

# VALUE ENGINEERING

## O&M Dredging Program

Date: Wednesday, November 9<sup>th</sup>, 2011

Presented to:  
CMANC

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# Purpose and Need

- **Increase Competition**
- **Extend the Maintenance Cycle**
- **Maximize use of upland Sites**



# V-E Study

- **Dates: May 16 – 20, 2011**
- **Location: Sacramento, CA**
- Scott Noble – Noble Consultants (Prime)
- Luis Venegas – Value Management Strategies
- April Hiller – Value Management Strategies
- James Garror – SF District
- David Doak – SF District
- Brian Ross – EPA
- Brenda Goeden – BCDC
- Syed Burney – SF District
- Charles Fano – Walla Walla District
- Richard Rhoads – M&N
- Jim Haussener – CMANC
- Greg Hartman - Hartman Associates
- Len Cardoza – Weston Solutions



# Study Objectives

- **Increase qualified dredging competition**
- **Reduce cost and increase efficiency of dredging**
- **Maximize amount of dredging for available cost/budget**
- **Optimize LTMS goals for available cost/budget**



# Study Objectives (cont'd)

- **Increase use of advanced maintenance dredging**
- **Incorporate latest environmental regulation**
- **Increase communication between parties / stakeholders / internal to agencies**
- **Streamline contracting methodology**



# Study Objectives (cont'd)

- **Meet customer expectations**
- **Increase PDT membership and assure participation**
- **Determine and develop process to implement these goals and objectives**
- **Reduce uncertainties**
- **Reduce frequency of dredging**



# Key Project Issues

- **Environmental Parameters**

- Environmental Work Windows
- Endangered Species Act (ESA) / Essential Fish Habitat (EFH)
- In-Bay Placement / Sediment Quality / Characterization Time

- **Environmental Goals**

- In-Bay <40% of total – 2012
- In-Bay <20% of total – 2013



# Key Project Issues

- **Budget**

- \$30M/year – all O&M projects in SF Districts jurisdiction

- **Other**

- Reduced competition
- Contractor restrictions
- Dredging equipment availability
- Budget uncertainties





# Key Project Issues

- **Constraints**

- Permitting
- Budget timing
- Contract award timing
- USACE “process”
- Timing of sediment testing



# Study Summary

- **88 ideas considered**
- **26 alternatives developed**
- **11 alternatives identified as “most critical”**
- **15 alternatives included for “further review”**



# Study Summary (cont'd)

- **Alternative Designations**
  - IC => increase competition
  - ICP => improve contract / project
  - EE => enhance environment



# Key Findings

- **IC-1 Increase Competition**

- Increase the size of the contracts
- Issuing 2 or 3 (minimal) contracts for all O&M undertakings
- Using multi-year contracts
- Using prime-contractor-type contract vehicle; and
- Consolidating non-federal projects by balancing the work across numerous projects

**UNDER REVIEW**



# Key Findings (cont'd)

- **IC-4 Array of Disposal Sites**
  - Allow contractors to propose reuse sites

**IMPLEMENTED IN 2011**
- **IC-15 Increase Communication**
  - Contractor workshops
  - Pre-solicitation workshops

**UNDER REVIEW**



# Key Findings (cont'd)

- **IC-25 Market Research for Increased Competition**

- Increase SBA / 8(a) participation

**IMPLEMENTED IN 2011**

- **ICP-1 On-Time Contracting**

- Maintain published contracting schedule

- *Advertise/award earlier ahead of work window*

- *Focus on end dates not start dates – allow flexibility*

**UNDER REVIEW**



# Key Findings (cont'd)

- **ICP-6 Project Team Continuity**

- Ensure PM continuity

**UNDER REVIEW**

- **ICP-14 Multi-Year EA**

- Expected to save 4 weeks in schedule
- Allows for earlier solicitation
- Allows greater contractor flexibility

**IMPLEMENTED FOR OAKLAND**



# Key Findings (cont'd)

- **ICP-18 Decouple “E” from BCOE**
  - Perform “environmental” in parallel with other tasks
  - Save 4 – 6 weeks
  - Maximize use of Tier I approvals

**SCHEDULE FOR IMPLEMENTATION IN 2012**





# Key Findings (cont'd)

- **ICP-30 Reevaluate the BCOE Process**
  - Eliminate redundant reviews, sign-offs, etc.
  - Review each step for “value added” and eliminate unnecessary steps
  - 4-week reduction in schedule

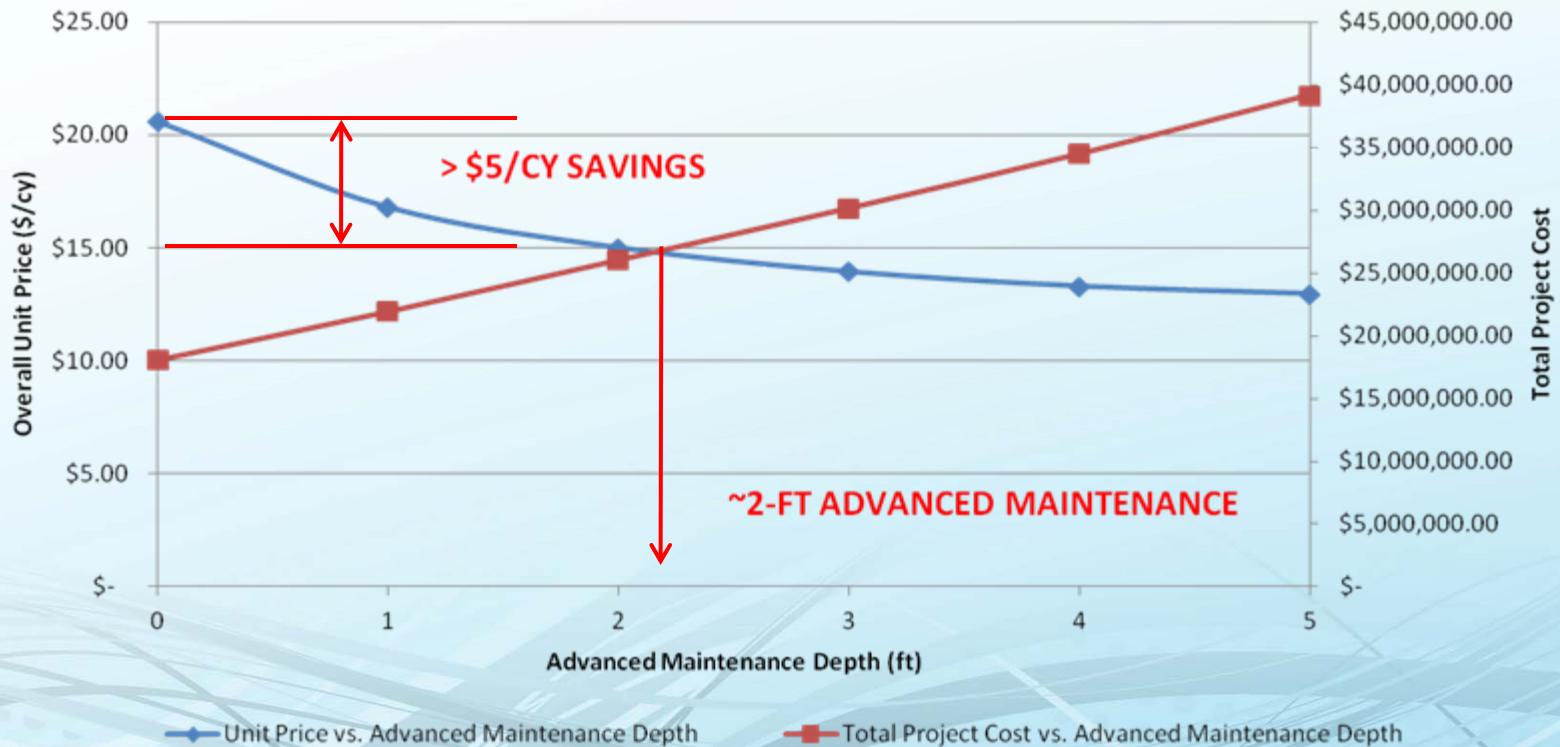
**UNDER REVIEW**



# Key Findings (cont'd)

- **EE-1 Dredge Deeper / Less Frequently**

Oakland Federal Channel Maintenance - 2010



**UNDER REVIEW**



# Key Findings (cont'd)

- **EE-6 Identify New In-Bay Beneficial Reuse Opportunities**
  - Bay is now “sediment starved”
  - Water is becoming “too clear”
  - Redefine / reevaluate environmental impacts of in-bay disposal
  - Redefine LTMS goals to reflect new reality
  - Develop pilot project(s)

**UNDER DEVELOPMENT BY DMMP**



# In My Humble Opinion!

- **Most Critical Findings:**

- Increasing contract sizes to increase contractor interest and competition
  - *Contract “bundling”*
  - *Multi-year contracts*
  - *Alternate year dredging cycles*
- Dredging more efficiently
  - *Advanced maintenance dredging, where appropriate*
  - *Greatly expanded use of knockdowns & WIJ*
    - *On-call knockdown contract(s)*
- Reduced testing of sediment



Thank You!

