

# Headwaters to Floodplains (H2F)

## *Flood Safety Partnership*

County Engineers Association of California: Flood Control & Water Resources Policy Committee

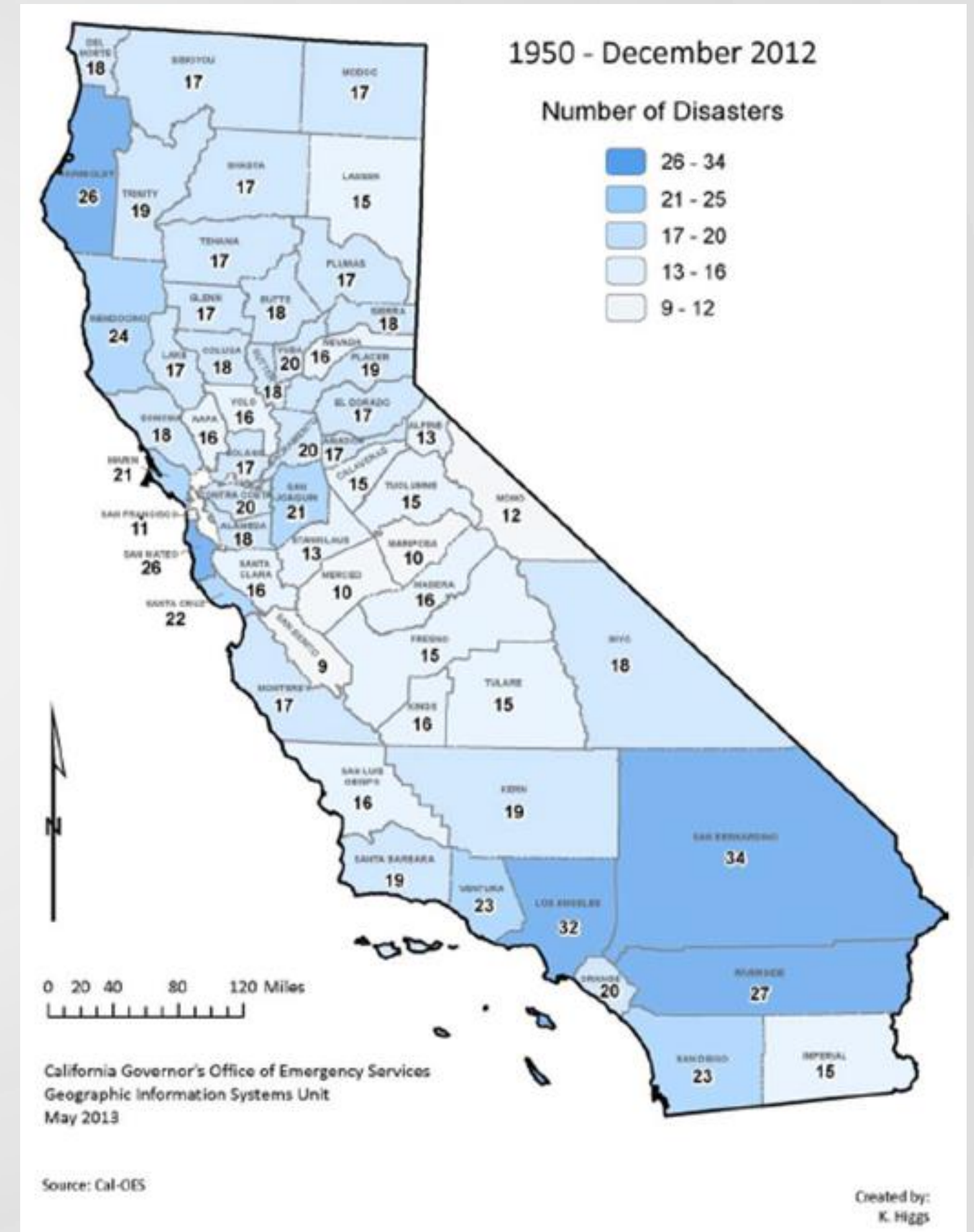
December 4, 2019



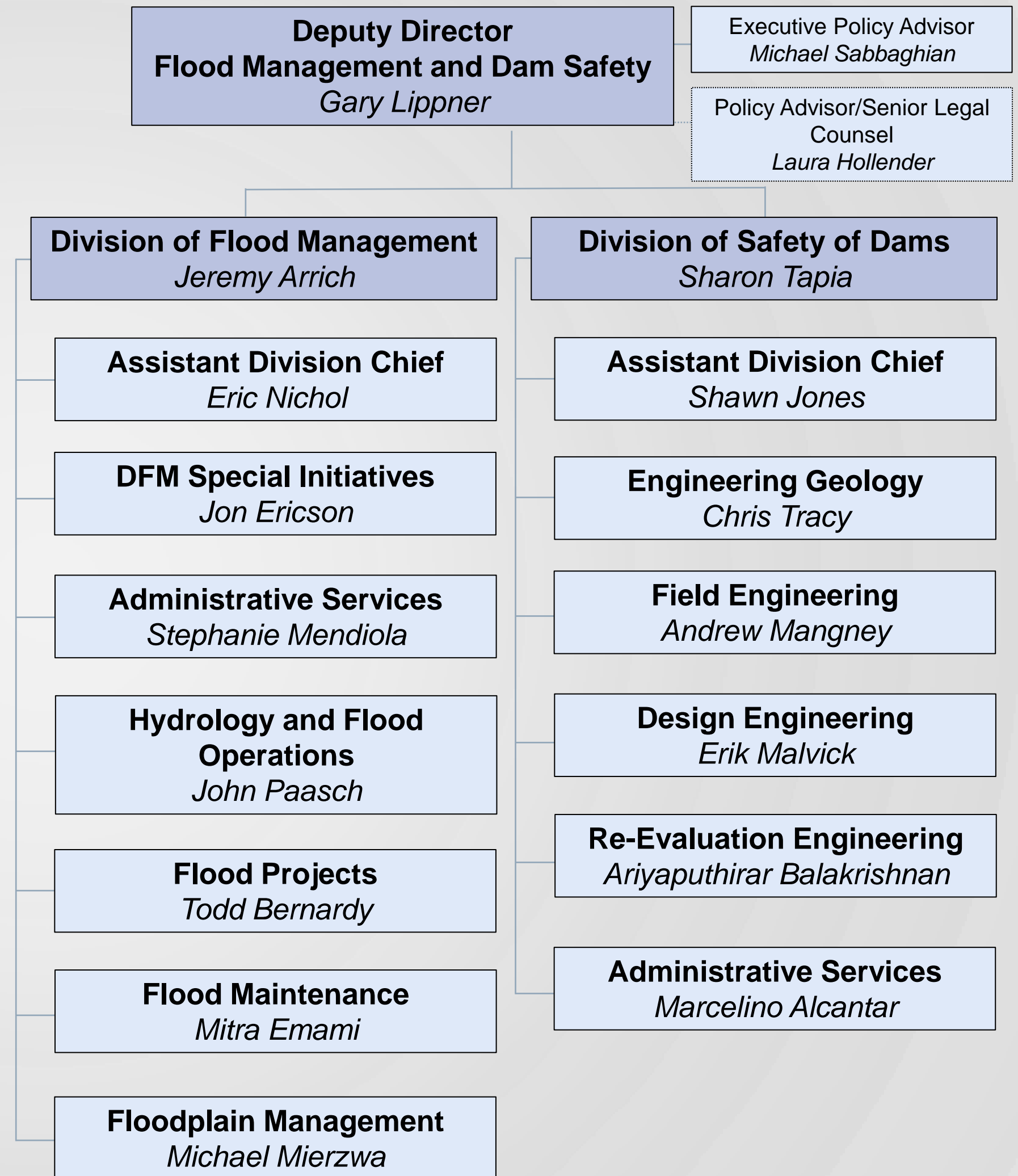
Michael Mierzwa, P.E., State Floodplain Manager  
Floodplain Management Office  
Division of Flood Management

# State & Federal Declared Flood Disasters

- Flood disasters have been the #1 hazard across 57 of California's 58 counties
- At least one significant flood event in CA has occurred annually since 1961 (yes, even in drought years)

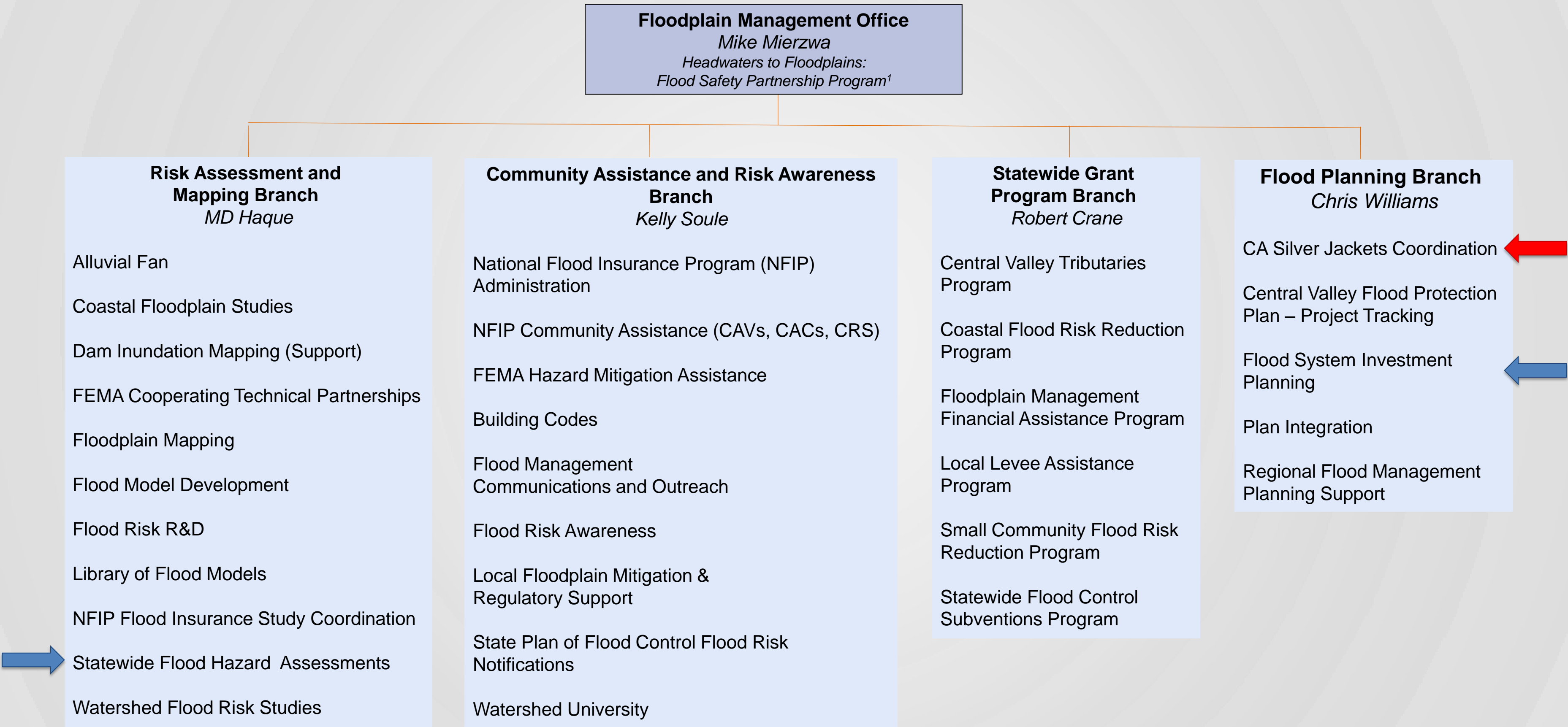


# Divisions of Flood Management and Dam Safety Functional Organization within DWR





# Floodplain Management Office



<sup>1</sup> H2F: Flood Safety Partnership is a multi-agency effort that is coordinated through DWR's Floodplain Management Office. This effort is focused on increasing the coordination and engagement between Federal, State and local flood management agencies and communities to reduce the exposure and consequences related to flooding.

H2F: Flood Safety Partnership

# HEADWATERS TO FLOODPLAINS

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

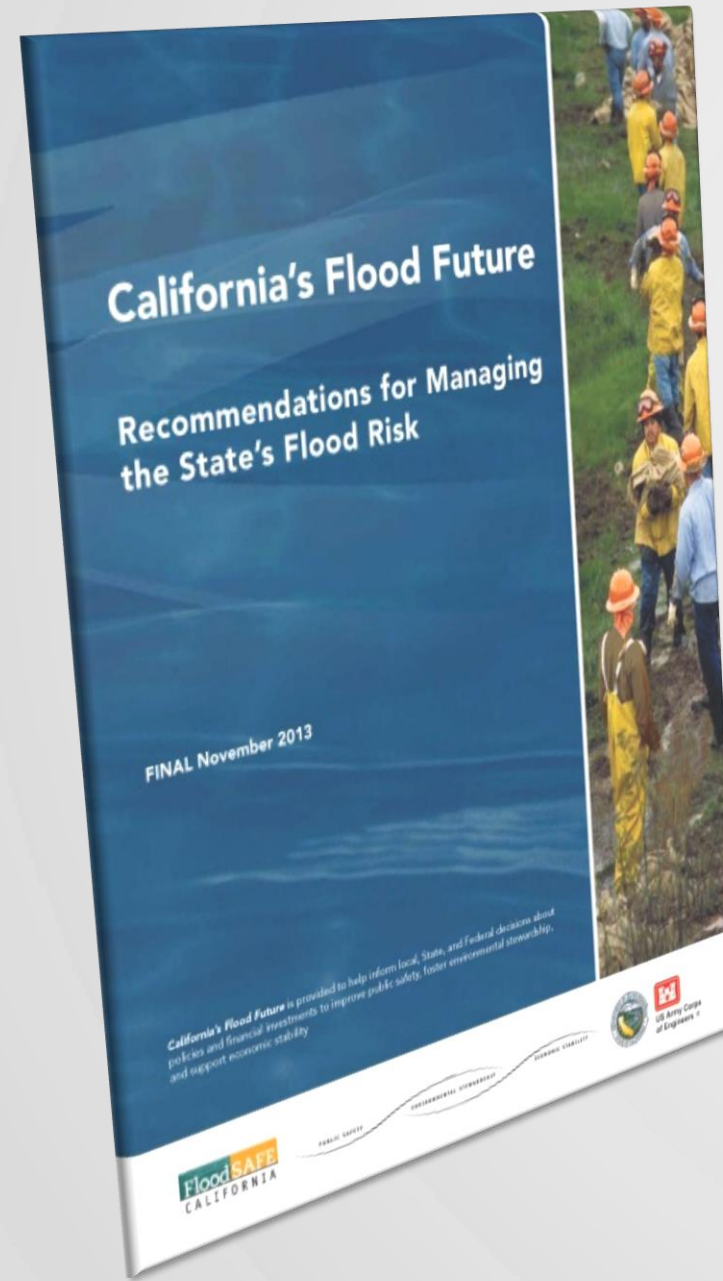
# Examples of Typical Flood Hazard Types Varied Across the State

- Most of California's hydrologic regions are exposed to multiple types of flood hazards
- Mitigation measures are often designed to address specific flood hazard types
- Lessons learned in one part of the State can benefit communities in other parts of the State

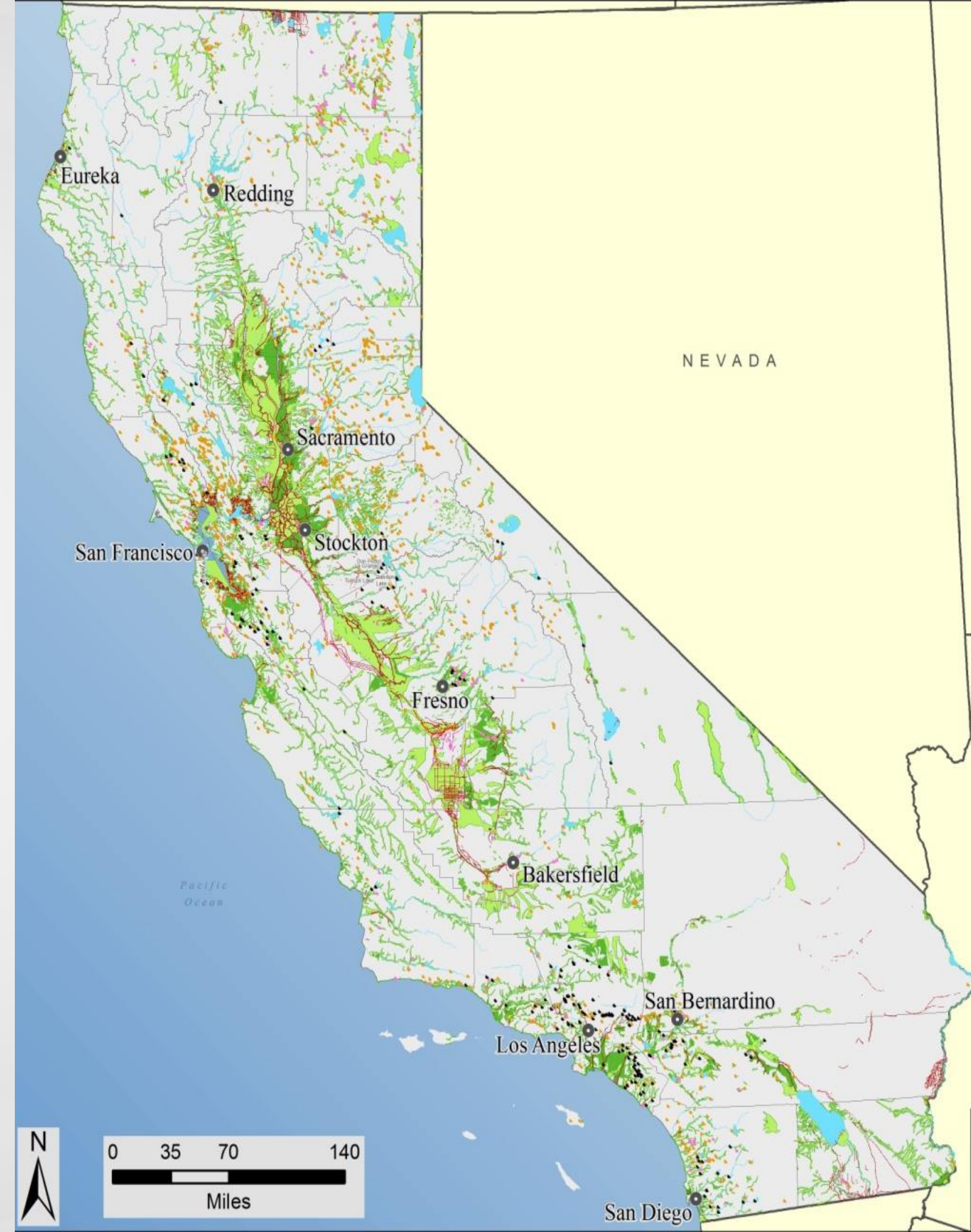




# Previous Effort (2010 – 2013) Focused on Assessing Statewide Flood Risk



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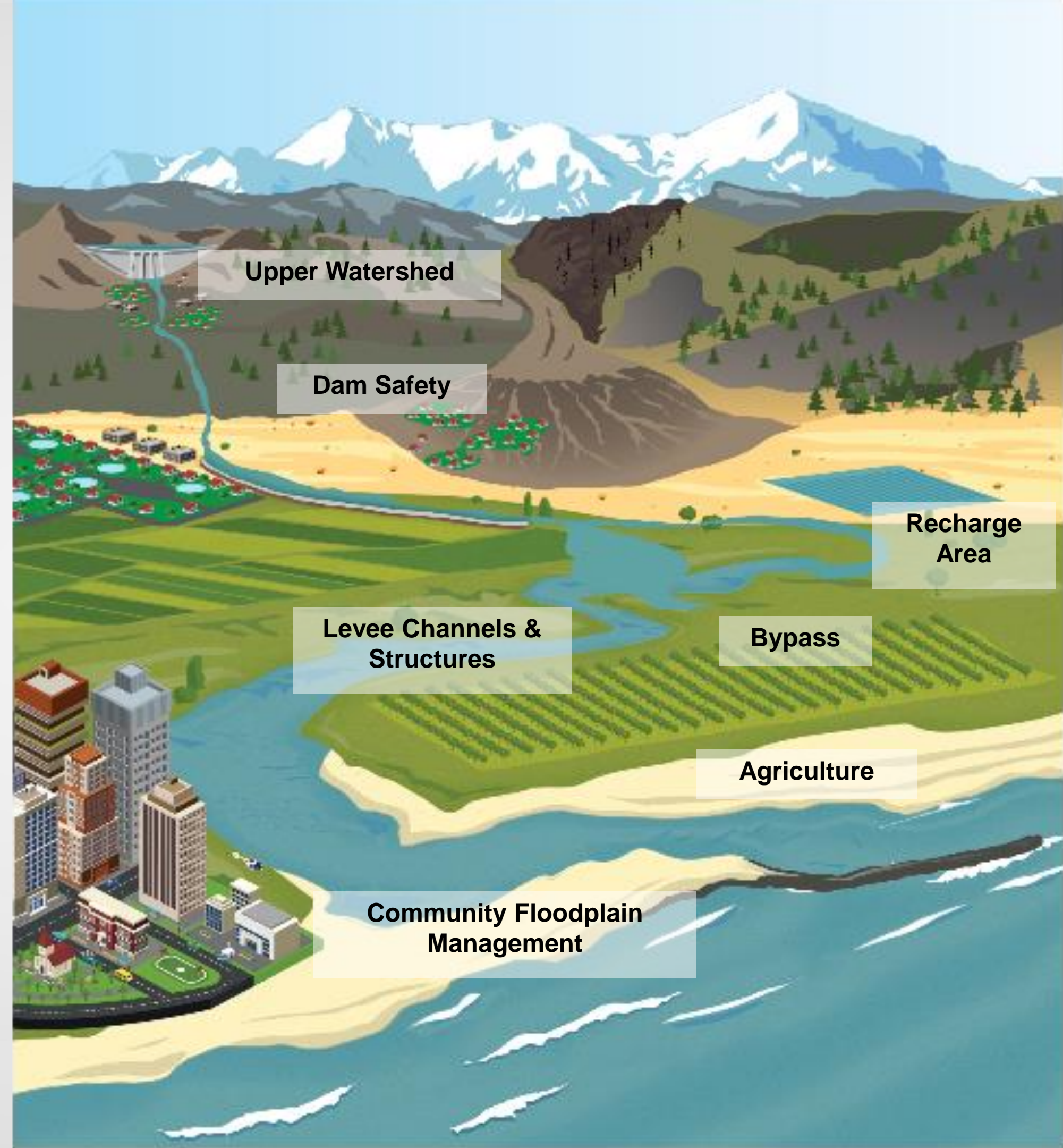
# Flood Management in a Watershed

Challenges and opportunities exist when moving beyond protecting a single asset and considering an entire watershed ...

Thus giving rise to a headwaters to floodplains approach to reducing flood exposure and consequences



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# Flood Risk Reduction Stairstep & H2F

- ★ Activities benefiting from informal partnerships through a headwaters to floodplains (watershed) approach



# Core Principles of the H2F Partnership

| What H2F is Not Replacing  | Value of Participation  |
|--|---|
| Direct engagement w/ public  | Venue for frequent, informal coordination   |
| Disagreements between agencies   | A “safe” place to have conceptual discussions & 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 & promoting shared interest in funding assistance programs  |
| Agency roles and responsibilities (regulators, implementers, operators, & maintainers) | Facilitating capacity growth for other participating agencies through <b><i>shared innovations, shared experiences, and collaboration</i></b> |





# Technical Assistance

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

## *“Sharing Innovations”*

### Example Projects:

- Gages
- Models
- Projects
- Data
- Forecasts
- Exercise Facilitation
- Exposure Assessment
- Mapping



# Funding Opportunities

*“Sharing Experiences”*

- Maintain & update inventory of flood mitigation projects
    - Review of HMPs
    - Coordination with IRMPs and SGMPs
  - Report on statewide investment need & implementation of mitigation measures
  - Promoting cost-effective floodplain management mitigation measures
- Example Projects:
- Develop Financial Assistance Clearing House
  - Create Guides Illustrating Successful Grant Applicants
  - Updating and review of exposure information (including mapping) to support loss avoidance studies





# Engagement

*“Collaboration”*

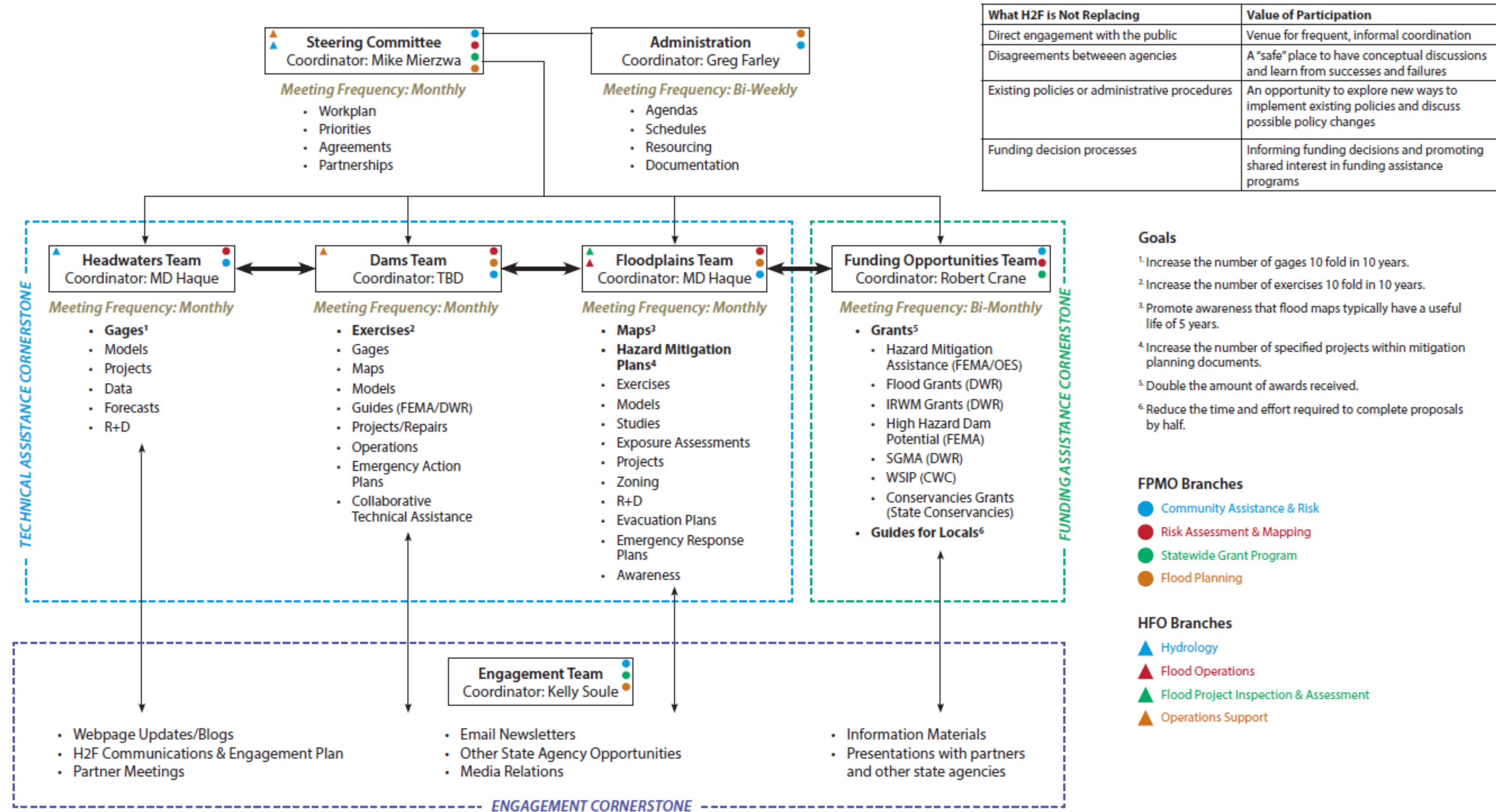
- Build or improve collaboration within and between public agencies
- Facilitate consistent messaging about flood risk and emergency preparedness
- Highlight success stories (projects, research, and recovery efforts)
- Strengthen collaboration between dam owners and downstream communities

Example Projects:

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



## H2F Governance - DWR Internal Resourcing



**DRAFT**





# DWR's Flood Risk Reduction Grant Programs

| DWR Flood Risk Reduction Grant Program             | State Plan of Flood Control | Central Valley | Statewide | Current Fund Source |
|--|-----------------------------|----------------|-----------|---------------------|
| Statewide Flood Control Subventions Program        |                             |                | ✓         | Proposition 1E      |
| Local Levee Assistance Program                     |                             |                | ✓         | Proposition 1E      |
| Small Community Flood Risk Reduction Program       | ✓                           |                |           | Proposition 1E      |
| Central Valley Tributaries Program                 |                             | ✓              |           | Proposition 1       |
| Coastal Flood Protection Program                   |                             |                | ✓         | Propositions 1 & 68 |
| Floodplain Management Financial Assistance Program | ?                           | ?              | ?         | Proposition 68      |



# FEMA Hazard Mitigation Assistance: The Big Three

| HMA Program                                     | Pre-Disaster | Post-Disaster | Authorities & Requirements  |
|---|--------------|---------------|---|
| Pre-Disaster Mitigation (PDM) Grant Program     | ✓            |               | Stafford Act (1988) / Hazard Mitigation Plan Activity   |
| Flood Mitigation Assistance (FMA) Grant Program | ✓            |               | National Flood Insurance Program (1968) / Must be NFIP Community / Must be HMP Flood Activity |
| Hazard Mitigation Program Grants (HMPG)         |              | ✓             | Stafford Act (1988) / Hazard Mitigation Plan Activity   |





# For More Information on H2F

## Headwaters to Floodplains Email List

[H2F@water.ca.gov](mailto:H2F@water.ca.gov)



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# CA Silver Jackets

<https://water.ca.gov/Programs/Flood-Management/Community-Resources/Silver-Jackets>

National Web Page: <http://silverjackets.nfrmp.us/>

Common Participants, Agencies focusing on flood and natural disaster ...

- Hazard Mitigation
- Emergency Management
- Floodplain Management
- Natural Resource Management & Conservation

Federal Partners include ...

- USACE
- FEMA
- NWS
- USGS



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