

CVPIA SIT Call-in Meeting October 18, 2017



Agenda

Follow up on charter scoring process (Rod)

Discuss the potential to evaluate cost effectiveness (Rod)

CVPIA Project list (John H.)

Update on model inputs (Mike U.)

Delta habitat updates? (Corey P.)

Updates on call-in meetings with Sturgeon and *O. mykiss* groups (Shelly)

Revisit Chinook objectives and decision alternatives (All)

New business

Modeling Wet/dry years?

Chinook

Fundamental objective Category	Fundamental objective attribute
Valley Wide	
Spatial structure	Total no. of viable spawning populations per diversity group (NMFS def. of independent population)
Abundance	Total no. of spawning natural origin adults (across watersheds)
	Naturally-spawned juvenile abundance at Chipps
Watershed specific	
Abundance	No. of returning natural origin adults
	Naturally-spawned juvenile abundance

Naturally-spawned juvenile abundance

- Juvenile biomass
- Length by date – Concern: Indices will be optimal at different values based on the watershed and the travel distance

Measuring viable populations

- Escapement > 833 annually
- Cohort Replacement Rate ≥ 1
- Hatchery stray rate $\leq 10\%$ – Concern: No population will be viable

[Example output](#)

Chinook

Scenario	Changes
Reduce diversion in April and May (one month at a time) San Joaquin watersheds (individually) % of tributary Q	5%
	10%
	35%
Eliminate predator contact points each watershed (individually)	5%
	10%
	50%
Increase seasonally inundated juvenile habitat each watershed individually (2 yr freq) % ESHE value	25%
	50%
	75%
Increase seasonally inundated juvenile habitat each watershed individually (1 yr freq) % ESHE value	25%
	50%
	75%
Increase perennially inundated juvenile habitat each watershed individually % ESHE value	25%
	50%
	75%
Increase spawning habitat each watershed individually % pseudo ESHE value	25%
	50%
	75%
Reduce the % hatchery origin spawners	5%
	15%
	30%
Pulse flows: Shasta only to 17500 cfs, 1 week (during month) prompt juvenile fall chinook migration	Jan
	Feb
	March
	April
Change multiple factors in single watershed vs. multiple factors single watershed 1) decrease diversion 50%; eliminate contact points 50%; increase FP habitat 50% ESHE; increase spawning habitat 50% ESHE	Upper Sacramento
	Stanislaus
	Mokelumne
	Feather American

Scenario Modifications

Drop multiple actions single watershed vs single action multiple watersheds

Desire for apples to apples comparisons for levels of effort

- Cost estimates for habitat improvements? [Update Here](#)
- Cost estimates for screening diversions? Update Here

Pulse flows:

- What flow values are a pulse flow?
 - 3 day pulses down Sacramento during spring
 - Clear, Mill and Deer adult passage pulse flows (run-dependent)
 - Geomorphic pulse flows
 - Early (April) vs later (May) pulse flows in the Mok and Stan
 - Potential downsides of pulses (getting fish to leave wrong time)

Reduce in-ocean survival for hatchery fish rather than reducing hatchery production.

- How do we do this?

Combine hatchery fish scenario with habitat improvements

- For all combinations or specific scenarios?

Evaluate delta productivity scenarios

- Increase the carrying capacity or increase the productivity of the current amount of habitat?

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