



PIT Tag Information System

Columbia Basin

Portland PTAGIS 2020 Update and Plans for 2021

presented at

2021 PIT Tag Steering Committee Annual Meeting

John Tenney, PSMFC

Meeting Agenda

Time	ITEM
09:00 – 09:15	Review action items from 2020 annual meeting (John)
09:15 – 10:00	PTAGIS Systems Update (John)
10:00 – 10:15	Break
10:15 – 11:00	PTAGIS O&M Update (Don)
11:00 -- 11:30	NOAA R&D Update (Gabe/Gordy)
11:30 – 12:00	IPTDS Subcommittee Update (Gabe/Ben)
12:00 – 12:30	Break
12:30 – 01:30	2022 PIT Tag Workshop Planning (John)
01:30 – 02:00	New PTAGIS Website Evaluation and Deployment (John, Nicole)
02:00 – 02:15	Break
02:15 – 02:30	Review Updating Interrogation Site RKM Values (Nicole)
02:30 – 03:00	Wrap Up

Review Action Items from 2020 PTSC Annual Meeting

- **Don will start process to install a new site at Easton Dam**
- **Don will work with Gabriel on R&D for expansion of Castile Falls site**
- **Charlie will work with FPAC/FPOM to request that USACE sign over Lower Granite ladder entrance and exit antennas to PSMFC so PTAGIS can take over O&M. Charlie will invite Don to join the next FPAC face-to-face meeting.**
- **Don will work with Gabriel and Gordy to draft thank you letter to USACE regarding collaboration on GRS and other projects**
- **Nicole will work on draft of Call for Presentations for the 2021 workshop, send to PTSC for review**
- **Nicole will send an announcement about the 2021 workshop to PTAGIS newsletter list and include information about registration fees so projects can add to their next contracts. Potential to also include a survey about topics for the workshop.**
- **John will work with PTSC and Tom on oral history for 2021 workshop keynote and work on an outline for PTAGIS retrospective: past, current and future direction**
- **Tiffani will provide USACE contact for tag distribution**
- **Will Simpson will provide USFWS contact for tag distribution**
- **PTAGIS will add an event log feature for trap MRR sites**
- **PTAGIS will update Length definition to include guidance about precision and consider adding a Length Source field to P4**

2020 Mark/Release Contributions

27

Organizations

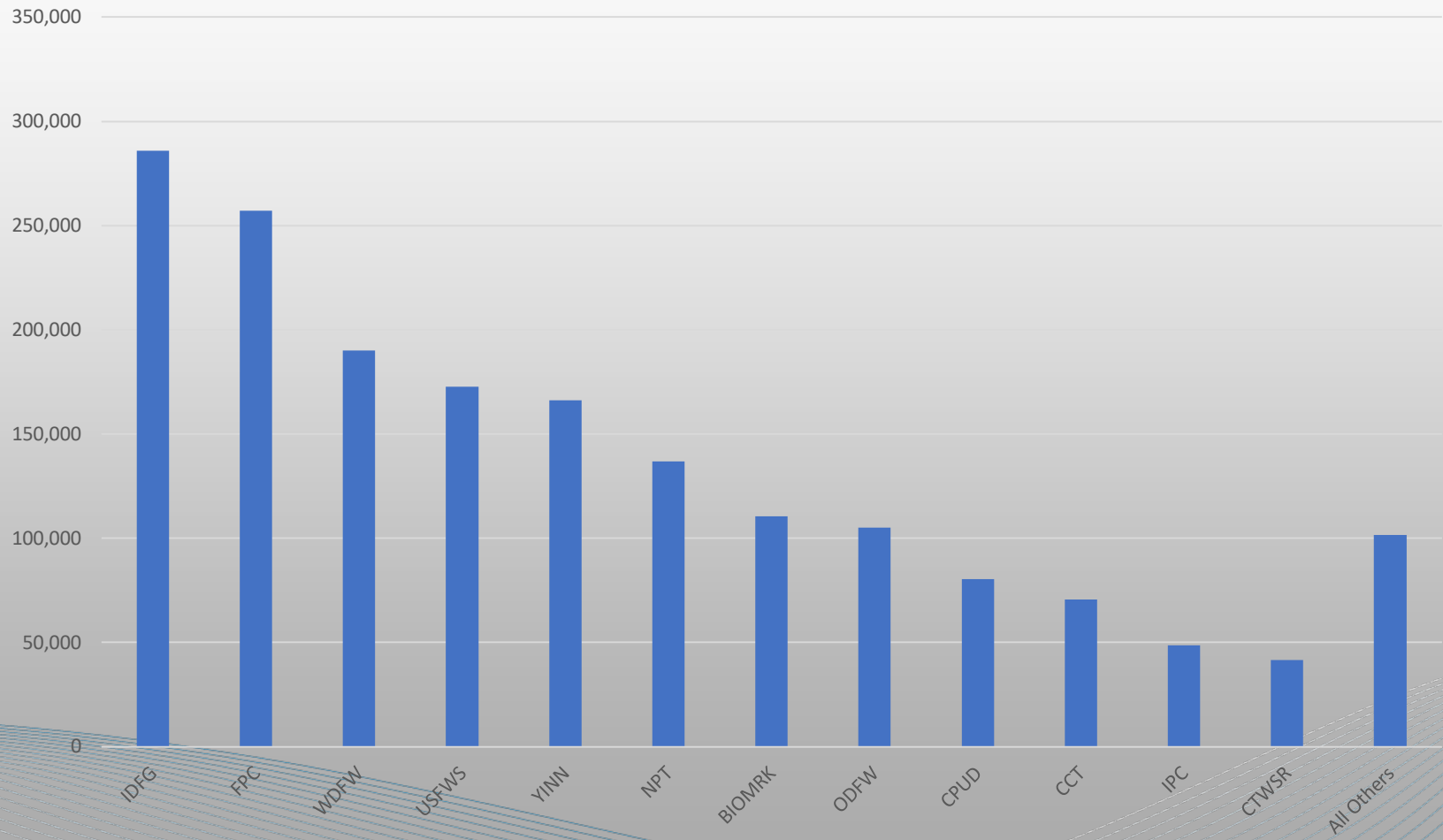
1.77

**Million
PIT-tagged
Fish
Released**

323

**Release
Locations**

2020 Releases by Organization



Observation Data Processed in 2020

824

**Thousand
Unique
Tags**

10.1

**Million
Observations**

277

**Interrogation
Sites
(30 PTAGIS Sites)**

2020 PTAGIS Website Activity

45

**Thousand
Visits**

9

**Thousand
Unique Visitors**

115

**Thousand
Pages Viewed**

2020 Summary of Advanced Reporting Usage

539

Users

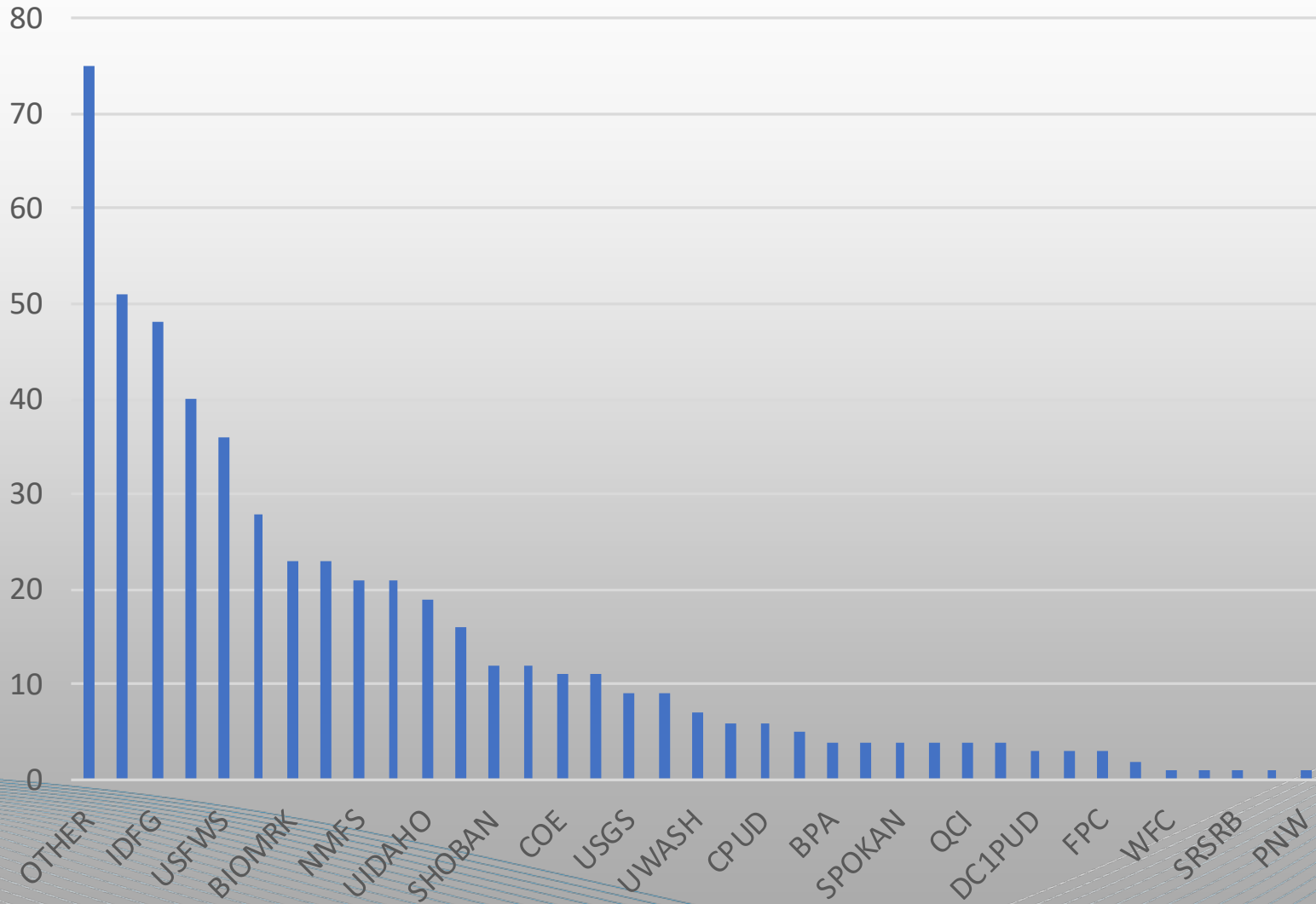
420

**Thousand Jobs
Ran**

13.3

**Billion
Rows
Returned**

2020 Users of Advanced Reporting by Organization



2020 Separation-by-Code (SbyC) Coordination

14

Projects

57

**Action Codes
(target groups)**

693

**Thousand
Target Tag
Codes**

2020 Coordination Activities:

Coordination Type	Action	Count
Validation Codes	Added/Updated	18
MRR Sites		24
Interrogation Sites	Added	13
	Decommissioned	5
	Updated	131
Newsletters	Published	2
News Items		10
Video Tutorials		5
Support Requests	Fielded	~15/mo.
Meetings	Coordinated	4
	Participated	6

P4 Tagging Software

- **2020 Activities:**

- 14K files submitted in 2020
- 4 updates released in 2020:
 - Bug fixes, deployment enhancements, documentation
 - Support for RKM Extension value > 999
 - Enhanced appending values to fields

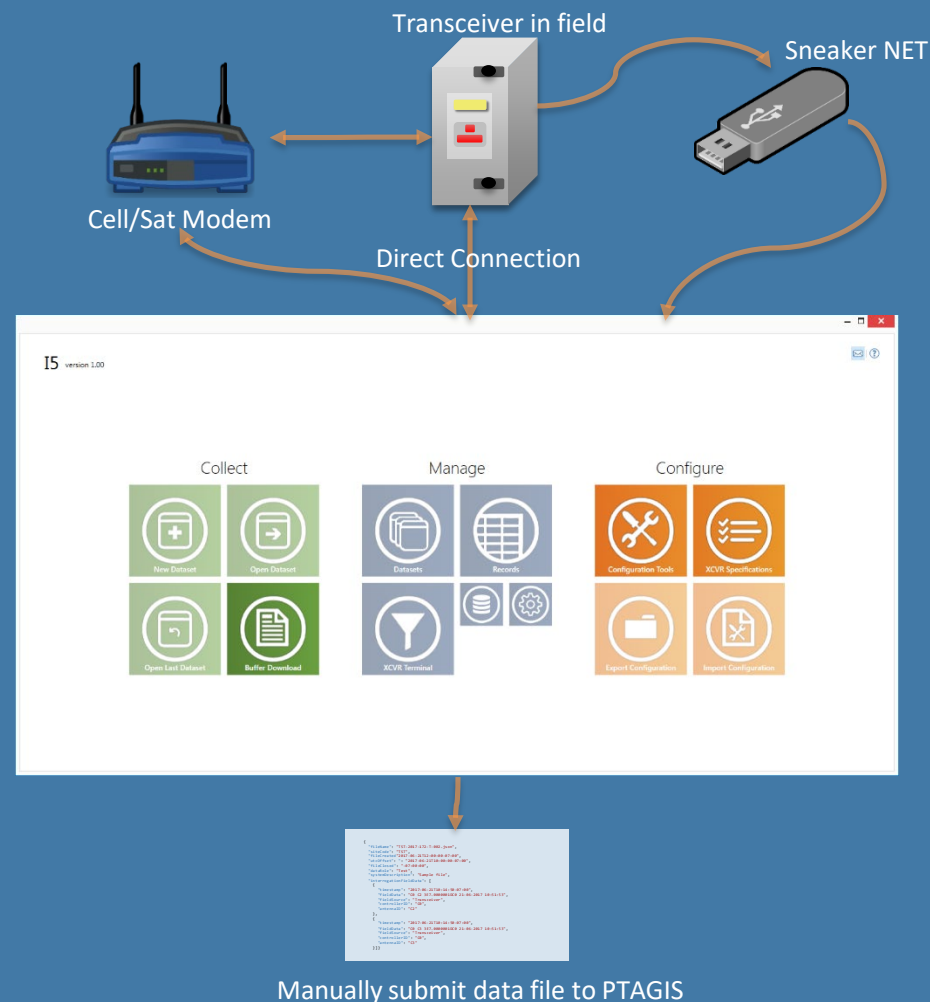
- **2021 Plans:**

- Ensure file submissions with new Web API deployment
- Consider major upgrade (P5):
 - Review usage scenarios (telemetry and polls)
 - Review P4 database requirements (SQL Server vs SQLite)
 - Review platform needs, *e.g.* tablet interface
 - Port to latest .NET Core Framework (aka .NET5)



I5 Interrogation Software (extended PIFF)

- Background:
 - Software runs on PC
 - Configurable data collection
 - Supports IS1001, IS1001-MTS, FS1001M (instream readers)
 - Data management features for QA/QC
 - Manual uploads to PTAGIS only
- 2020 Activities:
 - Redesigned and simplified
 - Features to handle duplicate data downloads
 - Demonstrated at IPTDS meeting
- 2021 Plans:
 - Refine with IPTDS focus group
 - Production release



M5 Interrogation Software

• 2020 Activities:

- Deployed in-situ at JO1
- Implemented SbyC features
- Evaluated SbyC performance (KLAB)
- Draft documentation

• 2021 Plans:

- Continue evaluation of SbyC features
- Additional in-situ deployments
- Community release to replace MiniMon
 - After new Web API is in production
- Deploy into production at PTAGIS sites with DCP upgrades (late 2021/2022)

The screenshot shows the M5 MS Control Panel interface. It includes a menu bar (Operations, Data, Tools, Help) and three status sections: Site Monitor, Data Logging, and File Submission. Below these is a log table with columns for Time, Source, and Field Data. The status bar at the bottom indicates the software is connected to M5 Host Service 1.3 on localhost.

Time	Source	Field Data
01/05/2021 13:06:20	02	INF: Start Of Noise Report
01/05/2021 13:06:20	02	Present Noise: 97 mV (10%)
01/05/2021 13:06:20	02	Maximum Noise: 117 mV (13%)
01/05/2021 13:06:20	02	Average Noise: 95 mV (10%)
01/05/2021 13:06:20	02	Time Averaged Over: 0:10:00
01/05/2021 13:06:20	02	NRP: 02 01/05/2021 13:07:28.000 10,13,10,600
01/05/2021 13:06:20	02	INF: End Of Noise Report
01/05/2021 13:06:27	04	INF: Start Of Noise Report
01/05/2021 13:06:27	04	Present Noise: 55 mV (6%)
01/05/2021 13:06:27	04	Maximum Noise: 75 mV (8%)
01/05/2021 13:06:27	04	Average Noise: 58 mV (6%)
01/05/2021 13:06:27	04	Time Averaged Over: 0:10:00
01/05/2021 13:06:27	04	NRP: 04 01/05/2021 13:07:35.000 6,8,6,600
01/05/2021 13:06:27	04	INF: End Of Noise Report
01/05/2021 13:06:30	03	INF: Start Of Noise Report
01/05/2021 13:06:30	03	Present Noise: N/A
01/05/2021 13:06:30	03	Maximum Noise: 88 mV (9%)
01/05/2021 13:06:30	03	Average Noise: 62 mV (6%)
01/05/2021 13:06:30	03	Time Averaged Over: 0:10:00
01/05/2021 13:06:30	03	NRP: 03 01/05/2021 13:07:37.000 0,9,6,600
01/05/2021 13:06:30	03	INF: End Of Noise Report
01/05/2021 13:06:34	01	INF: Start Of Noise Report
01/05/2021 13:06:34	01	Present Noise: 75 mV (8%)
01/05/2021 13:06:34	01	Maximum Noise: 100 mV (10%)
01/05/2021 13:06:34	01	Average Noise: 75 mV (8%)
01/05/2021 13:06:34	01	Time Averaged Over: 0:10:00

SbyC Configuration Manager

PTAGIS SbyC Configuration Manager v.1.1.1

GRJ - Lower Granite Dam Juvenile SbyC Configuration

B2J

System Status | Edit Protocol | Actions

GRJ SbyC Calendar

September 5, 2020

A-SEPARATOR GATE SATURDAY, 5	B-SEPARATOR GATE SATURDAY, 5	DIVERSION / SBYC GATE SATURDAY, 5	SBYC GATE SATURDAY, 5	RCWY-10 GATE SATURDAY, 5
<ul style="list-style-type: none"> 1899 - Yankee Fork Rel 1917 - Broodyear 2018 1800 - Haggerman Hat 1799 - Magic Valley Ha 1798 - Clearwater Hatc 1797 - Dworshak Hatc 1796 - Tucannon Hatc 1902 - Powell Summer: 1795 - Lookingglass Hz 1793 - McCall Hatchery 1792 - Dworshak NFH I 1791 - Rapid River Hat 1801 - Niagara Springs 1802 - Aggregate wild 1804 - Hatchery fall Ch 1794 - Lookingglass Hz 1903 - USR Steelhead f 	<ul style="list-style-type: none"> 1899 - Yankee Fork Rel 1901 - Lower Selway Ri 1800 - Haggerman Hat 1799 - Magic Valley Ha 1798 - Clearwater Hatc 1797 - Dworshak Hatc 1795 - Lookingglass Hz 1902 - Powell Summer: 1794 - Lookingglass Hz 1792 - Dworshak NFH I 1791 - Rapid River Hat 1801 - Niagara Springs 1796 - Tucannon Hatc 1802 - Aggregate wild 1803 - Springfield Hatc 1793 - McCall Hatchery 1903 - USR Steelhead f 	<ul style="list-style-type: none"> 254 - Green Stick Tags 1867 - Elk Creek - Colle 1866 - Bear Valley - Co 1868 - Herd Creek - Co 1871 - Lake Creek - Co 1869 - Valley Creek - C 1870 - Secesh River - C 1872 - South Fork Salmr 1873 - Upper Big Creek 1865 - All Coordinator 255 - Orange Stick Tag 1875 - Chamberlain Cr 1876 - WF Chamberlainr 1877 - Camas Creek - C 1878 - Sulphur Creek - C 1879 - Loon Creek - Cc 1880 - Marsh Creek - C 	<ul style="list-style-type: none"> 1881 - Cape Horn Cree 1866 - Bear Valley - Co 1865 - All Coordinator 1868 - Herd Creek - Co 1869 - Valley Creek - C 1870 - Secesh River - C 1871 - Lake Creek - Co 1872 - South Fork Salmr 1873 - Upper Big Creek 1867 - Elk Creek - Colle 255 - Orange Stick Tag 1874 - Lower Big Creek 1875 - Chamberlain Cr 1876 - WF Chamberlainr 1877 - Camas Creek - C 1878 - Sulphur Creek - C 1879 - Loon Creek - Cc 	

8
9
10
11
12 PM
1
2

August 2020

Su	Mo	Tu	We	Th	Fr	Sa
31	26	27	28	29	30	1
32	2	3	4	5	6	7
33	9	10	11	12	13	14
34	16	17	18	19	20	21
35	23	24	25	26	27	28
36	30	31				

September 2020

Su	Mo	Tu	We	Th	Fr	Sa
36		1	2	3	4	5
37	6	7	8	9	10	11
38	13	14	15	16	17	18
39	20	21	22	23	24	25
40	27	28	29	30	1	2
41	4	5	6	7	8	9

Today

- A-SEPARATOR GATE
- B-SEPARATOR GATE
- DIVERSION / SBYC...
- SBYC GATE
- RCWY-10 GATE

OK

SbyC Configuration Manager

PTAGIS SbyC Configuration Manager v.1.1.1

GRJ - Lower Granite Dam Juvenile SbyC Configuration

System Status

Configuration:

System:

Diversion Gates:

Actions

Operational Status:

Configuration:

Quota:

Configuration

Validate... Calendar... Deploy...

Protocols Action Codes Bindings System **Builds**

Build current SbyC configuration for deployment. Press DELETE key to remove selected build. Create...

Build File	Build Date	Last Deployed On	Description	Total Tags
GRJ-SBYC-2020-006.json	09/29/2020 13:06		Includes disabled protocols per issue #58	585,761
GRJ-SBYC-2020-005.json	07/16/2020 11:10		test new starttime fix	581,398
GRJ-SBYC-2020-004.json	06/25/2020 10:44		Removed AC 1800 tags	581,398
GRJ-SBYC-2020-003.json	06/25/2020 10:29		disabled Tiffan protocol	593,396
GRJ-SBYC-2020-002.json	06/25/2020 10:09		100 new tags in 1876	597,759
GRJ-SBYC-2020-001.json	06/25/2020 09:48		testing	597,659

Build Total: 6

SbyC Configuration Manager (Deployment)

PTAGIS Server

PTAGIS SbyC Configuration Manager v1.1.1

GRJ - Lower Granite Dam Juvenile SbyC Configuration

System Status: Configuration, Operational Status, System, Configuration, Diversion Gates, Quota, Actions

Configuration: Protocols, Action Codes, Bindings, System, Builds

Build current SbyC configuration for deployment. Press DELETE key to remove selected build.

Build File	Build Date	Last Deployed On	Description	Total Tags
GRJ-SBYC-2020-006.json	09/29/2020 13:06		Includes disabled protocols per issue #58	585,761
GRJ-SBYC-2020-005.json	07/16/2020 11:10		test new starttime fix	581,398
GRJ-SBYC-2020-004.json	06/25/2020 10:44		Removed AC 1800 tags	581,398
GRJ-SBYC-2020-003.json	06/25/2020 10:29		disabled Tiller protocol	583,386
GRJ-SBYC-2020-002.json	06/25/2020 10:09		100 new tags in 1876	597,759
GRJ-SBYC-2020-001.json	06/25/2020 09:48		testing	597,659

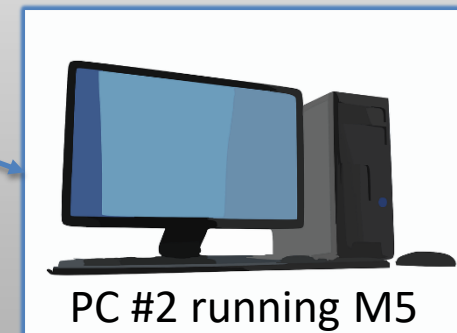
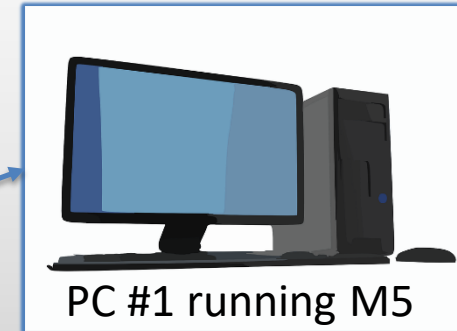
Build Total: 6

```

"siteCode": "GRJ",
"buildDate": "2020-09-29T13:06:31.0172266-07:00",
"sbycClientType": "ActivePassive",
"primaryHostName": "k1ab-m5-pheonix.pamfc.org",
"backupHostName": "john-wa2-w10.pamfc.org",
"siteOptions": {
  "cpuType": "S10",
  "ipAddress": "192.168.114.9",
  "mask": "24",
  "connectionTimeout": 1000,
  "watchdogTag": "M2116.4",
  "transactionTimeout": 0
},
"ignoreTagMask": "3ET,0000001D",
"isDirectAllModeEnabled": false,
"facilityOpenTime": "06:00:00",
"protocols": [
  {
    "protocolID": 10,
    "description": "Stick Tags Only",
    "isEnabled": true,
    "startDate": "2020-01-01T00:00:00",
    "startTime": "06:00:00",
    "endDate": "2020-12-31T00:00:00",
    "duration": 24,
    "associatedActionCodes": [
      254,
      255
    ]
  },
  {
    "protocolID": 23,
    "description": "Monitor Only",
    "isEnabled": true,
    "startDate": "2020-07-01T00:00:00",
    "startTime": "06:00:00",
    "endDate": "2020-12-31T00:00:00",
    "duration": 24,
    "associatedActionCodes": [
      1791,
      1792,
      1793,
      1794,
      1795,
      1796,
      1797,
      1798,
      1800,
      1801,
    ]
  }
]

```

GRJ Interrogation Site



Data File Repository and Audit

PTAGIS Data File Repository Browser 1.2.3 (Production)

- Interrogation Files
- Primary
- Secondary
- Audit Files**
- More
- Interrogation Submissions
- Loaded
- Submit
- More
- MRR Files
- All
- Audit MRR Files
- More
- MRR Submissions
- Loaded
- Submit
- More

Options for Interrogation File Audit

Site Codes:

(Select All)

158

15D

15R

18M

18N

18C

11C

28C

21C

30M

3D1

3D2

3D3

3D4

Year Range: 1990 1990 .. 2021 2021

Only audit files previously not recorded: Yes No

Filter files created in last 24 hours: Yes No

Log Observation Detail: Yes No

Interrogation File Audit Results

Root Folder: \\ptagisfiles\RawDataFiles\Interrogation\Loaded Folders To Audit: 33 Folders Audited: 33 Status: Audit completed without any errors. Elapsed Time: 00:00:00:01

Site Code	Year	Folder Audited	Status	Files Audited	Files Skipped	Files Processed	Error
15D	2019	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\15D\2019	✔	0	16	16	
15D	2017	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\15D\2017	✔	0	54	54	
18M	2017	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\18M\2017	✔	0	48	48	
18M	2015	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\18M\2015	✔	0	2	2	
18M	2019	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\18M\2019	✔	0	4	4	
18M	2018	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\18M\2018	✔	0	113	113	
15D	2018	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\15D\2018	✔	0	31	31	
18M	2020	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\18M\2020	✔	0	665	665	
3D1	2013	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D1\2013	✔	0	8	8	
3D1	2014	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D1\2014	✔	0	6	6	
18M	2021	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\18M\2021	✔	0	52	52	
11C	2020	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\11C\2020	✔	0	12	12	
3D1	2015	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D1\2015	✔	0	3	3	
3D1	2016	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D1\2016	✔	0	6	6	
3D3	2014	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D3\2014	✔	0	4	4	
3D3	2013	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D3\2013	✔	0	7	7	
3D1	2017	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D1\2017	✔	0	3	3	
3D3	2015	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D3\2015	✔	0	2	2	
3D3	2016	\\ptagisfiles\RawDataFiles\Interrogation\Loaded\3D3\2016	✔	0	3	3	

1,552 files

Tag Inventory Manager (TIM)

Complete Tag History for 3D9.1BF1234567

Mark and Release Information

Species	Fall Chinook (unknown r/t)
Mark Date	07/27/2001
Mark Site	MCN - McNary Dam
Mark Site Type	Dam
Release Date	07/28/2001
Release Site	MCNRRR - MCN - Release below the PIT-Tag Diversion System Gate with subsequent Return to the River at the Facility
Release Site Type	Intra-Dam Release Site
Release Site RKM	470
Event Capture Method	Bypass Sub-Sample
Length	121

File and Project Information

MRR Project	DMM - Tiffani Marsh Projects
Coordinator	Tiffani Marsh
File Name	DMM01208.MR2
Session Message	RETURN TO RIVER MCNARY 2001

Tag Distribution Information

Distributed By	PTAGIS
FWP Project	1993-029-00 - Survival Estimate For Passage Thru Snake & Columbia R
Project Contact	William Muir
Tag Recipient	Penny Smith
Ship Date	05/07/2001
Tag Type	12 millimeter PIT tag
Tag Model	TX1411BE

Event Summary

Tag	Event Date	Event Type	Event Site	Event Site RKM	Event Release Date	Event Release Site	Event Release Site RKM
3D9.1BF1234567	07/27/2001	Mark	MCN	470	07/28/2001	MCNRRR	470

<input type="checkbox"/>	APT067800	1/16/2020		Approved	6112	2008-503-00	Jeff Fryer, CRITFC	<input checked="" type="checkbox"/>	6/1/2021	6/15/2021	500 12pi
<input type="checkbox"/>	APT067900	1/16/2020		Approved	6114	1993-056-00	Chris Tatara, NMFS	<input checked="" type="checkbox"/>	6/1/2021	7/19/2021	18,000 12pi
<input type="checkbox"/>	APT068000	1/16/2020		Approved	6068	1996-020-00-01	Brandon Chockley, FPC	<input checked="" type="checkbox"/>	7/1/2021	7/26/2021	107,100 12mm

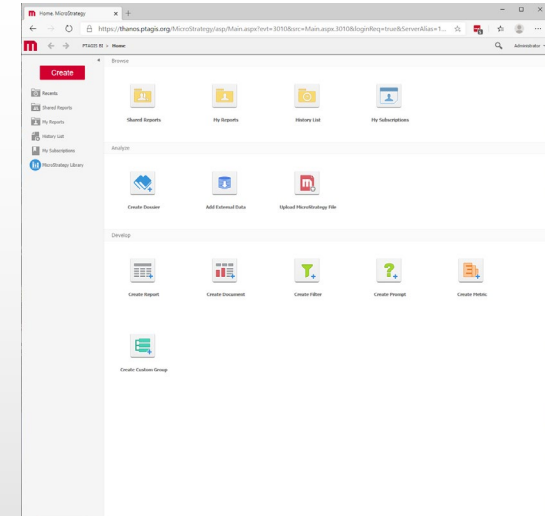
Database and Reporting Activities:

• 2020 Activities:

- New reporting server provisioned, configured, evaluated
- Database upgrades completed:
 - Support new interrogation data model
 - Support new data file repository and audits
 - Dimensional model
 - O&M Reports (TSR, ALE, CEA)
 - Schema and data migration in support new website

• 2021 Plans:

- Production deployment of new reporting server
- Refinement of database features for new website production deployment
- Consolidation of data submission: FTP, Email => HTTPS
- Review system security and backups with PSMFC IT



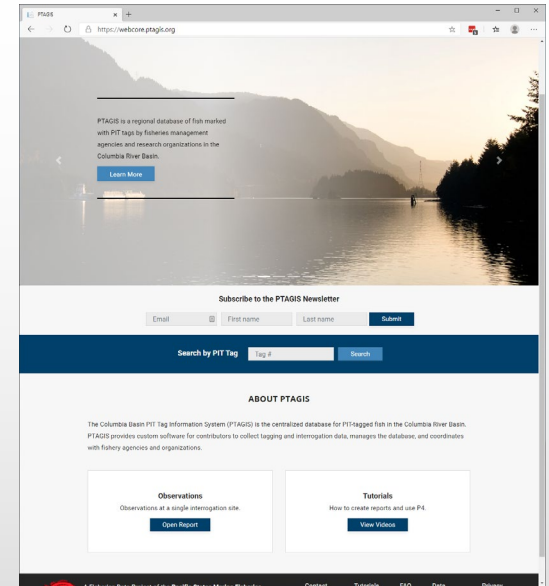
Website Activities

- **2020 Activities for new website:**

- Design and layout completed
- Integration with reporting server completed
- Advanced features mostly completed
- Database and user account migration completed
- New webserver provisioned, configured and evaluated
- Internal testing

- **2021 Plans:**

- Internal testing continues
- Deploy beta release for focus group evaluation, refine features
- Production release, user coordination, and retire current website
- Continue to refine features



PIT Tag Workshop Considerations

- **In-Person Workshop in 2022 or 2023?**
 - Covid Restrictions
 - Travel Budgets
 - Venue
- **Virtual Workshop in 2022?**
 - Recorded presentations with chatrooms
 - Vendor presentations
 - Multitrack conference
 - Unlimited participation
- **Technical Coordination: in-person > virtual**

2022 PIT Tag Workshop

- **When:** week of January/February, 2022 (TBD)
- **Where:** Skamania Lodge, Stevenson, WA (TBD)
- **Who:** similar audience as 2015 Workshop
- **What:** similar format as 2015 Workshop
- **How:** requires even more logistical support from PTAGIS staff than past workshops



Proposed Workshop Schedule:

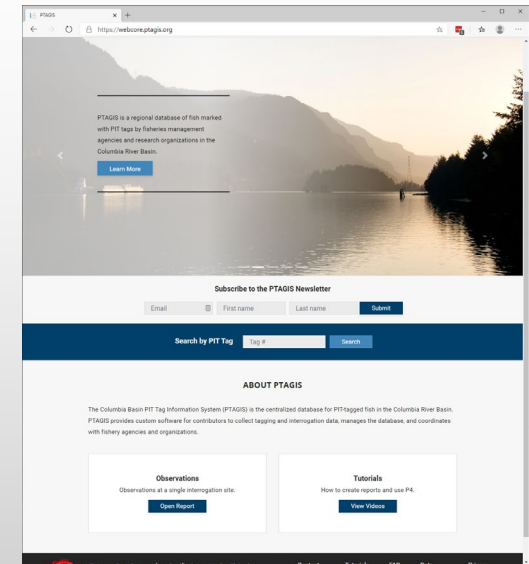
Day	Time	Description
Monday	12:00 PM – 05:00 PM	Venue setup for registration with staff
Tuesday	07:00 AM – 05:00 PM	Workshop Check-In/Vendor Setup
	01:00 PM – 02:00 PM	Workshop Introduction and Opening Presentations
	02:00 PM – 03:00 PM	Research and Monitoring Applications
	03:00 PM – 03:20 PM	Break
	03:20 PM – 05:00 PM	Research and Monitoring Applications (cont.)
	05:00 PM – 07:00 PM	Welcome Reception
Wednesday	07:00 AM – 08:00 AM	Breakfast Buffet
	08:00 AM – 10:00 AM	Data Modeling and Analysis
	10:00 AM – 10:20 AM	Break
	10:20 AM – 12:00 PM	Tag Effects
	12:00 PM – 01:00 PM	Lunch Buffet
	01:00 PM – 03:00 PM	Detection Methods
	03:00 PM – 03:20 PM	Break
	03:20 PM – 05:00 PM	Detection Methods (cont.)
Thursday	07:00 AM – 08:00 AM	Breakfast Buffet
	08:00 AM – 10:00 AM	Other PIT Tag Applications
	10:00 AM – 10:20 AM	Break
	10:20 AM – 12:00 PM	Data Management and Coordination
	01:00 PM – 03:00 PM	PTAGIS Training/IPTDS Session
Friday	08:00 AM – 03:00 PM	Annual PTSC Meeting w/ Room Service Lunch @ Noon

Other Workshop Considerations

- **Obstacles preventing full attendance**
- **Workshop costs:**
 - Registration fee: \$300
 - Vendor booth rental: \$500 (in addition to registration fee)
 - GSA room rate: \$157/night + 9.2% tax (TBD)
 - Meals included:
 - **Tuesday:** evening reception (vendor sponsorship)
 - **Wednesday:** breakfast, lunch
 - **Thursday:** breakfast, lunch
- **Registration start date? Survey?**
- **Presenter coordination and moderation**
- **Vendor area and poster sessions**
- **Keynote presentation**
- **Venue 'Green Choice Program' (Opt-In)**
 - No housekeeping service
 - Guests \$5 voucher per day for individual dining or retail
 - Guests can request extra towels, supplies, quick cleanups

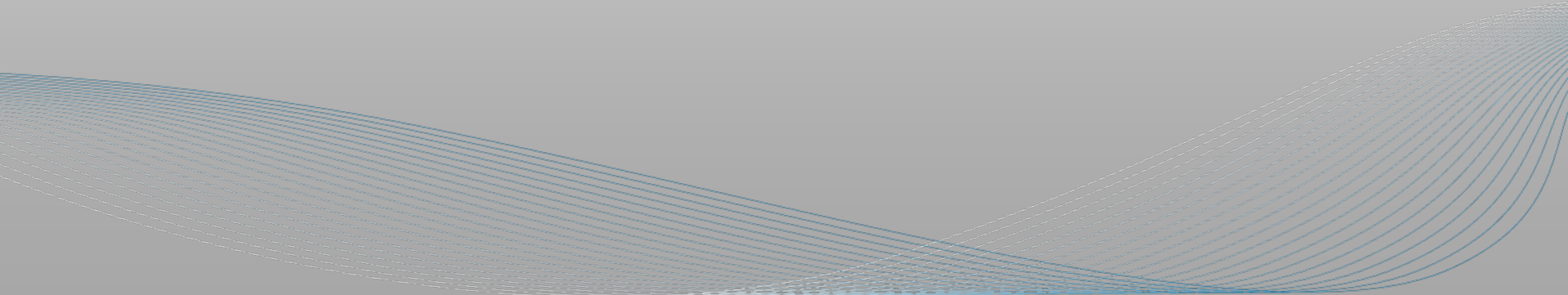
Plans for PTAGIS Website Production Rollout in 2021

- **PTSC, IPTDS evaluate website**
 - Provide guidance/webinar for evaluation
 - Email Nicole questions, concerns, ideas
 - Schedule for production release based upon evaluation results
- **Production Rollout**
 - Technical coordination (newsletter etc.)
 - User account migration
 - Additional features and refinement



Changing RKM Values for Interrogation Sites

Moving Interrogation Sites

- Only allowed to move up or down in the same stream
 - Usually move because stream has rerouted or because original location is problematic
 - 7 sites to date have moved > 1km
 - Average move is 2km
 - ~68k observation records
- 

Two Methods for Recording and Reporting Interrogation Site RKM

RKM of Current Location Reported for All Detections

- Metadata table has both original and new RKM values
- All detections are linked to the new value
- Distance and general time of move is in site description on the

Interrogation Site Metadata

Table Code	RKM	Start Date	End Date
WRU	251.030	10-12-2012	10-6-2016
WRU	251.02	10-6-2016	

Query Builder Report

Tag	Site	Site RKM	Obs Count
384.1B797295D9	WRU - Upper Wind River (WA) rkm 30	251.028	1
384.1B79729828	WRU - Upper Wind River (WA) rkm 30	251.028	13
384.1B79729AB4	WRU - Upper Wind River (WA) rkm 30	251.028	16
384.1B79729B1A	WRU - Upper Wind River (WA) rkm 30	251.028	4
384.1B79729C54	WRU - Upper Wind River (WA) rkm 30	251.028	1
384.1B79729D69	WRU - Upper Wind River (WA) rkm 30	251.028	1
384.1B7972A0E2	WRU - Upper Wind River (WA) rkm 30	251.028	1
384.1B7972A4F9	WRU - Upper Wind River (WA) rkm 30	251.028	2
384.1B7972A843	WRU - Upper Wind River (WA) rkm 30	251.028	2

WRU - UPPER WIND RIVER (WA) RKM 30

An instream interrogation system on the Wind River, WA. In its original configuration the site was located at river kilometer 30 near the FR3065 bridge over the Wind River and had 6 antennas in two arrays. After a flood event in December 2015 damaged all but one of the antennas, the site operated sporadically until it was **relocated in October 2016 to a location 2 km downstream** of its original location and reinstalled with three 20ft antennas. In September 2017, a 2nd array of three antennas was added to the site.

Two Methods for Recording and Reporting Interrogation Site RKM (cont.)

RKM of the Location When the Detection Reported to PTAGIS

- When observation is reported to PTAGIS, the RKM value at that time is recorded into the observation dimensional model table

Observation Dimensional Model Table

Code	RKM	Obs Date	Tag
WRU	251.030	10-1-2015	3D9.1234567
WRU	251.028	10-6-2016	3D9.7654321

Observation Data Extract File

ObsDateTime	ObsXcvtReads	DimFileID	DimDayID	DimIntSiteID	ObsEventID	ObsDate	DimTagID	DimAntennaGroupID
2020-12-31 19:56:54	1	10017027	20201231	430	353559688	2020-12-31	51867708	8665
2021-01-03 12:20:22	1	10017854	20210103	55	353572955	2021-01-03	26198766	8628
2021-01-03 13:03:22	1	10017854	20210103	55	353573066	2021-01-03	26198766	8628
2021-01-03 18:43:04	1	10018234	20210103	442	353579097	2021-01-03	45907634	8797
2020-12-31 09:16:54	1	10017027	20201231	430	353559550	2020-12-31	51867708	8665
2021-01-03 17:11:29	1	10018186	20210103	189	353578526	2021-01-03	52144002	8786
2021-01-03 07:21:09	1	10017352	20210103	182	353564851	2021-01-03	50886330	3635
2021-01-03 14:54:22	1	10017854	20210103	55	353573160	2021-01-03	26198766	8628
2021-01-03 01:59:25	1	10016761	20210103	55	353554323	2021-01-03	26198766	8628
2021-01-03 18:39:22	1	10018205	20210103	55	353578772	2021-01-03	26198766	8628
2021-01-02 22:40:24	1	10016559	20210102	55	353551242	2021-01-02	26198766	8628
2021-01-03 19:33:04	1	10018234	20210103	442	353579619	2021-01-03	45907634	8797
2021-01-02 22:08:05	1	10016740	20210102	442	353557378	2021-01-02	45907634	8797
2021-01-03 10:11:24	1	10017509	20210103	55	353567839	2021-01-03	26198766	8628
2021-01-03 04:41:47	3	10017231	20210103	91	353563434	2021-01-03	51508117	8750
2021-01-02 22:55:05	1	10016740	20210102	442	353557212	2021-01-02	45907634	8797
2021-01-03 15:19:22	1	10017854	20210103	55	353573116	2021-01-03	26198766	8628

Changing RKM Values for Interrogation Sites

Decision Points

- Reporting system and data extracts are using different methods to report interrogation site RKM – they should be the same. Which one should be used?
 - IPTDS Subcommittee?
 - Show location changes more explicitly on metadata page?
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