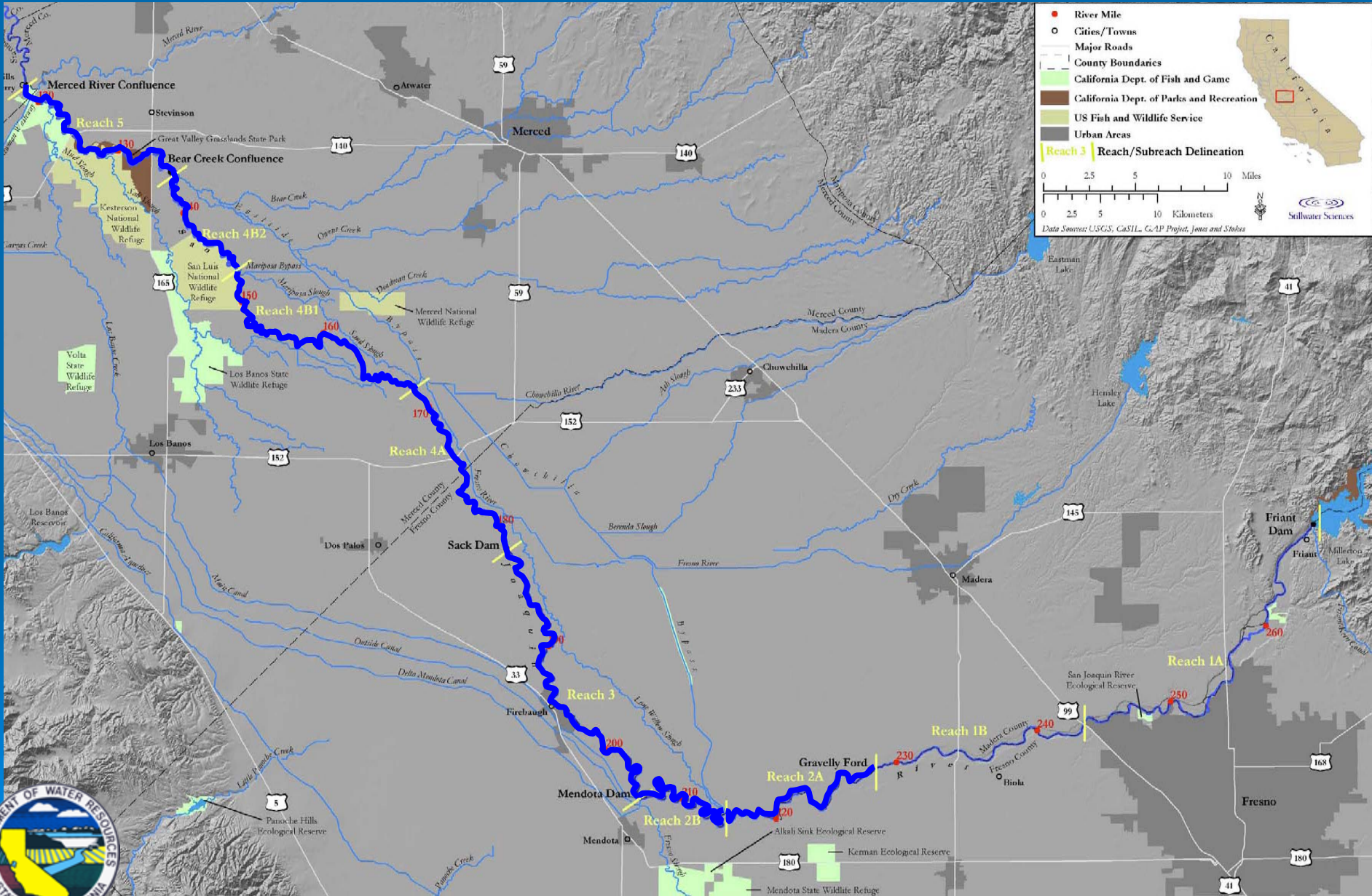


# **San Joaquin River Restoration Program and Flood Management Coordination**

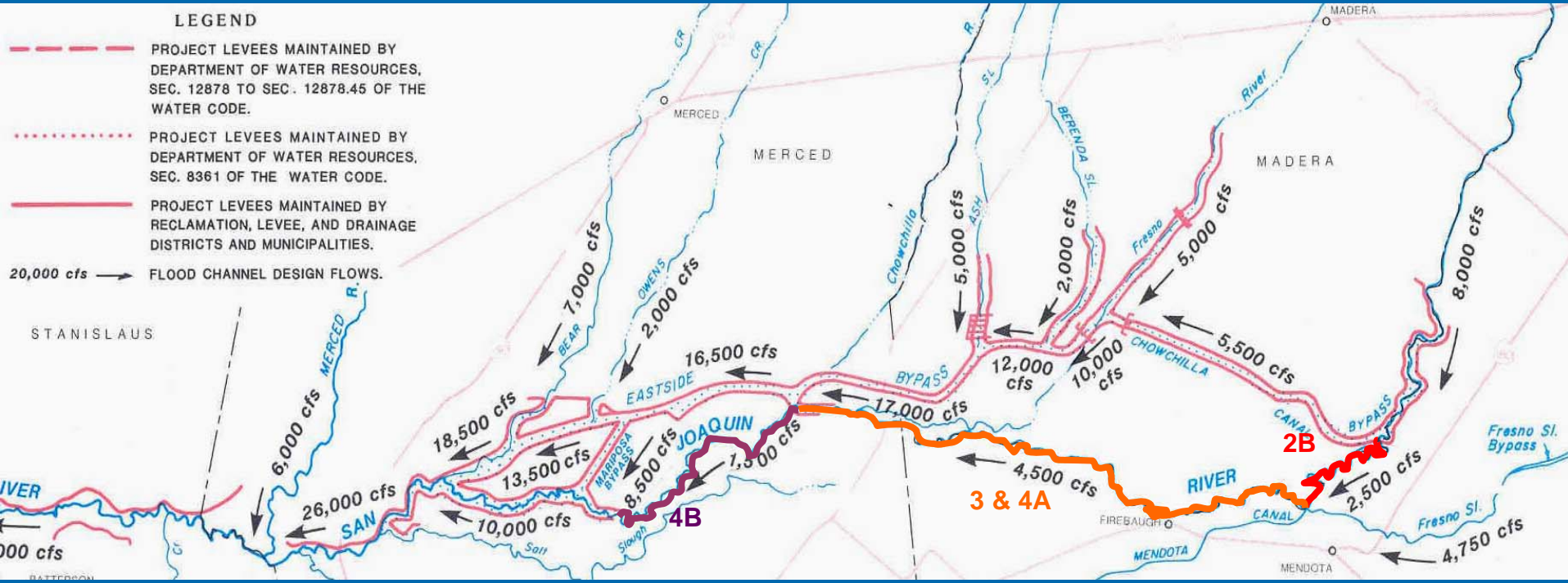
**PEIS/EIR Public Scoping Meetings  
August/September 2007  
Paula J. Landis, PE  
Chief, San Joaquin District  
California Department of Water Resources**



# SJRRP Flood Management Areas



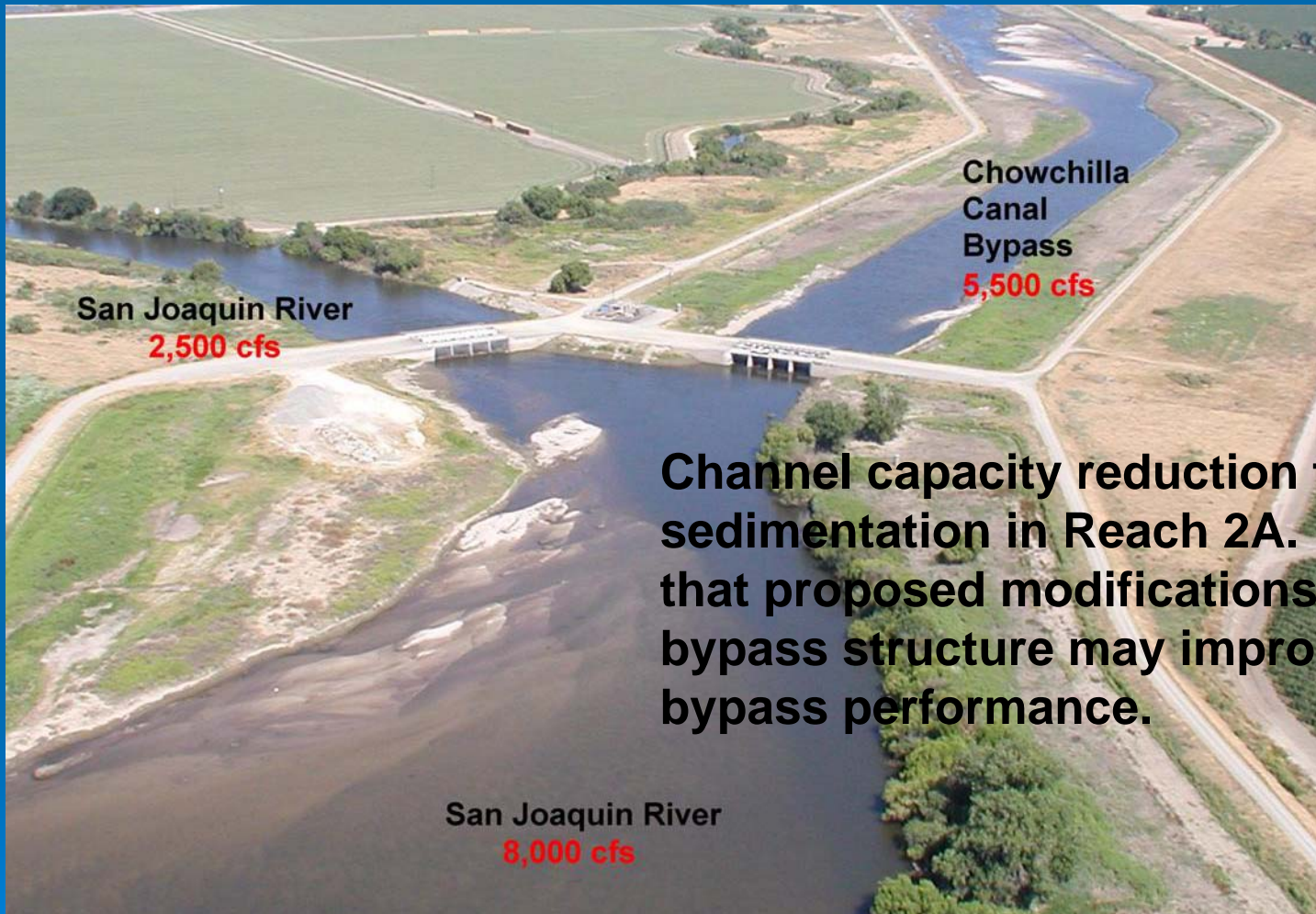
# Design Flows, Channel Capacity and Restoration Flows



Restoration plans propose that all channels on the San Joaquin have a capacity of 4,500 cfs. This means increased flow capacity in Reaches 2B and 4B and evaluation of the design flow capacities in Reach 3 and 4A.



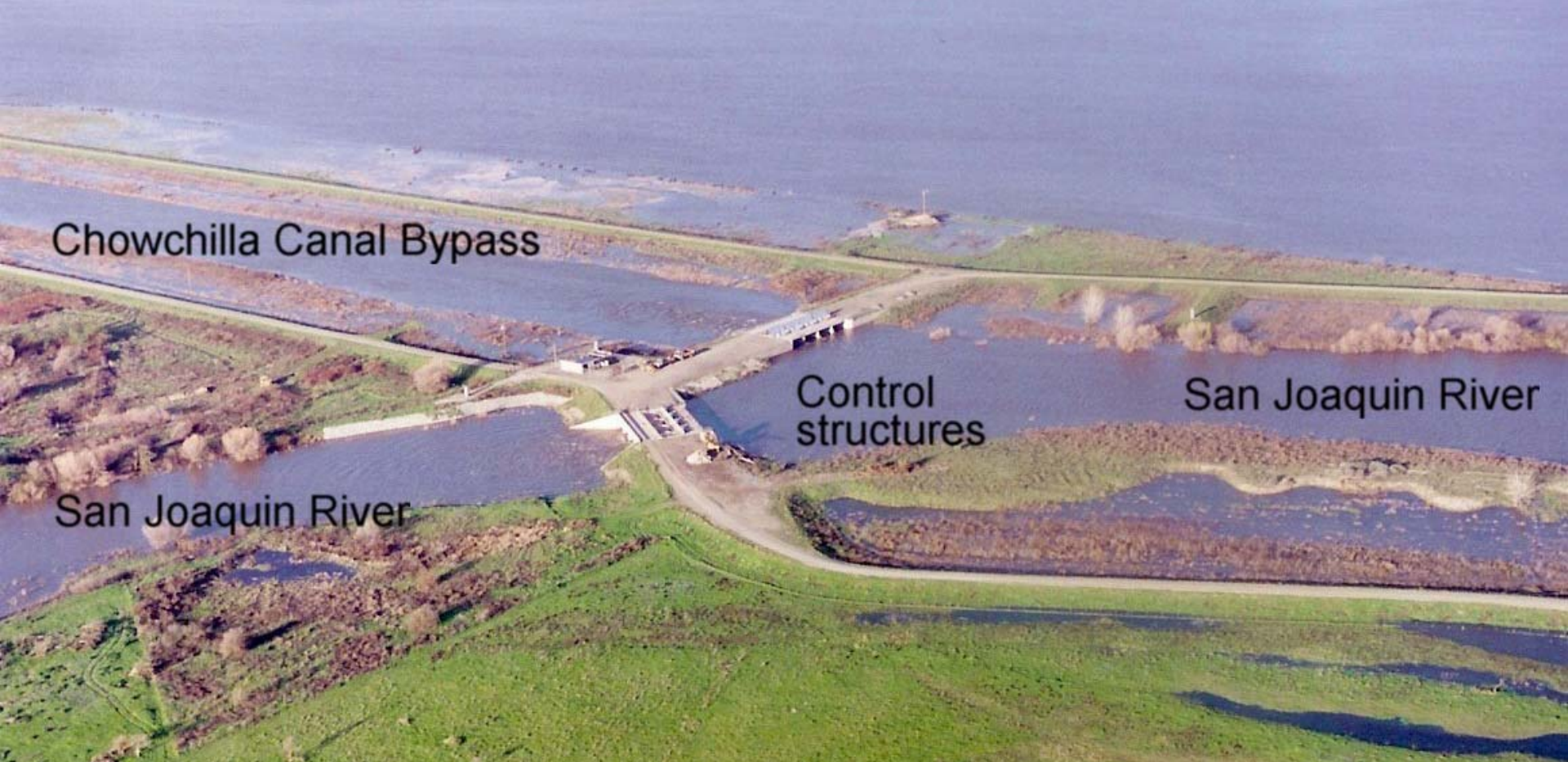
## 2 – Chowchilla Canal Bypass Control Structure *Capacity Operational Issue*



**Channel capacity reduction from sedimentation in Reach 2A. Note that proposed modifications to the bypass structure may improve bypass performance.**

Limited capacity of the control structure requires that the pool upstream be held excessively high to divert higher flows into the bypass or river. This condition adds to the problem of the upstream levee instability. Capacity of the Chowchilla Canal Bypass control structure should be increased at least 50 percent.





Chowchilla Canal Bypass

San Joaquin River

Control structures

San Joaquin River

**Illustration of impacts to adjacent land use from levee failure in Reach 2A. Floodwater at top out of channel flooding farmland.**



# Reach 2A – Flood water boiling through the levee 2006



**collapsing stream bank in reach 3  
Firebaugh**



**evidence of lateral earth  
cracking, proximity to  
structures in Reach 3  
Firebaugh**





# Reach 2A – Levee erosion 2006





**Vegetation encroachment  
reducing the capacity of the  
channel in Reach 4B.**

**Design capacity = 1,500 cfs.  
Actual capacity = 400 cfs.**



**Vegetation encroachment  
reducing the capacity of the  
channel in Reach 4B.**



# Levee Evaluation Program

- 300 miles urban levees
- 1,600 miles project levees
- Funding Propositions 84 and 1E
- Factors
  - seepage
  - stability
  - settlement
  - erosion
  - seismic



# Levee Evaluation Program

- DWR is committed to assisting local agencies in determining the best way to implement and fund needed repairs to their levees.
- Goal
  - 200 year protection in urban areas
  - Design level protection in rural areas
- Funds are not adequate for the entire state and they will be awarded on a competitive basis.



# Coordination

- The SJRRP is working closely with DWR's Levee Evaluation Program.
- Working to:
  - leverage funds and staff
  - assure no duplication of effort
  - coordinate schedules
  - attain common goals

