



PIT Tag Information System Columbia Basin

Newsletter

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The PTAGIS Newsletter is published periodically by Pacific States Marine Fisheries Commission.

We welcome input from the PTAGIS community, so email us at ptagis_newsletter@ptagis.org with your story ideas.

If you have questions regarding the contents of this publication, or about the PTAGIS program, please contact PTAGIS Staff.

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How Budget Cuts to the PTAGIS Program May Affect You

JOHN TENNEY (PTAGIS Portland Office) and PIT TAG STEERING COMMITTEE (PTSC)

Due to budget cuts, researchers will be required to recreate their QueryBuilder reports in the new PTAGIS web site due to the decommissioning of the PTAGIS server as early as March 2013.

Due to lower than expected revenues and unexpected high invoice totals for current Fish and Wildlife Programs (FWP), Bonneville Power Administration (BPA) has recently issued spending cuts to many FWPs including the PTAGIS program. There have been a few articles explaining these cutbacks in more detail including this one from the Columbia Basin Bulletin: <http://www.cbulletin.com/422796.aspx>.

This article is our best attempt to give notice of how recent budget cuts will impact the PTAGIS program and the community. Our staff has done a remarkable job maintaining the integrity and continuity of the 24-year-old PTAGIS dataset while concurrently developing, testing and deploying the next generation technology that is critical to the success of this on-going program for the foreseeable future. We are in the final phase of this multiyear effort and we will require your cooperation and patience to complete these tasks with even fewer resources.

The following sections outline the program deliverables most likely affected by the budget cuts and steps we think the community can take to help us mitigate the impact.

PTAGIS Database and Website

Because of the decrease in funding and the escalating cost of support and licensing for the current Unix database platform, we will decommission the current PTAGIS web site, including the QueryBuilder reporting tool, as early as the end of March 2013.

We ask that all researchers as soon as possible create an account in the new [replacement website](#) (currently in beta) and recreate your data reports using the advanced reporting features. When the website moves to production mode, your queries will not be lost. Please view the online [training videos](#) and [documentation](#) to get up to speed and provide us with constructive feedback in the [online forums](#) to help make the smoothest possible transition. We are working on method for you to export your queries to aid in creating new queries on the replacement website.

We are coordinating with projects that require large portions of the PTAGIS dataset to recreate a suitable replacement for the telnet reporting tool and TMT files. A plan to deploy a mirrored PTAGIS database in the cloud to serve these requests more efficiently has been postponed.

PTAGIS will now have to rely on Commission resources to host the new website and most of our development platforms. We may experience some growing pains and performance issues while operating on these virtual servers. Please notify us if the new website seems to be running slow and have patience while we work with IT staff to optimize these resources the best we can.

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How Budget Cuts to the PTAGIS Program May Affect You

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PIT Tag Distribution

The Tag Distribution System (TDS) used to inventory and distribute PIT tags to BPA's Fish and Wildlife Programs (FWP) will also be decommissioned next year due to support and licensing costs. We will do our very best to have a replacement distribution process; however, given our current workload we most likely will have to transition to an interim system of spreadsheets and email until it is ready for production use. We ask that all FWP sponsors be prompt and patient during this transition period to ensure ample lead time for the delivery of their tags.

PTAGIS Field Software

Development of the next-generation tagging software, P4, is postponed and we will have to rely on the aging P3 software for at least another year. We will be emailing surveys to the community late next year to help us scope the requirements of this project. Some of the infrastructure for this new program has been already developed with M4 (next-generation interrogation software) and we anticipate a fairly quick development process once it is started.

We ask users of P3, MiniMon and other PTAGIS software to help us by using the new [online forums](#) in the new replacement website to post technical support questions. We hope these forums will reduce phone calls and eventually provide a searchable knowledgebase to answer common questions. Feel free to answer forum questions and share your valuable (and civil) insight to other members in the community.

Technical Coordination

We will be limiting travel to and participation in regional meetings and technical forums. Ad hoc requests such as the evaluation and integration of emerging RFID technologies will be deferred. BPA has recently indicated to us the support of PIT tag-related projects on the Willamette River is outside the scope of this program.

We will rely on the PIT Tag Steering Committee (PTSC) to be our 'eyes and ears' in the Basin and provide us with ample guidance during this critical period of the Program. If you have any concern or questions, please feel free to contact me or your [PTSC representative](#). ☺

Public Release of the New PTAGIS Beta2 Website

PTAGIS PORTLAND STAFF

We are pleased to announce a public release of the PTAGIS Beta2 website (beta.ptagis.org).

A previous version, Beta1, introduced the new website design, layout and reporting tools and was released to a small focus group of about 20 PIT tag community members, who provided valuable feedback.

Beta 2 has a new look-and-feel, hones the reporting features and includes service applications for requesting SbyC Projects, new Tag Projects, and Coordinator IDs. Our goal is to create a website that offers the services you are used to finding when you visit the PTAGIS Web Portal, along with new features that make querying PIT tag data, submitting requests, and finding information easier.

This release is your opportunity to try out the new features and let us know if they will meet your needs as we transition from one system to another. Our Beta test program plays a key role in the development of the new website. We encourage you to go through the site, try out the available features, and leave us some comments and suggestions; we need your feedback to provide features that will be useful to the community. *Please create an account if you don't already have one.* We look forward to your feedback! ☺

PTAGIS Kennewick Staff Develops Thin Body PIT Tag Antenna Prototype

DON WARF (PTAGIS Kennewick Office)

Due to higher and higher construction costs and the dire need for PIT tag detection at critical points such as the adult ladders at The Dalles and John Day Dams, the PTAGIS Kennewick group embarked on an effort to build a pass-through thin body antenna. The goal of the thin body antenna is to be only two inches thick and still detect at the same high level of efficiency that is expected at all other PTAGIS main-stem detection sites.

In the past, at all other adult ladder detection points, it has been necessary to excavate large areas of concrete to house the standard thick bodied antennas and keep them from field-coupling to ferrous rebar. The new thin bodied antennas are possible due to the use of ferrite tiles embedded into the antenna housing.

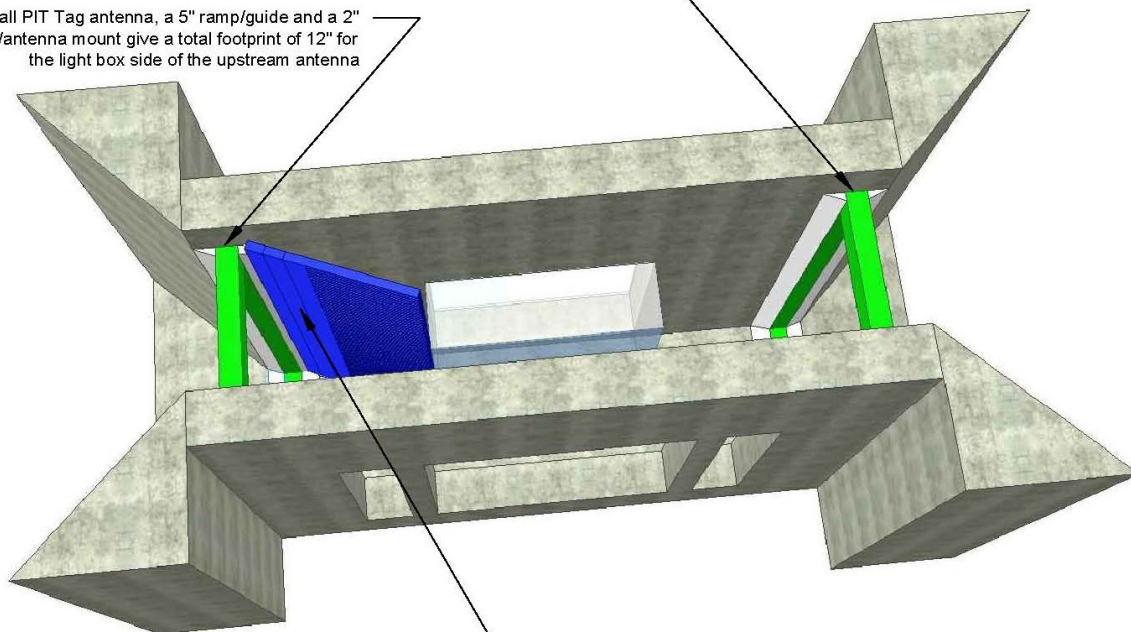
As of September 25, 2012, these goals have been met. A prototype antenna was built at PTAGIS Kennewick and tested at the NMFS Pasco facility. The prototype was built with the goal of later building four of these antennas for the counting window slots at The Dalles North and East ladders. The PTAGIS staff is currently working with the USACE to install these antennas at The Dalles during the winter work period. Due to the tight schedule it is unknown whether this will take place.

If scheduling works out, this temporary system will be installed at a relatively low cost since no concrete cutting will be required. The system is projected to read at near 100% detection efficiency and be maintained at near 100% uptime. The antennas should last 10 years or more. Below are conceptual drawings for installing these antennas at The Dalles North. The Dalles East will be similar.

A prototype 5" deep thin wall antenna is being developed in Kennewick. A successful 5" deep antenna will allow a 15" footprint in the counting window slot. Near the debris guide, only a 12" footprint would be needed at the upstream end of the counting window slot.

5" thin wall PIT Tag antennas and two 5" ramp/guides give a total footprint of 15". This view shows the two-inch "speedbumps" on the side walls of the counting window channel (3plcs)

5" thin wall PIT Tag antenna, a 5" ramp/guide and a 2" debris guide/antenna mount give a total footprint of 12" for the light box side of the upstream antenna



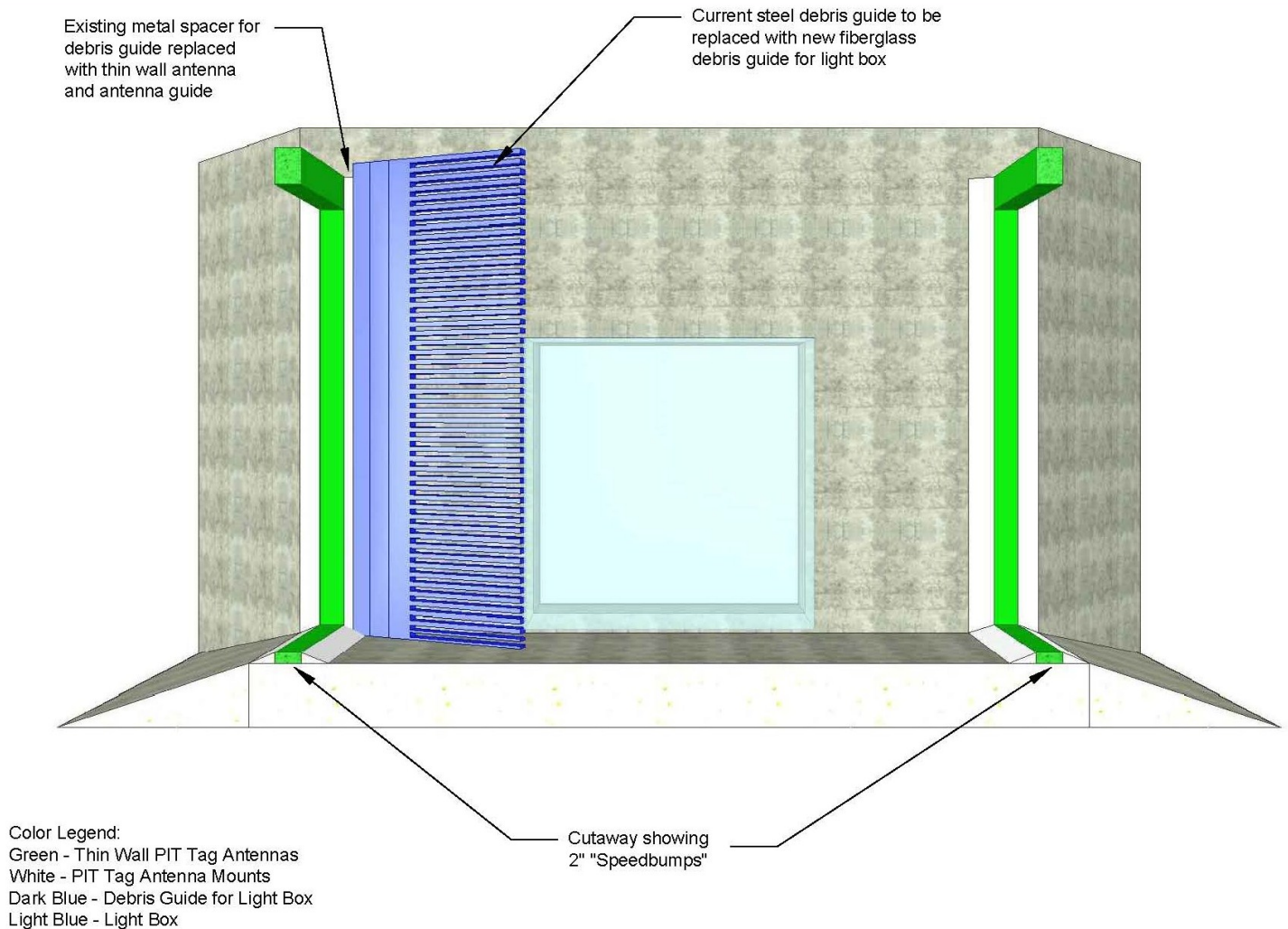
Current steel debris guide to be replaced with new fiberglass debris guide for light box (we can't have ferrous material in the RF field).

Color Legend:
 Green - Thin Wall PIT Tag Antennas
 White - PIT Tag Antenna Mounts
 Dark Blue - Debris Guide for Light Box
 Light Blue - Light Box

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PTAGIS Kennewick Staff Develops Thin Body PIT Tag Antenna Prototype

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The PTAGIS crew is currently working on a smaller footprint antenna that will reduce the "speed bump" length by four inches and should reduce the cost and weight of the antennas.

It should also be noted that these antennas can also be embedded in the concrete by excavating a slot the same size as the antenna. They can also be mounted on a metal surface. A full technical report is available at: ftp://ftp.ptagis.org/Documents/Newsletters/Volume_10/Thin_Bodied_Eval_0_1r2.pdf. ©

Important PTAGIS Field Software Update

JOHN TENNEY (PTAGIS Portland Office)

It is essential that you download and install the latest releases of P3 version 1.5.1 and MiniMon version 1.7.0 field software to support the new types of tag codes described in our last newsletter. The new tags are being distributed into the Basin with different manufacturer identifiers and will not pass the validation constraints of previous versions of the software. Prior versions of P3 will report the new tags as “invalid”. Prior versions of MiniMon will not record the new tags as passive observations and instead write them to a local log file as an invalid tag code.

With this release, P3 now supports the new Biomark HPR Plus portable reader also described in the last newsletter. The announcement of a new multiplexor reader from Biomark is still pending and will require a subsequent release of PTAGIS software that is yet to be scheduled.

Table 1 Available PTAGIS Field Software

Field Software	Type	Latest Release Date	Latest Release Version
P3	Tagging	October 2012	1.5.1
MiniMon	Interrogation	October 2012	1.7.0
PIFF	Utility	July 2011	1.1.0.5

The latest PTAGIS field software releases can be downloaded from the legacy www.ptagis.org as well as the new [beta website](#). **Please note before upgrading:** you will need to perform a manual uninstallation of any MiniMon version 1.5.1 or older (version 1.5.1 was released 5 years ago); rebooting the target computer after uninstallation is also recommended to ensure a successful upgrade.

The PIFF (PTAGIS Interrogation File Formatter) utility software that transforms raw device data into PTAGIS interrogation files will be updated in the coming weeks to support the 2013 M4 deployment. If you have any outstanding needs for this software please contact me ASAP.

M4 Deployment on Schedule

The final high-availability and fault-tolerant features of M4 have been completed and tested. The Kennewick field staff has finished upgrades to the computer rooms at interrogation sites operating separation-by-code. These upgrades were necessary to support the production deployment of M4 for the 2013 season described in the last newsletter article.

The M4 interrogation software is planned as an internal release with deployment at interrogation sites maintained by PTAGIS staff only. This strategy will allow us to focus on evaluating the most complex features of the software related to separation-by-code, high-availability and fault-tolerance.

Sites currently running MiniMon can continue through the 2013 season. The only required action for stewards maintaining these sites is to upgrade MiniMon to version 1.7.0. We will create a public release sometime after the 2013 season adding documentation and support for new readers used exclusively at smaller interrogation sites. ☺