2020 PTSC Annual Meeting

February 6, 2020

PSMFC Office, Portland, OR

Attendees: Jeff Fryer, Tiffani Marsh, Pat Keniry, Scott Putnam, Ben Warren, Brandon Chockley, Charles Morrill, Tom Pansky, Christine Peterson, Will Simpson, John Tenney, Nicole Tancreto, Craig White, Daniel Wilson

Remote: Gabriel Brooks, Ben Truscott, Don Warf, Sebastian Dudek

Action Items:

- Don will start process to install a new site at Easton Dam
- Don will work with Gabriel on R&D for expansion of Castile Falls site
- Charlie will work with FPAC/FPOM to request that USACE sign over Lower Granite ladder entrance and exit antennas to PSMFC so PTAGIS can take over O&M. Charlie will invite Don to join the next FPAC face-to-face meeting.
- Don will work with Gabriel and Gordy to draft thank you letter to USACE regarding collaboration on GRS and other projects
- Nicole will work on draft of Call for Presentations for the 2021 workshop, send to PTSC for review
- Nicole will send an announcement about the 2021 workshop to PTAGIS newsletter list and
 include information about registration fees so projects can add to their next contracts. Potential
 to also include a survey about topics for the workshop.
- John will work with PTSC and Tom on oral history for 2021 workshop keynote and work on an outline for PTAGIS retrospective: past, current and future direction
- Tiffani will provide USACE contact for tag distribution
- Will Simpson will provide USFWS contact for tag distribution
- PTAGIS will add an event log feature for trap MRR sites
- PTAGIS will update Length definition to include guidance about precision and consider adding a Length Source field to P4

Portland 2019 review and 2020 plans Presentation

John presented a review of the Portland office accomplishments from 2019 and plans for 2020.

Regarding the planned **I5 software** for retrieving, managing and submitting data from an interrogation site, Scott Putnam requested that support for HPR Plus be added.

Regarding plans to replace FTP access to raw data files with API access, Tiffani Marsh requested that the interface make it easy to download multiple files at one time. She uses the data files to harvest SbyC and Sample gate openings at Lower Granite adult trap.

Regarding the design of the **interrogation site metadata** page for the new website, Tiffani requested that some of the O&M data be made available on that page, things like the status of the trap gate at Lower Granite.

Regarding release of the **new website**, PTSC and IPTDS subcommittee can beta test before general release.

Kennewick 2019 review and 2020 plans **Presentation**

Don presented the accomplishments of the Kennewick office and plans for 2020.

The group discussed the **detection efficiency issues at the John Day ladders** and suggested trying to get some temporary detection in the lock to determine if fish are indeed using the lock at a high enough rate to cause the dip in efficiency (**97.9% at John Day vs 99%+ at the other ladder sites**). Gabriel suggested the use of a totally encapsulated system developed by Biomark, made to drop into a body of water for 4-6 weeks and then retrieved and all detections downloaded. Tiffani suggested putting something like that just below the last gate to avoid the flushing effect. Don thought logistics and reading efficiency would be tough to overcome and that he would also like directionality.

Don presented the request from Pat Monk, BOR, to add an interrogation site at **Easton Dam Adult Ladder and Juvenile Bypass**. It is very close to one of the acclimation pond sites already managed by PTAGIS (ESJ) and wouldn't require any R&D, just installation of commonly used antenna types, transceivers, and other standard electronics. Kennewick should be able to add to normal O&M rotation of spare equipment with minimal costs. Brandon wondered who is tagging above the dam. The site would be useful to WDFW, USFWS, Yakama Nation, NOAA Fisheries and the local irrigation district.

ACTION: PTSC recommends adding this site to PTAGIS O&M, pending further clarification of funding.

Joe Zendt has requested an **expansion of Castile Falls (CFF) site** to add detection to weir walls. Kennewick staff will work with NOAA on R&D, potentially using a flexible antenna cable within a concrete form.

Don asked the committee if the **GRA ladder entrance and exit antennas**, installed by Westfork Environmental for a short-term USACE project, are useful in general. The antennas have been part of GRA, but PTAGIS has not been maintaining them — nobody has. Should PTAGIS take over O&M of these antennas? The antennas and enclosures need work and the transceivers need firmware upgrades. In order to start work, the USACE would need to sign over the transceivers and hardware to become property of PSMFC. He asked the PTSC to write a letter to USACE in support.

Tiffani said they were initially installed for temporary use, but they have since found that the data is important. She uses them to track passage timing, which the ISRP asked about, and which is included in the upcoming contract for operation of the Lower Granite adult trap (2005-002-00). Jeff also uses the data and would like to see this kind of entrance/exit detection at BON, as well as other dams.

Charlie suggested he could take it to FPAC and FPOM and believes USACE will support this move.

ACTION: Charlie and Tiffani will take request to FPAC/FPOM and start the process. Charlie will invite Don to join the next FPAC face-to-face meeting.

Regarding work done by **PTAGIS, NOAA, and USACE on design and installation of GRS**, Tom suggested that a letter be drafted to send to USACE thanking them for good work and collaboration on this important project. It could come from PSMFC, NOAA and BPA to continue to foster collaboration on the river.

ACTION: Don will work with Gabe and Gordy to draft letter and work with Tom to figure out best folks to send and receive it.

Charlie asked if there are still issues with **lamprey tagged with FDX tags in ladders**. Don indicated that some researchers are still using FDX tags with lamprey. There has not been another incident like the one at Prosser a few years ago, but the potential still exists.

Tiffani said that she has been working with Mary Moser (NOAA Fisheries) on projects with the Confederated Umatilla Tribes to tag juvenile lamprey. They have been using small FDX tags because there are no HDX tags of that size.

Don wondered if a company would be interested in developing small HDX tags, but Tiffani said they are only tagging a few thousand a year so the market may not be substantial.

NOAA R&D Update Presentation

Gabriel Brooks presented accomplishments under the NOAA R&D contract and plans for future work.

Testing of GRS detection efficiency includes three phases: static read range test, stick test, and live fish test. Static read range test found that there should be 100% detection at 30 inches above the concrete. Flow over the spillway is supposed to be 24 inches of laminar flow, but that is not quite what they saw on the water-up test.

NOAA and USACE also conducted a stick test. Unweighted sticks were flying about 7ft once they hit the spillway. After weighing down the sticks they detected about 40% of them and measured water flow at about 78fps. Stick test may or may not directly correlate with live fish detections, so they are planning to conduct a live fish test late spring or early fall of 2020

Live fish test will include 3000 tags in hatchery yearling Chinook: 1000 APT tags, 1000 9mm tags, and 1000 half-telegram tags.

IPTDS Subcommittee Report

Presentation

Gabriel reported back to the PTSC about the first IPTDS subcommittee meeting:

- Subcommittee brings together a lot of expertise from across the Basin
- Will provide input to the NOAA R&D project
- Plan to work on improving metadata and including additional metadata
- Look at bringing in automated metadata and making it accessible to users
- Will provide potential talks to workshop and other ideas for workshop, e.g. vendor booth, fieldtrip to a nearby IPTDS site
- Provide technical guidance
- Long term goal is to document knowledge base as a group, develop living documents to share knowledge
- Provide updates to PTSC on advancements in PIT tag work

2021 PIT Tag Workshop

BPA and PTAGIS are on track to hold a workshop the week of January 25, 2021, at Skamania Lodge in Stevenson, Washington.

We are planning for a similar audience and format as in 2015:

- Start mid-morning or early afternoon on day 1
- Sponsored reception evening of day 1 (Biomark potentially)
- Full day of presentations for day 2
- Half day of presentations for day 3
- Day three afternoon: split into P4 or PTAGIS reporting training and Instream session (presentations or hands on)

PTAGIS will send out a call for presentations summer/fall. PTSC will review abstracts and work with PTAGIS to organize them into sessions. If too many received for available time slots, some will be asked to transition to posters.

ACTION: Nicole will send out draft call for presentations to PTSC for review

The committee discussed ideas for a keynote and settled on a PIT tag and PTAGIS retrospective. Tom suggested that BPA Communications department can help record an oral history with some of the early PIT tag pioneers. A video of the oral history could be shown and then a 2-3 person panel could talk about where PTAGIS is now and future technology innovations.

ACTION: John will work with PTSC on a list of potential interviewees and develop questions for the past (oral history) and an outline for current status and future direction (with Gabriel and Gordy's help).

Tiffani suggested that an announcement be made soon about the workshop that includes the registration fees so that projects can put it in their next contract. Tom indicated that BPA agrees that

projects which have historically traveled to the workshop and those with a nexus will be able to include it in the relevant contract year.

ACTION: Nicole will send out a survey with workshop announcement in email blast to newsletter list.

Tag Distribution Information in PTAGIS

PTAGIS provides access to tag distribution information for the ~1 million tags distributed for the Fish & Wildlife Program through PTAGIS, which includes tag model and tag type. PTAGIS would like this information for the other ~1 million tags used in the basin. Has requested to get this information from Biomark. They prefer to not provide the purchaser information without permission, but could potentially provide tag model and tag type.

Tom suggests that PTAGIS work with the other large tag purchasers directly to acquire that information – USFWS, USACE, PUDs and potentially Nez Perce and Yakama Nation.

ACTION: Tiffani will provide USACE contact to PTAGIS, Will Simpson will check with USFWS folks.

Tag Mask Validation language

John presented <u>draft language</u> to be included on the page where researchers request that a new tag mask be added to PTAGIS, to clarify who should request and why. The Committee approved the draft.

Event Logs for MRR Sites

Scott Putnam presented his suggestion that PTAGIS provide a way for screw/weir traps to record operating periods – similar to event logs for interrogation sites. IDFG is using screw trap data in similar ways to arrays and needs to know when the traps were and were not operating to use the data effectively. That information is usually buried in annual reports and is hard to find. If PTAGIS added something like that for trap MRR sites, IDFG would definitely use it. There was some discussion about how best to present the information and to let people know that it even exists, but the Committee agreed it would be useful.

ACTION: PTAGIS will work on adding this feature to the new website with goal to promote at 2021 workshop.

Length Measurements

Jeff was trying to look at lengths of fish and found that for one group of fish, the lengths of almost all fish were recorded to the nearest 5cm.

Does PTAGIS need some indication in the MRR file about the precision of the length measurement?

The Committee discussed a few different options for improving length metadata in PTAGIS:

• Update length definition to include information about general precision guidelines, e.g. juveniles are generally precise to the millimeter, adults to the centimeter

- Add one or more new Conditional Comments to indicate a less precise measurement technique is being used
- Add a new field to P4 called Length Source that would be required if Length is populated. User would choose from a list of sources: Digitizer Board, Ruler, Tape, Caliper, Visual Estimation, etc.

ACTION: PTAGIS will work with Committee to update Length definition and investigate addition of Length Source field

Election of Committee Chair

Charlie and Tiffani will continue as co-chairs for the next year.