Steering Committee Meeting 9/16-17/2024 Kalispel, MT

DAY 1

Attendees

In Person: Jake Chambers (ODFW), Dawn Anderson (MFWP), Russell Scranton (BPA), Mike Banach (PSMFC), Greg Wilke (PSMFC), Nancy Leonard (PSMFC), Mari Williams (PSMFC), Kate Al-Sheikhly (PSMFC), Meg Dethloff (PNAMP), David Schmetterling (Montana FWP), Angie Schmidt (IDFG)
Online: Van Hare (PSMFC), Nadine Craft (ODFW), Sheryn Olson (CRITFIC), Michelle Groesbeck (WDFW), George Batten (ESA/Colville), Katie Barnas (NWFSC-NOAA), Todd Gilmore (USFWS), Evan Brown (IDFG), Kasey Bliesner (ODFW), Leanne Cohn (PSMFC)

Action Items:

- ALL: Data Sharing/Data Use Agreement updates final comments before ExCom review
- ALL: CAP 5-year plan review and updates before ExCom
- ALL: HCAX timeline and needs to be discussed at ExCom
- CA DES Development Team/s: CAP HLI DataStatus table
- Greg: Query system usage tracking proposal
- Mari: BPA final report kickoff in December in SharePoint
- Greg: initiate QAQC application by the Feb SNSC meeting
- Meg: Send Dawn info about ETIS genetics talk for possible addition of MFWP talk
- Connect Dawn & Angie on mobile creel efforts by WDFW – Jessa Pease
- PSMFC staff: send examples of data going into pikeminnow database to Katie Barnas
- Mari will send calendar invites for next SNSC meeting in Portland.

Welcome & Introductions

HCAX closeout

Nancy summarized the project and final workshop in May 2024.
- Greg submitted xml schema to WA GSRO this summer.
- Nancy and WA GSRO completed the progress report to EPA to close out the grant
- Upcoming: figure out how to get data populated and support other folks who want to submit data
- 2024-25 HCAX data query tool
- Next CAP indicator targeted is age data

Fish Facilities outside the CRB VAN

- Fish facilities master dataset is managed across projects by PSMFC GIS
  - QAQCed CRB data for display on web map in 2016
  - Now QAQCing facilities outside of the CRB and working with partners to obtain the best available data
  - Once vetted by partners, Van will publish the full layer
- StreamNet maintains the Hatch ID/Dam ID
- PSMFC GIS developed a separate FacilitiesID to connect IDs from different PSMFC projects without requiring a complete change to all data
- Brought up for consideration
  - Set up a process for non-partners to submit facilities data to be included
  - ADD indications in data and map imagery to indicate co-management of facilities
- Looking for input from partners:
  - Are there any concerns with the process they are using?
  - Are they missing anything important in how they are doing it? Are there any ideas?
  - Don't want to track the level of detail that would be better tracked in a related table by StreamNet
  - What filters do we want to apply before publishing the view as related to the project?
- Please reach out to Van with any comments and questions! Will provide a draft for review that can be refined on partners timeline

DS/UA updates

- Final draft sent out in email pre meeting.
- EPA EN Grant included updating the data sharing agreement
- Will send out an updated version to the Steering Committee to approve and then ExCom for final approval.

Fish HLI CAP DES - HCAP DES Updates

- CAP DES meetings will now be held as joint with overlap between the natural origin DESs and the hatchery DESs to minimize time for those responsible for both

Natural Origin DES updates:
  - New DES effective July 22nd
  - Working on for next DES update:

- ID natural key for each table (SAR done) – need to come up with a natural key that works for everyone – conversation needed
- Remove fields still in the works – what fish have been removed for hatchery use if it is a natural pop etc (lead by Kasey Bliesner ODFW)

Hatchery DES:
- o Effective June of 2023

CAP HLI DataStatus table

- o Data Status Change proposal for natural and hatchery pops
  - o Identify status for entire time series, part of TimeSeriesID table
  - o Can be used to indicate data no longer collected
  - o modeled after trend status table
- o Everyone Approves!! DES Dev Team next!!

StreamNet Tech Team and DDT updates

- o Two tech meetings since last SN SC meeting
- o New StreamNet DES adopted vers 24.1
- o Webpage for expected data updates - completed.
- o Proposal for tracking data downloads
  - o Spring last year Google Analytics changed and broke our tracking
  - o Greg asked to figure out how to track and characterize usage of the query systems
- o StreamNet DES Updates for the Next version:
  - TrendID will not change if transferred to other orgs

SPOTLIGHT MFWP genetics

- o MFWP started using conservation genetics in 1970s
  - o MFWP developed a genetic monitoring program for bull trout
    - Collaboration with Idaho and universities
    - Stream Net contributed $50K to the efforts that helped genotype 4,000 individuals and establish the Genetic Panel: set of variable locations in the genome used to quantify biological patterns of interest
    - Developed the inter-agency bull trout monitoring with collaborative data
    - Found that genetic differences varies widely across management units
    - IDFG publication and PDH and post docs working on this from MFWP

- Cutthroat trout conservation genetics
  - Additional StreamNet funding to develop GTC panel
  - Less collaborative result than bull trout
- Developed a GTC panel for West slope cutthroat trout that was MFWP focused
  - Were able to obtain better genetic information for cheaper
    - Already influencing policy and decision making in the agency
    - Found that there are real genetic costs to focusing on hybridization

SharePoint Site / BPA Annual Report

Working to make a functional StreamNet SharePoint site that partners can access to edit the BPA final report, starting date of early December 2024

- Goal is to move away from web form and streamline and simplify the yearly task with reproducible workflow
- Mari will make comments with people's names in the document in the shared channel where they need to provide updates

RST Dashboard

The Columbia River basin Rotary screw trap dashboard is still in the development stage. The dashboard is intended to be a comprehensive resource for the Columbia River basin to connect data location, info management, organization, contact info, and other trap specific information. StreamNet staff and contractors will keep working on this as staff resources allow.

FMWG Updates

Juvenile density Task Group completed in April
Carrying capacity standards Task Group in final editing phase
Pit Tag Array Task Group developing webinar series
Terms and Definitions Task Group - Launching in October

- Have reviewed, flagged, and categorized issues for the initial round of review, will be sent out to folks who are interested
- We will set up an early October/November meeting to address how to move forward with the next round of review and edits
- Nov-Dec: collect input from SME using MS forms
- Jan: share final draft

- o   March: include updated terms & defs at the WA/BC workshop

TrendGroup query display

Trend groups – a way to link related time series within StreamNet Fish Monitoring data. A query built to show datasets joined by trend group is the goal so that all associated datasets could be downloaded. Mock up images are available in the slides.

DAY 2

Attendees

In Person:

Jake Chambers (ODFW), Dawn Anderson (MFWP), Russel Scranton (BPA), Mike Banach (PSMFC), Greg Wilke (PSMFC), Nancy Leonard (PSMFC), Mari Williams (PSMFC), Kate Al-Sheikhly (PSMFC), Meg Dethloff (PNAMP), David Schmetterling (Montana FWP), Angie Schmidt (IDFG)

Online:

Nadine Craft (ODFW), Sheri Olson (CRITFIC), Michelle Groesbeck (WDFW), George Batten (ESA/Colville), Katie Barnas (NWFSC-NOAA), Todd Gilmore (USFWS), Evan Brown (IDFG), Kasey Bliesner (ODFW)

QA/QC tool updates and 2025 plans

Random records are selected and pushed out through the QAQC application and are then available for the agency can go through and identify categories of issues.

2025 Priority: Decided to select a larger set of records than in the past – 80 records for each agency (Colville has less). Will have records loaded and ready to start at Spring SN SC and completed by fall SN SC. Montana has done the secondary agency review of records in the past, but this may not be possible in 2025 due to staffing shortages.

ETIS Planning

Emerging Technologies Info Session
- o   Goal is to bring together resource monitoring professionals and data managers
- o   Happens every other year, alternating between in person and webinar.
- o   2025 will be a webinar series
- o   Topics: new innovative data QAQC, AI, genetics, and modeling and analysis trends.
  - o   Emphasis on AI and genetics which have been hugely influential to IDFG's efforts

- o Genetics presentation from MWFP recommended as an addition to the talks
  - ▪ <mark>Meg will send Dawn info to pass along to Ryan to see if he'd be interested</mark>
- o Discussed if this could be a good place to talk about a standardized genetics database
  - ▪ That would be a FMWG topic – ETIS could be used to attract people/assess interest and then if there is we can take that to the FMWG

StreamNet ExCom Prep

Joint Ex Com PNAMP hybrid meeting in Portland
- o Invite all participants to stay for both days – though only Ex Com is requited for day 2
- o Day 1
  - o HCAX updates from Jake
    - ▪ <mark>Mari will send info and link to DES</mark>
  - o HCAX closeout and FMWG updated
- o Day 2 – only StreamNet ExCom
  - o Data provider needs from HCAX and any changes to CAP 5 yr plan
  - o Jake: Is Bull Trout still the next priority after HCAX? Do we need to look at the priority and change things around? Age is still not on there but it is a topic of interest
  - o Russel: Keep in mind that CAX is dominated by anadromous fish, BPA is interested in sharing Bull Trout data and that is why it is so high priority – age data is embedded withing the existing structures
  - o <mark>Everyone should review the priorities and let Mari know and we can readjust if needed.</mark>

Like last year, once we have the draft agenda and slides we will share it with the orgs so they can prep their committees so they are ready – will try and have slides at least 3 weeks in advance for people and will add that to the StreamNet Partners SharePoint

Updates from members - email notes for inclusion

MFWP - Dawn:
Staffing and capacity challenges – 3 vacancies
- Have other staff filling in for StreamNet position
- GIS & Natural Resource Data Analyst – 2 positions
- GIS Programmer/Analyst
- (Please distribute the vacancies to any job sites you may be aware of)

Working on the 2024 data exchange with other staff filling in. There's been a bit of a learning curve and computer compatibility issues with the API. Entering last minute Yellowstone Cutthroat Trout (YCT) native trout assessment updates from upper and lower Snake River. (After this meeting IDFG graciously offered to make their Snake edits to the YCT assessment database. Huge thanks to Evan.)

Work on our hydrography has been continuing but has been on hold with staff out on leave.

Secondary QA/QC review – MT has been assisting on reviewing other states records. This may not be possible in 2025 due to staff resources.

Outside of StreamNet:

GIS server upgrade in a Linux environment, working on a move to Windows

Portal evaluation – dependent on GIS server upgrade

Conversion of Web App Builder to Experience Builder in CY2025

Experience Builder/Dashboard updates

Regular and seasonal recurring work, including preparing for hunting season.

IDFG – Angie:

Overall IFWIS IDFG group

- 3 staff vacancies – filled!
- New Hunt Planner deployment this fall
- New IDFG website approved to be revamped.
- ArcGIS Enterprise demand ramping up throughout the agency with many mobile data collection apps deployed…Evan's catch phrase…'better data faster'!

Fisheries updates

- Creel mobile survey app – thousands of interviews conducted. Saving staff time and timely resource management.
- Scientific Collecting Permit - another example of converting to a digital workflow. SCP app, etc.
- SGS mobile application in production this year (pilot last year), field data collection
- SGS desktop application update and testing to manage, access, and share SGSm and traditional data
- TimeSeriesID implemented for all IDFG data as well as QCT data set we adopted
- IMW Smolt Density Maps updates.
- SN\CAX\HCAX updates.
- HiLI Manager and other updates.
- BCT RWA updates to Conservation Populations, feedback on online mapper and database

- WCT/YCT Conservation Efforts Database (CED) feedback and development of spatial framework and reporting outputs
- Chinook, Steelhead, and Coho fishery webpage development and updates in Drupal 10
- ETIS 2025 Webinar planning and coordination of presenters
- HCAX data sources established for the HatcheryReleases, BroodstockSpawning and SAR_Hatchery tables.
- HCAX, currently standardizing stock and program names and updating HatcheryStock and HatcheryProgram tables.

CRITFC Library - Tami:

Excited announcement is that our library is about to roll out two new digital collections
- CRITFC videos of symposia, interviews, and a show that was produced in the 80s and 90s called the CRITFC report that they created for public access television.
- A photograph collection by Raymond Metheny, who was contracted by the FWS to capture images of Celilo Falls and the fishing there before The Dalles Dam was constructed.

CRITFC ITMD – Sheryn:

Contacts Sheryn Olson, solson@critfc.org, Jiaming (Jammin) Yang, jyang@critfc.org (CDMS project lead)
- West Coast Ocean Alliance and Tribal Caucus. Has a Data portal (WCODP) and an Ocean Indicators Dashboard, both in development; comments welcome at portal.westcoastoceans@sccwrp.org WCODP lead Laura Bliss, laura.bliss@westcoastoceanalliance.org
- The WCODP data catalog references 23 of StreamNet's datasets on the mapserver, e.g. Layer: FishDistribution_AllSpeciesCombined (ID: 0) (psmfc.org) or StreamNet/Bull_trout_Core_Areas (MapServer) (psmfc.org)
- We are participating in offshore wind proposal developments, (BOEM). CRITFC's new energy development intern, Karlen Yallup, kyallup@critfc.org, is sponsored by the policy dept. and who is working with WCOA and energy OFW proposals.
- Elaine Harvey attended CHOW (capital hill ocean week) in June, sent by CRITFC and WCOA to represent west coast concerns about ocean uses, especially OFW.
- ITMD work: NOAA grant enabled good progress on the *tribalCDMS* and YNF Klickitat data manager + Jiaming (Jammin) Yang. 2 year grant expires Dec 24, applying again for another 2 years. We had no resources to maintain or improve the tribalCDMS from

2018, when CTUIR provided the system to NPT, CTWS and CRITFC, to 2023-we were awarded the NOAA grant, some CDMS work:

- Brought tribalCDMS up to same version as CTUIR CDMS.
- New core master code CDMS for natural resources, separated from entire CTUIR CDMS;
- GitHub forks for each NPT, CRITFC, CTWSRO for custom deployments;
- Cleaner code, more documentation, bug fixes
- Continuous development/continuous integration (CD/CI) implementation - pivotal project tracking, test or staging servers, Jenkins and GitHub actions for smoother pre-Beta testing, and deployment;
- UI improvements & better query/filter tool for data display and data extraction/downloads;
- Large dataset download capability; and more
- Indirectly - JYang salary freed up from the BPA/Accords source allowed ITMD to hire Innovate, Inc. to focus on the tribal CDMS.
- Current work: enable bulk record edits,

- We're participating in the EPA sponsored Tribal network Exchange Group (TXG) that holds training sessions, hands on data management assistance, a PNW coding group is meeting monthly; their biennial TENC meeting is in a month Oct 16-17 at the Spokane Northern Quest resort. Promote the TXG to the tribes! Great resources.

USFWS - Todd:

Has a new data manager staff member.

Hatchery DB is going to be their best option for data modernization.

CRIS – Columbia River Info Systems

- Being tested on 3 national fish hatcheries in the Olympic peninsula and getting feedback on SOP and improvements

SBT - Kurt Tardy – not available.

ODFW - Jake/Nadine/Kasey:

- Submitted 14 Hatchery Programs for the Returns, Broodstock Spawning, and Releases tables and one Program for the SAR table. The data is ready to be tested on the StreamNet query system. We also have three other Programs close to publication but need to make a few adjustments to Releases.
- West Region Fish Research completed additions for the field TimeSeriesID (TSID) in the Coordinated Assessments (CA) natural origin tables. East Region Fish Research

is currently in the process of adding TSID, updating Protocol Method URLs and Method Adjustments, and submitting natural origin HLI's for 2024.

- o Concurrently staff updated methods documentation for both natural and hatchery origin data exchange standards (DES) on the ODFW Data Clearinghouse related to Method URLs.
- Completed all system updates for the new CA DES adopted in the summer of 2024, Trend DES earlier in 2024, and miscellaneous updates for the pilot draft HCAX DES.
- Migrated all the recovery planning data and information from the obsolete ODFW Recovery Tracker website to a more secure and upgraded infrastructure. Developed a new internal application to manage the data and a new public website and web query system. We plan to update the data downloads and add new graphical, and table features over the coming months.
- Kasey Bliesner (IMW Coordinator/Project Analyst) and Joseph Feldhaus (Lower Snake River Hatchery Evaluation Project Leader) successfully procured a 3-year EPA Exchange Network Grant. The grant will help to create and implement an improved and streamlined data management system for Lower Snake River hatchery data, allowing the program to share data with internal ODFW systems, HCAX and FINS. The job announcement will be released soon to hire an Assistant Project Leader (NRS2) to lead work on this project.
- Also, of note is the East and West Region Fish Research will be a part of the newly formed "Inland Fish Science Program" (IFSP) in Fish Division. The first all-staff meeting is on Monday, September 23 when we will learn more about the scope and mission of the Program.
- The ODFW GIS Coordination group identified 6 updates for existing Hatchery Facilities and approximately 6 other acclimation sites to be added to the datasets for West Region, but still need to conduct are review for East Region. We anticipate data delivery to be sometime in mid- to late-Fall.
- ODFW StreamNet see no issues with sharing facilities outside of the Columbia River Basin as we will continue to include those facilities within the dataset.

CCT - George:

Fall was HCAX focused. Spring bios go into the field and Geroge works on other non SNet projects. Will work on processing data from bios and getting that in the DB when they get back

Chief Joe Hatchery work: creel surveys from May- Sep and takes that data into monthly reports. Used a spreadsheet that has been tedious to work with because of embedded calculations – asked for help improving that. Building a shiny app that pulls that data from the DB and does all aggregations and calculations for creel survey report and can look at the app and see output tables that can be downloaded as a spreadsheet for reporting.

- o Testing the app and its functionality – hopefully get that done in the next couple weeks.
- o Willing to share raw code and SOPs with the group

WDFW - Brody:

o   Hired new GIS lead – Andre. Will be recruiting for a new GIS hydro steward.
o   Finalized wok on SPI salmon population indicators database for NOSA, Lower Col R Tribs and StreamNet work.
   o   Long process getting the UI correct so analysts can use that effectively.
   o   Able to crosswalk to CAX
o   Hired a developer to build a modern eDNA database
o   Recruiting for new mobile developer for the commercial harvest app
o   Hatchery Management Sys Development – Fish Books replacement – mobile forms based entirely. This is what HCAX will be reported out of. DB not up and running yet as they are refining forms with Hatchery M&E
o   electronic record card development for Fish WA app that will let them do electric catch record cards – this will help integrate with mobile regs
   o   has been a challenge working with the 2 dev teams & contractor work
o   Creating a new harvest DB – previous SAS process for sport harvest
o   Continued migration to pure cloud env in AWS – was Azure
o   Mobile Creel Project DB – adding new projects
o   Michelle struggling with HCAX protocols to get data in – that is the hold up on that work – Brody working with her to make sure they can get their data in
o   Connect Dawn & Angie on mobile creel efforts
   o   Brody: Yes. Jessa Pease is the person who you can reach out to on mobile creel migration.
o   Angie: AWS vs Azure question, why did you pick that vs Azure cloud?
   o   Brody: Related to MS contract. Already had an AWS env with data in it so it came down to expertise, data in the AWS db, use, env security, and cost effectiveness so they went with AWS.

NOAA NWFSC - Katie:
NOAA 5y status review cycle pushed out and NOAA will give plenty of heads up for when the next data call will be.

BPA - Russell:
BPA has kicked off individual meetings with contractors for data accessibility compliance
Working on watershed layer updates and how to code things in R for cost savings.

Working on Pit Tag R code sharing to help document pit tag data use and publish those in GitHub.

PNAMP - Meg D:
Jen & Sam at AFD in HI – presenting on benefits of using collaborative tools and working with colleagues
Amy working with IMW – will get an update and send notes
Oct 17: FMWG October meeting that happens quarterly – Kasey will present on MFK John Day IMW.

PSMFC - Nancy:
Focused on improving hybrid team experience internally – merged programs
Hired 2 DMS2s this year
- o Megan: SNet, RMIS, and Fish Regs DB from Pacific Salmon Commission connection to RMIS
- o Gabe Smit may get pulled into meetings
Trying to develop polygon layers for other fish species for BPA's CBFish for project species and habitat use.
- o Will be reaching out for any organizational data/ agency approved list
- o Once those are drafted why will be available on PSMFC GIS Hub and we will share for the orgs to review metadata for – may use FMWG to review those as well
- o After this meeting will focus on MAFAC dashboard
  - ▪ Nancy and Mari will present to Columbia Basin Collaborative
- o Mike is working with project lead on Pikeminnow data so that they can bring that into the StreamNet DB
  - ▪ BPA ok with allocating funds to streamline data from WDFW into that
- o Klamath Basin Pit Tag Data System – new DB that is separate from Klamath Basin Data System.
  - ▪ Will leverage what PITAGIS has done – starting off private but will be made publicly available eventually.
- o Need an estimate from everyone by September 24th for how much each partner has spent on the current StreamNet contract -estimate what you think you will have spent by the end of September – to send to BPA
  - ▪ ODFW – need to work with DeAnna Erickson because Jon Bowers is out.
  - ▪ Angie sent what IDFG has spent up to date – she will update and re-send

PSMFC - Lara: SDM

- o Group involved DFO, USGS (PNAMP), Salmon Trust Alliance in Scottland, WDFW and some SNet participation
- o Met with NCEAS on Data One portal and connection to that
- o Created an RDA to engage with salmon ontology on a global level – allow us to set up working groups
- o WA/BC AFS presentation on Salmon Ontology workshop
- o https://www.rd-alliance.org/groups/salmon-research-and-monitoring-ig/
- o https://www.nceas.ucsb.edu/
- o Sheryn: RDA has great collaboration areas, one is Indigenous Data Sovereignty. rd-alliance.org
- o https://wa-bc.fisheries.org/ 2025 info is now out

PSMFC - Mike:

Will pick back up on Pikeminnow work when people get back from field

- o ==Nancy: When you have an example of data please share with Katie Barnas==

Next StreamNet Steering Committee Meeting

- o Next Meeting Location:
  - o February:
    - Remote location travel may be hard. Are folks ok with coming to Sellwood/Portland?
    - Decided on Portland for February. Focus on 18-21st of Feb
    - ==Decided on Feb 19-21st at PSMFC==
  - o Fall 2025:
    - La Grande suggested
    - Check in with Colville and see if Omak might want to host
    - No Date set yet
    - Potential La Grande Dates:
      - Kasey needs to check in on logistics – will set date at next meeting
      - Plan on LaGrande
  - o ==Mari will send out calendar invite to all for February meeting dates==