From: Google Docs <d+MTAzNzY3NjkzNTI4ODM2ODQ1MTIw@docs.google.com>

Sent: Monday, November 26, 2018 5:32 PM

**To:** evan.sawyer@noaa.gov

**Subject:** 20181116\_ROC Proposed Action\_NOAA\_(internal)

Garwin Yip - NOAA Federal, Sarah Gallagher - NOAA Federal, J. Stuart - NOAA Federal, and 1 other added comments to 20181116 ROC Proposed Action NOAA (internal)

New Resolved
46 comments 1 comment

New

#### Comments



### **Garwin Yip - NOAA Federal**

if Reclamation determines that projected inflows to Shasta Reservoir allow sufficient certainty for Shasta cold water pool summer temperature management, meet water supply allocations, and does not interfere with other system-wide factors.

With all of these caveats, what is the likelihood that pulse releases will actually be realized?

# ReplyOpen



### Garwin Yip - NOAA Federal

Reclamation proposes to address cold water management utilizing the following three methods, based on projected total storage and cold water pool, meteorology, Delta conditions, and habitat suitability for incoming fish population size and location.

How do initial and final allocations fit into this? No contract shortage provisions?

### ReplyOpen



#### Garwin Yip - NOAA Federal

after

How will "after May 15" be implemented? June 1 is after May 15. Based on the latter part of the paragraph, maybe the intended onset of temperature management is starting on May 15, or the onset of winter-run Chinook salmon spawning, whichever is later.

### ReplyOpen



### Garwin Yip - NOAA Federal

95 percent of the winter-run Chinook salmon redds' eggs have emerged,

How is this determined?

#### ReplyOpen



# Garwin Yip - NOAA Federal

If there is less than 2.5 MAF of total storage in Shasta Reservoir at the end of May,

Despite 2.3 MAF in #3, above, being an example, #3 and #4 seem inconsistent.

### ReplyOpen



### **Garwin Yip - NOAA Federal**

during drought years

How is this defined? Governor's declaration? Shasta storage in the spring?

### ReplyOpen



### Garwin Yip - NOAA Federal

safe release location

How is "safe" defined and determined? How much less straying would result in release upstream of Chipps Island, vs. releasing hatchery fall-run in the bay? Is an increased likelihood of adult straying factored into the definition of "safe?"

### ReplyOpen



### Garwin Yip - NOAA Federal

high river flows

This is likely when there would be increased juvenile emigration, so how effective would the wild juvenile trap and haul be?

### ReplyOpen



### Garwin Yip - NOAA Federal

Reclamation proposes to trap and haul adult salmonids and sturgeon from Yolo

Wallace Weir should be part of the environmental baseline.

# ReplyOpen



### **Garwin Yip - NOAA Federal**

In addition, Reclamation proposes to create pulse flows for both channel maintenance and spring attraction flows. For these actions, Reclamation would release two pulses of up to 900 cfs (or the safe release capacity) each for three days scheduled with CVO and could be met by storm events.

The NMFS RPA requires 3,250 cfs. Is there modeling that indicates that up to 900 cfs will meet the geomorphic objective intended from that flow?

#### ReplyOpen



# Garwin Yip - NOAA Federal

subject to updates and improvements from ongoing discussions

If these aren't proposed, then they may be a reinitiation trigger when Reclamation proposes them.

### ReplyOpen



### **Garwin Yip - NOAA Federal**

Temperature targets are dependent on cold water pool development, which occurs near the end of May. While there are temperatures that are considered optimal for different life stages, the modeling will indicate in what years the cold water pool may be insufficient to target optimal temperatures and what temperature objectives can be reasonably obtained.

How do contract allocations factor into temperature modeling and objectives?

#### ReplyOpen



#### Garwin Yip - NOAA Federal

To the extent practicable, Reclamation proposes to accommodate requests for spring pulse flows by re-shaping previously planned releases; however, these requests will not be accommodated in times when they may compromise temperature operations later in the year.

With the caveat, what's the frequency of the spring pulse flows? How about the situation where the spring pulse flow doesn't compromise temperature operations but may compromise Reclamation's ability to meet allocations?

#### ReplyOpen



#### J. Stuart - NOAA Federal

demands

Are the demands due to Sacramento River flow, Delta outflow, or salinity criteria, or irrigation demands downstream, or all of the above? Be more specific.

# ReplyOpen



#### J. Stuart - NOAA Federal

Submergence

Is this depth of water above intake opening to prevent cavitation or whirlpool effect?

### ReplyOpen



#### J. Stuart - NOAA Federal

harmful to fisheries

Should clarify which fisheries - specifically winter-run CS, but also any SRCS during the summer and fall. If the state requires temperature control for FRCS should also state that.

### ReplyOpen



### J. Stuart - NOAA Federal

periods when the intakes are being operated

Describe the period -i.e., is it the irrigation season, something like April - October ? Clarity would be helpful.

### ReplyOpen



#### J. Stuart - NOAA Federal

Flood contro

Is this the maximum volume of flood control space during the winter/spring runoff period that cannot be encroached into?

# ReplyOpen



### Barbara Byrne - NOAA Federal

50 percent of the threshold.

for any species? e.g. smelt or individual salmonid or sturgeon species? A table of species for which this OMR management applies would be helpful.

### ReplyOpen



#### Barbara Byrne - NOAA Federal

If Reclamation desires a different restriction, Reclamation proposes to confer with USFWS and/or NMFS, depending upon species.

Not sure this adds value since unclear what different restriction might be requested. If intended to be a placeholder for a relaxation of OMR requirements, will the effects analysis consider the relaxed OMR?

ReplyOpen



### Barbara Byrne - NOAA Federal

If Reclamation desires a different restriction, Reclamation proposes to confer with USFWS and/or NMFS, depending upon species.

See my previous comment.

ReplyOpen



### Barbara Byrne - NOAA Federal

Reclamation and DWR may operate to a more negative OMR to capture peak flows during storm-related events.

How will a storm be defined? How much more negative will OMR be, for how long?

ReplyOpen



### Barbara Byrne - NOAA Federal

San Joaquin Steelhead - When more than 95 percent of San Joaquin Origin steelhead have migrated past Chipps Island.

we don't have great resolution on steelhead in general, and SJ steelhead in particular

ReplyOpen



#### **Barbara Byrne - NOAA Federal**

Tracy and Skinner Fish Facility Improvements

These improvements are fewer than called for in the 2009 NMFS BiOP, and fail to address major structural problems, for example, a huge gap in the primary louver system when individual louver panels are lifted for cleaning.

ReplyOpen



# Barbara Byrne - NOAA Federal

modify infrastructure t

In addition to the baseline question, more detail would be needed to evaluate effects.

ReplyOpen



# Barbara Byrne - NOAA Federal

Revised Plan of Operations (RPO)

FYI: Have uploaded (to the ROConLTO/BA(2018\_11\_16) folder) a "NMRPO\_Overview" document that Katrina Harrison shared with me with some details on the NMRPO. Also added a subfolder with a presentation and comments from the Sept 2014 version of the NMRPO.

The overview that Katrina sent appears to be the same as the Sept 2014 version, so those old comments should apply.

ReplyOpen



### Barbara Byrne - NOAA Federal

low storage,

These low storage years are problematic, as it results in really low spring flows (and low fall flows, but think the spring issue is more problematic). End-of-September New Melones storage dropped below the 450 TAF "low storage threshold" in WY 2015. Modeling shows those low storage years occurred 7 times in the CALSIM record.





# Barbara Byrne - NOAA Federal

non-flow actions

No rearing habitat/floodplain/migratory habitat improvements proposed.

ReplyOpen



### Barbara Byrne - NOAA Federal

implement monitoring program

New programs, or fund existing programs?

### ReplyOpen



### Barbara Byrne - NOAA Federal

Decisions from the Directors' Operation Call

How will decisions be made? What if there is still disagreement?

# ReplyOpen



### Barbara Byrne - NOAA Federal

are not limited to

If fish agencies disagree with the Projects' risk analysis, can the fish agencies request conferencing?

### ReplyOpen



### Barbara Byrne - NOAA Federal

prior year activities through the spring of each year

Do summer ops ever get reported on? I'm agnostic as to timing of the report, but suggest that a full 12 months be summarized, even if that 12 months doesn't represent a single water year.

### ReplyOpen



# Barbara Byrne - NOAA Federal

Non-Flow Construction:

Just pursuant to this consultation, or all projects in each basin? I suggest the former, for simplicity.

### ReplyOpen



# Barbara Byrne - NOAA Federal

harvest

are harvest estimates available in a timely way?

# ReplyOpen



# Barbara Byrne - NOAA Federal

Depending upon the type of dam raise proposed, the TCD

Modification to TCD seems part and parcel of any dam raise proposal, not a project under this programmatic.

# ReplyOpen



# Barbara Byrne - NOAA Federal

to more negative levels of OMR reverse flows,

How much more negative? The PA already allows for more negative than -5,000 cfs OMR during storm flows; what additional increment is anticipated? Too uncertain even for programmatic evaluation.

### ReplyOpen



# Barbara Byrne - NOAA Federal

leading to more juveniles captured at Jones and Banks Pumping Plants

Not necessarily. Think the idea is that by increasing population size, a pop-based salvage threshold will allow higher salvage, but I note that since more fish may lead to greater likelihood of salvage, operations might not be able to change much, if at all, without having a proportionally greater effect on the population.

#### ReplyOpen



### Barbara Byrne - NOAA Federal

increase connectivity of the Sutter Bypass with the Feather River to increase juvenile salmonid rearing habitat.

Not enough info for evaluation.

#### ReplyOpen



### Barbara Byrne - NOAA Federal

move temperature compliance upstream

from where to where? How many fewer river miles will have suitable temperatures? Or, maybe "river acres" is the better metric since habit creation is proposed?

# ReplyOpen



### Barbara Byrne - NOAA Federal

Spawning Habitat:

Is this additional to CVPIA and other commitments? Where do the numbers come from?

# ReplyOpen



### Barbara Byrne - NOAA Federal

up to 2,600 acres

Too uncertain. How many acres, and on what timeframe?

### ReplyOpen



### Barbara Byrne - NOAA Federal

Corresponding flexibility would be provided in allowed salvage, if habitat is limiting.

A lot of steps between woody debris in the American River and salvage flexibility -- how will the flexibility be scaled?

### ReplyOpen



### Barbara Byrne - NOAA Federal

more negative OMR

How much more negative? The PA already allows for more negative than -5,000 cfs OMR during storm flows; what additional increment is anticipated? Too uncertain even for programmatic evaluation.

### ReplyOpen



# Barbara Byrne - NOAA Federal

Reclamation would consider increasing the flexibility of the pumps at the Tracy Pumping Plant to allow more rapid adjustments.

Interesting idea; insufficient specifics even for programmatic evaluation.

ReplyOpen



### Sarah Gallagher - NOAA Federal

ree days scheduled with CVO and could be met by storm events.

Attraction flows have shown to be most beneficial in May and June, outside significant storm flow events. Again does not work in sync with bigger flow geomorphic objectives.

#### ReplyOpen



### J. Stuart - NOAA Federal

fish and wildlife

Would reintroduction fall into this subheading?

#### ReplyOpen

Resolved

### Comments



### Barb Byrne

What flexibility, on what timeframe, will be assumed in the CALSIM modeling of the proposed action?



### Barbara Byrne - NOAA Federal

Marked as resolved

ReplyOpen

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