

San Joaquin River Restoration Program



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

Landowner Meeting
July 21, 2011



Agenda

- Reach 4B Project Overview
- Initial Concepts
- Field Activities and Access
- SJRRP General Program Update
- General Discussion



Original Alternatives Process

Section 11(a) Settlement Requirements:

- Reach 4B1:
 - Convey at least 475 cfs through Reach 4B of San Joaquin River channel
 - Modify Reach 4B headgate to ensure fish passage and flows
- Eastside and Mariposa Bypasses:
 - Modify Sand Slough Control Structure and Eastside and Mariposa Bypass structures to ensure fish passage
 - Modify Eastside and Mariposa Bypass channels to establish a low-flow channel for anadromous fish migration

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Concerns With Approach

- Reach 4B Project original purpose and need focused on capacity and fish passage
 - 475 cfs through San Joaquin River channel
 - Fish passage through river and bypass channels
- Several Concerns
 - No constructed rearing habitat for fish
 - Approach involves two rounds of disruptive construction

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Alternatives Formulation Principles

- Purpose and Need to include support for Restoration Goal
- Improve Reach 4B capacity to at least 475 cfs
- Provide habitat and flow in Reach 4B and/or the Eastside Bypass to support long-term fish population goals
- Peak restoration flows routed in Reach 4B will not be constrained
- Fish passage and rearing will be evaluated for Reach 4B, Eastside Bypass, and both
- Alternatives will inform separate flow routing decision called for under Settlement (High Flow Study)
- Total existing conveyance capacity for flood flows and operational flexibility cannot be diminished

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Example Initial Concepts

- Bracket a range of potential actions that may take place to accomplish project goals/objectives
- Represent a range of potential environmental effects
- Will change with feedback - landowners and stakeholders can suggest additional potential actions or approaches
- A draft Initial Alternatives TM will provide an opportunity for reflection and comment
- A preferred alternative will be developed into plans and specifications after a ROD

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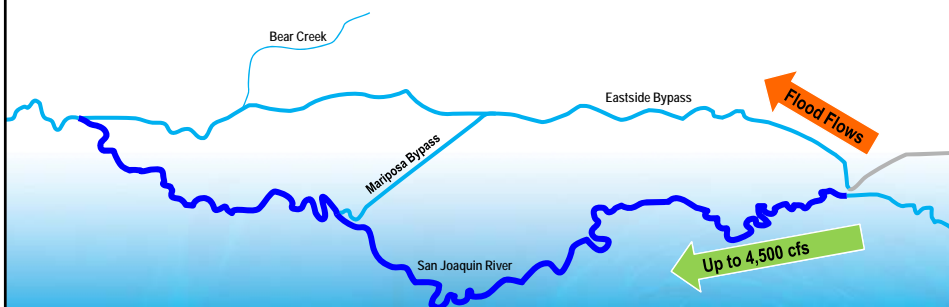
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Initial Concept 1

Main Channel Restoration

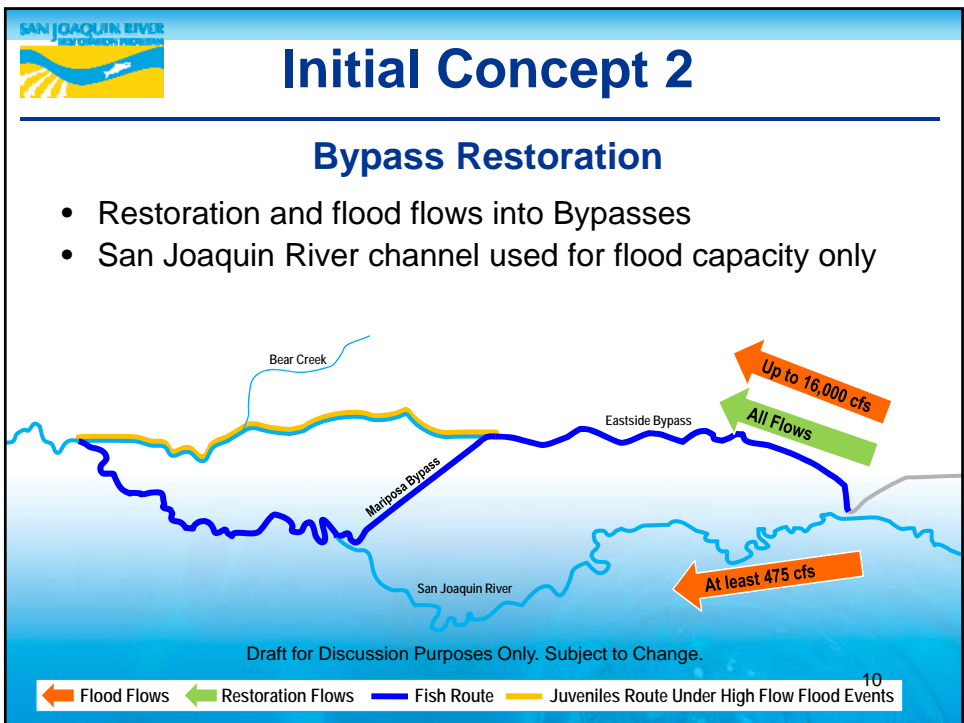
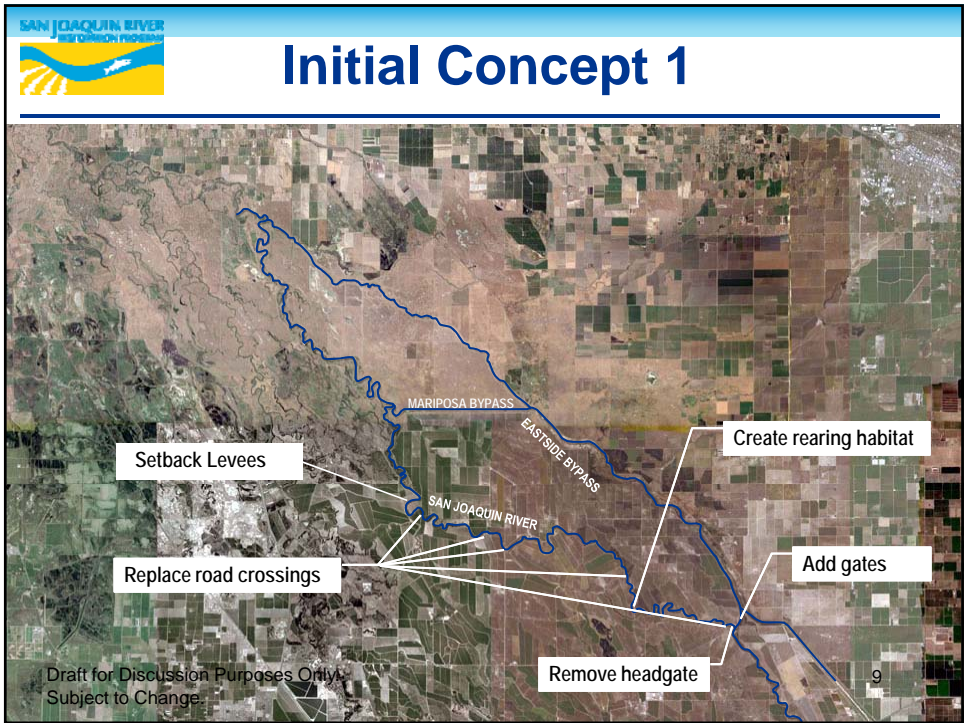
- Restoration flows and fish into San Joaquin River
- Flood flows into Bypasses

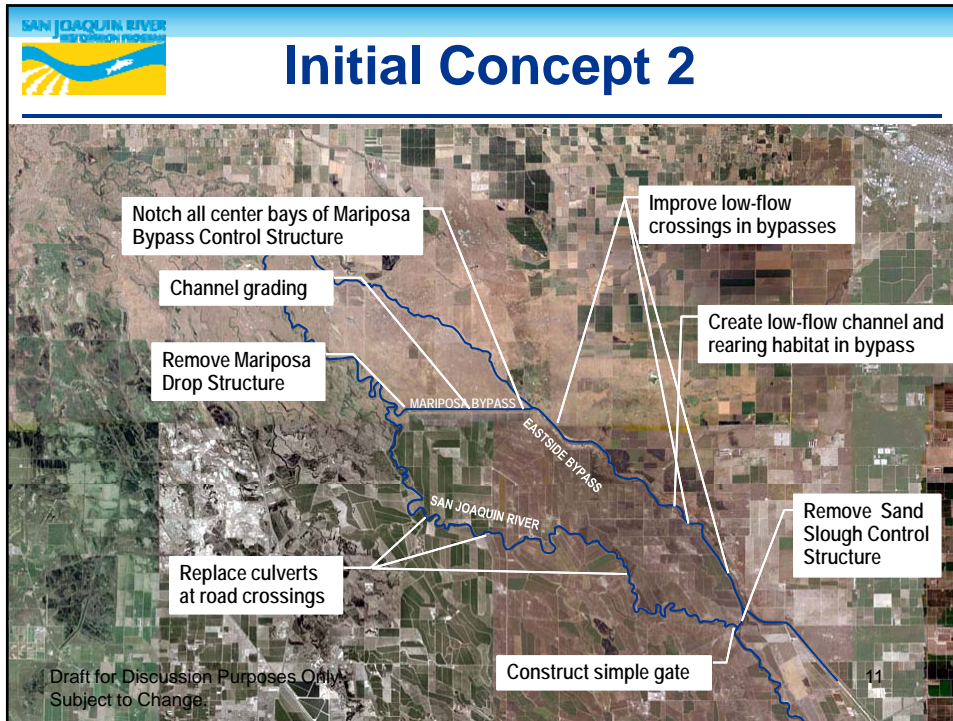


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← Flood Flows ← Restoration Flows — Fish Route

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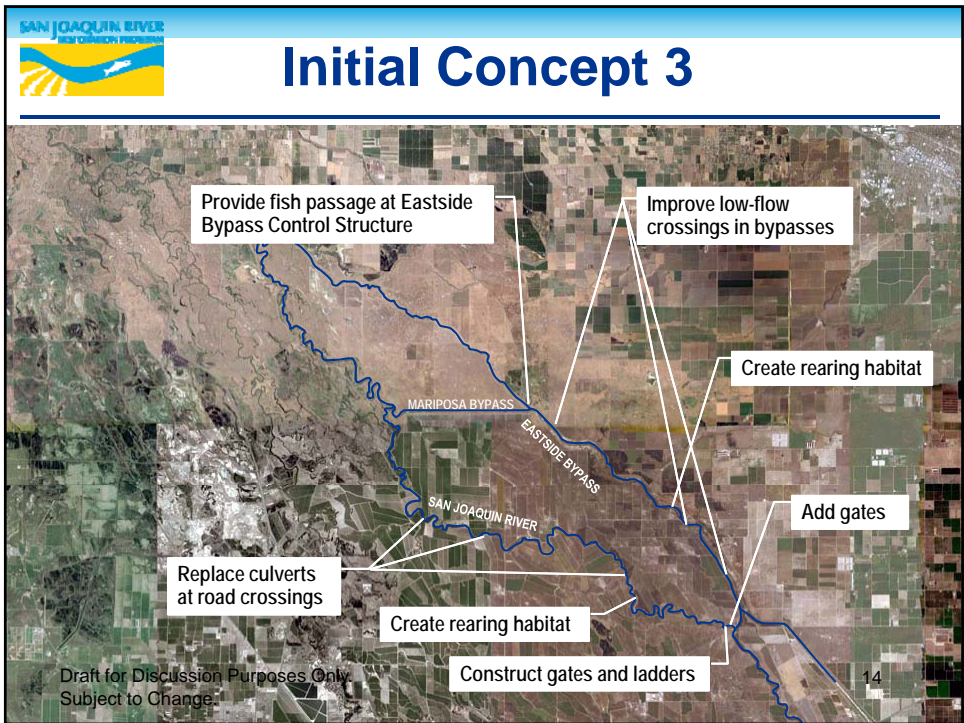
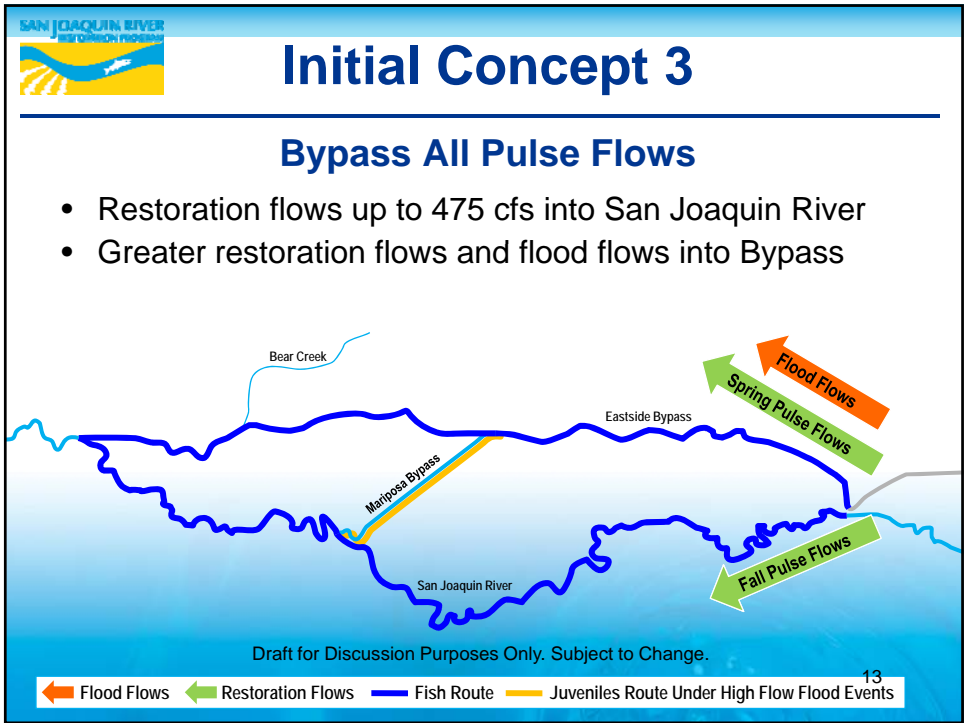


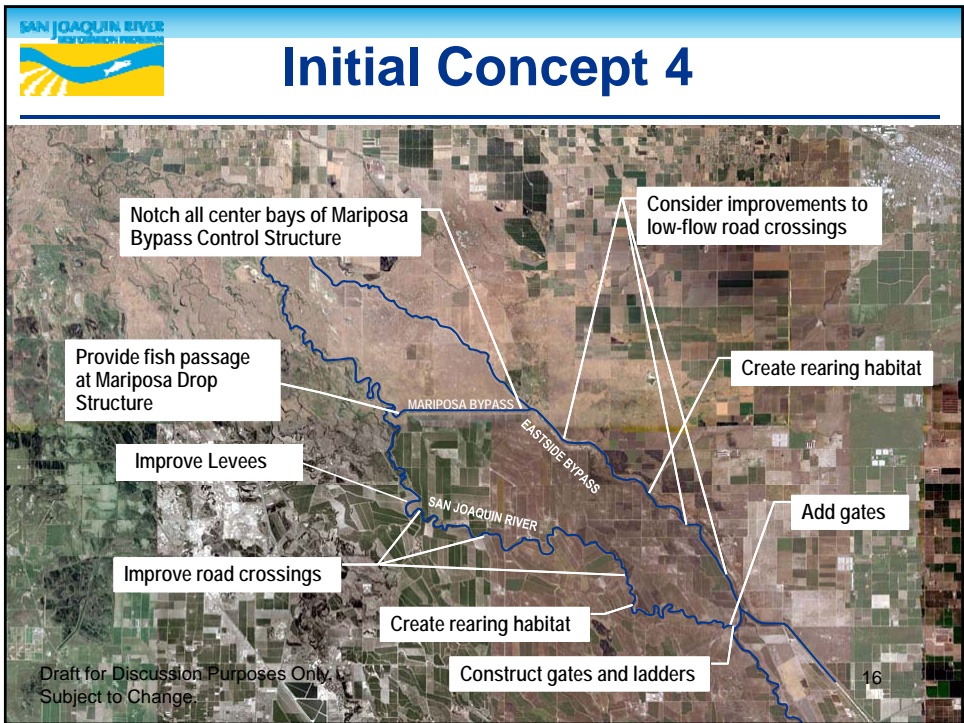
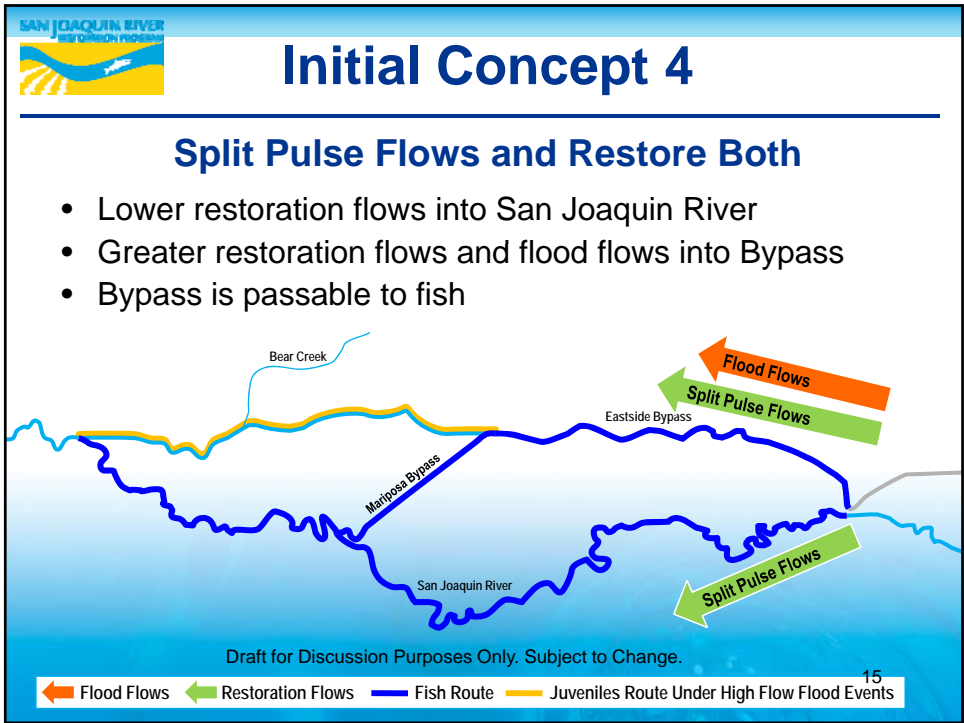


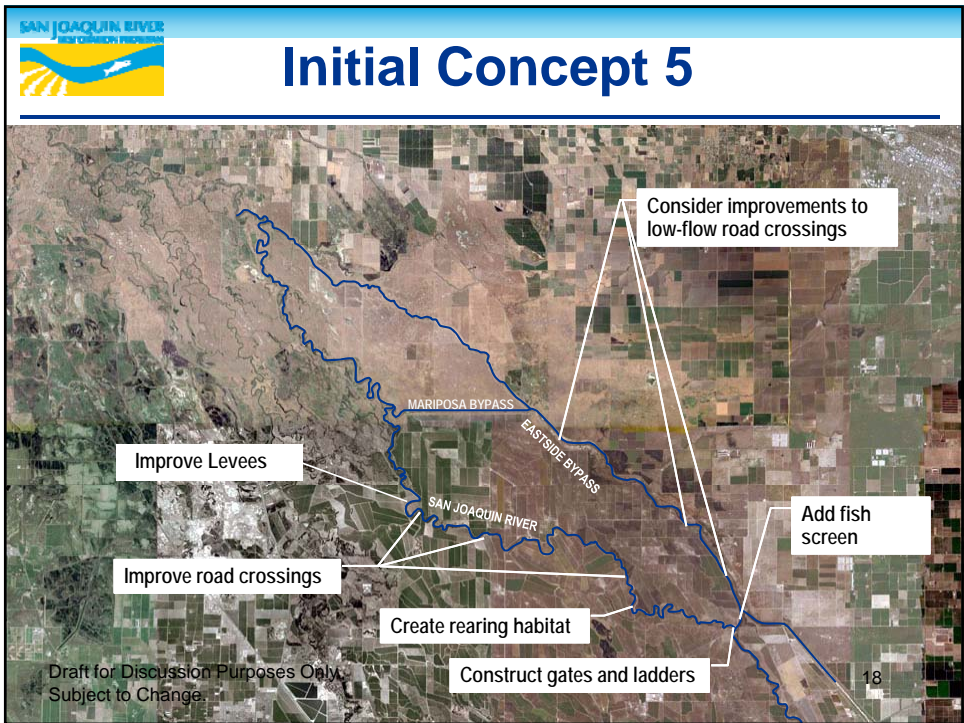
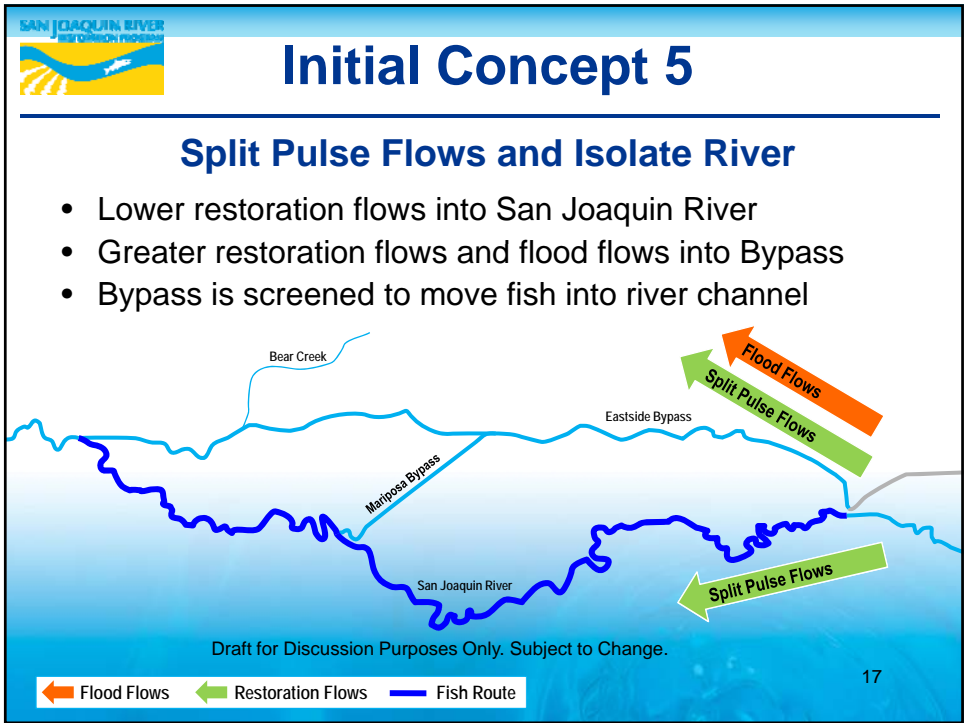
Initial Concept 2

- Need to mitigate changes to flood capacity and operations in bypasses
 - Add capacity in San Joaquin River
 - Move levees in the bypasses
 - Change slope and capacity in the bypasses
- Mitigation ideas have not yet been discussed with flood control entities – final mitigation measures may change

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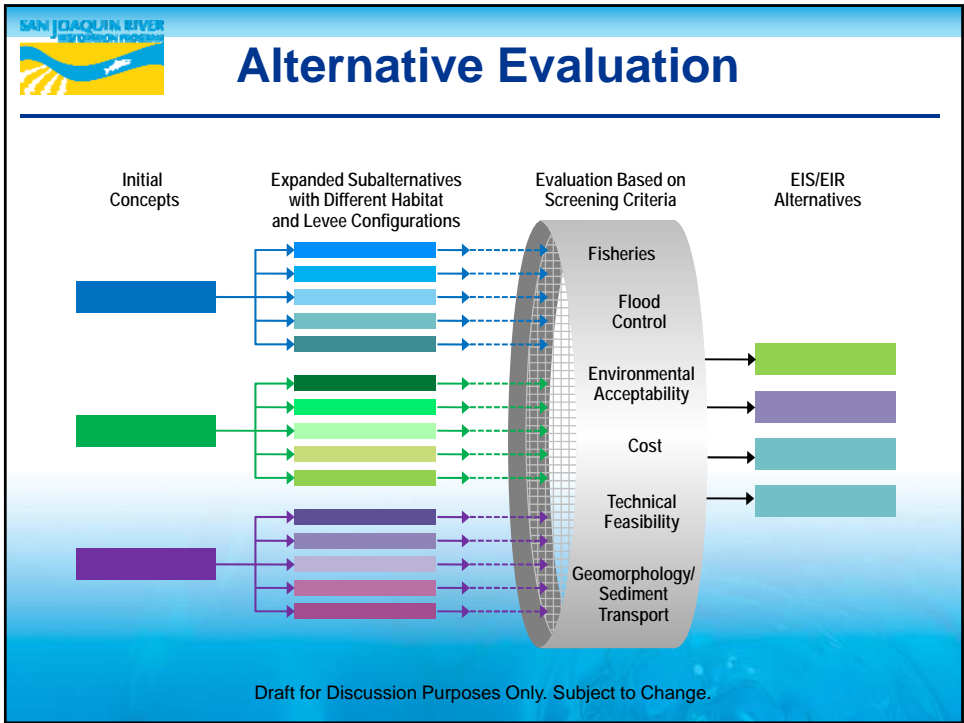
Seepage Impacts

- Increasing flows in the River channel and/or bypasses has potential to increase groundwater seepage into adjacent agricultural lands
- Seepage could affect adjacent crops and long-term productivity of adjacent agricultural lands
- The Lead Agencies are committed to avoiding or minimizing these impacts
- Pre-design will identify measures for each alternative to address potential seepage based on concepts in the Seepage Management Plan



Fish Considerations

- **Fish Passage** – physical blockage (road crossings), injury from impact, desiccation (damage from being out of water for long periods), velocity, depth, elevation changes, fatigue, false migration pathways, stranding, predation, disease
- **Water Quality** – temperature, dissolved oxygen, turbidity, salinity
- **Habitat** – shade, food, shelter, refuge from predators and high water velocities



SAN JOAQUIN RIVER
WATER CONTROL PROGRAM

Next Steps

Formulate Alternatives

- Comment on concepts
- Review Initial Alternatives TM

Field Work/Surveys

- Identify locations for traffic, noise, and air quality surveys
- Provide local knowledge and feedback
- Provide land access

Evaluate Alternatives

- Comment on screening criteria
- Provide feedback on how well alternatives meet screening criteria

Draft Project Description

- Review project description

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Reach 4B Schedule

Title	Date
Formulate Alternatives	June to November 2011
Initial Alternatives TM	August/September 2011
Evaluate Alternatives	September/October 2011
Draft Project Description	December 2011
Draft EIS/R for Public Review	June 2012
Final EIS/R for Public Review	March 2013
ROD/NOD/Findings	June 2013

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Questions?

- Any questions on the Reach 4B Project or schedule?

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SJRRP Surveys

- Review SJRRP surveys scheduled in next six months

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Reach 4B Project Surveys

- Surveys needed to collect information on existing conditions, determine appropriate mitigation for any impacts
- Ensures the design team understands site-specific conditions
- Helps to understand existing infrastructure and take that into account in the early design stages
- Identifies impacts early on so project can be designed to avoid/minimize them
- Provides on-the-ground input into the formulation of alternatives

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Reach 4B Project Surveys

Upcoming Surveys (next 6 months)

- **Bathymetry Surveys** – Reach 4B1 channel
- **Biological Resources** – vegetation, wildlife, wetlands, vernal pools
- **Cultural Resources** – historic properties or resources
- **Traffic** – current traffic volumes
- **Noise** – existing noise levels
- **Air Quality** – dust monitoring

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SJRRP Update

- Draft Program EIS/R released to public April 2011
- Comment period extended to September 21, 2011
- Interim flows and flood flows
- Seepage management and monitoring
- Sand Slough Conveyance Project
- SLC Update

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General Discussion

- Questions?
- Topics for discussion?
- Upcoming meetings?

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Contact Information

Reach 4B Project:

Michelle Banonis

U.S. Bureau of Reclamation

Office: (916) 978-5457

Cell: (916) 675-2936

E-mail: Mbanonis@usbr.gov