



# **California Fish Passage Forum**

## **Winter 2020 Meeting**

February 12 & 13, 2020  
Santa Cruz, CA

### **Day 1 – FISHPass Demonstration & Field Tour**

#### **FISHPass Demonstration & Training**

The FISHPass Working Group (Brett Holycross, Alex Jones, Anne Elston, Damon Goodman, and Alicia Marrs) held an in-person demonstration and training of the FISHPass tool for local practitioners. In addition to a brief overview of the Forum, a discussion of the history of FISHPass's development, its envisioned purpose, and various data inputs (including cost data, the PAD, and baseline fish habitat). The FPWG walked participants through various runs highlighting local watersheds showcasing the tools capabilities and limitations, and gave the participants the opportunity to provide feedback.

#### **Field Tour**

John Klochak (USFWS) and Amy Kaeser (San Mateo RCD) organized a half-day, three stop field tour showcasing key examples of fish passage advancements in the Pescadero and San Gregorio watersheds to Forum members and guests. Photos of each site are included below, and you can learn more about the San Mateo RCD's work here: <http://www.sanmateorcd.org/project/fish-passage/>

## Site 1: Alpine Creek





Site 2: Mindego Creek





### Site 3: Memorial Park



## Day 2 – Forum Business Meeting

### NOAA/NMFS Southwest Fisheries Science Center

110 McAllister Way  
Santa Cruz, CA 95060

**Attendees:** Bob Pagliuco (NMFS), Stan Allen (PSMFC), Damon Goodman (USFWS), Stephanie Byers (USFWS Region 8), Alex Jones (USFWS), Sandi Jacobson (CalTrout), Brett Holycross (PSMFC), Anna Halligan (Trout Unlimited), John Kolchak (USFWS), Kelli Camara (Santa Cruz RCD), David Boughton (NMFS), and Alicia Marrs (CFPF)

**Remote Participants:** Holly Eddinger (USFS), Jon Mann (CDFW), Mark Gard (CDFW), Tom Shroyer (CDFW), Anne Elston (PSMFC/CDFW), Jim Long (CDWR), and Krissy Atkinson (CDWR)

## Overview of Action Items

- The Governance Committee is looking for a new chair and/or one or two new member(s) (current members include Bob, Damon, Stan, Anna, and Holly). We do not currently have any State representation on the committee and are looking for a state participant. Please contact Bob if you are interested in joining the Governance Committee.
- The Outreach & Education Committee is seeking additional members. Please contact Alicia if you or a representative from our organization is interested in joining.
- Alicia will get the Forum added to the list of FHPs that can receive donations via [Beyond the Pond](#).
- Alicia and Anna will schedule the first call of the newly reconstituted Policy & Permitting Committee. Please contact Alicia and Anna if you would like to be involved.
- The Forum will continue to seek new member organizations if/when the opportunity arises. Please contact Alicia and Bob with ideas of potential new members.
- Alicia will send each signatory agency their section, as well as the updated MOU (which will expire Dec 31, 2030). Each signatory agency will need to review, update, and get their section approved via their respective approval chains, and ultimately seek the necessary signature.
- Alicia will reach out to partners from the projects/watersheds suggested for 2020 Waters to Watch Nomination and draft the nomination based on their response.
- The FISHPass Working Group (FPWG) and Education & Outreach Committee continue to seek opportunities for targeted outreach opportunities (small group demonstrations/trainings, practitioners/users to profile etc.). Contact Alicia if you have suggestions or would like to host.
- Contact Alicia if your agency would like to partner with the Forum on a World Fish Migration Day (May 16 event).

# Meeting Minutes

## Forum Administration

### Member Updates

- **National Marine Fisheries Service (NMFS)/NOAA Restoration Center**
  - The four mainstem dams on the Klamath River are slated to be removed in 2022, and there are many organizations (including Forum signatory agencies) in the watershed considering what can be done regarding some of the fish passage and habitat issues above the dam removal sites. NMFS is looking to prioritize projects, including the identification and screening of diversions. Bob recently submitted two proposals to do restoration project assessments.
- **US Fish & Wildlife Service (USFWS)**
  - Damon Goodman and Stewart Reid (Western Fishes) recently observed Pacific Lamprey in three locations within the Santa Margarita drainage. These are the first recorded observations since 1915 in the Santa Margarita.
  - Damon and Alex Jones continue working on refining and building upon FISHPass. This includes work on the habitat quality layer, an Rcode accompaniment, and comparing FISHPass runs to county level assessments.
- **California Department of Fish & Wildlife (CDFW)**
  - Mark Guard (formerly USFWS) joined CDFW last month in the conservation engineering branch (backfilling Jon's former position). Mark is now the chief fish passage engineer for the state, and Jon is managing the conservation engineering branch.
  - On February 5, 2020 CDFW announced the projects receiving [\\$6M in Prop 68 funds](#). The announcement for Prop 1 is likely coming next month, and there are quite a few fish passage proposals that may be selected under Prop 1, so if a project didn't receive funding under Prop 68 there is still hope.
  - CDFW recently released a [story map](#) focused on six restoration projects in the Deer Creek Watershed.
  - CDFW is working on the development of a new fish screen fish passage priority list. Waiting on regional staff to send in any updates.
- **California Department of Water Resources (DWR)**
  - Jim Long is the new DWR representative to the Forum and supervises the fish passage improvement program (supports Marc Commandatore, the past Forum representative). One of his focuses will be trying to help lay the groundwork for additional, and future funding for fish passage. Currently reviewing the Governor's portfolio to make the climate resilience/fish passage a priority. Most of his career has been focused on environmental compliance, and habitat mitigation.
  - DWR is engaged in the development of bond language in the current state legislature. There is also a bill that could be a good opportunity to fund fish passage throughout the state if passed. Requested engagement/support from Forum partners if interested and/or possible.
  - The Riverine Stewardship program has completed postings and reviews of their two grant programs. Will likely be recommending funding for some fish projects in the Lower San Joaquin Watershed.
  - Planning to start testing a juvenile salmonid system downstream of Lake Shasta with potential funding from a Prop 1 grant application.

- **Pacific States Marine Fisheries Commission (PSMFC)**
  - Brett continues to work to refine the Baseline Fish Habitat layer, and monitor the other inputs of FISHPass.
  - He has also been analyzing the FISHPass user data. This will help the Forum continue to understand how FISHPass is being used, and plan for future potential improvements to FISHPass.
  - Stan was reappointed to the NFHP board.
- **Trout Unlimited**
  - A couple of Trout Unlimited (TU) programs focused on passage issues will be funded through Prop 68.
  - Anna and Tim Frahm (TU Central Coast Steelhead Coordinator) are working on a few projects in the Mendocino Coast (some supported by the Forum).
- **U.S. Forest Service**
  - National US Forest Service (USFS) Fisheries Program Leader, Dan Shively, is starting a new position at the Portland office (region 6) as the Ecosystem Director. Dan was the USFS rep to the NFHP Board, and active in encouraging USFS participation and engagement in FHPs. There will be rotating acting representatives (first will be Nat Gillespie), until Dan's previous position is backfilled.
- **CalTrout**
  - CalTrout continues to make progress in the Santa Margarita drainage. CalTrout recently received notification that they will be receiving Prop 68 funding to move into final design and early construction on the Santa Margarita River Fish Passage Project and Bridge Replacement, as well as for the final fish passage design for the 1-5 and Metrolink barriers in Trabuco Creek. There are clear paths to implementation for each of these fish passage projects – both were part of the field tour Sandi organized and led in conjunction with the Forum's Fall 2019 Meeting in San Diego.
  - Cleveland National Forest (CNF) recently completed a monitoring report on the 71 dams removed through fall 2019. CNF plans to complete dam removals associated with the Traubuco District Dam Removal Project in Spring 2020.

## Forum Budget Update

Stan provided the following overview of the Forum's current budget status.

**CFPF NFHP Budget Status (USFWS)**

1072.17;.18; .19	Budgeted	Spent	Remaining
Personnel	\$ 23,607	\$ 13,770	\$ 9,837
Rents	\$1,000	\$487	\$513
Supplies/Software	\$2,516	\$240	\$ 2,276
Sub-Contracts (*)	\$486,208	\$473,572	\$12,636
Travel	\$ 6,704	\$ 2,140	\$ 4,564
Sub-Totals	\$520,035	\$490,209	\$29,826



<b>Indirect</b>	<b>\$ 16,738</b>	<b>\$13,125</b>	<b>\$ 3,613</b>
<b>Totals</b>	<b>\$536,773</b>	<b>\$503,334</b>	<b>\$33,439</b>

### Sub-Contracts to Date

End Date: 9/30/20 (new 5-year agreement that started 8/8/16)

Western Fishes (Pacific Lamprey; 17-44)	\$20,000 (completed)
Trout Unlimited (Pennington Creek; 18-08)	\$40,000 (completed)
Forum Coordination (Creative Resource Strategies; 18-07)	\$36,000 (completed)
CA State Parks (Benbow Dam; 18-25)	\$58,499 (completed)
Gold Ridge RCD (Upper Green Valley; 18-26)	\$30,089 (completed)
Ecotrust (FISHPass User Interface; 18-90)	\$63,500 (completed)
Earth Island Institute (Davy Brown; 18-96)	\$44,538 (nearing completion)
Forum Coordination (Alicia Marrs; 19-30)	\$50,000 (nearing completion)
Harvey Diversion	CANCELED
Neefus (Trout Unlimited; 19-25)	\$39,513 (completed)
Cooper Mill (Trout Unlimited; 19-61)	\$65,782 (completed)
Mid-Klamath	\$38,680 (directly funded by USFWS)

### CFFP Multi-State Grant Budget Status

<b>1121.19</b>	<b>Budgeted</b>	<b>Spent</b>	<b>Remaining</b>
<b>Personnel</b>	<b>\$10,752</b>	<b>\$9,377</b>	<b>\$1,375</b>
<b>Mtgs/Workshops</b>	<b>\$2,000</b>	<b>\$0</b>	<b>\$2,000</b>
<b>Supplies</b>	<b>\$550</b>	<b>\$2,000</b>	<b>\$(1,450)</b>
<b>Sub-Contracts</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Travel</b>	<b>\$519</b>	<b>\$0</b>	<b>\$519</b>
<b>Sub-Totals</b>	<b>\$13,820</b>	<b>\$0</b>	<b>\$2,444</b>
<b>Indirect</b>	<b>\$2,180</b>	<b>\$1,836</b>	<b>\$344</b>
<b>Totals</b>	<b>\$16,000</b>	<b>\$13,212</b>	<b>\$2,788</b>

End Date: 12/31/19 (was extended)

\*Note: \$2,000 for meetings/workshops is for WNTI Coastal Cutthroat



### CFPF NFHP Budget Status (USFWS)

New 5-Year Agreement (starting FY20)	Budgeted	Spent	Remaining
Personnel	\$16,038	\$ 0	\$
Rents	\$700	\$ 0	\$
Supplies/Software	\$4,196	\$204	\$
Sub-Contracts (*)	\$205,752	\$ 0	\$
Travels	\$4,000	\$ 0	\$
Sub-Totals	\$230,685	\$ 0	\$
Indirect	\$6,826	\$ 33	\$
Totals	\$237,511	\$237	\$237,274

### Sub Contracts to Date

New 5-Year Agreement with USFWS (F20AC00007)

Forum Coordination (Alicia Marrs; new)	\$60,000
Trout Unlimited (M-1) Road Crossing; new)	\$81,857
Gold Ridge RCD (Iron Horse; new)	\$20,039
Mid-Klamath Watershed Council (Seiad; new)	\$28,856
Trout Unlimited (Upper Novo-Skunk; new)	\$15,000
 Tolowa Tribe (Pacific Lamprey - Rowdy)	 \$19,500 (USFWS Direct)
Western Fishes (Pacific Lamprey – Sacramento)	\$34,853 (USFWS Direct)

### Forum-Funded Project Status Updates

Bob reviewed the current status of Forum-funded projects. All projects that received FY18 funding (Cooper Mill, Davy Brown & Munch Creek, Mid Klamath (final report still needed), and Neefus Gulch) have been completed. Central California Traction Railroad Bridge (CCTR) (FY16) was also recently completed. Kelly Gulch (FY14) still has yet to secure the necessary contracts and is not completed.

The Forum continues to refine the timeline and information requested in its project accomplishments and progress reporting [online form](#). Progress reports are now due April 1, Aug 1, and Dec 1 to correlate with various reporting needs of the Forum, USFWS and PSMFC. Updates have incorporated feedback received from funding recipients and in an effort to minimize duplicate information collection and reporting. Template emails/standard language have also been developed to provide clear communication with new and current funding recipients about the Forum's reporting and completion needs.

### **FY2019 Project Initiation & NFHP Funding Update**

The Forum received \$206,864 for projects after scoring a Performance Level 3 on the FY19 USFWS NFHP Annual Accomplishments Report & Work Plan for the first time in Forum history. The Forum elected to fund six projects: Iron Horse Vineyards (Gold Ridge RCD), Lamprey Passage at Rowdy Creek (Tolowa Tribe), M-1 Road Fish Passage Improvement Project (Trout Unlimited), Seiad Creek Off-Channel Connection Project (Mid Klamath Watershed Council), Upper Noyo River-Skunk Train (Trout Unlimited), and Lamprey Passage Design for Priority Obstacles in the Sacramento Basin (Western Fishes). The Forum was not able to fully fund the Lamprey Passage Design for Priority Obstacles in the Sacramento Basin project with the funds available through NFHP FY19 project funding allocation, so this project will be flagged for any remaining funding from the closeout from the current 5-year agreement between USFWS and PSMFC and/or available funds if the Forum scores high enough to receive project funding greater than the projects currently selected/recommended as part of the FY20 Funding Solicitation (see below).

Due to the substantial delays associated with NFHP funding being distributed to the USFWS Regions, and thus the FHPs, the Iron Horse Vineyard Fish Passage Project had already completed many of the components outlined in their original project proposal submitted to the Forum. The Forum Governance Committee and Coordinator worked with Gold Ridge RCD to develop a new proposal that reflects the work that will be done with the FY19 NFHP/USFWS/Forum funding received.

Sub-contracts and grant agreements have been initiated to all of the projects above either through PSMFC or USFWS Region 8 and some are already underway in an effort to have projects completed by the Sept 30, 2020 deadline (please note, that even though there was a substantial delay getting FY19 project funds distributed, USFWS HQ has decided not to extend that project completion deadline (one of the things each FHP is scored on in the annual accomplishment report). USFWS' rationale is that every FHP will be held to the same standard, and therefore be at equal disadvantage.

### **FY2020 CFPF Funding Announcement Project Selection Update**

There were 13 eligible proposals received as a result of the FY20 RFP which closed (October 18, 2019) – nearly double the number of proposals received in FY19. Of those proposals, five were recommended by the Forum for funding in December 2019: Applying FISHPass in the Smith River (Ross Taylor & Associates), Santa Margarita River Fish Passage & Bridge Replacement Project (CalTrout), Strawberry Creek at Clam Beach Fish Passage Remediation Project (Trout Unlimited), Montague-Grenada Weir Retrofit & Barrier Removal (Shasta Valley Resource Conservation District), West Tule Creek Diversion Fish Passage Project (The Watershed Research and Training Center).

Projects that weren't recommended for funding as part of the FY20 CFPF Funding Opportunity were passed on to the USFWS National Fish Passage Program (NFPP) representatives for their consideration.

The Forum's FY20 NFHP funding is contingent on how the Forum scores (compared to the other 19 FHPs) on the FY20 USFWS NFHP Annual Accomplishments Report and Work Plan, which was submitted to USFWS (regional and HQ USFWS NFHP Coordinators) on January 9. USFWS and NFHP are currently reviewing and scoring these reports, and the Forum should receive notification of its score and associated funding amount in March. When that occurs, USFWS (and PSMFC where appropriate) will work to get the funding distributed to recipients as quickly as possible.

A big THANK YOU to the following individuals who volunteered to participate in the FY20 review panel: Bob, Alex, Sandi, Holly, and Brett.

## Election of New Vice Chair of the Forum

Damon Goodman's current term as Vice Chair will end April 2020, and the Forum sought nominations for the next Vice Chair term which will span April 2020 – April 2022. Anna Halligan (TU) was nominated and unanimously approved by Forum members in attendance (in person and virtually). Anna will become the new Vice Chair of the Forum on April 1, 2020.

## Other Forum Business

### FISHPass Presentation at AFS 2020 (Columbus, OH)

The Forum has been invited by Eric MacMillan (USFWS Chief of Aquatic Habitat and Species Conservation Branch (formerly the NFHP and NFPP Coordinator)) to submit an abstract to a symposium he is helping to organize at the 2020 National American Fisheries Society Conference in Columbus, OH. The Governance Committee is asking if the Forum supports submitting an abstract. Members agreed this invitation is a compliment, and were appreciative of the recognition of the Forum's work on FISHPass. The opportunity is seen as a good opportunity to increase visibility of FISHPass and the Forum, however, given the geographic location of the meeting (Columbus, OH), the Forum discussed whether or not it would be worth the travel funds required. Damon is potentially willing to attend and give the presentation. He will reach out to Eric to discuss further.

*\*\*Since this meeting, the USFWS symposium has been accepted, and Eric encouraged Damon's participation on behalf of the Forum. On its Feb 27 call, the Governance Committee agreed to support submitting an abstract.\*\**

### MSCG 2019 Barriers to Tidal Connectivity Project Update

The Forum continues to work with Pacific Marine & Estuarine Fish Habitat Partnership (PMEP) and the Pacific Lamprey Conservation Initiative (PLCI), on this project. The Inter-FHP Working Group had their second bi-monthly call on Feb 10, which included a presentation from The Nature Conservancy's Oregon chapter on their newly released decision support tool targeting tide gates (in Oregon) which also uses OptiPass. The presentation on TNC Oregon's tide gate tool, which was organized by Bob, was also attended by members of the Forum's Science & Data Committee. Updates on the various elements of this project are as follows:

- **ArcGIS analysis** of available datasets spanning the three FHP regions is close to wrapping up. Forum members interested in reviewing the data catalog that has been developed should contact Alicia or Brett.
- **The Workshop/Summit** that will bring together experts from across the three FHP regions to review the information collected, products developed, and provide an opportunity for information sharing/lessons learned to better understand the issues surrounding protecting and restoring tidal connectivity will be held **Sept 29-30, 2020 at TNC's new Portland, OR offices**. The agenda is currently under development by the FHP coordinators with guidance from the Inter-FHP Working Group.
- **Next Steps:** The BTC Inter-FHP Working Group will continue to meet every other month to help guide the progress of this project (including the workshop and resulting report). Brett and Damon are the official Forum representatives, but if you would like to join or have suggestions for available datasets, missing data gaps and/or experts or speakers that should be engaged please contact Alicia.

## Regional USFWS Update

Stephanie Byers (USFWS Region 8 – Fish & Wildlife Conservation Office – Lahontan National Fish Hatchery Complex) attended the meeting in-person, and gave the Forum a presentation discussing how USFWS Region



8 works with and supports the various NFHP Fish Habitat Partnerships (California Fish Passage Forum, Desert Fish Habitat Partnership (DFHP), PLCI, PMEP, and the Western Native Trout Initiative (WNTI)) in the Region. The Region 8 NFHP Coordination Team is based in this office (and consists of Stephanie and her colleague Lisa Heki). Region 8 provides either coordinators (DFHP) or points of contact (POC) (CFPF, PLCI, PMEP & WNTI) for the FHPs, manages all grants and agreements for NFHP, and can provide technical assistance for projects. Damon Goodman and Alex Jones are the CFPF's USFWS primary points of contact.

## Update on Revisions to NMFS Fish Passage Criteria Guidelines

Bob reminded the Forum of some of the background behind the NOAA/NMFS's recent decision to revise its guidelines for juvenile jump pass criteria. In 2016, after receiving pressure to revise the *Guidelines for Salmonid Passage at Stream Crossings (Sept 2001)*, NOAA's Santa Rosa office decided to investigate. After a thorough literature review on juvenile jumping ability, it was discovered there had been quite a bit of work done in the 80s and 90s, but not much recently (in 2015, there were some experiments that found some of the fish were able to jump 12"). This recognized lack of understanding/information led to talks with other NMFS offices in the PNW about the desire to investigate further. In 2016, the Forum used NFHP funds to support the [Juvenile Fish Passage Criteria Assessment Project](#), which strove to better inform and increase operational and regulatory efficiency at dams and diversion. The findings of this project, ultimately helped inform some of the updates NMFS Southwest Region made in the [2019 Addendum of the NMFS Guidelines](#), which included two adjustments to the design criteria, and recommendations for intended applications for projects in California. These changes have helped streamline federal guidelines regarding jump heights at juvenile fish passage facilities in California, which will save taxpayers and practitioners millions of dollars in the future.

CDFW is still considering criteria for juvenile jump passage on a case by case basis, and some of this meeting's participants were unaware of these recent changes to the NMFS criteria. This highlights the need to do additional outreach around this update. Although Alicia has highlighted the Addendum on the Forum's website and through various NFHP outreach channels, she will work with the Education & Outreach Committee to look for additional opportunities.

## 2020 NFHP 10 Waters to Watch Nomination Discussion

NFHP announced the call for nominations for the 2020 10 Waters to Watch list. The Forum discussed potential projects/watersheds to nominate and decided to focus on the San Juan/Santiago Watershed (Trabuco District Dam Removal Project presented by Julie Donnell (USFS) at the Fall 2019 Forum meeting in San Diego & Monitoring Small Dam Removal Project (received funding in 2017 via CFPF/MSCG/NFHP) or Davy Brown & Munch Creek (FY18 Forum funded portion of this project was recently completed). Alicia will research both, and develop a nomination to be reviewed by the Governance Committee prior to submission.

**\*\*Post-meeting update – San Juan/Santiago Watershed was selected and nominated by the Forum to NFHP\*\***

NFHP plans to announce the 2020 Waters to Watch list in conjunction with [World Fish Migration Day](#) on May 16, 2020. Alicia is currently sitting on the 2020 Waters to Watch working group.

## Branciforte Creek Dam Removal Project Update

Kelli Camara (RCD Santa Cruz County) gave the Forum a presentation on the past, current, and future efforts to remove barriers to fish passage on Branciforte Creek. The Forum provided funding (along with the Coastal Conservancy, American Rivers/NOAA's Community-Based Restoration Program, and the City of Santa Cruz) to remove the [Branciforte Dam in 2013](#). The project was deemed a success, and the RCD is currently working with the County to continue to remove or remediate the following barriers in the creek: Casa de Montgomery (high priority), Happy Valley Site 1 (moderate priority), Santa Cruz City Dam (moderate priority), Happy Valley

Site 2 (moderate priority), Happy Valley Site 3 (low priority). Future efforts include addressing a collapsed bridge on the creek and remaining dam foundations.

## Forum Committee Updates

Each of the chairs/co-chairs of the Forum's three Committees (Governance, Science & Data, and Education & Outreach) walked through their Committees' respective work plans and provided an overview of 2019 accomplishments, and plans for 2020. The updated and compiled work plans are available on the [Committee Resources](#) page on the Forum's intranet. Additional highlights from each Committee's discussion include:

- **Governance Committee:** Bob Pagliuco (Governance Committee chair) provided the Forum with an overview of the Governance Committee activities since the Forum's last meeting in San Diego in September 2019. In addition to guiding the Forum's operations, the Governance Committee reviewed the Forum's USFWS/NFHP Annual Accomplishments Report and Work Plan submittal (January 9), monitored the Forum's budget and other funding opportunities and requests, helped plan the Winter 2020 Forum meeting, oversaw the annual funding announcement process, and approved project selection and funding distribution. In 2020, in addition to overseeing the update/renewal of the Forum's MOU (expiring Dec 31, 2020), the Governance Committee also plans to continue supporting FISHPass outreach, and will work to support an event/action for World Fish Migration Day (May 16).

When Javier Lineras (USFWS) stepped back from the Forum, he also left the Governance Committee. In December, Holly Eddinger (USFS) joined the Committee. Current members include Bob, Damon, Stan, Anna and Holly, but the Committee would welcome other interested members, and recognize that there still is not a state agency represented on the Governance Committee.

Bob again reminded the Forum that he has served as the chair of the Governance Committee for many (approximately six) years. He would be willing to hand over the reins if there is another individual interested in stepping into this role. Interested Forum members are asked to contact Bob if they are interested in joining the Governance Committee and/or serving as chair.

- **Science & Data:** Sandi Jacobsen and Alex Jones serve as co-chairs of the Science & Data Committee (S&D Committee) and reviewed the S&D Committee's accomplishments from the 2019 Work Plan and Plans for 2020 (both are available on the intranet Committee Resources page linked above).

FISHPass Phase 1, which was publicly released at the American Fisheries Society (AFS) national conference in Reno, NV on October 3 (in conjunction with a presentation on the Forum and FISHPass by Alicia and Brett), continues to be a top priority of the S&D Committee. The FISHPass Working Group (FPWG) continues to meet and is monitoring use and feedback received on the tool. The FPWG organized and led the FISHPass demo held conjunction with this meeting, and has developed a list of next steps and "wish list" upgrades for Phase 2 (this was discussed further below during the FPWG update). Sandi also recently secured funding to support work she and Brett are doing to develop a parallel GIS-based FISHPass analysis for Southern California resident rainbow trout above dams and large barriers to prioritize relocation sites.

Other key focus areas of the S&D Committee include continuing the work done in 2019 to integrate Pacific Lamprey data into the PAD by incorporating those changes into the public facing PAD tool. Maintaining the PAD has been identified as a high priority by the S&D Committee as it is an important input to FISHPass. Various activities to support its quality control and updating include continuing work on the gap analysis to include historic steelhead watersheds in Southern California,

prioritizing other data gaps to help direct future assessments and funding priorities (potentially using these in the Forum's next RFP). Anne will also be developing a QA/QC Plan for the PAD, and its implementation will be supported by the FPWG.

Some field testing has been done of the [Fish Passage Incidental Report](#) and associated mobile application (developed in beta mode by Brett), including use during the field tour associated with this meeting. The Forum has included this application in recent funding proposals, and will continue to seek additional opportunities for expanding its use. There was some discussion about the similarities and differences between the Forum's app/form and what has also been developed by Caltrans. There was also a suggestion that the Forum looking into incorporating post-barrier removal updates in the future.

Other tasks the Committee will focus on in 2020 include working with projects that have received Forum funding to collect monitoring data, and working with the Education & Outreach Committee to develop additional monitoring case studies

- **Education & Outreach:** Alicia recapped the Education & Outreach Committee's 2019 activities, which focused largely on outreach surrounding the public launch of FISHPass (blast email to the Forum's listserv, small articles in NFHP newsletters, presentation at AFS in Reno, NV, and an introductory webinar held in conjunction with the FPWG). Additionally, Alex attended the Coleman National Hatchery's Return of the Salmon Festival (Oct 2019) and he developed some youth-oriented outreach materials that were popular. The E&O Committee is considering expanding on this in 2020, and asked any Forum members that have an interest in participating, or have youth focused outreach programs or materials to share with the E&O Committee.

Priorities for the E&O Committee in 2020 include continued outreach focused on FISHPass with a specific focus on targeted demonstrations. The E&O Committee will also be seeking practitioners that have used FISHPass to profile in outreach (articles, blogs, etc.). Please contact Alicia if you would be interested in hosting a FISHPass demonstration, or know of a group that would be interested. Additional priorities include World Fish Migration Day (May 16) and nominating and promoting a project to NFHP's 10 Waters to Watch.

The Forum's website will also be migrating to a new webhosting platform in 2020, and the E&O Committee plans to use this as an opportunity to update and refresh its content, and "look and feel". Brett will be working with Alicia to update the story map for Forum-funded projects.

The E&O Committee will work with the S&D Committee on the monitoring case studies, and Stan recommended thinking about developing a report on the state of California's barriers. He will send Alicia some key points/outline for consideration.

### **FISHPass Status and Rollout Update**

Following the release of Phase 1 of the web-based user interface of FISHPass, the FPWG has focused on outreach (public and targeted), as well as continued monitoring of the tool's use, and its continued maintenance. While this initial version is much improved, there are still aspects that the FPWG would like to add and/or improve. FISHPass has been designed to be a "living tool", and is only as robust as the data inputs that it relies upon. The FPWG is keeping a running "wish list" of improvements to address, some of which will have to happen down the road, and others which are already under development. Additionally, one of the proposals being recommended for Forum funding in FY20 will help truth test FISHPass and verify some of its input data in the Smith River Watershed.



Habitat quality is something that the Forum, and Damon Goodman in particular, has been focused on as a desired feature of the tool since FISHPass' initial development. Damon revisited some of the points he made during the presentation he gave the Forum in San Diego about his continued work (with support from Brett), on refining the habitat quality data input. Using maxent software for modeling, and working with some inhouse statisticians at USFWS, the results are proving promising, and there appears to be ways they will be able to bring this together to be incorporated into FISHPass. Damon has also been working to find ways to make the habitat quality layer apply throughout FISHPass' current geographic scope (which aligns with the geographic scope of the Forum). They are making progress with this as well, though additional data discovery is needed, and complimentary efforts (such as the work Sandi is doing in Southern California on resident rainbow populations) are underway.

Damon has also been working on an Rcode, that would compliment FISHPass, and allow users to upload a list of barriers for consideration. The Rcode he's developed is up and running, and could potentially be incorporated into FISHPass. Further discussion and investigation will be done by the FPWG and S&D Committee to determine next steps and recommendations.

### **Carmel River after the San Clemente Dam Removal**

David Boughton (NMFS) gave a presentation to the Forum on the progress made since the removal of the San Clemente Dam, and the impacts on the Carmel River. At time of removal the San Clemente Dam was 95% blocked with sediment and essentially obsolete in its inability to store water, had essentially impeded nearly all fish passage, and was deemed a public safety hazard (especially vulnerable to floods and seismic events). One of the key questions associated with this project was what to do with the sediment behind the former dam. Ultimately, it was decided that they would sequester a vast majority of the sediment in place, and allow the river to restore sediment regimes naturally. The result was that this occurred rather quickly, and didn't take long for sediment to move downstream, helping to restore previously sediment-starved habitat. The removal of the dam resulted in increased steelhead spawning habitat up and downstream. While the return of anadromous species did not happen immediately, in the years since the dam's removal, steelhead and Pacific Lamprey have increasingly been observed above and below the former dam's site. NMFS and its partners continue to monitor the progress of restoration in the Carmel River.

### **Forum MOU and ByLaw Updates**

The [Forum's current Memorandum of Understanding \(MOU\)](#) will expire on December 31, 2020, and the process to renew has begun. Bob proposed making the next MOU last for 10 years, in comparison to the five-year versions in the past. The Forum members participating in the meeting (in-person and virtually) agreed.

*\*Since this meeting, Alicia has sent each Forum signatory agency two copies of the updated MOU, one with track changes showing the minor updates required (signatory agencies no longer participating in the Forum, updating the Forum's goals etc.) and a clean version that can be used to distribute to the necessary parties within their respective agencies. Forum members are being asked to review their agency's portion of the MOU, and respond to Alicia by May 15, 2020 with their updated language. Alicia will send the updated MOU containing each signatory agency's approved language to the Forum for their review prior to the Forum's next meeting (see below) where it will be discussed and approved. Following this meeting, signatory agencies will receive the final copy of the MOU and will be asked to secure the appropriate signature within their agency by October 1, 2020. See March 6 email from Alicia Marrs for additional details.*

The [Forum Bylaws](#) were also updated in November 2019 to reflect a desire to allow individuals from non-Forum signatory agencies to participate in Forum Committees.

### **Next Forum Meeting**

The Forum agreed to hold the next Forum meeting this summer, ideally in July. Various locations were discussed, including Chico and Sacramento. Alicia will send a doodle poll to the Forum with potential dates and investigate potential options for meeting and field trip locations. Please send her any suggestions if you have any.