STATEWIDE FLOOD MANAGEMENT PLANNING PROGRAM

FloodSAFE CALIFORNIA

**Department of Water Resources**

**SFMP Program**

# Statewide Flood Management Planning

DWR Workshop on Climate Change, Extreme Weather, and Southern California Floods

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PUBLIC SAFETY ENVIRONMENTAL STEWARDSHIP ECONOMIC STABILITY

# DWR Integrated Water Planning

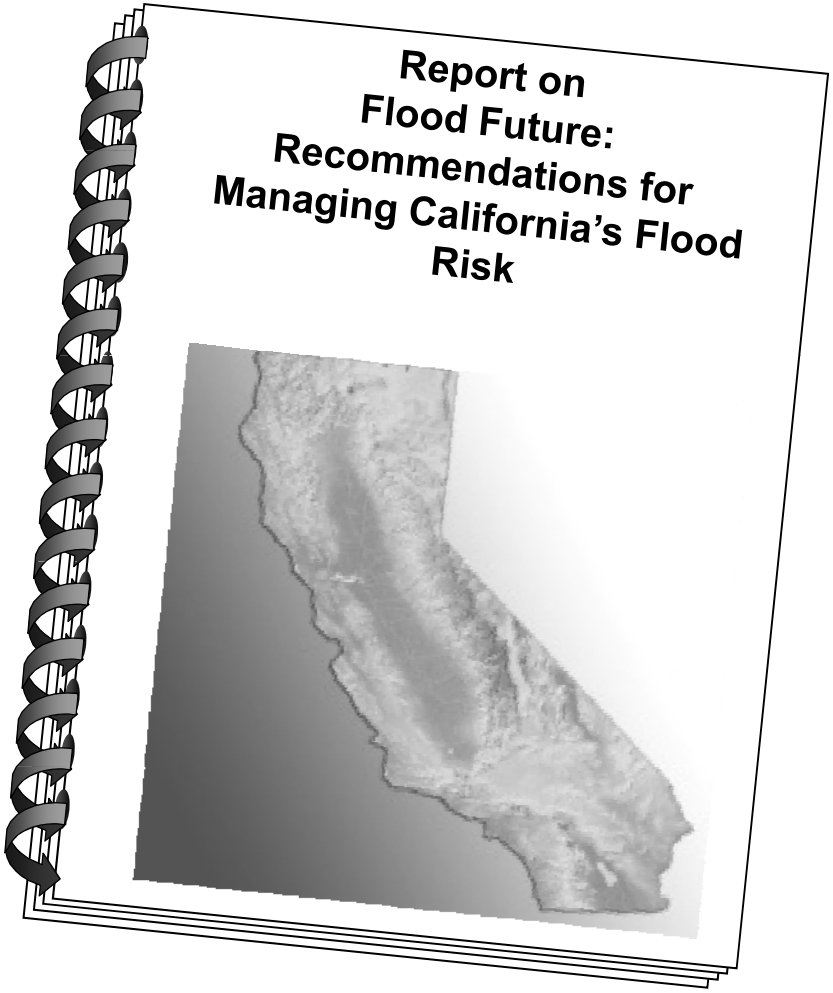
- Plan for a Specific Project
- Regional
  - Central Valley Flood Mgmt Plan
  - IRWM
- Statewide
  - SFMP Flood Future Report
  - California Water Plan

# Statewide Flood Management Planning

## SFMP PROGRAM PURPOSE

- Understand California's flood management
- Support local, State, and Federal partnerships
  - USACE is a key member of the project team
- Support integrated flood management strategies
- Coordinate within DWR with other planning efforts

# Flood Future Report



# SFMP Flood Future Report Goals

1. Inventory and describe the status of existing flood management infrastructure.
2. Assess exposure to flood hazard statewide
3. Identify opportunities for IFM to address flood management issues.
4. Identify challenges and opportunities for improving flood management.
5. Develop a finance strategy for IFM improvements and continuing operations and maintenance.
6. Develop recommendations to guide flood risk management strategic policies and investment decisions.

# Flood Future Report Approach

## Identify Flood Mgmt Issues in California

- Gather Flood Management Information and Inventory Data
- Define/Characterize Existing and Future Hazard and Risks (Exposure)

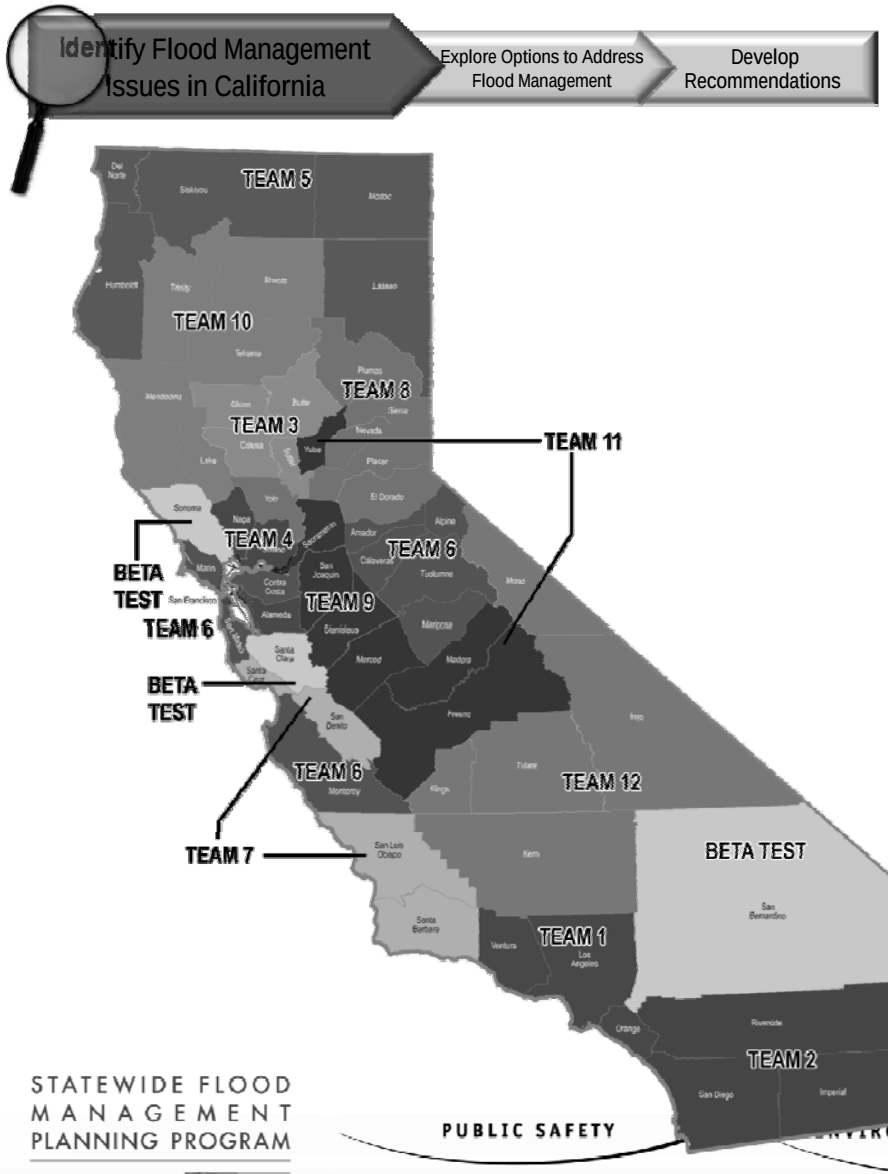
## Explore Options to Address Risk

- Identify Regional IFM Opportunities
- Identify Challenges and Opportunities for Improving Flood Management
- Develop Financing Strategies

## Develop Recommendations

- Make Recommendations
  - *Institutional*
  - *Policy*
  - *Financing*
  - *Legislative*
  - *Other*

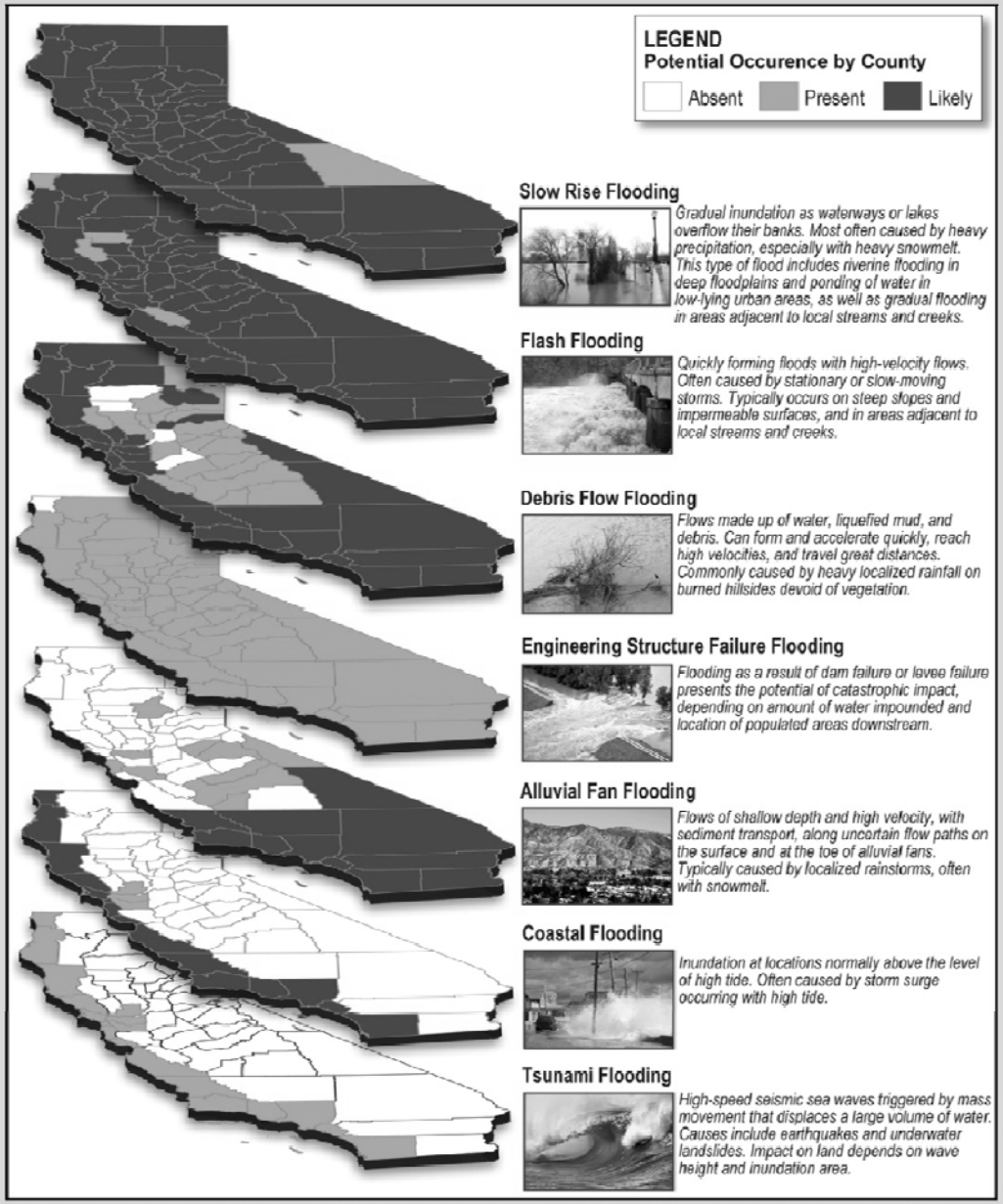
# Gather Information and Inventory Data



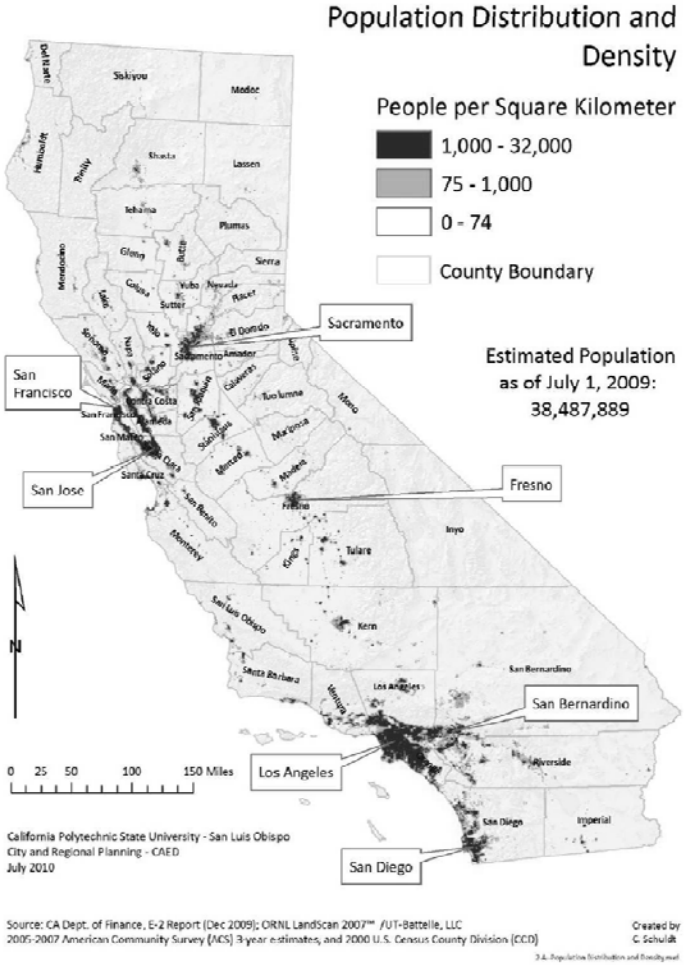

- 129 Local Agencies Visited
- Information Gaps Identified and State of Information Accessed
- Intermediate Work Products:
  - Existing Flood Management Infrastructure Inventory
  - Planned Local Flood Management Projects

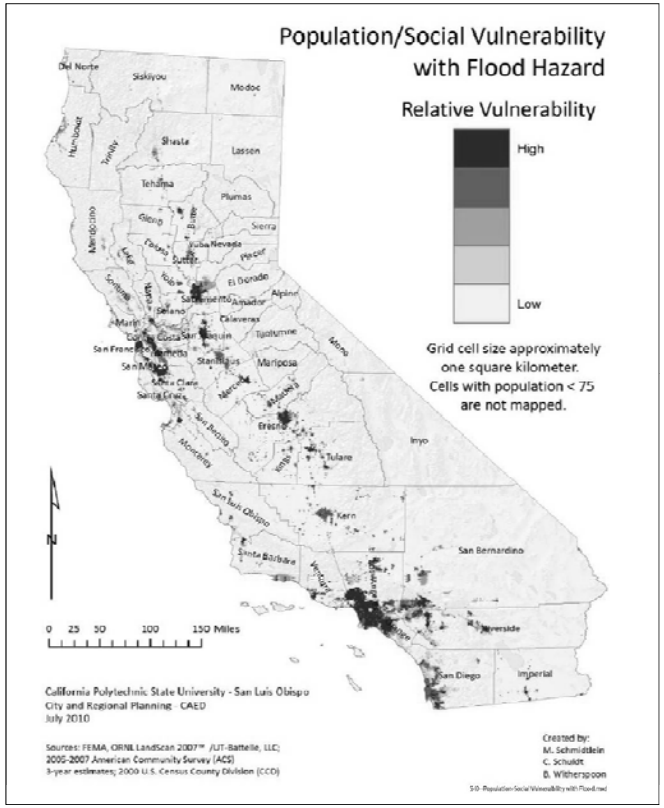
# What Are the Types of Flood Threats?

- What are the types of Flood Hazards?
  - Alluvial, Coastal, Banked Rivers, Deep Floodplain, etc
- How significant is the hazard?
- What are the Exposure Types?
- Where Are the Hazards?



# What's at Risk?




- People - Life Safety
- Property and Assets - Economic
- Natural Resources
- Cultural Resources

# Flood Exposure Summary

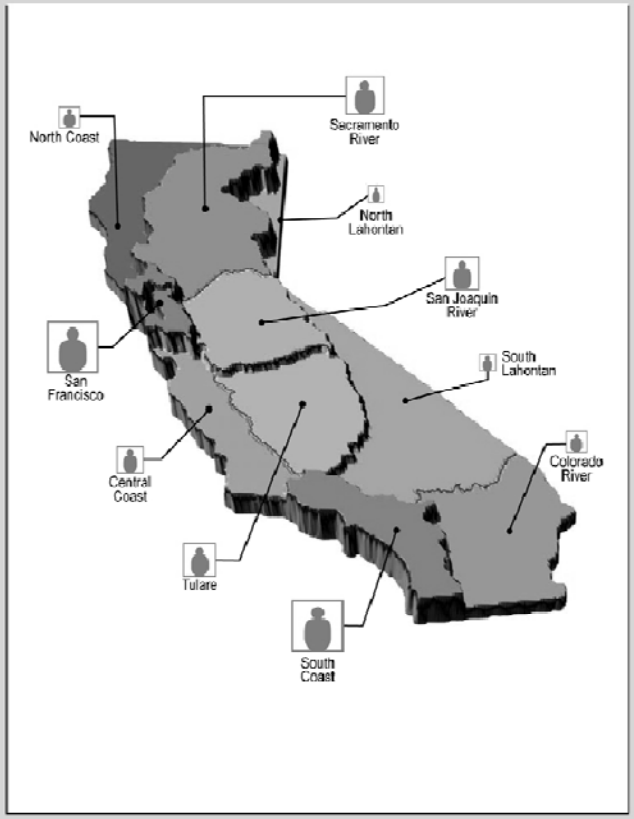
Identify Flood Risks in California → Explore Options to Address Risk → Develop Recommendations

- Flood Exposure Analysis Focused on:
- 100-year and 500-year floodplains
- Exposure of people, assets (structures and crops), and critical facilities

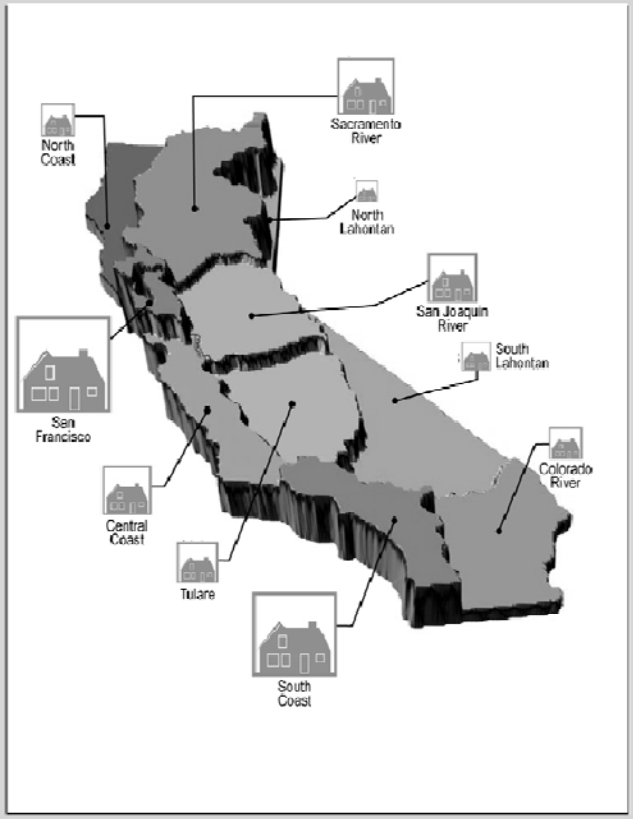
# Flood Exposure Summary

Identify Flood Risks in California → Explore Options to Address Risk → Develop Recommendations

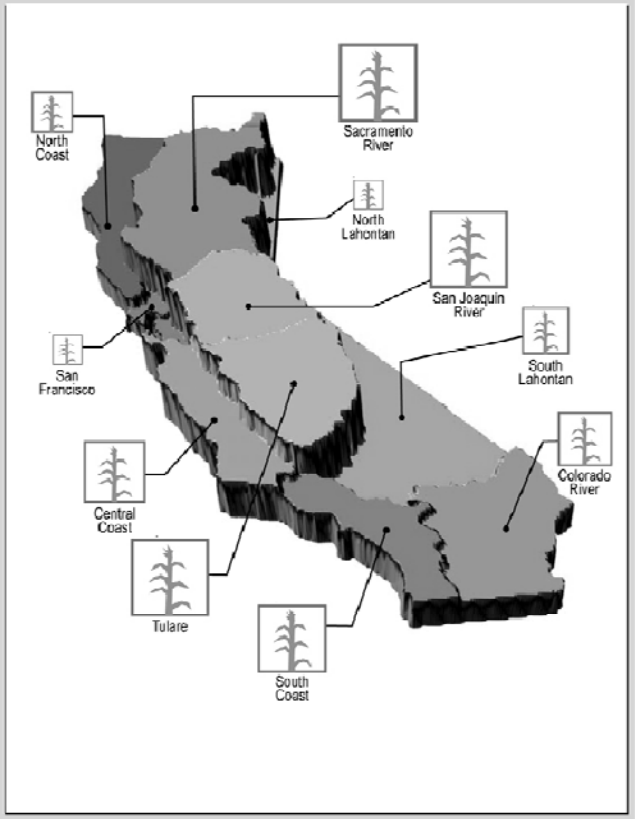
**Population Exposed by CWP Hydrologic Region**




**Value of Exposed Structures and Contents by CWP Hydrologic Region**




**Value of Exposed Agricultural Crops by CWP Hydrologic Region**

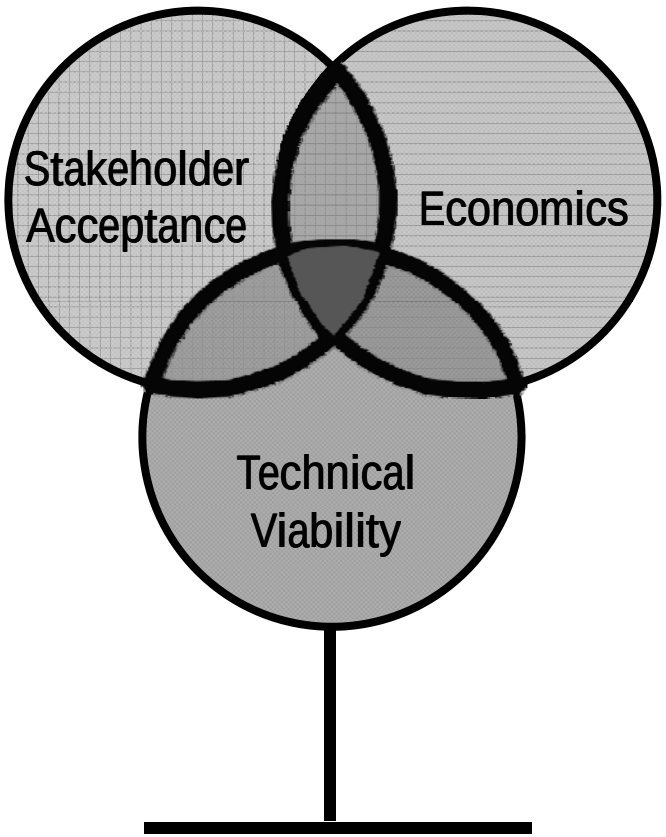



NOTE: Graphics are for illustrative purposes only

# Explore Options to Address Risk

- Integrated Flood Management Statewide
- Identify Planned Local Projects
- Better Integrate FM with Other Water Resource Benefits

# Integrated Flood Management




**IFM SOLUTIONS**

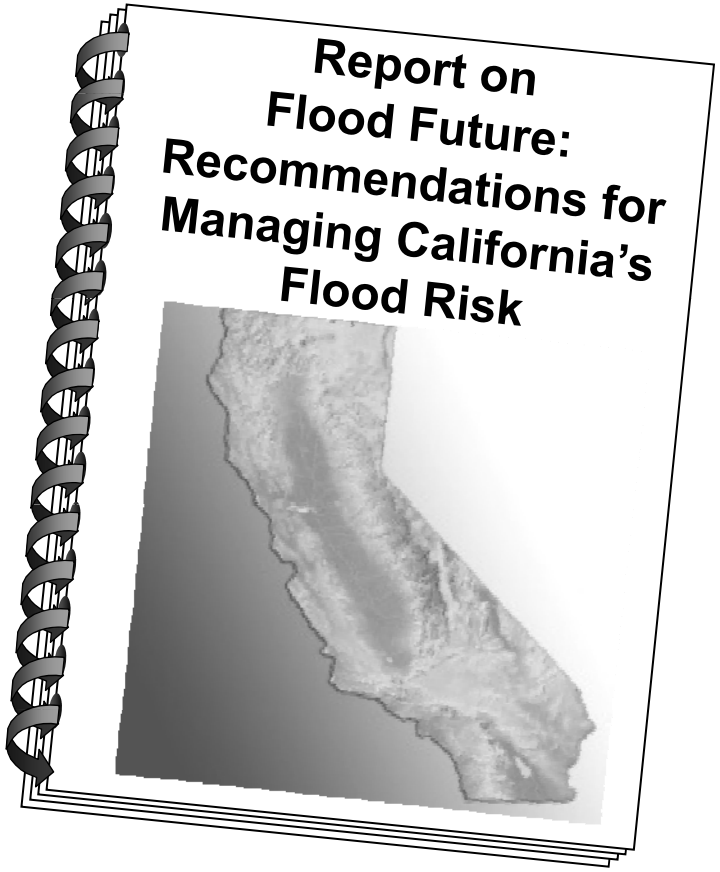
- Recognizes the connection of flood management actions to :
  - Water resources management
  - Land use planning
  - Environmental stewardship
  - Sustainability
- Uses a multi-faceted approach
  - Structural
  - Nonstructural
  - Natural watershed functions using other resource management strategies
- Recognizes the importance of:
  - Evaluating opportunities and potential impacts from a system perspective
  - Importance of coordinating across geographic and agency boundaries

# Flood Future Financing Strategy :

- Coordinate planning in cooperation with local and federal entities
- Interconnect IRWM and Flood Management
- Articulate the State's appropriate role

# Develop Recommendations

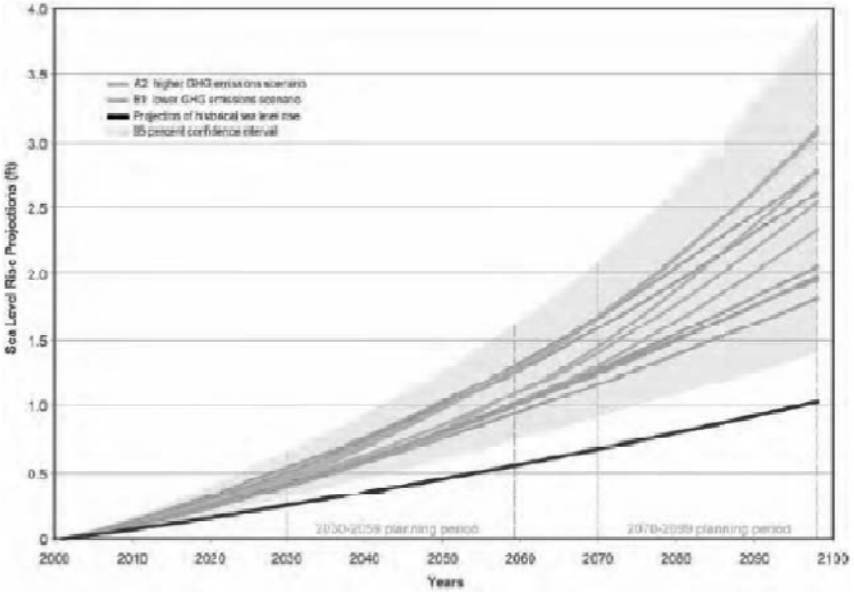
- "Big Picture" (high level) recommendations
- Policy: federal, state, local
- Legislative
- Financial
- Institutional
- Other



# Climate Change in the Flood Future Report

## QUALITATIVE DISCUSSION

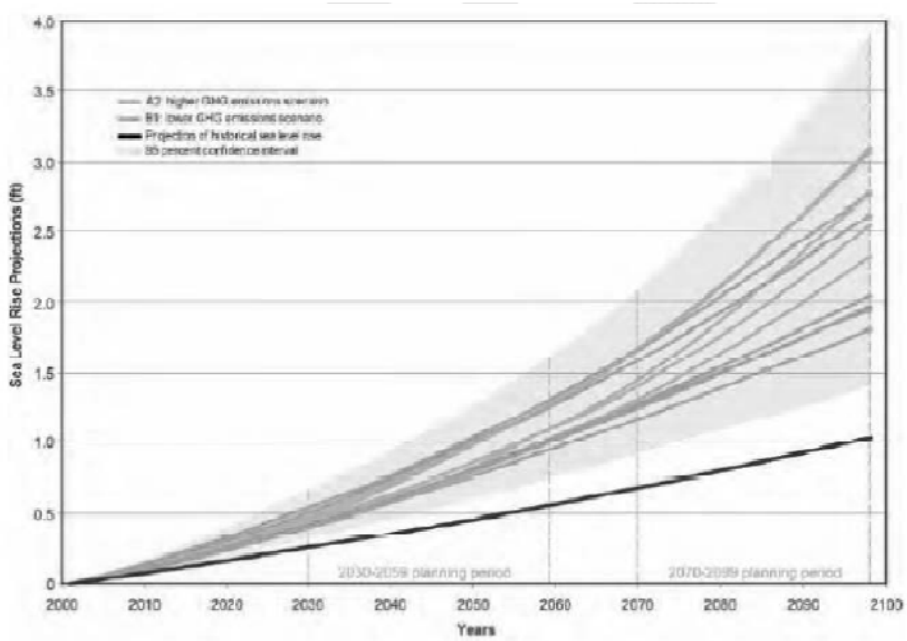
- Local flood management agencies need help addressing climate change impacts
- Climate change and sea level rise would exacerbate flood risk
- Existing tools and available information oriented towards water supply rather than flood events



# Climate Change in the Flood Future Report

## RECOMMEDATIONS

- Improve information/data/tools
- Future planning to include climate change and sea level rise



# 2012 Flood Future Report Milestones

- Public Review Draft: May 2012
- Final Flood Future: October 2012

# Statewide Integrated Flood Management Program

## CONTACT INFORMATION

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