

Bethel Island Hazardous Materials below sea level

Presentation to Contra Costa County Supervisors

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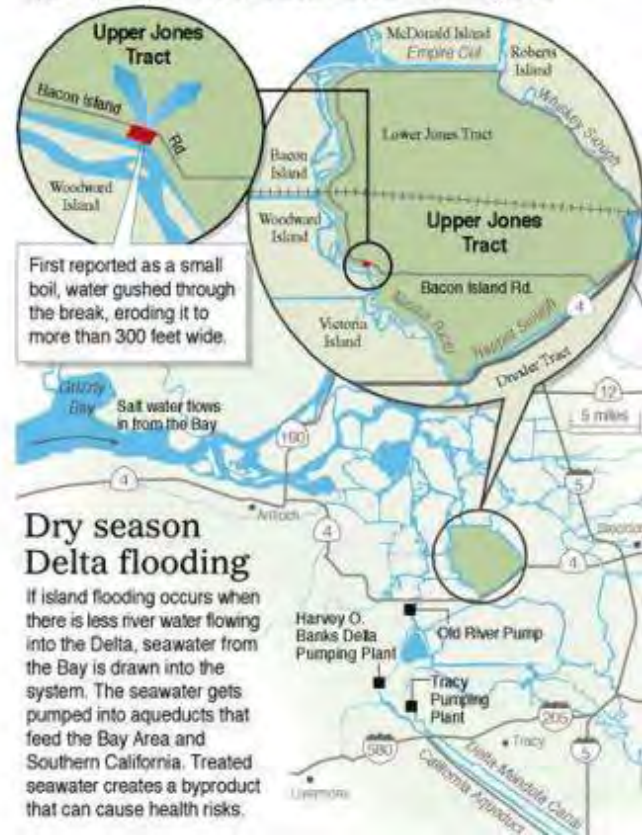
19 April 2016

04 Jones Tract Breach

- 08:15 Fishermen See Boil
 - Falling (ebb) Tide
- 08:55 DWR Notified
- 10:00 Pumping Reduced*
 - SWP: 0 cfs
 - CVP: 800 cfs
 - Delta Cross Gates Opened
- 15:00 Dutra Hired by RD
 - First barges arrive ~22:00

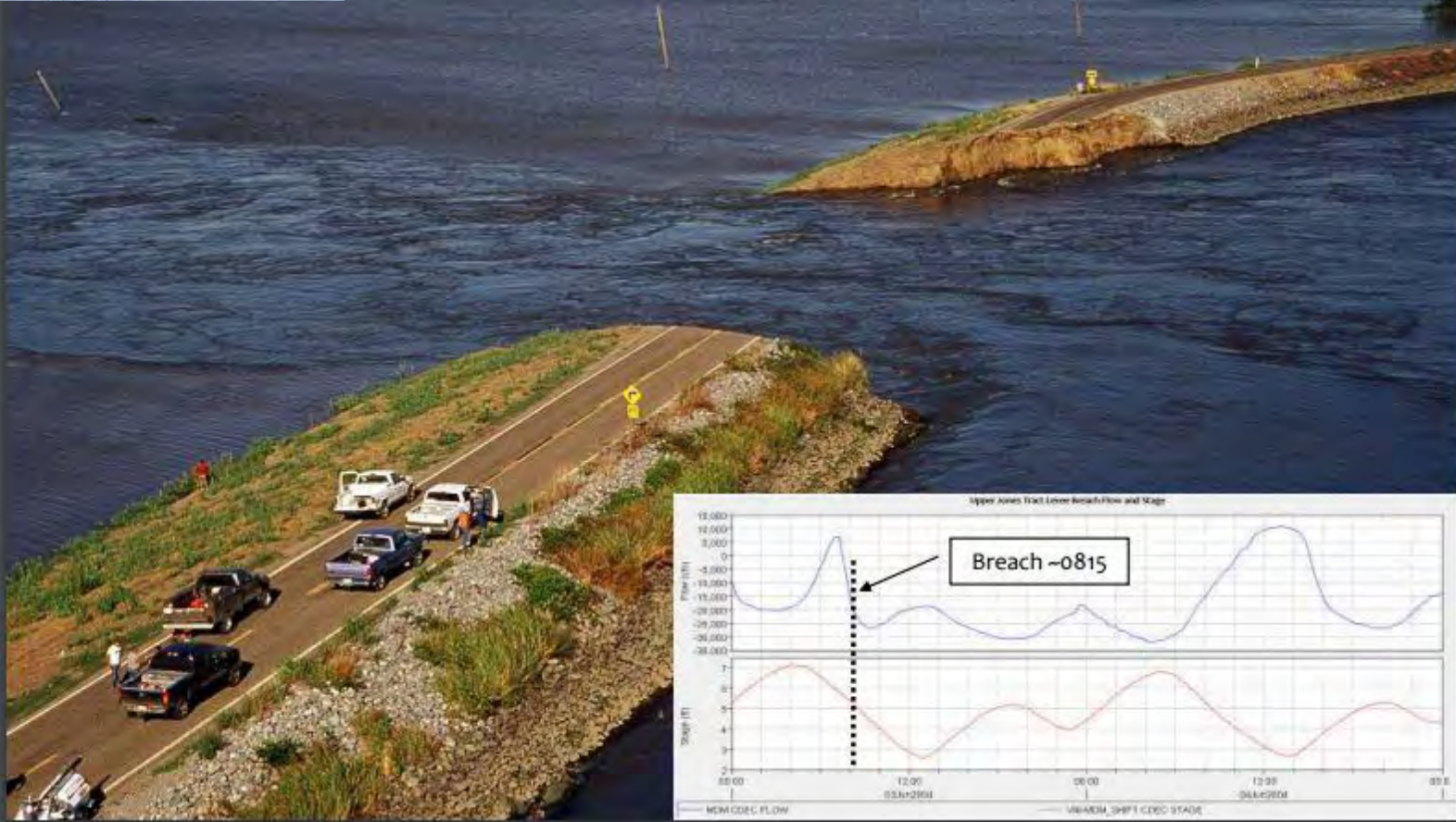
Levee break at Upper Jones Tract

One of the Delta's levees collapsed Thursday, allowing water to pour onto Upper Jones Tract, which sits lower than the surrounding water.



Geologic Setting of the Sacramento-San Joaquin Delta

J. David Rogers, Ph.D., P.E., P.G., C.E.G., C.HG.
Rune Storesund, D.Eng, P.E., G.E.
Berkeley NSF RESIN Project Meeting
January 26, 2011



Settlement of peaty soils

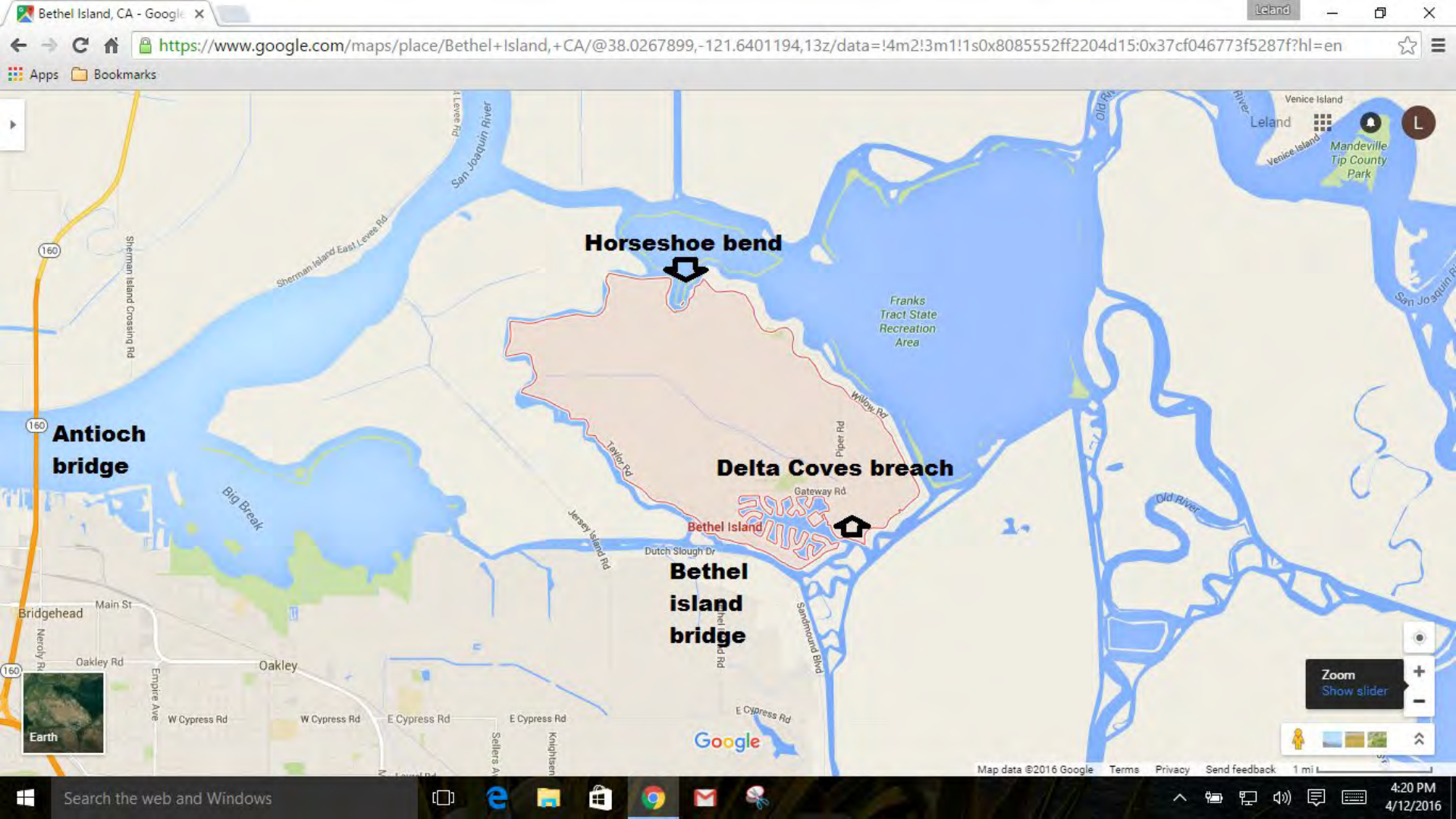
Ground settlement in the peaty soils is caused by biochemical oxidation; which is exacerbated by farming, wind erosion, fires, and subsidence due to compaction of underlying units (increased effective stress triggered by groundwater withdrawal)

Deep-measurement compaction recorders are needed to permit differentiation between ground settlement caused by surface oxidation and compaction of the peaty soils from deeper

settling from sand/or gas



Geologic Setting of the Sacramento-San Joaquin Delta



Horseshoe bend



Delta Coves breach



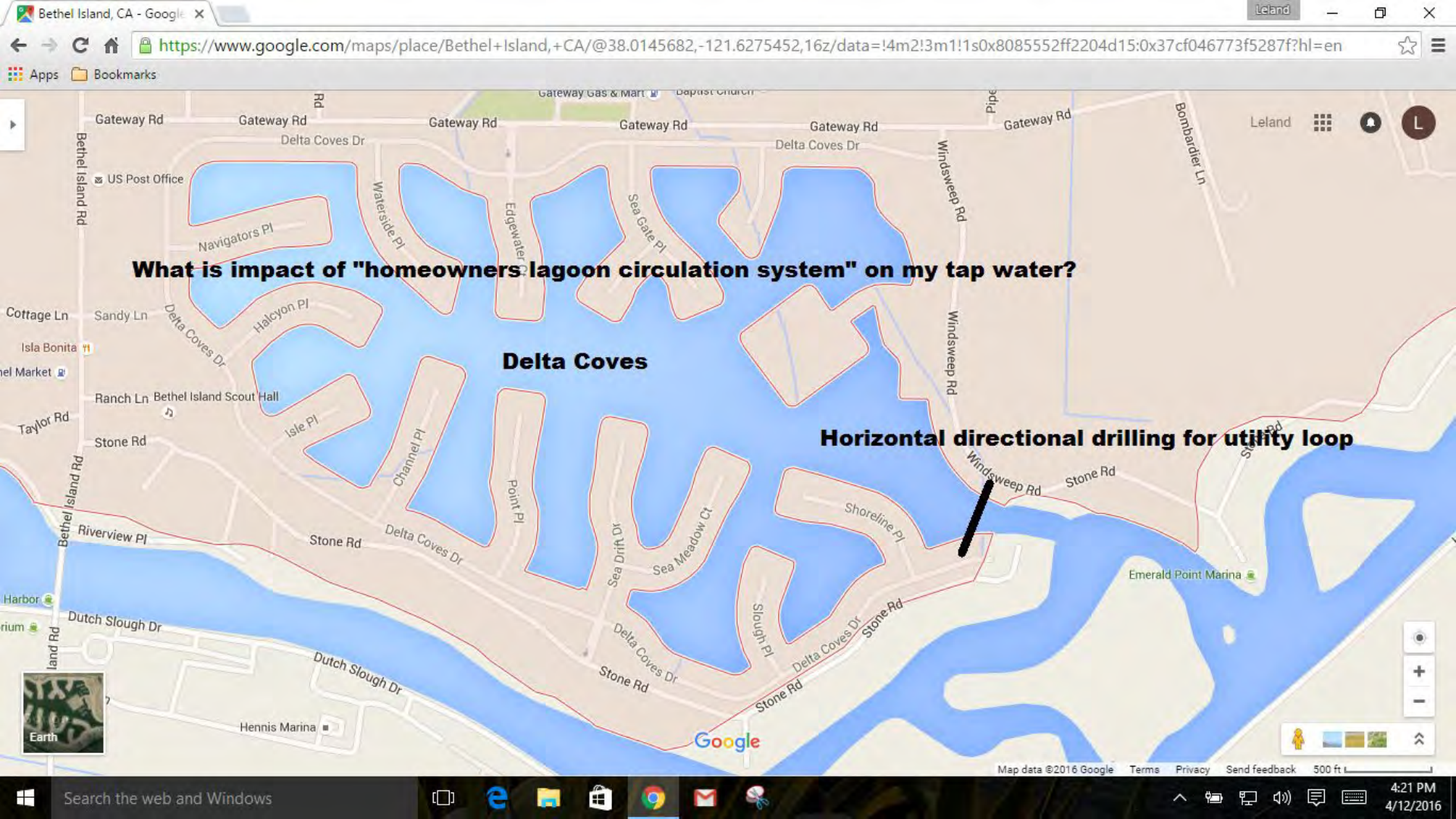
Bethel island bridge

Antioch bridge



Zoom
Show slider





What is impact of "homeowners lagoon circulation system" on my tap water?

Delta Coves

Horizontal directional drilling for utility loop

Google

Map data ©2016 Google Terms Privacy Send feedback 500 ft



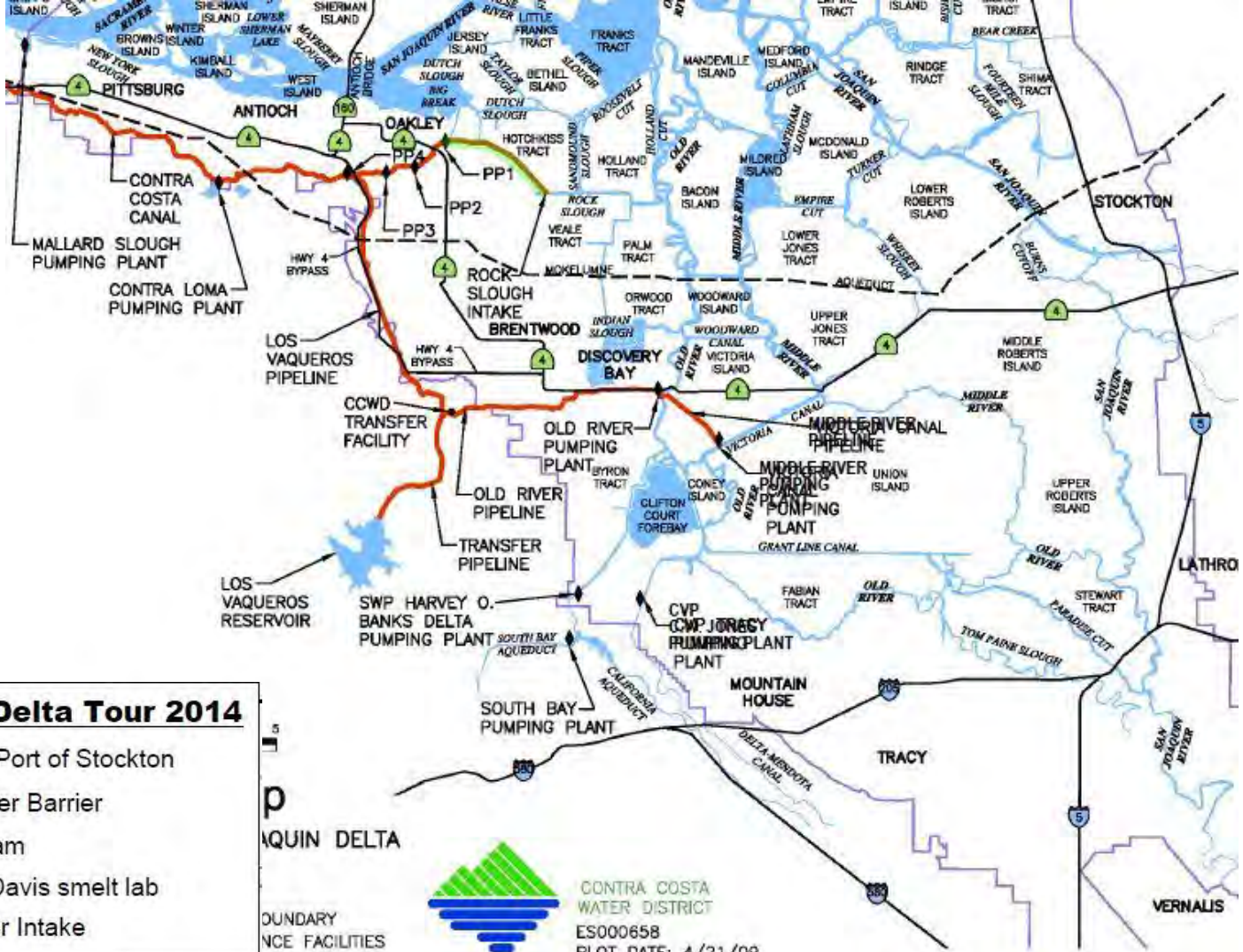






BethellIslandHazMatBelowSealevel - Marina1-4

Item	Qty dry storage below sea level	Fuel	Oil	Lead acid batteries (pounds)	Lead PPB EPA<15	Notes
Marina 1						CoCo county Sheriff's boat
Boats	140			13440		
RVs	114			10944		
RoundUp	Truck full					Used by state for delta weed abatement
Marina 2						
Boats	100			9600		
Marina 3						
Boats	100			9600		
Marina 4						
Boats	25			2400		
Total				45984	341	PPB calc @ 50,000 acre feet * 2.7 million pounds per acre foot "=(E10/(2700000*50000))*1000000000"



ISB's Spring Delta Tour 2014

- 2 Louis Park and Port of Stockton
- 3 Head of Old River Barrier
- 4 Paradise Cut Dam
- 5 CCFB and UC Davis smelt lab
- 6 CCWD Old River Intake



 CONTRA COSTA WATER DISTRICT
 ES000658
 PLOT DATE: 4/21/09

Notice

SAVE DELTA

WWW.RESTORDELTA.ORG

The levees of Grand Island
are privately owned.

No Trespassing - No Fishing

No Hunting - No Dumping

No Parking

Violators will be prosecuted under authority
of Penal Code Section 602.8

Grand Island Reclamation District 3

Recommendations

Contra Costa County supervisors direct infrastructure subcommittee and staff to perform Bethel Island Hazardous Materials inventory and risk assessment

Contra Costa County supervisors direct legislative subcommittee to research laws regarding Hazardous Materials stored below sea level

Me give this presentation to Contra Costa Water District board meeting 20 April 2016