

SAN FRANCISCO BAY DMMO DATABASE: COLLECTING AND MAINTAINING DREDGING DATA

Jessica Vargas
DMMO Chief
USACE San Francisco District



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LTMS FOR SAN FRANCISCO BAY

The Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region Policy Environmental Impact Statement/Programmatic Environmental Impact Report (LTMS EIS/EIR) was jointly published by the LTMS agencies in 1998.

- Arose out of limited capacity for disposal in San Francisco Bay and the controversies over environmental impacts highlighting the need for improved management of and alternative disposal options for dredged material.
- Program adopted by regulatory agencies, including creation of the DMMO
- Participation from resource agencies, dredging & environmental community
 - Member organizations include: USACE SPN / EPA / U.S. Fish & Wildlife / NMFS / BCDC / RWQCB / CA Dept. of Fish & Wildlife/ CA State Lands
- Programmatic EIS/EIR & Management Plan
- Programmatic Biological Opinions & Programmatic EFH Consultation
- LTMS goal is to limit disposal and maximize beneficial use of dredged material.





SAN FRANCISCO BAY DREDGING AND DISPOSAL DATABASE

- As part of the LTMS, the DMMO developed a web-based data management system to store, retrieve, query, and update sediment quality data and information.
- The database was created to support the interagency group in cooperatively reviewing sediment quality sampling plans, analyzing results of sediment quality testing, and making suitability determinations for material proposed for disposal or beneficial reuse in and around the San Francisco Bay area.

San Francisco Bay Dredging and Disposal Database: <https://www.dmmosfbay.org/>

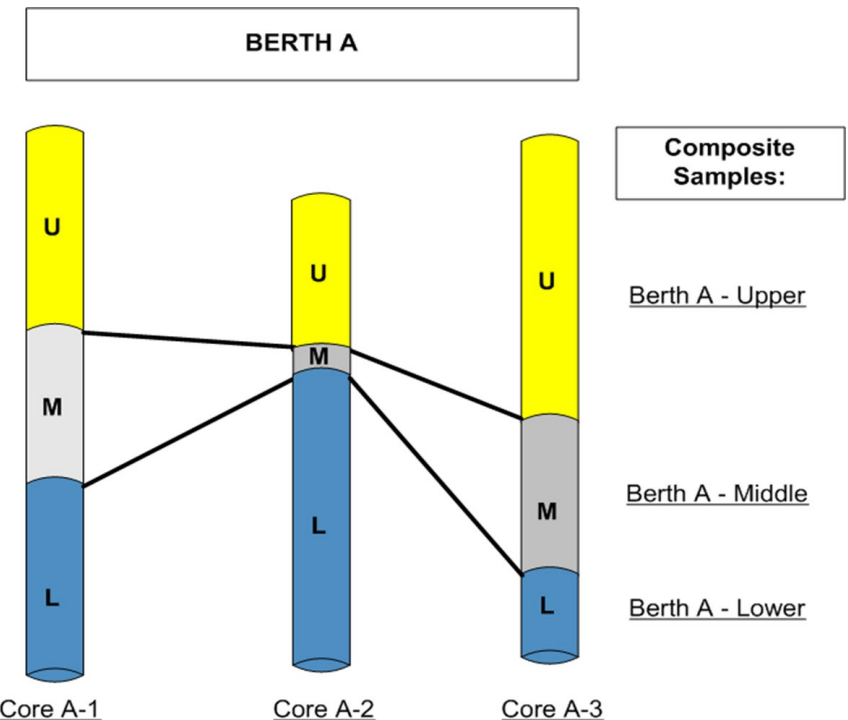




SAN FRANCISCO BAY DREDGING AND DISPOSAL DATABASE

- The database contains sediment testing data from years 2000 to 2023
- Designed to allow dredging project sponsors, labs, and consultants to upload their project data directly to site on an ongoing basis.
- Template Electronic Data Deliverable (EDD) to streamline data upload.
- Historic Sampling and Analysis Plans (SAP) and Sampling and Analysis Reports (SAR).
- Query function for individual project or regional data.

StationCode	LabSampleID	SampleTypeCode	AgencyCode	SampleID	MatrixName	MethodName	TestDuration	OrganismName	ToxBatch	Dilution	AnalyteName	UnitAnalyte	RepCount	Mean	StdDev	StageCode	TestDate
LC	LC	CNEG	PER	Lab Control	sediment	ASTM E1367-03 (2014)	10 days	Leptocheirus plumulosus	1	-88	Survival	%	5	95.0	5.0	J	6/12/2021
SF-10	SF-10	RFST	PER	SF-10	sediment	ASTM E1367-03 (2014)	10 days	Leptocheirus plumulosus	1	-88	Survival	%	5	96.0	4.2	J	6/12/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	sediment	ASTM E1367-03 (2014)	10 days	Leptocheirus plumulosus	1	-88	Survival	%	5	97.0	2.7	J	6/12/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	sediment	ASTM E1367-03 (2014)	10 days	Leptocheirus plumulosus	1	-88	Survival	%	5	98.0	2.7	J	6/12/2021
LLM-DU3	LLM-DU3	SMP	PER	LLM-DU3-Comp	sediment	ASTM E1367-03 (2014)	10 days	Leptocheirus plumulosus	1	-88	Survival	%	5	100.0	0.0	J	6/12/2021
LC	LC	CNEG	PER	Lab Control	sediment	ASTM E1611-00(2007)	10 days	Neanthes arenaceodentata	2	-88	Survival	%	5	100.0	0.0	J	6/15/2021
SF-10	SF-10	RFST	PER	SF-10	sediment	ASTM E1611-00(2007)	10 days	Neanthes arenaceodentata	2	-88	Survival	%	5	100.0	0.0	J	6/15/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	sediment	ASTM E1611-00(2007)	10 days	Neanthes arenaceodentata	2	-88	Survival	%	5	100.0	0.0	J	6/15/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	sediment	ASTM E1611-00(2007)	10 days	Neanthes arenaceodentata	2	-88	Survival	%	5	100.0	0.0	J	6/15/2021
LLM-DU3	LLM-DU3	SMP	PER	LLM-DU3-Comp	sediment	ASTM E1611-00(2007)	10 days	Neanthes arenaceodentata	2	-88	Survival	%	5	100.0	0.0	J	6/15/2021
LC	LC	CNEG	PER	Lab Control	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	-88	Normal Development	%	5	97.6	1.1	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	1	Normal Development	%	5	96.4	1.3	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	10	Normal Development	%	5	94.4	1.3	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	50	Normal Development	%	5	66.0	10.3	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	100	Normal Development	%	5	0.0	0.0	EG	7/2/2021
LC	LC	CNEG	PER	Lab Control	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	-88	Survival	%	5	95.9	2.0	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	1	Survival	%	5	88.4	1.3	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	10	Survival	%	5	88.9	4.8	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	50	Survival	%	5	58.5	12.0	EG	7/2/2021
LLM-DU1	LLM-DU1	SMP	PER	LLM-DU1-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3a	100	Survival	%	5	0.0	0.0	EG	7/2/2021
LC	LC	CNEG	PER	Lab Control	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	-88	Normal Development	%	5	96.9	1.1	EG	7/2/2021
SW	SW	RFST	PER	Site Water	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	-88	Normal Development	%	5	98.7	1.2	EG	7/2/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	1	Normal Development	%	5	97.2	2.1	EG	7/2/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	10	Normal Development	%	5	97.1	1.0	EG	7/2/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	50	Normal Development	%	5	96.7	1.2	EG	7/2/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	100	Normal Development	%	5	0.0	0.0	EG	7/2/2021
LC	LC	CNEG	PER	Lab Control	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	-88	Survival	%	5	96.6	4.5	EG	7/2/2021
SW	SW	RFST	PER	Site Water	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	-88	Survival	%	5	83.7	2.0	EG	7/2/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	1	Survival	%	5	93.1	5.3	EG	7/2/2021
LLM-DU2	LLM-DU2	SMP	PER	LLM-DU2-Comp	Elutriate-SET	ASTM E724-98(BIVALVE)	2 days	Mytilus galloprovincialis	3b	10	Survival	%	5	86.2	4.7	EG	7/2/2021





PROJECT DATA

- Project Page
- List of Projects with Applicants
- Project name is link to individual project page.
- Project Documents available to view.

Documents

Search Filter:

Title	Event Name	Type	For Consideration	Status	Document Date	Uploader
Results of Chemical, Physical and Biological Testing of Sediments from Wharves 1 – 4 at the Port of Redwood City.	2021 Port of Redwood City	SAR	Yes		2021-07-07	unknown
Sampling and Analysis Plan, Port of Redwood City, Wharves 1 - 4	2021 Port of Redwood City	SAP	Yes		2021-03-29	unknown
Sampling and Analysis Plan, Tier I with Confirmatory Chemistry, Port of Redwood City, Wharves 1 - 4	2021 Port of Redwood City	SAP	Yes		2021-03-17	unknown
Port of Redwood City SAR	2018 Port of Redwood City Berths 1-4	SAR	Yes		2018-05-30	unknown
revised Port of Redwood City SAP	2018 Port of Redwood City Berths 1-4	SAP	Yes		2018-02-16	unknown
Port of Redwood City Berths 1-4 SAP 2018	2018 Port of Redwood City Berths 1-4	SAP	Yes		2018-01-17	unknown
Port of Redwood City SAR	2015 Port of Redwood City Berths 1-4	SAR	No		2015-07-01	unknown
Port of Redwood City Berths 1-4 SAP 2015	2015 Port of Redwood City Berths 1-4	SAP	No		2015-01-21	unknown
Port of Redwood City Marina & F-Dock SAR Appendices	2014 Port of RWC Marina & F-Dock	SAR	No		2013-08-08	Shelah.Sweatt@usace.army.mil
Port of Redwood City Marina & F-Dock SAR Executive Summary	2014 Port of RWC Marina & F-Dock	SAR	Yes		2013-08-08	unknown
Port of Redwood City Berths 1-4 SAR 2010	2010 Port of Redwood City Berths	SAR	No		2010-09-01	PLM
Port of Redwood City SAR 2008 Mar	2008 Port of Redwood City	SAR	No		2008-03-01	PLM
Port of Redwood City Dredge Authorization 2004 May	2004 Port of Redwood City	DredgeAuth	No		2004-05-11	PLM
Port of Redwood City USACE Permit 2004 May	2004 Port of Redwood City	Permit	No		2004-05-03	PLM
Port of Redwood City BCDC Permit 2004 Mar	2004 Port of Redwood City	Permit	No		2004-03-23	PLM
Port of Redwood City RWQCB Permit 2004 Mar	2004 Port of Redwood City	Permit	No		2004-03-03	PLM
Port of Redwood City Suitability Determination 2003 Dec	2004 Port of Redwood City	SuitDeterm	No		2003-12-16	PLM
Port of Redwood City SAR 2003 Nov	2004 Port of Redwood City	SAR	No		2003-11-01	PLM
Port of Redwood City SAP Approval Supplement 2003 Sep	2004 Port of Redwood City	SAPApprove	No		2003-09-26	PLM
Port of Redwood City SAR Supplement 2003 Aug	2004 Port of Redwood City	SAR	No		2003-08-01	PLM
Port of Redwood City SAP Approval 2003 Jul	2004 Port of Redwood City	SAPApprove	No		2003-07-01	PLM
Port of Redwood City Application 2003 Mar	2004 Port of Redwood City	Application	No		2003-03-10	PLM

Project
DMMO and LTMS Annual Reports (358)
DMMO Internal Docs (265)
Aerial Yacht Club (247)
Alameda Harbor Bay Ferry (268)
Alameda Point Navigational Channel (225)
Alred Defense Recycling (305)
AMPORTS:Port of Benicia (272)
Aqua Vista Homeowners Association (389)
Argues Shipyard and Marina (228)
BAE Systems (1)
Bahia Lagoon (230)
Ballena Bay Townhouse Association (227)
Ballena Isle Marina (289)
Bel Marin Keys (228)
Belvedere Cove (229)
Belvedere Land Company (399)
Benicia Marina (230)
Benicia-Martinez Bridge (306)
Berkeley Marina (307)
Big Harbor Marina (400)
Blue Water Yacht Harbor (385)
BP Richmond Terminal (ARCO) (266)
Brickyard Cove Homeowners (309)
Brisbane Marina (367)
CalTrans East San of Bay Bridge (301)
California Maritime Academy Boat Basin (310)
Chevron Eureka Marina Terminal (427)
Chevron Richmond Leno Wharf (231)
Chevron Rod and Gun Club Yacht Harbor (386)
City of Foster City (311)
City of Martinez Marina (282)
City of Napa JFK Boat Ramp (347)
City of Napa River Park Marina (345)

Applicant
DMMO
Aerial Yacht Club
City of Alameda
Alameda Reuse and Redevelopment Authority
Now known as Mare Island Dry Dock
AMPORTS, Inc.
Bob Allen, Anthony Ailoa, Jon Dickinson
Argues Shipyard and Marina
BAE Systems, Inc.
Bahia Homeowners Association
Ballena Bay Townhouse Association
Ballena Isle Marina
Bel Marin Keys Community Services District
Bob Valentine
Belvedere Land Company
City of Benicia
Benicia-Martinez Bridge
Berkeley Marina
RVC Harbor Communities, LLC
Blue Water Yacht Harbor
BP West Coast Products
Brickyard Cove Homeowners
City of Brisbane
CalTrans, District 4
California Maritime Academy Boat Basin
Chevron Products Company
Chevron USA Inc, Richmond Refinery
Chevron Products Company, Richmond Refinery
City of Foster City
City of Martinez Marina
City of Napa
City of Napa
City of Redwood City
City of San Leandro
Suisun City
City of Sunnyside
Ken Pedersen
PLEASE SEE Phillips66 FOR CURRENT INFO
Channel (289)
Contra Costa Water District
Cointhian Yacht Club of San Francisco
Corona Del Mar Homeowners Association
County of San Mateo Parks and Recreation Division
Crescent City Harbor
Yacht Harbor (237)
Emery Cove Condo Assoc./Emery Cove Yacht Harbor
City of Emeryville



PROJECT DATA

- Look up data by project or using query tool

Port of Redwood City (252)

Project Test Data

Return to Projects List
To choose a different project, [click here](#).

Access Project Documents and Data
Use the Project Quick Links below to see or download this project's **Permit History**, a
You may also view and download past **Testing Results** for this project in two ways: (1

Project Quick Links
[Documents](#) ([jump to page](#))
[Historical Sediment Chemistry Testing Data](#) ([jump to page](#))
[Historical Bioassay Testing Data](#) ([jump to page](#))
[Permit History](#)
[Suitability Summary](#)

PROJECTS LIST
MEETING AREA
DATA SEARCH

Query Testing Data
Custom Queries

QUERY TESTING DATA

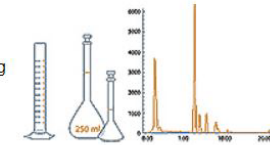
Dredging projects include sediment sampling information that allows the DMMO to determine the suitability of that material for disposal or reuse at one of the managed dredged material placement sites in and around San Francisco Bay. The information collected for any project may include physical, chemical, and/or biological testing data. Available testing data for all Bay Area dredging projects has been compiled in a database that is available to search here. (The database currently includes testing data from approximately 2000 - 2010.)

NOTE: The DMMO database accepts data submitted by testing labs without change or filtering. Macros built into the DMMO Excel Templates check to ensure that the data are in an acceptable format for submission to the DMMO database, but they do not evaluate data quality or accuracy. **This means that users are responsible for screening whether any data they view are appropriate for their intended uses.**

You may **view or download existing data** either by building your own [Custom Queries here](#) or by using the Automated Data Queries provided below. (The ability to select data spatially from a map will be coming in a future update.)

Testing laboratories with approved passwords may **submit new testing data** via the [Meeting Area](#). (Lab data are uploaded via standardized Excel Templates. The DMMO Excel Templates, an example data file, and a Template User Manual are available [here](#).)


Data Last Updated: August 2022





PROJECT DATA

- Project Test Data
- Download as excel file



[Project Home](#) | [Testing Data](#) | [Disposal Logs](#) | [DMMO Home](#)

Project Test Data

Sediment Chemistry

Query Results

Chemical Group: **All**
 Chemical: **All**
 Project Location: **All:All**
 Project Proponent or Permit Applicant Name: **All**
 Project Name: **Port of Redwood City**
 Exclude Data Below Detection: **No**
 Exclude Reference Data: **No**

[Download CSV File](#)

Total Rows: 5602.

StudyID	Study Name	Agency	StationID	Latitude	Longitude	Water Body	Watershed	County	SampleID	Sample Method	Sample Type	Date Sampled	Date Analyzed	Upper Sed Depth (ft)	Lower Sed Depth (ft)	QABatch	LabRep	Chemical Group	Chemical Name	CAS NUmber	Result	Units	Qualifier	MDL	RL
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU1	37.51262	-122.2107	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU1-02	Core	RESULT	2/13/2018	4/7/2018	0	-99	180404L17	1	PCB Congeners	PCB044	41464-39-5	0.38	UG/KG	U	0.38	0.49
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU1	37.51262	-122.2107	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU1-04	Core	RESULT	2/13/2018	4/7/2018	0	-99	180404L17	1	PCB Congeners	PCB151	52663-63-5	0.22	UG/KG	U	0.22	0.5
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU1	37.51262	-122.2107	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU1-Comp	Composite core/grab sample	RESULT	2/13/2018	3/1/2018	0	-99	180227S12	1	PAH	Acenaphthylene	208-96-8	88	UG/KG	U	-99	-99
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU1	37.51262	-122.2107	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU1-Comp	Composite core/grab sample	RESULT	2/13/2018	2/23/2018	0	-99	180302L01EGS	1	Grain Size	Sand C	NA	88	PCT	U	-99	-99
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU1	37.51262	-122.2107	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU1-Z-Layer Comp	Composite core/grab sample	RESULT	2/13/2018	4/12/2018	0	-99	180410L13A	1	PAH	Phenanthrene	85-01-8	100	UG/KG		5.2	23
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU2	37.51001	-122.2116	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU2-01 Z-Layer	Core	RESULT	2/15/2018	4/17/2019	0	-99	180413L21	1	PAH	2-Methylnaphthalene	91-57-6	37	UG/KG		5.1	22
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU2	37.51001	-122.2116	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU2-02 Z-Layer	Core	RESULT	2/15/2018	4/16/2019	0	-99	180413L19	1	PCB Congeners	PCB203	52663-76-0	0.13	UG/KG	U	0.13	0.46
252_2417_3_20	Port of Redwood City 2018	Port of Redwood City	DU2	37.51001	-122.2116	Redwood Creek	San Francisco Bay	San Mateo	PRC-DU2-03 Z-Layer	Core	RESULT	2/15/2018	4/16/2018	0	-99	I0416TSB6	1	Conventional	Solids	NA	44.9	PCT		0.1	0.1



DATA QUERY

Custom Queries:

1. Sediment Chemistry, Tissue Chemistry, or Bioassay

PROJECTS LIST
MEETING AREA
DATA SEARCH
Query Testing Data
Custom Queries

Build Custom Queries

You can build your own custom queries for sediment chemistry, tissue chemistry, or bioassay data in the database. Each query allows you to select by project, lo

Sediment Chemistry

To improve performance and maximize the usefulness of your results, select sediment chemistry data by narrowing your choices below. You may select data by c of the above. The project location choices are Place Name (large area or water body), Location or Feature (dredging area, reference area, smaller location name name of the applicant for dredging projects. The Project Name is the name and year of the study conducted at that location. You also have a choice to exclude da

Chemical Group: Chemical:
Project Location:
Project Proponent or Permit Applicant Name:
Project Name:

Data Handling Preferences:

Exclude Data Below Detection
 Exclude Reference Data



DATA QUERY

- Query by Chemical Group
- Region
- Project Name

Build Custom Queries

You can build your own custom queries for sediment chemistry, tissue chemistry, or bioassay data in the database. Each query allows you to select by project, location, or attribute.

Sediment Chemistry

Query Results

Chemical Group: PAH
 Chemical: Total PAHs (reported)
 Project Location: Place Name:Carquinez Strait
 Project Proponent or Permit Applicant Name: All
 Project Name: All
 Exclude Data Below Detection: No
 Exclude Reference Data: Yes

[Download CSV File](#)

Total Rows: 80.

StudyID	Study Name	Agency	StationID	Latitude	Longitude	Water Body	Watershed	County	SampleID	Sample Method	Sample Type	Date Sampled	Date Analyzed	Upper Sed Depth (ft)	Lower Sed Depth (ft)	QABatch	LabRep	Chemical Group	Chemical Name	CAS Number	Result	Units	Qualifier	MDL	RL
264_2616_6_16	City of Vallejo Marina South Basin 2016	City of Vallejo	DU-1	38.10769	-122.2699	Mare Island Strait	San Francisco Bay	Solano	DU-1-COMP	Core	RESULT	2/1/2016	3/15/2016	0	7.49	160314L09-PAH	1	PAH	Total PAHs (reported)	NA	695	UG/KG	-99	-99	
272_2580_4_16	Port of Benicia Terminal (AMPORTS) 2013	AMPORTS/Port of Benicia	ABT-DU1	38.04057	-122.1369	Benicia Point	San Francisco Bay	Solano	ABT-DU1-Comp	Core	RESULT	6/21/2013	7/5/2013	0	9.95	130702L22	1	PAH	Total PAHs (reported)	NA	766	UG/KG	-99	-99	
264_2590_6_16	Vallejo Marina North & South Basins 2012	City of Vallejo	VN1	38.11097	-122.2706	Mare Island Strait	San Francisco Bay	Solano	VN1-Comp	Core	RESULT	3/21/2012	5/8/2012	0	8.04	120425L05-PAH	1	PAH	Total PAHs (reported)	NA	688	UG/KG	-99	-99	
264_2590_6_16	Vallejo Marina North & South Basins 2012	City of Vallejo	VN1	38.11097	-122.2706	Mare Island Strait	San Francisco Bay	Solano	VN1-Z-Comp	Core	RESULT	3/21/2012	5/8/2012	8.04	8.54	120425L05-PAH	1	PAH	Total PAHs (reported)	NA	173	UG/KG	-99	-99	
264_2590_6_16	Vallejo Marina North & South Basins 2012	City of Vallejo	VS1	38.10841	-122.2685	Mare Island Strait	San Francisco Bay	Solano	VS1-Comp	Core	RESULT	3/21/2012	5/8/2012	0	8.06	120425L05-PAH	1	PAH	Total PAHs (reported)	NA	578	UG/KG	-99	-99	
264_2590_6_16	Vallejo Marina North & South Basins 2012	City of Vallejo	VS1	38.10841	-122.2685	Mare Island Strait	San Francisco Bay	Solano	VS1-Z-Comp	Core	RESULT	3/21/2012	5/8/2012	8.06	8.56	120425L05-PAH	1	PAH	Total PAHs (reported)	NA	122	UG/KG	-99	-99	
231_2619_6_16	Chevron Long Wharf/Richmond, CA 2011	Chevron Products Company	DU-5/A	37.92075	-122.4085	Davis Point	San Francisco Bay	Contra Costa	5/A-COMP	Core	RESULT	5/4/2011	5/17/2011	0	3.57	K1103974-001-PAH	1	PAH	Total PAHs (reported)	NA	945	UG/KG	-99	-99	
231_2552_6_16	Chevron Long Wharf 2015	Chevron Products Company	BSA/B-1/B-2	37.92308	-122.4107	Davis Point	San Francisco Bay	Contra Costa	BSA/B1/B2-COMP	Core	RESULT	4/30/2015	5/11/2015	0	2.23	KWG1504037-PAH	1	PAH	Total PAHs (reported)	NA	1543	UG/KG	-99	-99	



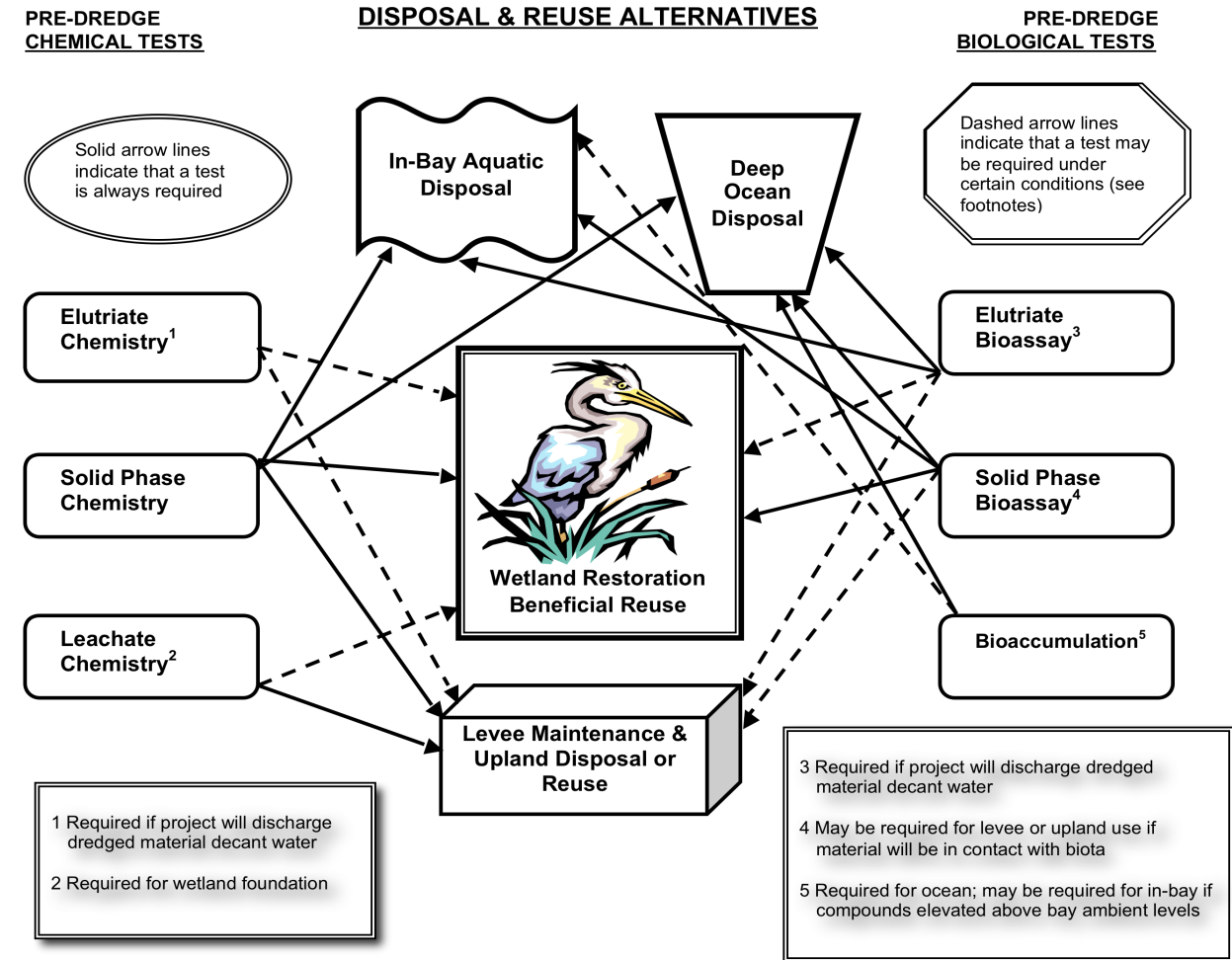
USING THE DATA

Disposal Options

- In-Bay disposal – Inland Testing Manual (ITM)
- The Ocean – SFDODS – Tier III+ Bioaccumulation (Green Book)
- Beneficial Reuse – Site Specific Requirements

Placement Site Criteria

- Ambient concentrations
- Risk based
- TMDL
- Bioaccumulation testing triggered at certain levels of concentration





MEETING REGULATORY REQUIREMENTS

Testing Requirements

- Regulations require approval of placement of dredged material does not result in degradation to the environment.
- Using data to ensure the testing requirements are no more than what is needed to meet regulatory requirements.
- Reduce costs to dredgers

Beneficial Use Site Criteria

- Draft Beneficial Reuse Criteria – CA Regional Water Quality Control Board
- Site Specific Criteria set by permit requirements or ESA Biological Opinions

Dredged Material Testing Thresholds

	Mercury ^a (mg/kg dw)	Total PCBs (µg/kg dw)	Total PAHs (µg/kg dw)	Total DDTs (µg/kg dw)	Total Chlordane (µg/kg dw)	Dieldrin (µg/kg dw)	Dioxins/ Furans (pg/g dw)
Bioaccumulation Trigger	0.33	18	4,500	50	37	1.9	10
TMDL Limit	0.47	29.5	--	--	--	--	--
Basis	b	b	b	c	c	d	e

a. DMMO no longer requires bioaccumulation testing for mercury above the BT. See [Amendment to EFH consultation](#).

b. Threshold based on San Francisco Bay ambient sediment concentrations, as described further below.

c. Published bioaccumulation trigger for [Puget Sound marine sediments](#).

d. Published marine SL value from the [Pacific Northwest Sediment Evaluation Framework](#).

e. Toxicity Equivalency Quotient (TEQ) based on WHO 1998 Toxicity Equivalency Factors (TEFs) for aquatic disposal, and is ½ the established limit for placement at the Hamilton Wetlands Restoration Project.

Draft Staff Report

Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines

May 2000 (with minor corrections as of 3/14/19)

For Planning Purposes Only

This document is for planning uses and the determination of general suitability of dredged material for beneficial reuse projects. The permits needed for beneficial reuse of dredged material will be based on site-specific conditions.

PREPARED BY: San Francisco Bay Regional Water Quality Control Board staff

Staff Contact: Elizabeth Christian (510) 622-2335 echristan@waterboards.ca.gov



REVIEWING REGULATORY REQUIREMENTS

Using DMMO Database to review testing requirements:

- Modification to the Programmatic EFH Conservation Measures for Maintenance Dredging Conducted Under the LTMS Program Concerning Mercury Bioaccumulation and Residuals Testing.
- Beneficial Reuse Workshop conducted by the Regional Monitoring Program for Water Quality in San Francisco Bay.
- Re-evaluation of the Floating Percentile Method for Deriving Dredged Sediment Screening Guidelines.
- Summary and Evaluation of Bioaccumulation Tests for Total PCBs Conducted by San Francisco Bay Dredging Projects.



REVIEWING REGULATORY REQUIREMENTS

Modification to the Programmatic EFH Conservation Measures for Maintenance Dredging Conducted Under the LTMS Program Concerning Mercury Bioaccumulation and Residuals Testing.

- Reviewed Mercury bioaccumulation data set comprised of dredging projects from 2001 through 2012.

Summary and Evaluation of Bioaccumulation Tests for Total PCBs Conducted by San Francisco Bay Dredging Projects – 2022.

- Reviewed PCB bioaccumulation data set comprised of dredging projects from 2011 through 2021.



REVIEWING BENEFICIAL REUSE CRITERIA

Beneficial Reuse Workshop conducted by the Regional Monitoring Program for Water Quality in San Francisco Bay - 2019.

- Workshop resulted in several recommendations for reviewing beneficial reuse criteria used in the SF Bay Region.

Re-evaluation of the Floating Percentile Method for Deriving Dredged Sediment Screening Guidelines – 2023.

- Out of the recommendations from the Beneficial Reuse Workshop.
- Reviewed the use of the Floating Percentile Method as an alternative to the use of current ambient concentrations in placement criteria.



SAN FRANCISCO BAY DREDGING AND DISPOSAL DATABASE

Benefits to collecting the data:

- Historical knowledge of dredged sediment analysis for the region.
- Availability of a scientific basis for regulatory requirements.
- Quantifiable reduction in costs to dredging community.

Challenges to collecting the data:

- Cost and staff time needed to maintain a database.
- Standardizing the data over time.
- Realizing full potential of the data set.

