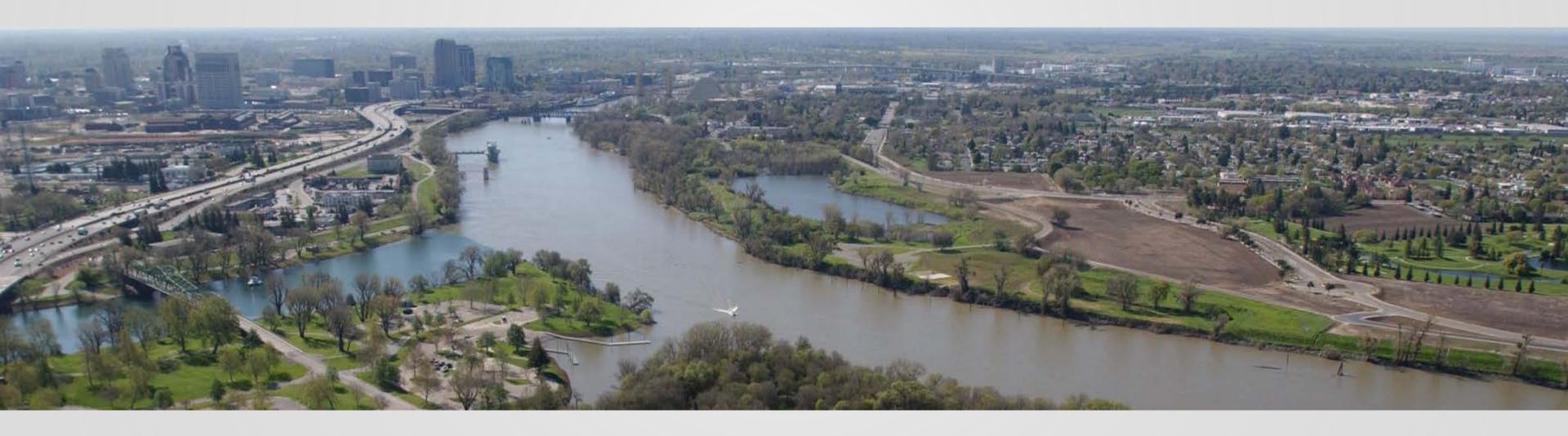
# HEADWATERS TO FLOODPLAINS FLOOD SAFETY PARTNERSHIP



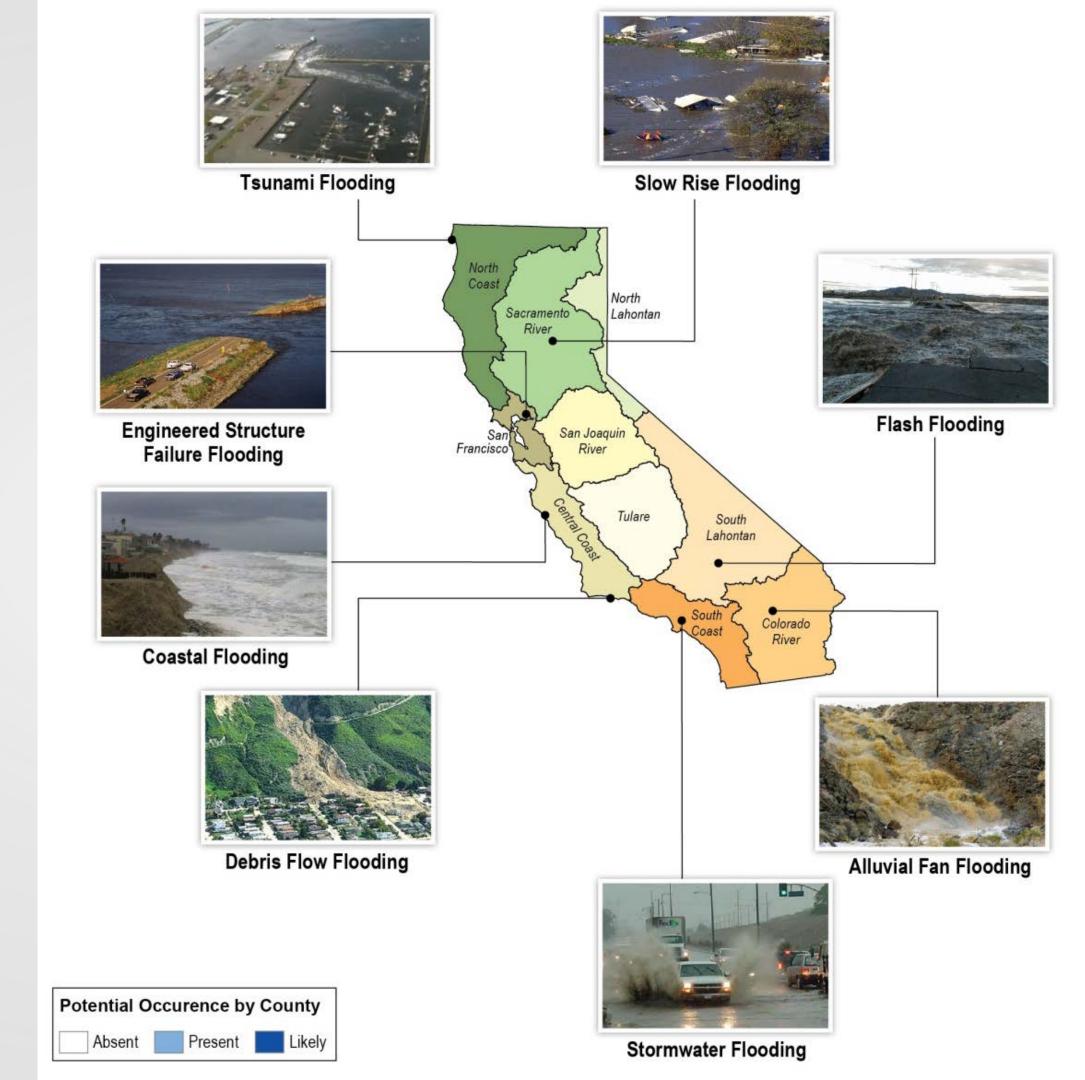


Michael Mierzwa, State Floodplain Manager CA DWR, Division of Flood Management

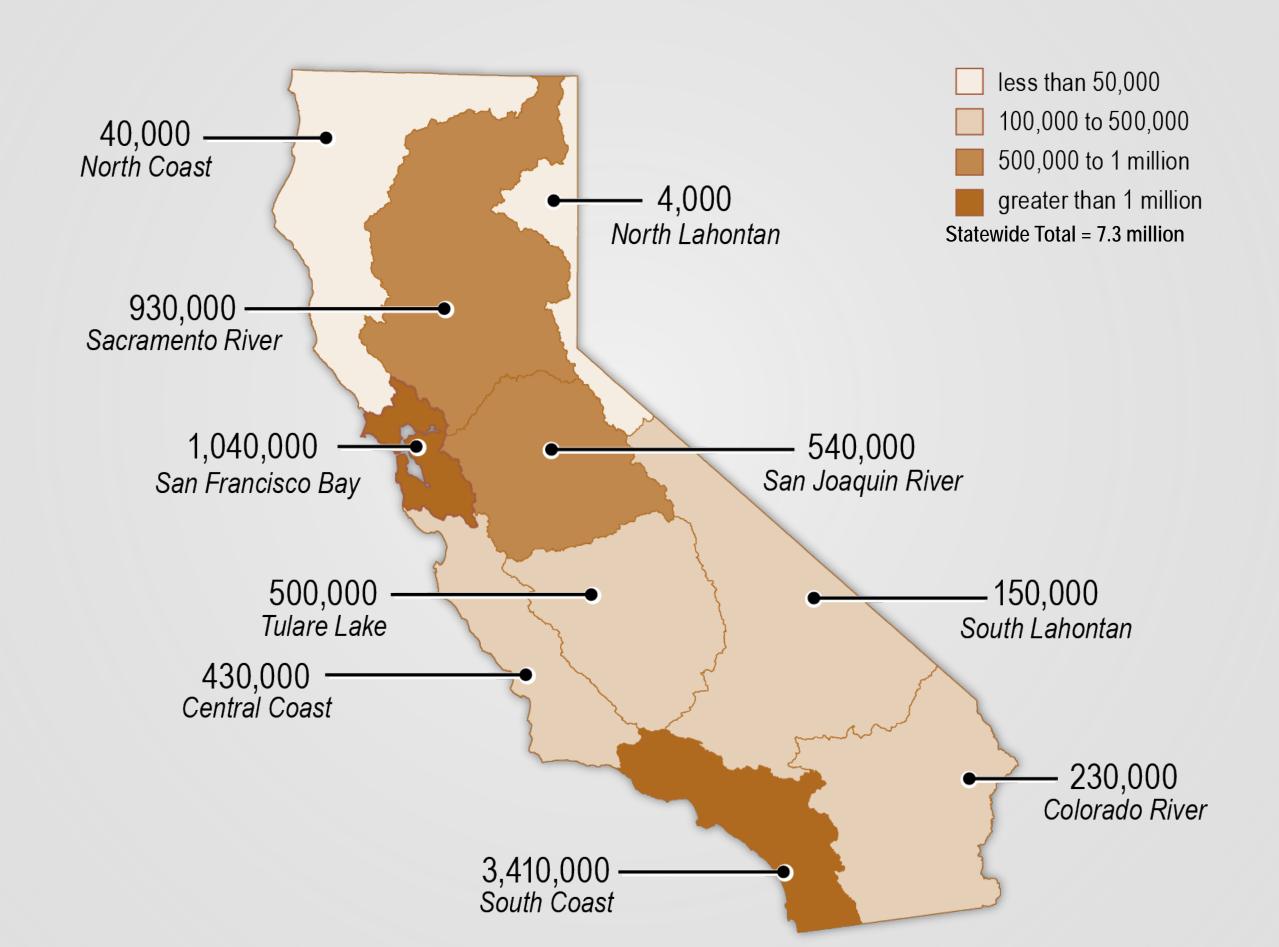
## Many regions in California are at risk for catastrophic flooding.

- One in five Californians are exposed to flood risk.
- \$600B in assets are exposed to flood risk.
- More than 20 sensitive species are exposed to flood risk.
- All 58 counties are at risk.



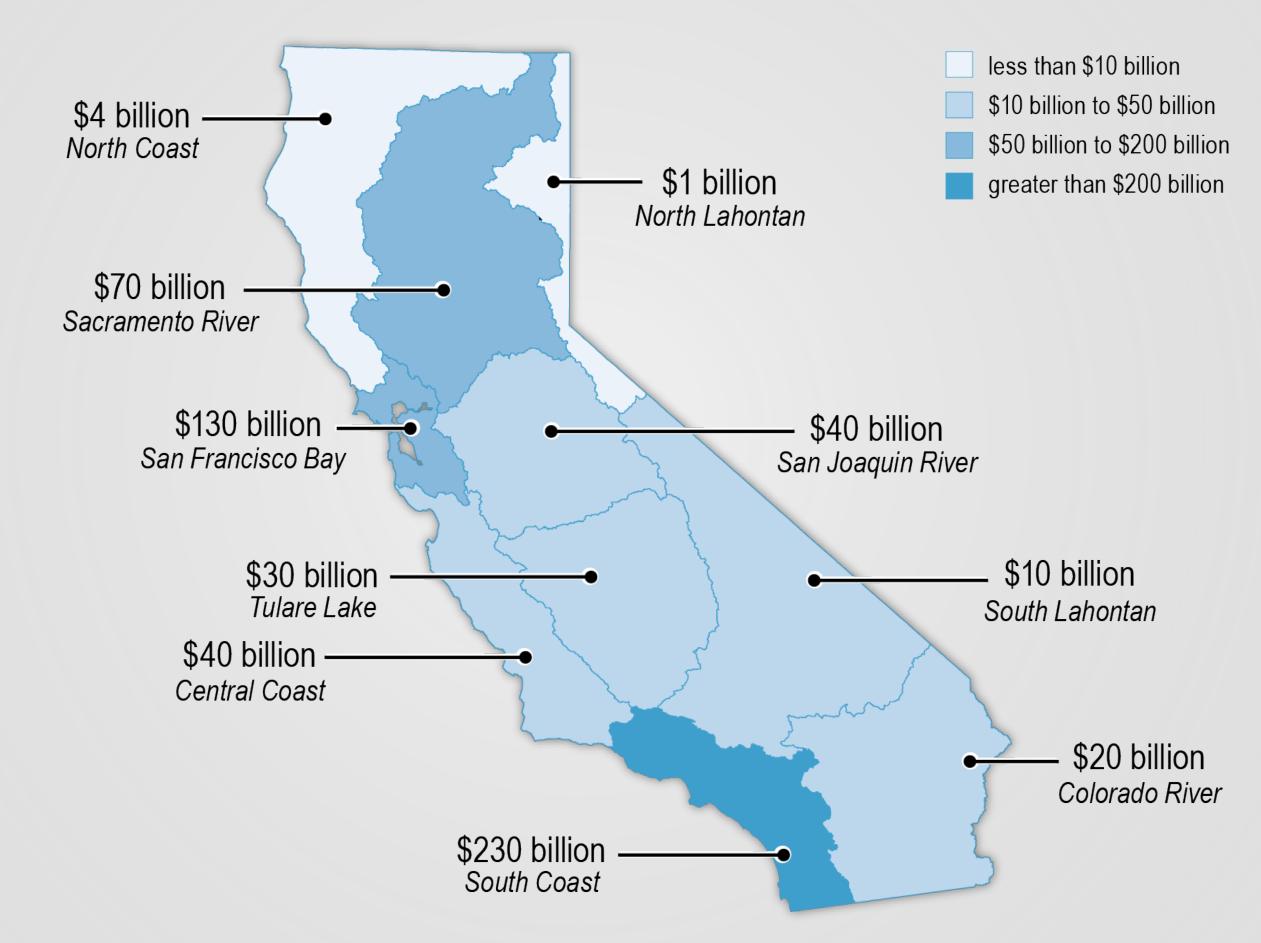


#### More than 7 million Californians live in floodplains



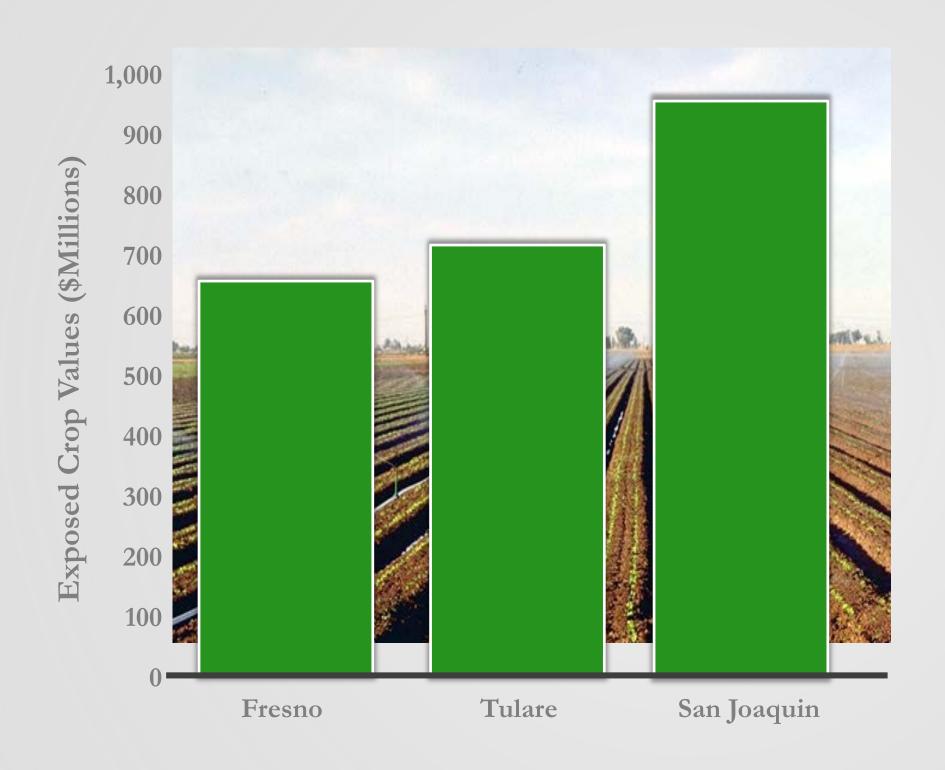


#### \$Billions in assets and infrastructure are at risk





#### California's agricultural economy is at risk





#### Flood Management Challenges



Aging infrastructure, growing population, and increased development in floodplains put pressure on flood management systems.



Flood agencies report that insufficient funding and technical resources lead to delayed O&M or necessary new projects, and to **very local approaches** to flood management.



Climate change impacts, including less snowpack, higher flood peaks, and rising sea levels create new uncertainties.



# HEADWATERS TO FLOODPLAINS FLOOD SAFETY PARTNERSHIP

- ✓ Collaborative partnership among public agencies
- ✓ Reduce California's exposure to flood risk and reduce the consequences of flooding



#### What is H2F?

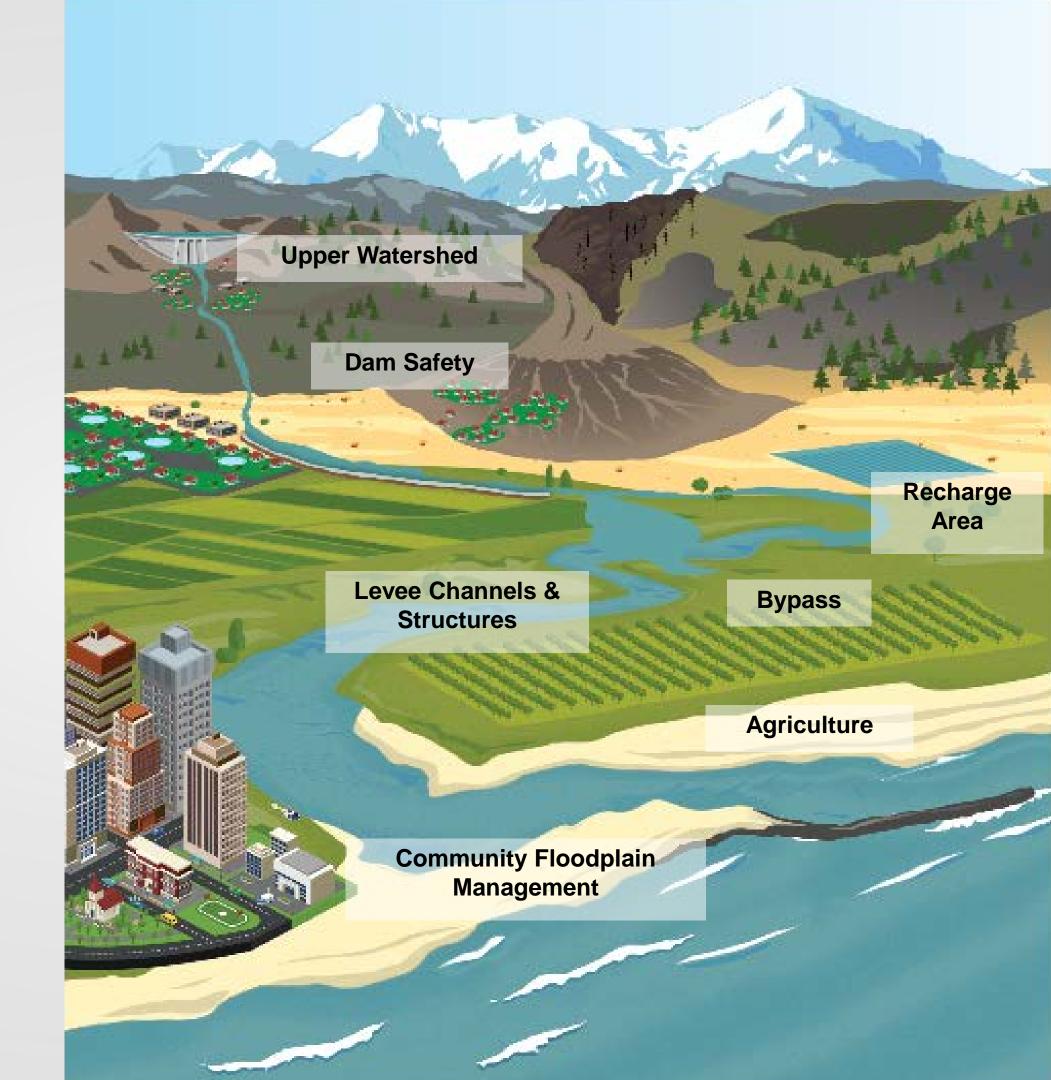
The Headwaters to Floodplains: Flood Safety Partnership (H2F) is a cooperative effort between federal, state and local agencies to reduce the risk and consequences of flooding. This partnership is focused on strengthening the collaboration, data sharing, and funding that is already in place; and by identifying and addressing unmet needs. H2F does not replace programs and projects currently in place, rather the collaboration strives to make all efforts more effective.



### Flood Management in a Watershed

There are both challenges and opportunities to moving beyond protecting a single asset and considering an entire watershed.

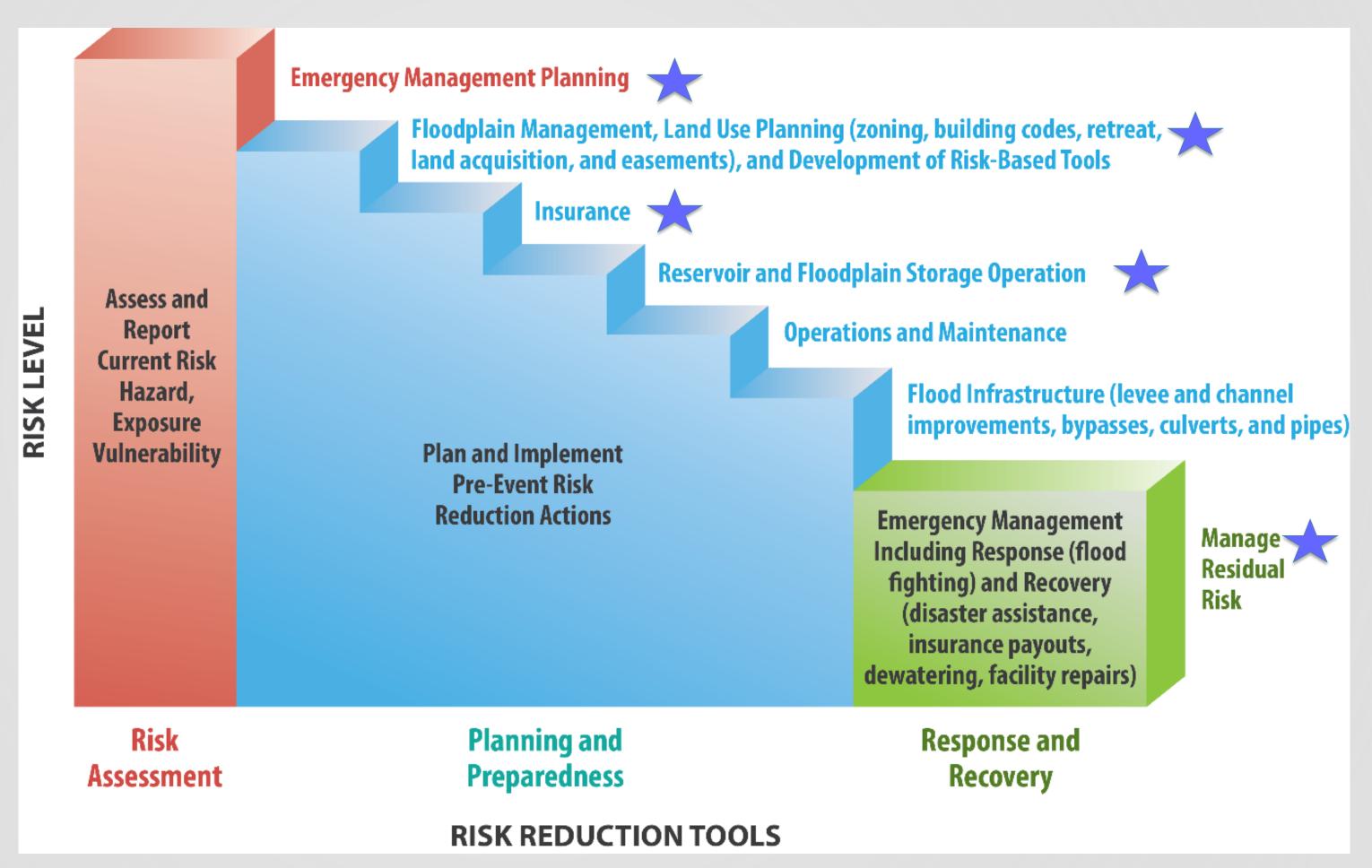
California is taking a headwaters
to floodplains approach to reducing
the risk and consequences of flooding.





#### Flood Risk Reduction Stairstep and H2F

Activities that benefit from informal partnerships through a headwaters to floodplains approach.





#### Core Principles of the H2F Partnership

H2F Does Not Replace	Value of Participation
Direct engagement with the public	Venue for frequent, informal coordination
Disagreements between agencies	A "safe" place to have conceptual discussions and learn from successes and failures
Existing policies or administrative procedures	An opportunity to explore new ways to implement existing policies and discuss possible policy changes
Funding decision processes	Informing funding decisions and promoting shared interest in funding assistance programs



#### Core Principles of the H2F Partnership

H2F Does Not Replace	Value of Participation
Agency roles and responsibilities (regulators, implementers, operators, and maintainers)	Facilitating capacity growth for other participating agencies through <i>shared innovations</i> , <i>shared experiences</i> , and <i>collaboration</i>
Review processes and internal policies of participating agencies	Increased understanding of member agency internal processes
Chain of command and authorities	Increased alignment of authorities



#### **H2F Cornerstones**



Engagement



Technical Assistance



Funding Assistance





#### Engagement

- Build or improve collaboration within and between public agencies
- Facilitate consistent messaging about flood risk and emergency preparedness
- Increase public understanding about flood risk
- Strengthen collaboration among dam owners

#### Examples:

- Webpage Development
- Partner Meetings
- Email Newsletters
- Presentations
- Information Materials



## Technical Assistance

- Create and/or share technical tools to improve flood risk awareness
- Make technical tools readily assessible to stakeholders
- Enhance local agency staff capacity, capabilities
- Expand weather monitoring, gages

#### Examples:

- Gages
- Models
- Projects
- Data
- Forecasts





#### **Funding Assistance**

- Funding inventory / opportunities
- Funding gaps analysis
- Funding utilization analysis
- Floodplain-focused regional and local assistance programs

#### Examples:

- Match existing grant programs to agencies.
- Produce funding guides for local agencies.
- Help agencies develop projects that qualify for funding.



#### **Next Steps**

- Data and information gathering
- Conduct needs assessments
- Build resource portal
- Design Technical Assistance offerings
- Identify and catalogue funding opportunities





#### For More Information on H2F

Headwaters to Floodplains Email List

H2F@water.ca.gov

