



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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2024 RESULTS OF COMPREHENSIVE PIT TAG EVALUATION

VERL MILLER (Bonneville Power Administration)

Bonneville Power Administration, in coordination with Pacific States Marine Fisheries Commission, is pleased to announce the 2024 results of the Comprehensive PIT Tag Evaluation. We want to thank all participants that took part in this evaluation to provide the best centralized database for PIT-tagged fish in the Columbia River Basin. Biomark had two standard tags meeting evaluation requirements: their HPT9 (9mm) and HPT12 (12mm). Voda IQ is a new entry among standard tags with their HQ9 (9mm).

The range of specialty tags meeting evaluation standards was significantly expanded:

8mm Specialty Tags

1. Hinchinbrook/Avery Denison Smartrac GlassTAG 704587 and 704487
2. EID/Trovan Nano Transponder ID-162/125 and Mini Transponder ID 162/1.4
3. Voda IQ HQ8 Nano

10mm Specialty Tags

1. Voda IQ HQ10
2. Biomark MiniHPT10

Editor's Note: the [PTAGIS Validation Codes](#) have been updated with [tag masks](#) for each of the new tag models listed above. See [FAQ #6](#) for more information. Please remember to update validation codes in P4 tagging software before using the new tags. ☺

NEW CONDITIONAL COMMENT CODE PI

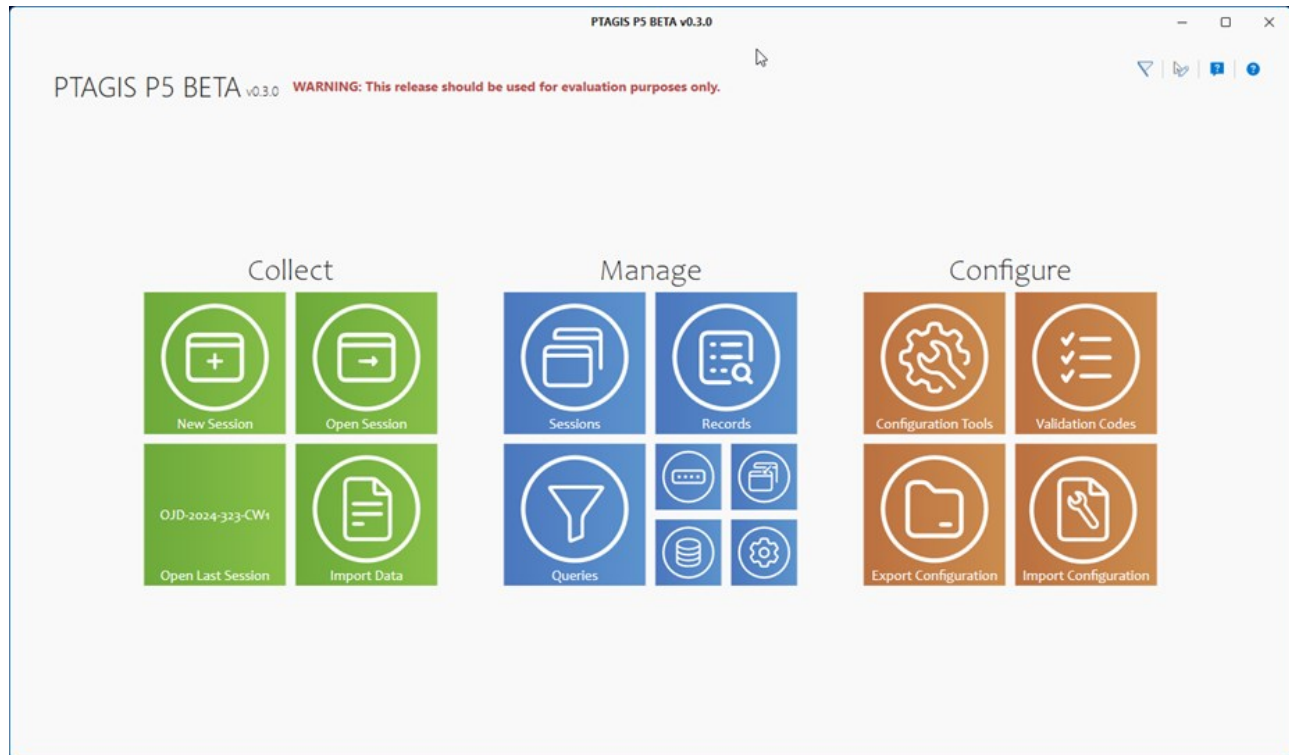
NICOLE TANCRETO (PTAGIS Portland Office)

A new Conditional Comment code has been added to the PTAGIS Validation Codes to help researchers indicate when there have been health issues with a PIT-tagged release group. The code **PI** can be used to indicate a **Potential Issue** with the health of fish at release. The issue could be due to disease outbreaks, rearing equipment failures, or anything else which could have impacted the health of the fish in that group.

If a release group for which you are responsible has experienced such an issue, add the PI code to the *Conditional Comments* field for each tag record in the group, then explain the issue more fully using the *Session Note* field. The Session Note is a large free text field available in the Session Properties in P4. ☺

P5 TAGGING SOFTWARE UPDATE

NICOLE TANCRETO (PTAGIS Portland Office)



A third beta version of P5 (v0.3.0) was released to a focus group this month. P5 has most of the same features and user interface as P4, allowing seasoned users to feel right at home. The focus for P5 is to upgrade the underlying technology and add select new features:

- An Android tablet can now be used as a digitizer
- Field values can now be cleared using Map Commands and Tag Actions
- Installation has been improved
- The UI has been refreshed
- Lengths and weights can be collected in centimeters and kilograms to better support tagging of adult salmonids and other large species
- Improved Bluetooth connectivity to Biomark readers
- Integrated support requests to send questions, screen shots and the P5 database to PTAGIS directly from within P5
- Enhanced CSV import column mapping
- Explicit order of activation for Tag Actions
- Data and configuration can be imported directly from an existing P4 installation

We anticipate releasing P5 for full production use in early 2025. P4 will continue to be supported for at least one year after P5 has been released to ensure there is ample time for users to make the switch.


If you are interested in helping to test P5 beta versions or have a feature request, please feel free to contact Nicole Tancreto at ntancreto@psmfc.org. 📧

HOW TO SAVE AND REFERENCE A SOURCE DATASET IN A PUBLICATION

NICOLE TANCRETO (PTAGIS Portland Office)

Using the PTAGIS [Advanced Reporting](#) system, users can create and save custom queries to export PIT tag data for analysis. The reporting system saves the query definition, not the results set. Every time the saved query is run the query definition is executed against the data as it exists now and any additions, changes or removals will be reflected in the results set.

To save and reference a set of results used in a publication, the data needs to be exported to a file and saved on the PTAGIS server. From there, it can be accessed through the PTAGIS web API and downloaded by anyone using a URL footnote embedded in a publication, such as this one: https://api.ptagis.org/reporting/reports/testingreg/file/BO1_2021_Results.csv.

For more information on how to save a results set and find the URL for that dataset, see this FAQ: <https://www.ptagis.org/FAQ#28> 

STREAMS SUBCOMMITTEE SEPTEMBER 2024 MEETING

NICOLE TANCRETO (PTAGIS Portland Office)

The recently renamed STREAMS (formerly IPTDS) Subcommittee held a meeting on September 26, 2024, during which the following topics were discussed:


- Subcommittee member round robin and agency updates
- NOAA Fisheries R&D Update
- PTAGIS Kennewick Update
- PTAGIS Portland Update
- Biomark Update
- How to submit detections from temporary arrays that are not registered as interrogation sites
- Warning about cell modems being hacked causing large mobile data bills

The full [meeting notes](#) can be viewed in the [Document Library](#).

PIT TAG STEERING COMMITTEE UPDATE

GORDY AXEL (PTAGIS Kennewick Office)

Jesse Lamb has joined the PIT Tag Steering Committee as the NOAA Fisheries representative. Jesse has worked at the NOAA Pasco Research Station since 2006 and has extensive knowledge of the PIT tag program as a user and contributor as well as years of experience on the research and development side of things. He provides feedback on new tagging software for PTAGIS, has assisted with instream detection site installations, all while managing field projects tagging wild spring/summer Chinook parr in the Salmon River Basin. His knowledge and collaborative relationships will be an asset to the committee.

The next PTSC Annual Meeting will be held in January or February 2025. Please contact your PTSC representative before then if you have any questions or concerns. 

PTAGIS O&M SUMMARY 2024

GORDY AXEL (PTAGIS Kennewick Office)

The PSMFC PTAGIS Kennewick office is responsible for ensuring the PIT tag detection systems in main stem juvenile fish bypass facilities and adult fish ladders are functioning at peak performance while those passage systems are in operation. The Kennewick office also monitors and cooperatively maintains Separation by Code (SbyC) hardware at nine of those facilities, allowing researchers to selectively separate PIT-tagged fish as they move through passage facilities. The Kennewick staff continues to provide technical assistance for multiple other projects involving the installation or development of new detection systems.

Juvenile fish bypass facilities on the Snake and Columbia Rivers began operating in March and April. Detection efficiency rates for 2024 are being kept at or above the previous year's rates of greater than 99%. The single antenna in the Bonneville Corner Collector (BCC) is the exception to this with an estimated efficiency rate in the seventies based on prior NOAA live fish testing using 12mm tags. 2024 BCC YTD detections are 49,894.

Separation by Code diversion efficiency (SbyC) rates remain high for 2024 with all diversion gates above 97%.

Adult ladder efficiency remains high in dam-to-dam comparisons. All sites maintained an approximate 98 to 99% detection efficiency over a 12-month rolling report period.

Other PTAGIS Field Office Projects for 2024

Bonneville Dam Powerhouse 1 Ice and Trash Sluiceway PIT tag antenna design

PTAGIS Kennewick team continues to work closely with the USACE-Portland District PDT regarding the antenna shield construction and structural modifications to the chain gate. The objective is to mount a series of 4 PIT tag antennas on the top of the chain gate in slot 1B. The structural and mechanical engineering required for this project is being provided by the USACE Portland District. The shield design is nearly 100% complete and NOAA will submit the design for construction this winter. Antennas are being constructed in the Kennewick office by staff. Installation is targeted for spring 2025.

B04 ladder remodel

The Washington Shore upper ladder is currently being redesigned to improve fish passage in the area of the existing B04 PIT tag antennas. New antennas have been built and are ready to install when construction begins in either 2024 or 2025.

Electronic Diversion Gate Installation

An effort was completed in 2022 for the first SbyC system at Lower Monumental juvenile fish facility that uses all new electronic diversion gate actuators. This system was developed by Mark Leonard in the Kennewick office. Mark is planning to install a similar system at Lower Granite this winter and Little Goose next year.

PTAGIS O&M SUMMARY 2024 - CONTINUED FROM PAGE 5

GORDY AXEL (PTAGIS Kennewick Office)

Klickitat Hatchery detection system design

Drawings have been submitted for using thin body antennas for adult and juvenile detections of fish at the Klickitat Hatchery, currently in the process of a large construction upgrade. We plan to have the detection systems operational in the winter of 2025/26.

Remote Site Communications Upgrades

Scott Livingston and Darren Chase have replaced communications systems at Easton, Jack Creek and Clark Flat acclimation ponds, Rapid River Hatchery Pond, Roza Dam, Castille Falls, and McNary Dam. These systems were upgraded to Starlink systems that are more reliable and cost-effective.

PTAGIS Data Collection Platform (DCP)

Roger Clark performed the annual Windows 10 LTSC (Long Term Service Contract) updates. These updates install security patches and other important Windows components to ensure the DCPs remain secure and stable. Note: Due to the lean nature of the Win 10 LTSC along with PTAGIS DHCP's update policies, these system-wide update activities are performed on an annual basis only, generally in the late fall when fish movement is low. Standard operating procedure was followed to ensure no PIT tag detections were lost during this upgrade process.

McNary Dam Spillway Detection

Kennewick staff are collaborating with USACE Walla Walla District and NOAA to identify and develop a PIT detection system that would boost detections of fish passing through a spill bay at McNary Dam. Ideas will be presented to regional agencies for a final selection to be made at a later date.

PIT Tag QA and Delivery

Jennifer Lundy and Roger Clark continue to provide oversight of annual tag quality assurance and timely delivery for BPA orders. The Kennewick lab tests ~3% of the PIT tags distributed throughout the region in order to verify optimal results for Columbia River Basin passage and survival estimation. 🌀