

SAN FRANCISCO DISTRICT NAVIGATION PROGRAM OVERVIEW

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13 November 2019

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SAN FRANCISCO DISTRICT – DREDGING MISSION



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ENVIRONMENTAL AND INSTITUTIONAL BACKDROP

- **NEPA:** 10-year (2015-2024) Environmental Assessment, 29 May 2015
- **Endangered Species Act (ESA):** BO
- **Clean Water Act (CWA):**
 - Section 401 Water Quality Certification
- **Coastal Zone Management Act (CZMA):**
 - Consistency Notification from the San Francisco Bay Conservation and Development Commission (BCDC)
- **Long Term Management Strategy:**
 - Framework for placement in the bay with a target of no more than 20% in Bay
- **Federal Standard:**
 - The least costly dredged material disposal or placement alternative (or alternatives) that is consistent with sound engineering practices and meets all federal environmental requirements, including those established under the Clean Water Act (CWA) and the Marine Protection, Research, and Sanctuaries Act.



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2020 O&M DREDGING PLAN*

Annual	Bid Opening Award Date	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Estimated CY	Dredge Type	Placement Site	
		FY 2020															
Oakland Harbor	1 Apr/16 Apr	◆	◆	Mob	New SPN Contract									750kcy	Contract Clam Shell	DODS/upland/least cost	
Richmond Inner Harbor	15 Apr/2 May		◆	◆	Mob	New SPN Contract								250kcy	Contract Clam Shell	DODS/upland/least cost	
SF Main Ship Channel	N/A				■									350kcy	Gov Hopper	OBDS/SF-8	
Richmond Outer Harbor	N/A				■									300kcy	Gov Hopper	SF-11/SF-10	
Humboldt Bar & Entrance	N/A				West Coast Hopper Contract									1000kcy	Contract Hopper	HOODS	
Sac/San Joaquin	15 May/2 Jun			◆	◆	Mob	New SPN Contract						300kcy	Contract Pipeline	Various Upland		
Suisun Bay Channel	1 Jun/16 June				◆	◆	Mob	New SPN Contract						130kcy	Contract Clam Shell	SF-16	
San Pablo Bay/Mare Island Straight	N/A						Deferred to 2021										
Workplan Dependent																	
Noyo O&M	15 May/1 June			◆	◆	Mob	Funded for P&S							40kcy	Pipeline	Upland Disposal Site	
Petaluma O&M	26 May/13 June			◆	◆	Mob	Funded for P&S							TBD	Clam Shell/Pipeline	Upland, SF-10, Ben. Reuse	
MOTCO	1 Jun/16 June			◆	◆	Mob	Funded for P&S							100kcy	Contract Clam Shell	Pending Suitability	
Moss Landing O&M	26 June/13 Jul				◆	◆	Mob	Funded for P&S						90kcy	Clam Shell w/Pipe	SF-14, Beach Site	
Redwood City Harbor	22 May/17 Jun				◆	◆	Mob	Funded for P&S					350kcy	Clam Shell	SF-11		
		■		Mobilization				■		Environmental Window							
		▨		New SPN Contract				◆		Bid Opening							
		■		West Coast Hopper Contract				◆		Contract Award							
		■		Government Dredge													
		■		Funded for P&S only													

* Program execution is based on the FY20 President's Budget, expected carryover and Federal Standard plan for each project. Date of Update: 11/12/2019



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THE SAN FRANCISCO BAY REGIONAL DMMP EFFORT UPDATE



Key Issues

- USACE dredging supports a wide array of goods moving throughout the Bay, 70% of which is commercial and 30% of which is fuel.
- Dredged material in the Bay is an important resource because material is mostly clean.
- Selection of future placement sites.
- Bringing visibility to shallow draft harbors.

Regional DMMP

- Comprehensive approach.
- Focus on addressing dredge material placement issues.
- Improve environmental compliance based upon best available science to inform environmental restrictions/limitations.
- Emphasis on resiliency, especially due to uncertainties with climate change and sea level change.



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SAN FRANCISCO TO STOCKTON DEEPENING PROJECT

- Deep-draft navigation study initiated in the early 2000's.
- Original study scope considered navigation improvements from SF Bay to Stockton/Port of Stockton is the non federal sponsor.
- Study re-scoped in 2016 to focus only on area between SF Bay and Avon: Contra Costa County enters as close partner with the Port to complete the study.
- Re-scoping by USACE HQ due to economic justification and environmental complexities between Avon and Stockton.



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RECOMMENDED PLAN OVERVIEW

CHANNEL DEEPENING

- From 35 feet to 38 feet MLLW: 13.2 miles
- Pinole Shoal Channel: 10.3 miles = 1,443,900 cy
- Bulls Head Reach: 2.9 miles = 38,700 cy

BULLS HEAD SEDIMENT TRAP

- Dredge trap to 42 feet MLLW + 2 feet overdepth = 120,600 cy
- Length = 2,600 feet; Width = 300 feet

ROCK SUBSTRATE

- Reduce elevation down to 43 feet, 950 sq feet = 40 cy

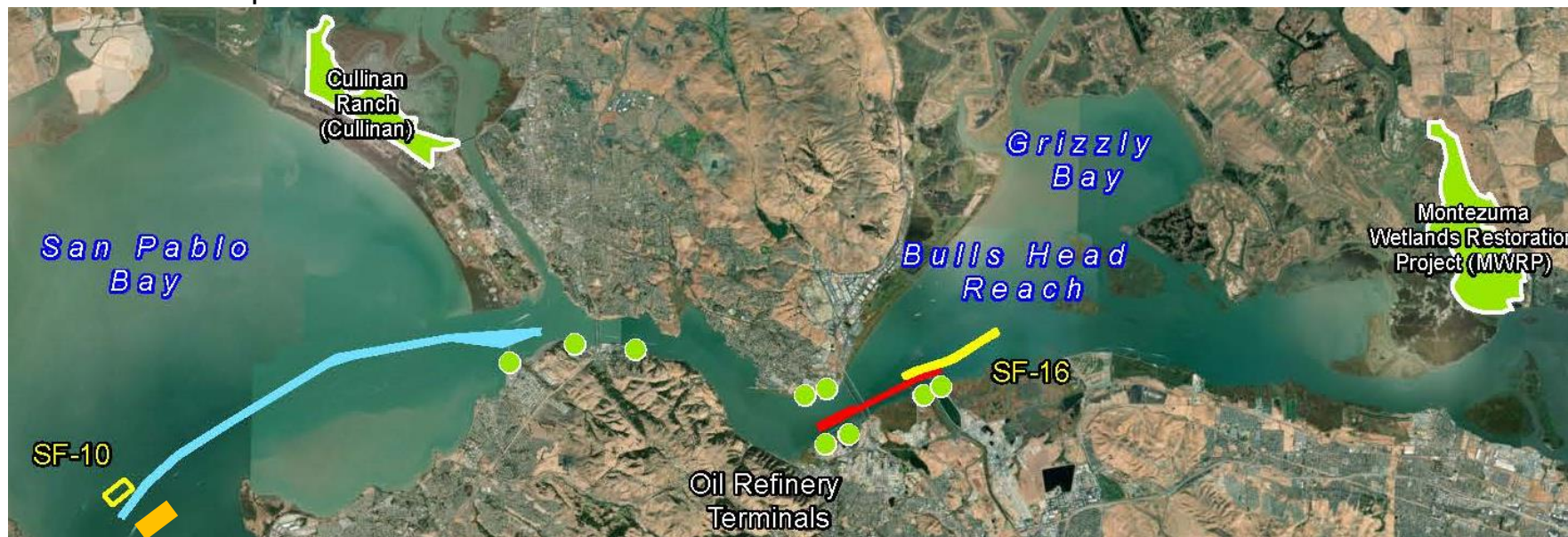
BENEFICIAL USE OF MATERIAL

- Placement at Montezuma Wetlands & Cullinan Ranch will help offset environmental effects

Oil Refineries (Channel Users)

LEGEND

	Deepen Pinole Shoal 35 ft to 38 ft MLLW + 2 ft overdepth
	Deepen Bulls Head Reach 35 ft to 38 ft MLLW + 2 ft overdepth
	Oil Refineries (Channel Users)
	Placement Sites – Beneficial Use
	Bulls Head Sediment Trap – 42 ft MLLW + 2 ft overdepth
	Existing O&M Sites – SF-10 & SF-16
	Existing rock formation – at peak of 39.7 ft MLLW



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MATERIAL PLACEMENT SITES

INITIAL PLACEMENT SITES & ASSUMPTIONS

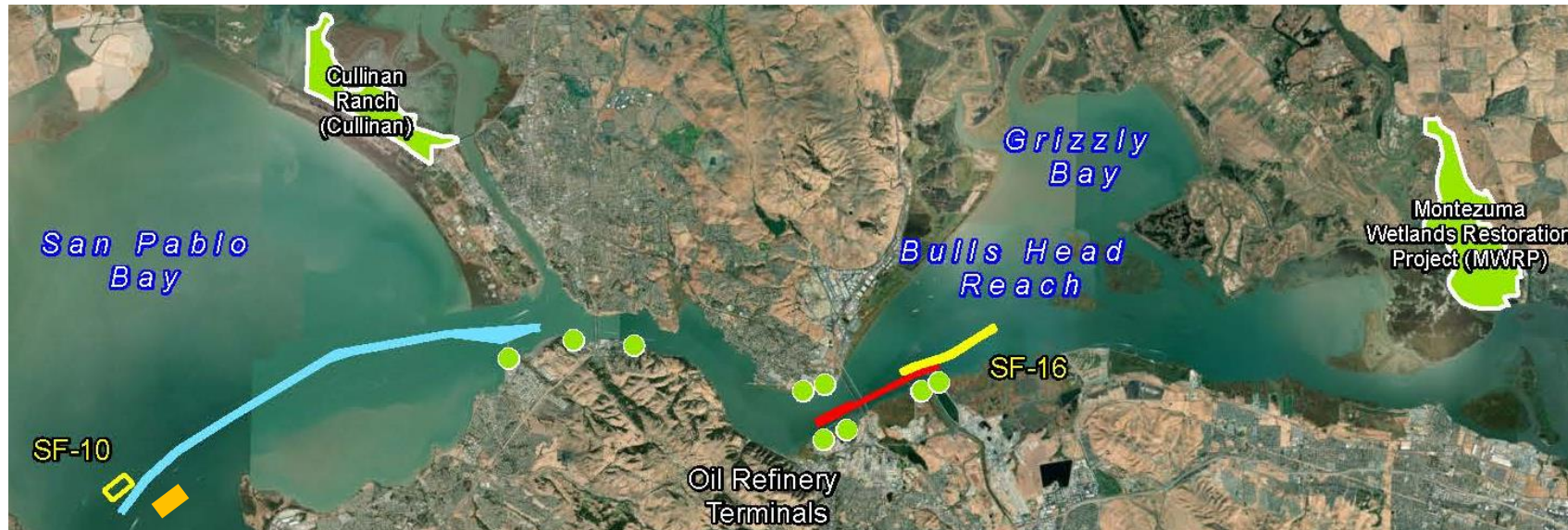
- Pinole Shoal Channel – Cullinan Ranch
- Bulls Head Reach – Montezuma Wetland
- San Francisco Dredged Ocean Disposal Site (SF-DODS)
– not assumed for placement but a backup site if needed

BENEFICIAL USE OF DREDGED MATERIAL:

- Beneficial use of material Montezuma Wetlands & Cullinan Ranch will contribute to 160 acres of habitat creation

OPERATIONS AND MAINTANCE

- O&M – SF-10 and SF-16 (Federal standard)
- Bulls Head Reach (47,500 cy) annually and Pinole Shoal (175,900 cy) will be dredged every other year
- Bulls Head Reach Sediment trap (8,900 cy) will be dredged annually.
 - Reduced frequency of additional O&M provides a savings of \$680,000 per year, or \$16M in Present Value



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SAN FRANCISCO BAY TO STOCKTON STUDY: KEY ENVIRONMENTAL COMMITMENTS

- **Use of clamshell dredge for initial deepening (both Pinole Shoal and Bulls Head Reach).**
- **Dredge in compliance with applicable Biological Opinions.**
- **Programmatic Agreement coordination under section 106 for Cultural Resources carried through to PED.**
- **Beneficial re-use of material.**



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NEXT STEPS

- **Final Report Transmittal to HQ:** October/November 2019
- **Final 30-day NEPA Review:** January 2020
- **Execute Programmatic Agreement/Cultural Resources:** March 2020
- **Signing of Director's Report:** June 2020
- **Non-federal Sponsor CEQA Compliance:** Schedule TBD
- **Initiation of Preconstruction, Engineering and Design:** Post-CEQA
- **Construction:** TBD pending CEQA compliance completion, design completion, and receipt of construction funding



YOUR COMMENTS/QUESTIONS



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