

---

**From:** Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov>  
**Sent:** Thursday, May 23, 2019 12:42 PM  
**To:** Cathy Marcinkevage - NOAA Federal  
**Subject:** Re: Document for Shasta

To insert in doc.

Egg to fry survival (measured at RBDD) is included as another metric to assess compliance with meeting the survival objectives of *Summer Cold Water Pool Management*, but where it only need be considered if Reclamation exceeds the TDM objectives of a particular tier of operation. The decision to include a performance metric based on ETF survival was made so as to incorporate the potential benefit of the many non-flow related action components that are part of the PA . The proposed ETF survival targets for years in tier 1, 2 and 3 are based on the recent history of Shasta operations and the associated ETF survival over the last 20 years (1996 – 2018, not including 2000 and 2001 due to a lack of information). Using the third quartile of ETF survival associated with a tier during this period (highest 25% of ETF survival in those years) provides a secondary survival objective for when the tier-specific TDM is exceeded. To remain consistent with the frequency and TDM objectives, the ETF survival objectives of tiers 2 and 3 were combined. A survival objective is proposed for tier 4 as a target, understanding that in those years hydrology will likely limit Reclamation’s ability to manage temperature control.

On Thu, May 23, 2019 at 12:10 PM Evan Sawyer - NOAA Federal <[evan.sawyer@noaa.gov](mailto:evan.sawyer@noaa.gov)> wrote:  
Hi Cathy,

still working here's what I have and I'm gonna write a paragraph on ETF survival and send that separate?

I may have gotten mixe up between rationale and approach. Sorry.

Evan

On Thu, May 23, 2019 at 10:45 AM Cathy Marcinkevage - NOAA Federal <[cathy.marcinkevage@noaa.gov](mailto:cathy.marcinkevage@noaa.gov)> wrote:

|

--

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](mailto:Evan.Sawyer@noaa.gov)  
[www.westcoast.fisheries.noaa.gov](http://www.westcoast.fisheries.noaa.gov)



--  
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](mailto:Evan.Sawyer@noaa.gov)  
[www.westcoast.fisheries.noaa.gov](http://www.westcoast.fisheries.noaa.gov)

