

2019 RCMT MEETING

43RD Annual Meeting

Committee: *Regional Committee on Marking & Tagging*
Hosted by: **Oregon Dept. Fish & Wildlife**
Location: *Holiday Inn Express & Suites Astoria*
204 West Marine Drive
Astoria, OR
Dates: **April 23, 24 2019**

Meeting Minutes

Documents Area:	2019 Documents Area
Other References:	ISRP Final Report -- May 2019
	Washington State PSC Location Codes Proposals
	NWIFC Recovery Id Extension Proposal

APR 23: TUESDAY: 9:00 AM – 4:00 PM

1. General Business Items (George Nandor/ PSMFC)

- Welcome and introductions (see roster in Appendix A);
 - USFWS has filled position (Ben Cross) who will be taking over for Carrie.
- Consider possible dates for next year's mtg – 2020 -- to be hosted in California;
 - Looking to hold meeting in Santa Rosa area; Jason Azat will coordinate and provide additional details;
 - Would like to avoid having the meeting the week after Easter in the future (not April 13, 14 2020).
- The 2021 meeting is intended to be hosted in Alaska;
- Review agenda

2. Regional Mark Processing Center operations & announcements (RMPC staff)

A. Status of CWT Datasets (Dan Webb/ PSMFC)

An adequate description file with all data submissions is required but it can't be enforced (either for content or for submission).

Data status charts are available on the website in the section called 'News & Data Status' (see also '2019 Documents Area' ref. above)

The RMPC identifies occasional data discrepancies in monthly data integrity reports and notifies agencies as they occur. Most agencies are quite responsive at resolving the discrepancies.

Location Codes: Most locations needed to validate data are current and up to date; contact reporting agency for that state if you have missing info.

Has thought been given to adding more agencies that would be handling locations for the state? It is noted that [State/Province] is an arbitrary definition of a 'Location code Reporting Agency'. We are not sure how that change would need to be approached- never dealt with that before. The data definition, Locations file processing, & data exchange format have not allowed for multiple agencies in the past, given constraints in the code, agency coordination questions, etc.

The best solution for changing or adding new locations is to get the issue resolved directly with the Locations providing agency in question rather than trying to come up with a work-around.

Releases: Releases are mostly up to date (some 2018 from CDFO missing).

Some releases are being reported by multiple agencies, and must be assigned to only one of the agencies since duplication is not allowed in the database. Dan is looking to clean it up and will send an email notification out to those agencies that need releases cleaned up.

Release data should be reported ASAP rather than waiting until the end of the year to avoid recoveries being reported without a release record;

Recoveries: Recoveries (through 2017 only) are mostly up to date (with some exceptions)

CRITFC does not have sampling programs to report recoveries (Dan will email regarding 2000 & 2001 recovery reporting).

Would it be possible to add a label or some other visual cue to indicate that someone else is responsible for reporting the recoveries or that the data set is not applicable for that year and agency? Would clean up the table blanks and remove the implication that data is missing; **Dan and Jim will try to resolve this issue by 2020.**

CDFWKT (Klamath /Trinity data) is still out of date. CDFW is still planning to get this filled in later. No timeframe on updating CDFW's reporting- contact them directly for info;

It is noted that there is a (pending ver 5.0) new field, 'Unresolved Reason' for Status 7 recoveries that should help with this situation.

Need to be able to visually differentiate in the database between “missing due to reporting lag” and “missing- never going to get” and “missing- doesn't exist”;

KGT list: Considering removal of KGT List (Known Good Tag list provided by NMT) from the validation process altogether;

NMT wants people to call Geraldine directly when they have a question about whether a tag code is valid to make sure the information is being interpreted correctly; the list provided annually from NMT would now consist of just the previous year's tag codes & types rather than a comprehensive dataset

WDFW, ODFW, and CDFO use the KGT file currently; want to see an annual update rather than an annual replace or complete elimination;

RMPC Note, June 2019: This issue is still being resolved between NMT and the RMPC. Agencies will be notified at some point in the future on the status of this.

B. RMPC Presentation: CWT Program Overview (George Nandor)
(See above direct reference link: [ISRP Final Report – May, 2019](#))

The presentation is available in the '2019 Documents Area' ref. above.

Put together for the Independent Scientific Review Panel (ISRP); should have their funding recommendations out by end of April;

3. Presentation & Discussion: SRKW, Ecology of Orcas and Salmon (Ron Olson)

- Increases in production plans for SRKW prey (multi- agency discussion);
- Special Presentation: Southern Resident Killer Whales by Eric Ward/ NOAA-NWFSC; eric.ward@noaa.gov (for presentations, reports, questions, etc.)
- see '2019 Documents Area' ref. above

WebEx presentation; see '2019 Documents Area' ref. above

Decline in whale population due to decreases in Chinook populations → increased hatchery production → use of CWT to assess and manage populations;

Hard to determine specific reasons for SRKW declining numbers (species as a whole is doing well); prey species declining, demographic changes within the population (age structure, more males);

Spring and summer diet dominated by Chinook salmon, greater contribution of Coho in late-summer, fall/ early winter they eat more Chum;

NOAA has assigned priority levels to stocks for focusing rebuilding efforts to increase prey for whales

(https://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/killer_whales/recovery/srkw_priority_chinook_stocks_conceptual_model_report___list_22june2018.pdf);

One option would like to diversify timing of hatchery releases to better mimic wild migration patterns (Ben Nelson et al. in review);

Seeing a decline in ocean fish size/ age (Ohlberger et al. 2018); ocean fish are younger and maturing more rapidly- trying to figure out why they are becoming smaller over time (harvest, ocean conditions, predation selection?);

Seeing a reduction in whale prey biomass based on declining body sizes of prey species;

Orca Taskforce needs modeling help to figure out what would benefit prey availability;

Also looking at how a reduction in Chinook bycatch in ocean fisheries would impact prey (largely focused on spring Chinook, though total bycatch numbers are relatively low compared to total abundance);

Workgroup going to look at the impact of salmon fisheries on the west coast in terms of impact/ contribution to prey (<https://www.pcouncil.org/2019/04/58855/ad-hoc-southern-resident-killer-whale-workgroup-to-hold-meeting-may-23-24-2019/>);

Questions from the group:

What does “success” look like and how do we know if we are achieving it?

WDFW envisions doing this in an adaptive management framework.

Would want to be able to demonstrate that hatchery production impacts availability (do this through recovery data);

SRKW is such a small population that they may not be a good metric for measuring success.

Why can't SRKW take advantage of the abundant harbor seal population?

No one knows why they won't take advantage of other prey species in the area. SRKW like other 'resident' ecotypes are primarily fish-eating whales, in contrast to transient whales (which only eat marine mammals) or offshore whales (which may consume both)

Diet is diverse world-wide; interesting to see this population being so inflexible when it comes to diet;

Which ocean indices are being used? How far back are you going?

Sea surface temperatures, upwelling, wind and other physical variables; going back to 1976.

Do the whales respond in other positive ways in good fish years?

Certain groups of females are underperforming in terms of producing viable young even in good fish years – they individuals may not respond as expected to increases in prey availability (through hatcheries or otherwise).

Increasing production may be driving down fish sizes which may do more harm than good (current work by WDFW and others investigating density dependence).

4. Update on PSC Data Standards Working Group (George Nandor)

Have not had a meeting since Oct, 2015;

There are proposals for Data Sharing to approve but action has been held up by work on updating the Pacific Salmon Treaty (treaty text was signed effective Apr 1st); Negotiators have completed their work but governments have not ratified it yet.

Language in the treaty is CWT focused; PBT still considered a research effort;

Next step is for a Data Sharing meeting to review/ incorporate proposals that are pending;

PSC Technical Committees have been moving forward; working on getting committees more efficient, direct access through their own servers (Mark McMillan working on this).

Kathy Fraser stated that there has been limited communication between Data Sharing and the other committees. Committee chairs need to be members of Data Sharing in order to better connect and not make decisions in isolation.

Also committee members need to be aware of discussions and proposals that data standards is grappling with.

Org. chart of Committees- Workgroups- Etc.; www.psc.org/about-us/structure/org-chart/
Data Sharing Committee reports directly to the Commissioners
Data Standards Workgroup determines what things will look like

5. Recovery ID Field Extension (Ken Phillipson/ NWIFC)

(See above direct reference link: [NWIFC Recovery Id Extension Proposal – 18-Apr-2019](#))

Memo handout; Plan to submit formal proposal to Data Standards

Normally they would bring this to Data Standards but wanted a more timely response.

NWIFC would like to see field length increased to 12 characters.

WDFW agrees with the proposal, and would like to see an extension to 36+ characters because they plan to move their database to Postgres and when doing that would like to adopt a 36 character ID field.

A proposal to Data Standards is recommended. Changes in field sizes haven't required a new release so submit as a version 4.1 change. It is recommended to make it an official proposal for Data Standards. NWIFC needs 2 more characters for the fall, rather than the full 36 characters. It may not be able to be instantaneous but a small change shouldn't be overwhelming to agencies.

6. Changes to Washington Location Codes (Gil Lensegrav, Jacob Shapley/ WDFW)

(See above direct reference link: [Washington State PSC Location Codes Proposals; 2019](#))

- Short Term Improvement Proposal: explanation & update;
- Long Term Improvement Proposal: new (spatial) data exchange formats.

New WDFW locations were submitted in a new format that wasn't recognized (freshwater locations). Multiple analysis projects use components of the code to pull for Mixed-Stock & other modeling queries, so altering the internal code format would break their queries. Some problems and potential solutions were discussed at a January 11, 2019 meeting between WDFW, NWIFC, RMPC and other interested tribal representatives.

WDFW drafted a document that outlined the problem and identified solutions.

The Short-term solution will maintain current format (hierarchical coding schema) except for the last 3 characters of the location code. This is expected to largely avoid the negative impact on the analyses currently relying on the hierarchical coding structure.

Long-term solutions involve likely reconsideration of how data is being exchanged; tying data to a specific location rather than to a region, or fishery-area, so that the data can always be applied regardless of how the geography is divided up; and proposing that they exchange “geometry” in the future rather than just an ID code. Recovery data is not always available as a point location.

The long-term solution for Washington will go through the Data Sharing/Data Standards committees.

Does Data Standards have the authority to change how everyone sources/ stores their data? They can make recommendations on where efforts should be directed. We will need to reconsider how we’re exchanging Location data. From a Data Sharing perspective, they thought they could get what they need from 23 characters (as proposed in the new Ver 5.0 Location Code) rather than the current 19 characters. It may be worth a revisit now.

7. Update from PSC Selective Fishery Evaluation Committee (Carrie Cook-Tabor/ USFWS, Ron Olson/ NWIFC)

PowerPoint presentation; see ‘2019 Documents Area’ ref. above

Committee looks at MM and MSF and their impacts to the CWT system and provides advice to the PSC;

SFEC reports directly to the Commissioners

Analytical Workgroup (AWG) reviews the MSF proposals and develops analytical tools;
Regional Coordination Workgroup (RCWG) reviews the MM proposals, documents efforts and CWT sampling activities, looks at technologies;

Overall decrease in DIT programs (dropped Vanc Island Coho in 2015); USFWS, WDFW, and Tribes are the ones still implementing DIT programs;

Newer MSFs in ADFG (Chinook commercial & sport fisheries), CDFO (Chinook Sport Fishery), WDFW (Col River test fisheries);

Kathy Fraser stated that CDFO’s proposal will not be acted on; fishery has been significantly delayed/ reduced this year due to stock listings;

RCWG Identified Issues

Incomplete DIT coverage

Incomplete ETD coverage

Database errors- both release and recovery data (set back the DIT analysis by a year)

AWG Identified Issues

Incomplete DITs, fishery sampling

Lack of post-season MSF reports

Lack of data depository for sharing estimated MSF impacts

Complicated regulations, lack of agency input, methodology

Seeing a decrease in Coho production, increase in Chinook production (for SRKW);

8. Presentation: Results of an Updated Coho CWT Analysis (Carrie Cook-Tabor)

Present results of an updated coho CWT analysis of ideal tag releases based on most recent survival and recovery rates.

PowerPoint presentation; see '2019 Documents Area' ref. above

- Newly funded proposal to compare post-season estimates of fishery impacts from coho cohort reconstructions vs FRAM-modeled estimates;

2008 CWT Working Group recommended agencies further review their programs and attempt to meet the criteria laid out.

FRAM is used for pre-season planning (PSC and PPMC) and for post-season assessments to the commissioners.

Are no longer getting enough tag recoveries to properly inform and guide manager decisions;

Continue to have low recoveries coast-wide;

Survival rates are variable by region, across regions, and more variable in recent years.

Trying to find other methods to update Coho FRAM (Southern Fund Project);

Incorporating aggregate CWT recoveries, surrogates, genetic stock identification, hybrid methods;

Chinook FRAM has been recently updated.

APR 24: WEDNESDAY: 8:00 AM - NOON

9. All-Agency Update on: (Tag-Coordination Representative, ALL-AGENCY Participation)

- Tagging Levels for 2019..... see Appendix B
- Mass Marking for 2019..... see Appendix B
- Mark-Selective Fishery Plans &/or Comments see Appendix B

Member agencies:

Agency or Organization	2019 Tagging Levels, Mass Marking, MSF Plans, Comments
USFWS / U.S. Fish & Wildlife Service	<input type="checkbox"/> handout provided (Carrie Cook-Tabor); Quilcene tagging levels. will likely be higher next year <input type="checkbox"/> handout provided (Jesse Rivera/ USFWS)
ODFW / Oregon Dept. Fish & Wildlife	<input type="checkbox"/> handout provided (Trevor Clark); note sig. losses at Cole Rivers (~1.2 mil Sp Chin); LV-clip being done at Klatskanine
ADFG / Alaska Dept. Fish & Game	<input type="checkbox"/> handout provided (Detlef Buettner) ; no major changes to report
MIC / Metlakatla Indian Community	Production now done in 4 total 'lots'; doubling amount of tagged Coho; working on 100% thermal mark on Chum; a part of MSC (Marine Stewardship Council)
IDFG / Idaho Dept. Fish & Game	<input type="checkbox"/> handout provided (Brian Leth/ IDFG)
NMFS / National Marine Fisheries Service, Alaska	85K Chinook ad clip + CWT, 55K ad-only, 55K CWT-only (all at Little Port Walter.) 6K Coho ad clip + CWT (at Auke Cr)
NWIFC / Northwest Indian Fisheries Commission	<input type="checkbox"/> handout provided (Ron Olson); 800K more unclipped+ CWT out of Puget Sd. Programs expanding, expect Chinook CWT to increase
CDFO / Fisheries & Oceans Canada ■	<input type="checkbox"/> handout provided (Doug Herriott/ CDFO); Tagging gone up; Chinook 6.6mil, Coho 1 mil; Production gone up as well; 7-8 mil mass marked, the rest are not; Tofino: experimental Chinook mass mark proposed, see others
CDFW / California Department of Fish & Wildlife	No handout provided; no major changes, made brood this year, 25% constant fractional marking program continues (Fall Chinook), winter & spring Chinook 100% CWT + ad clip; better returns expected this yr; there is talk of massive increase to % marked of fall Chinook
CRITFC / Columbia R. Intertribal Fish Commission	Updates covered by others (USFWS, YAKA, NPT); note joint program w/ ODFW, Walla Walla
WDFW / Washington Dept. Fish & Wildlife	<input type="checkbox"/> handout provided (Jillian Cady /WDFW); note 2 new groups at Wallace, Forks Cr; incr at Marblemount; see changes at Lyons Ferry; sig. losses incurred at Minter Cr; Increasing Chinook production in Puget Sound for SRKW at numerous facilities; may see special funding incr. from WA legislature

■ Agency CDFO represents two votes (members) of the RCMT

Other reporting agencies:

Agency or Organization	2019 Tagging Levels, Mass Marking, MSF Plans, Comments
YAKA / Yakama Nation	<input type="checkbox"/> handout provided (Bill Bosch/ YAKA); production somewhat decreased
NPT / Nez Perce Tribe	<input type="checkbox"/> handout provided (Drew Wickard/ NPT); note they are doing a 'compound' release at all 3 facilities due to poss. plumbing issue
CCT / Colville Confederated Tribe(s)	No update provided

NOTE: USFWS is attempting to move all OR, WA, ID release and recovery data onto one database ('FINS' project at PSMFC; hired a database manager to facilitate this change).

10. Columbia R Salmon Management (presentations & multi-agency discussion) (Marianne McClure /CRITFC)

- Columbia River Salmon Management (Stuart Ellis/ CRITFC)

Powerpoint presentation; see '2019 Documents Area' ref. above

- Pinniped Predation and the New Federal Legislation (Doug Hatch/ CRITFC)

Powerpoint presentation; see '2019 Documents Area' ref. above

Males move north looking for food in El Nino years (warmer water conditions farther south); females stay closer to rookeries.

Counts doubled every year from 2012-2016 (from steady at 500 pre-2012 to 4000);

CA Sea Lions only present in spring; Stellars arrive in summer and stay through following spring (impacts nearly all salmon runs, adults and juveniles);

Hazing was/is done but long-term value is very low. They come back within a [few hours].

Roughly 7% of the sea lions present at the east mooring basin at Astoria will make the journey upriver each year to Bonneville.

The current [CSC legislation] allows up to 92 per year to be removed.

Tribes interested in cultural use of the sea lion carcasses (hides, bones, etc. if the meat is contaminated); sea lions were not traditionally hunted.

11. Northwest Marine Technology (Geraldine Vander-Haegen/ NMT)

- Product update

Closing down the Shaw Island office and moving it to Anacortes (Dec '19);

Kathy Melville retiring in July after 40+ years;

38 AutoFish trailers currently deployed; upgraded to larger display monitors in the newer trailers, can operate trailer via a tablet w/ wifi;

Contact Geraldine with questions, orders, suggestions, tag codes, wand re-tunes/ trade ins, R-detector trade ins, etc.

NMT demonstrated the new Tag Viewer -- currently in production. It will be available in September (would come with its own monitor).

- Would replace microscope, magnaviewer, illuminator, etc.
- Will also eventually have software available to automatically read the tag code (machine reads it once, and person confirms as '2nd reader')
- Don't have cost estimate yet for unit plus software (~\$1000 for viewer)
- Saves the tag images within the unit's computer, can connect via USB to export images
- Could interface with barcode readers as well

- Q&A: other issues with equipment & usage, etc.

Think about what is a legitimate re-read; CDFO would like to be involved in developing this process with the new Tag Viewer; Interface should capture whether the read is manual or automatic;

12. Special Marking Requests & Announcements for 2019: (George Nandor)

Requests & Announcements received to date: (.)

None received.

REVIEWED

By Jim Longwill at 2:09 pm, Jun 12, 2019

Appendix A

2019 Mark Meeting Attendees

***Committee Member or Designee**

Name	Agency	Mailing Address/ Telephone/E-mail Address
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Appendix B

2019 Agency Marking and Tagging Updates

Pacific Northwest USFWS – 2019 Planned Releases of Hatchery Fish – by Mark and Tag Status

production in italics will be released and reported by another agency

22-Apr-19

Hatchery	Species/Run	Stock	CWT+AD	CWT only	AD only	None	Total
Spring Creek NFH	Fall Chinook	Spring Creek - Tule Falls	405,000	405,000	9,690,000	0	10,500,000
Little White Salmon NFH	URBs	Little White Salmon - URB Falls	200,000	200,000	4,100,000	0	4,500,000
Willard NFH	URBs	Little White Salmon - URB Falls	100,000	100,000	1,800,000	0	2,000,000
Little White Salmon NFH	URBs	Little White Salmon - URB Falls	150,000	0	1,050,000	0	1,200,000
Priest Rapids	URB Falls	Little White Salmon	50,000	0	450,000	0	500,000
Entiat NFH	Summer Chinook	Entiat - Summers 1+	220,000	0	200,000	0	420,000
Carson NFH	Spring Chinook	Carson - Springs 1+	87,500	0	1,082,500	0	1,170,000
Carson NFH	Spring Chinook	Carson - Springs 1+	50,000	0	200,000	0	250,000
Little White Salmon NFH	Spring Chinook	Little White Salmon - Springs 1+	110,000	0	890,000	0	1,000,000
Warm Springs NFH	Spring Chinook	Warm Springs - Springs 1+	780,000	0	0	0	780,000
Warm Springs NFH	Spring Chinook	Round Butte - Springs 1+	120,000	0	0	0	120,000
Leavenworth NFH	Spring Chinook	Leavenworth - Springs 1+	200,000	0	1,000,000	0	1,200,000
Winthrop NFH	Spring Chinook	Methow - Springs 1+	403,000	0	0	0	403,000
Kooskia NFH	Spring Chinook	Kooskia - Springs 1+	100,000	0	350,000	50,000	500,000
Dworshak NFH	Spring Chinook	Dworshak - Springs 1+	120,000	0	1,530,000	0	1,650,000
Eagle Creek NFH	Spring Chinook	Willamette - Springs 1+	25,000	0	215,000	0	240,000
Coleman	Late Fall	Sacramento	1,000,000	0	0	0	1,000,000
Coleman	Fall Chinook	Sacramento	3,175,000	0	0	9,525,000	12,700,000
Livingston Stone	Winter Chinook	Sacramento	225,000	0	0	0	225,000
Livingston Stone	Winter Chinook	Sacramento	184,000	0	0	0	184,000
Makah NFH	Fall Chinook	Sooes River Falls	200,000	0	2,500,000	0	2,700,000
Chinook Total	Ad-clipped % = 76%		7,904,500	705,000	25,057,500	9,575,000	43,242,000
Eagle Creek NFH	Coho	Eagle Creek - 1+	25,000	25,000	300,000	0	350,000
<i>Eagle Creek NFH</i>	<i>Coho</i>	<i>Clearwater River - 1+</i>	<i>30,000</i>	<i>0</i>	<i>0</i>	<i>245,000</i>	<i>275,000</i>
<i>Eagle Creek NFH</i>	<i>Coho</i>	<i>Clearwater River - 1+</i>	<i>30,000</i>	<i>0</i>	<i>0</i>	<i>245,000</i>	<i>275,000</i>
<i>Eagle Creek NFH</i>	<i>Coho</i>	<i>Eagle Creek/Yakima R. - 1+</i>	<i>0</i>	<i>0</i>	<i>500,000</i>	<i>0</i>	<i>500,000</i>
<i>Willard NFH</i>	<i>Coho</i>	<i>Wenatchee R. - 1+</i>	<i>0</i>	<i>1,100,000</i>	<i>0</i>	<i>0</i>	<i>1,100,000</i>
<i>Cascade Hatchery</i>	<i>Coho</i>	<i>Wenatchee R. - 1+</i>	<i>0</i>	<i>431,000</i>	<i>0</i>	<i>0</i>	<i>431,000</i>
<i>Winthrop NFH</i>	<i>Coho</i>	<i>Wenatchee R. - 1+</i>	<i>0</i>	<i>250,000</i>	<i>0</i>	<i>0</i>	<i>250,000</i>
Makah NFH	Coho	Tsoo Yess River	0	0	180,000	0	180,000
Quinalt NFH	Coho	Cook Creek	80,000	0	580,000	0	660,000
Quilcene NFH	Coho	Big Quilcene River	72,000	72,000	256,000	0	400,000
Quilcene NFH	Coho	Big Quilcene River	40,000	0	160,000	0	200,000
Coho Total	Ad-clipped % = 49%		277,000	1,878,000	1,976,000	490,000	4,621,000
Winthrop NFH	Steelhead	Wells/Methow	220,000	0	0	0	220,000
Eagle Creek NFH	Steelhead	Eagle Creek	0	0	95,000	0	95,000
Dworshak NFH	Steelhead	Dworshak	180,000	0	2,000,000	0	2,180,000
Dworshak NFH	Steelhead	Dworshak	0	0	0	200,000	200,000
Hagerman NFH	Steelhead	Salmon River	80,000		1,020,000	0	1,100,000
Coleman	Steelhead	Coleman NFH	0	0	611,000	0	611,000
Makah NFH	Steelhead	Sooes River	0	0	16,000	0	16,000
Quinalt NFH	Steelhead	Cook Creek/Quinalt	20,000	0	180,000	0	200,000
Steelhead Total	Ad-clipped % = 96%		500,000	0	3,922,000	200,000	4,622,000
Quinalt NFH	Chum Salmon	Cook Creek/Quinalt	0	0	0	2,000,000	2,000,000
Chum Total	Ad-clipped % = 0%		0	0	0	2,000,000	2,000,000
Total			8,681,500	2,583,000	30,955,500	12,265,000	54,485,000



ODFW: 2019 FISH MARKING PROGRAM

2019 PRODUCTION					
STOCK	TAGGED (CWT)		UNTAGGED		Total Marked
	AD+CWT	CWT only ¹	AD Clip	No AD Clip	
Spring Chinook	2,395,000	165,000	9,829,000	200,000 (LM only)	12,589,000
Fall Chinook	2,680,000	0	12,474,000	460,000 (LV only clip)	15,614,000
Coho	390,000	100,000	5,860,000	0	6,350,000
Sum. Steelhead	335,000	0	1,958,000	25,000	2,318,000
Win. Steelhead	0	0	1,669,000	0	1,669,000
Chum	0	0	0	0	0
Sockeye	0	0	0	0	0
TOTALS:	5,800,000	265,000	31,790,000	685,000	38,540,000

1) ODFW no longer is marking any DIT groups for Chinook or coho. The 'CWT Only' marked fish are limited to conservation purposes. These Spring Chinook 200,000+ 'CWT Only' fish are Umatilla / Upper Grand Ronde fish.

2) Fall Chinook 'Ad Clip' includes 300,000 'AD Agency only wire' used to mark Little White Salmon stock at Umatilla Hatchery.

3) Left Max only clip used at Wizard Falls to identify Warm Springs Hatchery spring Chinook in the upper Deschutes R drainage.

4) Fall Chinook 'No AD Clip' total is 460,000 LV clipped Rogue stock marked for Select Area Fisheries Enhancement (SAFE) terminal fishery in Youngs Bay (lower Col. R).

5) Coho: The 100,000 'CWT only' fish are Umatilla 9118 stock reared at Cascade Hatchery.

Comparison of AD+CWT and AD Clip Only Marks (2012 - 2019)						
	Spring Chinook		Fall Chinook		Coho	
Year	AD+CWT	AD Clip only	AD+CWT	AD Clip only	AD+CWT	AD Clip only
2012	3,210,000	9265000	2,955,000	15,775,000	350,000	5,494,000
2013	2,825,000	7285000	2,860,000	18,740,000	300,000	5,585,000
2014	2,710,000	9278000	2,820,000	18,691,000	300,000	5,187,000
2015	2,749,000	9783000	3,305,000	13,289,000	390,000	5,927,000
2016	2,780,000	9,456,200	3,200,000	13,638,500	365,000	5,762,000
2017	2,112,000	9,647,250	4,190,000	11,028,100	415,000	5,660,000
2018	2,952,000	9,581,100	2,755,000	9,915,100	365,000	4,709,000
2019	2,395,000	9,829,000	2,680,000	12,474,000	390,000	5,860,000

2019 ODFW FISH PRODUCTION AND MARKING PROGRAM

			No. Tagged x1000		No. Untagged x 1000		
Hatchery	Species	Stock / Br Year	AD+CWT	CWT Only	AD Clip	No AD Clip	Release
NORTH OREGON COAST							
Cedar Creek	ChS	Nestucca 471	25	0	205	0	Nestucca, Three Rivers
	ChS	Trask-3418	30	0	282	0	Trask R
		Totals:	55		487		
Trask	ChS	Trask 3418	0	0	137	0	Trask R
	ChF	Trask 3418	30	0	149	0	Trask R
	StW	Wilson R 12119	0	0	150	0	Wilson R
		Totals:	30		436		
Salmon R	ChF	Salmon R 3618	200	0	0	0	Salmon R
	Co	Big Cr 1318	25	0	360	0	S.F.Klaskanine
		Totals:	225		360		
Nehalem	Co	Fish - 9918	0	0	100	0	N. Nehalem
	StW	Nelm - 3219	0	0	132	0	N. Nehalem
		Totals:	0		100		
SOUTH OREGON COAST							
Millicoma	ChF	Coos 3718	30	0	35	0	Millicoma R.
Morgan Cr.	ChF	Coos 3718	30	0	470	0	Morgan Cr
Noble Creek	ChF	Coos 3718	30	0	390	0	Noble Creek
Cole Rivers	ChS	Rogue 5218	150	0	900	0	Rogue R
	ChF	Coos 3718	30	0	30	0	Morgan Cr (Coos Bay)
	Co	Rogue 5218	25	0	50	0	Rogue R
	StS	Rog-5219	0	0	300	0	Rogue R.
	StW	Coos 3719	0	0	170	0	Coos Area
	StW	Ten-8819	0	0	30	0	Ten ML Area
	StW	Rog-5219	0	0	300	0	Coos Area
	StW	App-6219	0	0	300	0	Ten ML Area
		Totals:	205		2080		
Indian Creek	ChF	L Rogue 6118	25		65	0	Rogue R
Rock Creek	StW	L Rogue 6118	80		70	0	Umpqua R.
Bandon	ChF	Coos-3718	0	0	10	0	Ferry Cr.
	ChF	Coos-3718	0	0	50	0	Fourth Cr.
	ChF	Coos-3718	0	0	100	0	Blossom Gl.
	ChF	Coos-3718	0	0	140	0	Morgan Cr.
		Totals:	0		300		
Elk River	ChF	Elk R 3518	255	0	0	0	Elk R.
	ChF	Chetco 9618	25	0	115	0	Chetco R.
	ChF	Chetco 9618	25	0	10	0	Ferry Cr.
		Totals:	305		125		
COLUMBIA RIVER							
Big Creek	ChS	San - 1118	25	0	225	0	Youngs Bay
	ChF	Big Cr 1318	400	0	1425	0	Big Creek
	ChF	Big Cr 1318	50	0	2475	0	Klaskanine
	Co	Big Cr 1318	50	0	685	0	Big Creek
	Chum	Big Cr 1318	0	0	0	40	Big Creek
	StW	Big Cr 1318	0	0	142	0	Big Creek
		Totals:	525		4952		

Hatchery	Species	Stock/Br Yr	No. Tagged x1000		No. Untagged x 1000		Release
			AD+CWT	CWT Only	AD Clip	No AD Clip	
Klaskanine	ChF	Rogue 5218	40	0	0	460 (LV only)	N Fk Klaskanine R
	Co	Big Cr 1318	25	0	610	0	N Fk Klaskanine R
		Totals:	65		610	460	
Gnat Creek	ChS	Mck-2318	25	0	375	0	Youngs Bay
	ChS	Mck-2318	25	0	125	0	Blind Slough
	ChS	Mck-2318	25	0	375	0	Gnat Creek
		Totals:	75		875		
Bonneville	ChF	Tann-1418	200	0	1800	0	Tanner Cr
	ChF	URB-4518	400	0	3220	0	Ringold
	ChF	URB-4518	120	0	880	0	Ringold
	ChF	URB-4518	240	0	660	0	Umatilla
	Co	Tann-1418	25	0	225	0	Tanner Cr
	Co	Tann-1418	25	0	425	0	Blind Slough
	StS	S Santiam 2419	0	0	250	0	S. Santiam R
	StW	Clck - 12219	0	0	100	0	Clackamas
		Totals:	1010		7560		
Sandy R	Co	Sandy 1118W	25	0	200	0	Sandy R, Blind Slough
	ChS	San 1118	25	0	200	0	Sandy R
	StW	Sandy 1119W	0	0	175	0	Sandy R
		Totals:	50		575		
Cascade	Co	Umatilla 9118	0	100	400	0	Umatilla R
	Co	Tann-1418	25	0	775	0	N.F Klaskanine
	Co	Tann-1418	25	0	515	0	Toungue Pt.
	Co	Tann-1418	25	0	140	0	Toungue Pt.
	Co	Nez Perce 8518	90	0	400	0	NzClearwater
		Totals:	165	100	2230		
Oxbow	ChS	S. Sant-2417	25	0	225	0	Sandy R (Bull Run)
	Co	Tann-1417	25	0	975	0	Youngs Bay
		Totals:	50		1200		
Round Butte	ChS	Deschutes 6618	255	0	150	0	Deschutes R (Pelton ladder)
	ChS	Hood R 5018	0	0	85	0	
		Totals:	255		235		
Fall River	ChS	Desc-6618	0	0	0	100 (LMax)	Upper Deschutes R
		Totals:				100	
Wizard Falls	StS	Desc 6618	0	0	0	100 (LMax)	Upper Deschutes R
		Totals:				100	
Irrigon	ChF	Snake R 9718	400	0	0	0	LGr Ronde, Hells Canyon
	StS	Little Sheep 2919	25	0	190	0	Little Sheep Creek
	StS	Wallowa 5619	100	0	220	0	Big Canyon
	StS	Wallowa 5619	0	0	140	0	Outside ODFW
	StS	Wallowa 5619	150	0	190	0	Wallowa R.
		Totals:	675		740		
Umatilla	ChF	Umatilla 9118	150	0	450	0	Umatilla R
	ChS	Umatilla 9118	0	40	0	0	Umatilla R
	ChS	Umatilla 9118	40	0	400	0	Imeques
	ChS	Umatilla 9118	50	0	170	0	Thornhollow
	StS	Umatilla 9119	60	0	90	0	Umatilla R.
		Totals:	300	40	1110		

			No. Tagged x1000	No. Untagged x 1000			
WILLAMETTE RIVER							
Eagle Creek	ChS	Clackamas 1918	25	0	175	0	Eagle Creek
	StW	Eagle-122H19	0	0	100	0	Eagle Creek
		Totals:	25		275		
Marion Forks	ChS	N San-2118	50	0	400	0	Tongue Pt, Blind Slough
	ChS	N San-2118	25	0	275	0	Youngs Bay
	ChS	N San-2118	25	0	75	0	Trout Cr.
	ChS	N San-2118	50	0	654	0	N. Santiam R
		Totals:	150		1404		
S. Santiam	StS	S Santiam 2419	0	0	282	0	S. Santiam R
McKenzie	ChS	McKenzie 2318	124	0	741	0	McKenzie R
Willamette	ChS	Willamette 2218	500	0	1240	0	Willamette R (Dexter)
	ChS	Willamette 2218	75	0	192	0	Willamette Coast Fork
	ChS	Willamette 2218	0	0	100	0	Hills Creek
	ChS	S Santiam 2418	110	0	916	0	S. Santiam R
	ChS	S Santiam 2418	0	0	1000	0	Various
	StS	S Santiam 2419	0	0	296	0	Various
		Totals:	685		3744		
SNAKE RIVER							
Lookingglass	ChS	Grande Ronde 8018	125	125	0	0	Upper Grande Ronde
	ChS	Lostine 20018	120	0	75	0	Lostine R
	ChS	Catherine Cr 20118	100	0	0	0	Catherine Creek
	ChS	Lookingglass 8018	126	0	0	0	Lookingglass R
	ChS	Imnaha 2918	240	0	132	0	Imnaha R
		Totals:	711	125	207		

* All production fish marking totals are preliminary and based on January 2019 projections.

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Alaska Department of Fish and Game: Hatchery Enhancement

Historic Production								
Release Year	SPECIES	TAGGED		UNTAGGED				TOTAL RELEASED
		AD + CWT	AD + TM + CWT	AD	TM	AD + TM	NO MARK	
2015	Chinook	444,221	857,593	11,070 ¹	5,361,124	15,227 ¹	2,167,917	8,857,152
	Coho	601,840	296,193	11,910 ¹	8,908,454	23,070 ¹	17,819,363	27,660,830
	Sockeye	0	0	0	58,339,346 ²	0	277,634	58,616,980
	Pink	0	0	0	770,252,457	0	177,423,968	947,676,425
	Chum	0	0	0	607,938,736	0	10,473,246	618,411,982
Year Totals:		1,046,061	1,153,786	22,980	1,450,800,117	38,297	208,162,128	1,661,223,369
2016	Chinook	296,262	857,445	9,702 ¹	6,785,271	20,968 ¹	2,412,347	10,381,995
	Coho	610,766	414,034	19,896 ¹	12,240,551	4,472 ¹	18,353,559	31,643,278
	Sockeye	0	0	0	48,566,690 ²	0	99,969	48,666,659
	Pink	0	0	0	755,361,971	0	138,394,477	893,756,448
	Chum	0	0	0	680,464,563	0	9,560,000	690,024,563
Year Totals:		907,028	1,271,479	29,598	1,503,419,046	25,440	168,820,352	1,674,472,943
2017	Chinook	328,483	740,024	13,931 ¹	6,067,398	168,576 ³	2,251,091	9,569,503
	Coho	770,064	175,144	14,148 ¹	6,172,778	3,920 ¹	22,522,163	29,658,217
	Sockeye	0	0	0	49,763,392 ²	0	347,059	50,110,451
	Pink	0	0	0	774,332,957	0	66,781,231	841,114,188
	Chum	0	0	0	650,873,117	0	4,340,000	655,213,117
Year Totals:		1,098,547	915,168	28,079	1,487,209,642	172,496	96,241,544	1,585,665,476
2018	Chinook	401,083	519,835	20,924 ¹	3,599,147	22,184 ¹	2,537,255	7,100,428
	Coho	661,404	200,062	27,179 ¹	7,221,264	6,500 ¹	21,747,292	29,863,701
	Sockeye	0	0	0	47,285,807 ²	46,000	430,932	47,762,739
	Pink	0	0	0	878,109,979	0	173,688,753	1,051,798,732
	Chum	0	0	0	689,838,575	0	0	689,838,575
Year Totals:		1,062,487	719,897	48,103	1,626,054,772	74,684	198,404,232	1,826,364,175
2019 (est)	Chinook	368,000	744,000	0	5,453,000	0	2,343,000	8,908,000
	Coho	663,000	271,000	0	8,635,000	0	20,283,000	29,852,000
	Sockeye	0	0	0	50,989,000	46,000 ⁴	289,000	51,324,000
	Pink	0	0	0	794,514,000	0	139,072,000	933,586,000
	Chum	0	0	0	657,279,000	0	6,093,000	663,372,000
Year Totals:		1,031,000	1,015,000	0	1,516,870,000	46,000	168,080,000	1,687,042,000

¹ These values represent a small portion of coded wire tagged releases that lost their tags prior to release. They were not intended to be released without a CWT

² These values include sockeye that Snettisham Hatchery released in BC as part of the TBR enhancement activities. There were 3,770,900 released in 2015; 3,870,000 released in 2016; 4,550,000 released in 2017; and 4,299,700 released in 2018.

³ In 2017, one hatchery intentionally released 147,953 adipose clipped and thermal marked Chinook without CWTs. The remaining 20,623 adipose clipped and thermal marked Chinook released without CWTs were small portions of tagged groups that lost their tags prior to release. These fish were not intended to be released without a CWT.

⁴ This estimate based on 2018 releases, which may not occur in 2019

Alaska Department of Fish and Game: Hatchery Enhancement

Projected 2019 Production by Region							
REGION	SPECIES	TAGGED		UNTAGGED			TOTAL RELEASED
		AD + CWT	AD + TM + CWT	TM	AD + TM	NO MARK	
Southeast	Chinook	368,000	480,000	4,077,000	0	2,164,000	7,089,000
	Coho	663,000	271,000	3,568,000	0	19,133,000	23,635,000
	Sockeye	0	0	13,202,000	0	0	13,202,000
	Pink	0	0	81,409,000	0	204,000	81,613,000
	Chum	0	0	506,710,000	0	6,093,000	512,803,000
Region Sub Totals:		1,031,000	751,000	608,966,000	0	27,594,000	638,342,000
Southcentral	Chinook	0	264,000	1,324,000	0	16,000	1,604,000
	Coho	0	0	4,895,000	0	38,000	4,933,000
	Sockeye	0	0	33,940,000	46,000 ¹	0	33,986,000
	Pink	0	0	708,514,000	0	0	708,514,000
	Chum	0	0	126,420,000	0	0	126,420,000
Region Sub Totals:		0	264,000	875,093,000	46,000 ¹	54,000	875,457,000
Arctic, Yukon, Kuskokwim	Chinook	0	0	52,000	0	32,000	84,000
	Coho	0	0	78,000	0	62,000	140,000
	Chum	0	0	144,000	0	0	144,000
Region Sub Totals:		0	0	274,000	0	94,000	368,000
Westward	Chinook	0	0	0	0	131,000	131,000
	Coho	0	0	94,000	0	1,050,000	1,144,000
	Sockeye	0	0	3,847,000	0	289,000	4,136,000
	Pink	0	0	4,591,000	0	138,868,000	143,459,000
	Chum	0	0	24,005,000	0	0	24,005,000
Region Sub Totals:		0	0	32,537,000	0	140,338,000	172,875,000
All Regions	Chinook	368,000	744,000	5,453,000	0	2,343,000	8,908,000
	Coho	663,000	271,000	8,635,000	0	20,283,000	29,852,000
	Sockeye	0	0	50,989,000	46,000 ¹	289,000	51,324,000
	Pink	0	0	794,514,000	0	139,072,000	933,586,000
	Chum	0	0	657,279,000	0	6,093,000	663,372,000
Grand Totals:		1,031,000	1,015,000	1,516,870,000	46,000 ¹	168,080,000	1,687,042,000

¹ This estimate based on a single 2018 release, which may not occur in 2019

IDFG production plans and marking/tagging for 2019

Mass Marking - With the exception of some limited releases intended for supplementation or specific broodstock management purposes, most spring/summer chinook salmon (92%) and steelhead (85%) are mass marked with an adipose fin clip (see tables below).

Mark Selective Fisheries- Recreational fisheries for Chinook salmon and steelhead in Idaho are mark selective. Tribal fisheries in Idaho are non-selective.

Brood Year 2018 Chinook and Sockeye Salmon Production Plan

Sum of Target Release Number			Marks & Tags				
Fish Hatchery	Stock	Release Site	AD	AD/CWT	CWT	PBT Only	Grand Total
Clearwater	S.F. Clearwater R.	Red River Pond	980,000	120,000			1,100,000
		Kooskia/Dworshak	Clear Creek	515,000	120,000		
		Lower Selway R.	145,000	120,000	135,000		400,000
		NF Clearwater	205,000	389,000			594,000
	Powell (summers)	Powell Pond	275,000	120,000	120,000	275,000	790,000
Clearwater Sum			2,120,000	869,000	255,000	275,000	3,519,000
McCall	S.F. Salmon R.	Knox Bridge S.F. Salmon R. (Seg)	730,000	120,000			850,000
		Knox Bridge S.F. Salmon R. (Int)			150,000		150,000
McCall Sum			730,000	120,000	150,000		1,000,000
Pahsimeroi	Pahsimeroi	Pahsimeroi R. (Seg)	815,000	120,000			935,000
		Pahsimeroi R. (Int)			65,000		65,000
Pahsimeroi Sum			815,000	120,000	65,000		1,000,000
Rapid River	Rapid River	Hells Canyon	100,000				100,000
		Little Salmon	0				0
		Rapid River	2,380,000	120,000			2,500,000
Rapid River Sum			2,480,000	120,000			2,600,000
Sawtooth	Upper Salmon R.	Yankee Fork	180,000	120,000			300,000
		Sawtooth weir (Seg)	980,000	120,000			1,100,000
		Sawtooth weir (Int)			120,000		120,000
Sawtooth Sum			1,160,000	240,000	120,000		1,520,000
Springfield	Snake R. Sockeye	Upper Salmon R. & Redfish Lake Cr.	1,000,000				1,000,000
Springfield Sum			1,000,000				1,000,000
Grand Total			8,305,000	1,469,000	590,000	275,000	10,639,000

Does not include spring Chinook production from Dworshak National Fish Hatchery (USFWS/NPT), Kooskia National Fish Hatchery (NPT), or Nez Perce Tribal Hatchery (NPT), or Fall Chinook from NPTH. Also, does not include Fall Chinook production (1.0M sub-yearlings) from the Idaho Power Company because these fish are reared and marked/tagged at Irrigon Fish Hatchery in Oregon.

IDFG-Brood Year 2019 Summer Steelhead Production Plan- Marking/Tagging in 2019

Fish Hatchery	Release Site	Stock	Marks & Tags			
			AD	AD/CWT	CWT Only	Grand Total
Clearwater	Newsome Cr.	SFCLW			123,000	123,000
	Red House Hole	SFCLW	219,000			219,000
	Meadow Cr	SFCLW	291,000		210,000	501,000
Clearwater Total			510,000		333,000	843,000
Hagerman National	Sawtooth Weir	SAWA	1,230,000			1,230,000
	Upper EF.Salmon R. (Weir)	EFNat			60,000	60,000
	Sawtooth Weir (PRAS Controls-norm density)	SAWA		90,000		90,000
	Sawtooth Weir (PRAS Controls- low density)	SAWA		90,000		90,000
	Sawtooth Weir (PRAS)	SAWA		90,000		90,000
Hagerman National Total			1,230,000	270,000	60,000	1,560,000
Magic Valley	Pahsimeroi Trap	DWOR USAL			93,000	93,000
					155,000	155,000
	Sawtooth Weir	SAWA	279,000			279,000
	Little Salmon R.	DWOR/USAL	217,000			217,000
		PAH	186,000			186,000
Magic Valley Total			1,085,000		465,000	1,550,000
Niagara Springs	Hells Canyon Dam	OX	550,000			550,000
	Pahsimeroi Trap	PAH	800,000			800,000
	Little Salmon R.	PAH	200,000			200,000
		OX	250,000			250,000
Niagara Springs Total			1,800,000			1,800,000
Grand Total			4,625,000	270,000	858,000	5,753,000

Does not include production from Dworshak National Fish Hatchery (USFWS/NPT).

2019 NWIFC Tribal Mass Marking and Coded-Wire Tagging Plans

(Includes tribal production marked by WDFW)

Area	Species	Number of fish to be released with a CWT		Number of fish to be released without a CWT		2019 Total Production
		Ad Clipped	Unclipped	Ad Clipped	Unclipped or Vent Clipped	
Puget Sound	Spring Chinook	300,000	2,175,000	900,000	100,000	3,475,000
	Summer/Fall Chinook	1,275,000	500,000	8,340,000	1,000,000	11,115,000
	Coho	785,000	175,000	5,230,000	950,000	7,140,000
	Steelhead	10,000	40,000	100,000	0	150,000
Coast	Spring Chinook	0	0	0	0	0
	Summer/Fall Chinook	750,000	370,000	300,000	200,000	1,620,000
	Coho	125,000	75,000	225,000	0	425,000
	Steelhead	70,000	0	135,000	340,000	545,000
Grand Total		3,315,000	3,335,000	15,230,000	2,590,000	24,470,000

 Fisheries and Oceans
Pêches et Océans
Canada

[illegible]

WDFW Marking and Tagging Plan 2019

Program Goal	Species						
Mark/Tag Type By Area	Chin	CO	Cutthroat	Kokanee	RBT	SH	Sockeye
Coast	8,895,000	4,030,000				922,000	
Ad	8,195,000	3,730,000				897,000	
Ad + Vent						25,000	
AD+CWT	500,000	150,000					
CWT	200,000	150,000					
Columbia River	29,118,570	8,761,000	183,000	200,000	55,000	3,748,422	
Ad	18,564,899	6,965,000	183,000	200,000	55,000	2,643,122	
Ad	1,000,000						
Ad + Vent						340,000	
Ad+BWT						10,000	
AD+CWT	8,078,171	1,519,000				371,650	
Body CWT	125,000						
BWT						60,000	
CWT	1,250,500	277,000				243,650	
Vent	100,000						
Ad+Body CWT						80,000	
Puget Sound	33,707,500	6,513,800		125,000	65,000	783,000	331,800
Ad	28,215,000	5,983,800		125,000	65,000	740,000	331,800
Ad + Vent	225,000						
AD+CWT	3,142,500	350,000					
BWT						43,000	
CWT	2,125,000	180,000					
Grand Total	71,721,070	19,304,800	183,000	325,000	120,000	5,453,422	331,800

Yakama Nation -- update

From: Bill Bosch <Bill_Bosch@Yakama.com>
Sent: **Tuesday, April 2, 2019** 12:41 PM
To: Jim Longwill
Cc: MCCM@critfc.org; Bill Sharp; Jason Rau (jayrau@ykip.org); Cory Kamphaus; Todd Newsome; Melinda Davis; Bill Fiander
Subject: RE: RCMT 2019 Meeting

Our releases are expected to be reduced compared to recent years' releases due to low brood returns of some species.

Approximate Yakama Nation Planned 2019 releases:

Yakima Basin

Spring Chinook: ~711,400 total release (89% CWT in snout, 11% CWT in post-dorsal)

Fall Chinook (subyearlings):

LWS NFH transfers released from Prosser, 0 total release due to BY18 brood shortfall

Prosser URBs released from Prosser, ~150,000, 20% PIT, no CWT

Summer Chinook: ~470,000 Wells stock released from Yakima R. acclimation sites, 100% CWT

Sockeye: natural-origin progeny of adult plants; minimal marking (PIT) at downstream juvenile sampling stations

Coho: ~0.6million total release, ~63% CWT- all blank wire tag

Mid-Columbia Coho: ~1.8million total release, ~79% CWT (of which some blank wire tag)

Klickitat Basin

Spring Chinook: ~635,000 total release, ~25% CWT

Fall Chinook: ~1.2m total release, ~15% CWT

Coho:

Lewis stock released from Klick. Hatchery, ~0.9m, ~5% CWT

Washougal stock direct released in lower Klick. R., ~1.5m, <5% CWT

Bill Bosch, Data Manager
Yakama Nation Fisheries
Yakima-Klickitat Fisheries Project



Nez Perce Tribe

Department of Fisheries Resources Management

Administration • Enforcement • Habitat/Watershed • Harvest • Production • Research • Resident Fish

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The Nez Perce Tribe acclimates and releases 450,000 Fall Chinook Yearlings that are reared at Lyons Ferry Fish Hatchery in Southeast Washington. The fish transferred to 3 different acclimation sites, two in the Snake River below Hells Canyon Dam and one in the Clearwater River below Dworshak Dam (see map). The three groups of Yearlings are marked with 2 CWT codes each prior to transfer to acclimation.

In late 2018 the main water supply line for Lyons Ferry Hatchery incurred a leak. In order to reduce the water demand of the hatchery, the 450,000 fish composing the 3 groups of Yearlings were mixed and transferred into one earthen pond after marking already occurred. In the Spring of 2019 two groups of roughly 150,000 fish were transferred from the pond at Lyons Ferry to acclimation sites in the Snake and Clearwater Rivers while the remaining 150,000 fish were released on station at Lyons Ferry.

Moving forward the plan for the RMIS CWT upload is to use Lyons Ferry Hatchery as the location for all 6 tag codes. A note in the comments field of the release file for each code will highlight the estimated number of tags being released and at what location, Snake River at Captain John Rapids, Clearwater River at Big Canyon Creek, and Lyons Ferry Hatchery.

For questions please contact me directly.

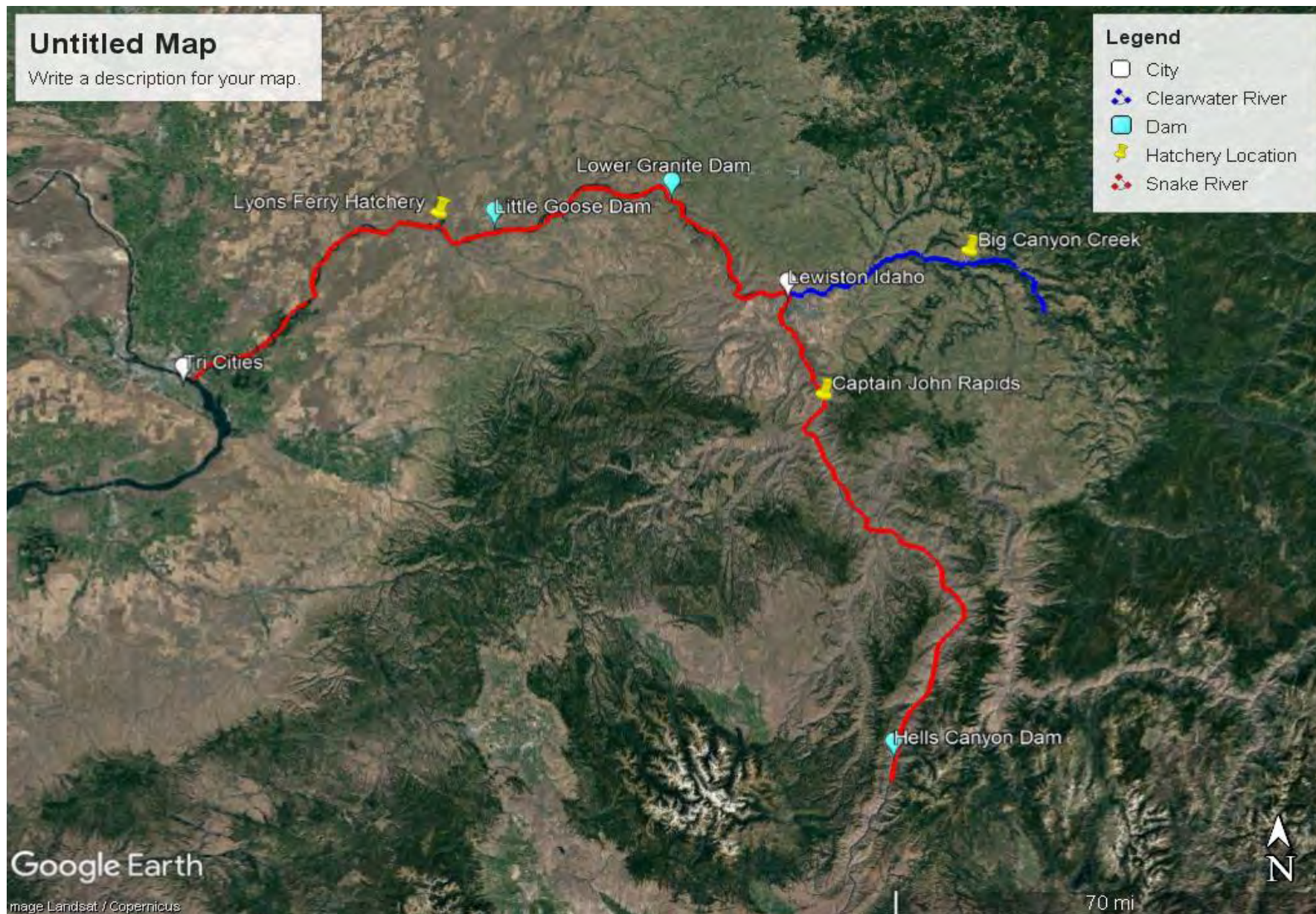
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Untitled Map

Write a description for your map.

Legend

- City
- Clearwater River
- Dam
- Hatchery Location
- Snake River



Species	Life Stage	Release Site	Release Goal	CWT Only	CWT/AD	AD Only	Unmarked
Fall Chinook	Sub Yearling	SF Clearwater Acclimation	350,000	0	100,000	0	250,000
Fall Chinook	Sub Yearling	Selway River Acclimation	350,000	0	100,000	0	250,000
Fall Chinook	Sub Yearling	Lapwai Creek Acclimation	200,000	0	100,000	0	100,000
Fall Chinook	Sub Yearling	Nez Perce Tribal Hatchery	500,000	0	100,000	0	400,000
Fall Chinook	Sub Yearling	Lapwai Creek Acclimation	200,000	0	100,000	0	100,000
Fall Chinook*	Sub Yearling	Captain John-1 Snake R.	450,000	0	200,000	0	250,000
Fall Chinook*	Sub Yearling	Pittsburg Landing-1 Snake R.	400,000	0	200,000	0	200,000
Fall Chinook*	Sub Yearling	Big Canyon-1 Clearwater R	450,000	0	200,000	0	250,000
Fall Chinook*	Sub Yearling	Captain John-2 Snake R.	200,000	0	200,000	0	0
Fall Chinook*	Sub Yearling	Pittsburg Landing-2 Snake R.	200,000	0	200,000	0	0
Fall Chinook*	Sub Yearling	Big Canyon-2 Clearwater R	200,000	0	200,000	0	0
Fall Chinook*	Yearling	Captain John Snake R.	150,000	80,000	70,000	0	0
Fall Chinook*	Yearling	Pittsburg Landing Snake R.	150,000	80,000	70,000	0	0
Fall Chinook*	Yearling	Big Canyon Clearwater R.	150,000	80,000	70,000	0	0
Sub total			3,950,000	240,000	1,910,000	0	1,800,000
Spring Chinook	Smolt	Kooskia Hatchery	600,000	0	100,000	450,000	50,000
Spring Chinook	Presmolt	Lolo Cr.	150,000	150,000	0	0	0
Spring Chinook	Presmolt	Newsome Cr	75,000	75,000	0	0	0
Spring Chinook	Smolt	Lolo Cr.	180,000	0	60,000	120,000	
Spring Chinook	Smolt	Nez Perce Tribal Hatchery	200,000	166,666	33,334	0	0
Sub total			1,205,000	391,666	193,334	570,000	50,000
Coho	Smolt	Kooskia Hatchery	500,000	200,000	0	0	300,000
Sub total			500,000	200,000	0	0	300,000
Grand Total			5,655,000	831,666	2,103,334	570,000	2,150,000

* Marking Completed by WDFW at Lyons Ferry Hatchery, Released by NPT