

## Kristin Begun - NOAA Affiliate

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**From:** Kristin Begun - NOAA Affiliate  
**Sent:** Friday, June 14, 2019 10:42 AM  
**To:** Barbara Byrne - NOAA Federal  
**Subject:** Re: East Side ITS section

When I say "more strict," I mean the lower temperature, but the monthly average would allow for some leeway.

On Fri, Jun 14, 2019 at 10:39 AM Kristin Begun - NOAA Affiliate <[kristin.begun@noaa.gov](mailto:kristin.begun@noaa.gov)> wrote:

See responses in **Red**:

On Fri, Jun 14, 2019 at 10:22 AM Barbara Byrne - NOAA Federal <[barbara.byrne@noaa.gov](mailto:barbara.byrne@noaa.gov)> wrote:  
thoughts in blue. call if you want.

On Fri, Jun 14, 2019 at 9:56 AM Kristin Begun - NOAA Affiliate <[kristin.begun@noaa.gov](mailto:kristin.begun@noaa.gov)> wrote:  
Hi Barb,

We had a group discussion about the ITS section yesterday. We briefly discussed how to handle take for Stanislaus and San Joaquin effects. I need to edit the tables so that they don't mention temperature compliance at locations we don't have temperature gauge data for.

I could either move SJR compliance points downstream to where there are gauge locations (Ripon/Vernalis/Mosssdale) **\*alert -- Ripon is on the Stan, not the SJR\* (right! so would not use this location )** and keep just OBB location on the Stanislaus, OR change take to cover average monthly temps in the modeling tables, maybe incorporating exceedance percentiles (can exceed X% of year?) and if exceeded what action to take to reduce rather than instantly triggering reinitiation **\*not sure how these are alternates -- wouldn't you use the locations with temp gauges to compare to modeled output at those locations?\***. (I currently have EPA temp requirement for each life stage, e.g. "The extent of incidental take is exceeded if the water temperature exceeds 65°F at X location", but if we used the temps in the modeling table instead, then that would be more strict, **\*see table below**) We could also add a T&C that Reclamation shall develop a temperature profile model for GDW to OBB and Knights Ferry to OBB **\*I think I have a draft T&C for developing a temp tool...was thinking of it as a way to clarify the temp model conservation measure but might be close to what you are thinking of...\***. (Awesome, I'll check that out)

**\*Using the modeling table, temps could not exceed 58.5 degrees at OBB in May in Critical years (for juvenile rearing)**

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
<b>Goodwin Dam</b>												
Wet	53.0	52.6	50.7	47.9	47.9	49.1	50.0	51.4	51.7	52.4	53.0	53.2
Above Normal	55.4	54.3	51.6	48.5	48.2	49.7	50.6	51.9	52.5	53.8	54.7	55.5
Below Normal	54.4	53.8	51.3	48.7	49.0	50.3	51.7	52.3	53.0	54.1	54.6	54.9
Dry	54.8	54.1	51.4	48.5	48.8	50.7	51.7	52.6	53.7	54.5	54.8	55.1
Critical	57.5	56.4	52.8	49.7	49.8	51.5	52.7	53.9	55.5	56.7	57.8	58.2
<b>Knights Ferry</b>												
Wet	53.4	52.8	50.6	48.0	48.2	49.3	50.4	52.0	52.6	54.8	55.1	54.7
Above Normal	55.8	54.3	51.3	48.6	48.7	50.6	51.0	52.6	54.7	56.9	57.3	57.4
Below Normal	54.7	53.8	51.1	48.7	49.4	51.3	52.0	52.9	55.1	57.3	57.1	56.8
Dry	55.2	54.1	51.1	48.5	49.3	51.7	52.4	53.7	56.6	57.6	57.3	57.0
Critical	57.9	56.3	52.5	49.6	50.3	52.6	53.6	55.3	58.7	60.3	60.8	60.2
<b>Orange Blossom</b>												
Wet	54.5	53.6	50.6	48.7	49.3	49.9	51.4	53.3	54.7	59.7	59.7	58.0
Above Normal	56.7	54.8	51.1	49.1	50.0	52.9	51.9	54.1	59.3	63.2	62.6	61.5
Below Normal	55.6	54.4	50.9	49.1	50.5	53.8	52.9	54.3	59.6	63.7	62.4	61.1
Dry	56.2	54.7	50.9	48.9	50.8	54.3	54.1	56.1	62.4	63.9	62.6	61.2
Critical	59.0	56.6	52.1	49.8	51.8	55.3	55.9	58.5	64.9	67.4	66.9	64.8

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On Thu, Jun 13, 2019 at 9:17 AM Kristin Begun - NOAA Affiliate <[kristin.begun@noaa.gov](mailto:kristin.begun@noaa.gov)> wrote:

Hi Barb,

1. The east side effects section still have some track changes that need to be accepted so we can get a clean version on the server today. Track changes are mostly mine and Susan formatted some tables. Most major edit was updating the temporal occurrence table for adult steelhead, and changing related text to "year round" which we discussed. Do you have time to look through or do you want me to accept and make a "clean" version?

2. Are there temperature compliance points on the Stanislaus River? Our ITS language (which is borrowed from the 2009 BO) includes ecological surrogates based on temperature (different for different life stages) at OBB, GDW, and SJR @ the confluence of Stanislaus. Quickly looking at CDEC, I do not see temperature data for GDW or SJR at Stanislaus. There is temp data at Mossdale, but that's the downstream extent. I suppose I could change the location, but if the requirement is no warmer than 65 degrees F (for juveniles) at the Stanislaus confluence, I'm not sure what temp should be the max at Mossdale. I suppose we could keep it at 65 degrees and hope it doesn't get much hotter than that upstream at times when fish are migrating. Any thoughts?

Thanks!

Kristin

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