

California's Flood Future

Recommendations for
Managing the State's Flood Risk

Briefing for South Coast Counties

Terri Wegener, P.E., DWR

Kim Gavigan, P.E., USACE

Riverside County FCWCD,
1995 Market Street, Riverside

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Agenda

- Introductions
- *California's Flood Future* Presentation
- Break
- Recommendations Discussion
- Questions & Answers
- Closing Remarks



Introduction

Report Purpose

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



California's Flood Future: Release Schedule

- Public Drafts Released on April 3:
 - California Flood Future Highlights
 - Flood Future Report
 - Technical memoranda
 - Comments due May 20
- 9 regional meetings statewide



Introduction

DWR Flood Planning

- Central Valley
 - CVFPP
- Statewide
 - Flood Future Report
 - California Water Plan



Introduction USACE

South Pacific Division Flood Plain Management Services Authority Program

- Compile/share flood hazard information
- Provide technical and planning advice

USACE Participation does not include:

- Advocating for taxpayer funding
- Advocating for additional USACE authority

Consistent with USACE Civil Works Strategic Plan 2011-2015

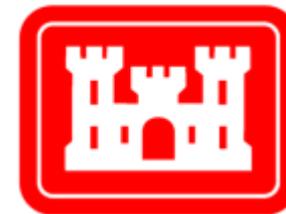


Flood Future Report Process



NORTH LAHONTIAN • Alpine County • Lassen County • City of Susanville • Susanville Ranchlands • Mono County •

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US Army Corps of Engineers ®

California is at risk for catastrophic flooding!

- Devastating impacts to California and the nation
- 1 in 5 Californians are exposed to flooding
- \$580B in assets are exposed to flooding
- Every county has experienced a Federally declared flood disaster in the last 20 years





The Problem

California experiences many types of flooding



Flood risk is defined using these factors:



Hazard

What causes harm?



Performance

How will the system react?



Exposure

Who and what can be harmed?



Vulnerability

How susceptible to harm?



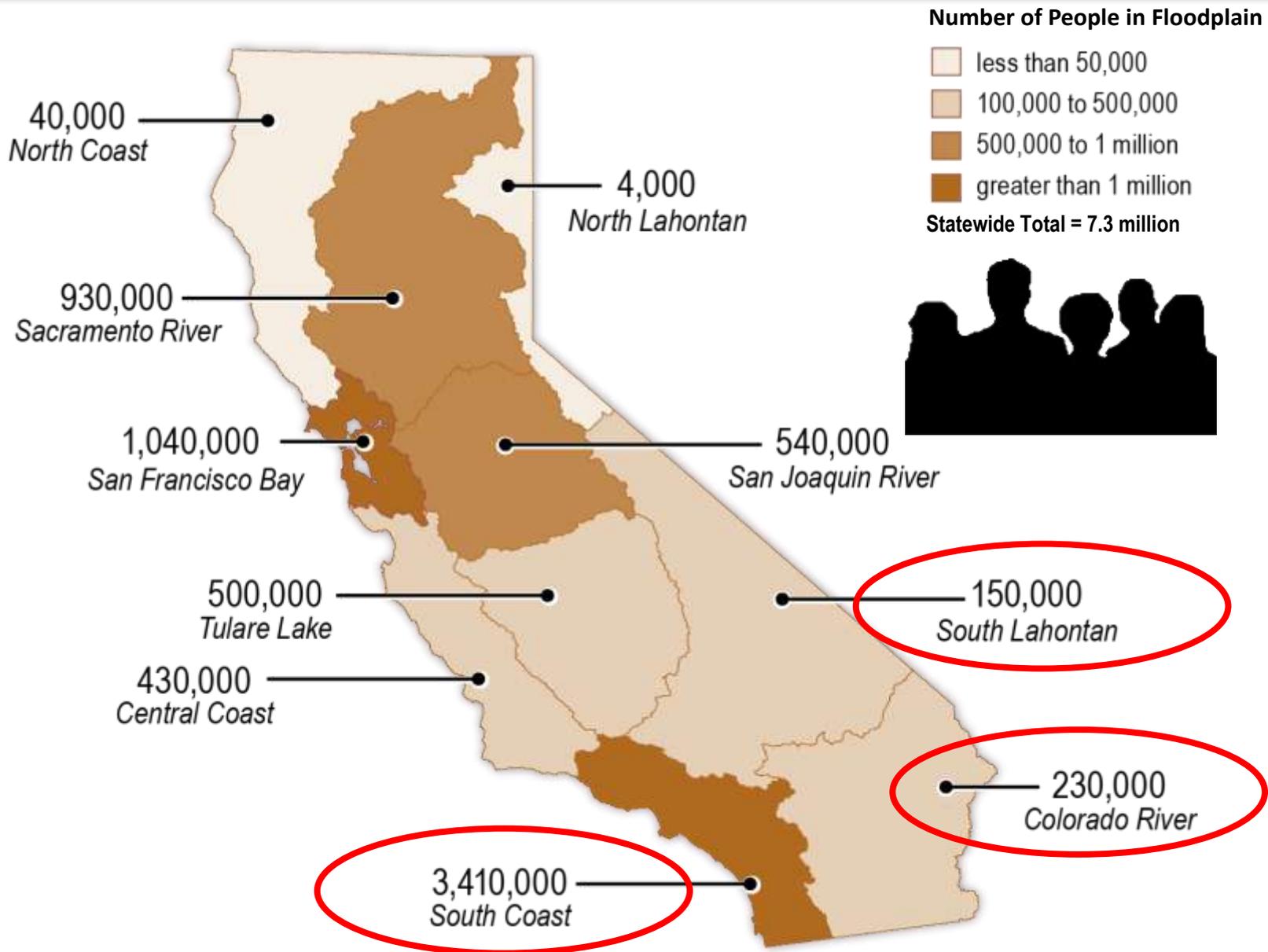
Consequence

How much harm?

Inundation Risk

Likelihood and severity of adverse consequences

7.3 million Californians live in floodplains

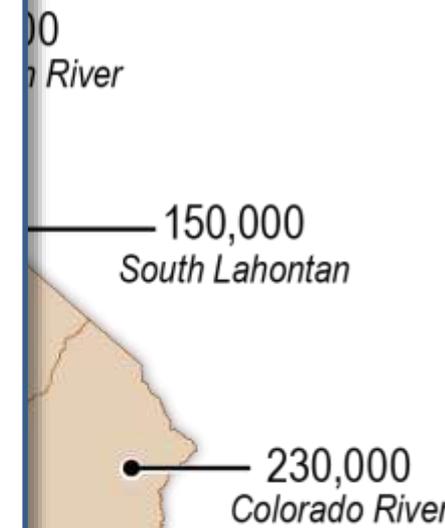
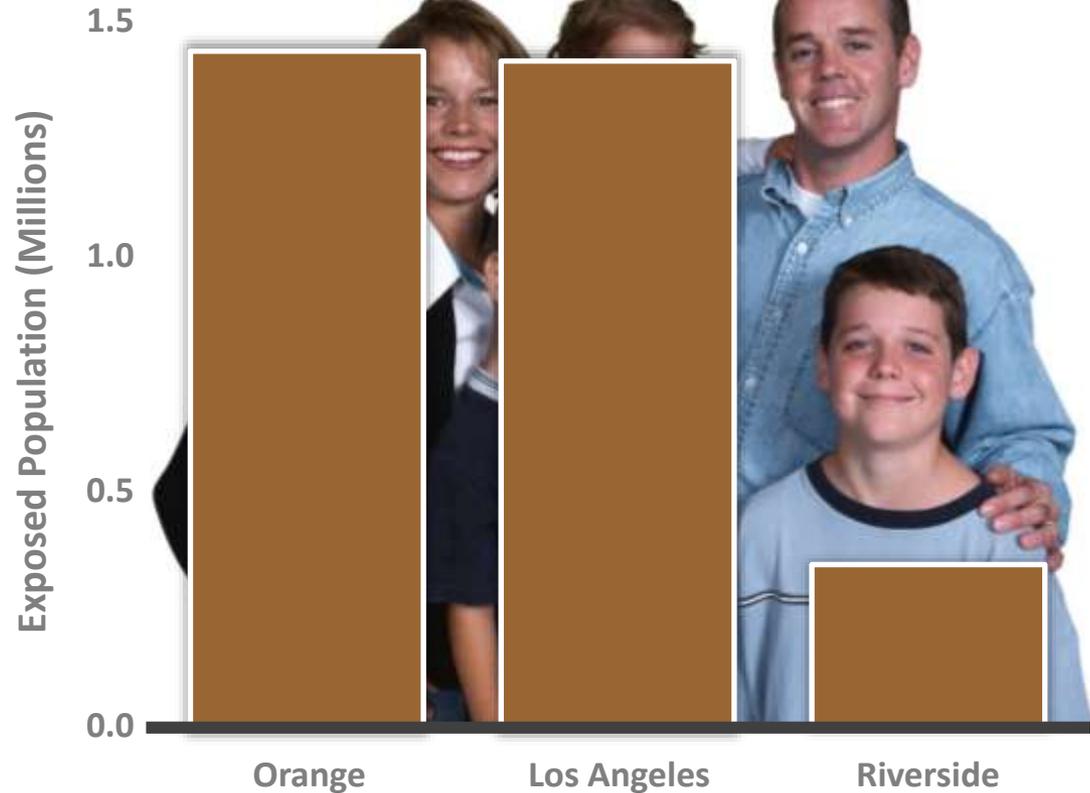


7.3 million Californians live in floodplains

Number of People in Floodplain

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

Statewide Total = 7.3 million

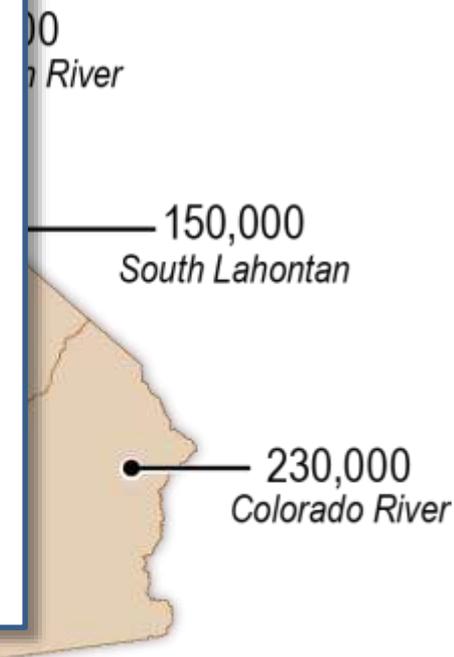
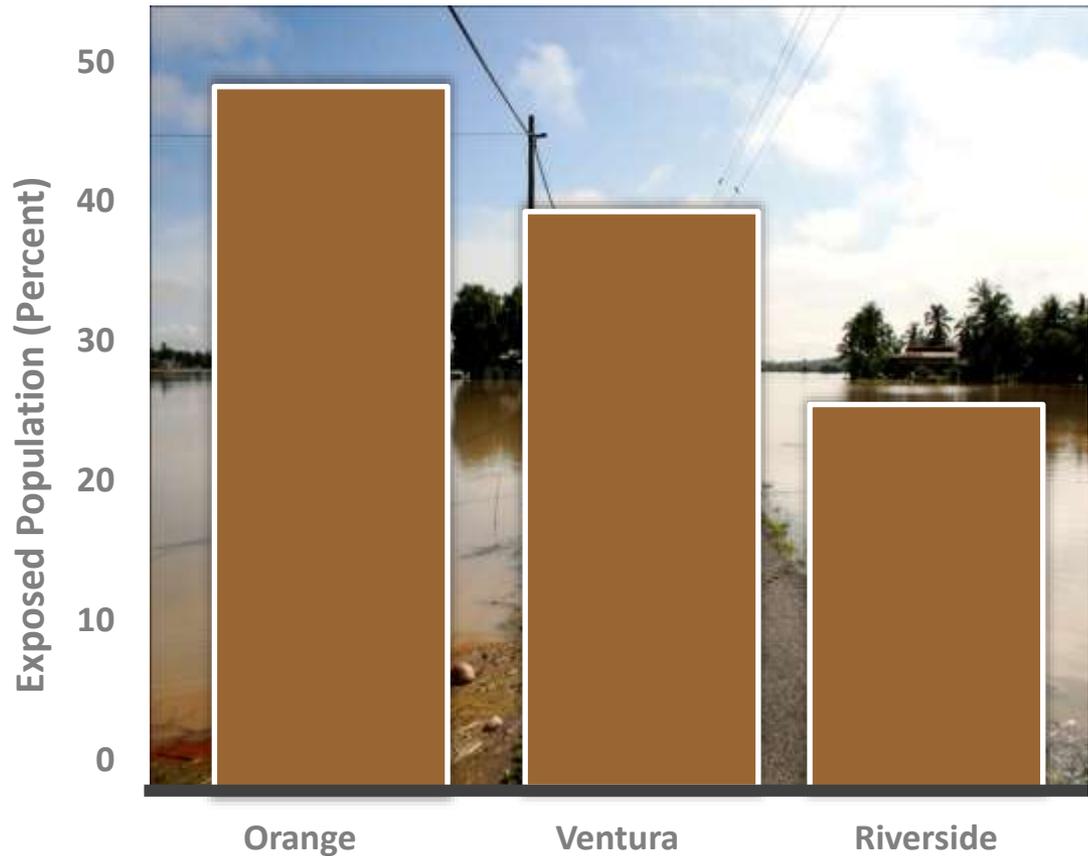


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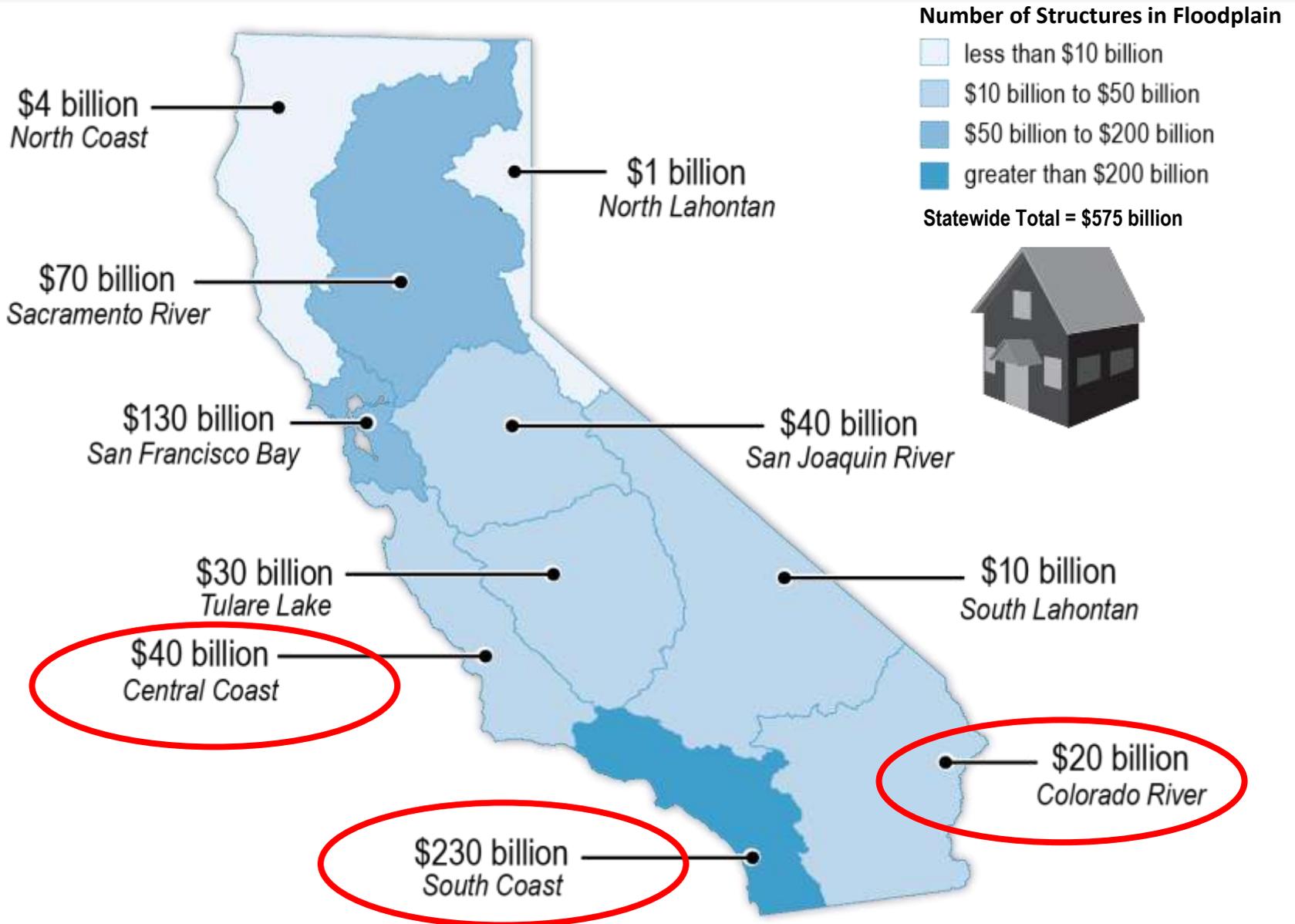
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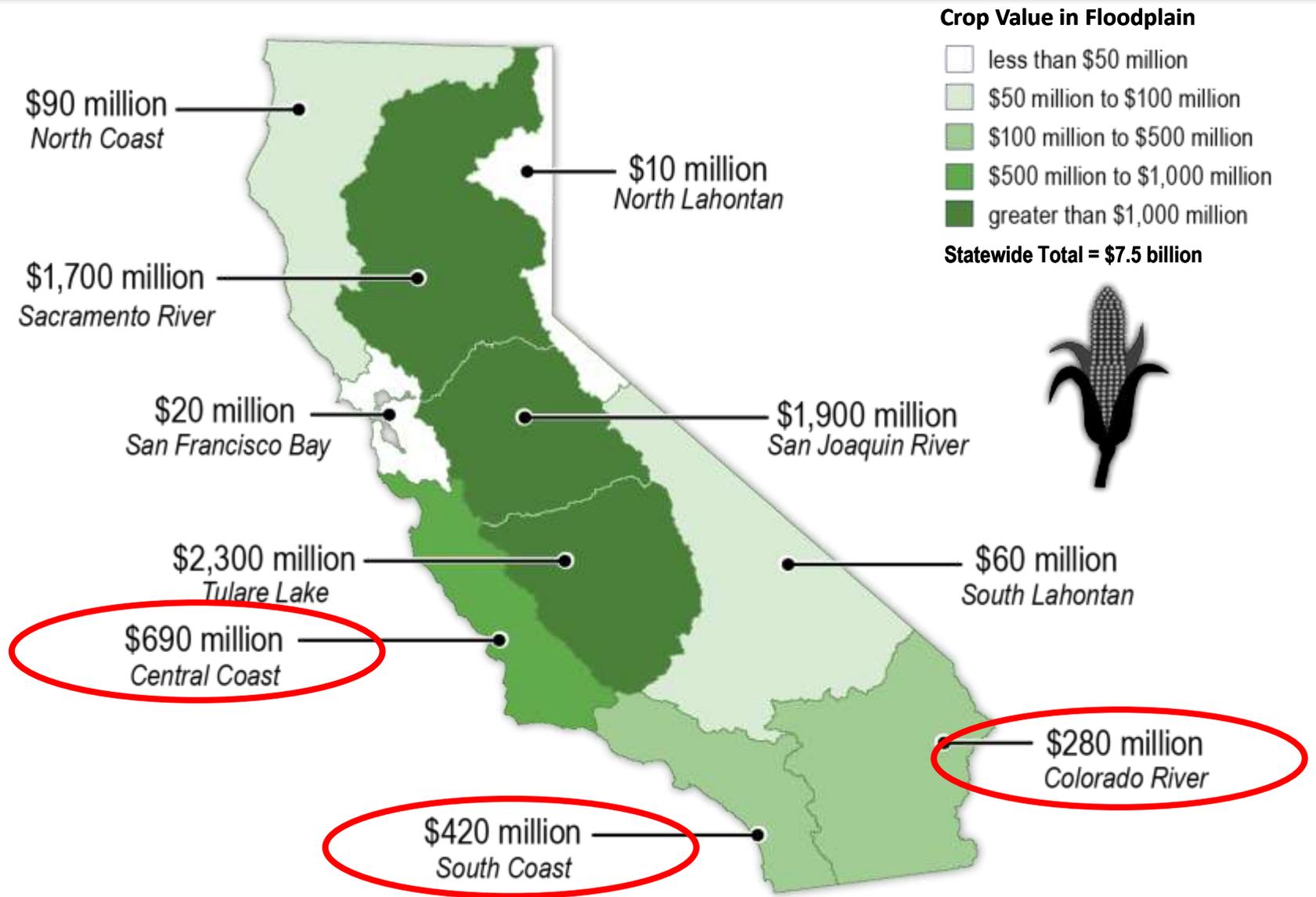
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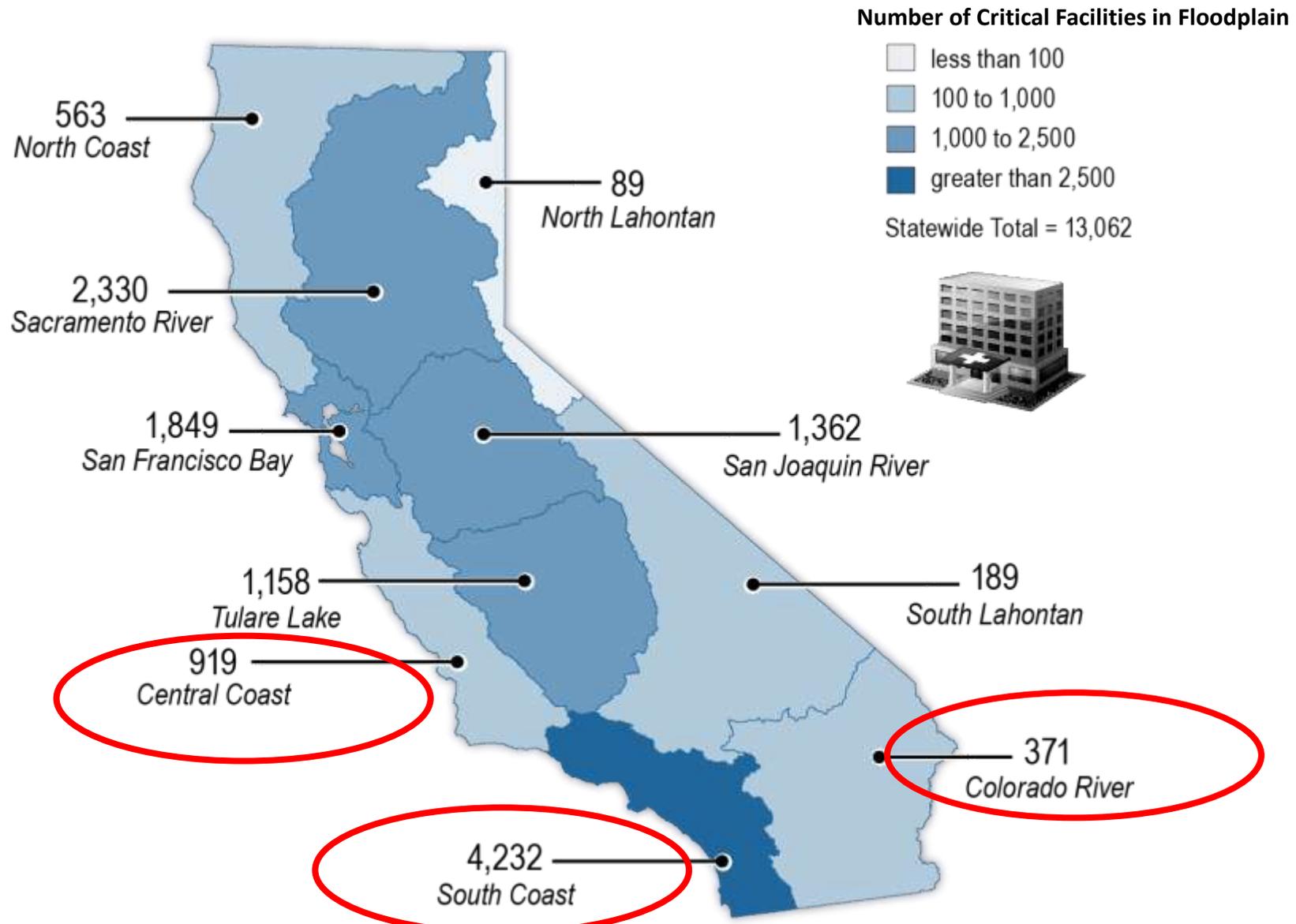
\$575 billion in structures are at risk



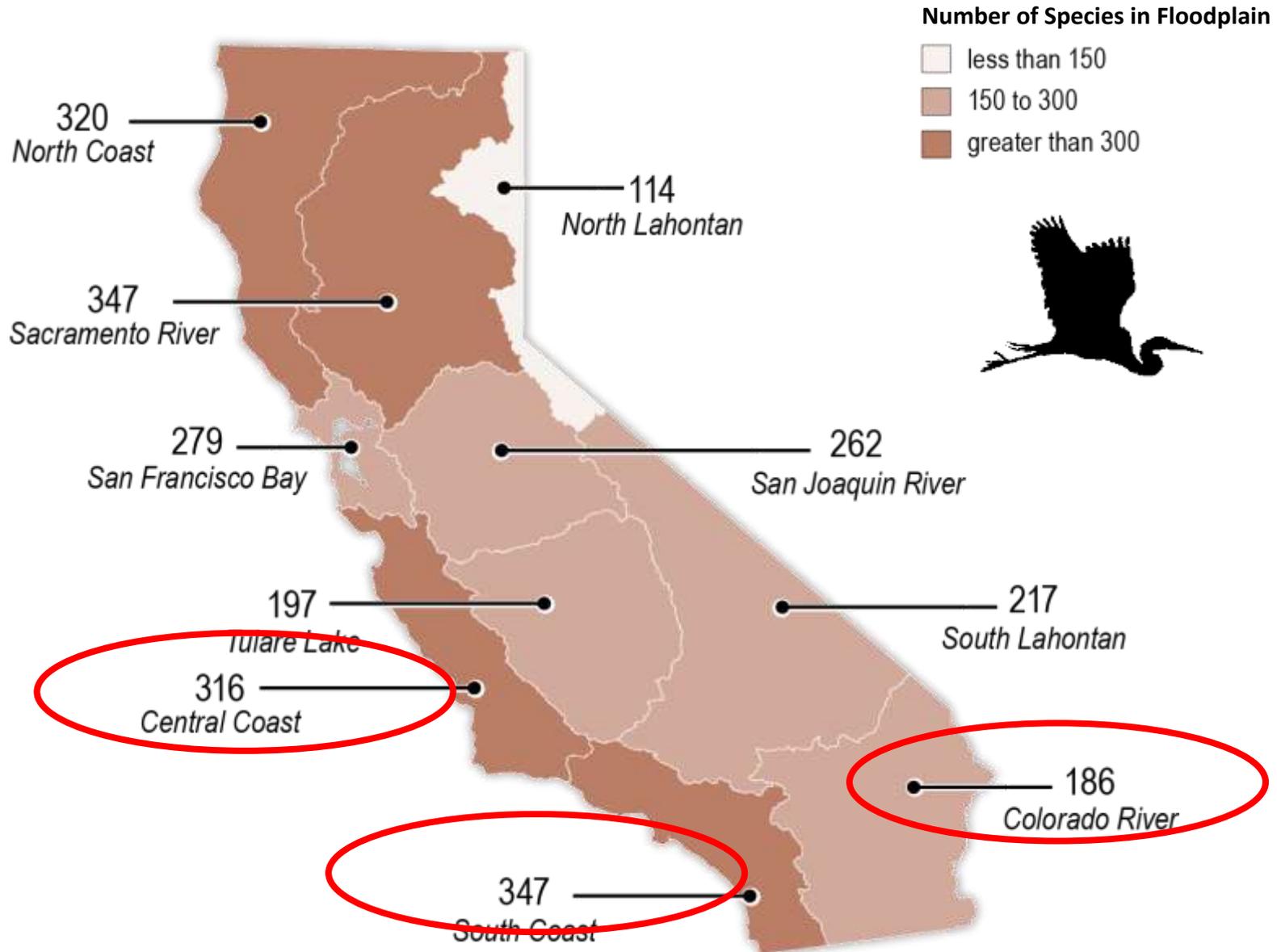
California's agricultural economy is at risk



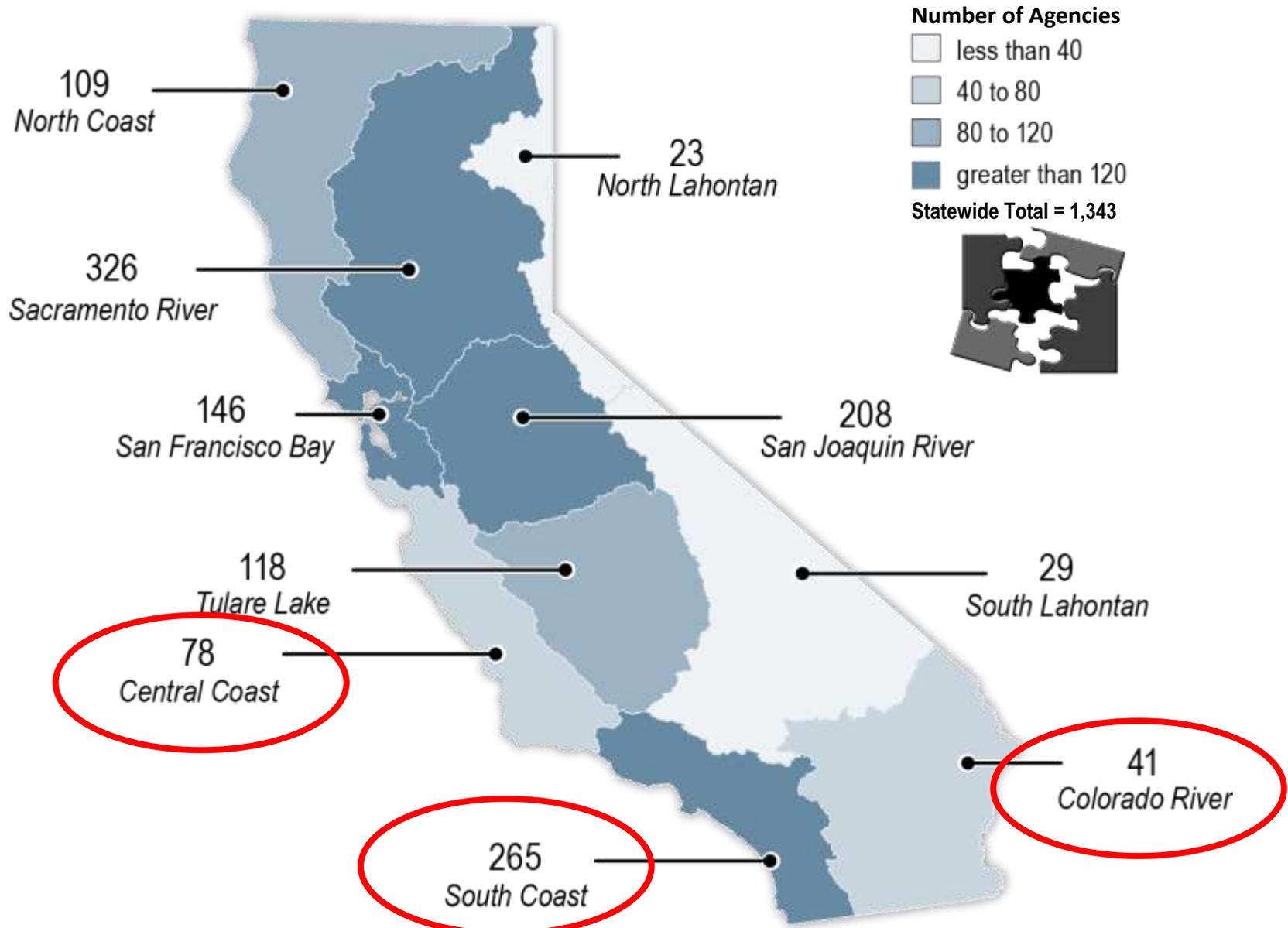
Critical facilities are at risk



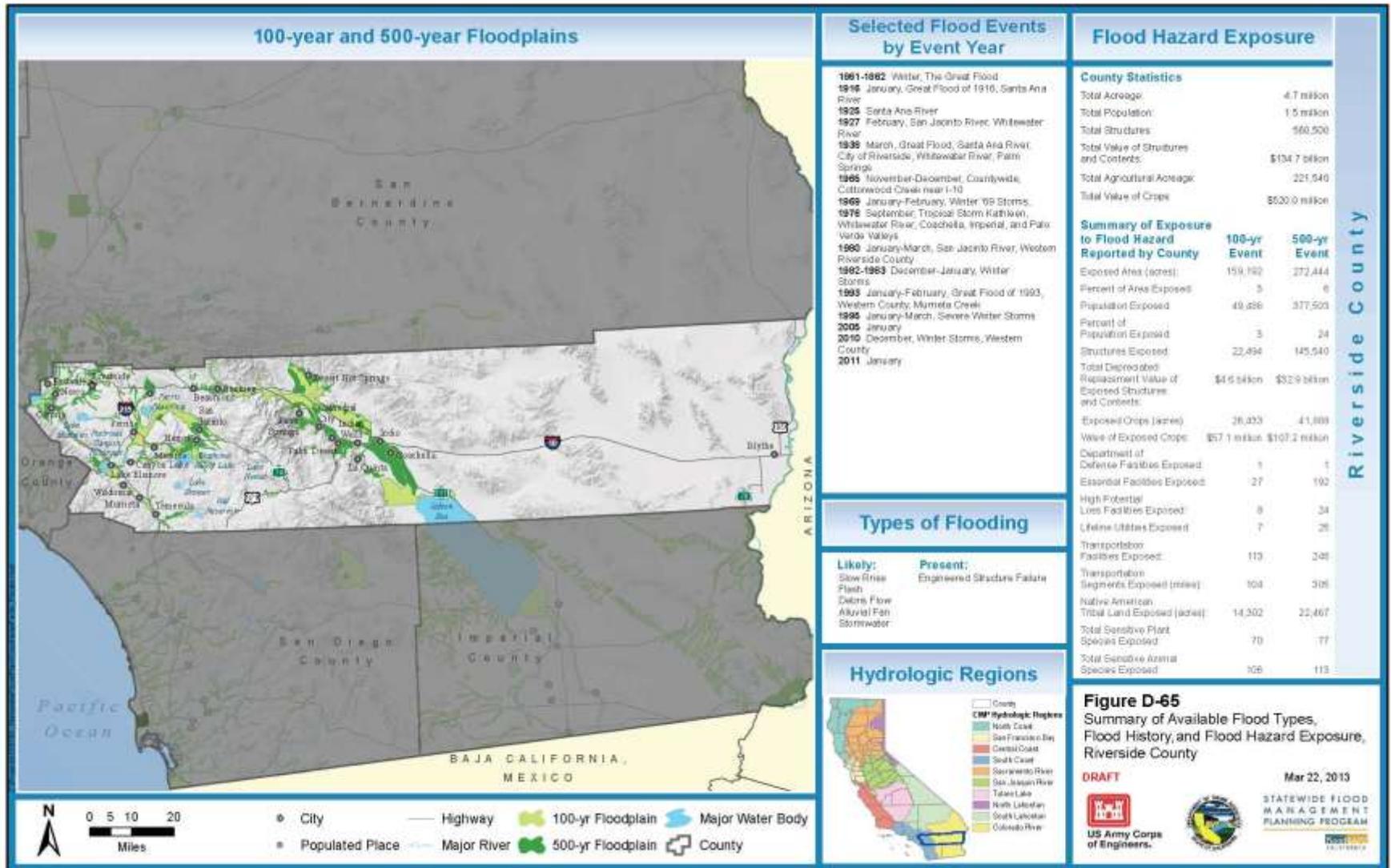
Floodplains are rich in environmental resources



Flood management authority is complex and fragmented



County mapbook example



DISCLAIMER: The CWRP does not warrant or guarantee the accuracy of the displayed floodplain extents and content.

Local agencies speak out

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- Inadequate data
- Limited understanding by Public and Policymakers
- Emergency management coordination
- Inconsistent land use planning
- Fragmented responsibility
- Conflicting permit requirements
- Unstable funding

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





The Solution

Solutions must use an “Integrated Water Management” approach

- Combines flood management, water supply, and ecosystem actions
- Regional and systemwide approach
- Collaboration and cooperation
- Array of funding sources



Recommendation

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



Recommendations

2. Increase public and policymaker awareness about flood risks to facilitate informed decisions.
3. Increase support for flood emergency preparedness, response, and recovery programs to reduce flood impacts.



Recommendations

PLANS

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



Recommendations

PLANS

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.



We Must Take Action. Now.

California's future depends on:

- Local, State, Federal, and tribal agencies working together
- Implement policies and projects using an IWM approach
- Increase awareness of the cost and consequences of flooding
- Establish investment priorities and sufficient and stable funding
- Short-term and long-term action and solutions

SFMP Website

For More Information about California's Flood Future : <http://www.water.ca.gov/SFMP>



One In Five Californians Are Exposed To Flooding

Over the last 60 years, California has experienced more than 30 major flood events, resulting in more than 300 lives lost, more than 750 injuries and billions of dollars in disaster claims.

Today, more than 7 million Californians, or one in five, live in the 500-year floodplain, and approximately \$580 billion in assets (crops, structures, and public infrastructure) are exposed to flooding. This estimate does not include the impacts of future development, population changes, climate change, or costs due to loss of major infrastructure and critical facilities, as well as losses to State commerce.

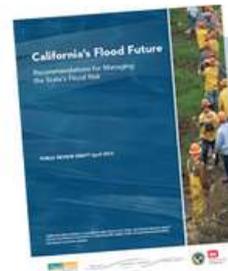
With many more structures per square mile in our urban areas, California would likely see much higher recovery costs from a major storm than the \$110 billion that has been spent on recovery from Hurricanes Katrina and Rita.

Flood disasters are an unfortunate reality in California, which is why DWR's Statewide Flood Management Planning (SFMP) program works with organizations across the State to develop flood management policies and guide financial investments to protect people and property from flooding.

The newly released public review draft of *California's Flood Future: Recommendations for Managing the State's Flood Risk* report, developed in partnership with the U.S. Army Corps of Engineers, is a comprehensive look at flooding throughout the State and makes recommendations for future actions to reduce flood risk.

DWR is accepting written comments on the public review draft of *California's Flood Future: Recommendations for Managing the State's Flood Risk* until 5 p.m. on Monday, May 20, 2013. Comments may be submitted electronically by sending them to sfmp@water.ca.gov or provided at any of the scheduled regional workshops.

California's Flood Future was developed as a companion plan to the California Water Plan Update 2013. To learn more about how *California's Flood Future* findings and recommendations are used, visit [Flood in California Water Plan](#).



California's Flood Future:
The public review draft of *California's Flood Future: Recommendations for Managing the State's Flood Risk* is available now. [Download](#)

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- FLOODING IN CALIFORNIA
- FLOOD FUTURE REPORT
- FLOOD IN CALIFORNIA WATER PLAN
- RESOURCES
- CONTACT THE SFMP

ANNOUNCEMENTS

FFR Public Review Draft Available

DWR released the public review draft of *California's Flood Future: Recommendations for Managing the State's Flood Risk* on April 3, 2013. Comments may be submitted in writing using the comment form via sfmp@water.ca.gov or at any of the scheduled regional workshops until 5 p.m. on Monday, May 20, 2013.

Regional Workshops Scheduled

DWR is holding a series of *California's Flood Future* Statewide Meetings in April and May 2013 to discuss the findings of the public review draft report. View the full workshop calendar.

Questions

Recommendations

1 Conduct regional flood risk assessments to understand statewide flood risk

STOPS

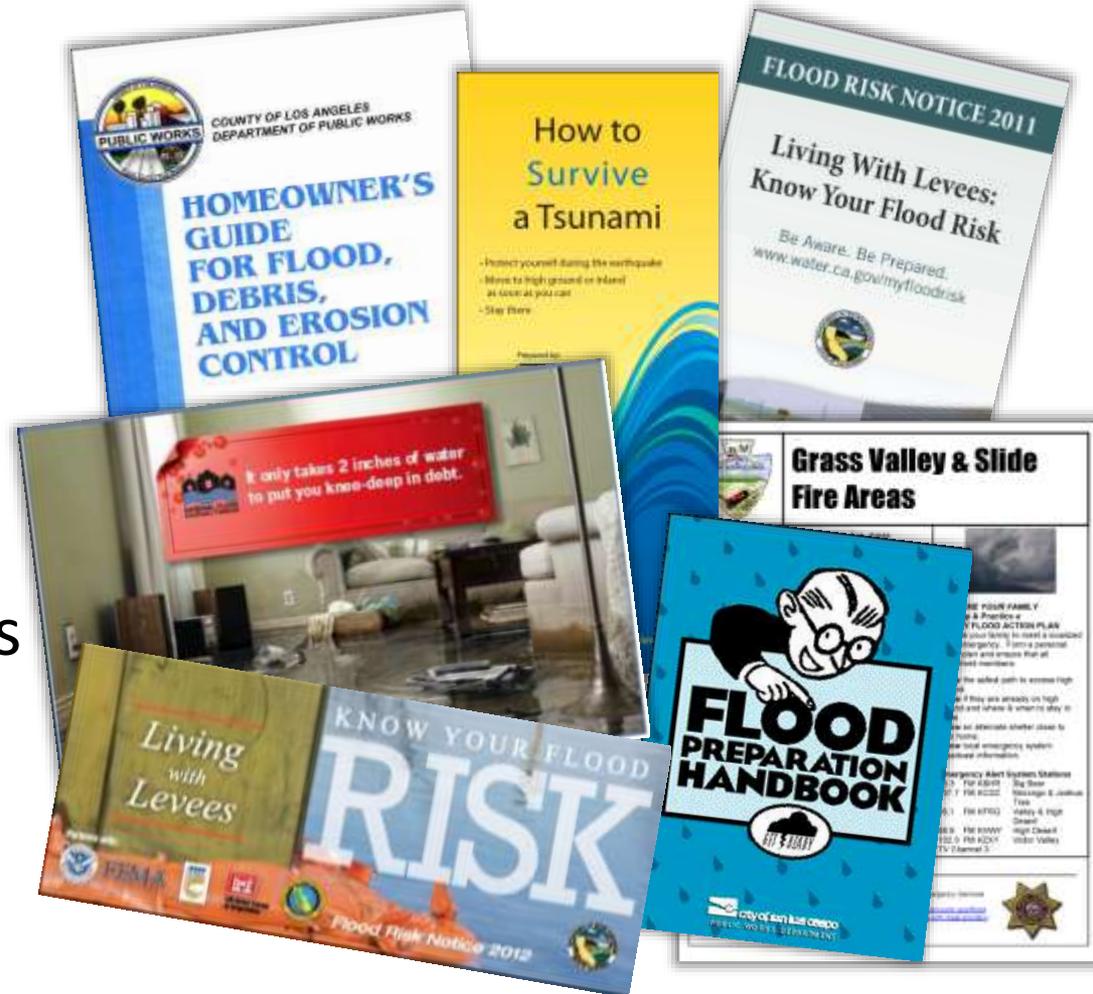
- Identify methods for and conduct regional flood risk
- Set regional flood risk reduction goals
- Identify opportunities to maintain natural systems
- Assess climate change and sea level rise impacts



2 Increase public and policymaker awareness about flood risks to facilitate informed decisions

TOOLS

- Develop consistent messaging
- Provide outreach materials
- Promote Online information resources
- Share data and information



4

Encourage land-use planning practices that reduce the consequences of flooding

PLANS

- Develop planning principles for development in floodplains
- Facilitate coordination and alignment between planners and emergency managers
- Incentivize best management practices



5

Implement flood management from regional, systemwide, and statewide perspectives to provide multiple benefits

PLANS

- Identify regional flood planning areas
- Prioritize flood management projects
- Improve State and Federal Processes
- Coordinate regional water and flood management
- Link funding to an IWM approach



6

Increase collaboration among public agencies to improve flood management planning, policies, and investments

ACTIONS

- Utilize regional working groups
 - *Permits*
 - *Plans*
 - *Implementation*
- Provide funding, grant, and in-kind credit programs
- Prioritize flood management investments



7 Establish sufficient and stable funding mechanisms to reduce flood risk

- ACTIONS**
- Assess potential funding sources and propose new options
 - Facilitate access to funding sources
 - Increase funding for priority flood management projects



For more information:

Terri Wegener: terri.wegener@water.ca.gov

Jason Sidley: jason.sidley@water.ca.gov

Kim Gavigan: kim.m.gavigan@usace.army.mil

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



Statewide Flood Meetings

Regional meetings to discuss the report:

April 8 – Marin County

April 9 – Santa Clara County

April 15 – Sacramento County

April 17 – San Diego County

April 18 – Riverside and
Los Angeles Counties

April 19 – Ventura County

May 8 – Fresno County

May 14 – Humboldt County

