Iteration on Maria Rea's questions generated from ROC LOT focus group meetings on Shasta modeling

1. Please clarify whether the modeling attempted to meet summer temperature thresholds as monthly averages or as daily averages. Similarly, please clarify whether the PA intends to operate to meet summer temperature thresholds as monthly averages or as daily averages.

Designee: Derek (reaching out to Reclamation)

2. Clarify how frequently the different tiers would be attained (based on storage) and explain any differences in expectation from modeling compared to real world operations (due to "perfect foresight" of CalSimII). Indicate whether this would change if using a different exceedance expectation (and clarify which is being used).

Designee: Derek

3. Please indicate whether the forecast of 4.0 for Shasta storage on May 1 is based on a previous month's forecast. If so, which month, and at what level of confidence (e.g., 90% exceedance)? Is there any additional "real-time" forecast information from NOAA being considered?

Designee: Reclamation

4. Please provide justification for the use of May 1st for the 4.0 Shasta storage prediction level. This seems very early in season for storage prediction, and could have the effect of minimizing the relationship between storage and cold water. June 1 or July 1 are also relevant to evaluate.

Designee: Reclamation

5. In order to better understand the comparison of results from different scenarios, please clarify the following regarding CalSim for the COS in dryer years?

A. Is it coded to reduce all non-discretionary deliveries before trying to meet the temperature target?
B. Is it coded to meet Delta demands through Folsom and Oroville release and export reductions first before drawing on Shasta storage?
C. Does it allow Wilkins Slough to go down to 4000 (rather than the 5000 cfs limit)?
D. Is it coded to limit Keswick flow releases in June, July? For example in drought years, we implemented maximum releases of 7500 cfs in June and July under the current RPA. Is this characterized correctly?
E. The current RPA allows for flexible locations of temperature compliance from Clear Creek to Jelly's Ferry. What does the COS temperature modeling output assume about choices
in compliance location? Choosing an artificially downstream compliance location could result in modeled temperature dependent mortality that wouldn't be implemented in real life.

Designee: Derek

6. In comparing COS and PA: If it is coded correctly, we would expect to see changes in June and July storage between the scenarios due to factors in the current RPA that require building storage in dry scenarios that are not included in the current PA (see #5 above). Do these results manifest in the model results? Why or why not?

Designee: Derek

7. Predicting temperature dependent mortality for each operational tier: It would be very helpful for SWFSC to predict temperature dependent mortalities for each of four tiers, to evaluate this plan of operation. This evaluation might allow for allowing some tiers to move forward and some not (requiring reinitiation), depending on predictions. With the tiers rolled up together, it doesn't allow for a full evaluation of the deconstructed action.

Designee: Already completed by the SWFSC

8. Does the PA CalSim modeling show that any discretionary contract deliveries will be shorted in drier years? Katrina's response makes it sound like contracts will never be shorted to preserve storage. Is this characterized this way in the modeling of the PA?

Designee: Derek