

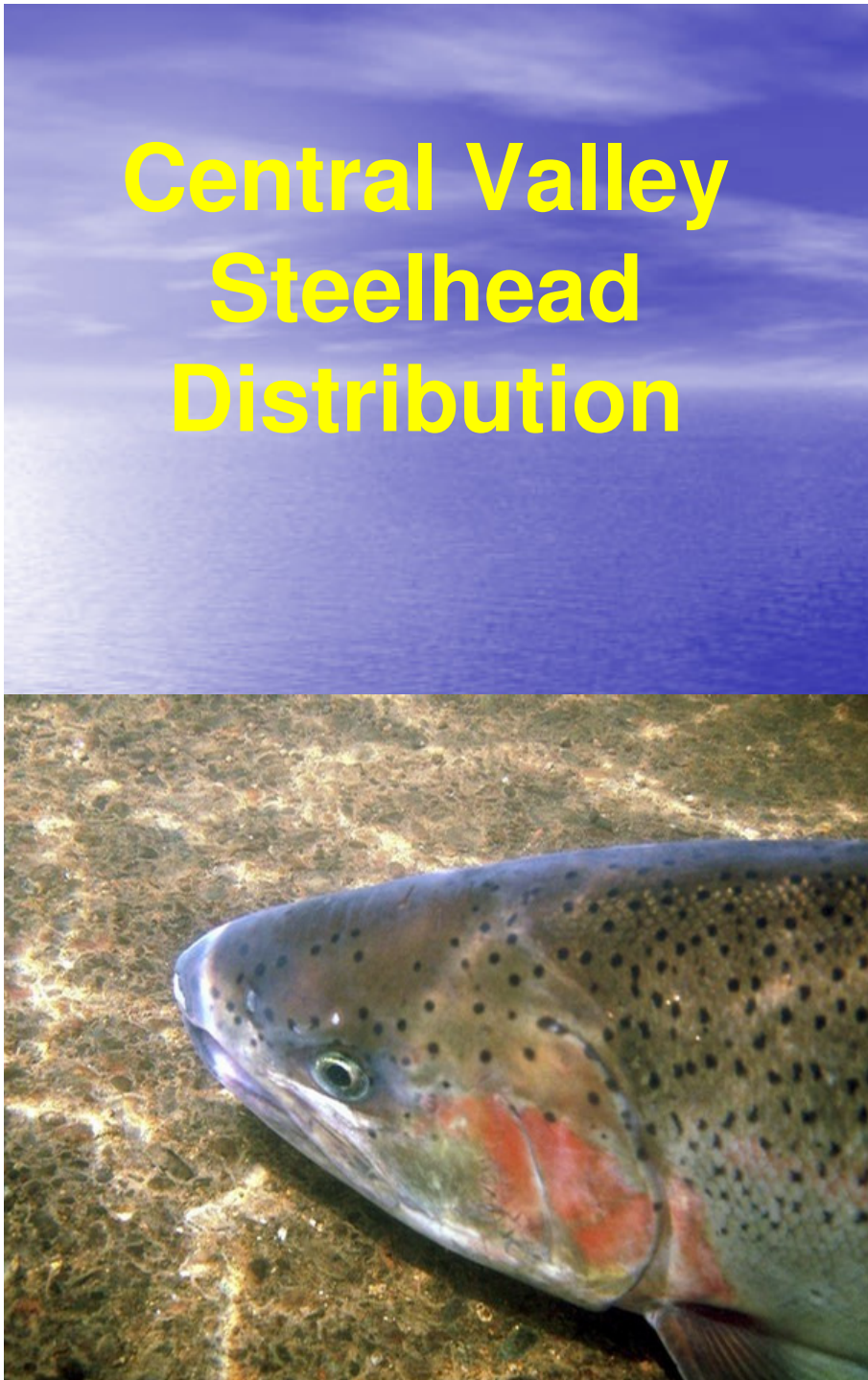
Steelhead in the San Joaquin River Basin



State Water Resources Control Board Workshop
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Central Valley Steelhead Distribution



Regulatory framework for salmonids in the San Joaquin Basin

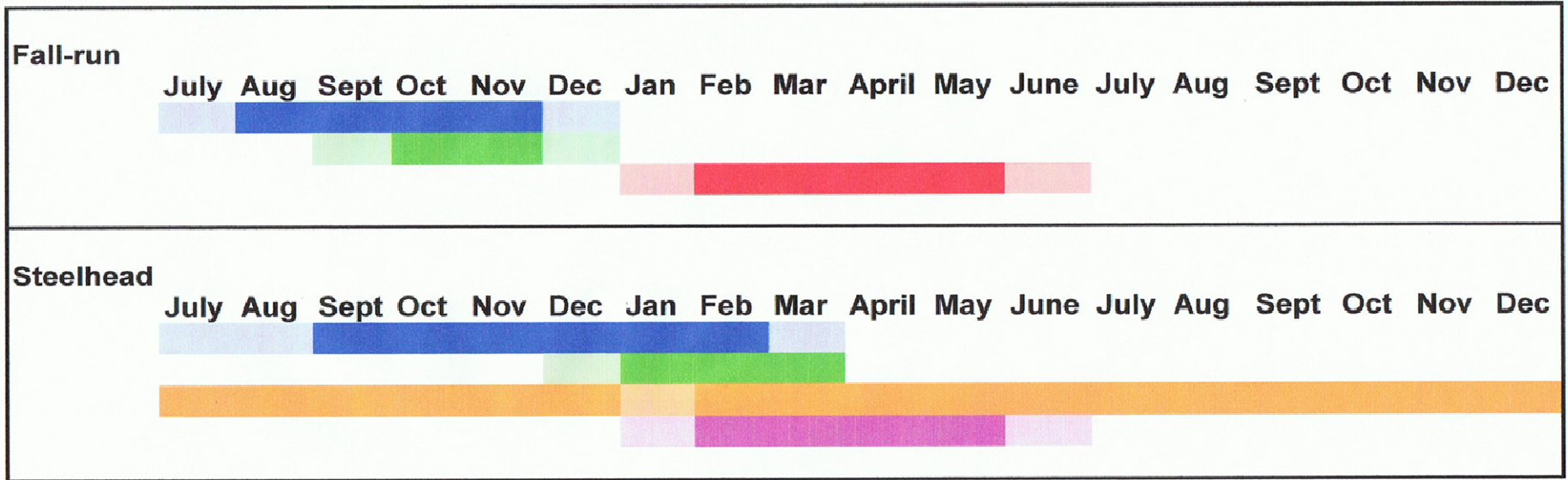
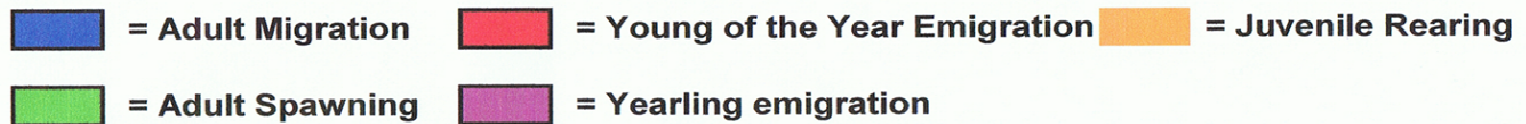
- **Steelhead are federally listed as threatened; the San Joaquin basin includes critical habitat (ESA)**
 - Section 7 consultations – where federal nexus (e.g. OCAP)
 - Section 10 Habitat Conservation Plan (e.g. draft Calaveras plan with Stockton East)
 - Section 9 take prohibitions/enforcement
 - Section 4 recovery planning
- **Fall-run Chinook salmon are a federal species of concern (ESA)**
- **Fishery conservation and management considerations (Magnuson-Stevens Act)**

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 as surrogate

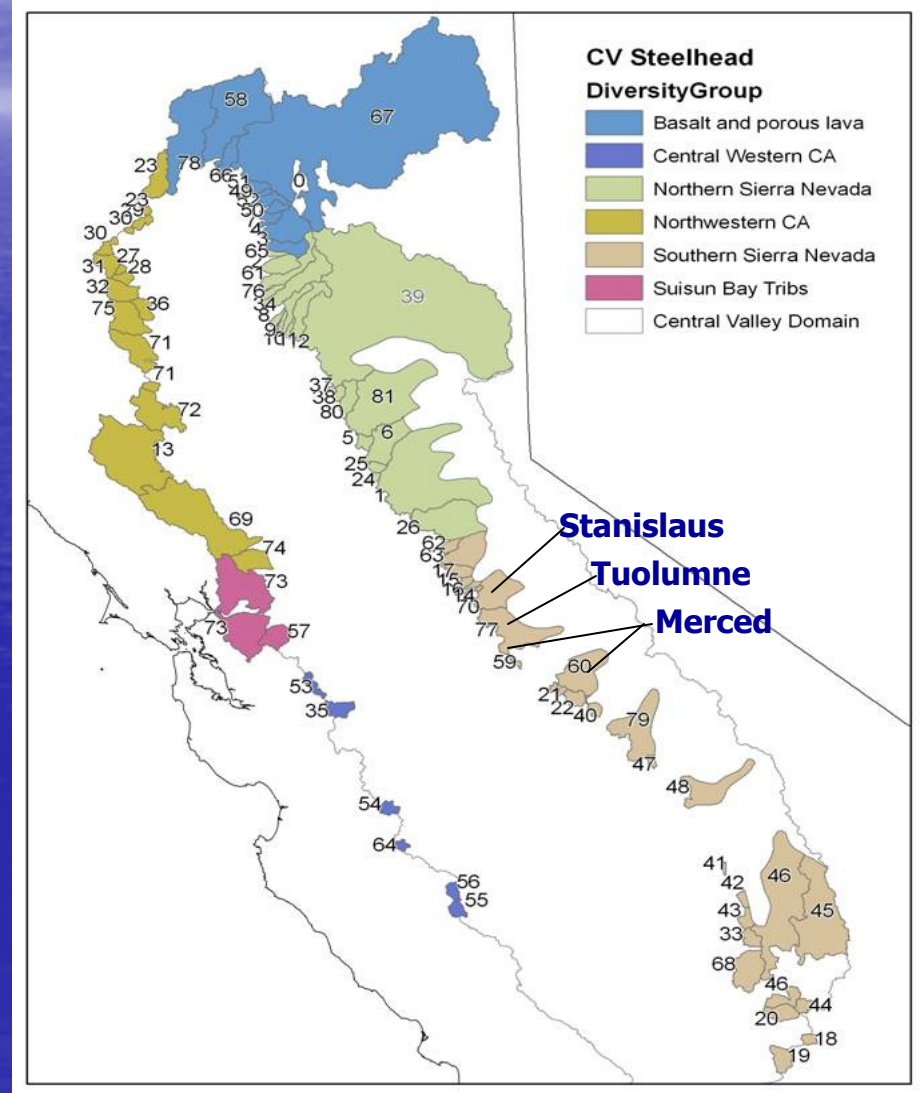
Steelhead & Fall-Run Chinook Salmon Life Histories

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



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



Threats to Steelhead in San Joaquin Basin

- NMFS Draft Recovery Plan addresses threats and recovery actions for steelhead (not fall-run Chinook) within the San Joaquin River Basin
- Very high threats identified in the recovery plan for Tuolumne, Stanislaus, Merced, and SJ Rivers by life stage
 - Passage barriers
 - Low flow conditions
 - Poor water quality
 - Loss of riparian, floodplain and instream habitats
 - Loss of natural habitat morphology and function

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

