



California Fish Passage Forum Meeting

Meeting Minutes

September 17, 2014

Arcata, California

Attendees: Candice Meneghin, Stan Allen, Kurt Zimmerman, Michael Bowen, Michael Kellett, Melinda Molnar, Robin Carlson, Donnie Ratcliff, Bob Pagliuco, Lisa DeBruyckere, Marc Commandatore, Tom Schroyer, Anne Elston, Javier Linares, Sam Assad, Kevin Shaffer, Leah Mahan, and Frank Meraz, and guests Stacy Jacobsen (*CalTrout*), Mitzi Wickman (*Mid-Klamath Watershed Council*), Allan Renger (*California Dept. Fish and Wildlife*) and Sharon Kramer (*Harvey*)

ACTION ITEMS:

- Lisa to distribute final MOU for signatures.
- Lisa will contact Steph Wald to gauge their interest in joining the Forum.
- American Rivers – Kerri McLean. Lisa will contact to gauge their interest in joining the Forum.
- At December meeting, SD committee will share what they have produced to date.
- Within the next week, Donnie will refine the scope of work to more clearly articulate the tasks for a technician – to Stan. Position reside in Donnie’s office.
- Mark Lancaster to let Stan and Bob know if 5 Counties can provide cost data for APASS, using the \$2,000 available to support this effort.
- Lisa will send NFHP funding email announcement to Forum members, and Forum members will cc Lisa.
- 2012 CDFW list on *CalFish*. We could compare all lists, and use FISHPASS to prioritize. Add to December agenda. We could compile the list of top barriers and then determine what it would take to fix them.
- Lisa will change “fiscal fishery” to “subsistence fishery” on question #25 of application.
- DWR has the data and Marc will sit down with Anne to incorporate that data into PAD.
- Robin/PNAMP could give a presentation on PNAMP at December Forum meeting.
- Kevin/Anne will ask Joe Carboni about his case studies, and see if we can add them to this list.
- Lisa will categorize the case studies on the website.
- By October 15, Forum members will send to Lisa letters on agency letterhead (signed by the agency) re: how they use PAD, how they have supported PAD, and its overall importance to fish passage.
- Viable options for funding PAD:
 - Forum support PAD through its federal monies (100%).
 - One or more of the state members to support PAD 100%.
 - One of the Forum state or federal members take on PAD 100%.
 - One or more of the Forum state or federal members enter into a cooperative agreement to fund PAD through PSMFC.
- Bob will email Lisa the Fish Passage Removal Performance Measures and Monitoring Worksheet.

- Ask Tom and Kevin to consider using some of the drought funding that may be available to support the water temperature initiative.
- Michael will work with Dan to draft a proposal that includes scope of work and ~\$100,000 budget.
- Lisa will distribute the AOP (Kellett) paper to Forum members with the meeting minutes.
- The Forum will draft a supportive and encouraging letter for willing Forum signatories to write a letter in support of the Trabuco Creek project. Draft will be sent to the Governance Committee within the next three weeks.
- Lisa will send a Doodle to Forum members to obtain availability for a December meeting.

MOU: Waiting to hear from 5 Counties on whether or not they are interesting in signing the MOU.

ACTION ITEMS:

- Lisa to distribute final MOU for signatures.
- Lisa will contact Steph Wald to gauge their interest in joining the Forum.
- American Rivers – Carrie McLean. Lisa will contact to gauge their interest in joining the Forum.

Fish monitoring at fish passage project sites: Bob volunteered to do scope of work in October for fish monitoring at fish passage project sites. We want to know what is going on in California, but expand protocol research outside of California. PSMFC will then announce RFP. The goal is for the report to compile where work is going on and where it has happened in the past, where it is going to happen, and protocols – then make recommendations about protocols. The Science and Data Committee is currently compiling protocols and posting them on the Forum’s SD Intranet portion of the website. Actions 3 and 7 from the September meeting are linked. Caltrans may potentially be able to support the \$20,000 contract.

ACTION ITEMS:

- At December meeting, SD committee will share what they have produced to date.
- Within the next week, Donnie will refine the scope of work to more clearly articulate the tasks for a technician – to Stan. Position reside in Donnie’s office.

FISHPASS: For anadromous and catadromous species.

- \$2,000 to 5 Counties for cost data. Bob and Stan reached out to Mark to obtain cost data for APASS.

ACTION ITEM: Mark Lancaster to let Stan and Bob know if 5 Counties can provide cost data for APASS, using the \$2,000 available to support this effort.

- Key upgrades
 - Data constructor has been redesigned to allow customization by the user before the data is input – now known as the Data Portal
 - Multiple mitigation options per barrier can now be incorporated.
 - Multiple “target” species can now be included in a single model run
 - User can now choose or define general cost and passability values by barrier type OR user can assign specific values to a barrier, if know.
 - User can weight at the species level OR by specific ESU/DPS.
 - Improved ability to refine area/region for model run.
 - Downstream passability can now be considered.
 - Model runs are significantly faster (50K+ barrier solution in ~20 minutes)
- Additional functionality
 - “Ownership” can be used to further refine model runs
 - Invasive species considerations
 - Climate change considerations
- Where are we right now
 - DPASS 1.0 has been delivered

- Draft user guide has been delivered
- Model runs can be completed with PAD-based test-sample datasets
- Data Portal is nearly complete
- Programming has been designed to easily incorporate new/different “habitat quality” estimates
- Cost estimates have been developed for many barrier types
- What more do we need?
 - Barrier ownership information
 - Cost estimates for some of the less common barrier types
 - Log jams?
 - Grade control structures
 - Flood control channels
 - Fish passage facility
 - Fish trap
 - Utility crossing
 - Gravel/borrow pit
 - Diversion
 - Other
- Plan to move forward
 - Improving existing and locate/acquire new cost estimates
 - Facilitate a new round of testing of DPASS and review of the draft user guide with the Work Team
 - Assist in work team coordination
 - Water Resources – potential in 2015-2016 for DWR or CDFW to use this tool and support it.

NFHP application for funding:

ACTION ITEMS:

- Lisa will send email announcement to Forum members, and Forum members will cc Lisa.
- 2012 CDFW list on *CalFish*. We could compare all lists, and use FISHPASS to prioritize. Add to December agenda. We could compile the list of top barriers and then determine what it would take to fix them.
- Lisa will change “fiscal fishery” to “subsistence fishery” on question #25 of application.

Forum Budget

- There is travel funding built into the Forum budget now, so if some non-Federal Forum members need travel assistance, the request can be made to the Forum.

Forum Work Plan (ACTION ITEM: Lisa to add updated plan to website)

Governance Committee:

- Governance Committee meets monthly and has met twice since the last Forum meeting.
- Grape Creek video – NFHP produced a great video on the successful Grape Creek project.

Science and Data Committee:

- Anne is working on improving PAD data - Use last years’ and current year funding to do QA/QC refinements to PAD data. A PSMFC tech is ready to begin working with Anne.
- **ACTION ITEM:** DWR has the data and Mark will sit down with Anne to incorporate that data into PAD.
- Effectiveness monitoring – This is a big NFHP initiative as well – to create national protocols for EM; the Forum will be able to be more California-specific. PNAMP (Pacific Northwest Aquatic Monitoring Partnership) may expand beyond the Pacific Northwest to create a portal to house and share protocols.
ACTION ITEM: Robin/PNAMP could give a presentation on PNAMP at December Forum meeting.

- Science and Data Committee provided Outreach and Education Committee with suggestions for case studies.
- Summaries of PAD and *CalFish* have been drafted and sent to the CaLCC for inclusion on their Climate Commons website.

Outreach and Education Committee:

- Case studies are now uploaded to the Forum website.
 - ACTION ITEM:**
 - Kevin/Anne will ask Joe Carboni about his case studies, and see if we can add them to this list.
 - Lisa will categorize the case studies on the website.

Eel River Event

There are 100 attendees registered for the Eel River event tomorrow. Fact sheets/packets and nametags have been produced.

Funding PAD

Coastal Conservancy first funded PAD, then it's been funded by the FRGP program. But last year, the FRGP was not rated as high as in the past. There is funding through May of 2015, and there's a current proposal into FRGP – and there's also some USFWS funding. Robin wrote a PAD proposal and distributed it to the Forum members for discussion, but there was no further discussion. Caltrans has an interagency contract with CDFW – perhaps Caltrans could alter the work order to help fund PAD.

ACTION ITEM:

- By October 15, Forum members will send to Lisa letters on agency letterhead (signed by the agency) re: how they use PAD, how they have supported PAD, and its overall importance to fish passage.
- Viable options for funding PAD:
 - Forum support PAD through its federal monies (100%).
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Mid-Klamath Watershed Council Restoration Activities (Mitzi Wickman)

Project area - Trinity River to Iron Gate Dam along 200 miles in the Klamath River corridor, including lower Scott River and Salmon River. Goal is for juvenile coho to move out of the warm Klamath and to the cold tributaries. They are assessing about 80 streams, looking for barriers, and treating them as they find them. Often, the major barrier is at the mouth – the alluvial sill. Assessments include juvenile and adult fish passage, barrier identification, and tributary characteristics – then on-site prescriptions are made. They start work when the fish are aggregating at the mouth of the creeks – between May and November. Step pools are constructed around the drops to enhance connectivity. Effectiveness monitoring conducted a variety of ways – photo points, videos, changes in physical characteristics, biological monitoring via snorkel surveys. Structural integrity is monitoring throughout the season. In 2013, 65 juvenile salmon migration barriers were addressed, and 42 were monitored. Recommendation to demonstrate a treatment effect by monitoring sites and not treating them, then comparing results with treated sites. In 2012, 81 tributaries were assessed, 72 tributaries had 103 barriers. 2014 season – assessed 54 streams, treated 40 barriers in 32 streams.

NOAA's Fish Passage Work (Leah Mahan)

Tier 1 – was the project built as designed, did it remove a safety hazard, does the site meet fish passage criteria, fish presence/absence upstream before and after the project, did it change recreational opportunities, did it change annual maintenance costs? **ACTION ITEM:** Bob will email Lisa the Fish Passage Removal Performance Measures and Monitoring Worksheet.

Tier 2 – biological, physical, long-term: questions included before and after barrier removal, and whether or not there is a spatial or temporal change in spawner and juvenile abundance and distribution, and habitat. Tier 2 methods include winter spawner surveys, juvenile abundance and distribution surveys (e.g., during summer and sometimes winter as well as e-fishing, go-pro underwater camera, snorkel, and outmigrant trapping), and habitat characterization (e.g., flow measurements, spawning substrate and rearing habitat characterization).

Permitting, Post-project Monitoring and Population Response (Allan Renger, Sharon Kramer)

- The roadmap for permitting depends on the project proponent and how the project is funded. Permit phasing/tiering should be planned as part of your project.
- Environmental analysis can be a good tool to streamline the permitting process to identify the alternatives and narrow them down – which ended up tiering the permitting.
- The Salt River Restoration project had 1 federal permit and numerous federal consultations, six state permits and two county permits

In Maine, NOAA took a programmatic approach to look at fish passage for Atlantic salmon and other species with upstream and downstream movements – to compartmentalize permitting for small, privately owned dams. They pre-permitted and streamlined the ESA side of the consultation. The **General Conservation Plan** is used more on the East Coast, but may have applicability for the West Coast.

Allan Renger – Salt River Restoration Post-Project Fisheries Monitoring

- Phase 1 construction (slough excavation, slough levee and tide gate removal, and habitat enhancement) is complete. All fish were captured and relocated from the Salt River and tributary slough prior to channel dewatering and excavation.
- RCD was required to monitor seasonal presence and distribution of listed salmonids and tidewater body as well as distribution and presence of non-native pike minnow.
- A monitoring plan was developed and 11 sites were selected for fish presence and dbn monitoring on a monthly basis using a 1/8th inch mesh seine (single pass) and baited minnow trap (placed for greater than 1 hour).
- Pre-project relocation -68 tidewater goby were relocated; 1 coho juvenile salmonid was relocated and 1 juvenile pre-piscivorous pikeminnow.
- Post –project monitoring: 327 tidewater goby and 40 coho, and six Chinook juveniles, and juvenile pre-piscivorous pikeminnow.

California Water Temperature Network Development (Michael Kellett)

How do we assess the quality of habitats upstream of barrier locations as a means of prioritizing barrier removal? Stream temperature could be a surrogate for habitat quality. Dan Isaak has already done this for other parts of the country. He constructed a temperature network for the Columbia River Basin – it's complete and on the Internet. National Hydrographic Dataset – treat it to make it a routed stream network (pick source and sink), then attribute that stream network with existing temperature data. They assign temperature regimes to unmonitored areas.

The source of funding for the initial work was USFWS LCC – they have already funded Oregon and Washington, which will be completed this winter. Michael Kellett contacted Dan Isaak and obtained some cost estimates that would range from \$60K to \$100K.

These networks are not limited to temperature data – other habitat quality data (e.g., bioassessment data) can be incorporated. Clean Water Act requires biological criteria (macroinvertebrates, etc.).

ACTION ITEM:

- Ask Tom and Kevin to consider using some of the drought funding that may be available to support this initiative.
- Michael will work with Dan to draft a proposal that includes scope of work and ~\$100,000 budget.

AOP Effectiveness Monitoring (Michael Kellett)

“Aquatic organism passage at road-stream crossings – synthesis and guidelines for effectiveness monitoring” paper was discussed, including the four methods for assessing aquatic organism passage and restoration effectiveness:

- Individual movement
- Occupancy models
- Abundance
- Molecular genetic markers

These methods can be useful for identifying evaluating the level of passage impairment at culverts and road-stream crossing structures and the ecological conditions that either rule-out or support repairing or replacing them.

ACTION ITEM: Lisa will distribute the paper to Forum members with the meeting minutes.

Trabuco Creek

In 2013, CalTrout submitted an FRGP proposal to remove 81 check dams in the Trabuco Creek watershed. The lower portion of the watershed below the I-5 freeway is critical steelhead habitat. The upper portion of the watershed, which would be affected by the project, is dotted by pools that contain trout. About one year after submitting the proposal, CalTrout received notification it had received the funding. An employee on the forest then noted that the forest would need three years to remove the dams, but the project was slated and funded to be conducted in one year. An environmental assessment then recommended a 3–5 year time frame removal for the check dams because a private landowner had expressed concerned about sediment. The estimate in an environmental assessment that was produced after the grant was submitted but before it was awarded noted that the estimated sediment is 200 to 1,000 tons behind the check dams (in a 130-square mile watershed). CalTrout then proposed taking out fewer dams, lengthening the time frame, making CCC volunteers in Riverside available to do the work, and bringing additional forest service biologists into project implementation. CalTrout then began talking with CDFW and others about a scaled down version and making another FRGP drought addendum application. Cleveland National Forest decided to not pursue the scaled down version.

ACTION ITEM: The Forum will draft a supportive and encouraging letter for willing Forum signatories to write a letter in support of the project. Draft will be sent to the Governance Committee within the next three weeks.

Next meeting

- Marc has offered to host the next meeting in Sacramento.

ACTION ITEM: Lisa will send a Doodle to Forum members to obtain availability for a December meeting.