TABLES

Sears Point Restoration Project Tables

Table 1. Existing Habitats and Land Uses at Sears Point Restoration Project	**Acres**
Agricultural Lands	1,178
Developed Area	20
Wildflower Field	1
Non-native Annual Grassland	225
Wetlands and Waters of the U.S.	520
TOTAL ACRES	1,944

Table 2a. Anticipated Habitat and Land Use Changes at Sears Point Wetland Restoration Project (includes wetlands and waters). (These targets are only goals and may not be met.)

Habitat Type	Fill Amount (cubic yards)	Existing Conditions (acres)	Anticipated Post Construction Habitats (acres)	Anticipated Post Construction Habitats (linear feet)	Net change in Habitat (acres)*	Net Change (linear feet)
Seasonal Wetland	52,750	79.887	31.017	-	-48.87	0
Vernal Pool	100	1.182	1.156	-	-0.026	0
Ditch	42050	26.882	3.866	12,900	-23.02	-67,100
Diked Brackish Marsh	800	1.128	0	-	-1.128	0
San Pablo Bay	0	70.72	70.72	-	0	0
Tidal Marsh	0	194.733	1002.684	-	807.95*	0
Tolay Creek/Slough Channel	0	137.154	269.229	48,000	132.07*	29,000*
Marsh	0	8.295	8.295	-	0	0
Ephemeral Stream	0	0.476	0.476	5,200	0	0
Agricultural Lands	-	1178	323.014	-	-855	0
Developed Area	-	20	8	-	-12	0
Wildflower Field	-	1	1	-	0	0
Non-native Annual Grassland	-	225	225	-	0	0
Total	**95,700**	**1,944.46**	**1,944.46**	**66,100**	**-**	**-38,100**
*Net Change in tidal habitat includes sloughs and tidal marsh for a total of about 940 acres of tidal restoration.						

Table 2b. Anticipated Net Changes in Wetlands and Waters at the Sears Point Restoration Project.

	Pre-project Conditions		Post-project Condition
	(acres)		(acres)
Ephemeral Stream	0.476		0.476
Tolay Creek	137.154		137.15
San Pablo Bay	70.720		70.72
Marsh	8.295		8.29
Tidal Marsh	194.733		1002.68*
Vernal Pool	1.182		1.16
Seasonal Wetland	79.887		31.02
Ditch	26.882		3.87
Diked Brachish Marsh	1.128		0.000
Slough	0.000		132.07*
TOTAL	520.457		1387.44
		Net Change	**866.99**

* Net change in tidal habitat includes sloughs and tidal marsh for a total of about 940 acres of tidal marsh restoration.

Table 3. Anticipated Excavation (cut) and Fill at the Sears Point Restoration Project

ELEMENT	TOTAL			SAN PABLO BAY			TOLAY CREEK			EPHERMERAL STREAM			TIDAL MARSH WETLAND		
	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)
South of RR															
NEW TIDAL LEVEE	12,900	77.3	813,000												
LEVEE GRADING CUT	22,400	7.0	(15,000)												
LEVEE GRADING FILL	22,400	24.6	125,000												
LEVEE LOWERING CUT	6,850	8.0	(41,950)												
LEVEE LOWERING FILL	6,850	8.0	41,950												
BREACH 1 LEVEE CUT	100	1.2	(18,000)												
BREACH 1 PILOT CHANNEL	380	1.6	(29,000)										380	1.6	(29,000)
BREACH 1 CONNECTOR	2,100	2.6	(27,000)	2,100	2.6	(27,000)									
BREACH 1 FILL	-	3.7	18,000												
BREACH 2 CUT	50	1.2	(14,000)				-	0.3	(2,000)				-	0.1	(3,000)
BREACH 2 FILL	-	2.9	14,000												
TIDAL CHANNELS	29,500	135.4	(1,093,000)												
RR CONVEYANCE DITCH	12,900	9.5	(33,000)												
SOIL REMEDIATION AREA	-	7.3	(24,000)												
DITCH BLOCKS	-	0.9	7,500												
MARSH MOUNDS CUT	-	57.5	(250,000)												
MARSH MOUNDS FILL		57.5	250,000												
SIDECAST RIDGES		2.1	12,000												
North of RR															
ACCESS ROAD	3,700	3.9	9,000												
MAINTENANCE ROAD	4,500	3.1	9,000												
RECLAMATION ROAD IMPR	4,500	2.6	2,500												
PUMP 1 DETENTION POND	-	1.5	(12,000)												
PUMP 2 DETENTION POND	-	1.5	(12,000)												
RIPARIAN BASINS	-	0.7	(5,000)												
ALLUVIAL DEPRESSIONS	-	1.4	(4,500)							315	0.0	(100)			

total cut (1,578,450)

total fill 1,301,950

Table 3 (continued). Anticipated Excavation (cut) and Fill at the Sears Point Restoration Project

SEASONAL WETLAND			VERNAL POOL WETLAND			DITCH WETLAND			DIKED BRACKISH MARSH			SHORELINE BAND			TOTALS		
LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)	LENGTH (FT)	AREA (AC)	VOLUME (CY)
-	2.5	26,000				5,500	1.3	14,000							5,500	3.8	40000.00
															0	0.0	0.00
-	0.8	5,000				9,499	3.3	17,000	-	0.2	800				9,499	4.1	22000.00
												6,850	8.0	(41,950)	8,850	8.6	(38950.00)
-	0.1	500				2,000	0.6	3,000				6,850	8.0	41,950	8,850	9	45450.00
						-	0.0	(400)				100	1.2	(18,000)	100	1	(18400.00)
															380	1.6	(29000.00)
															2,100	2.6	(27000.00)
															0	0.0	0.00
						-	0.1	(1,700)							0	0.4	(5400.00)
															0	0.0	0.00
-	4.0	(32,500)				-	2.0	(16,000)							0	6.0	(48500.00)
							0.1	(440)							0	0.1	(439.68)
												-	0.6	(2,000)	0	0.6	(2000.00)
						-	0.9	7,500				-	0.1	1,000	0	1.0	8500.00
-	4.6	(20,000)													0	4.6	(20000.00)
-	4.6	20,000													0	4.6	20000.00
															0	0.0	0.00
-	0.2	1,000		0.0	100		0.1	250							0	0.4	1350.00
-	0.1	250					0.1	300							0	0.2	550.00
															0	0.0	0.00
-	0.9	(7,000)													0	0.9	(7000.00)
															0	0.0	0.00
							0.1	(670)							0	0.1	(670.15)
															315	0.0	(100.00)
														Total	35,594	49.5	

Table 4: Dredged Material Screening Criteria (RWQCB 2000) Proposed for Use at Sears Point.

--Note that burial of wetland foundation material under 3 feet of surface material is not approved, and depends on E.O. approval of a plan to isolate the material and prevent channel incision.

Constituent	**Wetland Surface**	**Wetland Foundation**
Inorganics	(mg/kg)	(mg/kg)
Arsenic	15.3	70
Cadmium	0.33	9.6
Chromium	112	370
Copper	68.1	270
Lead	43.2	218
Mercury	0.43	0.7
Nickel	112	120
Selenium	0.64	
Silver	0.58	3.7
Zinc	158	410
Organics	(µg/kg)	(µg/kg)
PAHs, total	3,390	44,792
Chlordanes, total	2.3	4.8
DDTs, total	7.0	46.1
Dieldrin	0.72	4.3
PCBs, total	22.7	180
*Dioxins (total TCDD TEQ)	0.02	0.02

*Not required by the Water Board and the Long Term Management Strategy; may be required by USFWS

Table 5. Proposed Material that will be contained onsite with the use of BMPs.	
Type(s) of Material to be Moved	Volume (CY)
Native soils from onsite borrow areas, toe drains, tidal channel excavation, levee breaches, and levee lowering, can be used for ecotone, ditch blocks, levee reinforcement, and temporary road construction.	1. Interior Site Grading: **99,400 CY** 2. Lower perimeter levees: **25,500 CY** 3. Levee breaches: **0** Total: **124,900 CY**
Imported riprap for outfalls of pump station.	**600 CY**
	Total: **125,500 CY**