#	Field Name	Data Type	Size	Description	Primary Key	Indexed
Table: lkp-DBItems						
1	Sort	Number, Long Integer	4		☐	Yes (No Duplicates)
2	Itemname	Text	100		☐	No
3	Description	Text	150		☐	No
Table: luList01_AgencyCodes						
1	AgencyCode	Text	4	Code for the agency that collected or analyzed the data.	☑	No
2	Description	Text	80	Full name of the agency.	☐	No
Table: luList02_StudyType						
1	StudyType	Text	4	Code for the type of study and included data types of the study.	☑	No
2	Description	Text	75	Description of the study type, currently restricted to D (dredging) or M (monitoring).	☐	No
3	SedChem	Text	1	Study includes has sediment chemistry data.	☐	No
4	SedTox	Text	1	Study includes sediment toxicity data.	☐	No
5	LabAccum	Text	1	Study includes laboratory tissue bioaccumulation data.	☐	No
6	FieldAccum	Text	1	Study includes field-collected tissue bioaccumulation data.	☐	No
7	ElChem	Text	1	Study includes sediment elutriate chemistry data.	☐	No
8	Infauna	Text	1	Study includes benthic infaunal data.	☐	No
9	Type	Text	15	Standardized description of data.	☐	No
Table: luList03_SampleMethod						
1	SampleMethod	Text	50	Code used for the sample collection device.	☑	No
2	Description	Text	50	Description of the sample collection device.	☐	No
Table: luList04_SampleTypes						
1	SampleType	Text	10	Code for the type of sample collected.	☑	No
2	Description	Text	255	Description of the Sample Type code.	☐	No
3	TableType	Text	50		☐	No
Table: luList11_Fraction						
1	Fraction	Text	2	Code for the fraction or measuring basis of the result.	☑	No
2	Description	Text	50	Description of the fraction code.	☐	No
Table: luList12_TestType						
1	TestType	Text	7	Code for the test type used in biological testing.	☐	Yes (Duplicates OK)
2	TestDescript	Text	75	Description of the test type.	☐	No
3	ShortTestType	Text	15	Short description of the test type for use in forms.	☐	No
Table: luList13_QualifierCodes						
1	Qualifier	Text	5	Code for the qualifier used for chemistry data.	☑	No
2	Description	Text	255	Description of the qualifier code.	☐	No
Table: luList17_TestMatrices						
1	MaterialCode	Text	4	Code for the matrix analyzed for chemistry results.	☑	No
2	Matrix Name	Text	50	Description of the matrix code.	☐	No

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
Table: LuList18_ChemicalParameters						
1	ChemicalName	Text	50	Standardized name used for chemical parameters.	☑	No
2	Description	Text	80	Alternate description of the chemical name.	☐	No
3	ChemicalGroup	Text	15	Chemical group.	☐	No
4	SolidUnits	Text	8	Standardized units used for sediment and tissue data.	☐	No
5	WaterUnits	Text	8	Standardized units used for elutriate data.	☐	No
6	CASNum	Text	25	CAS Number	☐	Yes (Duplicates OK)
7	Sum	Text	10	Name of compound used to calculate totals.	☐	No
Table: luList19_Measbasis						
1	Measbasis	Text	2	Code for the measuring basis of the sediment chemistry results.	☑	No
2	MeasbasisName	Text	50	Description of the measuring basis.	☐	No
Table: luList20_SpeciesList						
1	SpeciesCode	Text	5	Code for species used in toxicity or laboratory bioaccumulation testing data.	☑	No
2	SpeciesName	Text	50	Description (name) of the test species, scientific.	☐	No
3	GroupName	Text	50	Category of species for grouping purposes.	☐	No
4	CommonName	Text	50	Common name of the species.	☐	No
Table: luList21_SedimentToxProtocols						
1	ProtocolCode	Text	25	Code for the toxicity test.	☑	No
2	ProtocolDescription	Text	100	Description of the toxicity test code.	☐	No
Table: luList22_SedimentToxLifeStage						
1	LifeStage	Text	10	Code for the organism life stage.	☑	No
2	LifeStageDescription	Text	50	Description of the life stage.	☐	No
Table: luList23_SedimentToxEndPoints						
1	EPCode	Text	10	Code for the end point of the toxicity test.	☑	No
2	EndPoint	Text	50	Description of the end point code.	☐	No
Table: luList25_SedimentToxTestAcceptabilityCodes						
1	AcceptCode	Text	5	Code for the acceptability of the toxicity test.	☑	No
2	CodeDescription	Text	50	Description of the toxicity test acceptance code.	☐	Yes (Duplicates OK)
Table: luList28_NavType						
1	NavType	Text	10	Code for navigational equipment used in sample collection.	☑	No
2	Description	Text	50	Description of the navigation type code.	☐	No
Table: luList33_ChemicalAnalysisMethods						
1	MethodCode	Text	25	Code for the analytical method used for chemistry results.	☑	No
2	Method	Text	255	Description of the method.	☐	No
3	Instrument	Text	50	Analytical instrument used for chemical analyses.	☐	No

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
Table: luList34_ChemicalPreparationCodes						
1	PrepCode	Text	10	Code for the preparation method used for chemistry results.	☑	No
2	Preparation Method	Text	255	Description of the method.	☐	No
Table: luList41_RegBoard						
1	RegBoard	Text	25	Location of the station by California Regional Water Quality Control Board.	☑	No
Table: luList42_Hydrounit						
1	Hydrounit	Text	25	Location of the station by Watershed name.	☑	No
Table: luList43_County						
1	County	Text	25	Location of the station in or near the noted County.	☑	No
Table: luList44_WaterBody						
1	WaterBody	Text	50	Location of the station by large scale water body name.	☑	No
Table: luList45_Locality						
1	Locality	Text	50	Location of the station by local, small-scale water body.	☑	No
Table: luList46_Ports						
1	PortName	Text	25	Code for the port name.	☑	No
2	Port	Text	50	Port name.	☐	No
Table: luList50_SigEffect						
1	SigEffect	Text	5	Code for reported toxicity significance (according to the original investigator).	☑	No
2	SigEffectName	Text	30	Shortened name of the significant effect determination.	☐	No
3	Description	Text	255	Description or other information about toxicity significance determination.	☐	No
Table: tblBiologyBatchInfo						
1	StudyID	Text	15	A unique identifier for each study, from the Study table.	☑	No
2	QABatch	Text	50	Identifier to match samples analyzed as a group.	☑	No
3	TestType	Text	3	Differentiates bioassay (TOX) and laboratory bioaccumulation (ACC) test methods, linked to luList12.	☐	No
4	MaterialCode	Text	4	Code for the matrix analyzed for toxicity results, from luList17.	☐	Yes (Duplicates OK)
5	SpeciesCode	Text	5	Code of species or type of biological system used for the toxicity test; refer to luList20.	☐	Yes (Duplicates OK)
6	LifeStage	Text	10	Life stage of the test organism.	☐	No
7	AgencyCode	Text	4	The agency that performed toxicity analyses, from luList01.	☐	Yes (Duplicates OK)
8	ProtocolCode	Text	25	Test protocol, from luList21.	☐	Yes (Duplicates OK)
9	TestDate	Date/Time	8	Date of the test.	☐	No
10	TestDuration	Number, Single	4	Duration of the test, in days.	☐	No
11	Temperature	Number, Single	4	Temperature of the test, degrees C.	☐	No
12	AcceptCode	Text	5	Quality assurance code from luList25.	☐	Yes (Duplicates OK)
13	Comments	Text	150	Comments.	☐	No

Table: tblChemistryBatchInfo

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☑	No
2	QABatch	Text	50	The code for all of the samples processed in the same batch.	☑	No
3	TestType	Text	25	SF Delta uniform code for test type.	☐	Yes (Duplicates OK)
4	MaterialCode	Text	4	Test material code from luList17.	☐	Yes (Duplicates OK)
5	PrepCode	Text	10	Preparation code from luList 34.	☐	Yes (Duplicates OK)
6	PrepDate	Date/Time	8	The date the sample was extracted expressed as mm/dd/yyyy.	☐	No
7	MethodCode	Text	25	Analysis method from lulist33.	☐	Yes (Duplicates OK)
8	AnalysisDate	Date/Time	8	The date the sample was processed in the instument expressed as mm/dd/yyyy.	☐	No
9	AgencyCode	Text	4	Agency code from luList01.	☐	Yes (Duplicates OK)
10	Comments	Text	80	Additional comments.	☐	No

Table: tblChemistryResults

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	SampleID	Text	20	ID for the sample or composite used for analysis.	☐	No
4	ChemicalName	Text	50	Name of parameter from luList18.	☐	No
5	QABatch	Text	50	Code for all samples processed in the same batch.	☐	No
6	LabRep	Text	10	Laboratory replicates, if present. Default labrep = 01.	☐	No
7	Fraction	Text	2	Code for the fraction or measuring basis of the result, linked to luList11.	☐	No
8	SampleType	Text	10	The type of result from luList04.	☐	No
9	Result	Number, Single	4	Numerical result; dry wt for sediment / wet weight for tissue.	☐	No
10	Units	Text	10	Units for the result (standard units as in luList18).	☐	No
11	Qualifier	Text	10	Data qualifiers from luList13; U is standard for data below detection.	☐	No
12	Measbasis	Text	2	Measuring basis of chemistry result, linked to luList19.	☐	No
13	MaterialCode	Text	4	Matrix code from luList17.	☐	Yes (Duplicates OK)
14	MDL	Number, Single	4	Method detection limit.	☐	No
15	RL	Number, Single	4	Reporting limit.	☐	No
16	Dilution	Number, Single	4	Dilution factor if available.	☐	No
17	AgencyCode	Text	4	The agency code from luList01.	☐	Yes (Duplicates OK)
18	Comments	Text	80	Additional comments.	☐	No
19	USE4SUM	Number, Single	4		☐	No

Table: tblCoreEvent

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	CoreID	Text	10	A unique identifier for the individual core.	☐	No
4	Date	Date/Time	8	The date the core sample was taken expressed as mm/dd/yyyy.	☐	No
5	Time	Date/Time	8	The time the core sample was taken expressed in 24 hour time.	☐	No
6	WaterDepth	Number, Single	4	Total water depth expressed in meters.	☐	No
7	NavType	Text	10	Type of navigation from luList28.	☐	Yes (Duplicates OK)
8	Vessel	Text	50	The name of the vessel.	☐	No
9	Segments	Number, Single	4	Number of segments tested from the core based on horizontal divisions.	☐	No
10	Latitude	Number, Double	8	Location of the individual core in decimal degrees (NAD83).	☐	No
11	Longitude	Number, Double	8	Location of the individual grab in decimal degrees (NAD83), negative for West longitude.	☐	No
12	CoreLength	Number, Single	4	Total core length expressed in cm below the sediment water interface.	☐	No
13	Penetration	Number, Single	4	Total penetration of the core barrel expressed in cm below the sediment water interface.	☐	No
14	Refusal	Text	1	Was refusal reached (Y/N/U)?	☐	No
15	Comments	Text	255	Additional comments.	☐	No
16	Datum	Text	10	Temp field to hold original datum until all coordinates are converted to NAD83.	☐	No

Table: tblCoreSamples

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	CoreID	Text	10	Identifier for the individual core.	☐	No
4	SampleID	Text	20	Identifier for the composite sample that includes the core sample.	☐	No
5	CoreSampleID	Text	10	Unique identifier for the core sample.	☐	No
6	Horizon	Text	5	First digit describes the lithological horizon the sample represents; 2nd digit the total number of segments.	☐	No
7	UpperMeasure	Number, Single	4	Upper sediment depth, measured from the sediment water interface, expressed in cm.	☐	No
8	LowerMeasure	Number, Single	4	Lower sediment depth, measured from the sediment water interface, expressed in cm.	☐	No
9	Comments	Text	80	Additional comments.	☐	No

Table: tblDredgeFate

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	A unique identifier for each study.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	SampleID	Text	20	Identifier for the composite sample used for analysis.	☐	No
4	Project Name	Text	80	Project name internal to the agency, for tracking purposes.	☐	No
5	SiteName	Text	50	Name for dredging area.	☐	No
6	AgencyCode	Text	4	The agency that paid for the study from luList01.	☐	No
7	PredictedVolume	Number, Single	4	Estimated volume (cy) quoted in sediment characterization report.	☐	No
8	ProposedDisposalSite	Text	80	Proposed disposal site in sediment characterization report, if available.	☐	No
9	Area_SqFt	Number, Single	4	Area of footprint (square feet) to be dredged.	☐	No
10	Agency Number	Text	50	Project number internal to the agency, for tracking purposes.	☐	No
11	Year	Number, Long Integer	4	Year of dredging project.	☐	No
12	COE Date Of Permit	Date/Time	8	Corps of Engineer Permit date.	☐	No
13	COE PermitNumber	Text	50	Corps of Engineer Permit number.	☐	No
14	RB Date Of Permit	Date/Time	8	Regional Water Quality Control Board Permit date.	☐	No
15	RB Case File Number	Text	50	Regional Water Quality Control Board Permit number.	☐	No
16	RB Permit Number	Text	50	Regional Water Quality Control Board Case File number.	☐	No
17	Dredge Start Date	Text	8	Date (year) dredging started.	☐	No
18	Dredge End Date	Text	8	Date (year) dredging ended.	☐	No
19	Disposal Method	Text	50	Disposal method used for project.	☐	No
20	DredgeMethod	Text	50	Type of dredging or dredge used for project.	☐	No
21	DisposalSite	Text	80	Ultimate location of material disposed.	☐	No
22	Volume	Number, Single	4	Total volume dredged and disposed (cy).	☐	No
23	Contractor	Text	50	Name of dredging contractor.	☐	No
24	Comments	Text	255	Comments.	☐	No

Table: tblGrabEvent

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	GrabID	Text	10	A unique identifier for the individual grab sample.	☐	No
4	SampleID	Text	20	ID for the composite sample if the grab was used for analysis.	☐	No
5	Date	Date/Time	8	The date the grab sample was taken expressed as dd/mmm/yyyy.	☐	No
6	Time	Date/Time	8	The time the grab sample was taken expressed in 24 hour time.	☐	No
7	WaterDepth	Number, Single	4	Total water depth expressed in meters.	☐	No
8	NavType	Text	10	Type of navigation from luList28.	☐	Yes (Duplicates OK)
9	Vessel	Text	50	The name of the vessel.	☐	No
10	Latitude	Number, Double	8	Location of the individual grab in decimal degrees (NAD83).	☐	No
11	Longitude	Number, Double	8	Location of the individual grab in decimal degrees (NAD83), negative for West longitude.	☐	No
12	Penetration	Number, Single	4	Total penetration of the grab sampler expressed in cm below the sediment water interface.	☐	No
13	Comments	Text	255	Additional comments.	☐	No

Table: tblSampleMaster

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	SampleID	Text	20	Identifier for the composite sample used for analysis.	☐	No
4	SampleMethod	Text	15	Code used for the sample collection device from luList03.	☐	Yes (Duplicates OK)
5	SampleType	Text	10	The type of sample from luList04, refers to reference, control, and field replicate samples.	☐	No
6	Composite	Text	1	Is the sample a composite? Restricted to Y/N/U.	☐	No
7	Date	Date/Time	8	The date the sample was taken expressed as dd/mmm/yyyy.	☐	No
8	UpperMeasure	Number, Single	4	Upper sediment depth, measured from the sediment water interface, expressed in cm (average for multiple cores).	☐	No
9	LowerMeasure	Number, Single	4	Lower sediment depth, measured from the sediment water interface, expressed in cm (average for multiple cores).	☐	No
10	Comments	Text	80	Additional comments.	☐	No

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
Table: tblStation						
1	StudyID	Text	15	Unique ID for the study.	☑	Yes (Duplicates OK)
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☑	No
3	Description	Text	50	A general description of the location of the station.	☐	No
4	Latitude	Number, Double	8	Latitude of the station in decimal degrees (NAD83).	☐	No
5	Longitude	Number, Double	8	Longitude of the station in decimal degrees (NAD83).	☐	No
6	Area	Yes/No	1	Are the data associated with an area (non-point location)?	☐	No
7	RegBoard	Text	25	Location of the station by California Regional Water Quality Control Board, linked to luList41.	☐	Yes (Duplicates OK)
8	Hydrounit	Text	25	Location of the station by Watershed name, linked to luList42.	☐	Yes (Duplicates OK)
9	County	Text	25	Location of the station in or near the noted County, linked to luList43.	☐	Yes (Duplicates OK)
10	WaterBody	Text	50	Location of the station by large scale water body name, linked to luList44.	☐	Yes (Duplicates OK)
11	Locality	Text	50	Location of the station by local, small-scale water body, linked to luList45.	☐	Yes (Duplicates OK)
12	PortName	Text	25	Location of the station by Port name, linked to luList46.	☐	Yes (Duplicates OK)
13	Salinity	Number, Single	4	Salinity of station if available.	☐	No
14	Comments	Text	50	Station occupation comments.	☐	No
Table: tblStudy						
1	StudyID	Text	15	A unique identifier for each study. Linked to metadata dataset ID.	☑	No
2	StudyName	Text	50	Name of the study.	☐	No
3	AgencyCode	Text	4	The agency that paid for the study from luList01.	☐	Yes (Duplicates OK)
4	Contact	Text	50	Contact name for the study.	☐	No
5	StudyType	Text	4	Defines the type of study and the data types included in the study, linked to luList02.	☐	Yes (Duplicates OK)
6	Comments	Text	50	Additional comments.	☐	No
Table: tblStudyReference						
1	StudyID	Text	15	Unique ID for the study.	☑	Yes (No Duplicates)
2	Year	Text	4	Year of publication, if applicable.	☐	No
3	Authors	Text	80	Authors of the publication.	☐	No
4	Title	Text	255	Title of the publication.	☐	No
5	Source	Text	80	Other reference or source information.	☐	No

Table: tblToxicityResults

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	Unique ID for the Study from tblStudy.	☐	No
2	StationID	Text	15	Station or area name with a specific geographic location or center point.	☐	No
3	SampleID	Text	20	Identifier for the composite sample used for analysis.	☐	No
4	QABatch	Text	50	Code for all samples processed in the same batch (commonly includes matrix, species, method for uniqueness).	☐	No
5	Dilution	Number, Single	4	The dilution factor expressed as a proportion.	☐	No
6	EPCode	Text	10	The type of test end point from luList23.	☐	No
7	LabRep	Number, Single	4	Lab replicate number.	☐	No
8	Initial	Number, Integer	2	Initial number of test organisms.	☐	No
9	Units	Text	10	The units of the end point.	☐	No
10	SpeciesCode	Text	5	Code of species or type of biological system used for the toxicity test; refer to luList20.	☐	No
11	SampleType	Text	10	Sample type from luList04.	☐	No
12	Value	Number, Single	4	Numerical result of the test.	☐	No
13	AcceptCode	Text	5	Quality assurance code from luList25.	☐	No
14	AgencyCode	Text	4	The four digit agency code from luList01.	☐	No
15	Comments	Text	80	Additional comments.	☐	No

Table: tblToxicitySumResults

#	Field Name	Data Type	Size	Description	Primary Key	Indexed
1	StudyID	Text	15	A unique identifier for each study, from the Study table.	☐	No
2	StationID	Text	15	A geographic location label from the station table.	☐	No
3	SampleID	Text	20	Unique identifier for the core composite within the study.	☐	No
4	QABatch	Text	50	Identifier to match samples analyzed as a group.	☐	No
5	Dilution	Number, Single	4	The dilution factor expressed as a proportion.. When not required, complete with -99.	☐	No
6	EPCode	Text	10	The type of endpoint for the test. Refer to luList23.	☐	No
7	Units	Text	10	The units for the endpoint.	☐	No
8	SpeciesCode	Text	5	Code of species or type of biological system used for the toxicity test; refer to luList20.	☐	Yes (Duplicates OK)
9	SampleType	Text	10	Type of sample. Refer to luList04.	☐	No
10	Initial	Number, Single	4	Beginning number of test organisms.	☐	No
11	Mean	Number, Single	4	The mean value for the test and sample generated from the lab replicates in tblCoreToxicityResults.	☐	No
12	N	Number, Long Integer	4	The number of replicates used to calculate mean and standard deviation from the lab replicates in tblCoreToxicityResults.	☐	No
13	StdDev	Number, Single	4	The standard deviation for the test and sample generated from the lab replicates in tblCoreToxicityResults.	☐	No
14	PctControl	Number, Single	4	The mean expressed as a percentage of the mean for the control (i.e., mean of the lab replicates divided by the mean for the control and multiplied by 100).	☐	No
15	SigEffect	Text	5	Statistically significant effect based on reference. Refer to luList50.	☐	No
16	AcceptCode	Text	5	Quality assurance code from luList25.	☐	Yes (Duplicates OK)
17	Comment	Text	255	Note comments on statistical test used if known (e.g. ANOVA, t-test, etc.).	☐	No