

# CA HSRG

## Hatcheries:

**Iron Gate, Trinity, Nimbus, Merced,  
Mokelumne, Feather River, Coleman  
& Livingston Stone  
(19 total programs)**

Did not review: Warm Springs and Mad River  
Hatcheries on the coast

# CA HSRG Members

John Carlos Garza – NOAA Fisheries - Geneticist  
Scott Hamelberg – USFWS – Coleman Hatchery Mgr.  
Michael Lacy – CDFG – Fish Bio/Administrator in HQ  
Michael Mohr – NOAA Fisheries – Salmon Fisheries Bio  
Kevin Niemela – USFWS – Research/Fisheries Mgmt.  
Kimberly True –USFWS - Fish Health Specialist  
David Hankin – Humboldt State U. – Fisheries Professor  
Dennis Lee – Independent Consultant (ret. CDFG)  
Bernie May – UC Davis – Genetics Professor  
George Nandor – PSMFC  
Reg Reisenbichler – Independent Consultant













































# Statewide Issues & Recommendations

**Broodstock Management** = source, collection, composition, mating protocols, spawner disposition

**Program size & release strategies** = program purpose, measure as adult production, ecological and genetic effects, release strategies (fish size, age, timing, location)

**Incubation, rearing and fish health management** = fish health monitoring, facility requirements, water quality, best management practices

**Monitoring and evaluation** = Hatchery & genetic mgmt. plans, hatchery evaluation programs, hatchery coordination teams, in-hatchery monitoring and record keeping, marking and tagging, post release monitoring, adult monitoring



# Major Recommendations

- 100% CWT all Chinook releases (~42 M)
- 25% Ad mark all Chinook releases
- discontinue off-site releases, move to all on-site releases
- move to integrated hatchery programs
- promote stock integrity/differentiation