

# IPTDS Subcommittee December Meeting

Tuesday, December 15, 2020 - Online

**Attendees:** Gabriel Brooks, Ben Truscott, Derrek Faber, Brian Davis, Jeff Fryer, Zack Mays, Rick Orme, Randy Johnson, Brian Knoth, Nico Romero, Brady Allen, Chris Beasley, Nick Yaniw, Daniel Wilson, Nicole Tancreto, John Tenney

## Action Items:

- Gabriel to work on site diagram template and instructions using Google Earth image and optional stream profile.
- Nicole will provide a link to the interrogation site metadata page for subcommittee to review.
- Gabriel, Zack, Derrek, and Ben will work with Daniel on refining I5 feature set. Daniel will send the group a beta version of I5 for more feedback.
- Gabriel will attend annual PTSC meeting January 6, 2021, and provide update to the PTSC.
- Annual IPDTS Meeting tentatively scheduled for February 2021, Nicole will send out Doodle poll in January.

## Introductions

Gabriel Brooks: completed test of 85ft x 7ft pass through antenna using flexible antenna cable, with 100% detection. R&D project is wrapping up reports and plans for 2021: finish multiplexor development, should be available spring of 2022; upgrades at GRS; fix pile dyke site using new technology to benefit the basin – batteries and solar panels; upgrades to flexible antenna array; purchase some equipment for ice and trash sluiceway at BON.

Ben Truscott: Primarily maintaining existing sites.

Derrek Faber: Completed a couple interesting installs: an array on channel from Columbia to sturgeon lake using smaller flexible cable to make antennas bigger and easier to anchor in the muddy substrate; another project outside the CRB installing antennas on large tide gates.

Brian Davis: Monitoring bull trout in Clackamas basin, fires causing sites to be removed and data lost. None of the tags are in PTAGIS because non-ICAR tags were used. The tags are half-duplex and the sites use Oregon RFID transceivers. John suggested he see if they can be read on the equipment being used in the basin and get back in touch with PTAGIS.

Jeff Fryer: Investigating adding a few more antennas at Zosel Dam to monitor other passage ways.

Zack Mays: We have an 85ft x 6ft antenna at Gold Creek for bull trout; another site in Box Canyon has two 30ft flat plate antennas.

Rick Orme: Nothing new since last meeting. JOC not functioning because during removal of blackberries the line to the site was damaged.

Randy Johnson: building a couple new temporary sites to answer adult steelhead passage questions

Brian Knoth: continuing to expand instream in Clearwater region, working on one site in Crooked River, switching from weir to instream array next year. Trying out Biomark's corded antenna system at Big Bear Creek, hopefully corded system is more low profile and will be able to stay anchored.

Nico Romero: not a whole lot to report with Yakama Nation, just maintaining installations. A 2016 floating array has been performing well, two arrays with three 10ft antennas, can cover most of the river, paired with screw trap. Planning to keep it installed all winter this year, thinking it will be able to withstand year-round conditions.

Brady Allen: Working with Biomark on O&M project. BPA working from home until at least March.

Chris Beasley: Not much field work to report. O&M contract going along well. Working on linking data analysis to data collection step of that project. Biomark second fabrication facility is up and running, so production is unaltered.

Nick Yaniw: (had audio issues, but pasted this into the chat) No new PIT infrastructure. Fish ladder was open to Okanagan Lake with sockeye entering the lake. Acoustic tagged 40 or so sockeye. Probably see more interrogation site in the next couple of years at Okanagan Dam or tributaries of the lake.

Gabriel would like to schedule time for this at the beginning of each meeting from now on.

### Site Diagrams

Gabriel presented two potential methods for creating a diagram showing the layout of the antennas relative to stream bank and water flow. One has a set of standard images on a Powerpoint slide that could be pasted into a new slide over hand-drawn lines showing the stream bank. The other starts with a Google Earth image taken at 300 ft eye elevation and has the antennas, water flow direction and the low and high-water marks drawn over that image.

In addition to the site diagram, he also presented a method to get a profile of the stream contour and how the antennas are positioned on the stream, along with estimates for how far above the antennas the water surface is at different water levels.

After discussion, the group agreed that the second method (using Google Earth image as a base) would be preferred. Some sites might not fit well with the 300 ft eye elevation, so that might be better as a recommendation. The actual elevation used for the image should be printed on the diagram along with the site info, date produced, and PTAGIS configuration number. Drone images could be used in place of Google Earth image, but the North arrow and scale bar should be added manually in those cases. The group also agreed that the stream contour profile is useful, but maybe not for every site, so that should be included in the standards as an optional element.

### Interrogation Metadata

Nicole showed the interrogation site metadata page on the new website and asked for feedback.

**Site Status** shows whether a site is Active or Inactive. If Active, a site can also have a second status of Operational, Non-Operational, or Unknown, which come from Event Logs. Several members suggested sending out reminders to stewards to keep event logs updated. Nicole currently sends out an annual reminder, but we can investigate sending out more frequent (quarterly?) automated reminders.

Suggestion to show site Active/Inactive on the map of sites. We will investigate adding that status into the map symbology.

**Transceiver IDs** will now be shown in metadata and used for validating data submitted from sites. This will be useful if/when PTAGIS accepts transceiver diagnostics and validating that data coming from sites is being reported as the site is configured.

**Equipment History** can be used to track the different types of equipment installed at the site over the course of its lifetime. Currently have Transceiver Type, Transceiver Firmware, Antenna Type, Antenna Size, Communications, and Power. We need input on what values should describe these types of equipment and if other types should be added.

### I5 Demonstration

Daniel demonstrated I5 interrogation utility software. This is intended to be a replacement for PIFF with additional features for connecting to sites remotely, editing data, and managing submissions to PTAGIS.

I5 makes use of the site configurations in PTAGIS, but connection information (e.g. IP addresses) would be stored locally.

Suggestions to make it able to schedule buffer downloads and to make the download profiles transferrable to multiple computers.

Several members agreed to join focus group to help refine the features: Gabriel, Derrek, Zack and Ben. Anyone else interested in joining can contact John Tenney.

### PTSC Annual Meeting

PTSC annual meeting is scheduled for January 6. Gabriel will join the meeting and provide an update on the IPTDS Subcommittee.

IPTDS Annual meeting tentatively scheduled for February. PTAGIS will send out Doodle poll in January.