STREAMS Subcommittee Meeting

January 22, 2025 – Microsoft Teams meeting

Attendees: Derrek Faber (ODFW), Gabriel Brooks (NOAA), Gordon Axel (PTAGIS), Mike Ackerman (NPT), Nicholas Porter (Biomark), Brian Knoth (IDFG), Zack Mays (YN), Ben Winkler (Biomark), Gabe Derrick (Biomark), Brian Davis (USFWS), John Tenney (PTAGIS), Randy Johnson (CCT), Sebastian Dudek (PTAGIS), Brady Allen (BPA), Kory Kuhn (YN), Jeff Fryer (CRTFC)

Action Items

- Nicole will write newsletter article about how to submit detections at temporary arrays as Passive Recaptures
- Derrek will write SOP for securing modems at sites
- Brady will investigate bulk purchase of equipment

Follow up on Action Items from September 2024 meeting

- Newsletter article about how to submit Passive Recaptures did not get completed
- Check into changing from CANBUS cable to DOP to reduce noise but there are some limitations due to long cable run causing lower input voltage to the IS1001 the further away it is
- Securing modems. Derrek Faber whitelisted all his modems and hasn't had an issue since. Brian Davis requested SOP and Derrek will take the action to write one.
- Ben Winkler updated Subcommittee on 000.00000000000 tags. They come in from all different transceivers and Biomark is scrubbing them from data submitted to PTAGIS. PTAGIS has this tag code categorized as an unknown tag, so it goes into the database but is not available through the reporting system.

Round Robin Updates

Brady Allen is working with Washington and Biomark on renewing contracts with some upgrades for Wenatchee sites. The bulk purchase PIT tag contract should be renewed this year. Worked with Biomark for a discount for BPA funded equipment purchases, separate catalog available from Brady or your project's COR. Brady will investigate method to allow bulk purchase of Biomark equipment instead of having to use agency purchasing.

Jeff Fryer is interested in testing Voda IQ tags and injectors. Vandalism has been an issue to some of the Canadian ONA sites. Zosel antennas were replaced but stuck tags are still an issue.

Randy Johnson installed a site above a barrier that was removed in 2024 and had several detections at the site. Troubleshooting an instream site having issues with batteries discharging quickly.

Brian Knoth no new sites but continuing to maintain existing sites, troubleshooting noise on some sites with cord antennas.

Mike Ackerman worked on R script to estimate the proportion of habitat that each array is monitoring. Draft results for spawn year 2024 for all Snake River populations are available. Worked on assessment of PIT tag arrays in the Snake River Basin which resulted in some recommendations to add/remove/move sites. Experimenting with juvenile detection site in Lower Clearwater, large 20ft x 8ft antenna will be suspended in the river.

Macos Ong not able to attend but had questions about the Voda IQ tags: will they be available through Biomark BioLogic and in PTAGIS? Biomark confirmed that if they are ISO compliant they will be available. John confirmed that the tag mask is already added to the PTAGIS validation codes.

Brian Davis has no updates, just maintaining existing sites.

Zack Mays focused on permitting for a couple of new sites: a barge in the lower Yakima River planned for fall installation and PIT tag array at mouth of the Cle Elum River.

Derrek Faber finished upgrading sites on Middle and South Fork John Day and preparing for installs at Lookingglass Hatchery and a new barrier on Catherine Creek.

Kory Kuhn has been working on repairing Klickitat sites hit by massive flows or ice last year and data QC.

PTAGIS Portland Update

John Tenney

There is an M5 bug that causes files with a Day of Year 366 to fail to be created. DOY 366 only occurs during leap years. Changing PSMFC IT security policy makes it difficult to build distributions for Linux so this bug was not fixed in the Debian package. The Debian version of M5 will remain available and can be used but won't be updated unless there is a critical bug.

NOAA R&D Update

Gabriel Brooks

Upgraded TWX equipment

- replaced FS1001M with IS1001-MUX
- replaced both matrix antennas
- upgraded wireless link
- preseason testing gave 7% increase in detections

Pile Dike arrays

- reinstalled PD5, PD6, PD7 and PD8
- experimental barge at PD8
- doubled the size of PD5 and PD6
- looks like with lower flows PD sites don't detect as many fish
- working on ELAM model to find sites where PD sites would work during low flow years

2025 Plans

Bonneville post construction evaluation

• replace HDX antenna at WA ladder exit

East Mooring Basin Pinniped study

• trying to detect ingested tags

Continue MCN detection development

Asked the group if there are any requests for firmware modifications for the Master Controller.

PTAGIS Kennewick Update

Gordon Axel

- BON ice and trash sluiceway is in development with the USACE. Building antennas in house. The earliest possible installation will likely be late summer. Shield for antennas must meet certain criteria and needs to be built by certified bridge builders.
- Working with Corps and WA shore ladder builders on BO4 antennas. Planned to finish by March 15. Delivering antennas this week.
- Working with NOAA on MCN detection and other in-system sites.
- Getting YN acc ponds up for the season

Upgrading ODFW sites

- Have been able to install cord antennas at tributary sites that have old mux antennas just over the top of the existing structure
- Need to cut the old antenna cable

Biomark

Gabe Derrick has a new position focused on customer success.

Gabriel recommended a UPS hat that has a small battery and can initiate a graceful shutdown on power loss.