## **Delta Smelt Scoping Team Meeting (4/21/20)**

**Attendees:** Brycen Swart, Chuck Hanson, Erin Cole, Erwin Van Nieuwenhuyse, Eva Bush, Larry Brown, Pat Coulston, Sam Luoma, Scott Hamilton, Shawn Acuna, Ted Sommer, Will Smith, Yuan Liu

#### **Action Items**

- Bruce ask Erica about Fall Outflow manuscript (just one manuscript or multiple?)
- Bruce check with Darcy if specific management questions were identified as part of Fall Outflow scope
- All provide feedback on Lenny's Executive Summary by 4/28
- All provide feedback on Eva's memo by 5/1
- Bruce circulate Eva's memo as a Word doc
- All provide feedback on Status Report and Retrospective by 4/28

### **Discussion**

- Fall Outflow Study Status
  - o Status report shared reflecting conversations with DSST
  - Manuscript is close to being completed
    - Will there be multiple manuscripts or just one?
    - Were specific management questions identified in the scope of work?
      - Concerned that description of manuscript sounds like a paper on methodology
- Entrainment Studies
  - Executive summary (revised by Lenny)
    - Questions/comments
      - Consider including factors leading to improvement
      - Would like executive summary to stand on its own more since it's the part managers and policy makers are most likely to read.
        - Explain variables, explain how it can be applied to management (e.g., salvage can be reduced by lowering turbidity)
      - Feels like the right length doesn't need to be much longer, especially since additional detail could be in preface/memo.
      - Typo regarding water years selected (should be 2011, not 2010)
  - o Draft DSST memo
    - Integrated various presentations/docs/feedback
    - Included 2013 management questions and tried to answer them. Couldn't find answers for questions 2 & 4.
      - Questions 2 & 4 weren't really addressed by study
      - Early animations reinforced complexity of Delta smelt movement
      - Particle tracking gave a sense of how complex the movement is didn't find a behavior that accurately reflected empirical data, couldn't use to predict distribution
    - Questions/comments
      - Appreciate layout, style, approach and objectivity
      - Target length? Level of detail?
        - Could shorten things by not repeating answers to questions
          - Don't have a problem with it being on the longer side

- Assumption is that audience is CAMT/CSAMP and that this would be included with technical report
- Appreciate inclusion of management questions (explicitly posing and answering them)
- Recommend sending memo back to Lenny when final to make sure we haven't mischaracterized anything
- Use as an opportunity to educate that reducing entrainment is not the path to species recovery (low salvage/PEL since 2006, species has continued to not do well, not the limiting factor) – consider comparing to other mortality
  - The question for further research should be: what additional measures are needed for species recovery? (Assuming we don't disagree with PEL numbers, then controlling PEL is necessary but not sufficient)
- DSSP Implementation Action Plan
  - o DSSP adaptive management of Delta Smelt based on prediction, detection, understanding
  - Created action plan based on nine recommended next steps in DSSP
  - Top three priority actions:
    - Adopt programmatic three-year science planning process (plus annual supplements)
      - Six month planning period (June Nov 2020) to identify candidate activities, assess resource availability, prioritize activities, finalize
    - Develop decision support model
      - Integrated process based tool to predict the effects of annual flow related management actions
        - o Process already underway (Denise Reed convening experts)
        - o DSP funded initially, contract issues (PWA considering funding)
    - Develop Synthesis Topics
      - Utilize IEP synthesis team as forum to develop list of topics
      - Refine list of current and future synthesis efforts based on IEP Science
         Strategy to be smelt specific and coordinate efforts going forward
  - Other actions:
    - Convene workshop on new field survey techniques
    - Establish independent science panel on non-take detection of Delta Smelt
    - Inventory isotopic signatures of potential carbon sources
    - Engage Contaminants PWT to plan and conduct specific experiments
    - Solicit proposals relevant to understanding Delta Smelt mgmt. action
  - Questions/comments
    - CAMT feedback was to get more input from DSST, consider integration with other
      efforts (IEP), consider coordinator role (and what work is already being done by, or
      would need to be coordinated with, which agencies)
    - There is interest in applying plan broadly
      - In prior discussions with CAMT and in the DSSP itself there was receptivity to including non-flow actions, broader perspective
    - Thoughts about how to lessen reporting burden (i.e., quick turnarounds) and other resource limitations? Had assumed that challenges with implementing DSSP identified in beta test would be dealt with up front.
      - Addressing reporting/resource concerns could be part of three-year planning process.

- Have to start somewhere, manage expectations and communicate that it's going to be bumpy the first time around
  - Policy makers will be interested in keys to success and what resources will be needed, consider trying to anticipate potential challenges (e.g., resource limitations) and solutions, and sharing them with Policy Group before planning process starts.
- Adaptive management implies that DSSP needs to assess effectiveness of management actions that are being implemented – not seeing that in presentation.
  - Is that not covered by predictive management support model?
    - Yes, that captures the concept, but it's not explicit in the three-year planning process that we're focusing on assessing management actions (as opposed to just increasing learning)
    - Might consider including a slide with the adaptive management wheel
- Seems like we have a generic plan and it might help to go through it with an example action to make it more specific
- What type of model is being envisioned for the decision support model?
  - Was thinking it would be an aggregated model
    - Specific model to answer individual management questions that feeds into life cycle model (for example). Would like to understand from Denise what questions she's trying to answer.

# • CSAMP Status Report

- Overview of adjustments
  - Added introduction
  - Converted status report numbers to symbols
- Comments
  - Is assumption that "being addressed, but not finished' means it's funded?
    - If it's being addressed (present tense) then that implies it's funded
  - Anything we can add to #6? Would it be more accurate to say this has been answered elsewhere?
    - Yes, this has been fully addressed outside of CAMT.
      - o Consider making note of this.
      - Concerned this might be a slippery slope we're not undertaking a literature review
      - "has not been conducted" is inaccurate
  - Reference study numbers (e.g., question #5) so that information can be found
  - Does "no more funding recommended" really mean "no more CSAMP funding recommended"? When we recommend future studies in Entrainment memo, are we suggesting that someone besides CSAMP should fund them? Make sure there's consistency between memo and status report (where currently no additional CSAMP funding is recommended for entrainment)
  - Change answer to number 8 to same answer as provided for numbers 9, 10 and 11
- Schedule
  - Provide feedback on Retrospective/Status Report by 4/28
- Question/comments
  - Concerned that last slide of Retrospective makes it seem like we don't already have a focused set of efforts we're working on - could detract from list of current CSAMP

activities. Consider showing how current activities fit on adaptive management wheel.

• Rather than "future focus" it's "where are we on adaptive management"?