

## OUTCOMES MEMORANDUM

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**TO:** CAMT Members  
**FROM:** Bruce DiGennaro  
**DATE:** November 7, 2019  
**RE:** October 15, 2019 CAMT Meeting #84

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**Attendees:** April Robinson, Ben Geske, Brad Cavallo, Brycen Swart, Cathy Marcinkevage, Darcy Austin, Deanna Sereno, Erik Loboschewsky, Erin Cole, Frances Brewster, Kate Spears, Larry Brown, Louise Conrad, Lynda Smith, Pat Coulston, Rene Henry, Sam Luoma, Scott Hamilton, Sheila Greene, Stephanie Fong, Yuan Liu

### Action Items:

1. Bruce – send 10/10 Salmon Subcommittee next steps to CAMT.
2. Bruce – integrate Steering Committee's comments into SDM goal statement and share with CAMT (complete)
3. Bruce – update language of #4 of the Entrainment Recommended Next Steps slide (complete)
4. Bruce – send CAMT Technical Studies summary to CAMT (complete)
5. All – vet 2020 CSAMP Policy Group meeting dates with respective policy teams (complete)
6. Stephanie - share DJFMP Salmonid Survival project proposal with CAMT

### Discussion Highlights:

#### 1. Agenda and Updates

- CSAMP funding
  - Kearns & West has been hired to provide facilitation services under several Bureau of Reclamation contracts, including CAMT and CSAMP.
  - Summary of meeting to be developed and shared with members. Document sharing protocol to be established.
- SDM and Coordinated Salmon Science Plan (CSSP)
  - SDM report-out forthcoming.
  - Salmon Subcommittee reconvened on October 10. Meetings to occur monthly and will provide feedback on consultant team's progress in developing CSSP (anticipated to be finalized in June 2020).
  - Salmon and Delta Smelt processes will include outreach to those outside of technical teams (e.g., workshops, ad-hoc meeting invites, etc.)
- Winter Run Life Cycle Model Workshop
  - Roughly 40 attendees, want to ensure NGO voices are present next time.
  - First meeting since November 2018.
  - Focus of workshop pertained to updates since last workshop, especially changes to models and model runs as well as identifying topics for future workshops.
  - Next workshop will be in late January/early February 2020 to review results of modeling and what version of model was used and why.
  - The second 2020 workshop will be held in late April and will cover Enhanced Particle Tracking Model, which will include feedback received from this group.

- Sites JPA has been working with CDFW and NMFS on Section 7 consultation.

## **2. Review CSAMP Policy Group Agenda for 10/30**

- Members to vet 2020 CSAMP Policy Group meeting dates with respective policy teams.
- Goal statement will be finalized at next Structured Decision Making meeting and will include feedback provided by Steering Committee.
- Bruce to send CAMT Technical Studies summary to CAMT.

## **3. CAMT Perspective on Entrainment Study Findings**

- Entrainment findings presentation
  - Will include Lenny's independent investigator presentation (similar to last month's CAMT presentation) including an explanation on the use of OMR and its constraints
  - Overview of work completed by CAMT to date.
- Scott Hamilton's Concerns with PEL estimates
  - Assumptions and simplifications result in high level of uncertainty, including ability to calculate confidence levels.
  - Scott's concerns reflect Studies 1 and 2, though they will likely be applicable to Study 3 as well.
  - Others on DSST feels results are still useful for management decisions.
  - Competing conceptual models with equal uncertainty suggests an adaptive management experiment.
  - In presenting to CSAMP, assure balance between technical findings and potential limitations with understandability and implications for management.
- Recommended Next Steps
  - Remove color coding from diagram on Scott's slide as colors no longer hold significance.
  - Language of recommended step #4 to be updated.
  - Present information so that each conclusion is linked to its specific areas of disagreement and next steps (rather than all conclusions, then all disagreements, then all next steps).

## **4. USBR Prize Competition Topics**

- Process:
  - List of 15 potential topics were brainstormed by CAMT.
  - Topics were refined and prioritized through criteria established by subcommittee.
  - Prioritization process led to five areas of further pursuit.
- Bureau to advise on how to avoid issues around proprietary of intellectual property.
- Automated detection of food items includes specifications from biomedical field and those tools developed for ocean-specific species – these will be calibrated against existing lab samples.
- Ultimate goal of competition is to provide USBR with specific direction on at least one of the five topics recommended for further pursuit.

## **5. CAMT Salmon Rearing Habitat Study**

- Background
  - Funded by Nature Conservancy and Delta Stewardship Council.
  - Geographic scope included tidal areas of the Delta, not including Suisun.

- Habitat characteristics considered: water depth, max daily velocity, dendritic channel networks, wetland and riparian vegetation (e.g., adjacency, weighted wetland edge, SAV/FAV), and water temperature.
- Additional considerations include:
  - There is currently more open water in Delta than there was in previous studies
  - Data sets for migratory populations were not separated from those actively rearing in the Delta
  - Study was not oriented to be divided into the five Delta regions to show regional trends
- Project progress
  - Workshop held in May 2019 to vet results to date. Feedback received indicated support for building on to habitat in West and Northwest Delta as well as improving migratory corridor conditions.
  - Final report expected to be released by end of 2019
- Initial findings indicate Northwest and South Delta are most optimal for rearing habitats; these findings will need to be integrated with findings from workshop and feedback from the advisory committee.
- When SFEI provides a high-level version of this presentation to CSAMP on 10/30 they should consider including: which agencies attended workshop (to demonstrate coordination), explanation of objectives and potential uses, and CAMT's involvement

## 6. IEP 2020 Workplan

- 2020 Timeline
  - June:
    - Full proposals due
    - Directors' Work Planning update
    - Full proposal review begins
  - July
    - Proposal review ends
    - CT & SMT finalize recommendations
  - August: Stakeholder check-in
  - September
    - Directors' input on draft 2020 Work Plan
    - Coordination for permitting
  - November: Stakeholder check-in
  - December
    - Finalize 2020 Workplan with Directors
    - Permitting coordination completed
- Summary
  - 21 Compliance and Monitoring Elements
    - Community
    - Salmonid
    - Delta Smelt
    - Longfin Smelt
    - Ecosystem
  - 6 Baseline Status and Trends Elements

Facilitator Notes, Not Reviewed or Approved by Meeting Participants

- Adult Striped Bass Population Estimates
- Adult (White) Sturgeon Population Estimates
- Yolo Bypass Fish Monitoring
- DJFMP Liberty Island
- DJFMP Resident Fish
- DJFMP Salmonid Survival
- 14 Synthesis, Modeling and Review Elements
  - Science Advisory Group
  - Estimation of Pelagic Fish Population Sizes
  - Statistical Support DJFMP DS life cycle model
  - Gear Efficiency in Support of DS Modeling Efforts
  - LFS Conceptual Model Development and Synthesis
  - Status, Trends, and Distribution of Cypriniform Native Fishes
  - FLoAT MAST
  - IEP Zooplankton Sample Methodologies and Variation in Communities
  - Forecasting Nutria Invasion
  - Aquatic Veg Response to Treatment
  - Understanding Climate Change Tools and Thermal Refugia
  - Feasibility of Improving Juvenile Chinook Monitoring through EDSM
  - Patterns for Early Life Stages of Fishes and Their Assoc. with Zooplankton
- 16 Directed Studies
- 17 Project Work Teams
- 2 Technical Teams
- Program Support