

# RECLAMATION

*Managing Water in the West*

## **Delta-Mendota Canal Recirculation Feasibility Study**

**Stakeholder Meeting  
November 17, 2006**



U.S. Department of the Interior  
Bureau of Reclamation

# Purpose and Outcome

- **Purpose**
  - Update Stakeholders on the study plan
  - Engage Stakeholders in the development of the study
- **Outcome**
  - Identify Stakeholder involvement
  - Receive Stakeholder input on major issues and concerns and alternatives development

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# Agenda

- **Introductions**
- **Stakeholders' Role**
- **Study Background and Process**
- **Stakeholder Input**
  - Alternatives Development
  - Issues and Concerns
- **Next Steps**
- **Wrap-Up**

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# Stakeholders' Role

- Provide input at critical study milestones
- Participate in Technical Team Workshops



## Potential Technical Teams

- Alternatives Development
- Alternatives Screening
- Baseline/No-Action
- Modeling
- Others?

\*PMT – Project Management Team

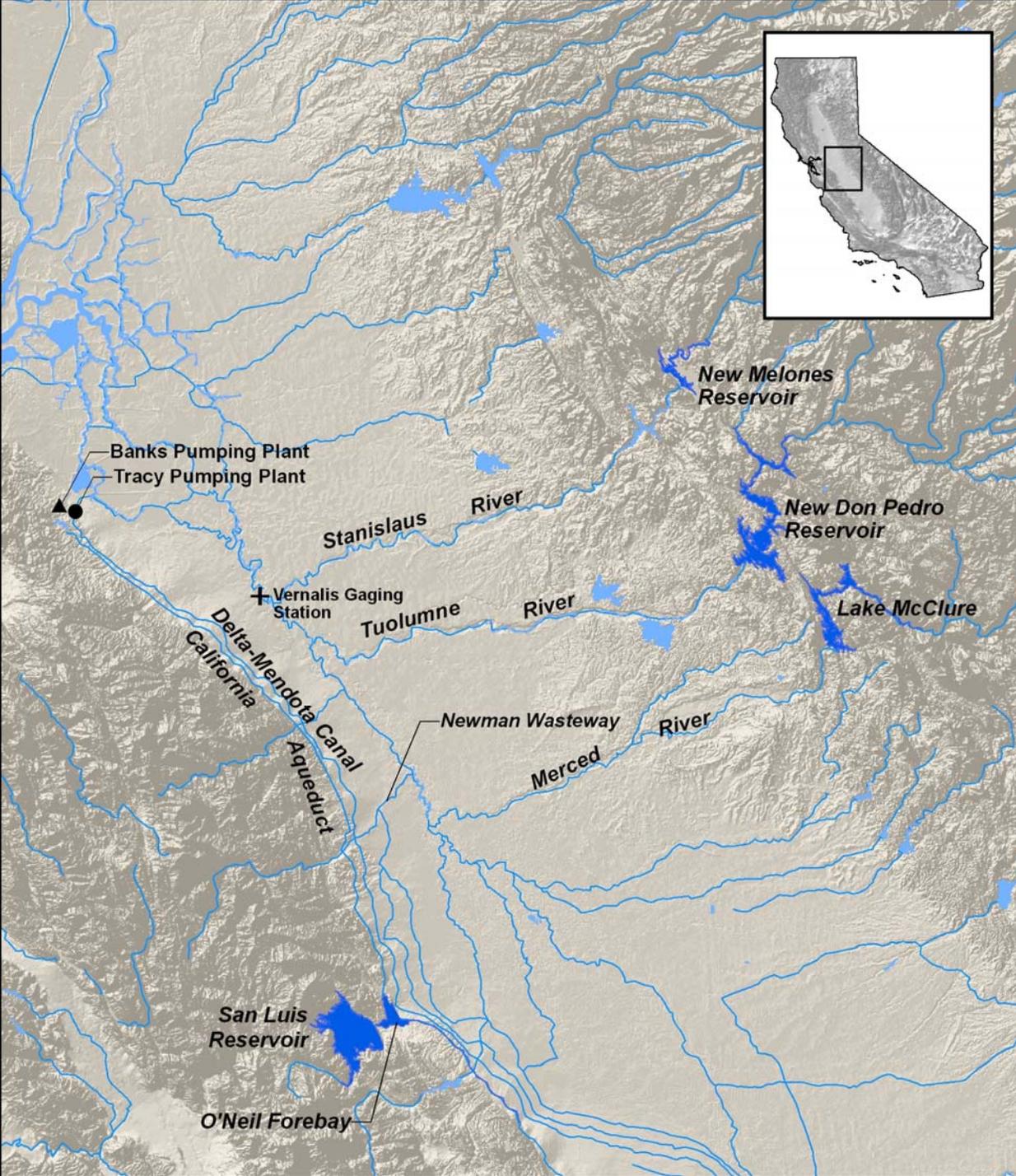
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# Study Background

- **Feasibility Study** authorized by PL 108-361 and required by D-1641
- **PL 108-361:** Proposed as a way to meet Vernalis flow and salinity objectives while reducing reliance on New Melones Reservoir
- **D-1641:** SWRCB – prepare a Plan of Action and consult with NMFS, USFWS, DFG, DWR, and SDWA
- **Decision to implement or not** would be made after the Feasibility Study and EIS/EIR are completed

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# Study Area



# CEQA Lead Agency

- **Coordinate with ongoing State projects and programs that may influence the formulation of alternatives**
- **Participate in the formulation and evaluation of Project Description and Alternatives**
- **Implement CEQA requirements and activities**
- **Certify adequacy of environmental documentation**

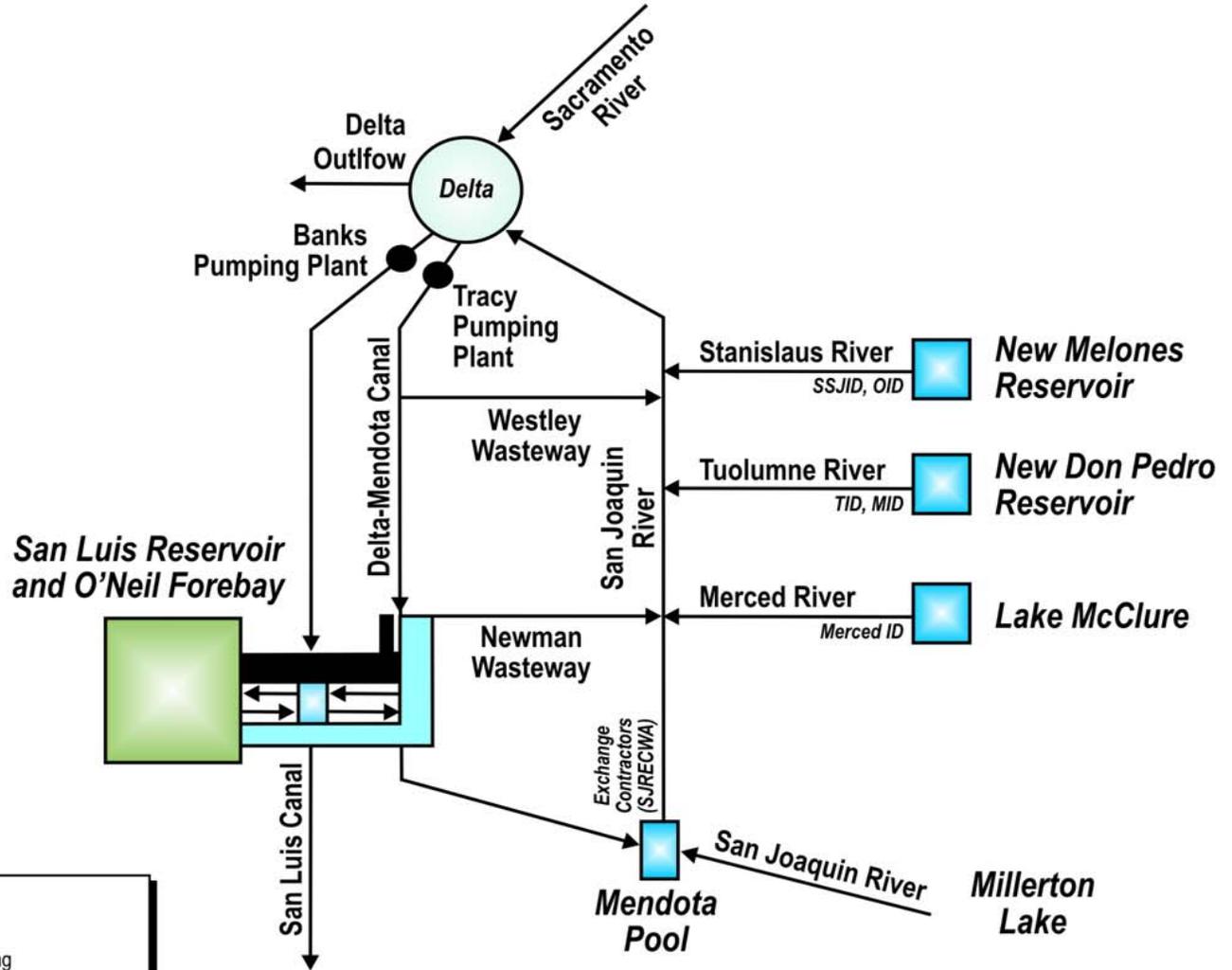
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# Cooperating Agencies

- **Participate in the development of technical analysis, alternatives, and analysis of affected environment and impacts**
- **Provide technical input for development of the feasibility report and environmental document**
- **Participate in technical teams**

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# Conceptual Representation



# Feasibility Study Deliverables

- Initial Alternatives Information Report (IAIR)
- Plan Formulation Report (PFR)
- Feasibility Report (FR)
- Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR)

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# Key Milestones

<b>Completed Plan of Study</b>	<b>May 2006</b>
<b>Initiated Feasibility Study</b>	<b>Sept 2006</b>
<b>File NOI/NOP</b>	<b>Early 2007</b>
<b>Complete IAIR</b>	<b>May 2007</b>
<b>Complete PFR</b>	<b>Dec 2007</b>
<b>Complete Draft FR &amp; EIS/EIR</b>	<b>Mid 2008</b>
<b>Complete Final FR &amp; EIS/EIR</b>	<b>2009</b>
<b>Record of Decision</b>	<b>2009</b>

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# Work Completed to Date

- **Plan of Action**
- **Hydrologic Modeling**
  - Completed 2003
- **Pilot Study**
  - Completed August 2004; report 2005
- **Plan of Study**
  - Completed May 2006

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# DMC Recirculation Modeling

- Performed hydrologic modeling study
- Evaluated recirculation for 31-day pulse flow
- Evaluated water quality and flow for February through June release to supplement San Joaquin River flows
- Identified some potential water supply impacts and benefits

## *Delta-Mendota Canal Recirculation Study*



## *Final Report on Hydrologic Modeling*

Prepared for



US Bureau of Reclamation  
Mid-Pacific Region

By

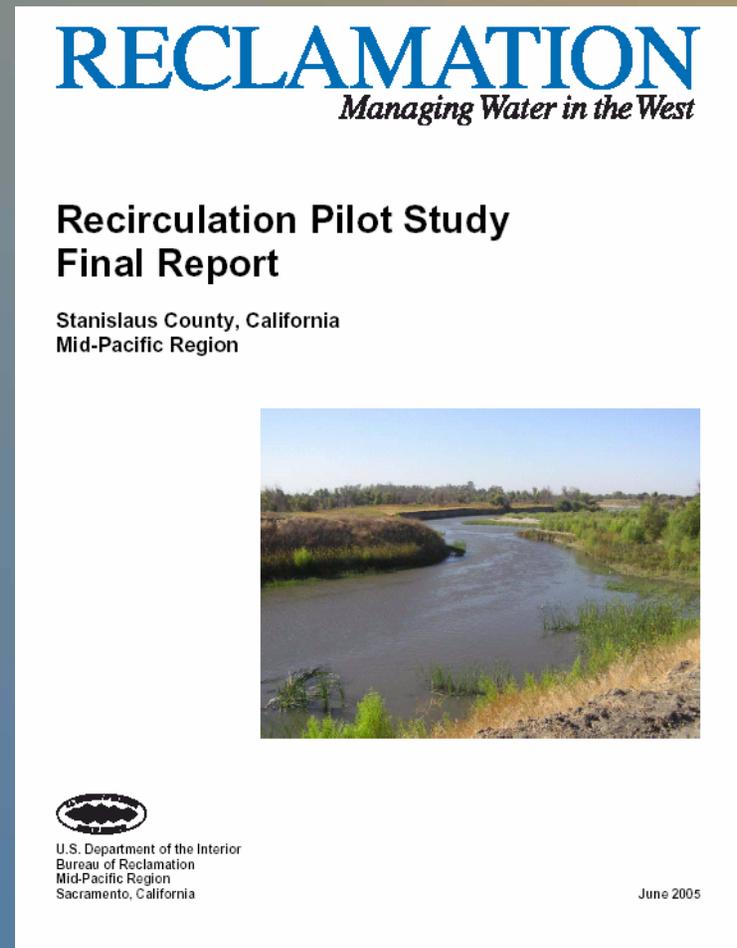


May 2003

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# Recirculation Pilot Study

- Diversion of 250-300 cfs into Newman Wasteway
- Discharge 1.24 miles upstream of Merced River confluence
- Increased flow, reduced electrical conductivity at Vernalis
- Used surplus CVP water supplies; surplus SWP pumping capacity



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# Plan of Study

Internal Reclamation document intended to guide the work of the consultant

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**Plan of Study  
Delta-Mendota Canal Recirculation  
Project**

Central Valley Project  
Mid-Pacific Region

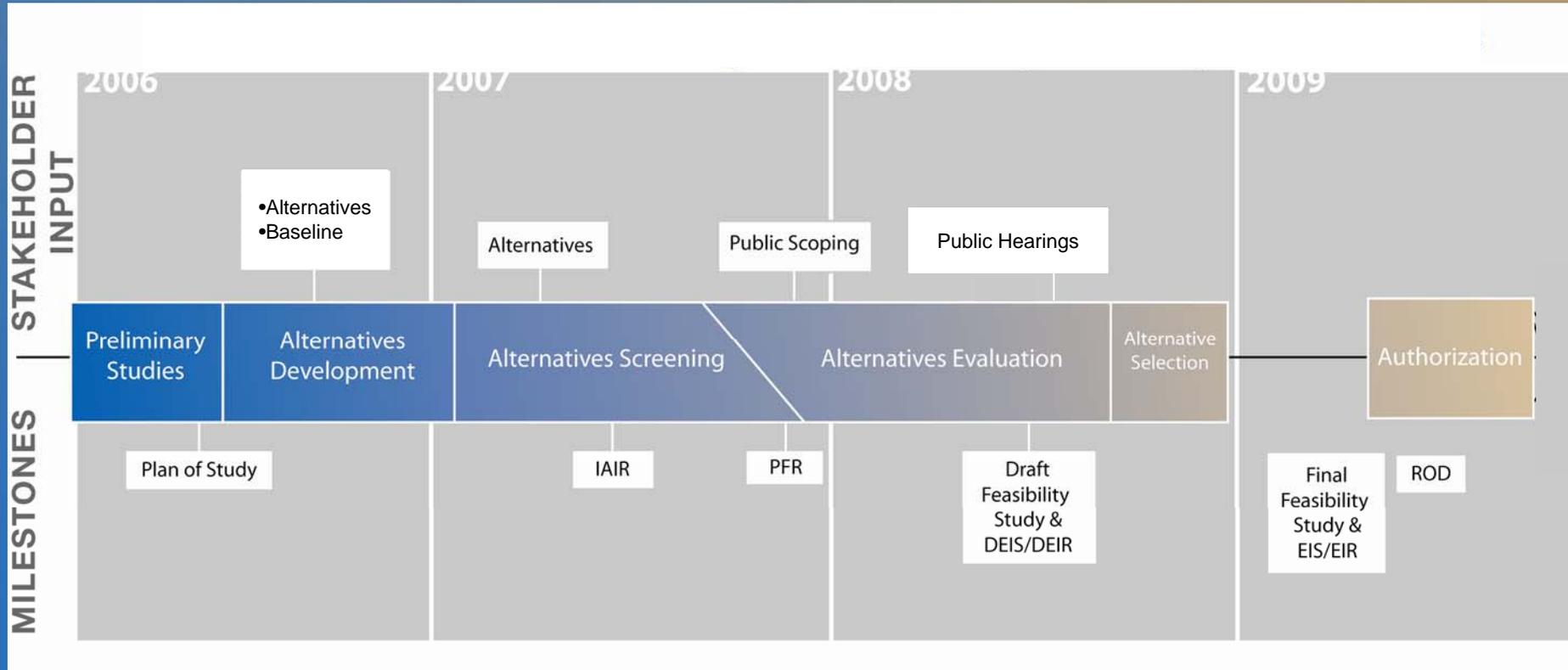


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May 2006

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# Feasibility Study Preliminary Timeline



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# Initial Alternatives Information Report

- Refine project objectives
- Define existing & future baselines, study area
- Identify initial alternatives
- Develop screening criteria and methodology
- Sets the groundwork in place for the PFR

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# Initial Alternatives Development

- **Physical Conveyance Options**
  - Newman Wasteway
  - Westley Wasteway
  - Others?
- **Operational Options**
  - 31 day spring flow
  - July – August for flow/salinity
  - Borrow from San Luis storage
  - Others?
- **No-Action Alternative**
- **Provide comments/ideas on alternatives by 12/08/06 or at the 12/13/06 technical workshop**

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# Water Supply Issues & Concerns

- Impacts on water deliveries
- Disproportionate impacts to CVP contractors
- Impacts to available capacity at export pumps to convey transferred CVP and non-CVP water
- Potential for recirculation to conserve water to meet Delta flow and VAMP requirements
- Ability of recirculation to complement SDIP implementation or other water supply/conveyance programs
- Appropriate baseline of operations to compare alternatives

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# Water Supply Issues & Concerns

- Losses and disposition of recirculated water
- Potential for recirculation to cause indirect water supply impacts as a result of alteration of facility maintenance schedules
- Others?

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# Water Quality Issues & Concerns

- Effects of salt and contaminant loading
- Impacts on TMDL compliance
- Impacts to San Luis Reservoir water quality
- Impacts to San Joaquin River temperature
- Impacts to drinking water quality and water treatment costs
- Establishing well-defined, specific, and measurable water quality objectives
- Evaluation of water quality considerations downstream of Vernalis
- Others?

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# Fishery Issues & Concerns

- **Impacts of changes in water composition**
  - Impacts on imprinting
  - Increase in straying
- **Effects of changed operation on the cold water pool**
- **Effects of increased exports**
- **Potential to increase fish entrainment**
- **Potential for staggering timing of recirculation to reduce impacts to fish**
- **Others?**

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# General Issues & Concerns

- Impacts of the San Joaquin River settlement
- Capacity of physical facilities to implement recirculation
- Determination and cost of any needed structural/channel modifications
- Allocation of costs among beneficiaries
- Increased electrical load
- Clear definition of all operational assumptions
- Potential impact on TPP maintenance
- Others ?

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# Next Steps

- **Initial alternatives development**
- **Define baseline and future no-action conditions**
- **Develop screening criteria and evaluation method**
- **Prepare NOI and NOP for Feb/Mar scoping**

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# Stakeholder Technical Workshops

- **December 13, 2006, 1 p.m. Modesto CA**
  - Purpose: work to further develop and refine alternatives
- **January/February 2007**
  - Purpose: work on Baseline/No-Action assumptions and development of screening evaluation methods

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# Wrap-up

## For Additional Information Contact

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**[www.usbr.gov/mp/dmcrecirc/index.html](http://www.usbr.gov/mp/dmcrecirc/index.html)**

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