Comments:
San Joaquin River
Flow Objectives
Revised NOP

State Water Resources Control Board
Scoping Meeting
June 6, 2011

John M. Shelton
Staff Environmental Scientist
Central Region
San Joaquin River is an Ecosystem
• Part of the Central Valley Ecosystem

“To keep every cog and wheel is the first precaution of intelligent tinkering” – Aldo Leopold
Flood Plain Habitat needs flow

• At the right time
  • Mimic natural hydrograph
• Needs to vary between years
  • High, moderate and low

To provide
  FULL Ecological Services
We have some floodplain habitat – we need flows to connect it....
We have invested in several floodplain restoration projects....
Salmon grow larger on Floodplain Habitat…

Salmon from the River Channel

Salmon from the Floodplain
It’s the Water!

Almost every stressor’s impact on the San Joaquin Ecosystem is greatly increased by the lack of flows.
Higher Flow = Higher Survival

- Multiple Mechanisms for this, but it is clear that Higher Flow results in Higher Survival
"The ultimate test of man's conscience may be his willingness to sacrifice something today for future generations whose words of thanks will not be heard."

- Gaylord Nelson, former governor of Wisconsin, founder of Earth Day

McConnell State Park

Field Note Taking

Water Quality Sampling

Classroom Instruction on Salmon Life Cycle

Harmony School
Natural Science Academy
Spring, 2011
Valley Eco Connection
Burden of Proof

- What is it?
- Who has it?

✓ Diversions changed the Status Quo
  ✓ Public Trust Rights came with Statehood
  ✓ Salmon had the water & were in higher numbers
  ✓ Well documented in Scientific Literature
  ✓ Diverters have the Burden of Proof to show fish do not need water they once had
Example
Pre & Post New Don Pedro

Salmon Population
Pre NDP = ~40,000
Post NDP = ~6,000

Substantial Flow Changes Pre & Post NDP

Fall
Spring
What it Means?

Highly significant (p < 0.01) relationship between flow and survival

This significant relationship between flow & fish survival has been shown for this system...

Where is the statistically significant relationship that shows salmon do not need the water they once had?

Figure 3: Logistic regression of validated smolt survival indices by the recovery-weighted flow (cfs) at La Grange from release to last recapture at Mossdale Trawl
To Protect an Ecosystem, the components must all function and they must function together as a system.

The SWRCB has the ability
- to assure that the San Joaquin River ecosystem’s components function (each tributary needs a protective flow regime)
- all components function together to provide the Ecosystem Services

So that
- The San Joaquin Valley’s local communities
- The Delta and its users
- The West Coast Fishermen and
- The State of California

Are assured a resilient future.

We must protect this ecosystem for our future prosperity....
Systematic Management/Protection Opportunities

- SWRCB - Water Rights
- SWRCB - Bay-Delta Plan
- CVRWQCB - Sac/SJ River Basin Plan
- The Delta Stewardship Plan

Opportunities for Management/Protection of the Components

- FERC - License Processes
- F&G Commission/PSMFC-Harvest
- 5937 Litigation
Questions....
Presentation by

National Marine Fisheries Service,
U.S. Fish and Wildlife Service, and
Department of Fish and Game

For the

SAN JOAQUIN RIVER FLOWS AND
SOUTHERN DELTA WATER QUALITY
SCOPING MEETING
June 6, 2011