



**South Bay Salt Pond
Restoration Project**
Restoring the Wild Heart of the South Bay

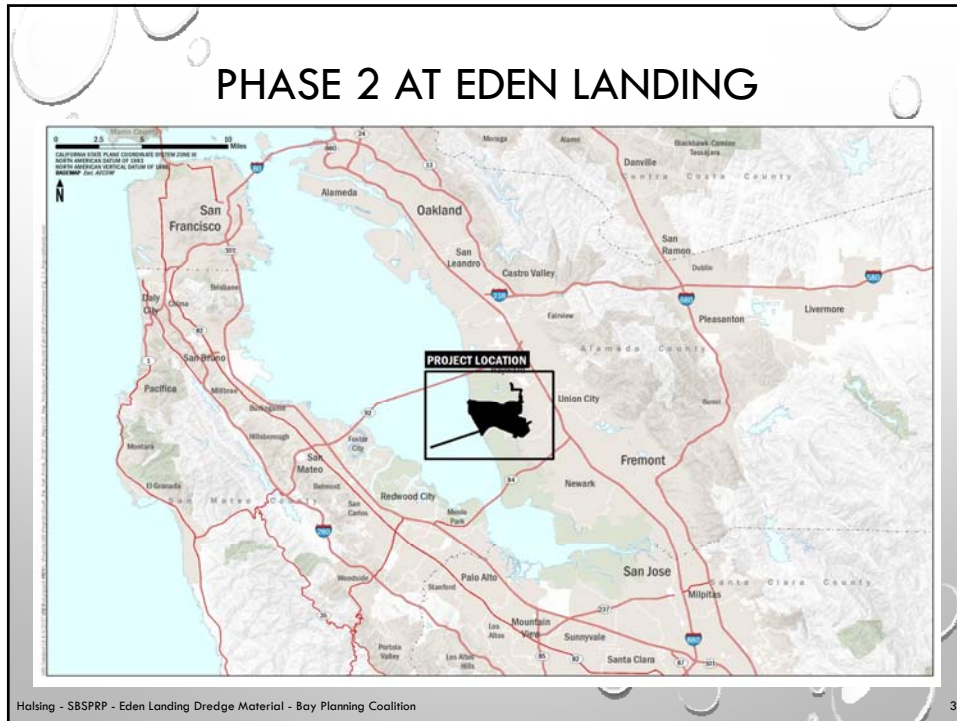
**BENEFICIAL REUSE OF DREDGE MATERIAL
SOUTH BAY SALT POND RESTORATION
PROJECT – PHASE 2**

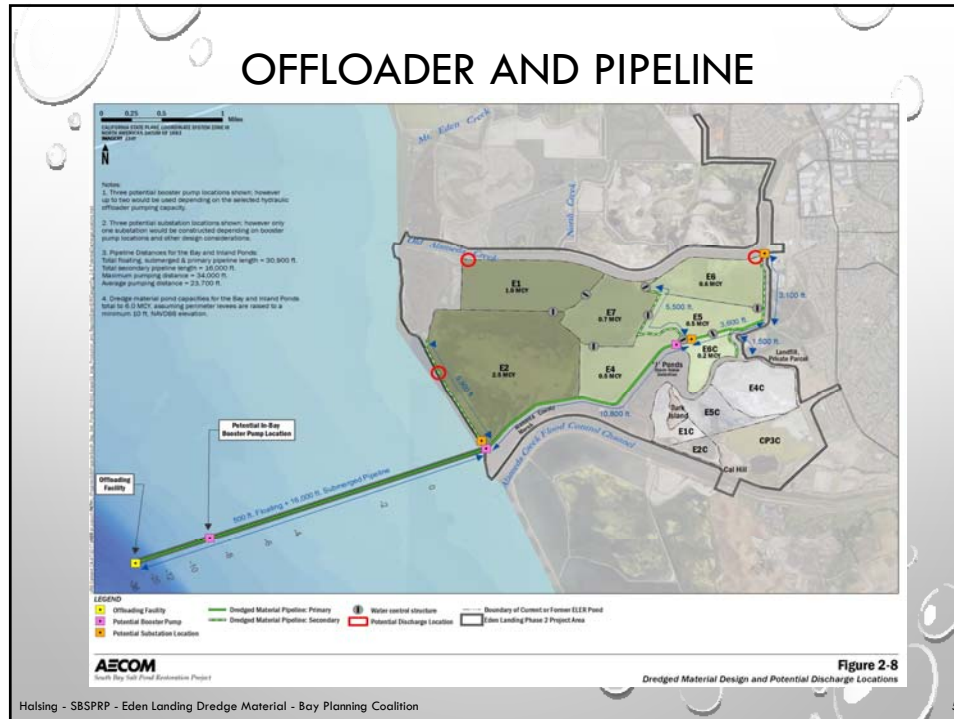
**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
EDEN LANDING ECOLOGICAL RESERVE**

PROJECT UPDATE

- PHASE 2 HAS TWO PARTS:
 - USFWS' REFUGE (ALVISO AND RAVENSWOOD)
 - CDFW'S EDEN LANDING ECOLOGICAL RESERVE
- PHASE 2 AT REFUGE EIS/R DONE; PERMIT APPLICATIONS SUBMITTED
- PHASE 2 AT REFUGE NOT USING DREDGE MATERIAL
- BUT PHASE 2 AT EDEN LANDING IS ENTIRE SOUTHERN HALF; LOTS OF POTENTIAL FOR IT THERE

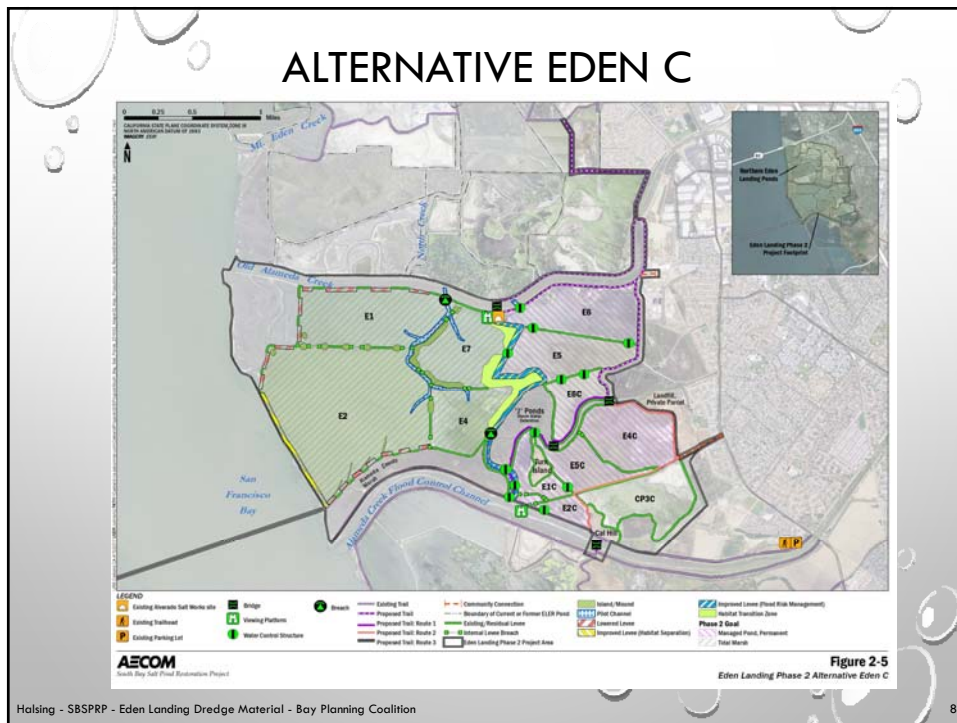
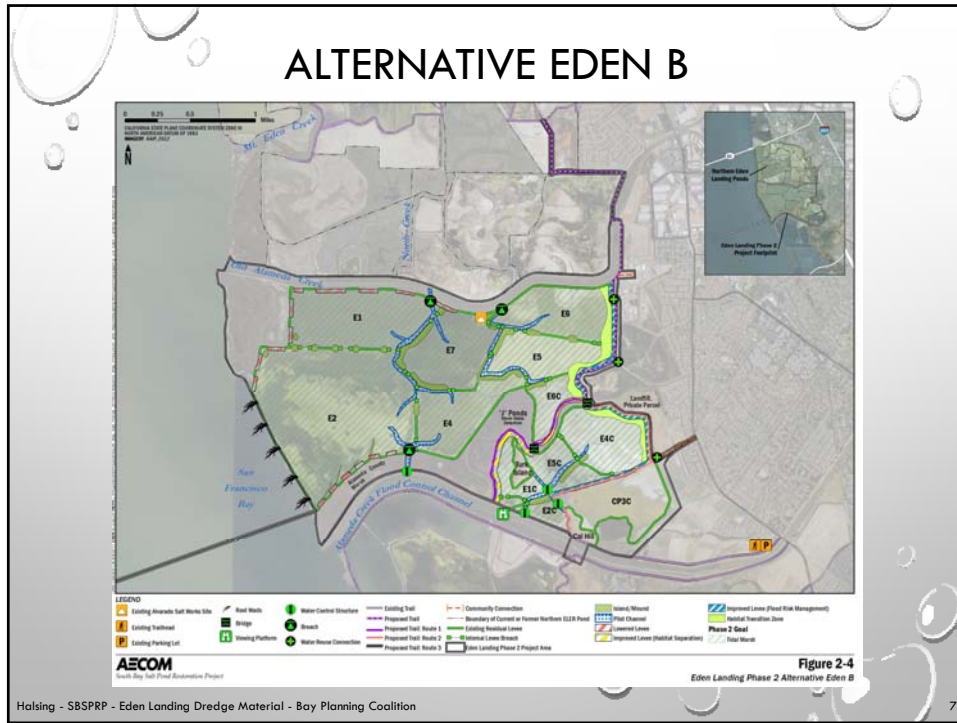
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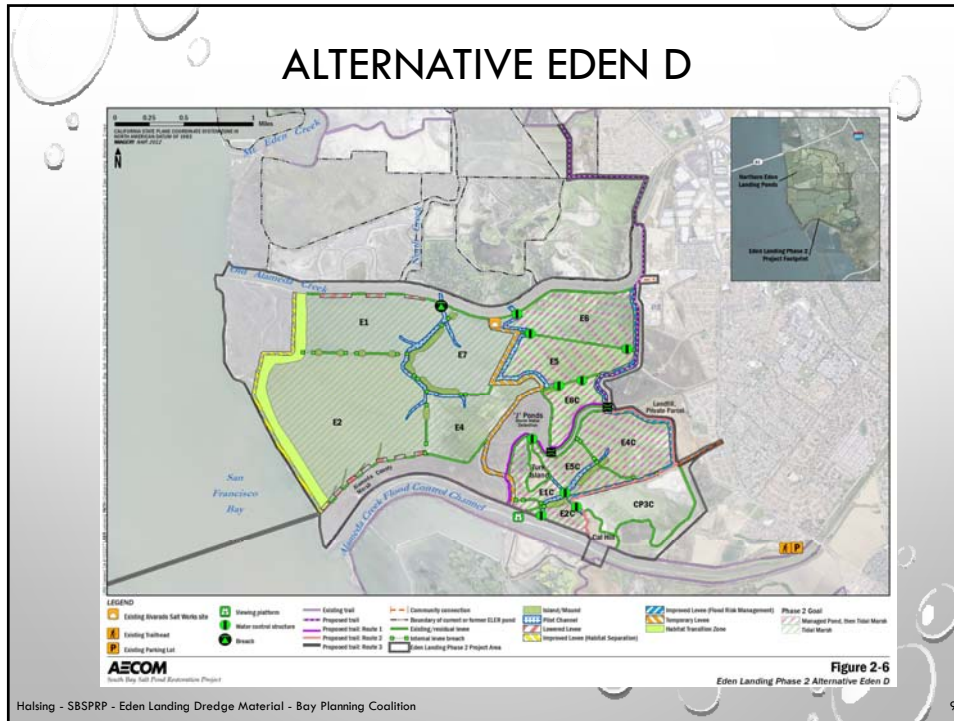




PHASE 2 EDEN LANDING UPDATE

- 3 ACTION ALTERNATIVES, LARGELY BASED ON
 - RESTORATION GOALS FOR THE DIFFERENT POND GROUPS
 - WHERE AND HOW FLOOD RISK MGMT. IS PROVIDED
- ALL WITH REUSE OF DREDGE MATERIAL
- TO RAISE POND BOTTOMS TO MHW (6.5 FT ELEVATION)
 - ALTERNATIVES B AND D → 6 MILLION CY (BAY AND INLAND PONDS)
 - ALTERNATIVE C → 5 MILLION CY (BAY PONDS ONLY)
- MORE FOR HABITAT TRANSITION ZONES (46-93 KCY)





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DESIGN INFORMATION

- GENERAL DESIGN IS FOR OFFLOADER ON 20 MOORING PILES
- WATER INTAKE, MAIN PUMP, 1-2 BOOSTER PUMPS
- DIESEL OR ELECTRIC POWERED PUMPS (COST VS EMISSIONS IMPACTS)
- DELIVERY RATE OF 0.9-1.8 MILLION CY/YEAR
- DELIVER FOR A 3- TO 7-YEAR PERIOD

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DESIGN INFORMATION

- CAN ACCEPT AND PLACE MATERIAL YEAR-ROUND
- ACTUAL DREDGING IN NMFS WORK WINDOWS
 - JUN 1- NOV 30
- PLACE DREDGE MATERIAL FIRST
- PROCEED WITH RESTORATION, PUBLIC ACCESS, AND FLOOD RISK MGMT. ACTIONS
- TOTAL PROJECT CONSTRUCTION PERIOD IS 6-10 YEARS, DEPENDING ON ALTERNATIVE AND MATERIAL AVAILABILITY

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TIMING AND NEXT STEPS

- EDEN LANDING EIS/R WAS PLANNED FOR DECEMBER 2016
- HELD BACK TO ADD IN DREDGE MATERIAL
 - DESIGNS AND ENVIRONMENTAL IMPACT ANALYSIS
- OFFLOADER, PUMPS, SLURRY PIPES, AND OTHER INFRASTRUCTURE TO DELIVER AND PLACE
- ADDED TO DRAFT EIS/R IN EARLY 2017
- RECENTLY COMPLETED; LEGAL REVIEW BY CDFW AND USFWS NOW
- PUBLIC MEETING IS AUG 15; IN MIDDLE OF PUBLIC REVIEW PERIOD
- EXACT DATES TBD; PLANNING FOR 60 DAYS ROM AUG 1 – SEPT 30

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POND GROUPS AND DIMENSIONS

Pond	Pond Group	Area (Acre)	Avg. Pond Bottom Elev. (ft. NAVD88)	Min. External Existing Levee Crest Elev. (ft. NAVD88)	Notes
E1	Bay Ponds	297	4.8	8.5	Dredged Material Placement Proposed
E2		692	4.8	9.5	
E7		217	4.9	9.0	
E4		202	5.6	9.5	
E6	Inland Ponds	183	5.1	9.0	
E5		172	5.3	9.0	
E6C		85	5.5	9.0	
E1C	Southern Ponds	65	5.8	9.0	No Dredged Material Placement Proposed
E2C		32	5.2	7.5	
E5C		97	5.4	9.0	
E4C		168	5.7	9.0	

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MATERIAL VOLUMES

Feature	Pond	Alternative Eden B		Alternative Eden C		Alternative Eden D	
		Dredge Material (CY)	Onsite Material (CY)	Dredge Material (CY)	Onsite Material (CY)	Dredge Material (CY)	Onsite Material (CY)
Bay Ponds	E1	1,052,000	800	1,052,000	800	1,052,000	800
	E2	2,449,000	0	2,449,000	0	2,449,000	0
	E7	723,000	0	723,000	2,900	723,000	2,900
	E4	501,000	0	501,000	1,900	501,000	1,900
Inland Ponds	E6	571,000	0	0	0	571,000	0
	E5	477,000	0	0	0	477,000	0
	E6C	217,000	4,400	0	0	217,000	4,400
Habitat Transition Zones		83,000	0	46,000	0	96,000	0
Total		6,073,000	5,200	4,771,000	5,600	6,086,000	10,000

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