

OUTCOMES MEMORANDUM

TO: CSAMP Members
FROM: Bruce DiGennaro
DATE: Aug 5, 2024
RE: July 30, 2024 CSAMP Meeting

Attendees: Amanda Cranford, Amy Blunk, Ashley Overhouse, Bill Vanderwaal, Brad Samuelson, Brian Mahardja, Cathy Marcinkevage, Christine Joab, Chuck Bonham, Cindy Meyer, Dana Lee, Darcy Austin, Dorene Dadamo, Gary Bobker, Heidi Williams, Henry DeBey, Ian Buck-Macleod, Jeff Sutton, Joaquin Esquivel, Josh Israel, Julie, Lisa Marie, Louise Conrad, Lucinda Shih, Sam Luoma, Sarah Piramoon, Scott Hamilton, Shawn Acuna, Steve Lindley, Thad Bettner, Tom, Victoria

Action Items:

- Finalize Delta Smelt SDM report
- Advance thinking regarding 7 proposed next steps (e.g. feasibility, regulatory requirements, etc.)
- Compile a list of ongoing and planned activities that relate to the 7 proposed next steps. Look for efficiencies and potential gaps.
- Identify where individual CSAMP members are positioned to potentially assist with advancing components of the 7 proposed next steps.

Summary of Input Received Regarding Next Steps for the Delta Smelt SDM Work

- Finalize the report asap. Include dissent, if provided.
- Flush out the suggested 7 actions.
- Consider links to existing and planned projects. Look for efficiencies and leveraging opportunities.
- Take action, but recognize limited resources and assets (including agency staff capacity).
- Be realistic. Consider where there are constraints that could affect feasibility (e.g. costs, regulatory restrictions)?
- Look at system-wide effects (river-delta-bay) and multi-species effects.
- Consider building a bay-delta coalition around turbidity actions.
- Work together and build on existing trust.
- Consider monitoring needs, but should not always be additive to existing monitoring.
- Avoid stranding the report and its suggestions.

Discussion Highlights:

1. Agenda Review and Announcement
 - USBR released the NEPA report for project operations. Taking public comment through September 9th
2. Delta Smelt Structured Decision-Making Report
 - Thirteen actions were evaluated by the Smelt TWG using multiple models followed by further feasibility analysis and near-term recommendations
 - The report includes three main components
 - Consequence tables
 - Takeaways
 - E.g., growing the Delta Smelt population might be possible through management actions that increase combinations of food, turbidity, flows

and or improve survival via contaminant reduction and further entrainment mitigation.

- Possible next steps (candidate adaptive management & research next steps for Round 1 actions)
 - Managed wetlands food production
 - Tidal wetland restoration
 - Aquatic weed control
 - Sediment supplementation
 - Outflow X2
 - Physical point source contaminants reduction
 - Engineered first flush
- Soliciting input on draft report (comments due Aug 9), hoping to release final report by Aug 30
- TWG member Scott Hamilton shared his perspective
 - All SDM models predict that two food-focused management portfolios had the greatest benefit for delta smelt and implementation of them was expected to lead to the recovery of Delta Smelt.
 - If we don't address that limiting environmental factor, delta smelt will not survive.
 - While multiple environmental stressors put delta smelt at risk, enhancing food availability, the foundational element of habitat, will change the trajectory of delta smelt abundance.
 - Agencies and water users alike face resource constraints. Better utilization of existing resources is worth discussing, e.g. modeling suggests that food-based actions are likely to be more cost-effective than flow augmentation actions.
 - Consider next steps:
 - Decision makers need full information to make good policy decisions
 - Costs of current actions are not considered
 - Social impacts are not included in consequences table
 - There are better portfolios
 - Some key technical issues have not been resolved
 - Lack of iterations and truncation of the process prevented clear articulation of conclusion, potentially misinforming management
- TWG member Sam Luoma shared his perspective
 - There is no silver bullet, rather the next phase of management will need to include moving forward on all of the following items:
 - Sustain and regularly report results from AM experiments underway
 - Food: AM experiment(s) with managed wetlands (in Suisun Area)
 - Turbidity: Concerted effort to progressively reduce area of Aquatic Weed
 - Systematic adaptive management experiments (reverse trajectory)
 - Contaminants:
 - AM experiment eliminating a hotspot with a constructed wetland...Ulatis Creek

- Flesh out understanding of flow management with a new three-year modeling initiative:
 - Update data since 2014
 - Absence of management? Number of years? Timing of managed flows (summer, year-round, fall)? Combine with increased food and turbidity?
 - There are important synergistic effects of adding turbidity to food actions. There are modeled flow actions that appear to have as significant an impact as food actions.
 - Questions/Comments
 - What's the form of the contamination at Ulati Creek?
 - Ag land and urban Vacaville drainage
 - There's going to be a lot of turbidity coming out of creeks due to wildfire
 - Impacts are assumed to reach the Delta
 - Appreciate the use of multiple models, strong scientific grounding. Current activities underway that appear to align with recommended management actions include:
 - Plans to incorporate takeaways into summer fall habitat peer review (upcoming synthesis study to evaluate ecological impacts of summer fall habitat)
 - Integrate with Tidal Wetland symposium takeaways
 - Multi-year contract to deal with aquatic weed control (open to adaptive management approach)
 - Food web modeling synthesis team is in development
 - Continued research on managed wetlands
 - Supplementation may be essential to this effort. Appreciate advancing seven synergistic management actions together as a hypothesis to test via adaptive management (the spirit of adaptive management can be seen in soon to be released regulator permits).
 - It would have been advantageous to have this report ahead of re-consultation (acknowledging that the permits are always being re-evaluated).
 - Seeking consensus made the process take longer (which meant having to deal with technical staff turnover). Having a TWG and a Scoping Team was critical. Management actions can be considered all together or further prioritization can take place.
 - This is an incomplete SDM (didn't reach an optimal strategy due to uncertainty and time constraints) but moving forward on the seven recommended actions will help us optimize. Don't think we should focus on further winnowing the seven actions rather we should attempt to move ahead with championing the full suite. Consider incorporating and addressing dissenting viewpoints in the report.
 - Current monitoring (especially in terms of where food is available) is insufficient. How to achieve turbidity isn't clear (not clear if sediment discharges are good or bad)
 - Are we ready to take the step of starting to do experiments? Trying to bite off seven actions together seems like a lot. Intrigued by turbidity because it links the whole system – interested in trying to build a broader coalition.

- Support the goal of linking Bay and Delta science/management. Getting enough turbidity without adding sediment could be really difficult – will need to deal with regulatory side.
- Monitoring improvements could help with uncertainty. Consider opportunistic monitoring when unique conditions arise.
- Leaning towards trying something as opposed to studying more - acknowledging this may be a higher resource lift at a time when resources are diminishing. Struggling to remain at tables, will likely have to prioritize spaces where actions are taking place.
- Given that this is a difficult year for ag, how can we be more efficient with water and dollars? How can we crosscheck potential projects against seven management actions to determine if they're aligned? Need monitoring to gauge success otherwise efforts will be fruitless.
- Need to focus on putting an end to expensive things that don't work (e.g., some current monitoring) so that we can re-allocate funds. How feasible is execution of these projects? Execution is difficult and there will be failures. Monitoring will be key – but it should be a replacement as opposed to an add-on.
- Seems like we've done enough to move forward – with some or all actions depending on championing. Sounds like some actions are already underway, is there a way that we could daylight those things (e.g., foodweb synthesis, aquatic vegetation removal) to make them more collaborative/aligned with management actions/monitored/robust/tied to adaptive management? It seems like we do best when we work together (thought it takes longer) – hoping we can use this table to avoid redundancies in other spaces.
- Consider further exploring risk tolerance and cost distribution as next steps towards turning science into actions.
- Would like to see the report finalized (fine with including dissent and response). Consider pulling together a table of current actions that are aligned with recommended management actions in report – could be an opportunity to leverage existing efforts and identify gaps. Consider documenting potential regulatory hurdles.
- Seems like tidal restoration, managed wetlands and point-source reductions could be piloted at the small scale. Supplementation and turbidity sound interesting but concerned that they may be challenging to implement. Not sure why we're doing fall X2 if it's not having a benefit, seems like the water would better be used for a summer action.
 - Fall outflow doesn't have as big a benefit on growing the population as summer outflow but does help avoid species extinction in the fall.
- Concerned that information about current efforts that are underway may not be circulating sufficiently for us all to be in the loop.
- Pursuing recommended management actions would be easier done if we split tasks/funding amongst ourselves. We need to do a better job communicating the importance of these fish.
- Pieces that aren't going to be funded through permits will require additional funding if they're going to happen. Would like to make sure that actions are as efficient as possible to minimize real world cost implications. Appreciate inclusion of analysis regarding impacts to salmon.

- Consider a permanent adaptive management team to determine priorities (e.g., given regulatory and cost constraints) and have a technical working group delve further into outstanding science questions.
- 3. Consent Item – Salmon TWG Report
 - No objections to releasing report.
- 4. Other CSAMP Activities