

Sukola, Katrina

From: Wilder, Rick
Sent: Friday, August 14, 2015 5:48 PM
To: Unger, Sophie
Subject: FW: Migration Flow Sacramento River

Justification for using 3,250 in the Sac.

From: Cathy Marcinkevage - NOAA Federal [mailto:cathy.marcinkevage@noaa.gov]
Sent: Friday, August 14, 2015 2:25 PM
To: Wilder, Rick <Rick.Wilder@icfi.com>
Cc: Kundargi, Kenneth@Wildlife <Kenneth.Kundargi@wildlife.ca.gov>
Subject: Fwd: Migration Flow Sacramento River

----- Forwarded message -----

From: Kundargi, Kenneth@Wildlife <Kenneth.Kundargi@wildlife.ca.gov>
Date: Fri, Aug 14, 2015 at 2:22 PM
Subject: Fwd: Migration Flow Sacramento River
To: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>

Can you forward this to Rick. I don't have his email on this phone.

Kenneth N. Kundargi
Senior Environmental Scientist
CDFW

Begin forwarded message:

From: "Killam, Doug@Wildlife" <Doug.Killam@wildlife.ca.gov>
Date: August 14, 2015 at 2:13:45 PM PDT
To: "Roberts, Jason@Wildlife" <Jason.Roberts@wildlife.ca.gov>, "Kundargi, Kenneth@Wildlife" <Kenneth.Kundargi@wildlife.ca.gov>
Subject: RE: Migration Flow Sacramento River

Hi guys,

I have not seen the river below 3250 from Keswick on the spawning grounds and at this flow the salmon don't seem to have problem with getting all the way to Keswick, not sure about this flow from Keswick and the very low flow from tribs for this fall, we just have never encountered this before. Normally tribs below raise the flows but not sure what would happen below 3250 downstream of RBDD. Above Colusa we start seeing riffles and low flows may cause problems for fall run but they are mostly all in by Oct1. Late fall and Spring run may be impacted during winter months if drought continues.

Thanks Doug

Douglas Killam, M.S.

California Dept. of Fish and Wildlife
1530 Schwab St.
Red Bluff CA , 96080
Phone [530-527-8893](tel:530-527-8893)
Fax [530-527-8674](tel:530-527-8674)
Doug.Killam@wildlife.ca.gov

Every Californian should conserve water. Find out how at:

SaveOurWater.com · Drought.CA.gov

-----Original Message-----

From: Roberts, Jason@Wildlife
Sent: Friday, August 14, 2015 12:58 PM
To: Kundargi, Kenneth@Wildlife
Cc: Killam, Doug@Wildlife
Subject: RE: Migration Flow Sacramento River

I would say the low flows can't be 5% less. The NAA is frequently the D-1641, 90-5, etc. flows that must be maintained.

These flows would typically be seen in September through March.

Can we state that flows cant be lower than the NAA during a time period such as that?

-----Original Message-----

From: Kundargi, Kenneth@Wildlife
Sent: Wednesday, August 12, 2015 3:10 PM
To: Roberts, Jason@Wildlife
Cc: Killam, Doug@Wildlife
Subject: RE: Migration Flow Sacramento River

It would be upstream near the spawning areas. I remember last year on SRTTG calls the fall spawners were not showing up and there was some supposition that the low flows were holding fish back. The idea here is to flag analysis results where there appear to be modeled percentages of change due to project actions and modeled flows below a threshold need to be examined further to see if they can be managed through real time operations. This is to trim down the number of instances of change because a 5% change when the modeled flow is 8 or 10,000 cfs is probably not biologically meaningful to upstream migrating Chinook but it be if the flow is low already in the NAA then a reduced flow due to project implementation might need to be addressed.

-----Original Message-----

From: Roberts, Jason@Wildlife
Sent: Wednesday, August 12, 2015 11:58 AM
To: Kundargi, Kenneth@Wildlife
Cc: Killam, Doug@Wildlife
Subject: Re: Migration Flow Sacramento River

What location in the river? Below Verona, below GCID?

Above/Below current D1641 Delta Rio Vista flows?

Sent from my iPhone

On Aug 12, 2015, at 11:50 AM, Kundargi, Kenneth@Wildlife
<Kenneth.Kundargi@wildlife.ca.gov> wrote:

Doug,

In a meeting. Question for you is there a Sacramento River threshold flow below which upstream Chinook salmon migration is delayed or impeded? Trying to screen a bunch of Cal Water Fix modeling results to look for areas where further examination is necessary. On the American it seems around 1000-1500 cfs they don't want to come up and hang downstream until they are very ripe.

This is a professional opinion question unless you have empirical data and it's only for screening not a final word.

Kenneth N. Kundargi
Senior Environmental Scientist
CDFW