

OUTCOMES MEMORANDUM

TO: CAMT Members
FROM: Bruce DiGennaro
DATE: June 23, 2020
RE: June 16, 2020 CAMT Meeting #92

Attendees: Alison Collins, Ben Geske, Brett Harvey, Brittany Davis, Brycen Swart, Carl Wilcox, Cathy Marcinkevage, Chuck Hanson, Dan Ohlson, Dana Lee, Darcy Austin, Deanna Sereno, Denise Reed, Erik Loboschefsky, Erin Cole, Frances Brewster, Henry DeBey, Jason Peltier, Jennifer Pierre, Kate Spear, Larry Brown, Louise Conrad, Lynda Smith, Mario Manzo, Michelle Banonis, Rachel Johnson, Rene Henery, Sam Luoma, Scott Hamilton, Scott Petersen, Sheila Greene, Steve Culberson, Ted Sommer, Yuan Liu

Action Items:

- Mario/Bruce – look into timing of prize competition
- Bruce/Louise – coordinate with DPIIC (Amanda Bohl) on habitat restoration white paper
- Bruce – coordinate with CDFW regarding providing CAMT/Policy Group with an update on nutria infestation

Discussion Highlights:

1. Agenda and Updates
 - NA
2. CSAMP Priorities
 - Current Priorities (2019-2020)
 - Complete current CAMT investigations and communicate findings
 - Mostly complete outside of fall outflow and smelt entrainment studies.
 - Support implementation of resiliency strategies for Delta smelt and Sacramento salmonids
 - Support additional near-term, no regrets salmon actions
 - Improve coordination of salmonid research in the Delta and support development of an integrated Central Valley science plan for salmonids
 - Initiate conversation regarding oversight, guidance, and feedback on monitoring schemes targeting the Delta's natural resources
 - Advance decision support tools
 - Questions/Comments
 - Are smelt entrainment studies finalized and posted?
 - Not yet. DSST will be meeting with Eva Bush this afternoon to review her revised summary.
 - Not clear what part of Resiliency Strategies CAMT would be engaging with, or if it's even necessary to include this item seeing as BiOps include Resiliency Strategy elements
 - SDM pilot, Science Plan implementation, Battle Creek are places CAMT might engage.
 - Resources from the Governor for resiliency strategies are no longer available. Consider focusing on permitted projects.

- ◆ Disagree - there were 13 resiliency strategies in Delta Smelt plan only three are included in ITP. Interested in evaluating the other strategies to gauge whether any should be promoted by this group.
 - SDM process for Delta Smelt includes evaluating resiliency strategies.
 - Is there a window of time when the Prize Competition is open?
 - Annual competition, not sure what the window is this year.
 - Need to have a conversation regarding funding cap for CSAMP efforts – the priority is SDM work.
- Future Priorities (2021-2022)
 - Habitat restoration
 - Some Policy Group members have expressed an interest in focusing more on restoration actions (including both flow and non-flow actions).
 - The CAMT Workplan includes a line item for habitat restoration, but CAMT has not yet discussed what this would entail.
 - One Policy Group member suggested CAMT prepare a brief white paper, to clarify what is already being done and how CSAMP might best engage (e.g., by filling gaps).
 - Habitat restoration actions are included in the resiliency strategies, Delta Smelt SDM and CSSP. CAMT also recently completed a study on Delta rearing habitat for salmon.
 - Questions/Comments
 - Concerned that the habitat restoration white paper be framed succinctly and not be redundant with other efforts.
 - ◆ Consider coordinating with DPIIC
 - Would like to see CSAMP focus on helping resource agencies cut through habitat restoration green tape
 - If habitat restoration white paper is a means of improving communication that could be helpful but shouldn't be viewed as an end product unto itself
 - Consider taking a broad view of habitat restoration that includes adaptive management experiments (as opposed to a narrow view that would be limited to physical restoration activities listed in EcoRestore)
- Recommendations from CAMT Management Questions Committee
 - Committee = Cathy, Erik, Sam, Josh, Brycen, Darcy, Erin
 - Charge:
 - Develop an updated set of management needs and questions to guide CSAMP activities
 - Provide CSAMP management needs to the DSP as input for the Science Action Agenda update (CSAMP management needs would be a subset of the SAA)
 - Committee has met 3 times and has developed an initial draft set of topics with goals, objectives and questions for each. Still at brainstorming stage, have yet to prioritize or determine level of specificity.
 - Delta Smelt Viability
 - Delta Smelt Summer-Fall Management
 - Longfin Smelt Outflow Relationship
 - Salmon Entrainment
 - Efficacy of Physical/Non-physical Barriers

Facilitator Notes, Not Reviewed or Approved by Meeting Participants

- Exotic and Submerged Aquatic Vegetation
 - Water Quality (Nutrients, Contaminants, Temperature)
 - Restoration
 - Core Monitoring
 - Steelhead Collaboration
 - Questions/Comments
 - Concerned that conversations regarding management questions often devolve into arguments about regulatory priorities vs improving conditions.
 - The list of management needs is confusing in terms of how things are/aren't nested – especially without the context of the full document
 - Consider tying management questions to objectives
3. IEP Long-term Monitoring Survey Design Review (Culberson)
- IEP pilot effort underway to review existing survey designs to evaluate whether they are collecting intended data and whether that data is useful
 - Review process
 - Evaluate efficiencies within and among LTMEs.
 - Evaluate for redundancies, suitable spatial and temporal resolution, statistical robustness, logistical feasibility
 - Tentative Review Themes
 - Starting with Otter & Midwater Trawl surveys (UC Davis, Bay, Fall)
 - Are these three surveys successful at identifying fish communities (in terms of abundance, distribution, demographics)?
 - Determined representative species, next step is to combine with potential drivers and ecological predictor variables to create model
 - Once model is created, is it possible to create the same data set with different surveys/changes to existing surveys? Will require ground-truthing with survey operators.
 - Draft report due in September.
 - Questions/Comments
 - Consider making the questions driving the surveys more explicit. For example, is trend detection embedded in the details?
 - Habitat and time parameters will be the focus (i.e., are fish in a certain place at a certain time?). Broader criteria were shared with reviewers. Trend detection should be covered by time parameter.
 - Consider evaluating feasibility/east of feeding survey data into other processes
4. Delta Smelt Science Plan (DSSP) Implementation (Swart)
- Feedback from the April CAMT meeting on the proposed implementation plan for the eight DSSP recommended actions was focused on the science planning process:
 - Consider timing and resource limitations of planning, implementing, and evaluating flow management actions
 - Develop a road map to apply for future actions
 - Walk through an example action to demonstrate how it will work
 - Defining roles and responsibilities

- Science manager
 - Coordinate planning across actions
 - Identify and elevate resource needs
 - Annual reporting and synthesis
- Action champions
 - Study planning/Permitting
 - Project implementation
 - Data collection and management
 - Analysis
 - Project reporting
- CSAMP
 - Assess resource availability
 - Prioritize science activities
 - Approve planning process
- Example: Suisun Salinity Control Gates Action
 - Potential work plan model for actions
- Three-year planning process
 - Programmatic approach to coordinate various single year and multi-year science activities
 - E.g. management actions, laboratory studies, synthesis, etc.
 - Reduce inefficiencies and redundancies
 - Process should make transparent the timing and funding limitations and prioritization process
 - Have already started identifying candidate science activities, categorizing and identifying resources needed
- Next Steps
 - Propose that the DSSP be adopted by the CSAMP Policy Group at their July meeting
 - For now, focus on coordinating currently planned actions – build action by action
 - When completed, SDM will inform selection of science activities
 - Rely on steps in the three-year planning process, but revisit the development of a “three-year plan”.
 - Develop a schedule for implementing other plan recommendations.
- Questions/Comments
 - Consider highlighting the need for data interpretation (not just reporting) as this is a critical and time-consuming step
 - How does this fit into the work Larry Brown is doing in terms of what is being reported and when?
 - Proposed changes to FLOAT-MAST reporting were derived from workplan so there should be significant alignment.
 - Not clear who is responsible for various reports
 - Seems like we’re doing this out of order and haven’t connected all of the pieces of an adaptive management plan (of which the Science Plan would be a part). Who is defining the problem and establishing goals and objectives – is that CSAMP? What are we doing the science for? How will the Science Plan inform next steps coming out of SDM? Need to think more about integrating these pieces. There are more roles and responsibilities to think through (e.g., evaluation and Policy Member decision making)
 - Agree, this needs to be tied back to BiOp/ITP and integrated with other efforts to avoid

redundancies. Need to think through communication, reporting requirements and timelines.

- Next step would be to outline and timeline each action.
- We considered bringing this to the Policy Group for adoption in May but there was a desire for additional discussion, should we bring it to the July Policy Group meeting for adoption?
 - Yes, there is wide-spread support for adopting Science Plan as part of framework for adaptive management process stemming from ITP
 - Not totally clear what adoption means, what it gets us and how this aligns with the SDM process. Will there be a broader discussion about the resources needed to develop and implement the plan?
 - Concerned about putting off the conversation regarding resources needed to see this through.
 - Seems like we should at least have the resources for development of the implementation plan and call out specific items in scope that are high priorities (e.g., coordination with other efforts)
 - Concerned that the Science Plan was developed before the SDM process got underway, seems like an update to the Science Plan (perhaps authored by Denise or Compass) might be in order so that they fit together.
 - Sally and Denise were in communication regarding how the SDM would be incorporated into DSSP but not sure if anything got written down. Seems like a necessary step.
 - ♦ Seems like the alignment is fairly straightforward: the SDM suggests what to do, Science Plan says how to do it.
 - ◇ Except SDM isn't done yet so it's not clear how the timeline works
 - Agreed. Both are conceptual guidance documents at this point.
 - Concerned that the implementation plan is being made to fit regulatory requirements of ITP and BiOps. Originally, the DSSP was supposed to be about applying science to management actions first and foremost.
 - Agree that the ITP/BiOps should not constrain the Science Plan.
 - Support the idea of adopting the Science Plan but not clear how to communicate what commitments we're making
 - Maybe adoption isn't necessary – consider just stating agreement on moving forward with work on the implementation plan (which would be tacit adoption). Concerned that we're expecting too much out of SDM process for this fall, agreement on framework for moving forward would be a significant step in and of itself.
 - ♦ Wouldn't preclude trying to identify resources needed (though not clear we'll be ready to have that discussion in July)
 - ◇ Agree that this would allow us to move forward without getting stuck on lingering questions.

5. Agenda and Planning for July Policy Group Meeting

- July 31 from 1-3pm

Facilitator Notes, Not Reviewed or Approved by Meeting Participants

- Proposed Agenda Topics
 - SDM and Science Plan
 - Next steps (i.e., implementation plan) and integration (**not** adoption at this time)
 - Salmon Rearing in the Delta – Dr. Anna Sturrock
 - CSAMP Management Needs and 2021-2022 Priorities
- Questions/Comments
 - Consider tying the SDM and Science Plan to adaptive management
 - What is happening with Delta nutria invasion?
 - CDFW task force is focused on it, still a relatively high priority for the agency
 - CDFW can provide an update at Policy Group/CAMT if so desired