

2006 PTSC Meeting

2006 PIT Tag Steering Committee Meeting Agenda

1.	Construction Updates for New Detection Sites	Don Warf
2.	Discuss FPAC Meeting and PTSC Charter	Charles Morrill
3.	PTAGIS Status and Plans	Carter Stein
4.	PTAGIS Web and Query System (30 minutes)	Dave Marvin
5.	M4 (Minimon, Multimon & SbyC) Development Status	John Tenney
6.	Active Passive Development Update	Sandy Downing
7.	BON Corner Collector Update	Sandy Downing
8.	Small Streams Update	Ian Jezorek
9.	New PIT Tag (ST, SGL & SST) Update	Sandy Downing
10.	Update on Pro's & Con's of Half vs. Full Duplex PIT Tag Detection (30 minute teleconference @ 10am)	Chris Peery —

PTAGIS February 2006 Meeting Notes PSMFC February 2006 PIT Tag Steering
Committee Meeting
Version 1.0
28 March 2006
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PTSC

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1. PRELIMINARIES (8AM)

Introductions of attendees

- **PTSC Members:** Ed Buettner, Doug Marsh, Charles Morrill (Chair), Pat Keniry, Carter Stein
- **Guests:** Roger Anderson, Anthony Carson, Doug Clough, Ryan Day, Sandy Downing, Nadia Gruman (afternoon), Ian Jezorek, Kristiana Kroneck, Dave Marvin, John Tenney, Don Warf

2. FPAC MEETING AND PTSC CHARTER DISCUSSION (8:15AM)

Charles, Carter & Doug summarized the meeting with Dave Wills and FPAC members Tuesday afternoon February 7. As a result of CBFWA updating their charter and not identifying or confirming the status of the PTSC, the current charter is no longer valid. It appears that we now are simply a standing subcommittee under FPAC.

FPAC supports the current functions identified in the charter and we have the opportunity to suggest changes to FPAC and they will review and submit any suggestions to CBFWA for consideration and action. The current PTSC Charter has a termination clause that CBFWA may not be aware of and that needs to be invoked.

In the general discussion that followed the group discussed and identified a number of issues:

- For the PTSC committee to be fully effective in implementing the elements in the current charter and effectively advising both FPAC and PTAGIS on technical issues we need to broaden the scope of effective participation, communication and coordination among the different entities that are not represented in the current committee makeup.
- How do we accomplish this? A regional forum or committee may/may not be the best choice. Participation from both BPA and the COE and other entities as well is essential to a fully effective PTSC role. Changes in the committee structure and function might require additional time and effort for committee members. Broadening participation is clearly desirable and essential to enable the PTSC to function more effectively.

Some of the PTSC functionalities identified and discussed included:

- Provide technical guidance and direction for PTAGIS (including the specifications document)

- Provide coordination and training on techniques and applications within the basin to users within the basin
- Provide recommendations to PTAGIS and on the operation and maintenance of interrogation sites with FPAC approval or concurrence
- Oversee upgrades to devices, main project facilities and equipment.
- PTSC and PTAGIS staffs do not make policy decisions.
- PTSC & PTAGIS should assist in the development and implementation of standards for new tags and receivers as well as testing new tags and equipment to ensure compatibility with existing systems and provide this information to the community.
- Promote coordination and communication among all entities within the basin on the new and ongoing PIT tag projects and or developments. At this point we do not know if there is a way to ensure that any PIT tag project within the basin has a requirement to advise and or coordinate new projects with FPAC and or PTSC to ensure regional coordination and cooperation that would capture actions by all Agencies and entities within the basin? The lack of communication at some of the COE projects has resulted in difficulties for PTAGIS in maintaining the functionality of existing equipment on-site. Improved coordination would help identify and avoid potential problems.

3. ACTIVE/PASSIVE DEVELOPMENT UPDATE (9:30AM) – SANDY DOWNING

Sandy reported that the advancements with the Bonneville corner collector show that it may be possible to build a 50 by 6 foot antenna with passive technology in future (three years?). BPA has requested that NOAA Fisheries research PIT detection at spillways. The technology would utilize SST Tags.

NOAA will continue to request support from PTSC to push technology and development for spillway. We will not support this until the corner collector is in and working well.

Digital Angel has not noticed any real benefit from Active/Passive tag, by sticking with the passive tag the timeline will be much shorter.

The committee discussed technical issues related to tag characteristics (*i.e.*, read range, collisions, tag weight, tag size, etc.).

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4. PROS AND CONS OF HALF DUPLEX VS. FULL DUPLEX PIT TAG DETECTION (10AM) – CHRIS PEERY

PTSC spoke by conference call with Chris Peery University of Idaho (UI) who works on Army Corps of Engineers funded lamprey study. Coordination for the 2006 field season is intended to forestall problems that resulted from University of Idaho research in 2005. The primary problem has been that UI Half Duplex (HDX) PIT Tag Detectors caused interference with the Full Duplex (FDX) PIT Tag Detectors used to detect adult salmon at the Corps facilities.

Chris Peery walked through UI installation plans for 2006.

The group agreed:

1. Prior to turning on for the season UI will communicate with Don Warf to verify and evaluate installed HDX equipment.
2. UI will use the PSMFC event log notification used by Kennewick Staff when technicians perform maintenance.
3. UI and NOAA will develop criteria for turning off the HDX when there is interference.

Discussion about incorporating HDX tags into PTAGIS database. Carter reported that this effort is ongoing and is dependent upon available resources.

You can view Chris Peery's presentation via this [link](#). You may also want to review the [Summary for HDX Installations and FDX Compatibility Testing](#).

5. HALF AND FULL DUPLEX PIT TAG ACTIVITIES AT THE BON CORNER COLLECTOR (11:30AM) – DOUG MARSH

Doug Marsh reported changes to Mary Mosiers lamprey research at Bonneville. NOAA will move HDX lamprey detectors from the Bradford Island Fish Ladder to the Cascades Island Fish Ladder near the old counting window.

6. CONSTRUCTION UPDATES FOR NEW DETECTION SITES (12PM) – DON WARF

Don gave this presentation: [Link to Don Warf's presentation](#).

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7. BON CORNER COLLECTOR UPDATE (12:30) – SANDY DOWNING

Sandy reported the Digital Angel found a fabricator for the plastic antenna enclosure. A high range in flooding has caused construction delays. As of the meeting the bottom shield and floor are installed, and the outside walls were being poured. It is anticipated that the antenna will be installed March 17th, and contractors work would be completed by April 10th. Roger reported the current read range is 10 feet in the lab. BPA has decided to delay full efficiency testing until 2007. Some fish testing will be performed in 2006 by NOAA.

There was discussion about data collection interfaced to the Digital Angel reader for the Bonneville Corner Collector (BONCC). BONCC reader is not completed. PTAGIS is waiting for Digital Angel to provide a BONCC reader in order to develop M4 driver for PTAGIS data collection.

PTSC agreed on the site code BCC for the BONCC site.

Sandy suggested the question would be whether or not the region would need to install a second BONCC detector in order to provide redundancy for verifiable statistical analysis.

8. DIGITAL ANGEL UPDATE (1PM) – ROGER ANDERSON

Roger Anderson from Digital Angel provided a Digital Angel update for the PTSC. In order to improve communication Roger suggested researchers could get more information by viewing their website:

- <ftp://ftp.digitalangelcorp.com/>
- User: DA Fisheries
- Password: Pit Tag

Roger reported that Digital Angel abandoned the preloaded, pre-sterilized PIT Tag Injector project.

Roger entertained technical discussion on the FS1001M (MUX). There have been some problems with CPU chips constructed from March to April 2005. The CPU chips are exhibiting problems booting. The symptom is that on power up, the chip fails to see memory and stops the boot and begins booting every 2-3 seconds. Devices with this

problem need to be sent back to DA. Send the board in and the chip will be replaced. Dan is trying to compile a list of CPU boards that may have an issue. The RAM chip has been pulled from manufacturing and replaced with a surface mount CMOS chip in house at DA. The problem doesn't display during test.

Any FS1001M purchased after April 2005 can be replaced. Digital Angel wants the MUX boards back so Digital Angel can fix it. Contact Digital Angel for repair. There will be a yellow dot on the units that have had this corrected. They think there are 71 units affected to be replaced. A test for this condition is to put it in a freezer for 10 minutes and then power on. If it comes up, you don't have this problem. A noticeable symptom is when the FS1001M boots it may beep. And if this happens it indicates the unit may fail in the future.

[Link to Roger Anderson's presentation.](#)

9. NEW PIT TAG TEST UPDATE (1:45) – SANDY DOWNING

Sandy reported on tag evaluation recently conducted; you can view her report by clicking this link: [Preliminary Evaluation of an Applicant PIT Tag for the Columbia River Basin](#). PSMFC has initiated a project to automate tag testing process in order to save time and reduce costs.

10. BIOMARK UPDATE (2PM) – ANTHONY CARSON

Anthony Carson of Biomark Inc. reported on their current projects that may have interest to the PTSC:

- Installation of juvenile and adult detection systems at PGE Sullivan Powerhouse (SUJ) and adult fish ladder at Willamette Falls (WFF).
- Another installation at Rocky Reach.
- A new installation on the Tucannon River which has two transceivers and a pass-through antenna, for a total of five antennas. Steve Anglea will give a presentation at Idaho AFS Idaho.
- A new crump weir installation at Cold Man Creek.

11. USGS SMALL STREAM UPDATE (2:30PM) – IAN JEZOREK

Ian Jezorek reported on current USGS projects of interest to PTSC.

- Rattlesnake Creek. The site is currently offline because of high water, and it may or may not be reconstructed. The site has been running for four years. MUX and six antennas. The project is BPA funded; funding decreased this year. It is a write up year.

- Wind River Watershed. USGS has been tagging 3-4K per year since 1999, primarily wild steelhead. That project will probably continue. The site utilizes FS2001F ISO “cheese blocks” in stream at Hemlock ladder. The project is BPA funded.
- Hemlock Dam interrogation site. The site utilizes two FS2001F ISO and has been running for two years.
- Cedar River Watershed. Seattle water supply. Funded by Seattle public utilities. Two MUX. Bull trout primary focus.
- Methow River Basin. Bureau of Rec funded. Two MUX and eight cheese blocks. Restoration through removal of barriers, recolonization. Funding through 2008 (Ian).

12. PTAGIS UPDATE (3PM) – CARTER STEIN

Carter gave an update on PTAGIS subsystems and you can view his presentation with this [link](#).

13. M4 (MINIMON, MULTIMON AND SBYC) DEVELOPMENT STATUS (3:30PM) – JOHN TENNEY

John Tenney gave an update on the M4 development (replacement programs for MultiMon and MiniMon), you can view his presentation by [clicking on this link](#).

14. PTSC ELECTION/SELECTION OF NEW CHAIR AND CO-CHAIR (4:00)

- Ed Buettner – 2006 Chair
- Charles Morrill – 2006 Co-Chair

15. PTAGIS WEB AND QUERY SYSTEM (4:15) – DAVE MARVIN

Dave Marvin shared the presentation that he gave to USFWS, but was targeted to PTSC members and people who are responsible for setting up new PTAGIS codes.

Dave focused on the PTAGIS.org Services → New Validation Code Request (user must log in to see the Services link). Dave instructed the committee to include contact information and description when setting up new codes. Only PTSC members can do this.

Dave requested that users attach site maps when setting up new interrogation sites.