Background & Purpose

Background

- **August 2015**: Community recommended replacing dock, HLUET directed County Parks to undertake feasibility study
- **June 2016**: BOS allocated funding for feasibility study
- **December 2016**: Consultant team began preliminary research
- **March 2017**: Feasibility Study completed

Purpose

- Assess possibility of replacing the existing Alviso dock
- Determine associated potential costs, required permits, and potential timeline
- Determine possibility of opening the dock for public use following its reconstruction
Feasibility Study Approach

- Background Research
- Site Analysis
- Stakeholder Interviews
  - South Bay Yacht Club (SBYC)
  - Santa Clara Valley Water District (SCVWD)
  - State Lands Commission (SLC)
  - U.S. Army Corps of Engineers (USACE)
  - SF Bay Conservation and Development Commission (BCDC)
- Analysis of Project Alternatives
Related Projects, Reports & Plans

- South San Francisco Emergency Port Study
- South Bay Salt Ponds Restoration Project
- South San Francisco Bay Shoreline Study
- Alviso Slough Restoration Project (SCVWD)
  - Intended to restore channel width and wildlife habitat to pre-1983 conditions
  - Estimated to cost over $22 million
  - USACE denied Clean Water Act Permits (2012)
Potential Project

Alternative Scenarios
Existing Alviso Dock

- Located 0.2 miles south of Alviso County Park boat launch
- 50 boat slips when originally constructed
- 8 boat slips remain usable (result of sedimentation)
- Ownership and Leases:
  » SLC owns waterway
  » SCVWD owns land area of dock
  » SBYC owns a portion of dock; has leases on remainder
Dock Replacement & Landside Facilities

- Construct 740 feet of new dock for 18 berths
- ADA-compliant gangway and access
- Utility infrastructure connections for electrical, water, communications, and sewage
- Landside amenities: Parking and Restroom
- Removal of all existing docks, piling, and abandoned boats

* All improvements identified above would apply to the potential project. Variations are possible and are expressed in the 3 Alternatives.
SBYC Proposed Project Improvements

Proposed changes to South Bay Yacht Club Dock Configuration
4/2/2015

← 100' →

[Map of South Bay Yacht Club with proposed project improvements highlighted in red and green]

Red - to be removed
Green - new suggested configuration

PLACEWORKS

TranSystems
SBYC Proposed Project Improvements

Alviso Dock Feasibility Study
TranSystems Corporation

Legend
- Docks and Vessels To Be Removed
- Proposed Project Dock (740 Linear Feet, 18 Berths)

South Bay Yacht Club
New ADA Gangway (80 Feet Long)

Google earth
© 2016 Google

300 ft
Alternatives Considered

- **Alternative 1**: Replace Dock; Dredging near Potential Dock Performed by Another Entity
- **Alternative 2A**: Replace Dock; No Dredging in Potential Dock Area
- **Alternative 2B**: Dock Replacement and Dredging included in project
Opportunities, and Constraints
Potential Project Benefits (All Alternatives)

- Increase opportunities for water-oriented recreation in the South Bay
  - Utilize desirable location for recreation (access and connectivity)
  - Add another South Bay dock to the Bay Water Trail
  - Improve emergency response access to South Bay waters
- Nearby vacant lots could support a public staging area
Key Constraints *(All Alternatives)*

- Restoration of current sediment-filled dock
- Multiple land and water-rights owners
- Emergency response limited by 4-mile journey to Bay (water) and railroad crossings (land)
- Utilization of a public dock limited by dock capacity
- New infrastructure needed (ADA-compliant path, restrooms, parking, sewer connection, lighting, and electricity)
- Easements and/or acquisitions (for associated facilities) is costly and requires willing property owners
- Potential environmental impacts (wetlands, Special Status and/or Endangered Species, etc.)
- Dredging anticipated for all alternatives; environmental and financial constraints may be prohibitive.
Channel Accessibility

- **Existing Slough:**
  - ~50-80’ wide; up to 8’ deep (varies)
  - Regular occurrences of grounded boats in the project vicinity
  - Limited visibility (levees, land masses, vegetation)

- **Navigability Requirements:**
  - 75’ wide x 6’d deep at the potential dock site

- **South Bay Salt Pond Restoration Project**
  - Breach of Pond A8 may improve or stabilize sedimentation
  - Continued scour cannot be assumed
Slough Cross Section

32' (ALTERNATIVE 2B)
Dredging

- Dredging is assumed necessary for all alternatives
  - Alternative 1- initial dredging in the potential dock area would be completed by a previous project.
  - Maintenance dredging of the slough every 5 years
- Dredged sediment is likely mercury-laden (costly disposal)
- Potential impacts to the Wildlife Refuge and loss of wetland habitat
- Project would be null and void if USACE denies permits
# Regulatory Permits & Requirements

<table>
<thead>
<tr>
<th>Organization</th>
<th>Jurisdiction</th>
<th>Permits/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. Army Corps of Engineers (USACE)</strong></td>
<td>Federal</td>
<td>Section 404, b1 Alternatives Analysis</td>
</tr>
</tbody>
</table>
| **San Francisco Bay Conservation and Development Commission (BCDC)** | State        | 1. Bay Waters  
2. 100-foot shoreline band                              |
| **California Department of Fish & Wildlife (CDFW)** | State        | 1. Streambed Alteration Agreement  
2. Endangered Species Consultation*                         |
| **Regional Water Quality Control Board (RWQCB)**   | State        | 1. Waste Discharge Requirements  
2. 401 Water Quality Certification                         |
| **State Lands Commission (SLC)**                  | State        | Lease                                                      |
| **Santa Clara Valley Water District**              | Local        | 1. Lease/ MOA  
2. Construction & Encroachment Permit                     |
| **US Fish and Wildlife Service (USFWS)**          | Federal      | Endangered Species Consultation*                           |

* The Consultation will determine if a permit will be required by the organization
Approximate Timeline
Approximate Implementation Timeline

- All alternatives: Estimated 78 months
  - Channel dredging
  - Environmental Impact Report (EIR) under CEQA
- Alternative 1 is dependent on other project(s)
- In-water work window for sensitive species: June 1st to November 30th
Financial Considerations
# Alternatives Cost Comparison

<table>
<thead>
<tr>
<th>Alternatives Cost Summary</th>
<th>Alternative 1</th>
<th>Alternative 2A</th>
<th>Alternative 2B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Replace Dock; Dredging Near Potential Dock Performed by Another Entity</td>
<td>Replace Dock; No Dredging in Potential Dock Area</td>
<td>Dock Replacement and Dredging</td>
</tr>
<tr>
<td>Construction Cost in 2017 Dollars</td>
<td>$9,691,680</td>
<td>$9,628,080</td>
<td>$11,248,080</td>
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<tr>
<td>Soft Costs</td>
<td>$2,828,320</td>
<td>$2,811,920</td>
<td>$3,551,920</td>
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<tr>
<td><strong>Total Capital</strong></td>
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<td><strong>$12,440,000</strong></td>
<td><strong>$14,800,000</strong></td>
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<tr>
<td>Annual Maintenance Costs</td>
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<td>Annual Operations Costs</td>
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<td>$500,000</td>
<td>$500,000</td>
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<tr>
<td><strong>Total Annual O&amp;M</strong></td>
<td><strong>$538,340</strong></td>
<td><strong>$538,340</strong></td>
<td><strong>$1,770,340</strong></td>
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<tr>
<td>Annual Potential Revenue</td>
<td>$48,600</td>
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<td>$48,600</td>
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<tr>
<td><strong>Net Annual Costs</strong></td>
<td><strong>$489,740</strong></td>
<td><strong>$489,740</strong></td>
<td><strong>$1,721,740</strong></td>
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</tbody>
</table>
Findings & Recommendations
Findings

- Feasible from engineering perspective
- Permits for dredging will be difficult to obtain
- High capital and ongoing maintenance costs
- Revenue generation would not cover costs

Recommendations

- Further study would be needed to confirm slough navigability and/or level of dredging required.
- *If dredging is required, no alternatives are recommended for further consideration.*
Questions?