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**From:** Hilts, Derek <derek\_hilts@fws.gov>  
**Sent:** Friday, May 3, 2019 9:50 AM  
**To:** Cathy Marcinkevage - NOAA Federal  
**Subject:** Re: [EXTERNAL] Table for NMFS ROC LTO BiOp  
**Attachments:** Action Components in Modeling\_DH20190503cmts.docx

Cathy,  
Sorry for the late response. I picked a bad day to start at 8am. Based on your email time stamp, I should have started working on a response about 9 hours ago! :)  
Attached is your document with my suggested additions in column 2. Please let me know if I've misunderstood what you wanted me to do. I'll be around til at least 5pm today.  
Derek

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On Thu, May 2, 2019 at 11:29 PM Cathy Marcinkevage - NOAA Federal <[cathy.marcinkevage@noaa.gov](mailto:cathy.marcinkevage@noaa.gov)> wrote:

Derek --

We put together the attached table (or columns 1, 2, and 4, anyhow) to try to identify 1) what items are included in RPAs or other *actual* operations that tend to affect storage and/or can be implemented to protect species, 2) whether those actions are actually modeled in the COS, and 3) whether those actions are part of the PA and therefore included in the modeling of the PA. This was partly to help us get a better idea of how "real" the COS modeling is and therefore how much credence to give to results that find little difference between the COS and the PA.

I took a stab at the third column, but definitely have some blanks. Would you be able to provide entries and corrections for that column?

Happy to discuss more if you like! Thanks!  
Cathy