

PTSC Conference Call

August 13, 2018

Attendees: Charles Morrill, Brandon Chockley, Courtney Newlon, Pat Keniry, Scott Putnam, Tiffani Marsh, Ben Warren, John Tenney, Nicole Tancreto

Actions

- **John will talk to BPA about addressing HPR issues along with procurement of replacement readers**
- **Nicole will send out Spec Doc review details**
- **PTSC will review Spec Doc and provide comments by October 15**
- **Nicole will schedule a conference call for mid-October to discuss Spec Doc review comments**
- **John will schedule annual meeting for week of January 21 in Portland**

HPR Readers

John [summarized issues](#) with the HPR readers that have been experienced by PTAGIS folks and other folks as reported to the PTSC.

Question for the PTSC: should the committee send a list of issues to BPA to recommend that they request these issues to be fixed before they make a large purchase of HPRs to replace the FS2001s?

Charlie and Ben would like to propose that the community explore developing a reader with a separate engineering firm. It could be beneficial to the community to develop a modular reader with different features that can be added on depending on research needs. WDFW took a similar route in developing a Bluetooth connector for the 601 readers which was successful.

Scott proposes developing a source for antennas that could serve as replacements for the FS2001 antennas that are failing. The readers themselves still work fine, it's just the antennas that are failing and can't be replaced.

Tiffani remembers the process for developing the FS2001 was difficult to get the community to agree on the necessary features of the reader. This process will take some time, and FS2001s need to be replaced now, primarily because the antennas are failing. Can't wait two years for a new reader. Also, where would the R&D funding come from?

Charlie proposes that BPA would be willing to fund the R&D instead of replacing some of the FS2001s.

Tiffani and John understand that the cost for replacing FS2001s will be coming out of each project's budget, not that there is an extra pool of money. They are trying to gain some cost-savings by doing a bulk purchase so the replacement costs aren't quite so high. This might also give us an opportunity to have some of the common issues addressed.

Committee agrees that sending a memo to BPA with a list of concerns about the HPR units and asking that they be addressed as part of the procurement of replacement units.

PIT Tag Specification Document review

New spec doc is ready for review. Nicole walked through the document, which is now online in the form of a web help system. Comments and text revisions can be provided via email or by using the Basecamp tool. Nicole will send out an email with details by the end of the week

Charlie proposes that PTSC review and make comments by October 15 and suggests scheduling another conference call around that time for further discussion. Also suggests adding a section or specific language about tag procurement and that it is researcher's responsibility to determine if a tag is suitable for use in the basin.

Tributary PIT Array Workshop Update

John has been participating on planning group led by PNAMP at the request of BPA to determine standards for instream array placement and operation. They are looking for a steering committee to help with development and review of those standards. The 2-day workshop will take place in Portland, October 16-17, and John urges the PTSC to participate.

There is another workshop being planned by Biomark in Portland for the week of January 21. Several folks proposed that the annual PTSC meeting be scheduled either before or after that workshop so that both can be attended.

Summary of Responses RE: HPR Plus Performance

Source	Organization	Response Summary
J. Tenney	PTAGIS	Early unit stop reading tags when plugged into AC. Couldn't be repaired by Biomark, purchased new reader in 2017.
D. Wilson	PTAGIS	Fails to send data from reader to PC on occasion, especially after changing settings. Cannot consistently reproduce. Issues with auto-tune mode enabled. Requires reader reboot.
A. Brower	PTAGIS	Changing settings causes loss of communication. Locked up with 'Error' while searching through menus. Cannot consistently reproduce.
R. Clark	PTAGIS	Downloading large file from reader to PC via Bluetooth fails. Consistently reproducible. Biomark attempting to reproduce problem. Could not reproduce issues described by A. Brower or D. Wilson.
B. Warren	WDFW	Lower detection efficiency compared to FS2001, poor ergonomics for mobile sampling, lacks a read-on-demand button for handheld antenna, needs better feedback indicator mechanisms for positive interrogation (LED light on antenna, haptic etc.). We have also seen issues with readers locking up when attempting Serial Port Protocol Emulation (SPPE), and a lack of true SPPE support for some programs. As well, the reader as designed utilizes a less secure Bluetooth classic (Rev. 3.1) radio, which is currently in violation of current WDFW IT security standards. No iOS support.
B. Bowersox	IDFG/SMP	Freezing issue corrected with firmware upgrade. No other issues from units operating for 12 months
S. Williams	SMP	No issues from SMP at Lower Granite, LOMO, McNary
T. Marsh	NOAA	Issues with more than one unit: freeze-ups at boot-up and after changing settings (reading to standby); shrill noise from unit on occasion requires shutdown of unit.
J. Rivera	USFW	Detection efficiency inferior to FS2001. Issue HPR not communicating with P4 or laptop. Issues with HPR locking up.
J. Fryer	CCT	No complaints from one group. Light alert on antenna when tag read; larger hoop antenna for better detection efficiency.

J. Fryer	CRITRC	Issues with detection efficiency resulting in a few double-tagged fish. Units regularly maintained by Biomark.
A. Pearl	Colville	Low detection efficiency with one reader due to damaged antenna and repaired by Biomark. Auto-tune feature works well for stream monitoring at temporary sites with noise.
P. Cleary	Nez Perce	No Issues; using Bluetooth + GPS features.
S. Putnam	IDFG	3/2017: repaired unit locked up again, sent back to Biomark.