

---

**From:** Garwin Yip - NOAA Federal <garwin.yip@noaa.gov>  
**Sent:** Thursday, March 14, 2019 8:29 PM  
**To:** Barbara Byrne - NOAA Federal  
**Cc:** Howard.Brown; Evan Sawyer - NOAA Affiliate; Cathy Marcinkevage; Douglas Hampton  
**Subject:** Re: REVISED (Read this one): Draft of "Uncertainties in the ROConLTO BA"  
**Attachments:** 2019.03.13\_Uncertainties in ROConLTO BA\_BBdraft\_REVISED--GY.docx

Barb,

See attached for my track changes. What is this for? A memo to the record? Documentation for the BiOp?

-Garwin-

---

*Garwin Yip*  
Water Operations and Delta Consultations Branch Chief  
NOAA Fisheries West Coast Region  
U.S. Department of Commerce  
California Central Valley Office  
650 Capitol Mall, Suite 5-100  
Sacramento, CA 95814  
Office: 916-930-3611  
Cell: 916-716-6558  
FAX: 916-930-3629  
[www.westcoast.fisheries.noaa.gov](http://www.westcoast.fisheries.noaa.gov)



On Wed, Mar 13, 2019 at 8:45 PM Barbara Byrne - NOAA Federal <[barbara.byrne@noaa.gov](mailto:barbara.byrne@noaa.gov)> wrote:  
The attached revision includes a 4th category of uncertainties. I made no changes to categories 1-3 that were included in my previous draft, other than to include the feedback I got from Doug.

Please (except for Doug) review this version rather than the one in my 6:50pm e-mail.

On Wed, Mar 13, 2019 at 6:50 PM Barbara Byrne - NOAA Federal <[barbara.byrne@noaa.gov](mailto:barbara.byrne@noaa.gov)> wrote:  
Subject doc attached.

**Howard --** Let me know if this "categorical" approach works. I've listed examples, rather than an exhaustive list, since many elements still have SOME uncertainty associated with them and didn't think listing all PA components would be that helpful.

**Doug & Evan --** Please see comments addressed to you on p. 2; asking for your help in identifying a "reference consultation" we could use for easy, and reasonable, assumptions on some specific programmatic elements of the ROConLTO Proposed Action. If you don't know of a relevant BiOp off the top of your head

just let me know that and don't worry about looking for one! Please respond by noon Thursday (3/14). Thanks.

--

**Barb Byrne**  
Fish Biologist  
*NOAA Fisheries West Coast Region*  
*U.S. Department of Commerce*  
Office: 916-930-5612  
[barbara.byrne@noaa.gov](mailto:barbara.byrne@noaa.gov)  
*California Central Valley Office*  
*650 Capitol Mall, Suite 5-100*  
*Sacramento, CA 95814*



**Find us online**

[www.westcoast.fisheries.noaa.gov](http://www.westcoast.fisheries.noaa.gov)



--

**Barb Byrne**  
Fish Biologist  
*NOAA Fisheries West Coast Region*  
*U.S. Department of Commerce*  
Office: 916-930-5612  
[barbara.byrne@noaa.gov](mailto:barbara.byrne@noaa.gov)  
*California Central Valley Office*  
*650 Capitol Mall, Suite 5-100*  
*Sacramento, CA 95814*



**Find us online**

[www.westcoast.fisheries.noaa.gov](http://www.westcoast.fisheries.noaa.gov)

