

# San Joaquin River Restoration Program



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**Central Valley Office**

## Legal settlement 2006 Goals:

- Restore flows and maintain fish populations below Friant Dam
- Reduce or avoid adverse impact on water supply

## Federal legislation 2009

DRAFT

### Fisheries Management Plan: A Framework for Adaptive Management in the San Joaquin River Restoration Program



Draft June 2009





## Settlement:

- FWS Permit Application by Sept. 30, 2010
- NMFS decision on Permit by April 30, 2012
- Spring-run Chinook reintroduced by Dec. 31, 2012
- Phase 1 improvements completed by Dec. 31, 2013
- Use all ESA “tools”



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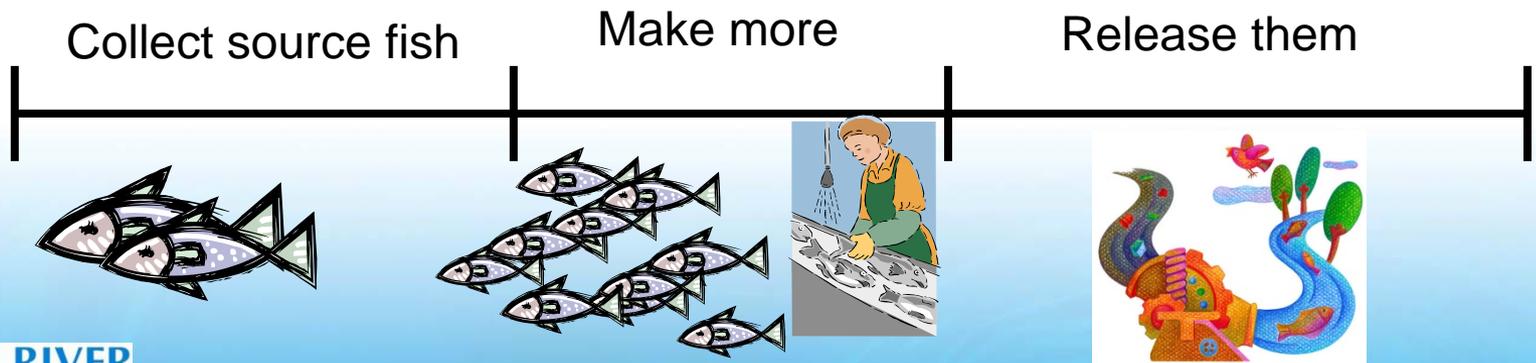
## Enabling Law:

- Reintroduced spring-run must be “experimental population” per ESA sec 10(j)
- No timelines for reintroduction



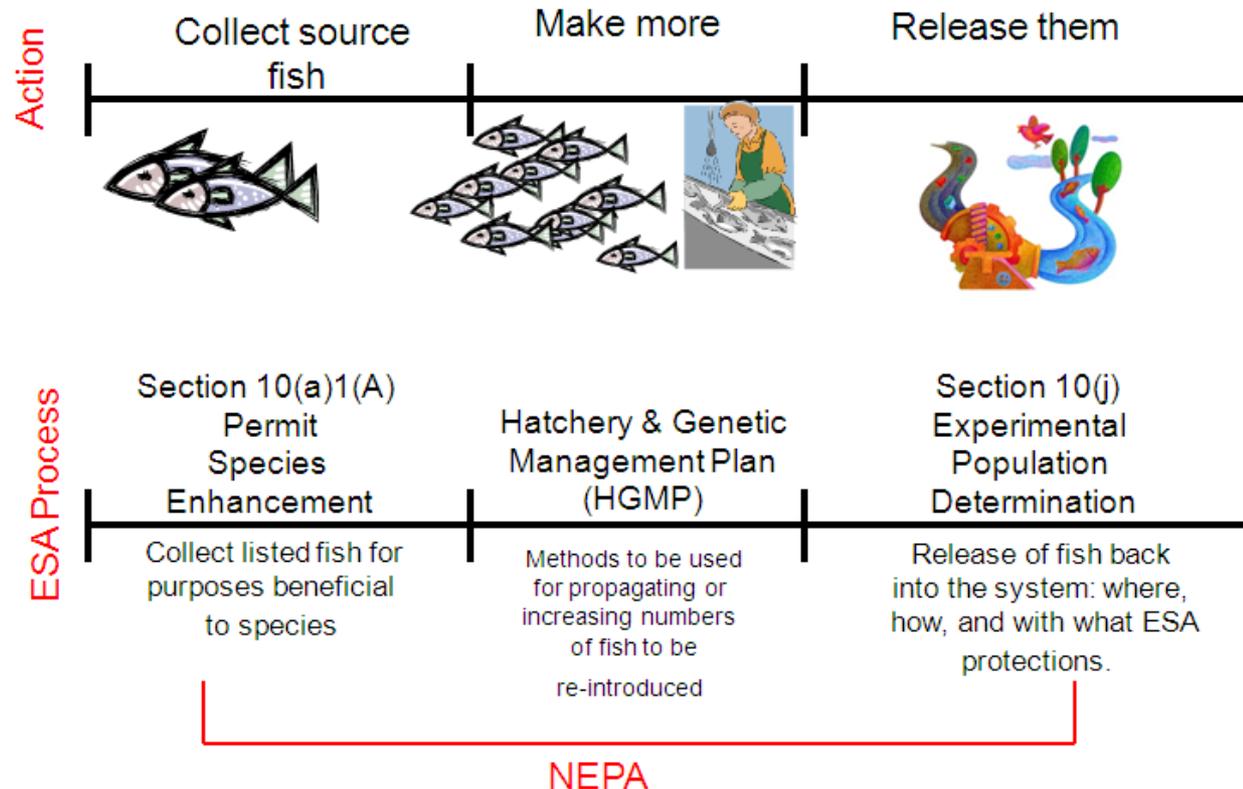


# Component Elements for Chinook Salmon Reintroduction





## Component Elements for Spring-run Chinook Salmon Reintroduction



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## Stock Selection – Available Stocks

- Butte Creek
- Feather River
- Deer/Mill Creek
- San Joaquin Tributary “spring running” stocks
  - Mokelumne River
  - Stanislaus River





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## Reintroduction Strategies

- Direct River Reintroductions
  - Short term goals.
- Captive Broodstock
  - Mid term goals.
- Life Stage Considerations.



## Obstacles to Reintroduction

- Hatchery construction
- Funding
- Timeline for site specific restoration actions
- River habitat suitability
- Spring-run population status



## River Suitability by 2012

- Migration Needs
- Temperature
- Holding Habitat
- Spawning Habitat



*Interim Flows have begun the process of re-watering the river.*



# Major Channel Improvements

Settlement requires 10 specific channel and structural improvement projects to address:

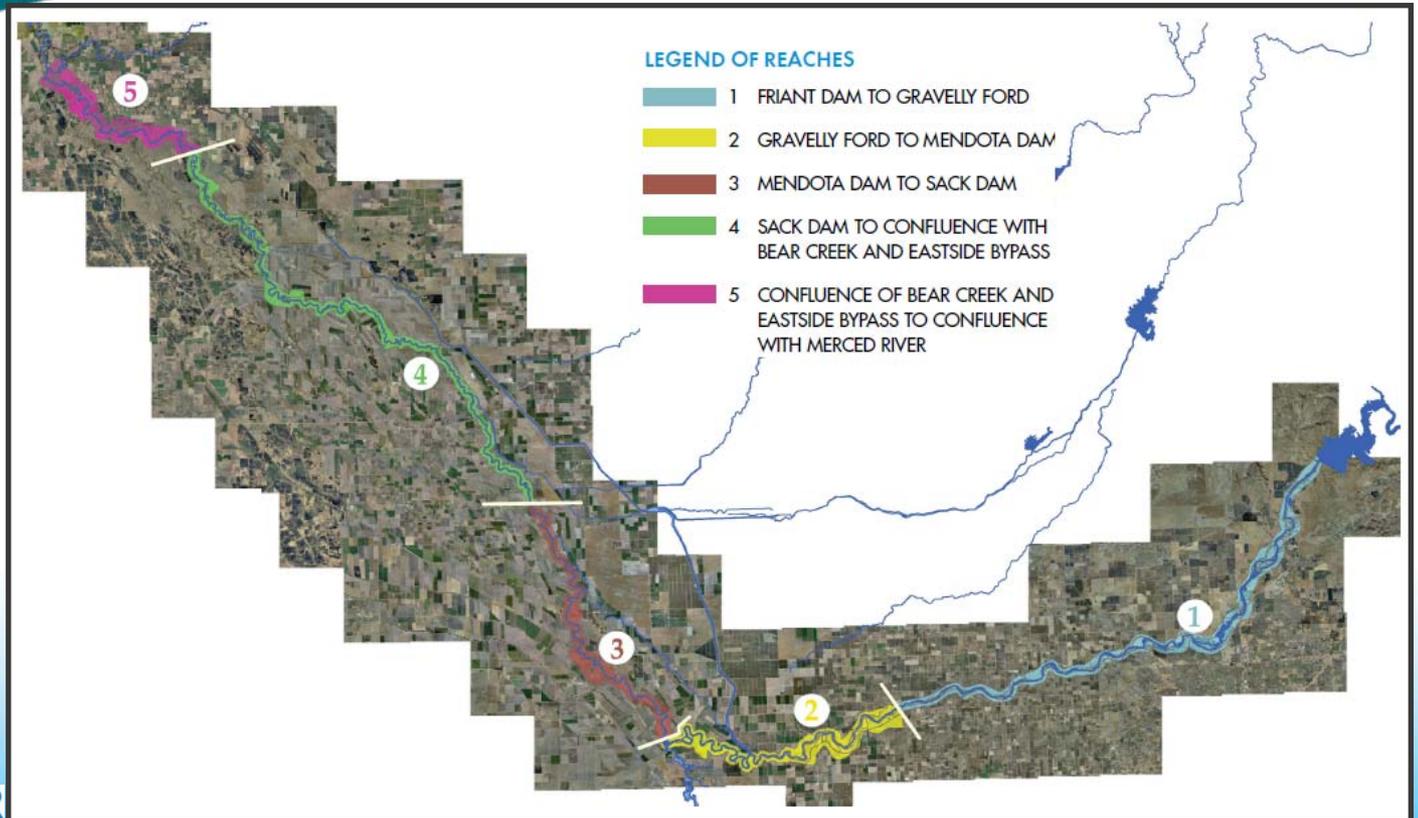
- Channel capacity limitations
- Fish habitat limitations
- Fish passage and entrainment issues

Combined into 4 major projects

3 underway, 1 to start in late 2011

All targeted for completion: 2015





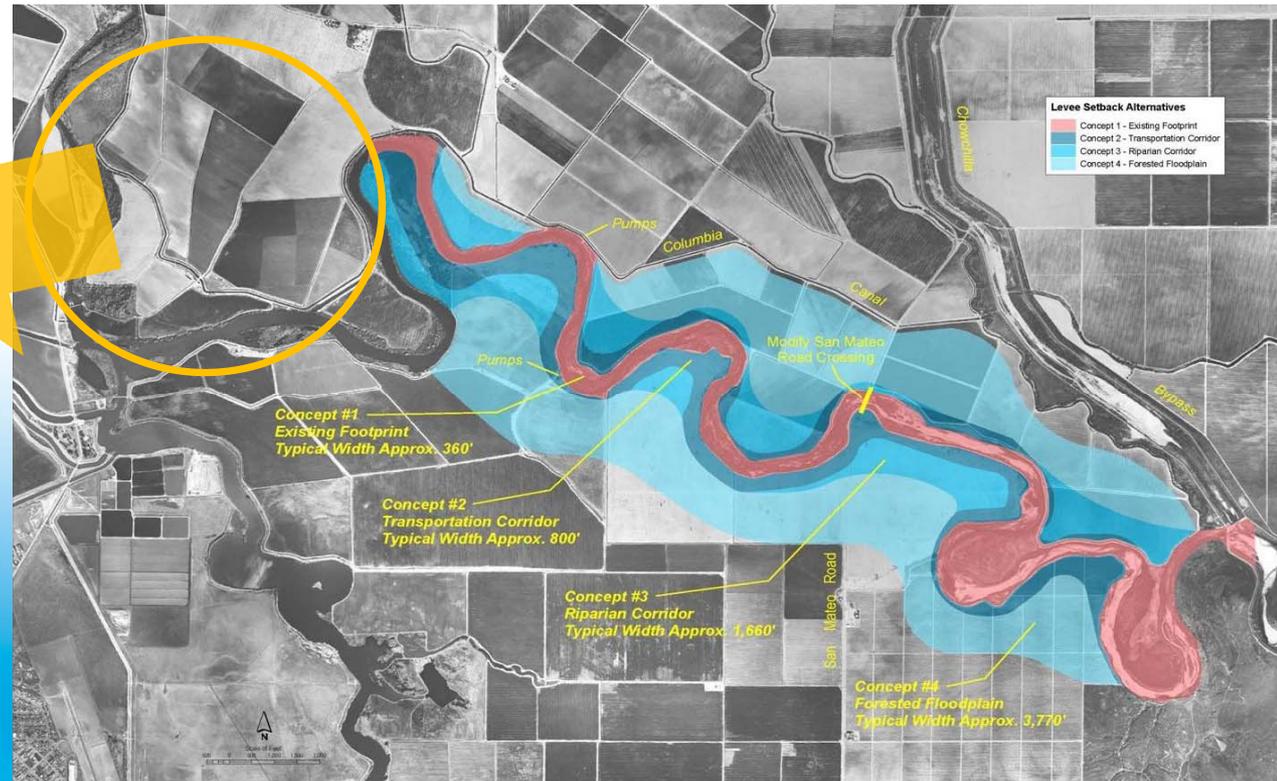
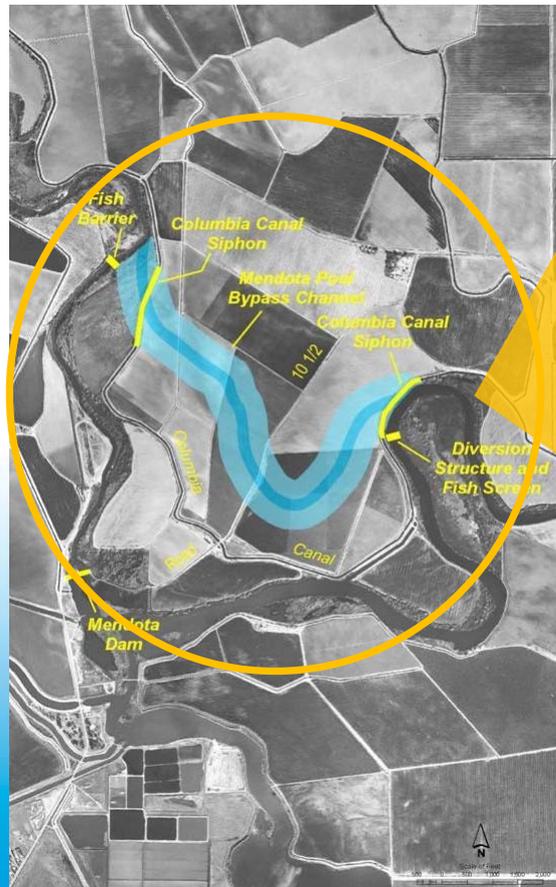
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Can start now.



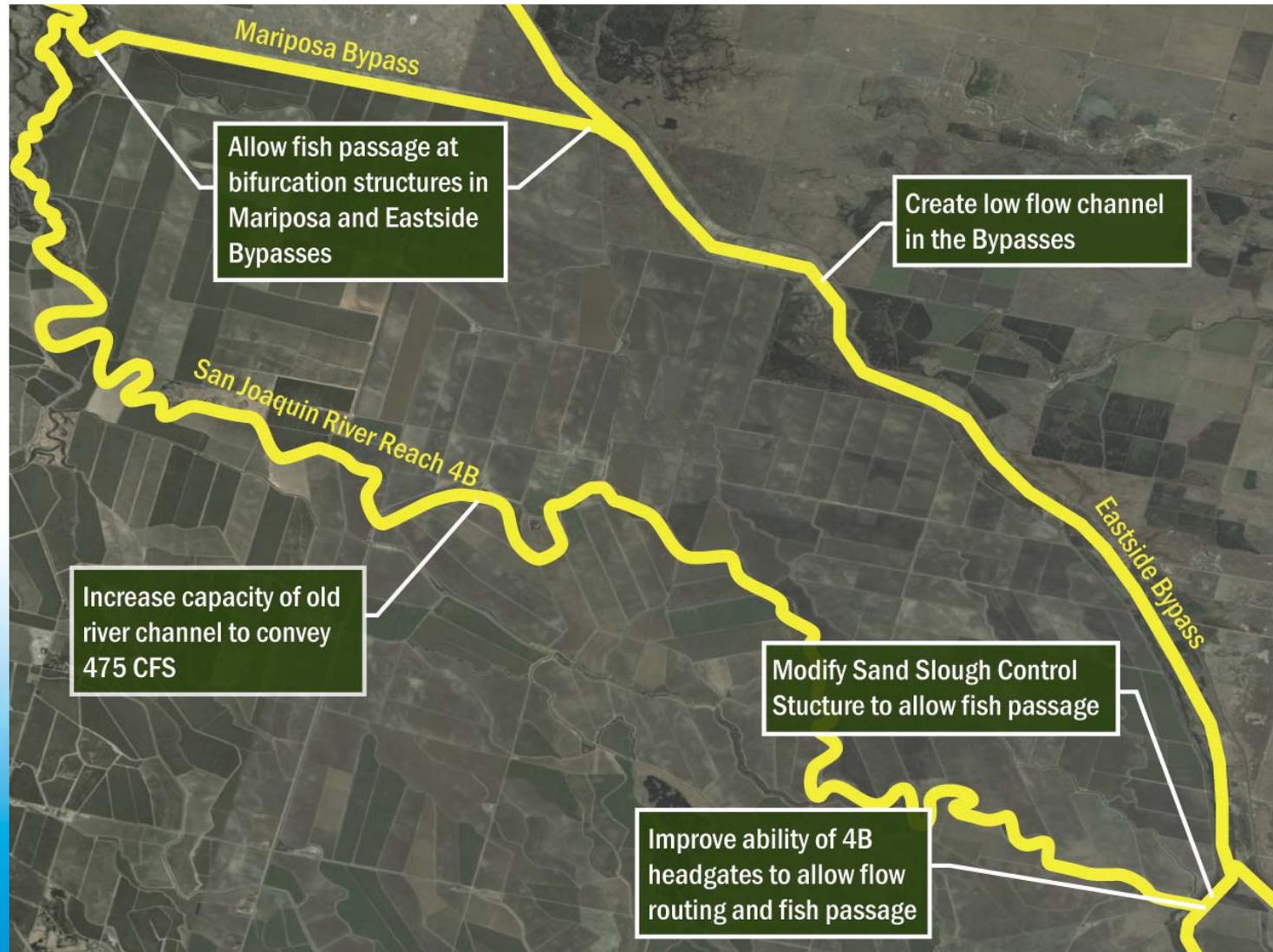
# Mendota Pool Bypass and Reach 2B Channel Improvements Project

- Create bypass channel around the Mendota Pool (about ½ to 1 ½ miles of new river channel, depending on route)
- Expand Reach 2B capacity to convey at least 4,500 cfs (11 miles of new levee and flood plain habitat)



# Reach 4B, Eastside Bypass and Mariposa Bypass Low Flow Channel and Structural Improvements Project

- Up to 21 miles of channel clearing and possibly new levees
- Modifications to 5 or more structures for flow and fish passage
- Possible low flow channel and fish habitat in the bypass



# Reach 4B, Eastside Bypass and Mariposa Bypass Low Flow Channel and Structural Improvements Project

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Channel modifications  
for conveyance and fish  
passage



Structural modifications  
for fish passage

# Arroyo Canal Fish Screen and Sack Dam Fish Passage Project



Arroyo Canal – Screening  
to prevent entrainment

Sack Dam –  
Modifications for fish  
passage



# Future Projects



- Seasonal Barriers at Mud and Salt Slough
- Gravel Pit Isolation
- Diversion Screening
- Habitat Improvements



## Additional Salmon Considerations

- Temperature
- Contaminants
- Flow and passage beyond the Merced River
- Interaction between restoration flows and downstream flow standards.
- Spring-run population status





<http://www.restoresjr.net/>

