Steelhead in the San Joaquin River Basin

State Water Resources Control Board Scoping
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Regulatory framework for salmonids in the San Joaquin Basin

- Steelhead are federally listed as threatened; the San Joaquin basin includes critical habitat (ESA)

- Fall-run Chinook salmon are a federal species of concern (ESA)

- Fishery conservation and management considerations (Magnuson-Stevens Act)
Central Valley Steelhead Distribution
Central Valley Steelhead Recovery

- Draft recovery plan status

- Draft Recovery goal: at least 2 viable steelhead populations within each diversity group

- San Joaquin Basin is the Southern Sierra Nevada diversity group

- Current population numbers very low
Status of Steelhead in the San Joaquin Basin

- Steelhead are difficult to monitor (resident vs. anadromous life histories)
- Tributary screw traps capture few smolts, tributary weirs and carcass surveys detect few migrating adults
- Mossdale (mainstem SJ River) trawl provides the limited data:
  - 1988 (1st year of sampling) = 30 HIGH
  - 1991 = 1 LOWEST
  - 2007 = 38 HIGHEST
  - 2008 = 4 LOW
- Often use Chinook salmon as surrogate
## Steelhead & Fall-Run Chinook Salmon Life Histories

### CV Steelhead and Fall Run Chinook Salmon
Sacramento - San Joaquin River Systems

- **Blue** = Adult Migration
- **Red** = Young of the Year Emigration
- **Orange** = Juvenile Rearing
- **Green** = Adult Spawning
- **Purple** = Yearling Emigration

### Fall-run

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### Steelhead

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Considerations for Steelhead Management in SJ Basin

Goal: Manage riverine conditions for all life stages

Considerations:
- Longer duration, higher magnitude spring pulse flow
- Longer duration, higher magnitude fall/winter attraction flow
- Higher summer base flow
- Flow and water quality criteria for tributaries, in addition to Vernalis standards
- Other habitat elements related to flow – floodplain habitats
- Explore passage opportunities
THANK YOU