

Spawning Ground Survey123 Forms

Michelle Steg-Geltner, YN

Tribal Data Workshop

April 13, 2022

Spawning Ground Survey

- Showed them what is possible.
- Staff still getting used to digital data entry.
- Starting simple, other surveys
- Building flexible form to accommodate different projects
- Plan to try out next year

Methow Basin - Coho - Spawning Ground Surveys													
River _____			Species <u>Coho Salmon</u>			Samplers: _____							
Reach _____			Air & Water Temp _____			Page _____ of _____							
Date _____			Water Visibility _____			Weather Conditions: _____							
Redds	Live	Dead	Sample #	Scale Card	Position	Condition 1-3	Head Bag #	Fork	POH	Sex	No. Eggs	PIT Tag #: 3D9.1C2D..	Time Start: _____ Time End: _____ Remarks or Associated Redd #
<u>Total</u>	<u>Total</u>	<u>Total</u>	Remember: Samplers are ALL people in a crew, please record BOTH Air and Water Temp in Celcius. <u>Mort Condition</u> - 1 Fresh, 2 Fair, 3 Poor. <u>Weather Conditions</u> - Sunny, Overcast, Raining, Snowing. <u>Temperature</u> - record at noon or mid-survey.										

Michelle Steg-Geltner
Status and Trends Reporting Coordinator
4.11.2022

▼ Header

Subbasin Name <small>(to make into a cascading list)</small>	River Name	
<input type="text"/>	<input type="text"/>	
Section	River Km	
<input type="text"/>	<input type="text"/>	
Reach ID	Date	
<input type="text"/>	<input type="text" value="Tuesday, April 12, 2022"/>	
Surveyors	Weather	
<input type="text"/>	<input type="text"/>	
Water Visibility (cm)	Flow (m/s)	Stage
<input type="text"/>	<input type="text"/>	<input type="text"/>
Water Temp (C)	Air Temp (C)	Start Time
<input type="text"/>	<input type="text"/>	<input type="text" value="3:55 PM"/>
End Time	Comment	
<input type="text" value="3:55 PM"/>	<input type="text"/>	

▶ Redds

▶ Carcasses

▼ Redds

Collect data. Click "+" at bottom right to add a record.

Live fish on redd?	Species	Substrate (multiple)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Sedimented?	Redd Length (m)	Redd Width (m)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Redd Age	Note	
<input type="text"/>	<input type="text"/>	
GPS Click the compass icon in upper left to refresh to current location.		
<input type="text" value="45°31'N 122°42'W ± 69 m"/>		
		

▼ Carcasses

Collect data. Click "+" at bottom right to add a record.

Species	Gender?	
<input type="text"/>	<input type="text"/>	
Fish Condition	Fish Length (cm)	Adipose clipped?
<input type="text"/>	<input type="text"/>	<input type="text"/>
PIT Tag (Full String)	PIT Tag (Clipped)	
<input type="text"/>	<input type="text"/>	
Floy tag #, color, location	Scale Sample #	Genetic Sample #
<input type="text"/>	<input type="text"/>	<input type="text"/>
Snout #	Note (other markings, etc.)	
<input type="text"/>	<input type="text"/>	
GPS Click the compass icon in upper left to refresh to current location.		
<input type="text" value="45°31'N 122°42'W ± 69 m"/>		
		

1 of 1



Spawning Survey

Spawning Survey Header

Project *	Stream - Reach *
<input type="text"/>	<input type="text"/>
Date *	Pass *
<input type="text" value="Tuesday, April 12, 2022"/>	<input type="text"/>
Index	Observer
<input type="text"/>	<input type="text"/>
Start Time	Start Temp
<input type="text" value="Time"/>	<input type="text"/>
End Time	End Temp
<input type="text" value="Time"/>	<input type="text"/>
Target Species	Water Visibility
<input type="text"/>	Poor <6', Fair 6-12', Good 1-3', Excellent >3'
<input type="text"/>	<input type="text"/>

Comments

Details

Feature Type *

Start
 Redd
 Carcass
 Prespawn
 Stop

River Mile

Comments

GPS Location



Photo

Details

Feature Type *

Start
 Redd
 Carcass
 Prespawn
 Stop

Species

Spring Chinook
 Fall Chinook
 Steelhead
 Coho
 Bull Trout

Redd ID

Live fish on Redd

Origin

Hatchery
 Wild
 Unknown

River Mile

Comments

GPS Location

Details

Feature Type *

Start
 Redd
 Carcass
 Prespawn
 Stop

Species

Spring Chinook
 Fall Chinook
 Steelhead
 Coho
 Bull Trout

Origin

Hatchery
 Wild
 Unknown

River Mile

Comments

GPS Location



Photo

Details

Feature Type *

Start
 Redd
 Carcass
 Prespawn
 Stop

Species

Spring Chinook
 Fall Chinook
 Steelhead
 Coho
 Bull Trout

Origin

Hatchery
 Wild
 Unknown

River Mile

Sex

M
 F
 U

MEPS Length (cm)

Marks

BKD

Yes
 No

Spawn

Yes
 No

Floy Tag

Scale Card

CWT

Yes
 No

CWT No

Snout Card

Pittag

Adult Traps

Roza Dam Adult Trap (Prosser Denil next year)

Prosser Adult Sampling

Date	4/12/2022	Time	2:07 PM	Species Code		Status	Wild Brood
Fork		MEH		Weight		Prosser Adult PIT Tag	
<input type="checkbox"/> Adipose-clip?		Radio Tag Data		Recapture PIT Tag			
No	CWT?	Channel	Code				
Ventral?	63			Brightness	Sex	ScaleLoc	
Comments		DNA Id:					
		ID #	Init.				
		(New)					
Coho Release Trib.							

Record: 1 of 1 Unfiltered Search

Roza Adult Collection

Species:	Roza	Date	4/12/2022	ID #	≡+04	Roza PIT Tag		Recap. PIT Tag	
Fork	POH	Weight	Status	Origin	Ad Clip?	Sex	Injection		
			Release		<input type="checkbox"/>				
Comments									
Eye		Elastomer Color		CWT Body Location					
<input type="radio"/> Left		<input checked="" type="radio"/> Red		<input type="radio"/> Posterior Dorsal					
<input type="radio"/> Right		<input type="radio"/> Orange							
Tube? <input type="checkbox"/>		<input type="radio"/> Green		<input type="checkbox"/> Snout Tag? LongTube? <input type="checkbox"/>					
Radio Tag:		Channel	Code	DNA Sample ID	ScaleLoc				

Record: 1 of 1 Unfiltered Search

Adult Fish Trap Sampling 2

▼ Header

Ladder Code *	ro (Roza)	Date *	Tuesday, ...	Operator Initials	
Default Species Refresh species field below to apply.		Default Purpose Refresh purpose field below to apply.		Last DNA # Steelhead	Last DNA # Spring Chinook
				0	0
Last DNA # Fall Chinook	0	Last DNA # Sockeye	0	Last DNA # Coho	0

▼ Bulk Fish Count Warning: Once you click "+" in bulk fish to expand below you will be adding a record.

+

▼ Fish Trap (Repeat Samples)

▼ Metrics

Time *	Species * (Refresh arrows to set from default)	Purpose? * (Refresh arrows to set from default)	Sex * (M, F, J, or P)
4:44 PM			
Fork Length *	POH Length *	Weight *	Recap PIT Tag Click in field before scan.

▼ Tags

Elastomer Eye	Elastomer Color	CWT? *	Ad Clip? (autopopulated from origin or enter here) *
<input type="radio"/> L	<input type="radio"/> Red	<input type="radio"/> Snout	<input type="radio"/> Yes
<input type="radio"/> R	<input type="radio"/> Orange	<input type="radio"/> Post-dorsal	<input checked="" type="radio"/> No
	<input type="radio"/> Green	<input checked="" type="radio"/> None	
Origin (autopopulated from tags or enter here) *	Species Code Assignment	Brood PIT Tag Click in field before scan.	
wild/natural			

▼ Samples

DNA Sample? *	Scale Sample? *
<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No

Comment

1 of 1

Count of records

1

Adult Trapping & Dam Counts

Prosser Video Counts

frmFISH ENTRY

FISH TABLE DATA ENTRY

Fish Passage Date

Ladder

Spp

Passage Time

Viewer

Mark Name

Multiplier

Est. Fk Lgth

Record: 1 of 1

Unfiltered Search

Adult Fish Passage

Date & Ladder Header Page

Enter data on this page once and do not change. Open & submit a new form for a new date, ladder, or viewer.

Passage Month
1 through 12
1

Passage Day
1 through month end
28

Passage Year
four-digit year greater than 2021
2022

Ladder *
Options: ca, ce, lf, pb, ro, rt, vr1, vr2
ca

Viewer *
Options: F, J, W, Temp
F

To enter fish data, use arrow on bottom right to go to next page >>

1 of 2



Adult Fish Passage

Fish Data Page

Fish Data Entry

Press "+" at bottom to add a fish. Press the checkmark when done to submit.

Fish Passage Date
1/28/22

Ladder
ca

Species *
Options:
1) h/w + a/j + coh/fck/sck/sum/fkco/spp
2) h/w + sth/sock
3) brwntr, bulltr, raintr, lamp, smbass
hsth

Military Time *
must have two digits before and after colon, eg. 03:25
03:25

1 of 1

2 of 2

Juvenile Trapping

- Screwtraps (Yakima Basin) ~5 yr.
- Survey123 Form, rugged tablets
- Pittag entry
- Staff in Wenatchee using laptop, P4 export

Screw Trap Data Entry2

▼ Header

Location Name *

Date *

Initials *

Time *

Fishing * Yes No

Rotating * Yes No

Air Temp (F)

Water Temp (F)

Staff Gage (#.##)

Efficiency Test * Yes No

Cloud (%)

Seconds per 1 final rotation

Debris Size Diameter (in) none <2" 2-5" >5"

Water Clarity (in) <6" 6-12" >12"

PIT Tag File

PIT Tag Vial 1

PIT Tag Vial 2

▼ Individual Fish Log

Species

Length (mm)

Warning: Length out of normal range (is >300mm) or is empty.

Weight (g)

Smolted 1 2 3

Recap Yes No

Mortality Yes No

PIT Tag (Full String)
(Click in this field, then scan the tag. Note: Keyboard app must be left open in the background)

PIT Tag (Clipped)
(appears automatically)

Individual Fish Comments
(fish condition, mark for efficiency test, other species, etc.)

DNA Slot No.

Scale Card No.

1 of 1

▼ Juvenile Bulk Fish Count

Species

How many? *

Comment

1 of 1

▼ Fish Count Summary

Total Fish Count

sthd fish count	lamprey fish count	Chinook fish count	coho fish count
<input type="text"/>	0	0	0

General Comment

HONOR. PROTECT. RESTORE.

Yakama Nation Fisheries

Juvenile Trapping

<https://dashboard.yakamafish-star.net/dashboard>



[HOME](#) [ABOUT](#) [DASHBOARD](#)

HOME / DASHBOARD / QA / SCREW TRAP CONSOLIDATED FORM

Tip: Hover over the magnifying glass at the top of the table to see filter options. If downloading data, please only download one year at a time to avoid getting bogged down.

New Entry Export to Excel

		Location	Date ↓	Time	Fishing	Fish Count	# Tag	Eff. Recap	Mort	Avg. Len	Avg. Wt	Mort %	Min/Max
			4/9/2022		(All)								
▶	Edit	Lower Toppenish	4/9/2022	09:48:00.0...	<input checked="" type="checkbox"/>								
▼	Edit	Upper Toppenish	4/9/2022	10:57:00.0...	<input checked="" type="checkbox"/>	2	2	0	0	169.00	54.05	0	168/170

Rotating: true	Efficiency Test: false	Debris Size Diameter: <2
Seconds/Rotation: 15	Efficiency Test No:	Water Clarity: >12
Pit Tag Vial 1:	Water Temp: 48	Cloud Percentage:
Pit Tag Vial 2:	Air Temp: 50	Staff Gage:
Initials: Jr	Bulk Count: 0	

General Comments:

Species	Length	Weight	Smolted	Recap	Mortality	PITTag No	Individual Fi...	DNAVial No	Scale Card ...	Condition F...
steelhead	168	52.6	2	<input type="checkbox"/>	<input type="checkbox"/>	3DD.0077D62E06		19	4	1.10932269...
steelhead	170	55.5	3	<input type="checkbox"/>	<input type="checkbox"/>	3DD.0077D5F9C6		18	4	1.12965601...



Juvenile Trapping

<https://dashboard.yakamafish-star.net/dashboard>



HOME

ABOUT ▾

DASHBOARD 

HOME / DASHBOARD / QA / JUVENILE ABUNDANCE ESTIMATE



Steelhead Juvenile Abundance Estimates

Location: ▾

Go

Export

Show ▾ entries

YEAR	NUMBER CAPTURED	NUMBER CAPTURED ADJUSTED	NUMBER PIT TAGGED	SEASON (DAYS)	DAYS NOT OPERATING	% OF SEASON NOT OPERATED	NUMBER RELEASED	NUMBER RECAPTURED	POOLED EFFICIENCY	POOLED ESTIMATE	OUTMIGRANT ABUNDANCE ESTIMATE	ESTIMATED STANDARD ERROR	CV	95% CI + OR -	PRODUCTION
2016 - 2017	659	659	605	249	9	3.61	604	46	7.62	8653	10464	2133	20.38	4180.68	137.5
2017 - 2018	1524	1524	1459	240	0	0	1361	102	7.49	8643	25418	3208	12.62	6287.68	334.01
2018 - 2019	1819	1831	1296	238	6	2.94	1270	158	12.44		15102	13554	8.97	2653.84	198.45
2019 - 2020	1576		1335	157	0	0	1154	99	8.58						
2020 - 2021	1387		1124	204	2	0.98	730	63	8.63						
2021 -	365		340	148	0	0	264	17	6.44						

Yakama Nation Fisheries

STAR

Information Management System

Data Capture, Management and Sharing

Michelle Steg-Geltner

Status and Trends Reporting Coordinator

4.11.2022

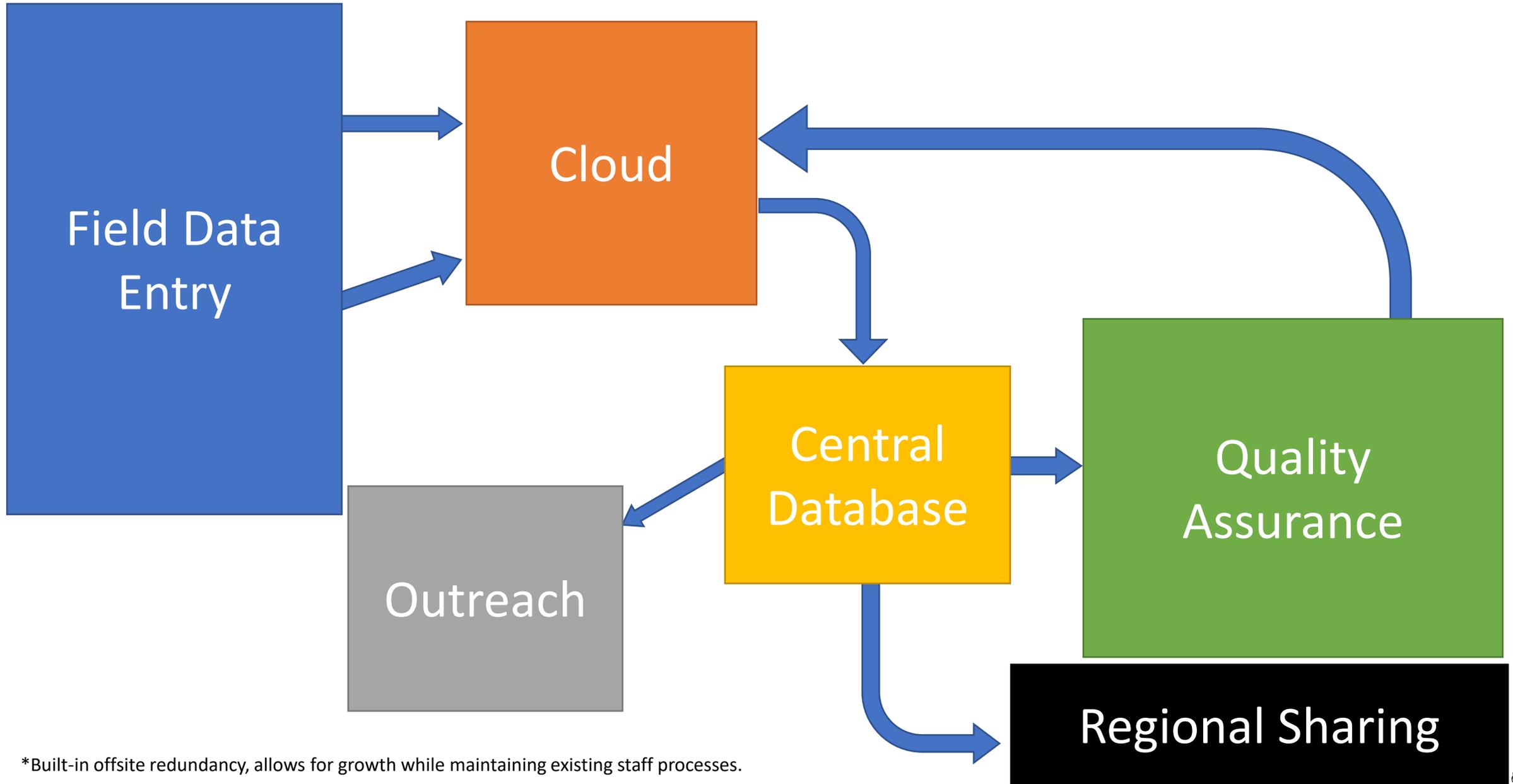
Driving Factors:

- 1. Increased demand on staff time to report in certain formats***
- 2. Increased demand on projects to share data (Need for Efficiency)***
- 3. Need for internal consolidation, review, sharing, documenting progress***
- 4. Ability to pass (simplified) processes on to new staff***
- 5. Usability of legacy data***



Field Data Workflow

End-to-end solution with ESRI tools (Survey 123/ArcGIS online) and YN's STAR Project



*Built-in offsite redundancy, allows for growth while maintaining existing staff processes.





Field Data Workflow

End-to-end solution with ESRI tools (Survey 123/ArcGIS online) and YN's STAR Project

Yakima screw trap, UC habitat/
snorkel, lamprey surveys.

ESRI Survey123*
Field Tablets / mobile

Field Data Entry

Existing Processes*
Excel, Access, etc.

(Nelson Springs) Dam Counts,
Roza Trap Samples,
Klickitat Counts, etc.
Legacy datasets also.

Outreach

ESRI Tools

(Dashboards, story maps,
online maps, etc.)

Cloud: Consolidated,
standardized dataset

ArcGIS Online
ESRI Hosted Feature
Service

Central Database

Central Dataset Repository
(MS SQL Server)

Quality Assurance

STAR Dashboard
(DRUPAL)

Data queries and reporting

QA Module

Regional Sharing (Streamnet, DART, etc.)

*Built-in offsite redundancy, allows for growth while maintaining existing staff processes.





Our Need for Our Approach

- 1. No top-down implementation, siloed legacy***
- 2. Need for project by project implementation, demonstration of advantages***
- 3. Lacking technical staff***
- 4. Prioritization of our priorities (individualized outputs to serve needs)***
- 5. Need for self-supportable, in-house tools and systems***
- 6. Start in-house, then share regionally***

Advantages: Tailored to Staff Needs E.g. UC Kelt Reconditioning

UC Kelt PreRelease

▼ Header

Date *
Tuesday, April 12, 2022

▼ Individual Fish Log

▼ Pre-release fish (repeat). Note: when you click "+" you are adding a fish. You do not need to click "+" after the last fish.

PIT Tag (Full String) * (Click in this field, then scan the tag. Note: Keyboard app must be left open in the background)	PIT Tag (Clipped) (appears automatically)
YN Floy Tag	Tank <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4
Fork Length (cm)	Weight (g)
POH (cm)	Fat (%)
Blood Sample ID	Comments

1 of 1

UC Kelt Mortality

▼ Individual Fish Log

▼ Deceased Fish (repeat). Note: when you click "+" you are adding a fish. You do not need to click "+" after the last fish.

Date *
Tuesday, April 12, 2022

PIT Tag (Full String) * (Click in this field, then scan the tag. Note: Keyboard app must be left open in the background)	PIT Tag (Clipped) (appears automatically)
Cause	Tank <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4
Eggs Retained	Copepods

UCKelt Intake

▼ Header

Date
Tuesday, April 12, 2022

Initials
Event Site
MSKF

Location of Capture
 MSKF WNFB RI
 BVR HCS LBC
 MSH SFG

Collection Method
 Spawn Dam Trap
 Skip

▼ Individual Fish Log

▼ Captured fish (repeat). Note: when you click "+" you are adding a fish. You do not need to click "+" after the last fish.

Fork Length (cm)	POH (cm)
Weight (g)	Sex <input type="radio"/> M <input checked="" type="radio"/> F
Event Type <input type="radio"/> Recapture <input checked="" type="radio"/> Mark	PIT Tag (Full String) *Required* (Click in this field, then scan the tag. Note: Keyboard app must be left open in the background)
Fat (%)	PIT Tag (Clipped) (appears automatically)
Floy Tag	Tank <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4
Copepods	Comments

1 of 1

UCKelt Maturation

▼ Individual Fish Log

▼ Fish status (repeat). Note: when you click "+" you are adding a fish. You do not need to click "+" after the last fish.

Date *
Tuesday, April 12, 2022

PIT Tag (Full String) * (Click in this field, then scan the tag. Note: Keyboard app must be left open in the background)	PIT Tag (Clipped) (appears automatically)
Blood Sample ID	E2 (pg/ml)
Maturation Status <input type="radio"/> Maturing <input type="radio"/> Non-Maturing <input type="radio"/> Borderline	Suggested Action <input type="radio"/> Release <input type="radio"/> Evaluate at Release <input type="radio"/> Hold
Release Location: [Dropdown]	
Comments	

1 of 1

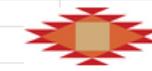


UC Kelt Consolidated

- New Intake
- New Mort
- New Maturity
- New Pre-Release
- Export to Excel

PITTAG	Latest Form	Form Date	Tank	Sex	Length (cm)	Weight (g)	Maturity Status	Suggested Action	Mort	Rel/Mort Date
3DA.1A19B20250	INTAKE	05/05/2021	1	F	83	4594			N	
3DA.1A19B203B8	MORTALITY	06/16/2021	2	F	71	3072			Y	06/16/2021
3DA.1A19B20437	PRERELEASE	09/21/2021	1	F	73	4030	maturing	release	N	09/21/2021

	Transaction Type	Event Date	Tank	Sex	Length (cm)	Weight (g)	POH (cm)	Event Type	Event Site	Method	Floy Tag	YN Floy Tag	Location
Edit	INTAKE	05/05/2021	1	F	72	3034	60	Mark	MSKF		14		wfnh
Edit	MATURATION	09/21/2021											
Edit	PRERELEASE	09/21/2021	1		73	4030	59					454	



Honor. Protect. Restore.

Kelt Roster Report

Export to Excel

Date from: Date to: Tank: All, 1,2,3,4

Tank	PIT Tag	Floy Tag	Intake Date	Date of Last activity	Fork Length (cm)	Weight (g)	Sex	Fat %
1	3DA.1A19B203B8	64	4/21/2021		71	3072	F	0.9
1	3DA.1A19B20250	1	4/21/2021		83	4594	F	0.7
1	3DA.1A19B20B8C	119	4/14/2021		72	3124	F	0.8
1	3DA.1A19B20D58	73	4/7/2021		67	2264	F	1
Tank 1 Total #:		4	Most Recent Intake Date:	4/21/2021	Total Weight:		13054	
2								
2								
2								
2								
Tank 2 Total #:		0	Most Recent Intake Date:		Total Weight:			
3	3DA.1A19B205E8	7	04/28/2021		60	2780	F	
3	3DA.1A19B20B39	82	5/5/2021		68	2298	F	0
Tank 3 Total #:		2	Most Recent Intake Date:	5/5/2021	Total Weight:		5078	
4								
4								
4								
4								
Tank 4 Total #:		0	Most Recent Intake Date:		Total Weight:			
Combined total:		6	Most Recent Intake Date:	5/5/2021	Total Weight:		18132	



Areas Not Covered:

Not a comprehensive data warehouse.

Not implemented across all projects.

Targeted just for those who need help with a specific process.



From previous presentation...

	CDMS	STAR
Staff Required	2-3 (data coordinator / facilitator, system administrator, programmer)	2-3 (data coordinator / facilitator, system administrator, programmer)
System Requirements	4 servers (web, database, ArcGIS, authentication)	2 servers (web, database)
Technology	AngularJS, Rest Services ASP.net Web API (.Net 4.0), MS SQL Server, ArcGIS Enterprise	Drupal, PHP, MS SQL Server, MySQL, REST Services ASP.net Web API (.Net 4.0) ArcGIS online
Open Source? (developed by)	Yes (Umatilla Tribe – Ken Burcham)	Yes (Drupal a content management system (CMS) used by many – QW configures custom modules based on YN needs)
Ability to store datasets? (how?)	Yes (manual setup)	Yes (manual setup)
Ability to QA datasets	Yes	Yes
Ability to share data regionally (e.g. CAX)	(individuals are working developing the ability)	Yes
Field data capture	Excel? MS Access? (Manual)	Survey 123, MS Access, Excel
Field data automated to central system?	(individuals are working on ability to load, though not automated)	Yes. (and can edit/add a record in the field, validation)
Reports	Report server	Report server
Data query available to public/staff	yes	yes
Years in development	7+	4+

From previous presentation...

Pros	Cons?
Hybrid, or CDMS	
Would be on same system as CTUIR, Nez Perce, CRITFC <i>may</i> be able to provide some support.	Is there a reason why we should be on the same system as them? We can't count on CRITFC support.
CDMS may be a better catalogue, has more metadata. Has track changes inherent in the system.	Still requires coding to get datasets into the system, as well as to develop queries e.g. for tracked changes, and to share.
	Would need more resources, technical staff to host and maintain. Combining systems would be complicated
	Transferring over to/developing this system would take time away from making other progress (set us back a year or two). Loss of momentum.
	Intranet based (maybe con?)
STAR system	
Friendly user interface, tools specifically for unique dataset/ user needs	Similar to CDMS, does also need coder/developer to add/modify to this (sql, java?).
Is compatible with yakamafish website, should be easier to manage, maintain for our staff	Although backend does still need slq programming
Has tools in place to flow data into and out of it.	Continuing development needed (of course)

End-to-End Data Capture, Consolidation, and Sharing

Data Capture

Survey 123
ArcGIS Online

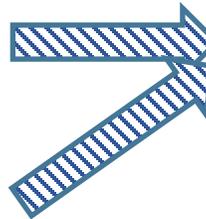
- Screw traps
- UC habitat, fish surveys
- Lamprey & habitat surveys
- Dam counts
- Trap Samples
- Hatchery tagging & sampling
- Harvest monitoring?

Existing Processes
(Excel, Access, etc.)

Field Data



automated scripts



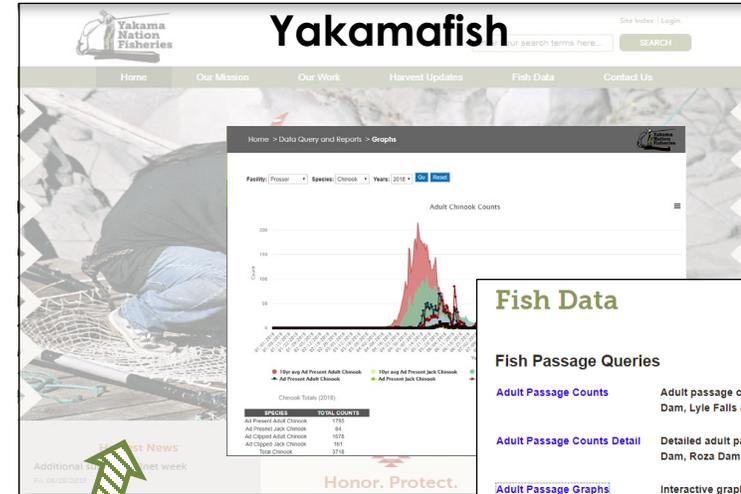
Real-Time

Central Dataset Repository
(Access through STAR Dashboard)

Quality Assurance;
Controlled Dataset
Access



Fish data is displayed for public view, sharing

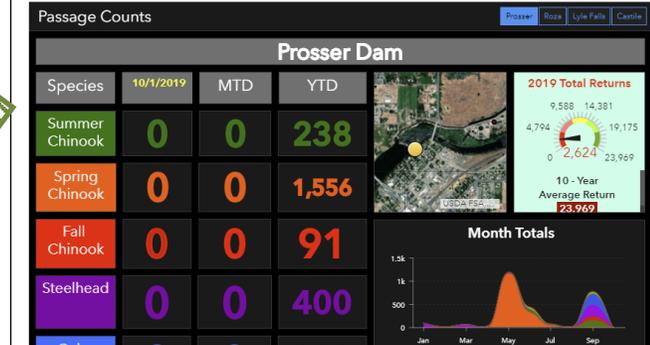


Embedded

Fish Data

Fish Passage Queries

- [Adult Passage Counts](#) - Adult passage count query for Prosser Dam, Roza Dam, Lyle Falls and Castile Falls
- [Adult Passage Counts Detail](#) - Detailed adult passage count query for Prosser Dam, Roza Dam, Lyle Falls and Castile Falls
- [Adult Passage Graphs](#) - Interactive graphs of annual adult passage for Prosser Dam, Roza Dam, Lyle Falls and Castile Falls



PUSH data to external partners,
or they retrieve from us.
(Streamnet, CAX, DART)

Key

- Partly or fully automated
- Completed
- Some in-progress



Data Display, Query, and Sharing Tools: **Public Access**



Home > Data Query and Reports > **Adult Passage Count Details**

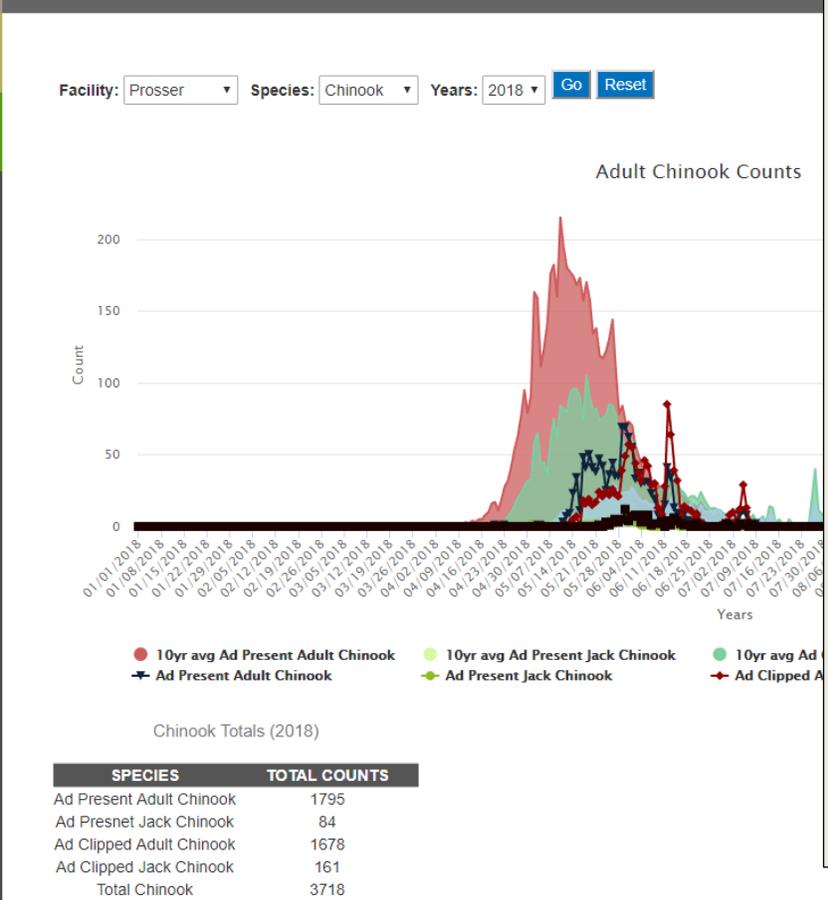
Yakama Nation Fisheries

HOME ABOUT DASHBOARD

HOME / DASHBOARD / FISH COUNTS / ADULT PASSAGE COUNTS DETAILS

Adult Passage Count Details

Home > Data Query and Reports > **Graphs**



Fish Data

[Fish Passage Queries](#)

[Adult Passage Counts](#) Adult passage count query for Prosser Dam, Roza Dam, Lyle Falls and Castile Falls

[Adult Passage Counts Detail](#) Detailed adult passage count query for Prosser Dam, Roza Dam, Lyle Falls and Castile Falls

[Adult Passage Graphs](#) Interactive graphs of annual adult passage for Prosser Dam, Roza Dam, Lyle Falls and Castile Falls

Date Sort By

Passage Counts

Prosser | Roza | Lyle Falls | Castile

Prosser Dam			
Species	10/1/2019	MTD	YTD
Summer Chinook	0	0	238
Spring Chinook	0	0	1,556
Fall Chinook	0	0	91
Steelhead	0	0	400

2019 Total Returns

9,588 14,381

4,794 19,175

0 2,624 23,969

10-Year Average Return **23,969**

Month Totals

ickilat River RM 2.4). With the exception of some fish that are collected for hatchery broodstock or after sampling. The counts do not include fish that ascended the natural waterfalls or fish that are returned directly to the fishway without handling or

SUM	TOTAL SUMMER CHINOOK								TOTAL FALL CHINOOK	
	WJSUM	HASUM	HJSUM	CHINOOK	WAFCK	WJFCK	HAFCK	HJFCK	UAFCK	CHINOOK
-	-	-	-	-	56	56	197	46	-	355
-	-	-	-	-	18	6	21	1	-	46
-	-	-	-	-	8	3	22	7	-	40
-	-	-	-	-	28	17	62	14	-	121
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	3	3	2	-	8
-	-	-	-	-	2	1	4	10	38	55
-	-	-	-	-	-	7	4	1	-	12
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	112	93	313	81	38	637

hafck - marked adult fall chinook, hafcko - marked adult fall chinook or, hasck - marked adult spring chinook, hasum - marked adult summer chinook, hjfck - marked jack fall chinook, hjfcko - marked jack fall chinook or, hjsck - marked jack spring chinook, hjsum - marked jack summer chinook, uafck - unknown adult fall chinook, uafcko - unknown adult fall chinook or, uasck - unknown adult spring chinook, ujfcko - unknown jack fall chinook or, c, ujsck - unknown jack spring chinook, wafck - unmarked adult fall chinook, wafcko - unmarked adult fall chinook or coh, wasck - unmarked adult spring chinook, wasum - unmarked adult summer, wjck - unmarked jack fall chinook, wjckco - unmarked jack fall chinook or coho, wjsck - unmarked jack spring chinook, wjsum - unmarked jack summer Chinook