Beneficial Reuse in Action: Kickstarting Pond A4's Restoration

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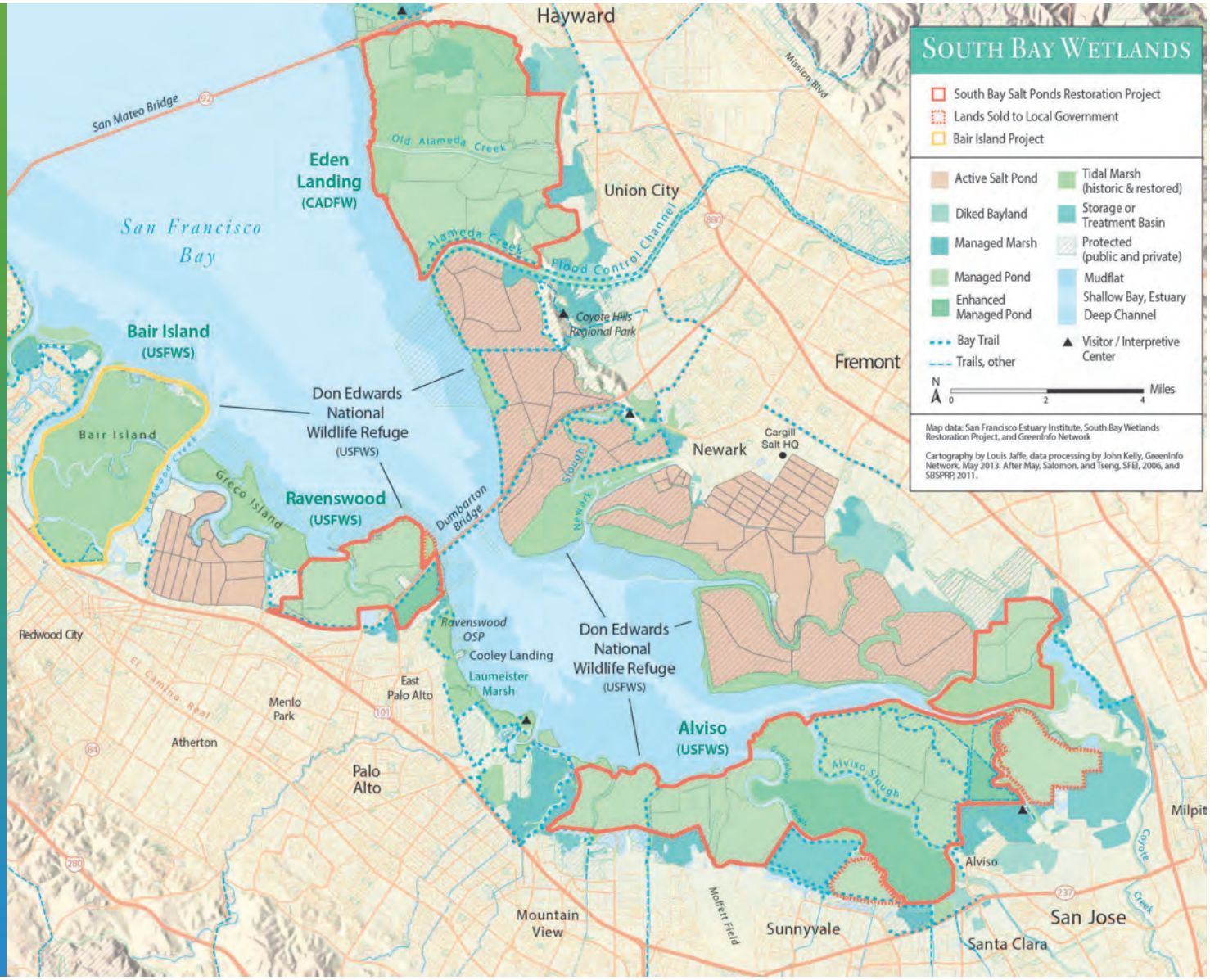
Associate Environmental Planner

Valley Water

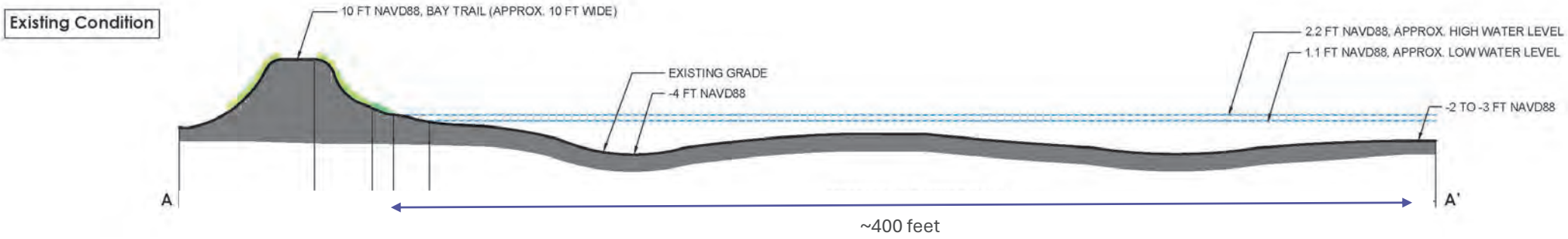


A Bay of Opportunity

Map courtesy South Bay Salt Pond Restoration Project


South SF Bay Shoreline Project Phase I Ponds
Sunnyvale WPCP Ponds
A8 Pond Complex
Moffett Field
Pond A4
Alviso
Sunnyvale
Image: Google Earth

Pond A4 Existing Conditions



Prepared by HT Harvey & Associates

Existing Cross Section

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Objective

Beneficially reuse fluvial and upland sediments to restore mudflat

Provide ecologically appropriate restoration in non-tidal pond

Enhance Pond A4's biodiversity and endangered species habitat

Continue Valley Water's beneficial sediment reuse along Bay shore

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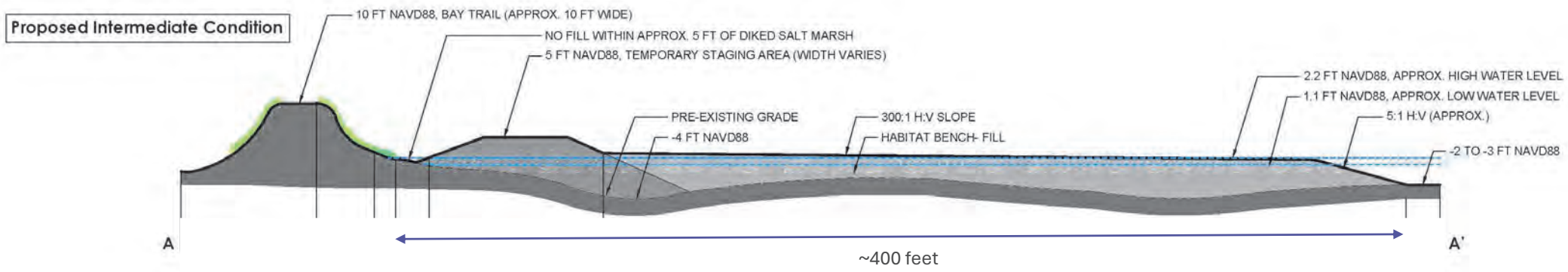
Proposed Project



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Construction Phase Cross Section

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Beneficial Reuse

Beneficial Reuse Material

- Full buildout of habitat bench requires ~400k CY

Material Sources

- Fluvial material: Valley Water Stream Maintenance Program
- Upland material: Partnership with dirt broker

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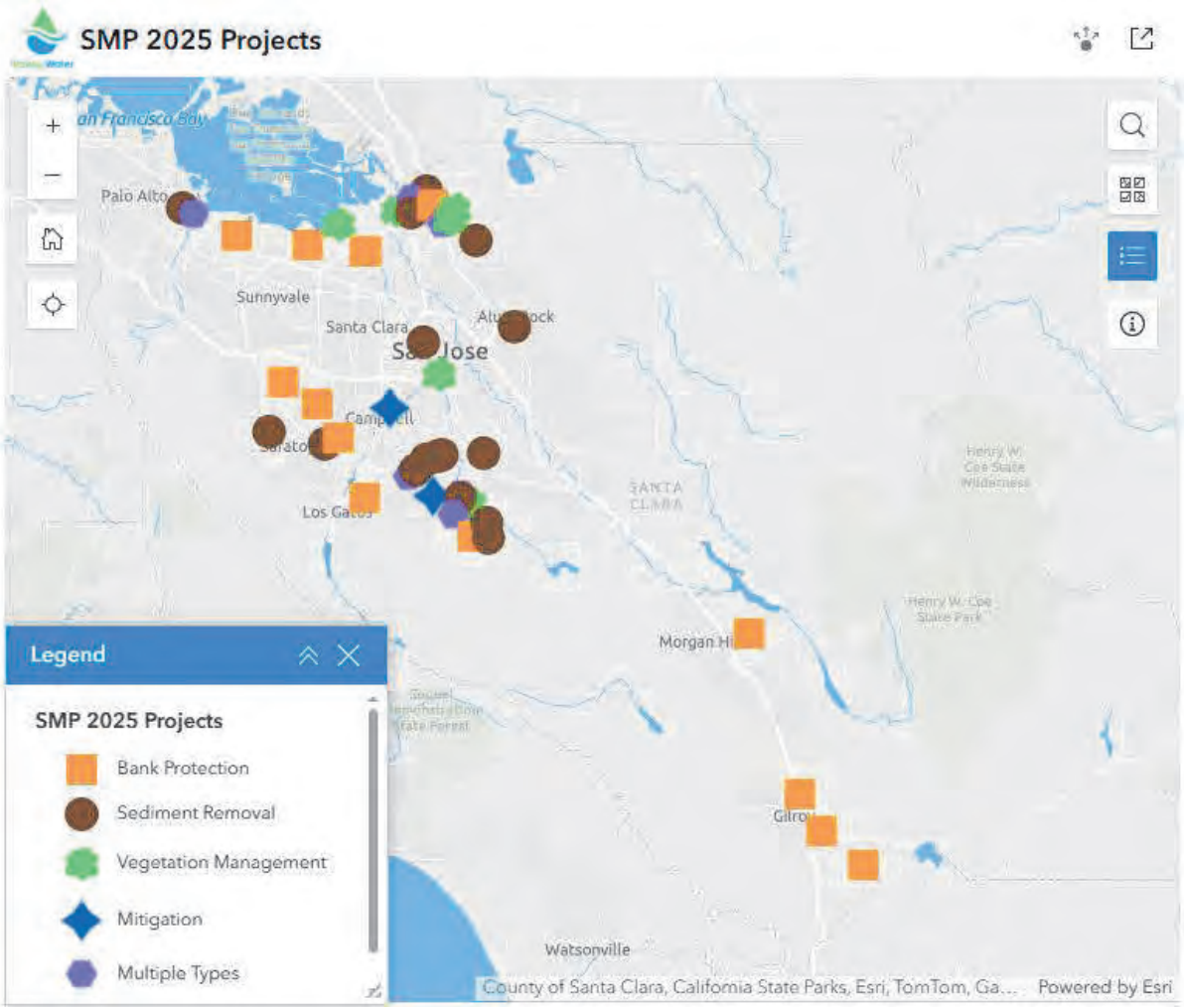
Images courtesy of HT Harvey & Associates

Stream Maintenance Program

- Sediment removed annually to maintain flow capacity
- SMP material previously delivered to Pond A8 for ecotone
- Pond A4 represents new opportunity to avoid landfilling
- Availability of clean SMP material is highly variable (~5-10k CY per year)



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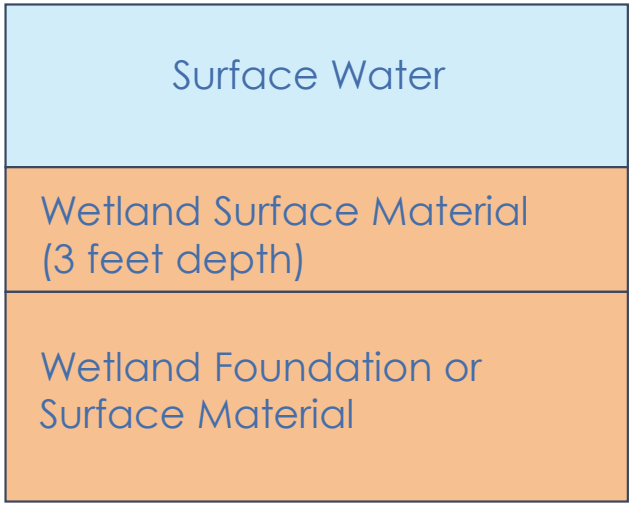
Quality Assurance Project Plan

Pond A4 QAPP based on Refuge Master QAPP

- Defines project team roles/qualifications to implement QAPP
- Describes analysis procedures and contaminant screening criteria for wetland surface and foundation material
- Describes quality assurance procedures during soil import



Construction Methods

- Dirt broker constructs staging area
- Earthmovers/excavators push and spread stockpiles
- Material placed above water level anticipating settlement
- Regrade staging area sections to mudflat
- Monitor and adjust mudflat, as necessary

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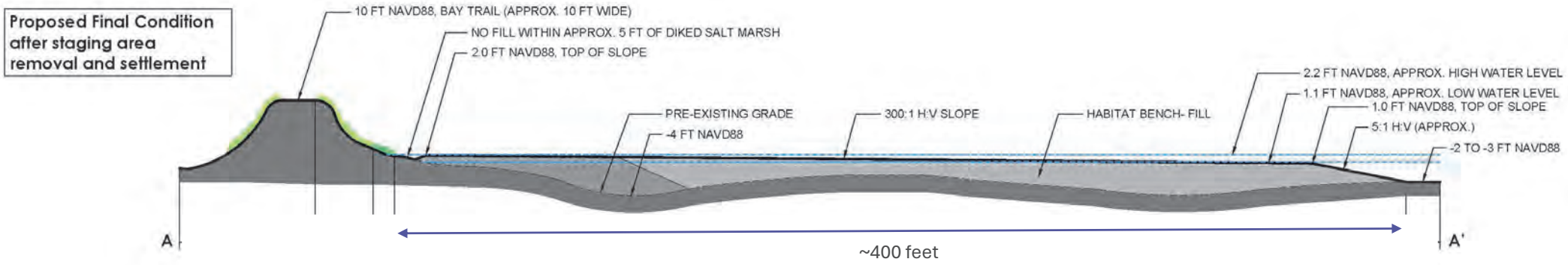
CEQA & Permitting

CEQA

- CDFW Statutory Exemption for Restoration Projects (SERP)

Bay Restoration Regulatory Integration Team (BRRIT)

- USACE 404 Individual Permit
- RWQCB 401 Water Quality Certification (Statewide Restoration General Order)
- CDFW Restoration Management Permit
- BCDC Administrative Permit



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Post-Project Cross Section

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Calabazas/San Tomas Aquino Creeks-Marsh Connection Project

QUESTIONS

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Clean Water • Healthy Environment • Flood Protection