



# **Delta Levee Improvements Collaborative Partnerships April 28, 2016**

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East Bay Municipal Utility District

# Failure of the Levees



- Result in flooding of the islands
- Stress adjacent islands
- Could result in progressive failures of surrounding levees
- Threaten critical facilities

# Jones Tract Flooding - 2004



Mokelumne Aqueducts

Burlington Northern  
Santa Fe Railroad



Mokelumne Aqueduct parallels railroad





**Trapper Slough levee raised 6 feet**

# SB2X -1 (Perata) Bond Fund Appropriations



- Bill allocated funding to reduce the risk of levee failures in the Delta
- Purpose is to protect assets of Statewide importance
- Reinforce levee sections near aqueducts
- Goal is to improve Delta levees to Public Law 84-99, Army Corps. of Engineers Standard

# Department of Water Resources Recommendations



- Fund ten projects
- Total Project Cost = \$41.3 million
- State Cost Share - \$35.2 million\*
- Local Cost Share = \$6.1 million\*
- Total Levee Miles Improved = 40 miles

\* Reclamation District's receive funding

# DWR and Reclamation Districts Agreements



- State provides cash advances up to 90% of the 85% state funding costs
- Leaves a temporary cash burden of approximately \$4 million that needed to be financed
- RDs lack the finances to meet these costs

# EBMUD and Reclamation Districts Funding Agreement



EBMUD agreed to:

- Provide the non-refundable local share (\$6.1 million)
- Advance temporary cash flow (approximately \$4 million)
- Maintain financial oversight

# EBMUD and Reclamation Districts Funding Agreement



Reclamation Districts agreed to:

- Execute Grant Agreements with the Department of Water Resources
- Be the Engineer of Record
- Issue all contracts

# Delta Levee Projects Recap



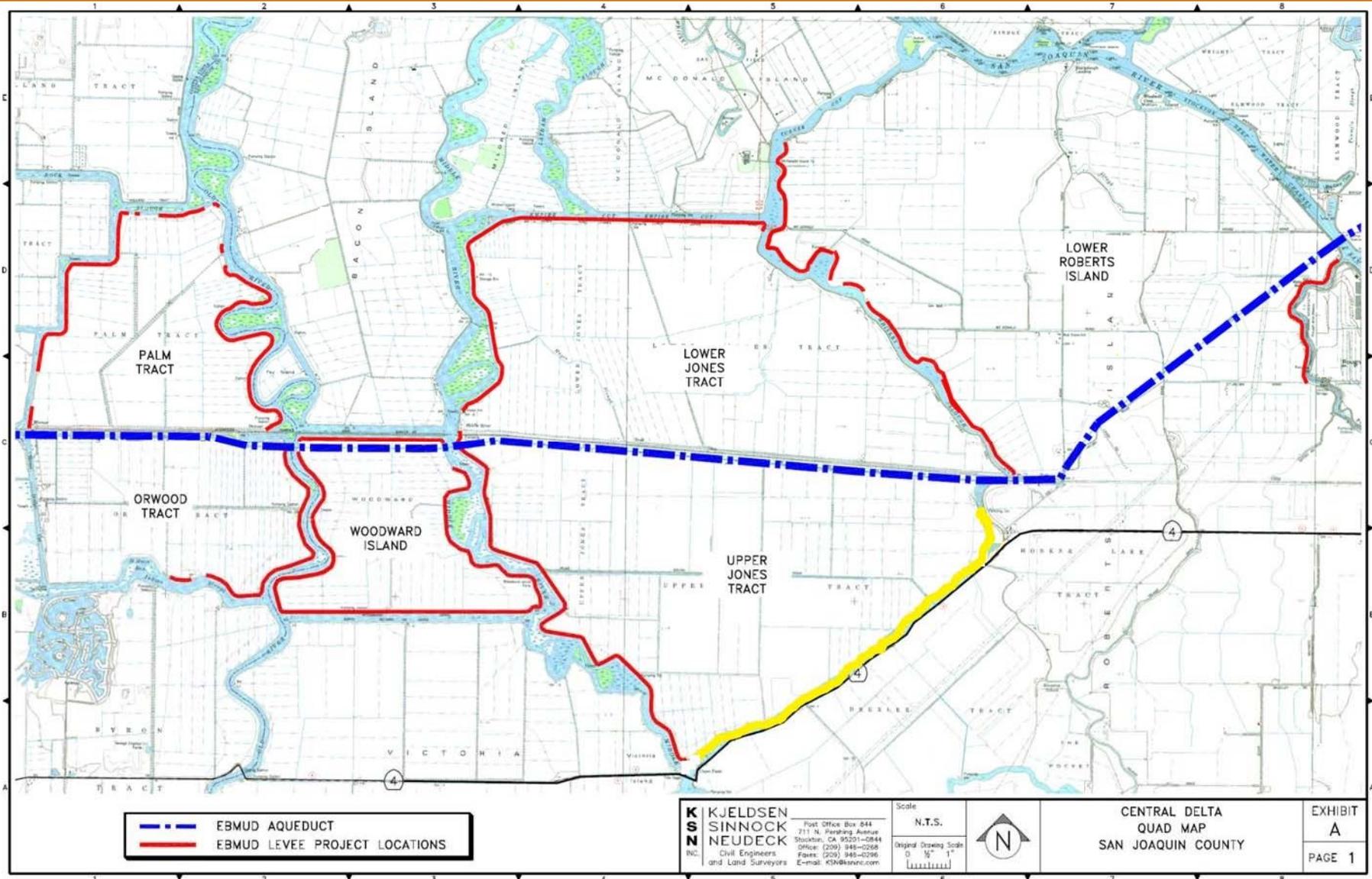
RECLAMATION DISTRICT	FUNDING AGREEMENT	TOTAL BUDGET	STATE COST SHARE	EBMUD 15% SHARE
RD 684 Lower Roberts Island	RL-10-1.0	\$3,157,895	\$2,684,211	\$473,684
RD 689 Lower Roberts Island	RL-10-2.0	\$4,015,328	\$3,413,029	\$602,299
RD 2038 Lower Jones Tract	LJ-10-1.0	\$5,540,216	\$4,709,184	\$831,032
RD 2039 Upper Jones Tract	UJ-10-2.0	\$3,573,984	\$3,037,886	\$536,098
RD 2039 Upper Jones Tract	UJ-10-3.0	\$4,054,526	\$3,446,347	\$608,179
RD 2072 Woodward Island	WD-10-1.0	\$5,244,156	\$4,457,533	\$786,623
RD 2072 Woodward Island	WD-10-2.0	\$5,225,941	\$4,442,050	\$783,891
RD 2024 Orwood and Palm Tract	OP-10-1.0	\$3,093,864	\$2,629,784	\$464,080
RD 2024 Orwood and Palm Tract	OP-10-2.0	\$5,513,158	\$4,686,184	\$826,974
<b>TOTALS</b>		<b>\$39,419,068</b>	<b>\$33,506,208</b>	<b>\$5,912,860</b>

# Delta Levee Projects

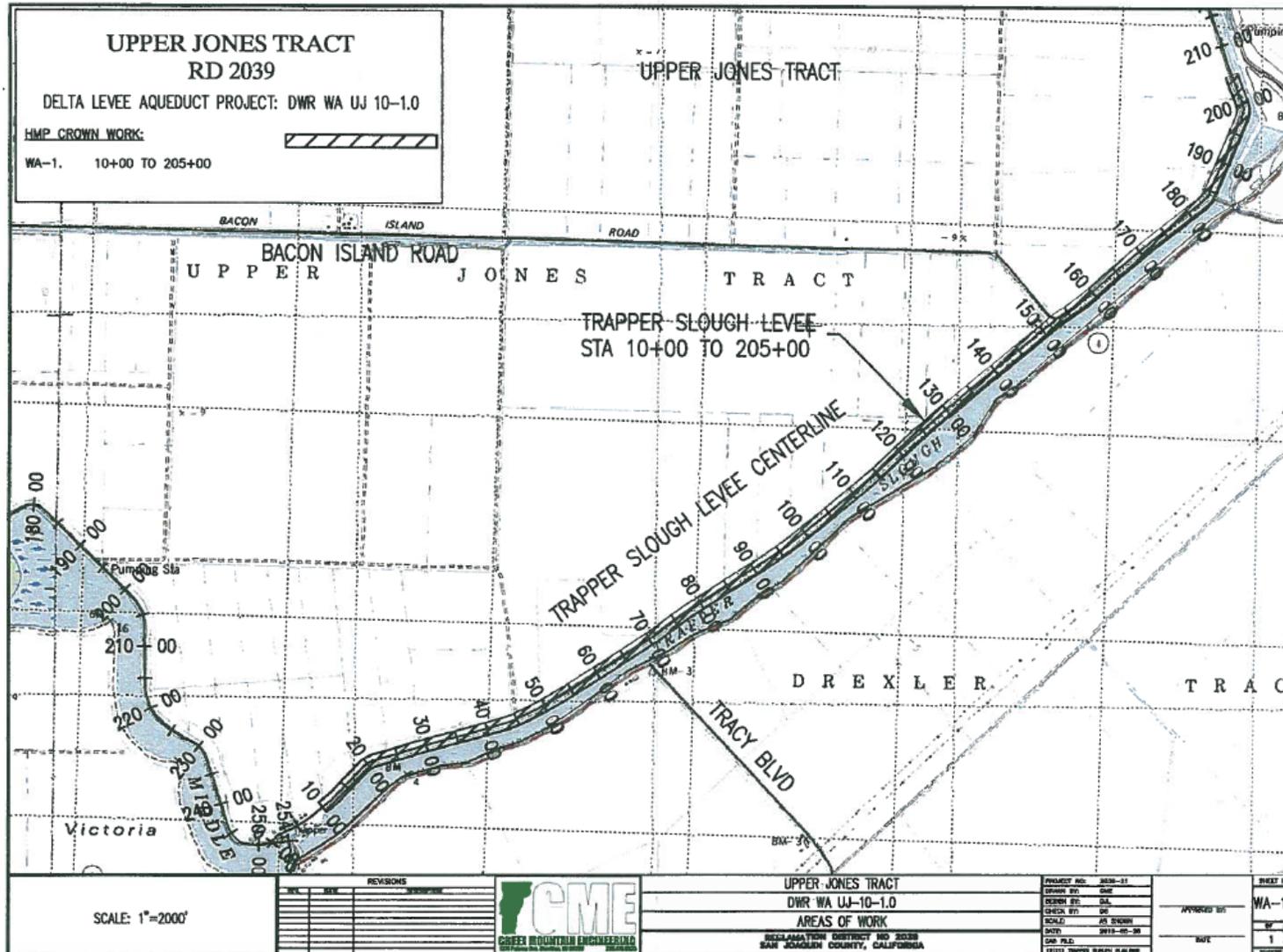


- \$20 million for five projects were approved by the Delta Stewardship Council on July 28, 2011
- \$13.5 million for four additional levee projects were approved by the Delta Stewardship Council on January 26, 2012
- Nine of the projects are complete
- Seeking approval of construction funding for the 10<sup>th</sup> project today

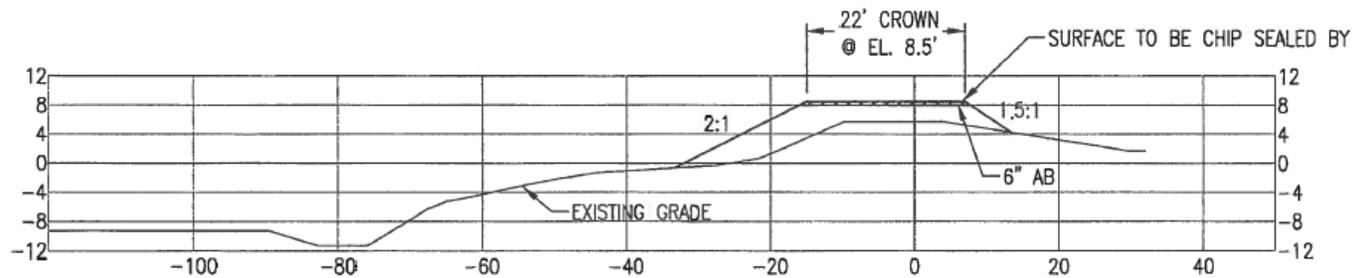
# Delta Levee Project Locations



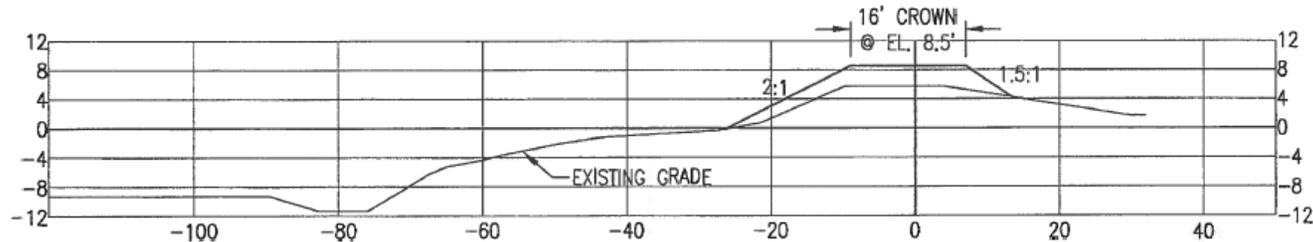
# Trapper Slough Levee



# Bacon Island Road



BACON ISLAND ROAD 22' WIDE CROWN HMP TYPICAL  
 X-SECTION  
 STA 153+00 TO 184+75



16' WIDE HMP TYPICAL X-SECTION  
 STA 10+00 TO 153+00 & STA 184+75 TO 205+00

SCALE: 1"=20'

REVISIONS	
NO.	DESCRIPTION



UPPER JONES TRACT  
 DWR WA UJ-10-1.0  
 TYPICAL CROSS SECTIONS  
 RECLAMATION DISTRICT AND 2008  
 SAN JOAQUIN COUNTY, CALIFORNIA

PROJECT NO: 2008-21  
 DRAWN BY: GAC  
 CHECK BY: DA  
 SCALE: AS SHOWN  
 DATE: 08-20-08  
 CAD FILE: 10101\_SHPPL\_SBLK\_PLANING

APPROVED BY:	SHEET NO:
	1
DATE:	TYP-1

# Looking southwest from crown of levee



Northeastern portion of the project site, looking southwest from crown of levee. Trapper Slough is to the left. Notice maintained road on crown, weedy but depauperate inland side of levee, and alfalfa monoculture to right.

# Western View of Levee



Western view from same position as first photo. Newly harvested alfalfa on ground, vegetation-free zone between levee and field, and dry ditch in middle foreground.

# Trapper Slough



Looking northeast along inland berm of levee.