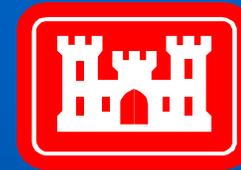


# Delta Risk Management Strategy



US Army Corps  
of Engineers

Sacramento District

CBDA Independent Science Board Meeting  
08/14/06

Delta-Suisun Marsh Branch  
Department of Water Resources

# DRMS

## CALFED's Four Fold Objective



# DRMS

- **How LSIP Contributes to the 4 Objectives**
  - Reduce risk of levee failure through DWR Subventions & Special Projects Programs
  - Levees act to control saltwater intrusion, and thus improve water quality
  - Levees act as conveyance to pumps/point of use
  - Habitat mitigation on Decker Island/Dutch Slough/Meins Landing`

# DRMS

- **How LSIP Contributes to the 4 Objectives**
  - Delta has many assets beyond water supply & habitat plus Secondary zone is being rapidly developed
  - CALFED ROD called for LSIP to do risk assessment to quantify major risks to Delta – started in years past, now is DRMS
  - DRMS will fulfill the ROD requirements, provide technical data to address AB 1200 concerns, and will coordinate with & provide input to the DVP on future State policy for Delta Sustainability

# DRMS

- AB 1200 (CWC 139.2) Sets General Framework for both DRSM & DVP
  - DWR Shall Evaluate Potential Impacts on 50, 100, 200-year projections on possible impacts to Delta from:
    - Subsidence
    - Earthquakes
    - Floods
    - Climate Change
    - & Combination of above

# DRMS

- AB 1200 Continued (CWC 139.4)
  - DWR/DFG to Determine Principal Options for Delta
    - comparatively rate for ability to:
      - Prevent Disruption of Water Supplies
      - Improve the Quality of Water Supplies
      - Reduce Salts, Maintain Water Quality
      - Preserve, Protect, Improve Delta Levees
      - Protect Water Rights/Environments of River Systems
      - Protect Infrastructure within Delta
  - Report Due – January 2008 (DVP)

# DRMS

- **Phase I**

- **Development of Status & Trends**
  - Over next 50, 100, & 200 years
  - Based on “BAU”
- **Development of Risks**
  - Floods
  - Earthquakes
  - Subsidence
  - Climate Change
- **Determine Consequences based on Risks**
- **Prepare Risk Quantification & Uncertainty Analysis Report**

# DRMS

- **Phase II**
  - **Development of Alternative Risk Strategies**
    - **Based on Consequences identified from Risk Analysis Report**
    - **Will Result in Risk Reduction/Mitigation Management Measures**
- **Will be part of DVP report due to Legislature in Jan '08**

# DRMS

- *Technical Advisory Committee:*
  - **Dr. Raymond Seed**, University of California, Berkeley
  - **Dr. Norm Abrahamson**, Independent Seismological Consultant
  - **Gilbert Cosio, P.E.**, MBK Engineers
  - **Dr. Wim Kimmerer**, San Francisco State University, ERP Science Board
  - **Dr. Peter Moyle**, University of California, Davis, ERP Science Board
  - **Roger Fujii**, United States Geological Survey
  - **Jon Burau**, United States Geological Survey

# DRMS

## STEERING COMMITTEE

Includes Members Representing:

- TAC Members
- USACE
- DFG
- CBDA
- USBR
- Delta/Suisun Marsh Interests
- Public
- SWC
- CVP Contractors

# DRMS

- Contract Information

- URS Corporation, Oakland, CA
  - Over 20 subcontractors
- Contract is for \$6,000,000
  - Approved by DGS - March 6, 2006
  - Expires on January 31, 2009
- Task Order 001 – NTE \$2.5M
- Task Order 003 - NTE \$341K
- Task Order 004 (DVP) - NTE 330K

# DRMS

## White Paper Topic Areas

- Seismic Hazard
- Wave Action
- Climate Change
- Levee Fragility
- Hydrodynamics
- Geomorphology
- Infrastructure
- Risk Analysis Methodology for the Delta & Suisun Marsh
- Flood Hazard
- Ecosystem
- Subsidence
- Emergency Response
- Water Operations
- Economics

# DRMS

- **White Papers result in:**
  - **Description of methodology/approach (Starting Point)**
  - **Project tasks**
  - **Interface between other elements (i.e., Hydrodynamic Modeling and Flood Hazards)**
  - **General approach to be followed in Risk Analysis**
  - **Establish budget & schedule for work to be done**

# DRMS

## MILESTONES

## Deliverable Date

- White Papers on DRMS web site Sep '06
- Trends Analysis (DVP) Oct '06
- Technical Memoranda Oct-Dec '06
- Phase I Risk Analysis Feb '07 (?)
- Draft Final Report Aug'07
- DRMS Final Report Oct '07

# DRMS

- **PUBLIC OUTREACH PROGRAM**
  - **Center for Collaborative Policy (CSUS)**  
**Selected to support URS w/ Public Outreach**
  - **Currently working on various DRMS activities & performing DVP Assessment**
  - **New Amendment to CCP Contract being written for Communications & Public Involvement Program for both DVP & DRMS projects**

# DRMS

- **Coordination Efforts**
  - **Weekly Phone Calls w/ URS & DWR/DFG/COE/CBDA**
  - **SC/TAC Meetings**
  - **Monthly Updates at Delta Levees and Habitat Advisory Committee Meetings**
  - **Presentations Given at CBDA BDPAC & Agency Coordination Team Meetings**

# DRMS

- **DVP Coordination Efforts**
  - **DVP Core Team Established**
    - **DWR/CBDA/DFG/CCP are members**
    - **Weekly Meetings Held Every Monday**
  - **CCP Will Do Delta Stakeholder Assessment & Public Outreach**
  - **WEF Proposing to Hold Workshops Throughout the State**

# DRMS

- **DRMS Has Need for Independent Scientific Review to Establish Credibility:**
  - **Independent Scientific Review would do the following:**
    - Assemble appropriate review team
    - Meet w/ consultant team, DWR/DFG/COE, TAC/SC members, others
    - Review methods, analyses & findings
    - Review Phase 1 and 2 Reports
    - Produce formal reports on findings

# DRMS

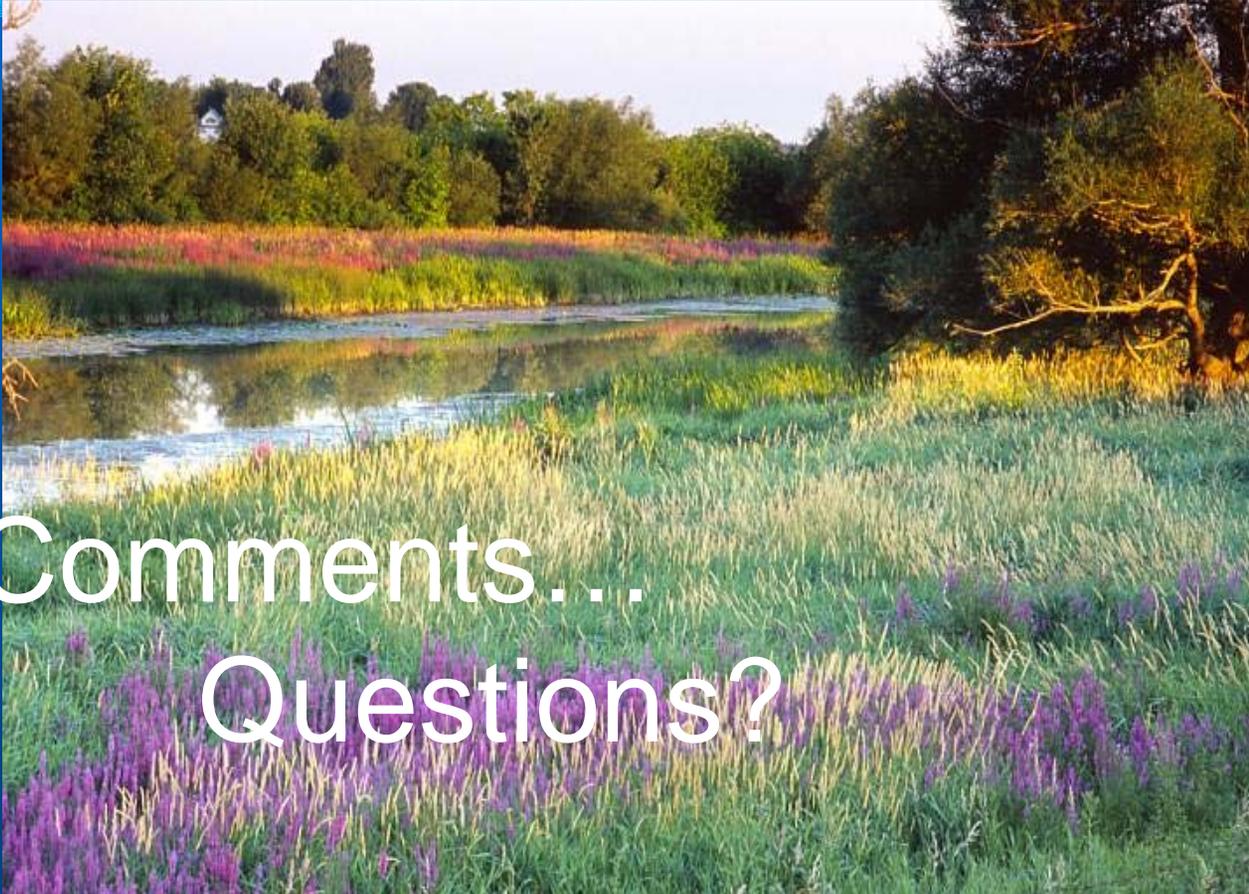
- **Independent Scientific Review**
  - Letter Sent to The National Academies on July 5, 2006 Requesting a Proposal to Perform Review as Shown on Previous Slide
    - Proposal received in Letter from NAS dated July 17, 2006

# DRMS

- **ISB Review**
  - **Options Available for This Review**
    - **CBDA ISB Selects Technical Experts to Perform Review**
    - **DWR Proceeds w/ Review by NAS**

# DRMS Web Site:

<http://www.drms.water.ca.gov/>



Comments...  
Questions?