Central Valley Integrated Flood Management Watershed Study (CVIFMS) Overview

Glen Reed – Project Manager Rhiannon Kucharski – Lead Planner Sacramento District, US Army Corps of Engineers March 2015





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Outline

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Welcome and Introductions





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What is CVIFMS?

 Federal companion document to Central Valley Flood Protection Plan, Regional Flood Management Plans and Integrated Regional Watershed Management Plans





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What is CVIFMS?

- A watershed study focused on Sacramento River Basin to develop a comprehensive basin-wide management plan to:
 - Assess watershed characteristics and conditions
 - Identify watershed issues/problems
 - Develop, evaluate and prioritize conceptual alternatives, including structural and non-structural measures
 - Incorporate public input and involvement
 - Identify potential "spin-off" projects under Federal, State and/or local authorities
- San Joaquin Basin next phase



Vision Statement

The Federal and State governments share a vision for an integrated flood management system in the Central Valley to provide for safe, healthy and thriving communities while protecting and restoring the environment. The problem is so overwhelming that achievement of this shared vision can only be through pursuit of mutual priorities. The State's flood risk management priorities of public safety, environmental stewardship and economic stability match the Federal administration's priorities of protecting the American people, restoring and protecting the environment and improving the nation's economy.

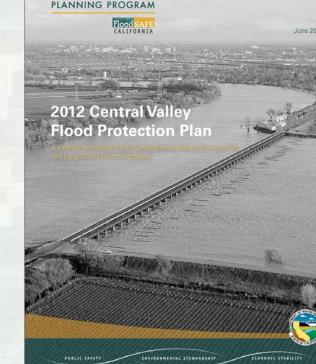


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Ongoing Efforts

Leverage existing information and models from State and USACE projects, including, but <u>not</u> limited to:

- Central Valley Flood Protection Plan
- Basin-wide feasibility studies
- Bay Delta Conservation Plan
- Regional Plans
- Sutter Basin Project
- Yuba River General Reevaluation Project
- Yuba River Ecosystem Restoration Study
- West Sacramento General Reevaluation Study
- American River Watershed Program: Common Features and Folsom Dam Joint Federal Project
- American River Common Features General Reevaluation Study
- Sacramento River Bank Protection Project
- Cache Creek Feasibility Study
- Delta Islands and Levees Feasibility Study
- Sacramento-San Joaquin Comprehensive Study







Recent Activities

- Held a series of CVIFMS Plan Formulation meetings (Project Delivery Team level, including representation from DWR) to formulate a complete range of measures, and apply those measures to locations within the watershed
- Drafted required read-ahead materials to meet requirements of Vision Milestone





Current Activities

 With input from stakeholders, developing full list and associated map of potential features by focal areas within watershed for use in screening, prioritization and formulation of conceptual alternative plans



Current Activities Continued

 Working on stakeholder outreach and communication plan with the Conflict Resolution and Public Participation Center of Expertise (CPCX) and DWR

- Utilize existing communication network
- Provide informational updates via existing meetings and venues
- Initial letters to stakeholders sent in February
- Initial public meetings in March
- Engage with sister Federal agencies such as EPA, BoR, USFWS, NMFS, BIA and tribes





Planning Goals

- Reduce the risk to public safety from flooding in the Sacramento River Basin;
- Reduce the risk of damages to residential, agricultural and commercial/industrial areas, and roads and other critical infrastructure due to flooding;
- Restore aquatic habitat for the Sacramento River ecosystem;
- Restore natural stream processes in the Sacramento River; and
- Improve water supply reliability and availability





Initial Array of Flood Risk Management Management Measures

- 1. Widen bypasses
- 2. New bypasses
- 3. Modify weirs
- 4. Optimize operation of weirs
- 5. Automate weir operations
- 6. Remove/modify obstructions
- 7. Raise/strengthen existing levees
- 8. New levees
- 9. Setback levees
- 10. Coordinated emergency response plans

- 11. Flood recovery plan
- 12. Floodplain management plan
- 13. New floodplain storage
- 14. Purchase flowage easements
- 15. Re-operate reservoirs
- 16. Raise existing dams
- 17. Forecast-based reservoir operations
- 18. Re-allocate storage in reservoirs
- 19. Construct new dams





Initial Array of Ecosystem Restoration Management Measures

- 1. Increase shaded riverine aquatic habitat
- 2. Increase riparian habitat
- 3. Increase perennial marsh habitat
- 4. Impoundments for wetlands
- 5. Restore natural bank habitat
- 6. Re-create channel meanders
- 7. Remove barriers to channel migration
- 8. Lay-back banks to connect with floodplain
- 9. Terrace floodplains

- 10. Re-contour floodway
- 11. Remove barriers to fish passage
- 12. Screen pump diversions
- 13. Extend floodplains/expand floodway
- 14. Set back levees
- 15. Notch weirs
- 16. Remove non-native species
- 17. Reservoir re-operation
- 18. Low flow channel in bypasses



Initial Array of Water Supply Management Measures

- 1. New dams that include water supply purpose
- 2. Re-operate existing dams to conserve more water
- 3. Enhance/increase groundwater percolation
- 4. Re-allocate storage in reservoirs
- 5. Improve existing water conveyance system





Other Considerations

- Strategic Watershed Governance
- Regional Permitting
- Timing of State and Local Actions (Basin-Wide Feasibility Studies / Regional Flood Management Plans / Near-term Implementation)



Next Steps

Vision Milestone

- Purpose define overall vision of stakeholder group and present study framework
- Clearly identifies how the framework and associated activities support the collaborative watershed vision
- Stakeholder/Public Input/Involvement





Contacts

USACE:	Public Affairs Office
	CVIFMS@usace.army.mil
	Glen Reed, Project Manager, (916) 557-5332
	anthony.g.reed@usace.army.mil
	Rhiannon Kucharski, Lead Planner, (916) 557-7258
	rhiannon.l.kucharski@usace.army.mil
DWR:	Christopher Williams, Project Manager
	(916) 574-2375
	christopher.williams@water.ca.gov
CVFPB:	Corey Lasso, CVFPB-FPO liaison
	(916) 574-1439
	corey.lasso@water.ca.gov



