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**From:** Joe Heublein - NOAA Federal <joe.heublein@noaa.gov>  
**Sent:** Tuesday, April 2, 2019 4:00 PM  
**To:** Cathy Marcinkevage; Barbara Byrne - NOAA Federal; Howard Brown; Garwin Yip - NOAA Federal  
**Subject:** Email memo on ROC LTO consultation

Topic: Feather River Division (Joe Heublein co-lead)

Feather River operations in the BA are listed as “not consulted on” due to FERC Project #2100-134 and associated NMFS biological opinion. I did not evaluate if proposed Feather River operations will preclude achievement of the following recovery criteria from the Recovery Plan for the Southern Distinct Population Segment of North American Green Sturgeon (2018):

Demographic Recovery Criteria #2- sDPS green sturgeon spawn successfully in at least two rivers within their historical range. Successful spawning will be determined by the annual presence of larvae for at least 20 years.

Evaluating this criteria on the Feather River would potentially involve establishing conditions necessary for spawning (e.g., Spring 2011, 2017, 2018) and estimating the frequency of these conditions under proposed operations.

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