

# California's Flood Future

Recommendations for  
Managing the State's Flood Risk

Presentation to  
California Water Commission  
October 17, 2012

# Report Purpose

- Promote understanding of flood problem statewide
- Make recommendations for managing flood risk
- Guide decisions about:
  - Policies
  - Financial investments



# Flood Planning Hierarchy

- **California Water Plan**
  - **Statewide Flood Mgmt. Planning—Flood Future Report**
    - **Central Valley Flood Mgmt. Plan**
      - **Regional and Local Plans**
        - » **Individual Projects**



# California's Flood Future Report

- Unprecedented effort
  - Statewide coverage
  - Joint collaboration: DWR and USACE
- In consultation with:
  - Over 140 local agencies
  - County Engineers Association of California (CEAC)
  - FEMA



## OUTLINE

# PROBLEM

1. California is at significant risk for flooding

# SOLUTION

2. Flood Management is a key component of IWM

3. 7 Recommendations for

-Short term actions

-Longer term solutions

# Problem

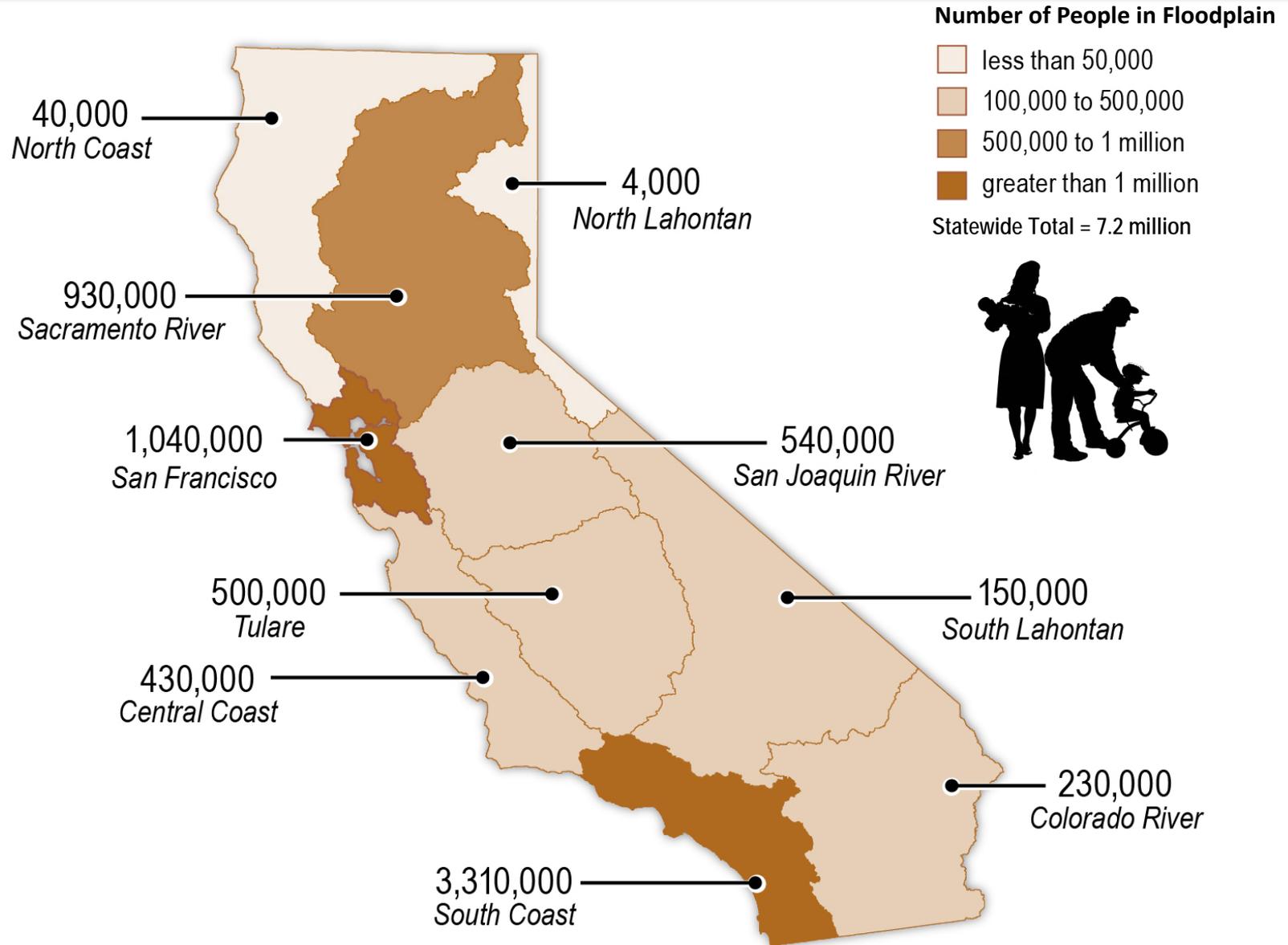


# California is at risk for catastrophic flooding

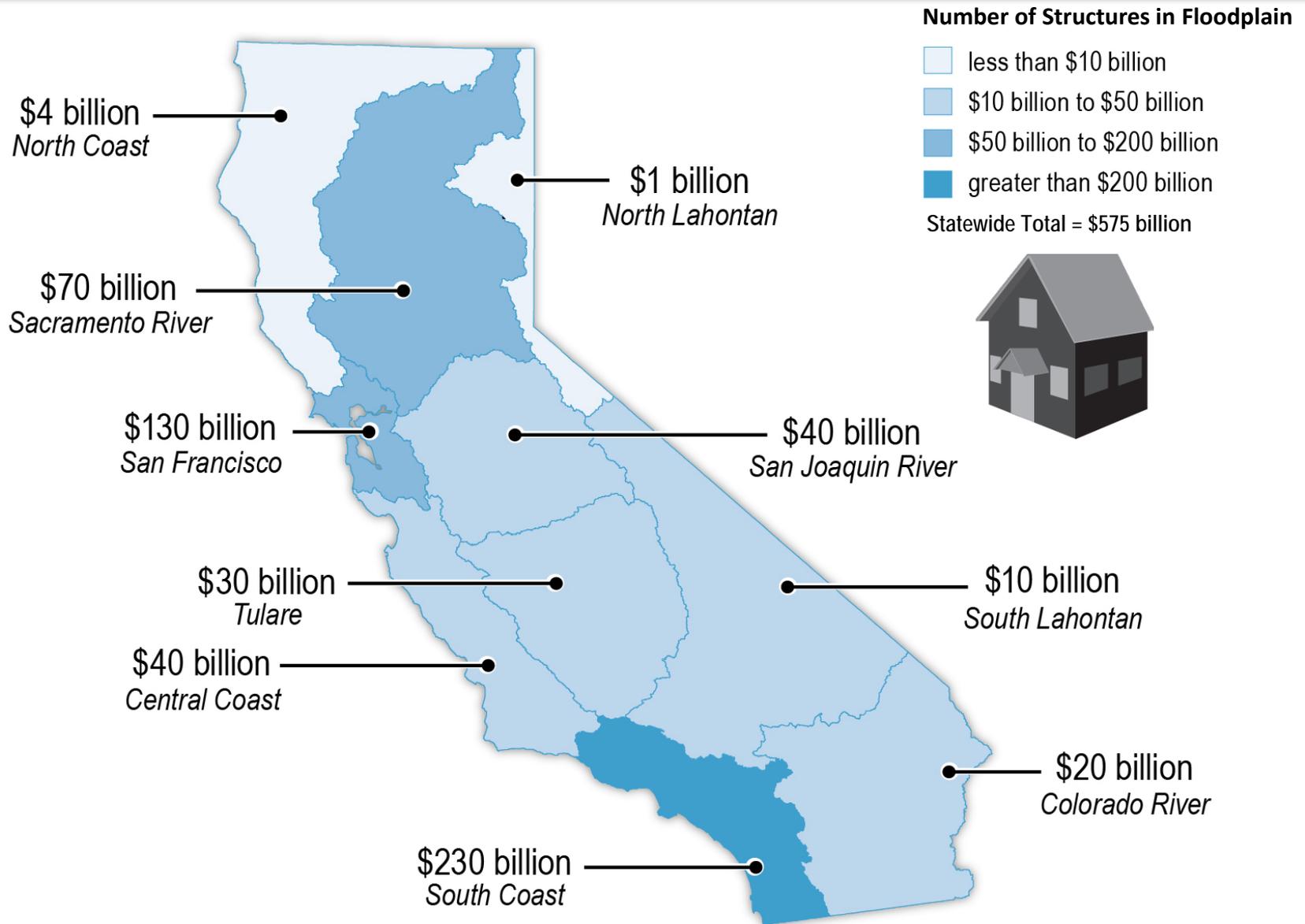
- 1 in 5 Californians are exposed to flooding
- Nearly \$600B in assets are exposed to flooding
- Major flooding in all counties
- Critical infrastructure out of service for long periods of time



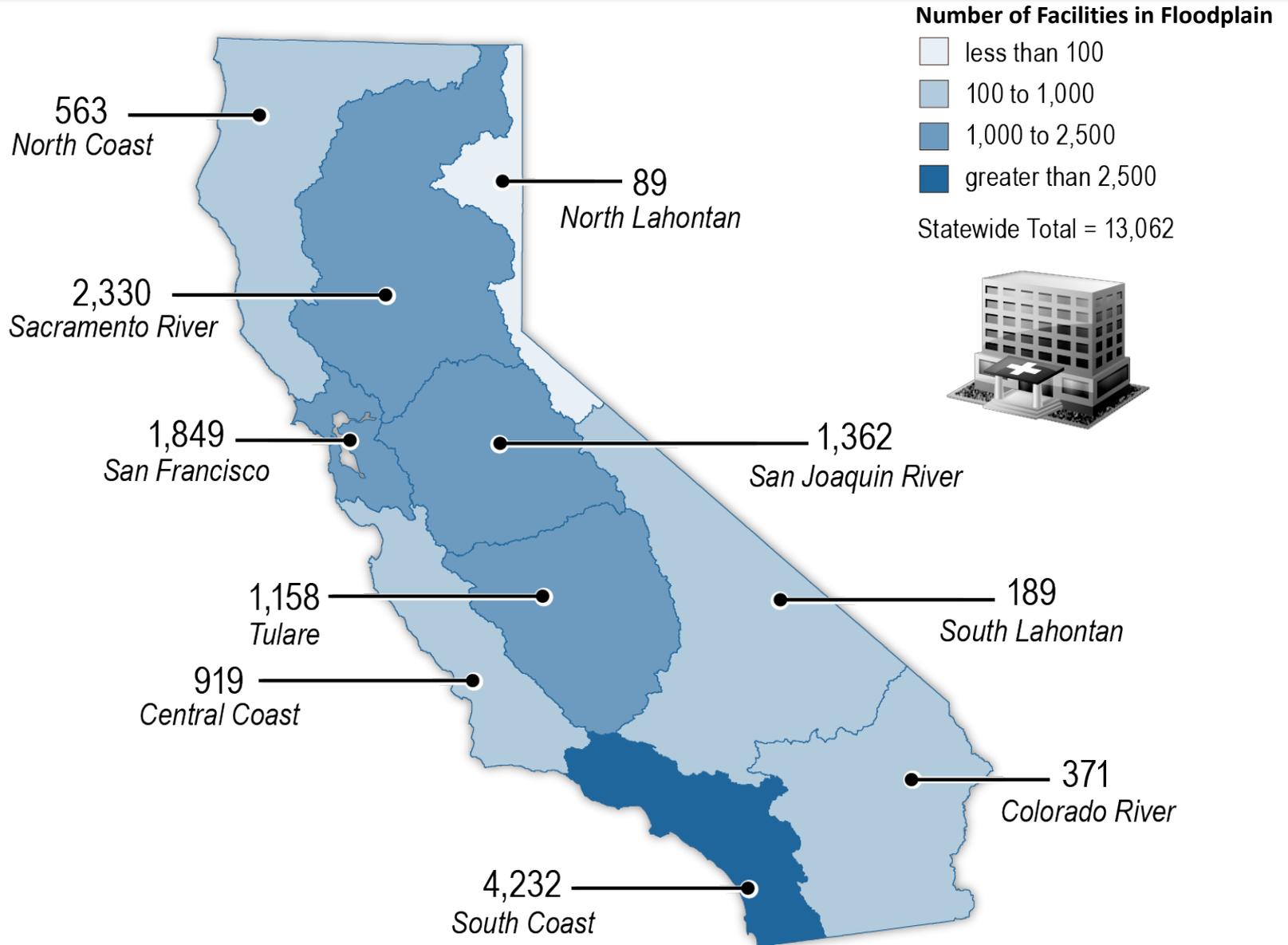
# 7.2 million Californians live in floodplains



# \$575 billion in structures are at risk



# Thousands of critical facilities are in floodplains

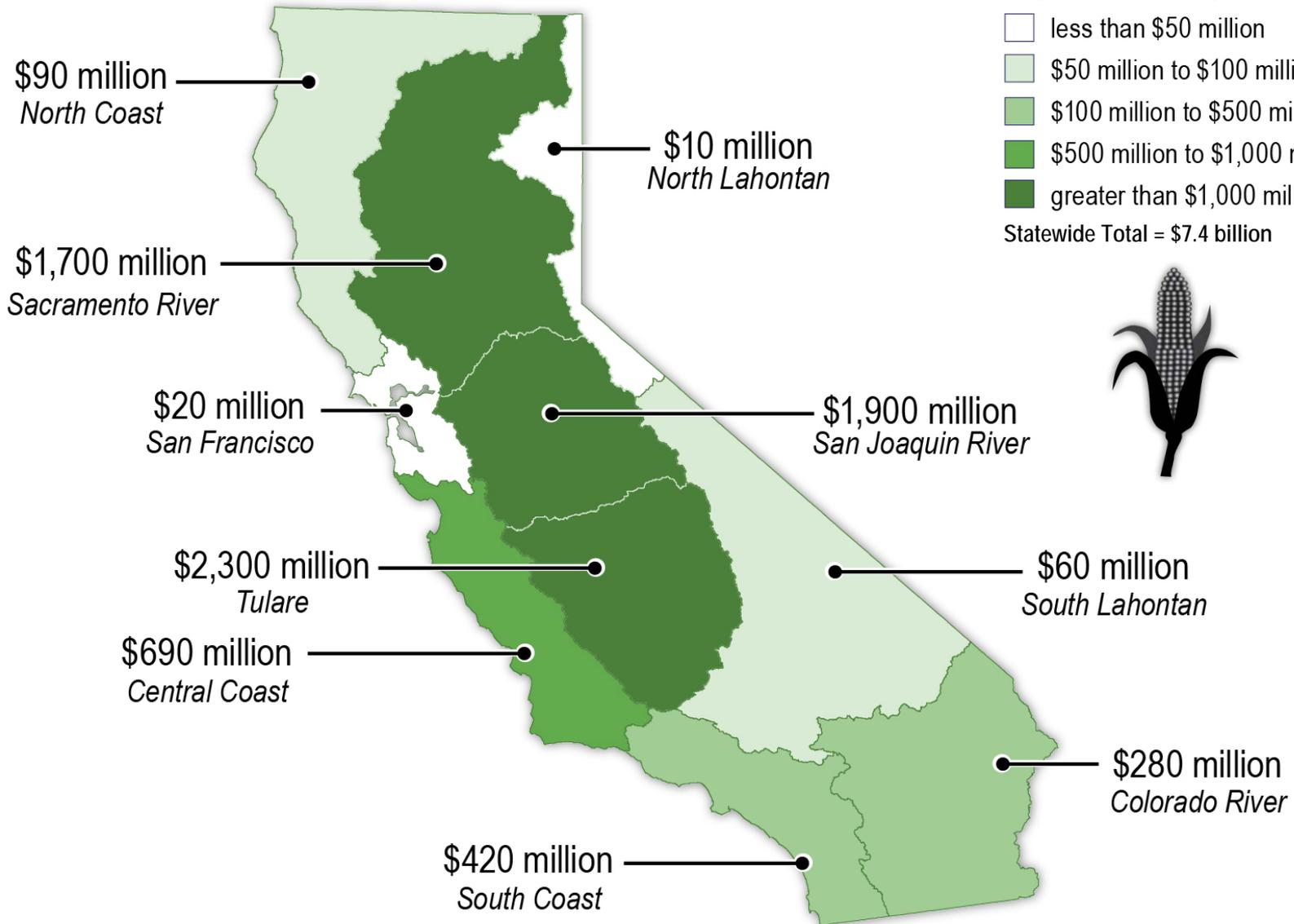


# California's agricultural economy is at risk

## Crop Value in Floodplain

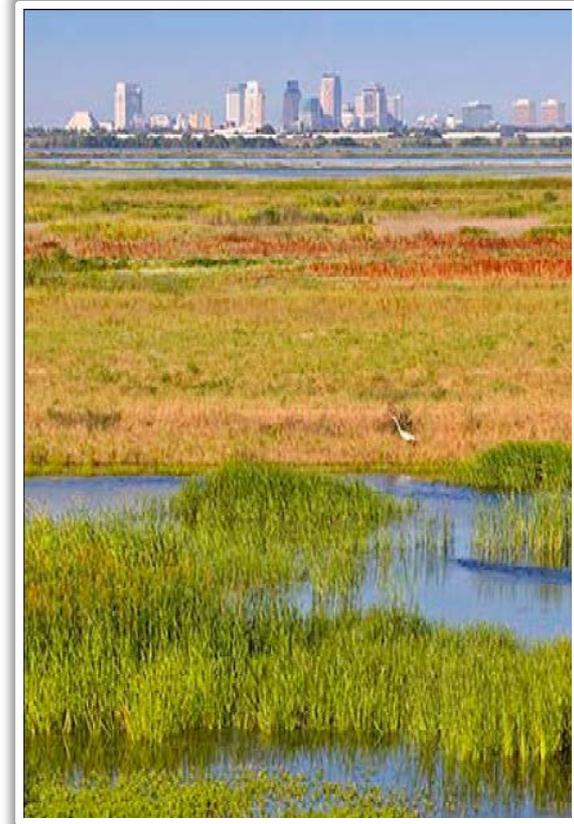
- less than \$50 million
- \$50 million to \$100 million
- \$100 million to \$500 million
- \$500 million to \$1,000 million
- greater than \$1,000 million

Statewide Total = \$7.4 billion



# Additional Factors

- Sensitive Species live in floodplains
- Flood Mgmt authority is fragmented and complex
  - *over 1350 agencies statewide*
- Complex array of existing flood infrastructure
  - *11,000 miles of levees*
  - *Over 600 debris basins*
  - *Over 1,700 dams, 36 major reservoirs*



# Flood infrastructure does not meet current and future needs

More than 900 projects identified statewide

- 20% do not have cost estimates
- \$30 to \$50 billion improvements and projects
- Will not provide a 100-year level of protection statewide



# Flood funding is limited and unreliable

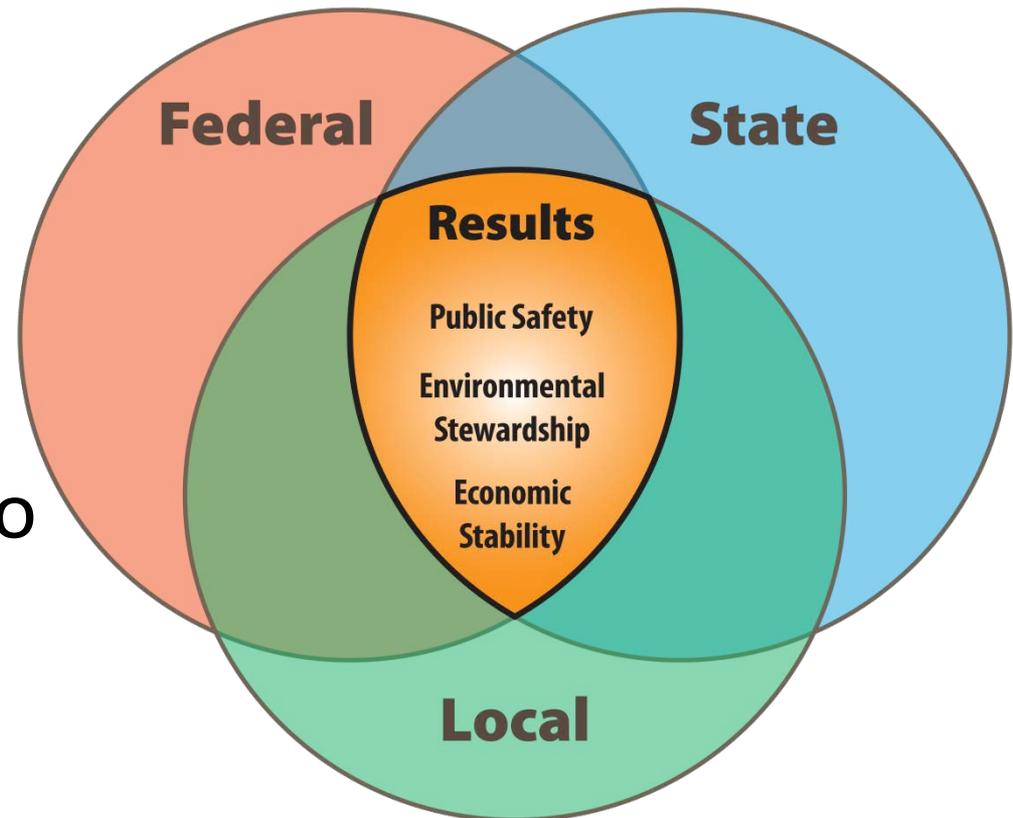
- Inconsistent and insufficient funding
- Declining local resources
- Reduced Federal cost shares
- Challenging revenue structure
- Cost of flood management misunderstood by public and policy makers



# Solution

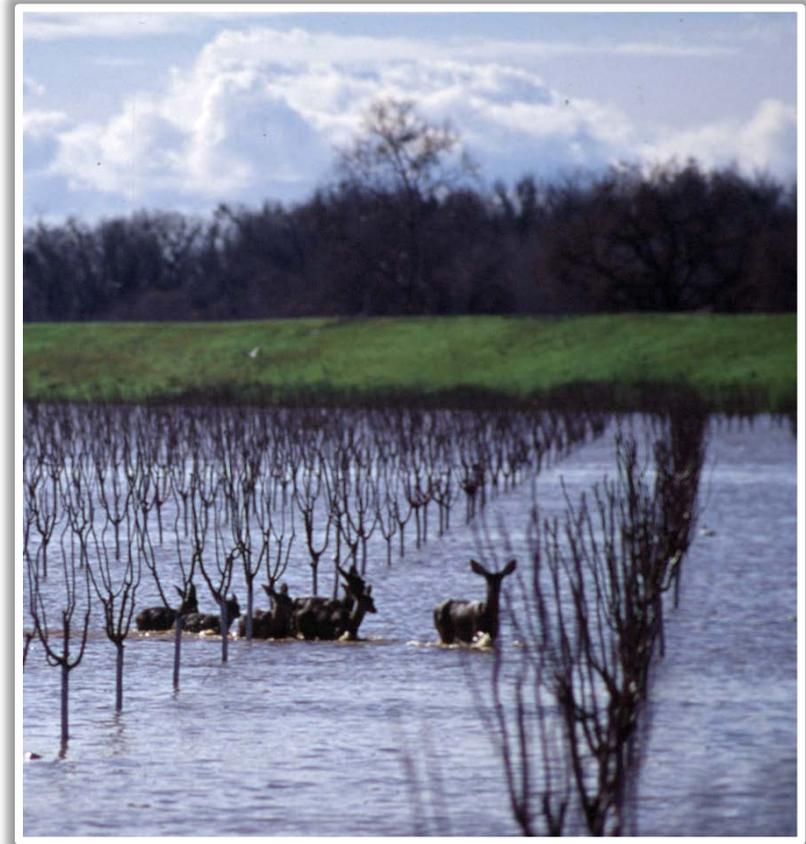
# Flood Management using an Integrated Water Management Approach

IWM is a strategic approach that combines specific flood management, water supply, and ecosystem actions to deliver multiple benefits



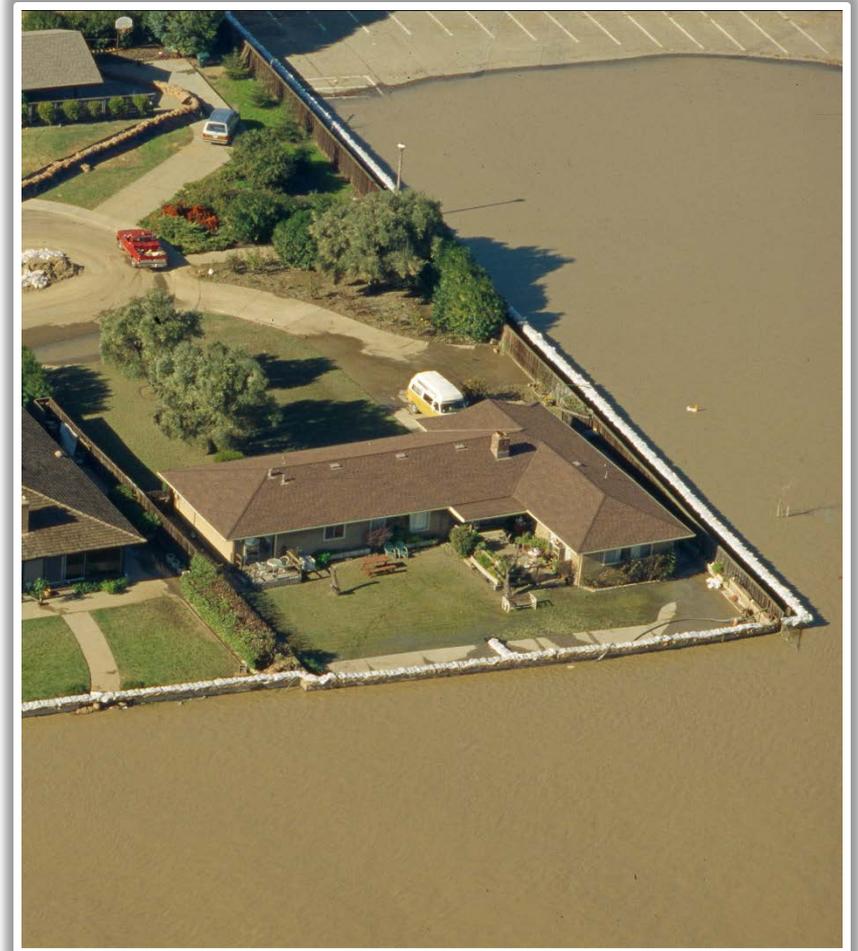
# Recommendation 1

1. Conduct regional flood risk assessments to understand statewide flood risk



# Recommendations 4 and 5

- PLANS
3. Encourage land-use planning practices that reduce the consequences of flooding
  4. Conduct flood management from regional, systemwide, and statewide perspectives to provide multiple benefits



# Recommendations 6 and 7

- ACTIONS
6. Increase collaboration among public agencies to improve flood management planning, policies, and investments
  7. Establish sufficient and stable funding mechanisms to reduce flood risk



# Recommendations for managing California's flood risk



# We Must Take Action Now

## California's future depends on:

- Agencies at all levels working together
- Implementing policies and projects using an IWM approach
- Stakeholder and policymaker awareness of the cost and consequences of flooding
- Establishing investment priorities and sufficient and stable funding

# For more information:

Terri Wegener: [twegener@water.ca.gov](mailto:twegener@water.ca.gov)

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

