California Fish Passage Forum 2019 Work Plan

**Science and Data Committee**

**Chair(s):** Sandi Jacobsen & Alex Jones (co-chairs)

**Members:** Damon Goodman, Brett Holycross, Bob Pagliuco, Tom Schroyer, Anne Elston, Holly Eddinger, Megan Sheely, Kristine Atkinson, and Alicia Marrs

The California Fish Passage Forum Science and Data (S&D) Committee creates and coordinates working efforts to address data and science needs important to achieving Forum’s goals and objectives, in accordance with the Forum’s bylaws. The committee also collaborates with the National Fish Habitat Partnership Science and Data Committee to the extent possible, other Fish Habitat Partnerships (FHPs), and other statewide and regional working groups to address shared goals and objectives. To ensure that the committee is fulfilling its responsibilities on behalf of the Forum, the committee develops an annual work plan outlining the goals and objectives for the following year. The following work plan includes activities the Science and Data Committee plans to pursue for calendar year 2019.

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| **GOAL #1: Identify and remediate data gaps related to barriers to anadromous fish migration.** | **Timeline** | **Funding** | **S&D Committee Contact** | **Status** |
|  ***Objective 1:*** *Integrate Pacific Lamprey passage data into the Passage Assessment Database (PAD)* |
| **Task 1.1:**  Once a funding source is identified, implement strategy developed in 2018 to complete Pacific Lamprey passage assessments in CA, starting with a case study on the Sacramento River. | December 2019 | TBD | Damon Goodman (USFWS) | Initial work has been completed. Funding is being sought to implement this project. |
| **Task 1.2:** Integrate lamprey assessment form fields and other database changes into current PAD database (data entry form etc.) to create a comprehensive assessment form.  |  September 2019 | PSMFC to support | Anne Elston (PSMFC) | Completed.  |
| ***Objective 2:*** *Continue to support quality control and updating of PAD data.* |
| **Task 2.1:** Develop strategy and affirm with S&D Committee, and then conduct gap analysis to determine data missing from the PAD. Information could be validated using Smith and South Fork Eel River. Use watersheds for which we have baseline now – then add others as baseline and tracing is completed for the entire state. Add data gap points to BFH layer in FISH*Pass.*  | Winter 2019 | TBD | Anne Elston (PSMFC), Brett Holycross (PSMFC) | Initial work is completed. Anne provided data gap points to Brett. He plans to compile these (and the road layer information also from Anne) on a Map Viewer for the S&D Committee to review. Thinking of including the BFH layer as well.  |
| **Task 2.2:** Prioritize areas with PAD data gaps to direct future PAD assessments. | Winter 2019 | TBD | Brett Holycross (PSMFC) | Brett is taking this over while Anne is on maternity leave. Still contingent on completion of 2.1. Once these areas are identified, Brett will do a basic analysis, summary and ultimately the S&D Committee will consider ways to direct Forum funds to these priority areas |
| **Task 2.3:** Apply for funding opportunities to fund the highest priority assessments identified in Task 2.2. | Ongoing | TBD | Alicia Marrs (CFPF) |  |
| **Task 2.4:** Review PAD data and solicit agencies and other entities to provide updates on barrier remediation. | December 2019 | TBD | Anne Elston (PSMFC) | Anne has continually reviewed PAD data and sought updates throughout the year. |
| **Task 2.5:** Conduct QA/QC on PAD fields and data to ensure information is accurate and to identify assessment needs. | Ongoing in 2019 | NA | Anne Elston (PSMFC) | Anne has continually conducted QAQC on PAD fields and data and provided an update in the PAD Newsletter on March 18, 2019. |
| **Task 2.6:** Summarize the findings from the PAD questionnaire to share suggestions for improvements, inform PAD users of changes made.  | Ongoing in 2019 | NA | Anne Elston (PSMFC) | Anne completed this on March 18, 2019. Since then there has only been one other person who has submitted a questionnaire. |
| ***Objective 3:*** *Update and modernize Fish Passage Incidental Report* |
| **Task 3.1:** Conduct annual review (and update if needed) of Fish Passage Incidental report | June 2019 | NA | Brett Holycross (PSMFC) and Damon Goodman (USFWS) | The S&D Committee has been asked to test the form (paper and mobile versions) in the field and report back on its utility. |
| **Task 3.2:** Explore creating a mobile version of the tool/report | Summer 2019 | NA | Brett Holycross (PSMFC) | Brett developed a mobile version, S&D Committee has access to test and is exploring how best to promote (when appropriate). |
| **GOAL #2: Facilitate prioritization of barriers to anadromous fish migration in California.** | **Timeline** | **Funding** | **S&D Committee Contact** | **Status** |
| ***Objective 1:*** *Develop FISHPass barrier prioritization tool and provide an open-access version via the website.* |
| **Task 1.1:** Conduct internal testing of a beta version of the FISHPass software.  | April 2019 | Ongoing | Anne Elston (PSMFC), Brett Holycross (PSMFC) and Damon Goodman (USFWS) | Complete |
| **Task 1.2:** Update data used in FISH*Pass* (e.g., stream tracing, PAD and cost data). | December 2019 | NA | Brett Holycross (PSMFC) | All barriers on hydrography have been associated; baseline fish habitat will be created, then traced |
| **Task 1.3:** Work with Ecotrust to finalize user-friendly interface of FISH*Pass* for public release and post to Forum website when finalized. | October 2019 | $63,500 | Alicia Marrs (PSMFC), Brett Holycross (PSMFC) | Phase 1 completed. |
| **Task 1.4:** Coordinate with members of the Forum Education & Outreach Committee to execute FISH*Pass* rollout strategy. Activities include, but are not limited to:* 2019 SRF Annual Conference (April 26-28 in Santa Rosa)
* 2019 AMS/TWS National Conference in Reno, NV (Sept 29-Oct 3)
 | Ongoing | NA | Alicia Marrs (CFPF), Anne Elston (PSMFC) | Anne and Alicia gave a preview of FISH*Pass* at SRF in April 2019. Phase 1 was officially announced at AFS in Reno, and is publicly available. It has been publicized via the Forum listserv, website and a webinar.Initial rollout strategy has been developed by the E&O Committee and is continually updated based on the current status of FISH*Pass.*  |
| **Task 1.5:** Develop user manual that clearly describes the utility and limitations of the data used FISH*Pass*. | Spring 2019  | NA | Alicia Marrs (CFPF) | Version 1 Completed.Ecotrust completed version 1 of user guidance. The FPWG reviewed and refined the document and it is available on the FISH*Pass* website. Should be updated regularly. |
| **Task 1.6:** Facilitate application of FISH*Pass* tool when opportunities arise (e.g., FRGP and others). Identify potential groups that would use the tool; offer assistance in running and evaluating outputs. | December 2019 | NA | Anne Elston (PSMFC), Damon Goodman (USFWS), Alicia Marrs (CFPF) | Phase 1 released at AFS 2019 in Reno. Webinar held Oct 24.  |
| **Task 1.7:** Develop a parallel GIS-based FISH*Pass* analysis for Southern California resident rainbow trout above dams and large barriers that builds on the existing FISH*Pass* interface for *O. mykiss* occurrence, gradient, and streamflow data, to further incorporate water temperature, natural springs locations, and fire interval and perimeter maps. | December 2019 | TBD | Sandi Jacobson (Caltrout), Brett Holycross (PSMFC) | Goal to have a pilot by end of 2019. |
| **Task 1.8:** Investigate ways to utilize FISH*Pass* (or other approaches for prioritizing barrier remediation projects) in the formal assessment of projects submitted for Forum funding. | November 2019 | NA | Damon Goodman (USFWS), Alicia Marrs (CFPF) | Alex ran the FY20 proposals through FISH*Pass* and presented the results to the Review Panel. |
| ***Objective 2:*** *Continue to improve non-PAD* FISH*Pass inputs.* |
| **Task 2.1**: Refine the existing template and continue to collect new barrier remediation cost data (including from NFHP), and adjust existing cost data for inflation (obtain what coordinates represent – center of project, downstream, etc.) | December 2019 | NA | Alicia Marrs (CFPF), Bob Pagliuco (NMFS), Anne Elston (PSMFC), Brett Holycross (PSMFC) | The S&D Committee approved template email language and criteria being requested (also available in an excel spreadsheet. Both are posted under the S&D Committee section of the Intranet. |
| **Task 2.2:** Explore potential improvements to passability rating (0-1) for all barriers (literature review) | TBD  | NA | Brett Holycross (PSMFC) | Low priority for 2019 |
| **Task 2.3**: Develop draft upstream habitat quality layer using NorWeST stream temperature data and other attributes. | December 2019 | NA | Brett Holycross (PSMFC), Damon Goodman (USFWS) | Likely a late 2019 project. |
| **Task 2.4:** Develop a strategy to regularly review existing FISH*Pass* inputs. | Annually | NA | Brett Holycross (PSMFC) | Ongoing |
| **GOAL #3: Report data compiled by the Science and Data Committee to the public and the NHFP.** | **Timeline** | **Funding** | **S&D Committee Contact** | **Status** |
| ***Objective 1:*** *Continue to compile barrier remediation case-studies and convey them to the public.* |
| **Task 1.1:** Assess the need for new case-studies that have documented effectiveness monitoring to highlight the importance of barrier removal. If deemed useful, develop as appropriate and post to Forum website. | December 2019 | NA | Alicia Marrs (CFPF) and Sandi Jacobsen (Caltrout) | S&D Committee will discuss potential topics during their next call. |
| **Task 1.2:** Coordinate and oversee reporting of relevant datasets to the NHFP Science and Data Committee (e.g., habitat assessments, completed habitat improvement projects), as requested.  | As needed | NA | Kate Sherman (PSMFC) | Ongoing |
| **Task 1.3:** Report back to the S&D and full Forum Steering Committees on NFHP Science and Data Committee meetings. | After National Science and Data meetings | NA | Kate Sherman (PSMFC) | Ongoing |
| **GOAL #4: Facilitate communications between the Forum and other related organizations.** | **Timeline** | **Funding** | **S&D Committee Contact** | **Status** |
| ***Objective 1:*** *Coordinate with other Fish Habitat Partnerships (FHPs) including, but not limited to the Pacific Marine Estuarine Partnership (PMEP), Pacific Lamprey Conservation Initiative (PLCI) and their Science and Data Committees.* |
| **Task 1.1:** Increase committee interactions to mutually support the goals of the Forum and the PMEP and PLCI. | Twice Annually | NA | Alicia Marrs (CFPF), Sandi Jacobsen (Caltrout), Damon Goodman (USFWS) and Brett Holycross (PSMFC) | Alicia has been in regular communication with Joan (PMEP) and Christina (PLCI) regarding the MSCG 2019 Barriers to Tidal Connectivity (BTC) project. Brett & Damon currently represent the Forum on the Inter-FHP Tidal Connectivity Working Group.Alicia is working with Alex Atkinson and the other Coastal FHPs to restart the Coastal FHP coordination calls.  |
| **Task 1.2:** Convene annual joint conference call. | November 2019 |  | Alicia Marrs (CFPF) | A summit will be held in mid-2020 as part of the MSCG 2019 BTC project that could be an opportunity to facilitate other coordination. |
| **Task 1.3:** Collaborate with other FHPs to support the goals of the Forum and NFHP to facilitate communication and cross-FHPs information sharing.  | Ongoing |  | Alicia Marrs (CFPF) | Members of the S&D Committee participated in calls with the Midwest Glacial Lakes Partnership (MGLP) regarding their interest in FISH*Pass*, and the Southeast Aquatic Resources Partnership (SARP) to learn about the development of their prioritization tool and its subsequent rollout.  |

**Considerations for 2019 and future work plan activities:**

* Conduct a literature and data review of FISH*Pass* to assess its validity in practice.