

OUTCOMES MEMORANDUM

TO: CAMT Salmon Subcommittee Members
FROM: Rafael Silberblatt
DATE: June 17, 2020
RE: June 11, 2020 CAMT Salmon Subcommittee Meeting

Attendees: Alison Collins, Brad Cavallo, Bryan Matthias, Brycen Swart, Carl Wilcox, Cathy Marcinkevage, Deanna Sereno, Dylan Stern, Frances Brewster, Jean Castillo, John Ferguson, Josh Israel, Kate Spear, Mike Beakes, Pascale Goertler, Rene Henery, Thad Bettner, Todd Manley

Action Items:

- Bruce - Share draft of Denise Reed's Science Plan w/ ESSA (DONE)
- ESSA - Share draft chapters from CSSP doc w/ Bruce
- Rafi/Bruce - Determine CSSP webinar invite list (DONE)
- Rafi - Send out doodle poll to determine date for CSSP webinar
- Bruce - Reach out to NGO folks who haven't participated in CSSP survey yet
- Rafi - Reconvene the refiners (+ any others) to weigh in on CSSP webinar agenda/content
- Bruce/Rafi - Reconvene Salmon Action Matrix group to discuss next steps and timeline for prioritizing which projects to model
- Bruce/Rafi - Reconvene Subcommittee members on SFEI Rearing Habitat Study science group (Rene, John, Josh, Alison?) to discuss which hydrodynamic criteria to map
- Josh - Share USBR material on impacts of operations on hydrodynamic criteria
- Bruce - Reach out to Anna Sturrock/Stuart re: July Policy Group presentation
- Dylan/Rafi - Share link to SSA survey (note: deadline is 7/17)
- Rafi - Send doodle poll to Subcommittee with alternative Sept meeting dates
- Rafi/Bruce - Life Cycle Model Brief next steps
 - Reach out to Brett + others (Ann Marie?)
 - Has any inventorying of existing data streams been done?
 - Would they welcome proposed Subcommittee actions or would these be redundant/out of step?
 - Convene John, Cathy, Josh, Carl + ? to develop a list of potential next steps in support of Brief to share w/ CAMT
- Rafi - Add USBR Steelhead item to July Subcommittee agenda

Discussion Highlights:

1. Agenda Review and Updates

- An online workshop dedicated to Sacramento River spring-run Chinook salmon is slated for three half-days on September 8-10, 2020. The workshop will seek to: 1) take stock of the best available science on life

history and genetics research relating to spring-run; 2) inventory and document the extent of spring-run monitoring; and 3) synthesize current approaches to producing and using juvenile production estimates (JPEs) and identify knowledge gaps for producing a JPE for spring-run. This workshop will be co-hosted by the Delta Science Program, DWR, CDFW and AFS. Attendee criteria is still being determined.

- K&W to send Doodle Poll to reschedule September Subcommittee meeting to avoid conflicts with workshop
- The Sacramento River Science Partnership (SRSP) will be holding a series of webinars in June and July as follows:
 - June 18: SRSP Science Plan Webinar
 - July 9: Fall Pulse Flow Findings 2019 and Salmon Cohort Summary
 - July 30: Temperature Modeling on the Sacramento River Webinar

2. Coordinated Salmonid Science Plan

- Survey Response Rate & Representation to date
 - 74% of 61 people invited participated in each of the four surveys
 - Respondents by stakeholder type:
 - 34% Federal agencies
 - 32% State agencies
 - 17% Experts
 - 11% Public Water Agency
 - 6% NGO
 - Based on responses received to date, ESSA proposed writing up the results in the following three parts for the final CSSP.
 - Part A: Exploring the influence of stakeholder group membership on response. This will be broken out by respondent's stakeholder type as well their role (e.g. science vs management)
 - Part B: Exploring priority lists by each criterion. This would include ranking activity statements by criterion.
 - Part C: Synthesizing the results of prioritization across criteria. This would include demonstrating the extent of alignment of different viewpoints across criteria and highlighting areas where broad consensus was and was not observed.
 - Member questions and comments
 - When will results be matched with spatial locations? That matching should be done before the data is presented and analyzed. There are some activity statements that are mainly applicable to a handful of locations. Once we break it down spatially, it may simplify prioritization for specific locations. This topic should be included as an agenda item for the Results Review Webinar.
 - ESSA now has a list of activity statements that are assigned to different locations. We can demonstrate a ranked list by location once survey has been closed.
 - I think a short call with some members of this group is warranted to discuss how and what data to present at the Results Review Webinar.
- Project Timeline and Next Steps

- Late June/early July: Results Review Webinar
 - Goal: provide opportunity for attendees to review final results, ask questions, and comment/provide expert context on best ways to interpret and present these results in report.
 - Subcommittee members agreed to pursue a one day webinar in which the morning session would be open to survey participants and an afternoon session that would specifically be for the Subcommittee.
 - Tentative agenda items include:
 - Share thoughts on the survey process & experience
 - Present results for each section as they might appear in report & hear reactions (can be distributed in advance?)
 - Discuss best way to interpret and present results in report
 - Hear how results align with what's coming out of parallel processes (e.g., CVPIA SDM, Delta Smelt SDM)
 - Introduce upcoming peer-review process
- June 12: Closing of survey period
- June 15-19: processing of final survey results and data rendering
- July 11-15: ESSA writes draft plan
- July 15-31: Subcommittee completes peer-review of ESSA's draft
- August 13 CAMT meeting: seek CAMT's on comments and questions received during peer-review
- August 3-17: ESSA incorporates revisions received
- Week of August 24: ESSA distributes and presents on draft final CSSP
- August 24-31: ESSA incorporates remaining revisions and submits final CSSP
- Member questions and comments
 - Consider coordinating with Denise to see where there are opportunities to make the outline of the CSSP consistent with her report.
 - ESSA has been engaging with Denise and intend to reference her plan in the parallel processes portion of the CSSP.
 - Consider sharing draft sections of the CSSP as they are completed? Does it make sense for us to review piecemeal?
 - ESSA will share draft sections with Bruce and let him determine whether to engage the Subcommittee in piecemeal review.

3. Science Action Agenda (SAA) Update

- Purpose of the SAA
 - Prioritize and align science actions to inform management needs (Delta Science Plan Action 2.3)
 - Identify emerging science actions to address gaps and support knowledge advancement
 - New for 2022-2026 SAA: starting with a broad list of management questions to ensure science actions inform policy and management
- Relevant definitions
 - Management needs: information necessary to: (1) achieve policy or regulatory objectives, (2)

assess the effects of a past or future management action, and or (3) inform a decision between multiple scenarios.

- Management questions: target uncertainty around a given management action or topic, tend to be specific to a single agency or a set of agencies or organizations (but do, generally, have enterprise-wide application)
- Science actions: identify priority efforts to generate information or create tools that advance policy and address the physical, natural, and socio-economic challenges of the Delta—including research, modeling, synthesis, communication, adaptive management, and more.
- Format of the SAA: Science actions will be used to inform management questions and, in turn, management needs.
- Proposed criteria:
 - Management Questions:
 - Screening Criteria to ensure that the questions fall within the scope of the near-term needs of the Delta’s science-management landscape
 - Selection Criteria for SAA to identify the management questions that best align with the scope of the SAA (actions will address key uncertainties and institutional gaps, while promoting collaboration among agencies and organizations)
 - Science Actions:
 - Screening Criteria to ensure that considered science actions best meet the needs of the SAA and management needs, based on feasibility, cross-agency priority, and uncertainty/lack of progress addressing science topic
 - Prioritization Criteria to identify the science actions that are highest priority for addressing the management needs, based on scientific merit, impact, timeliness, and opportunity cost
- Timeline:
 - Spring/summer 2020: initial outreach
 - Summer/Fall 2020: scoping of management questions
 - Fall 2020 – Winter 2021: SAA content creation
 - Winter 2022: SAA publication
- Subcommittee agreed to having CAMT subgroup focusing on management actions take an initial pass at answering the Delta Stewardship Council’s questions related to the Update before providing its own feedback

4. Life Cycle Models Management Brief

- Request from May CAMT meeting was for Subcommittee to provide recommendations for moving management brief forward (e.g. CAMT endorsement and next steps).
- Member comments and questions:
 - Within the life cycle and SIT model teams there seems to be a data gap as it relates to how to inform the model for the benefits of restoration. This is a monitoring information need that requires broad support in order to initiate the resolution of the data gap.
 - Agree, that data gap is fundamental to informing the model and its ability to inform restoration management actions especially at the population scale. We don’t have much information in that

regard and that is core issue with most of the monitoring, whether it's related to spawning/rearing or floodplain enhancements. If that's the question we are trying to answer, CAMT would be supportive.

- CVPIA just wrapped up near term restoration activities and included guidance on ongoing and future data gathering and how it would feed into life cycle modeling. I would suggest that work be consulted as the Subcommittee considers what recommendation it will be making.
- USBR has been working with the SIT group to conduct special studies to identify data gaps. There are other efforts that are addressing this issue as well. I think this is more of a communication issue – different dots aren't being connected. CSAMP can act as this forum and as a catalyst to advocate for the right kind of monitoring to fill data gaps.
- There's broad support but what's the action? It could be we support concept of actions being needed. We should also sit with life cycle modelers to see exactly what they need to determine if we have the right type of data and determine if there's anything needed. The findings of these conversations could then inform our proposal to CSAMP. We need to synthesize existing data and sit down with modelers to see if they can use what's already available.
- Bruce and Rafi to
 - Reach out to Brett to determine if any inventorying of existing data streams has been done and if proposed Subcommittee actions would be welcome or if these would be redundant/out of step
 - Convene John, Cathy, Josh to develop a list of potential next steps in support of Brief to share with CAMT

5. July/Sept Policy Group Salmon Topics

- Bruce to reach out to Anna Sturrock and/or Stuart for presentation on new research (to be vetted by Subcommittee/CAMT prior to Policy Group)

6. Workplan Items

- Salmon Entrainment
 - PWAs are interested in developing a salmon entrainment study proposal based on a subset of the questions being considered by the CAMT management questions working group and would like the Subcommittee to review.
 - The Subcommittee was open to the idea of reviewing a concept proposal (not a full proposal) and noted that previous SST salmon work had extensive peer review.
- SFEI Rearing Habitat Study and Salmon Action Memo
 - CAMT feedback will require further discussion amongst respective working groups.
- DSP/Prop 1 Study Engagement
 - DSP reached out to all 5 relevant projects to see if PIs would be interested in engaging with Subcommittee and received 3 affirmative responses (from Russ Perry, RMA, Mariah Meek (MSU) and AnchorQEA).
- USBR Steelhead

- Reclamation is working on LTO Action aimed at improving the understanding of steelhead behavior, demographics, and vital rates that will inform actions tailored to understanding the effects of operating the CVP on steelhead abundance.
- Through CSAMP, Reclamation would like to coordinate with others to develop a framework for scaling and transferring research studies and monitoring from the Stanislaus and CVP tributaries to other Central Valley watersheds.
- A first step is inventorying existing research studies and monitoring surveys and assessing how these can be improved for measuring viability metrics (similar to previous SAIL evaluations done for salmon and sturgeon).
- Reclamation is hoping the Subcommittee can:
 - Provide a forum for stakeholder outreach
 - Review study proposal
 - Track progress and preliminary findings through quarterly updates
 - Review draft report