francisco RDC	Cristina Grosso	510/746-7371	cristina@sfei.org
Southern California RDC	Shelly Moore	714/755-3207	shellym@sccwrp.org

Field Data Submission Steps

To submit water quality field data to CEDEN, start with the CEDEN_Field_Template excel file you received from your Regional Data Center (RDC). In this template you will find the four data tables (each in a separate worksheet) required for submitting field data. This file can be named at the discretion of the user; however, the Excel sheet tabs **MUST** be named **Stations**, **Locations**, **FieldResults**, and **HabitatResults** respectively.



CEDEN Field Template Tables

Below describes what is included and submission requirements for each of the 4 tables in the CEDEN Field Template:

1. Stations
    a. Holds information about sample site and GIS information
    b. Submit new stations prior to or concurrently with submitting chemistry data
    c. Required only for new stations that are not currently in the database.
2. Locations
    a. Holds information about location sampled

    b. Required only if actual unique latitudes and longitudes were recorded for each sampling event.
3. FieldResults
    a. Used to record field measurement results
    b. Required when submitting field measurement results
4. HabitatResults
    a. Used to record habitat/field observation results
    b. Required when submitting habitat results

The guidelines in the following sections will assist you in getting your data into the CEDEN Field Template tables. However, if at any time you have questions more specific to your data, (e.g. adding new codes to LookUp lists) please do not hesitate to contact your local Regional Data Center.

Once you have placed your data into the CEDEN Field Template tables, please visit your Regional Data Center's website and utilize the data checker to check and submit your data. Regional Data Center information can be found at: http://www.ceden.org/data_centers.shtml. The online data submission process includes specific checks on your data to ensure both data integrity and comparability with other data sets. Once your data has passed all of our checks it will be uploaded into the centralized CEDEN database and become available through the CEDEN website (www.ceden.org).

Field Template Data Tables

Stations Table

PURPOSE:

The stations table contains information about the station/sample site and GIS information. It is important to fill out as much information as possible. This table is required for only new stations not within the database and can be submitted prior to or consecutively with any field data. Please see the above section for data submission steps.

COLUMN REQUIREMENTS:

Columns within the CEDEN Field Template tables are either considered 1) required, 2) desired or 3) not required. Required columns must be filled out in order for data to be accepted by CEDEN. Desired columns are strongly encouraged and should be filled in whenever possible. Not required columns include additional information that aid in data usability. Individual column requirements are listed below:

Required Columns:

StationSource
StationCode
StationName
CoordinateNumber
TargetLatitude
TargetLongitude

Desired Columns:

Datum
LocalWatershed
LocalWaterbody
State
Counties_2004_County
SWRCBWatTypeCode
CalWater_2004_RB

Not Required Columns:

StationDescr	UpstreamArea
StationComments	HBASA2_1995_NHCODE
GeometryShape	NHD24k_GNIS_Name
DirectionsToStation	NHD24k_ReachCode
AddDate	NHD24k_HUC12
CoordinateSource	NHD24k_Hu_12_Name
Elevation	NHD_100k_GNIS_Name
UnitElevation	NHD_100k_ReachCode
StationDetailVerBy	Ecoregion_1987_Level3*
StationDetailVerDate	IBI_NorthCoast_2005_WithinPolygon*
StationDetailComments	IBI_SoCal_2005_WithinPolygon*
CalWater_2004_CALWNUM	StationGISVerBy
CalWater_2004_HUNAME	StationGISVerDate
CalWater_2004_SWRCBNUM21	StationGISVerComments
HydrologicUnit	StationGISVerComments
GageStationID	

* Not required unless station has accompanying bioassessment data

STATIONS TABLE STRUCTURE:

* Primary Key, required for record uniqueness.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
StationSource*	Text	**Yes**	50		Agency or project that created the station.
StationCode*	Text	**Yes**	25	Station LookUp	A code representing the StationName and site and should be unique within a study design.
StationName*	Text	**Yes**	100	Station LookUp	Represents a unique sampling site in a sampling design. A single waterbody may have multiple stations. Station name must be unique for all stations.
StationDescr	Text	No	255		Description of the StationCode.
StationComments	Text	No	255		Any pertinent comments regarding the station and/or station area.
GeometryShape	Text	No	50		Physical shape of the Station. Example values are Line, Point, or Polygon.
DirectionsToStation	Text	No	255		A general description of how to get to the station using streets, landmarks, etc.
AddDate	Date/ Time	No			Date the StationCode was added.
CoordinateNumber	Integer	**Yes**			Number of the coordinate recorded at a Station; e.g. 1 for Points (target and actual coordinates), 1 and 2 for Lines.
TargetLatitude	Decimal	**Yes**			Represents the targeted latitude for the sample site in decimal degrees with 5 decimal places.
TargetLongitude	Decimal	**Yes**			Represents the targeted longitude for the sample site in decimal degrees with 5 decimal places (must be negative).
Datum	Text	**Desired**	10		Represents the associated model of the Earth from which reference points are used to calculate position measurements. GPS Devices commonly use Datum's such as NAD83 and WGS84.
CoordinateSource	Text	No	50		Describes how the coordinate was measured. For example, if measurement was taken from a map or GPS.
Elevation	Decimal	No			Elevation at which the sample was taken.
UnitElevation	Text	No	2		Unit of the Elevation measurement.
StationDetailVerBy	Text	No	100		Agency or person who performed the verification of the station detail information.
StationDetailVerDate	Date/ Time	No			Date the station detail information was verified.
StationDetailComments	Text	No	255		Comments related to the station detail information.
LocalWatershed	Text	**Desired**	50		Local watershed of the station as supplied by data user.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
LocalWaterbody	Text	**Desired**	50		Local waterbody of the station as supplied by data user.
State	Text	**Desired**	2		State in which the station was surveyed. Default = CA
Counties_2004_County	Text	**Desired**	50		County in which the station was surveyed.
SWRCBWatTypeCode	Text	**Desired**	10	WBType LookUp	Unique code assigned by the state for the appropriate waterbody type.
CalWater_2004_RB	Integer	**Desired**	1		Regional Board ID Number from the CalWater 2.2.1 2004 GIS layer. This layer can be retrieved from: https://projects.atlas.ca.gov/frs/download.php/676/calw221_e00.zip
CalWater_2004_ CALWNUM	Text	No	12		Watershed ID Number from the CalWater 2.2.1 2004 GIS layer.
CalWater_2004_ HUNAME	Text	No	35		Hydrologic Unit Name from the CalWater 2.2.1 2004 GIS layer.
CalWater_2004_ SWRCBNUM21	Text	No	6		State Water Resources Control Board (SWRCB) ID Number from the CalWater 2.2.1 2004 GIS layer.
HydrologicUnit	Text	No	50		Name of hydrologic unit from the CalWater 2.2.1 2004 GIS layer.
GageStationID	Text	No	50		Identifier for USGS Gage station located at the Station location.
UpstreamArea	Decimal	No			Area (measured in km2) upstream that drains to the sampling point.
HBASA2_1995_ NHCODE	Text	No	6		NHDCODE from Teale HBASA watershed GIS layer. This layer can be retrieved from: https://projects.atlas.ca.gov/frs/download.php/389/hbasa2-1997_shp.zip
NHD24k_ GNIS_Name	Text	No	65		Official federal Geographic Names Information System (GNIS) name of stream from the NHD high-resolution GIS layer. This layer can be retrieved from: http://nhd.usgs.gov/data.html
NHD24k_ ReachCode	Text	No	14		14-digit ReachCode ID Number for streams from NHD high-resolution GIS layer.
NHD24k_HUC12	Text	No	12		12-digit Hydrologic Unit ID for NHD watershed polygon (WBD) from NHD high-resolution GIS layer.
NHD24k_ Hu_12_Name	Text	No	120		Name of 12-digit Hydrologic Unit for NHD watershed polygon (WBD) from NHD high-resolution GIS layer.
NHD_100k_GNIS_Name	Text	No	120		Official federal Geographic Names Information System (GNIS) name of stream from the NHD medium-resolution GIS layer. This layer can be retrieved from: http://nhd.usgs.gov/data.html

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
NHD_100k_ReachCode	Text	No	14		14-digit ReachCode ID Number for streams from NHD medium-resolution GIS layer.
Ecoregion_1987_ Level3	Text	No	5		EPA Ecoregion Level III name (US_L3NAME). This layer can be retrieved from: ftp://ftp.epa.gov/wed/ecoregions/ca/
IBI_NorthCoast_ 2005_WithinPolygon	TRUE/ FALSE	No			True if the Station is located within the IBI North Coast 2005 polygon. False if otherwise.
IBI_SoCal_ 2005_WithinPolygon	TRUE/ FALSE	No			True if the Station is located within the IBI Southern California 2005 polygon. False if otherwise.
StationGISVerBy	Text	No	100		Agency or person who performed the verification of the GIS station information.
StationGISVerDate	Date/ Time	No			Date the GIS station information was verified.
StationGISVer Comments	Text	No	255		Comments related to the GIS station information verification.

Locations Table

PURPOSE:

The locations table contains specific information about the locations sampled. Actual latitudes and longitudes are recorded here for each sampling event. In the event that only target latitudes and longitudes were recorded, it is sufficient to fill out the Stations table only.

COLUMN REQUIREMENTS:

Columns within the CEDEN Field Template tables are either considered 1) required, 2) desired or 3) not required. Required columns must be filled out in order for data to be accepted by CEDEN. Desired columns are strongly encouraged and should be filled in whenever possible. Not required columns include additional information that aid in data usability. Individual column requirements are listed below:

Required Columns:

StationCode
SampleDate
ProjectCode
CoordinateNumber
ActualLatitude
ActualLongitude
Datum

Desired Columns:

ProtocolCode
AgencyCode
LocationCode

Not Required Columns:

EventCode
SampleComments
GeometryShape
CoordinateSource
Elevation
UnitElevation
StationDetailVerBy
StationDetailVerDate
StationDetailComments

LOCATIONS TABLE STRUCTURE:

* Primary Key, required for record uniqueness.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
StationCode*	Text	**Yes**	25	Stations LookUp	A code representing the StationName and site and should be unique within a study design.
SampleDate*	Date/ Time	**Yes**			Refers to the date the sample was collected in the field. Formatted as dd/mmm/yyyy.
ProjectCode*	Text	**Yes**	25	Project LookUp	References the project that is associated with the sample.
EventCode	Text	No	20	Event LookUp	Represents the primary reason, i.e. water quality, tissue or bioassessment sampling, of the sampling event at a particular station and date.
ProtocolCode	Text	**Desired**	50	Protocol LookUp	Represents the sampling protocol used, which includes the set of methods, methodology and/or specifications, such as MPSL-DFG_Field_v1.0. Established protocols may be used or Regions may document their own sampling protocols.
AgencyCode	Text	**Desired**	20	Agency LookUp	Refers to the organization or agency that collected the sample.
SampleComments	Text	No	255		Comments related to the GIS station information verification.
LocationCode	Text	**Desired**	50	Location LookUp	Describes the physical location in the waterbody where the sample was collected. One sampling event may have a single or multiple locations.
GeometryShape	Text	No	50		Physical shape of the location. Example values are Line, Point, or Polygon.
CoordinateNumber	Integer	**Yes**			Number of the coordinate recorded at a Location; e.g. 1 for Points (target and actual coordinates), 1 and 2 for Lines.
ActualLatitude	Decimal	**Yes**			Represents the actual latitude for the sample site in decimal degrees with 5 decimal places.
ActualLongitude	Decimal	**Yes**			Represents the actual longitude for the sample site in decimal degrees with 5 decimal places (must be negative).
Datum	Text	**Yes**	10		The Datum field records the datum that was used on the GPS Device to record the GPS measurements. Example = NAD83
CoordinateSource	Text	No	50		Describes how the coordinate was measured. For example, if measurement was taken from a map or GPS.
Elevation	Decimal	No			Elevation at which the sample was taken. Example = 1
UnitElevation	Text	No	2		Unit of the Elevation measurement. Example = m

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
StationDetailVerBy	Text	No	100		Agency or person who performed the verification of the station detail information.
StationDetailVerDate	Date/ Time	No			Date the station detail information was verified.
StationDetailComments	Text	No	255		Comments related to the station detail information.

Field Results Table

PURPOSE:

The purpose of the field results table is to document field measurement results. Each record represents a result from a particular water quality measurement at a specific station at a specific point in time.

COLUMN REQUIREMENTS:

Columns within the CEDEN Field Template tables are either considered 1) required, 2) desired or 3) not required. Required columns must be filled out in order for data to be accepted by CEDEN. Desired columns are strongly encouraged and should be filled in whenever possible. Not required columns include additional information that aid in data usability. Individual column requirements are listed below:

Required Columns:

StationCode
SampleDate
ProjectCode
CollectionTime
CollectionMethodCode
Replicate
CollectionDepth
UnitCollectionDepth
MatrixName
MethodName
AnalyteName
FractionName
UnitName
Result
ResQualCode
QACode

Desired Columns:

ProtocolCode
AgencyCode
LocationCode
CollectionDeviceName
FieldReplicate
ComplianceCode
BatchVerificationCode
CalibrationDate

Not Required Columns:

EventCode
SampleComments
GeometryShape
PositionWaterColumn
FieldCollectionComments
FieldResultComments

FIELD RESULTS TABLE STRUCTURE:

* Primary Key, required for record uniqueness.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
StationCode*	Text	**Yes**	25	Station LookUp	A code representing the StationName and site and should be unique within a study design.
SampleDate*	Date/ Time	**Yes**			Refers to the date the sample was collected in the field. Formatted as dd/mmm/yyyy.
ProjectCode	Text	**Yes**	25	Project LookUp	References the project that is associated with the sample.
EventCode	Text	No	20	Event LookUp	Represents the primary reason, i.e. water quality, tissue or bioassessment sampling, of the sampling event at a particular station and date.
ProtocolCode	Text	**Desired**	50	Protocol LookUp	Represents the sampling protocol used, which includes the set of methods, methodology and/or specifications, such as MPSL-DFG_Field_v1.0. Established protocols may be used or Regions may document their own sampling protocols.
AgencyCode	Text	**Desired**	20	Agency LookUp	Refers to the organization or agency that collected the sample. This should be listed on the Chain of Custody (COC) document that accompanies the samples from the field.
SampleComments	Text	No	255		The comments field should be used for any notes or comments specifically related to the sample collection.
LocationCode	Text	**Desired**	50	Location LookUp	Describes the physical location in the waterbody where the sample was collected. One sampling event may have a single or multiple locations.
GeometryShape	Text	No	50		Physical shape of the location. Example values are Line, Point, or Polygon.
CollectionTime*	Date/ Time	**Yes**	20		Refers to the time when the first sample of a sampling event at a specific station was collected in the field.
CollectionMethod Code	Text	**Yes**	50	CollectionMethod LookUp	Refers to the general method of collection such as Sed_Grab, Sed_Core, Water_Grab, Autosampler24h, Autosampler7d.
Replicate*	Integer	**Yes**			Used to distinguish between replicates created at a single collection in the field. Default value is 1. Replicate samples are collected at the same station and date. Therefore, samples collected on different dates from the same station should both have a value of 1 for FieldReplicate.
CollectionDevice Name	Text	**Desired**	50	CollectionDeviceLookUp	Unique name of the CollectionDevice.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
CollectionDepth	Decimal	**Yes**			Records the depth or penetration, from the surface in the water or sediment column, at which the sample was collected.
UnitCollection Depth	Text	**Yes**	50		Refers to the units used in the CollectionDepth including cm (centimeters) and m (meters).
PositionWaterColumn	Text	No	20		Position in water column where sample was taken.
FieldCollection Comments	Text	No	255		Comments related to the FieldCollection
MatrixName*	Text	**Yes**	50	MatrixLook Up	Refers to the sample matrix, e.g. samplewater.
MethodName*	Text	**Yes**	50	Method LookUp	Refers to the analysis method used to analyze the sample. Default is "FieldMeasure".
AnalyteName*	Text	**Yes**	100	Analyte LookUp	Name of the analyte or parameter for which the analysis is conducted and result is reported. The LookUp list includes the acceptable abbreviation or name of the variable used by the database, enabling consistency across reporting.
FractionName*	Text	**Yes**	50	Fraction LookUp	Specific descriptor of the Analyte. For example, metals are often expressed as total or dissolved and therefore this description should be used within the fraction field.
UnitName*	Text	**Yes**	50	Unit LookUp	Refers to how the chemistry result is measured or expressed.
FieldReplicate*	Integer	**Desired**			The replicate number identifies replicates created in the field.
Result	Text	**Yes**	50		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.
ResQualCode	Text	**Yes**	10	ResQual LookUp	Qualifies the analytical result of the sample.
QACode*	Text	**Yes**	30	QA LookUp	Applied to the result to describe 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". If more than one code should be applied to a record, the convention is to list them in alphabetical order separated by commas and no spaces.
ComplianceCode	Text	**Desired**		DataCompliance LookUp	Unique code referencing the Compliance with the associated QAPP.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
BatchVerificationCode	Text	**Desired**	10	Batch Verification Lookup	Unique code referencing the Verification of a Batch. If the Batch Verification used is not found in the lookup list please contact your Regional Data Center for assistance.
CalibrationDate	Date/ Time	**Desired**			CalibrationDate refers to the date the collection device was calibrated. Formatted as dd/mmm/yyyy.
FieldResult Comments	Text	No	255		Holds any comments related to the field result or analysis of the sample.

Habitat Results Table

PURPOSE:

The purpose of the habitat results table is to document field observation results. Each record represents a result for a single observation at a specific station at a specific point in time.

COLUMN REQUIREMENTS:

Columns within the CEDEN Field Template tables are either considered 1) required, 2) desired or 3) not required. Required columns must be filled out in order for data to be accepted by CEDEN. Desired columns are strongly encouraged and should be filled in whenever possible. Not required columns include additional information that aid in data usability. Individual column requirements are listed below:

Required Columns:

StationCode
SampleDate
ProjectCode
CollectionTime
CollectionMethodCode
Replicate
MatrixName
MethodName
AnalyteName
FractionName
UnitName
VariableResult
Result
ResQualCode
QACode

Desired Columns:

ProtocolCode
AgencyCode
LocationCode
CollectionDeviceName
ComplianceCode

Not Required Columns:

EventCode
SampleComments
GeometryShape
HabitatCollectionComments
BatchVerificationCode
HabitatResultComments

HABITAT RESULTS TABLE STRUCTURE:

* Primary Key, required for record uniqueness.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
StationCode*	Text	**Yes**	25	Station LookUp	A code representing the StationName and site and should be unique within a study design.
SampleDate*	Date/ Time	**Yes**			Refers to the date the sample was collected in the field. Formatted as dd/mmm/yyyy.
ProjectCode	Text	**Yes**	25	Project LookUp	References the project that is associated with the sample.
EventCode	Text	No	20	Event LookUp	Represents the primary reason, i.e. water quality, tissue or bioassessment sampling, of the sampling event at a particular station and date.
ProtocolCode	Text	**Desired**	50	Protocol LookUp	Represents the sampling protocol used, which includes the set of methods, methodology and/or specifications, such as MPSL-DFG_Field_v1.0. Established protocols may be used or Regions may document their own sampling protocols.
AgencyCode	Text	**Desired**	20	Agency LookUp	Refers to the organization or agency that collected the sample. This should be listed on the Chain of Custody (COC) document that accompanies the samples from the field.
SampleComments	Text	No	255		The comments field should be used for any notes or comments specifically related to the sample collection.
LocationCode	Text	**Desired**	50	Location LookUp	Describes the physical location in the waterbody where the sample was collected. One sampling event may have a single or multiple locations.
GeometryShape	Text	No	50		Physical shape of the location. Example values are Line, Point, or Polygon.
CollectionTime*	Date/ Time	**Yes**	20		Refers to the time when the first sample of a sampling event at a specific station was collected in the field.
CollectionMethod Code	Text	**Yes**	50	CollectionMethod LookUp	Refers to the general method of collection such as Sed_Grab, Sed_Core, Water_Grab, Autosampler24h, Autosampler7d.
Replicate*	Integer	**Yes**			Used to distinguish between replicates created at a single collection in the field. Default value is 1. Replicate samples are collected at the same station and date. Therefore, samples collected on different dates from the same station should both have a value of 1 for FieldReplicate.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
CollectionDevice Name	Text	**Desired**	50	CollectionDevice LookUp	Unique name of the CollectionDevice. Default value for habitat is "None".
CollectionDepth	Decimal	**Yes**			Records the depth or penetration, from the surface in the water or sediment column, at which the sample was collected.
UnitCollection Depth	Text	**Yes**	50		Refers to the units used in the CollectionDepth including cm (centimeters) and m (meters).
PositionWater Column	Text	No	20		Position in water column where sample was taken.
HabitatCollection Comments	Text	No	255		Comments related to the habitat collection.
MatrixName*	Text	**Yes**	50	Matrix Lookup	Refers to the sample matrix, e.g. samplewater.
MethodName*	Text	**Yes**	50	Method LookUp	Refers to the analysis method used to analyze the sample. Default is "FieldObservation".
AnalyteName*	Text	**Yes**	100	Analyte LookUp	Name of the analyte or parameter for which the analysis is conducted and result is reported. The LookUp list includes the acceptable abbreviation or name of the variable used by the database, enabling consistency across reporting.
FractionName*	Text	**Yes**	50	Fraction LookUp	Specific descriptor of the Analyte. For field observations this is "None".
UnitName*	Text	**Yes**	50	Unit LookUp	Refers to how the result is measured or expressed. For field observations this is "None".
VariableResult	Text	**Yes**	80		Categorical result for field observation.
Result	Text	**Yes**	50		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.
ResQualCode	Text	**Yes**	10	ResQual LookUp	Qualifies the analytical result of the sample.
QACode*	Text	**Yes**	30	QA LookUp	Applied to the result to describe 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". If more than one code should be applied to a record, the convention is to list them in alphabetical order separated by commas and no spaces.

FIELD TEMPLATE HEADER	DATA TYPE	REQUIRED	SIZE	LOOKUP LIST	DEFINITION
ComplianceCode	Text	**Desired**		DataCompliance LookUp	Unique code referencing the Compliance with the associated QAPP.
BatchVerification Code	Text	No	10	Batch Verification Lookup	Unique code referencing the Verification of a Batch. If the Batch Verification used is not found in the lookup list please contact your Regional Data Center for assistance.
HabitatResult Comments	Text	No	255		Comments related to the habitat result.