

## OUTCOMES MEMORANDUM

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**TO:** CAMT Members  
**FROM:** Bruce DiGennaro  
**DATE:** December 4, 2019  
**RE:** November 19, 2019 CAMT Meeting #85

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**Attendees:** Ben Geske, Brad Cavallo, Brycen Swart, Carl Wilcox, Cathy Marcinkevage, Chuck Hanson, Dan Olson, Darcy Austin, Deanna Sereno, Erik Loboschefsky, Erin Cole, Frances Brewster, Jason Peltier, Jennifer Pierre, Josh Israel, Kate Spear, Kaylee Austin, Louise Conrad, Lynda Smith, Mario Manzo, Sam Luoma, Scott Hamilton, Scott Peterson, Shaara Ainsley, Shawn Acuna, Sheila Green, Stephanie Fong, Steve Culberson

### Action Items:

1. Bruce – invite Denise Reed to present on Delta Smelt Science Plan and Life Cycle Model during December CAMT meeting
2. Bruce – add an agenda item regarding fall outflow to December Scoping Team agenda and January CAMT meeting
3. Bruce – revise 2020 workplan (incorporating CAMT input)
4. Bruce + K&W – revise proposed protocols based on CAMT feedback
5. K&W – confirm exact boundaries of Coordinated Salmonid Science Plan (CSSP) with Salmon Subcommittee
6. K&W/ESSA – share updated CSSP outline with Subcommittee’s approval of updated version
7. All – provide additional feedback on Delta Smelt Conditions Report by December 6
8. All – provide suggested topics and format to State Water Contractors for their next symposium
9. Stephanie – share pre-review report w/ CAMT - DONE
10. Linda, Frances, Bruce – review website and go live with it
11. Carl – share Frank’s Tract Phase 2 structured decision-making website with Bruce to relay to group

### Discussion Highlights:

#### 1. Agenda and Updates

- State Water Contractors’ symposiums:
  - November 7 symposium: 75 attendees, recording will be posted online. To be determined if presentations will be posted.
  - February symposium:
    - Delta Outflow projects and CAMT activities are potential topics - suggestions on other topics and formats are welcomed.
    - Members requested State Contractors include as many distribution lists as possible to advertise February symposium.
- Delta Smelt Science Plan modeling recommendation
  - Preliminary brainstorming on work plan to develop advanced process-based modeling tool(s) is planned with funding support from the Delta Science Program (DSP) Experts to include Denise Reed, Win Kimmerer, Kenny Rose, Lisa Lucas and Ed Gross. Other experts and CAMT agency staff to also be engaged.

- Anticipate development of a draft white paper and a workshop, with feedback on the white paper collected at the workshop.
- CAMT will be used as sounding board in white paper's development.
- Concern was expressed regarding coordination with the Delta Smelt Life Cycle Model.
- Plan for a more complete discussion at the December CAMT meeting.

## **2. Delta Smelt Conditions Report**

- Outgrowth of the Delta Smelt Science Plan
- Annual progress summary to facilitate regular review & interpretation of monitoring data
- Contents of report:
  - Key variables for Delta Smelt habitat
  - Abiotic (Outflow, X2, water temperature, Secchi, salinity)
  - Biotic (phytoplankton, Microcystis, zooplankton, bivalves)
  - Delta Smelt indices and estimated abundance
- Member feedback:
  - Appreciation for data without “spin” – if intent is to keep it free of bias there are some interpretive statements that may need to be removed from current draft (consider including interpretations in a companion report)
  - Desire for more recent data (can updating of some data streams be automated?) balanced with recognition that data isn't standardized and therefore must be formatted in addition to being QA/QC'd.
  - Consider adding:
    - a trend line (separately graphed);
    - a visualization of where the Delta Smelt are distributed by month;
    - information on aquatic vegetation
  - Concern that there may be overlap with the IEP “Status and Trends” report
    - Different purposes, resolutions, narrowing of scope (from IEP → Conditions Report)
    - Staff are communicating, using same coding
  - Report highlights data gaps, which is valuable insofar as it indicates where additional resources/efforts are needed.
- Update on report to be provided during February CAMT meeting.

## **3. Delta Smelt SDM and Salmon Subcommittee Activity**

### *Delta Smelt SDM*

- TWG Meeting Schedule, Topics, and Outcomes:
  - October 4: reviewed introductions and roles and discussed impact pathway prioritization approach (e.g. what life stage and stressor are likely most limiting and identifying which management actions are worthy of detailed feasibility investigation)
  - October 23: refined hypotheses statements/structure and discussed parallel track to explore an approach that explores various scenarios holistically.
  - November 8:
    - Refined the questions/structure to target for “typical” versus “rare/episodic” conditions and broke down level of confidence into “expertise” & “technical uncertainty”.

- Agreed to do another round of input into structure to allow for more members to respond.
- November 22: review prioritization results
- December 6: TBD
- December 20: TBD
- Workplan Outlook
  - Define DS Objectives (& Sub-Objectives)
  - Define Performance Measures
  - Explore Estimation Methods (Models)
  - Screen Candidate Management Actions
- Member feedback:
  - Requests to report back on estimation methods that will be used.
  - Importance of connecting this effort to other SDM work.
  - Provide opportunities for those unable to attend regular meetings to provide feedback on the process.

#### *Salmon Subcommittee Activity*

- Coordinated Salmonid Science Plan (CSSP) Objective: Leverage existing planning efforts into a plan that will logically prioritize Central Valley salmon science, recovery & management activities across the Delta region
- Decisions made/work completed to date
  - Developed interview list, interview questions, info packet, draft plan outline
  - Determined scope:
    - Geography: the Delta (Knight's Landing to Suisun Bay including Yolo Bypass/Cache Slough complex)
    - Species/run type: Winter, spring, and fall-run Chinook and steelhead
  - Life stages: migration (adult and smolt) and rearing survival; will not include spawning or incubation
  - Literature to review (soliciting additional input through interviews)
- Member requests and feedback:
  - Include plans for coordination with CAMT member agencies and with work of Sacramento River Partnership in the CSSP outline.
  - Confirm exact boundaries of the CSSP with Salmon Subcommittee.
  - Make clear that it's a management plan and ensure that managers are included in the plan's development.

#### **4. CAMT Technical Studies Reports**

- Proposed protocols and procedures:
  - One round of review and comments by scoping team.
  - Final reports transmitted to CAMT by scoping team.
  - All reports to include CAMT preface (including any disagreements). Scoping teams would draft preface and CAMT would refine/adopt it.
  - Summary presentations provided to CAMT and Policy Group.
  - Final reports made publicly available.
- Member feedback and requests:
  - Strive to reach agreement regarding when a project is complete.
  - Consider independent review if there are continued disagreements.

- Consider documenting lessons learned from engagement outside of manuscript
- Recognition of need to avoid scope creep of reports
- Avoid scope creep by
  - defining scope of work at start and being clear about modifications
  - identifying a project manager to administer the study,
- Consider tying final payment to receipt of deliverables so as to ensure timeliness
- Request quarterly or semi-annual updates/reports to CAMT to avoid scope creep and multiple review rounds.
- One member suggested two rounds of review by the Subcommittees and one round by CAMT.

## 5. CAMT 2020 Workplan

- Workplan Categories
  - Ongoing Technical Studies (fully funded)
    - Entrainment Studies (Adult Delta Smelt) – Study 4
    - Fall Outflow
    - Salmon Rearing Habitat in the Delta
    - SDM for Delta Smelt
    - Coordinated Salmon Science Plan for the Delta
    - WRLCM Workshops
  - New Initiatives (continuation of ongoing discussions)
    - Delta Smelt Science Plan Implementation (DSSP) – coordination with Float MAST and Float PWT
    - Support implementation of Resiliency Actions (Smelt and Salmon), e.g. North Delta Foodweb Action
    - USBR Prize Competition – Topic to be determined. Work would entail developing selection criteria and reviewing submittals.
    - Application and refinement of existing Decision
    - Support Models
    - Engagement with Prop 1 funded studies
    - Implementation of CSSP outputs
  - BiOp Implementation Support
    - Delta Smelt Summer-Fall Habitat Action – review plans developed by the Delta Coordination Group.
    - Support San Joaquin Basin Steelhead Collaborative
    - RPM 8 – Convene Annual Director’s meeting to review the past year’s actions to minimize the impact of incidental take and coordinate future year priorities.
    - 13.6 Conservation Recommendations for Science and
    - Monitoring - Review and recommend methods for predicting and estimating incidental take
    - Study/test any questionable premises in the BiOps.
  - Delta Monitoring Schemes
    - Use CSAMP as a communication venue for ongoing reviews.
    - Conduct a synthesis of existing juvenile salmon monitoring data for the Delta to examine use by parr, fry and smolts.
  - Possible New Studies (suggested by CSAMP members)

Facilitator Notes, Not Reviewed or Approved by Meeting Participants

- Expand on the smelt behavior/PEL investigations
- Support Delta Smelt pre-screen loss investigations
- Entrainment for salmonids – behavior modeling approaches (similar to CAMT Delta Smelt work)
- Entrainment for larval Delta Smelt
- South Delta barriers and habitat restoration
- Long-fin – pending ITP
- Support production of a “what does it all mean” review of recent LFS and Delta Smelt research
- Member feedback and requests
  - General
    - Concerned about taking on new initiatives when existing work will take up most agency resources (e.g., SDM efforts are a heavy lift)
    - Might be helpful to take a step back and review CAMT initiatives to demonstrate where gaps may exist, what has been successful, etc
    - Would be helpful to better understand funding, resource needs required for each proposal
    - Focus should be on bringing science to contentious issues
    - What are the management questions we’re trying to answer and how do we structure science around that?
    - Concern that even if funding is secure, additional discussion regarding scope modifications may still be needed for items in the “Ongoing Technical Studies (e.g., Entrainment Study 4)
  - Project specific
    - Communicate with Prop 1 funders semi-annually regarding goals and objectives and ensure that CAMT is updated on status of two Prop 1 studies that reflect recommendations from Salmon Scoping team report.
    - One member expressed concern over constraints on staff capacity for implementation of DSSP, including coordination with Float MAST and Float PWT.
    - Ensure clear differentiation of science management and management actions in CSSP implementation.
    - Further refinement of Delta Coordination Group’s actions and CAMT’s role relating to the BiOp is needed.
      - Re: input into BiOps – where did we/could we provide input?
    - One member proposed a life history diversity synthesis project using IEP’s data sets on juvenile rearing.
    - Ensure CSAMP is notified of major milestones around monitoring reviews.