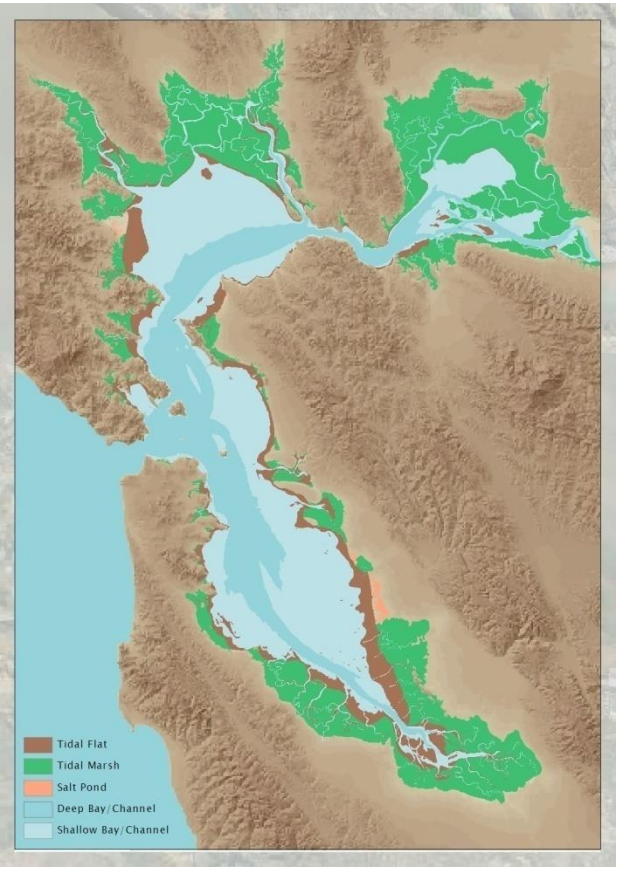
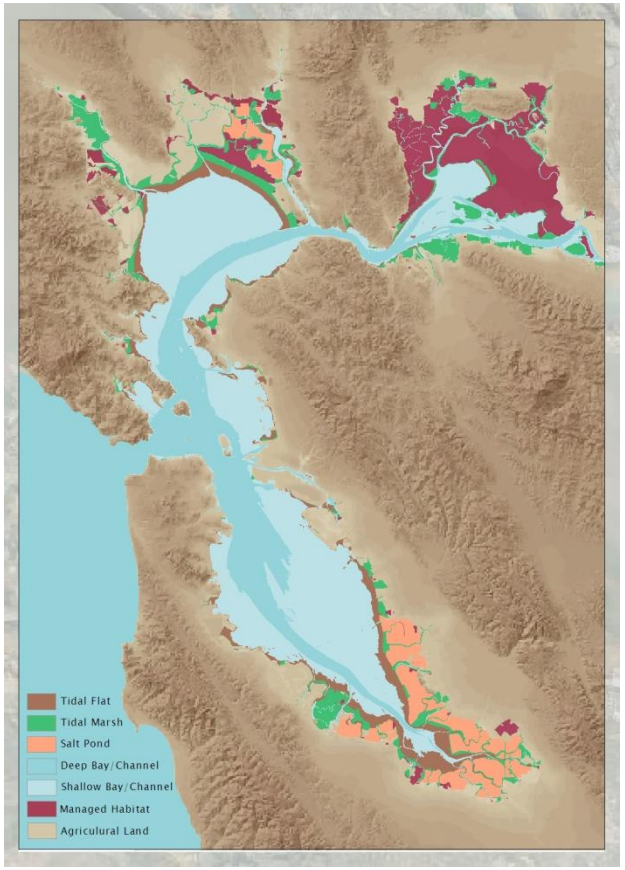
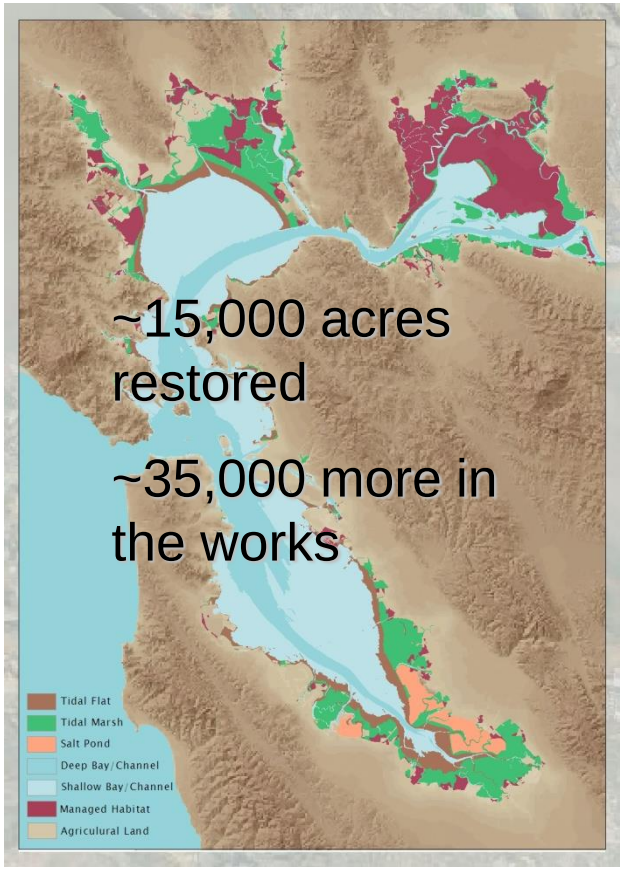


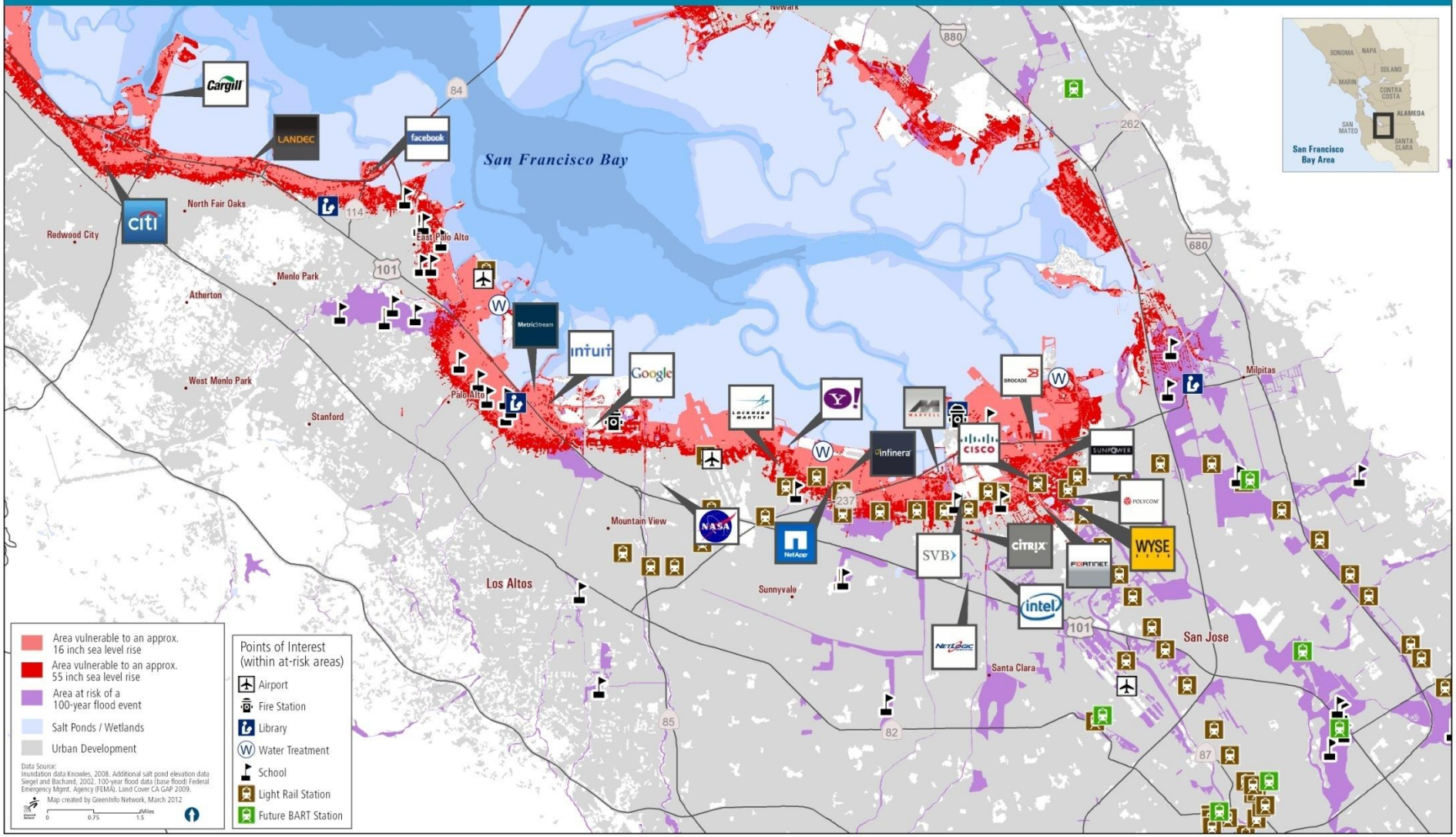




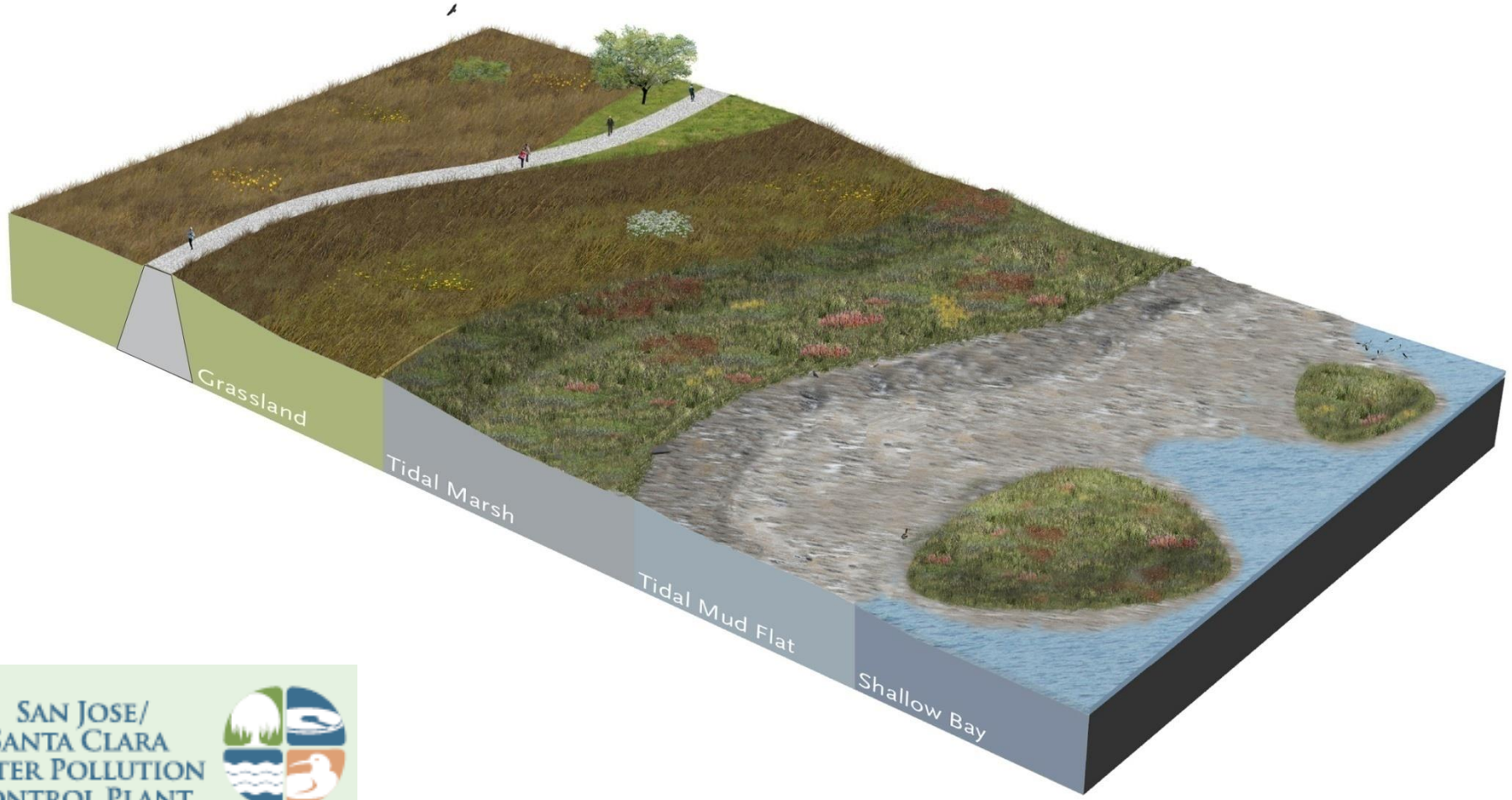
Past (~1850) Present (~2000) Future

Flood Risk and Sea Level Rise – South Bay

Economic Impact, San Francisco Bay Area



“Horizontal Levee”



SAN JOSE/
SANTA CLARA
WATER POLLUTION
CONTROL PLANT

Plant Master Plan

::: Hargreaves Associates :::

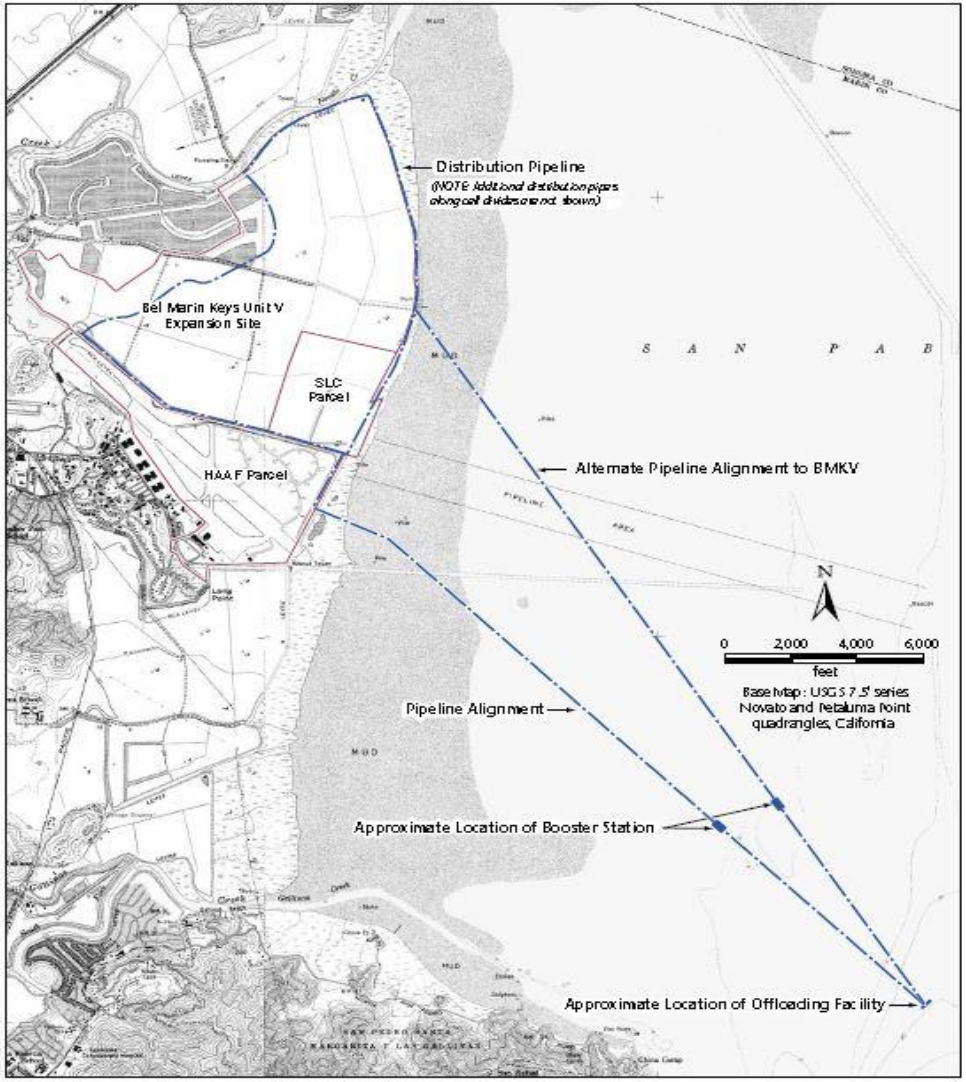
PAULA LEE

Sonoma Baylands
Before

After

ESA

Offloader Location



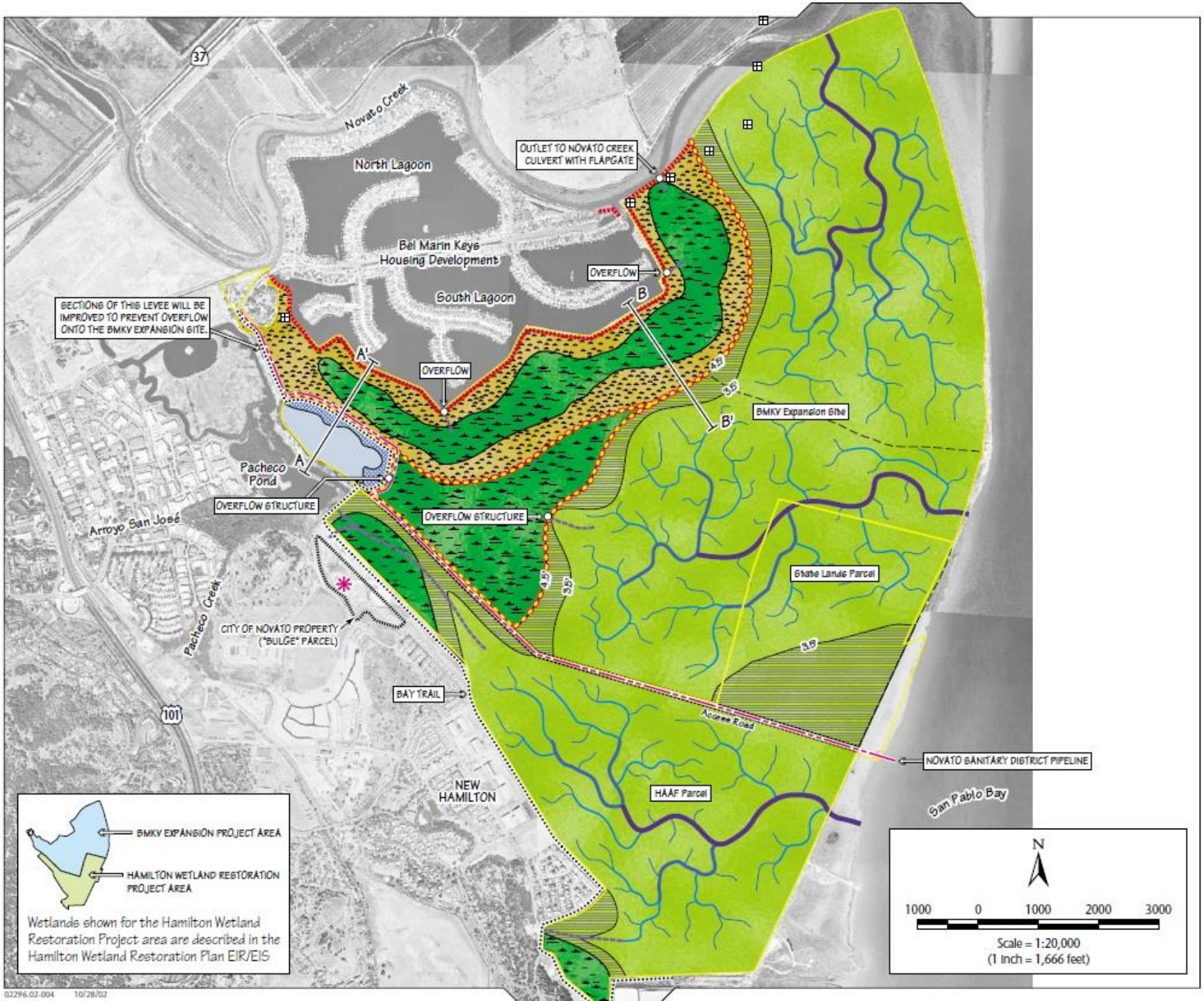
Jones & Stokes
nhc northwest hydraulic consultants

Figure 3-4
Approximate Location of Offloading Facility

NORTH SEASONAL WETLAND
ACCESS ROUTE
TIDAL PANNE
NORTH ANTENNA FIELD
WILDLIFE CORRIDOR
TIDAL WETLAND
EXPANDED SETTLING BASIN
LEVEE BREACH CHANNEL
BAY TRAIL
SOUTH SEASONAL WETLAND
1400' 700' 0' 700' 1400'
SCALE: 1" = 1400'

April, 2014 Breach

Google earth



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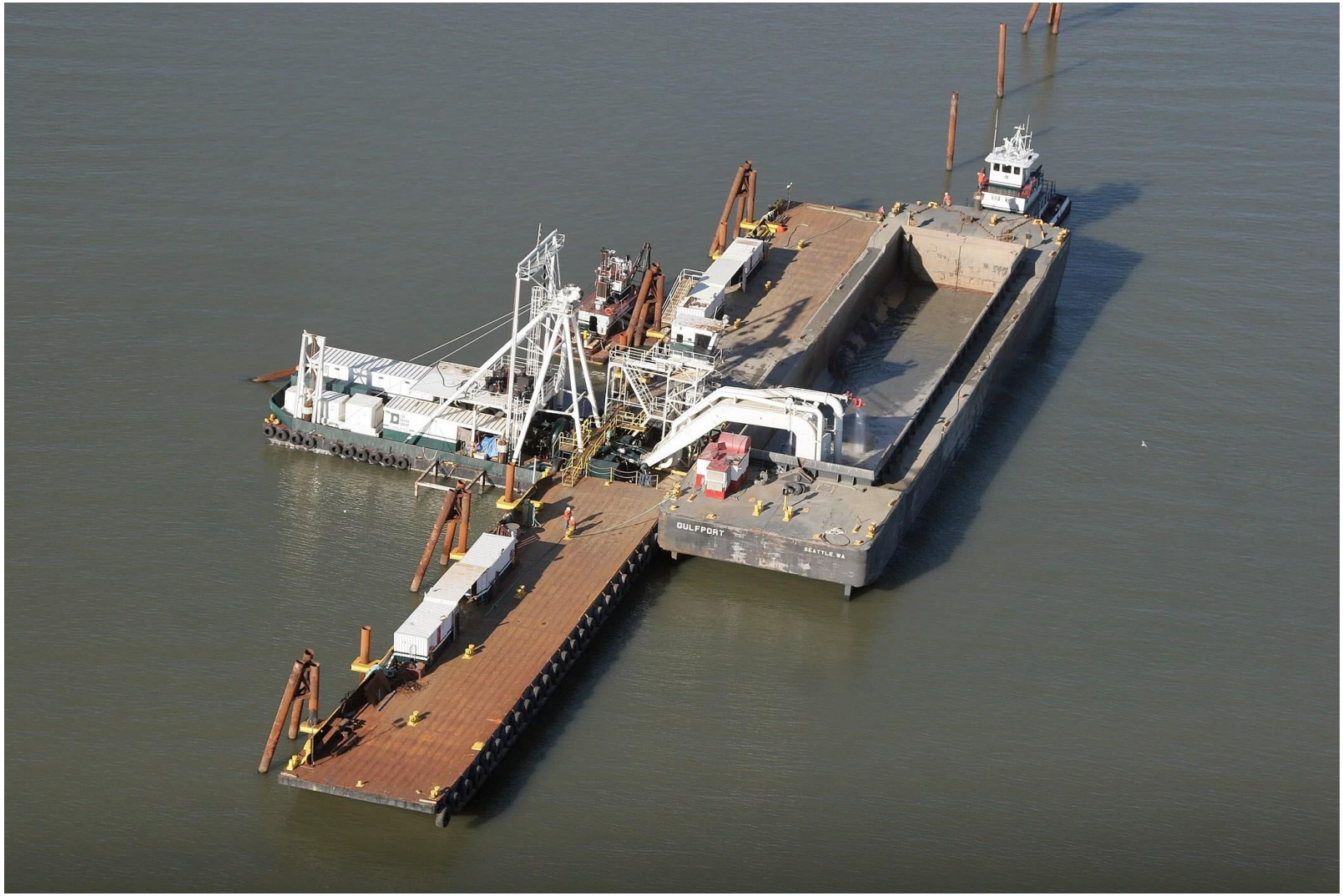
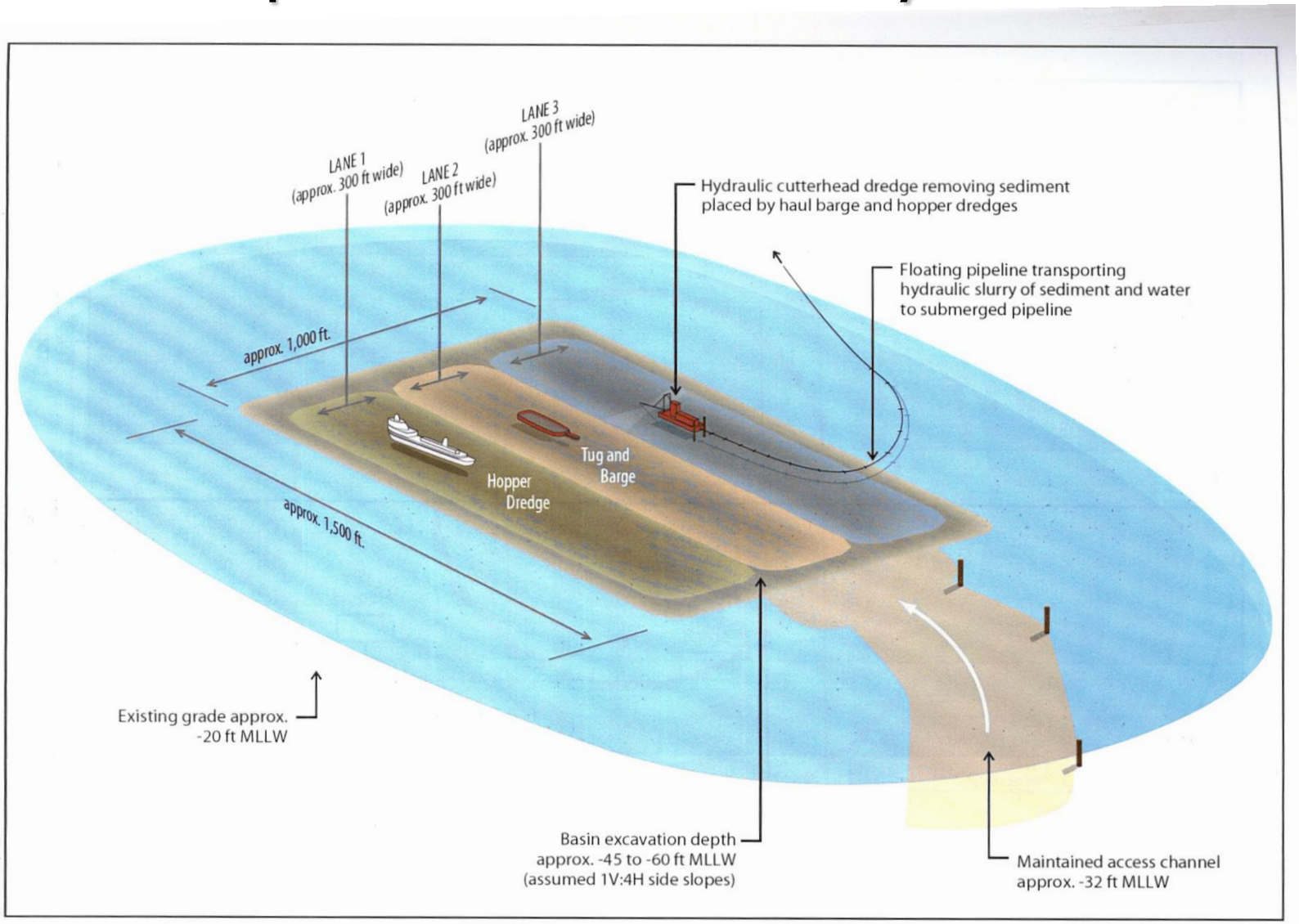
Hydraulic Offloader



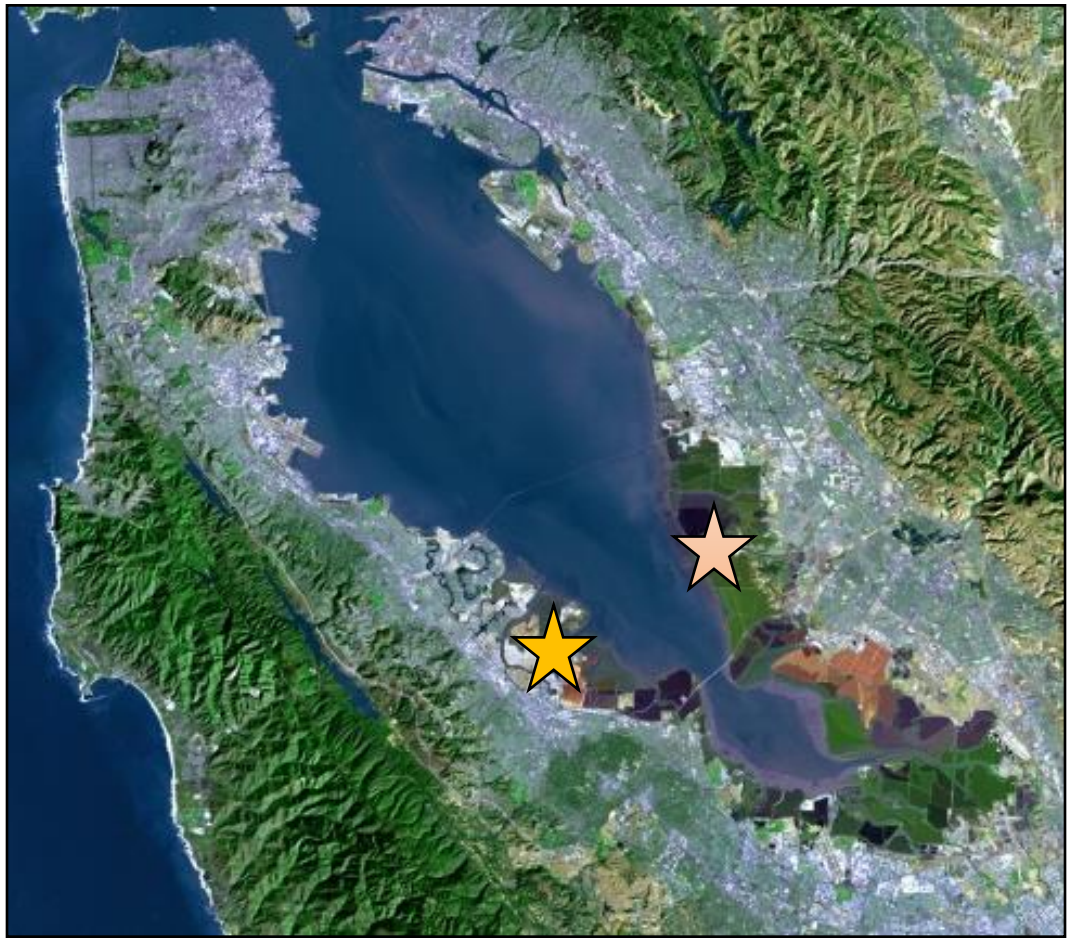
Aquatic Transfer Facility



Jones & Stokes

Figure 2-3
Alternative 2: Unconfined In-Bay ATF

South Bay Salt Ponds



EDEN LANDING PLAN

Alameda County & SCC/DFW partner to build infrastructure (berms).

Corps brings Redwood City deepening material (2 - 3 mcy).

Land mass built!

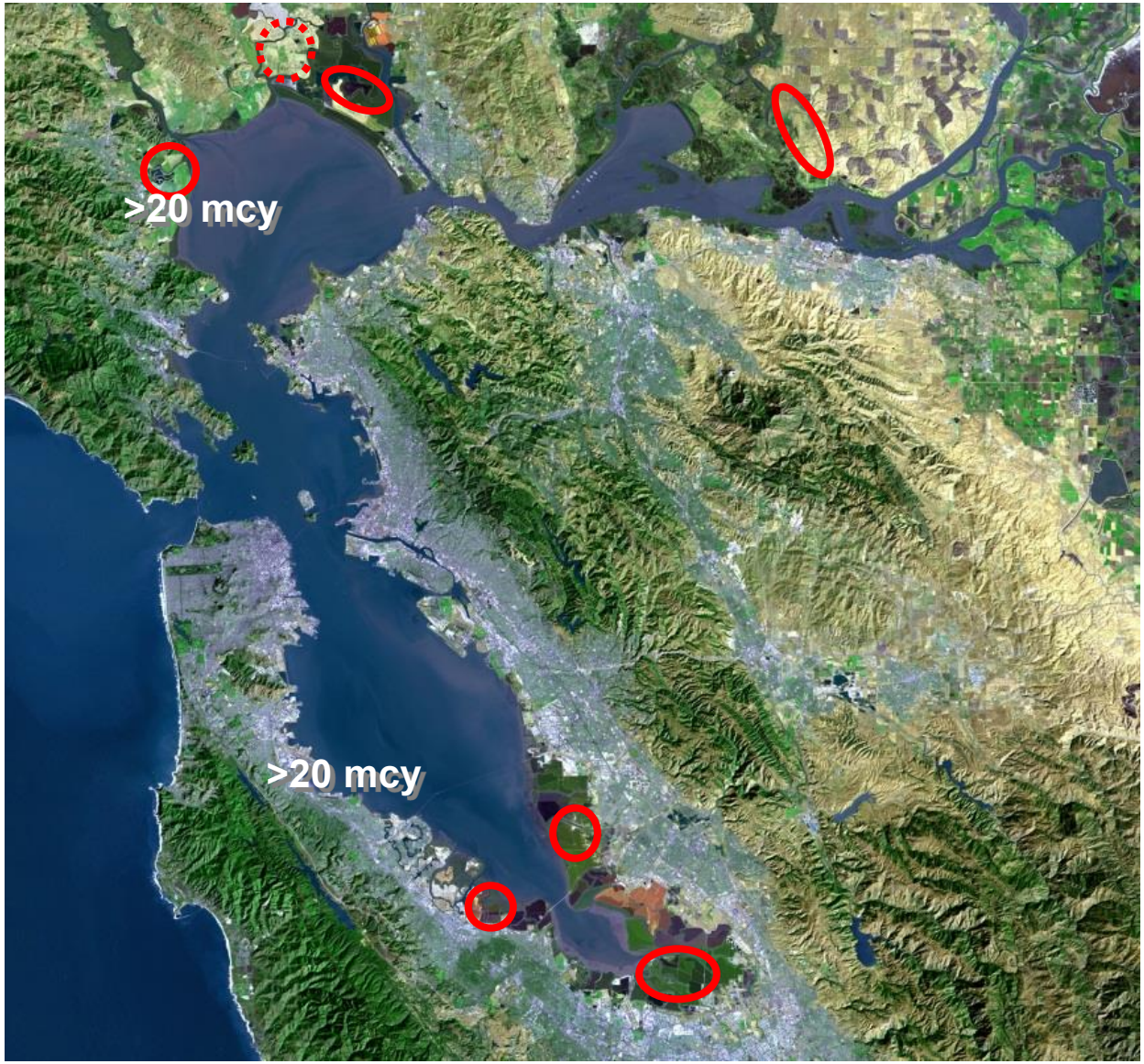
SCC lets out 5 yr offloading contract to private entity.

Corps brings Oakland/ Richmond/ Redwood maintenance material.

Eden Landing ponds E1, E2, E4, E5, E6, E7 restored!

MOFFATT & NICHOL

Implementing Beneficial Reuse Projects



Bay Area not capacity limited.

<u>Challenges:</u>

Distance to beneficial reuse sites.

Expansive mudflats.

Cost of offloader setup and operation.

Regulatory requirements re wetting/drying, decant.

High incremental costs.

O&M vs. Civil Works projects.

Cost of beneficial reuse greater than baseline.

If restoration community preps the sites, will the material come?

THE END… OR THE BEGINNING