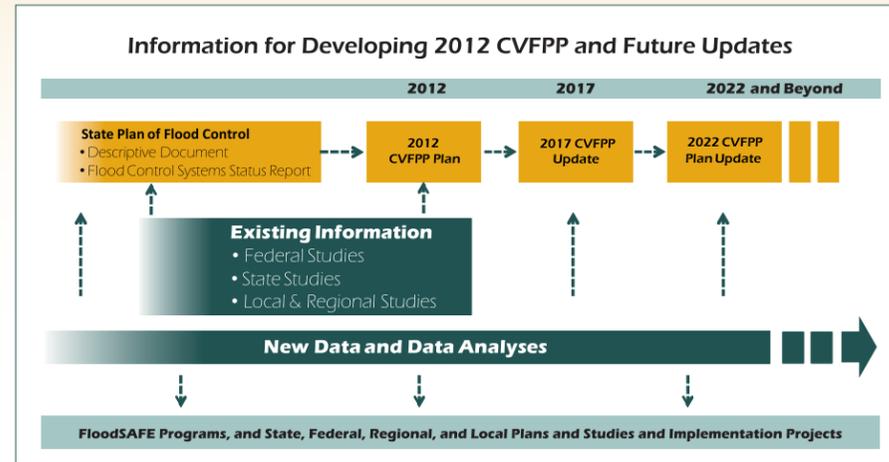


MEETING THE CHALLENGE

Building on Existing Information & Developing New Data



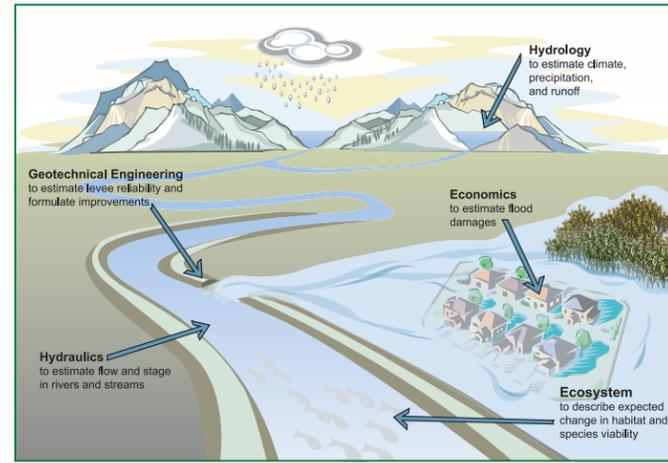
Geotechnical Exploration



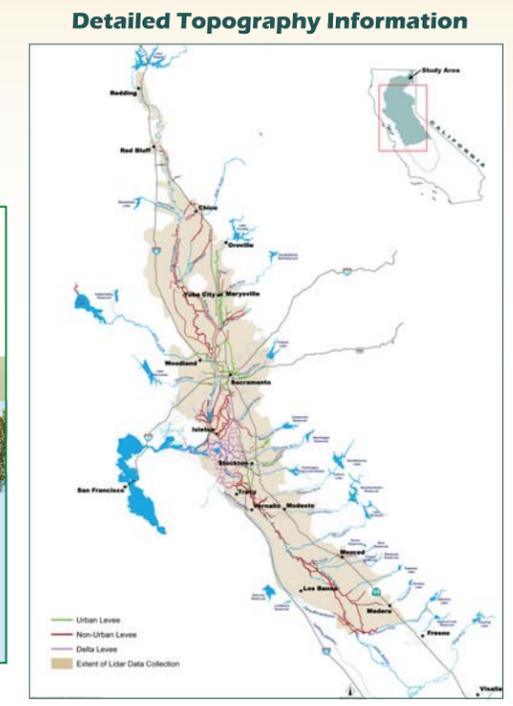
Delta Islands depend on levees year-round

Central Valley Flood Planning Hydrology Update

- DWR is partnering with the U.S. Army Corps of Engineers to develop flood-flow frequency information for 150 locations in the Central Valley
- The new information will include 10-year, 50-year, 100-year, 200-year, and 500-year hydrographs for multiple storm centerings in the Central Valley



Key factors to understand flood risk



Building on Existing Information



Levee Evaluation Programs

Urban and Non-urban Levee Evaluations Programs assess the performance of levees using a wide range of data collection and analysis tools:

<p>Performance History Interview local and flood control experts to understand past performance of levees during flood events</p> <p>Aerial LiDAR Surveys Collect topographic data to create an accurate profile of the levees</p> <p>Airborne Electromagnetic Surveys Identify different materials within and beneath levees and create maps</p> <p>Bathymetric Surveys Collects underwater topographic profile of levees and streambeds</p>	<p>Geomorphic Assessments Use historical maps and surveys to create a geologic map of the project areas prior to levee construction</p> <p>Geotechnical Evaluations Conduct exploration, testing, and analyses of levees and foundations</p> <p>Remedial Recommendations Prepare alternatives and cost estimates for identified deficiencies</p> <p>Seismic Vulnerability Assessment Assess the risk posed by earthquakes to urban levees</p>
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Delta Risk Management Strategy

DWR is evaluating levee failure risks in the Delta and the Suisun Marsh:

- Phase 1 – analyze levee risks and consequences of levee failure
- Phase 2 – identify and evaluate measures to reduce risks and consequences of levee failure

California Levee Database

- Compile location information for more than 10,000 miles of levees and flood management structures throughout California
- Develop inventory of California levees to better manage levees and understand levee reliability risk factors

Central Valley Floodplain Evaluation and Delineation (CVFED)

CVFED is improving the quality and accuracy of flood hazard data and mapping available to local communities:

- Develop Levee Flood Protection Zones maps for areas protected by the State-Federal flood management system
- Update floodplain maps for the Central Valley
- Update and develop new hydrologic and hydraulic models
- Collect detailed aerial photographs, topographic and bathymetric data, surveys, and profiles of bridges and structures

Ecosystem

- The study and scope are under development

Economics

- The study and scope are under development