From: Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov>
Sent: Monday, June 17, 2019 3:12 PM
To: Cathy Marcinkevage - NOAA Federal
Cc: Brian Ellrott
Subject: Re: WR TDM Consistency

Sharing these number with you just in case I fail to transcribe them through all sections:

PA_Anderson_TDM Tier 1		**PA_Martin_TDM Tier 1**	
Mean	4.7%	Mean	5.8%
Median	2.0%	Median	2.0%
Standard Deviation	7.9%	Standard Deviation	9.5%
PA_Anderson_TDM Tier 2		**PA_Martin_TDM Tier 2**	
Mean	12.0%	Mean	15.3%
Median	7.4%	Median	9.4%
Standard Deviation	13.1%	Standard Deviation	16.3%
PA_Anderson_TDM Tier 3		**PA_Martin_TDM Tier 3**	
Mean	27.8%	Mean	34.1%
Median	21.3%	Median	24.4%
Standard Deviation	25.2%	Standard Deviation	31.3%
PA_Anderson_TDM Tier 4		**PA_Martin_TDM Tier 4**	
Mean	79.1%	Mean	81.3%
Median	78.8%	Median	84.3%
Standard Deviation	13.7%	Standard Deviation	15.6%

Evan

On Mon, Jun 17, 2019 at 1:06 PM Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov> wrote:

Background

Recs Performance Metrics for TDM:
- Tier 1 – Maximum (39%); Average (6%); Median (2%); Minimum (0.4%); Std. Dev (+/-9%)
- Tier 2 - Maximum (46%); Average (15%); Median (9%); Minimum (1%); Std. Dev (+/-16%)
- Tier 3 - Maximum (77%); Average (34%); Median (24%); Minimum (6%); Std. Dev (+/-31%)
- Tier 4 – Appropriate performance metrics will be addressed under "Drought and Dry Year Actions" consistent with the "Governance" section of this Proposed Action

Our Effects Analysis (example for Tier 1):
• Reduced survival probability (mean temperature dependent mortality of 5 percent (Anderson) and 6 percent (Martin); widest range of 25 and 75 percentiles for 2 different models is 0 to 6 percent).

I&S (example for Tier 1, showing the mean):
5% - 6% temperature dependent mortality

ITS (example for Tier 1):
Temperatures higher than 53.5°F would result in reduced survival (mean temperature- dependent mortality of 5 percent [Anderson] and 6 percent [Martin]; widest range of 25 and 75 percentiles for 2 different models is 0 to 6 percent).
Shasta operations remain consistent with performance metrics described in in Section 2.5.2… (Performance Metrics)

So you see the mix of things. I propose the following to address this (changes in **bold**):

Recs Performance Metrics for TDM (**nothing to change here)**:
- Tier 1 – Maximum (39%); Average (6%); Median (2%); Minimum (0.4%); Std. Dev (+/-9%)
- Tier 2 - Maximum (46%); Average (15%); Median (9%); Minimum (1%); Std. Dev (+/-16%)
- Tier 3 - Maximum (77%); Average (34%); Median (24%); Minimum (6%); Std. Dev (+/-31%)
- Tier 4 – Appropriate performance metrics will be addressed under "Drought and Dry Year Actions" consistent with the "Governance" section of this Proposed Action

Our Effects Analysis (example for Tier 1):
• Reduced survival probability (mean temperature dependent mortality of 5 percent (Anderson) and 6 percent (Martin); **the standard deviations are +/-Y and +/-Z**).

I&S (example for Tier 1, showing the mean):
5% - 6% temperature dependent mortality **with the standard deviations are +/-Y and +/-Z**.

ITS (example for Tier 1):
Temperatures higher than 53.5°F would result in reduced survival (mean temperature- dependent mortality of 5 percent [Anderson] and 6 percent [Martin]; **the standard deviations are +/-Y and +/-Z)**.
Shasta operations remain consistent with performance metrics described in **BA Section 4.10.1.3.3 (Upper Sacramento** Performance Metrics).

Whaddya think?

I can make many of these changes if you agree.

Slightly related....I guess we need to make new rows for SR, STH, and GS that reflect the PA revisions, as I did for WR, right?

--
Evan Bing Sawyer,
Natural Resource Management Specialist
NOAA Fisheries West Coast Region
U.S. Department of Commerce
Office: (916) 930-3656
Evan.Sawyer@noaa.gov
www.westcoast.fisheries.noaa.gov