Agenda

- Welcome, Introductions, Ground Rules
- Overview of Flood RMS Approach
- Strategy Review and Discussion
  - Flood Flow Modification
  - Flood Susceptibility Modification

Break
  - Flood Impact Modification
  - Floodplain Restoration

- Recap Discussion
Welcome

- Introductions
- Ground Rules
Update 2009
Flood Management
Approach
Update 2005
Framework for Action

Vision

2 Initiatives
Ensure Reliable Water Supplies

3 Foundational Actions
Ensure Sustainable Water Uses

Vital Economy
Healthy Environment
High Standard of Living

Implement
Integrated
Regional Water Management

Improve
Statewide Water Management Systems

Use
Water Efficiently

Protect
Water Quality

Support
Environmental Stewardship

Vision
Update 2005
Resource Management Strategies

Reduce Water Demand
- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

Improve Operational Efficiency & Transfers
- Conveyance
- System Reoperation
- Water Transfers

Increase Water Supply
- Conjunctive Management & Groundwater Storage
- Desalination – Brackish & Seawater
- Precipitation Enhancement
- Recycled Municipal Water
- Surface Storage – CALFED
- Surface Storage - Regional/Local

Improve Water Quality
- Drinking Water Treatment and Distribution
- Groundwater/Aquifer Remediation
- Matching Quality to Use
- Pollution Prevention
- Urban Runoff Management

Practice Resource Stewardship
- Agricultural Lands Stewardship
- Economic Incentives (Loans, Grants, and Water Pricing)
- Ecosystem Restoration
- Floodplain Management
- Recharge Areas Protection
- Urban Land Use Management
- Water-Dependent Recreation
- Watershed Management
A multi-faceted program to improve public safety through integrated flood management
Statewide Program

- 4 Major Activities
- Primarily funded by Propositions 1E and 84
- Emphasis on state-federal system in Central Valley & Delta
- ~10 year effort
FloodSAFE Vision

A sustainable integrated flood management and emergency response system throughout California that improves public safety, protects and enhances environmental and cultural resources, and supports economic growth by reducing the probability of destructive floods, promoting beneficial floodplain processes, and lowering the damages caused by flooding.
Integration

- Integrated flood management recognizes
  - Interconnection of flood management actions within broader water resources management
  - Value of coordinating across geographic and agency boundaries
  - Need to evaluate opportunities and potential impacts from a system perspective
  - Importance of environmental stewardship and sustainability
FloodSAFE Goals

1. Reduce chance of flooding
2. Reduce consequences of flooding
3. Sustain economic growth
4. Protect and enhance ecosystems
5. Promote sustainability
Guiding Principles

1. Approach flood risk management on a system-wide basis and prevent adverse impacts
2. Integrate land use planning with flood risk management
3. Encourage and fund projects that offer multiple or regional benefits
Guiding Principles (cont.)

4. Protect and restore natural floodplain processes and promote environmental stewardship

5. Design and build flood protection facilities to avoid catastrophic or unexpected failures

6. Promote and fund regional planning
7. Adapt flood management to cope with climate change
8. Provide accurate information about flood risks to help residents and communities make safer decisions
9. Leverage state investments to provide maximum public benefits
10. Provide equitable access to decision process
Planning Activities

Improve Flood Management Systems

- FloodSAFE Strategic Plan
- FloodSAFE Implementation Plan
- California Water Plan
- Central Valley Flood Protection Plan
- Integrated Regional Water Management Plans
- Project Feasibility Studies

What to accomplish…
- System-wide plan for improving integrated flood management in Central Valley …
- Regional plans with State assistance…

How to accomplish…
- Statewide strategic policy document…
- Detailed project studies …
Why Link FloodSAFE & Water Plan?

- Water Plan organizational structure
- Common principles, overlapping resources, and compatible planning considerations
- Both involve an interdisciplinary, multi-objective approach
Integrated Flood Management

“A process that promotes a comprehensive approach to flood management that considers land and water resources at a watershed scale within the context of integrated regional water management, which aims to maximize the benefits of floodplains and minimize the loss of life and damage to property from flooding.”
Update 2005 Structure

- **Volume 1: Strategic Plan**
  - Recommendations and Actions
- **Volume 2: Resource Management Strategies**
  - Toolkit for Water Management
- **Volume 3: Regional Reports**
  - Summary of Local Conditions
- **Volume 4: Reference Guide**
- **Volume 5: (Online) Technical Guide**
Update 2009 Flood Mgmt Content

- **Volume 1: Strategic Plan**
  - Companion Plans: FloodSAFE

- **Volume 2: Resource Mgmt Strategies**
  - New Flood Management Strategies

- **Volume 3: Regional Reports**
  - New Flood-Related Content

- **Volume 4: Reference Guide**

- **Volume 5: (Online) Technical Guide**
  - Potential for New Flood-Related Content
Resource Management Strategies

**Reduce Water Demand**
- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

**Improve Operational Efficiency & Transfers**
- Conveyance
- System Reoperation
- Water Transfers

**Increase Water Supply**
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- Recharge Areas Protection
- Urban Land Use Management
- Water-Dependent Recreation
- Watershed Management
Resource Management Strategies

- **Reduce Water Demand**
- **Improve Water Quality**
- **Improve Operational Efficiency & Transfers**
- **Practice Resource Stewardship**
- **Increase Water Supply**
Resource Management Strategies

- Reduce Water Demand
- Improve Operational Efficiency & Transfers
- Increase Water Supply
- Improve Water Quality
- Practice Resource Stewardship
Resource Management Strategies

- Reduce Water Demand
- Improve Operational Efficiency & Transfers
- Increase Water Supply
- Improve Water Quality
- Practice Resource Stewardship
- Improve Flood Management
Strategies to Improve Flood Management

- National Unified Program for Floodplain Management:
  - Modify Flooding
  - Modify Flood Impacts
  - Modify Susceptibility to Flood Damage
  - Preserve Natural Floodplain Functions
Strategies to Improve Flood Management

- Resource Management Strategies: Initial Draft
  - Modify Flooding
  - Modify Flood Impacts
  - Modify Flood Susceptibility
  - Preserve & Restore Natural Resources
Strategies to Improve Flood Management

Resource Management Strategies: Working Draft

- Flood Flow Modification
- Flood Impact Modification
- Flood Susceptibility Modification
- Floodplain Restoration
Integrated Flood Management

- Flood Management Strategies
- Other Resource Management Strategies
  - Conjunctive Management
  - Conveyance
  - Ecosystem Restoration
  - Surface Storage
  - System Reoperation
  - Urban Runoff Management
  - Watershed Management
Strategies to Improve Flood Management

Resource Management Strategies: Proposed Changes

- Flood Flow Modification
- Flood Impact Modification
- Flood Susceptibility Modification
- Floodplain Restoration
Strategies to Improve Flood Management

Resource Management Strategies:
Proposed Changes

- Flood Flow Modification
- Flood Preparedness
- Flood Planning, Standards, Design & Regulation
- Floodplain Restoration
Strategies to Improve Flood Management

Resource Management Strategies: Proposed Changes

- Flood Risk Modification
- Flood Preparedness
- Flood Planning, Standards, Design & Regulation
Flood Management Approach

- Questions of Clarification?
- Discussion of Overview

  - Integrated Flood Management definition...
  - Four Strategies...?
Flood Management Strategy Review
Flood Flow Modification

- Overview
  - Description
  - Benefits
  - Potential Costs
  - Major Issues
  - Recommendations
Flood Flow Modification

Description

- Dams and Reservoirs
- Levees, Dikes, & Flood Embankments
- Channel Improvements
- High Flow Diversions and Bypasses
Flood Flow Modification

Potential Benefits

- Regional Benefits
- Inter-Regional Benefits
- Other:
  - Water Supply and Drought Preparedness
  - Reduce Groundwater Overdraft
  - Water Quality
  - Energy
  - Resource Stewardship
Flood Flow Modification

- **Potential Costs**
  - TBD

- **Major Issues**
  - IRWM Coordination
  - Potential Costs & Competition for Funds
  - Population Growth
  - Climate Change
  - Limited Documentation of Needs
Flood Flow Modification

Key Recommendations

- Complete Central Valley Flood Plan
- Undertake Statewide Flood Planning
- Develop Financing Strategy
Flood Flow Modification

- Questions of Clarification?
- What Content Should Move Forward to Advisory Committee?
Flood Impact Modification

- **Description**
  - Information and Education
  - Disaster Preparedness
  - Post-Flood Recovery
  - Flood Insurance
Flood Impact Modification

- **Potential Benefits**
  - Regional Benefits
  - Inter-Regional Benefits
  - Other Benefits?
    - Water Supply and Drought Preparedness
    - Groundwater Overdraft
    - Water Quality
    - Energy
    - Resource Stewardship
Flood Impact Modification

- **Potential Costs**
  - TBD

- **Major Issues**
  - Population Growth
  - Climate Change
  - Limited Documentation of Needs
Flood Impact Modification

Key Recommendations

- Complete Central Valley Flood Plan
- Undertake Statewide Flood Planning
- Develop Financing Strategy
Flood Impact Modification

- Questions of Clarification?
- What Content Should Move Forward to Advisory Committee?
Break
Flood Susceptibility Modification

Description

- Floodplain Regulation
- Development & Redevelopment Policies
- Design and Location of Facilities
- Housing and Building Codes
- Flood Proofing
- Flood Forecasting and Warning
Flood Susceptibility Modification

Potential Benefits

- Regional Benefits
- Inter-Regional Benefits
- Other Benefits?
  - Water Supply and Drought Preparedness
  - Groundwater Overdraft
  - Water Quality
  - Energy
  - Resource Stewardship
Flood Susceptibility Modification

- **Potential Costs**
  - TBD

- **Major Issues**
  - Population Growth
  - Climate Change
  - Limited Documentation of Needs
Flood Susceptibility Modification

- Key Recommendations
  - Complete Central Valley Flood Plan
  - Undertake Statewide Flood Planning
  - Develop Financing Strategy
Flood Susceptibility Modification

- Questions of Clarification?
- What Content Should Move Forward to Advisory Committee?
Floodplain Restoration

- Description
  - Ecosystem Restoration
  - Watershed Management
  - Floodplain Management
Floodplain Restoration

Potential Benefits

- Regional Benefits
- Inter-Regional Benefits
- Other Benefits?
  - Water Supply and Drought Preparedness
  - Groundwater Overdraft
  - Water Quality
  - Energy
  - Resource Stewardship
Floodplain Restoration

- **Potential Costs**
  - TBD

- **Major Issues**
  - Population Growth
  - Climate Change
  - Limited Documentation of Needs
Floodplain Restoration

Key Recommendations

- Complete Central Valley Flood Plan
- Undertake Statewide Flood Planning
- Develop Financing Strategy
Floodplain Restoration

- Questions of Clarification?
- What Content Should Move Forward to Advisory Committee?
Recap

► Four Strategies
  ● Combine or Consolidate?
  ● Other Suggestions?

► Next Steps
  ● Pre-Administrative Draft: September
  ● Plenary: September 18-19 in Sacramento
  ● Public Review Draft: December 31st
Adjourn