StreamNet Steering Committee Meeting

October 2-3, 2025

In-person location
ODFW La Grande

Hybrid meeting
with MS Teams access

Meeting Material:
CAP Strategic Plan_DRAFT_22SEPT2025

Day 1

Attendance: (name, affiliation)

In Person: Sarah Maher (IDFG), Brodie Cox (WDFW), Jon Bowers (ODFW), Ian Tattam (ODFW), Joseph Feldhaus (ODFW), Joe Dittmer (ODFW), Kasey Bliesner (ODFW), Brittany Beebe (ODFW), Evan Brown (IDFG), Nancy Leonard (PSMFC), Lara Erikson (PSMFC), Bekki Waskovich (IDFG), Chris Harrington (IDFG), Mari Williams (PSMFC), Meg Dethloff (PSMFC)

Online: Dawn Anderson (MFWP), Jake Chambers (ODFW), George Batten (ESA for CCT), Greg Wilke (PSMFC), Michelle Groesbeck (WDFW), Jason Edwards (PSMFC), Jiaming Yang (CRITFC ITMD Project), Kurt Tardy (SBT), Megan Griffiths (PSMFC), Mike Banach (PSMFC), Russell Scranton (BPA), Sam Cimino (PSMFC), Phil Sandstrom (WDFW), Sheryn Olson (CRITFC ITMD Project), Tami Wilkerson (CRITFC CBFWL), Van Hare (PSMFC), Kris Warner (WDFW)

Links to Spotlight Presentations:

- *ODFW's LSRCP Hatchery Assessment and Development Data Exchange – Progress to Date*: Kasey Bliesner and Brittany Beebe, ODFW
    - Link to recording: https://youtu.be/jrxdRvb2hTE
- *RShiny tools for Data Management, Sharing and Display in ODFW's LSRCP Hatchery Assessment and Development Project*: Joe Dittmer, ODFW
    - Link to recording: https://youtu.be/vLDjbYeFd_g
- *E-Creel Methods for Estimating Steelhead Harvest in the Grande Ronde Basin*: Mike Greiner, ODFW
    - Link to recording: https://youtu.be/phRS1oSiJ_0

Action Items: (item assigned to)

- **Website updates** for committee and team membership (Mari)
- **CAP Strategic Plan Review:** Review the milestones section and Appendix B of the CAP strategic plan and provide feedback or edits by October 8 to ensure the document is ready for the executive committee meeting. (All steering committee members)
- **QA/QC Tool Launch:** QA/QC processes will be reviewed and consider adding HCA records to the random selection. (Mari)
- **Montana's Fish Distribution Development:** Dawn will present their fish distribution redevelopment at our next meeting. (Dawn Anderson, MFWP)
- **HCAX Web Query Tool Feedback:** Compile and provide consolidated partner feedback on the HCA web query tool mock-ups and data sets to guide the next round of specifications and development. (All partners, Mari)
    - Feedback also included being aware of ADA/508 compliance steps and resources that were recommended for integration.
- **CAP Terms and Definitions Summary**: Draft summary for review by co-leads and task team. (Mari)
- **Polygon Map Development for Focal Species:** Develop draft polygon maps using HUC 6th scale. Convene task group for review. (PSMFC)
- **Western Division AFS**: Work with Kasey to develop data management focused symposium for WD in May 2026. (Mari)
- **Emerging Technologies Information Sessions:** hybrid event at Skamania Lodge in October, with a planning committee to be formed and session topics under discussion (Sam)
- **2026 StreamNet Steering Committee meetings:** Meg will follow up with Evan and Kurt about hosting the meeting in Idaho. The group discussed potential dates and locations aiming to avoid fieldwork conflicts and federal budget constraints, with a poll to be sent for finalizing dates. (Meg)

Notes

Welcome and Introductions: Nancy Leonard

Team and Project Staffing Updates: Nancy Leonard announced organizational changes; PNAMP has joined PSMFC. Sam Cimino, Meg Dethloff, and Erin Benham will be working on PNAMP, StreamNet, and other projects, Mari Williams is supporting PNAMP and StreamNet, Erin Benham is also working on Klamath Basin Fisheries Collaborative.

Membership and Committee Updates: Review of current committee and technical group memberships, please verify and update participants and their roles for accurate tracking and inclusion in communications. Email Mari with any changes.
Website updates for committee and team membership (Mari)

Spotlight: ODFW's LSRCP Hatchery Assessment and Development Data Exchange – Progress to Date: Kasey Bliesner and Brittany Beebe, ODFW

Link to recording: https://youtu.be/jrxdRvb2hTE

Kasey and Brittany provided an update on the work accomplished with funds from an EPA Exchange Network Grant. Their work focused on modernizing hatchery data management, integrating with the FINS database, and addressing challenges in collaborative data collection and reporting among ODFW, tribal partners, and other stakeholders. The presentation focused on the complicated matrix of production goals for spring chinook programs, illustrated with the Lookingglass Hatchery spawning process that includes many data collection stations both within the same room and elsewhere, with some reliant on the data entered at the station before to enter their data. Outside stations operate on Survey123 and sample for PBT identification. Hatchery staff record data on paper. The Tribal partners scan fish for PIT tags to confirm stock identification and marks that might have eroded during holding. The steelhead hatchery programs in the spring are even more complex and will undergo the same process. EPA EN grant has allowed them to hire staff to help identify and design data flow through the processes and into the repositories requiring data under contract requirements and for informed management decisions.

- **Grant Objectives and Staffing:** The EPA Exchange Network Grant, awarded after a second application, provides three years of funding to modernize hatchery data collection and management, improve data access, and pilot a reproducible data system, with Brittany Beebe hired as assistant project leader.
- **Hatchery Assessment Program Overview:** The hatchery evaluation program, led by Joseph Feldhaus, monitors Chinook and Steelhead hatchery operations, involving multiple co-managers (ODFW, tribal partners) and complex data collection and reporting requirements. Facility organization matters in how the stations are set up, prohibiting physical standardization of station flow.
- **FINS Database Implementation:** Brittany described efforts to integrate real-time data entry into FINS during spawning events, the use of various data collection tools (paper, Survey123, PIT tag systems), and the need for coordination among multiple teams and facilities. Transfer and received in FINs could be simplified if the fish is identified as in the hatchery at trapping. Collection and spawn events can be within a day of each other, so any lag in data entry or upload can make the next data collection more complicated.
- **Challenges and Constraints:** Key challenges include differing procedures among co-managers, undefined roles and timelines, staff turnover, duplicative data entry requirements, technical limitations in FINS (e.g., offline functionality, batch updates),

and the need for improved facility organization. FINs training is time consuming and tough to justify or fit into seasonal positions. Adding PIT tags to the spawning module in FINs would be helpful. Trap data has already been collected by the time spawning occurs but has not always been entered into the database and does not autopopulate into the spawning data form.

- **Genetics in the mix:** ODFW has been collaborating with the genetics lab since 2008 for PBT in the Snake River basin. These tools are possibly already in FINs, but the geneticID needs to be tied to all the other things, and it would be better to connect them in a simpler manner. ODFW has an in-house genetic lab at EOU but also sends some to the Eagle Genetics Lab.
- **Successes and Next Steps:** Successes include improved communication, real-time data entry, error reduction, and proof of concept for FINS integration; next steps involve documenting processes, enhancing FINS features, exploring batch updates, and expanding to steelhead data management.

Spotlight: RShiny tools for Data Management, Sharing and Display in ODFW's LSRCP Hatchery Assessment and Development Project: Joe Dittmer, ODFW

Link to recording: https://youtu.be/vLDjbYeFd_g

Automated Data Visualization and Management Tools: Joe demonstrated a suite of automated R Shiny applications for PIT tag data, FINS integration, and Survey123 survey management, highlighting their use in streamlining data access, reporting, and management decisions for ODFW and co-managers.

- **Mainstem Run Tracker App:** The Mainstem Run Tracker app automates the aggregation and visualization of PIT tag data for Chinook and Steelhead, incorporating historical data, genetic estimates, and expansion values, with daily updates via APIs for real-time management use. Trapping data isn't always entered live or uploaded on the day the fish are handled. PIT data is manually entered into the app when an excel file is sent to Joe.
- **Tributary Run Tracker App:** This app displays tributary PIT tag detections, allowing users to filter by river, species, and date, and provides downloadable data for all arrays, supporting detailed tracking of returning fish in Northeast Oregon.
- **Weir Management Planning App:** Developed by Kyle Bradshaw and published by Joe Dittmer, this app guides hatchery staff in broodstock collection and fish disposition, automating daily management decisions based on FINS data and providing accessible downloads for users that don't have FINS accounts.
- **Survey123 Spawning Ground Survey Tracker:** The Survey123 tracker app consolidates electronic survey submissions from multiple agencies, merges duplicate entries, tracks submission status, and provides instant data access for managers, improving data quality and transparency.

PNAMP MR updates: Sam Cimino

Monitoring Resources Platform Updates: Sam Cimino provided updates on Monitoring Resources, including onboarding Mari Williams for user support, proactive outreach to project sponsors, and efforts to expand and update the Monitoring Explorer map with confirmed (actuals) data collection events. We will be updating the charter, but have the same funder (BPA), and the same developer (ESA).
Monitoring Explorer Map Expansion: The team is working to add Klamath Basin data collection events to the Monitoring Explorer map, collaborating with Erin from PNAMP and other partners to document protocols and locations, aiming for broader and more accessible coverage.

CAP Strategic Plan Feedback: Nancy Leonard

CAP Strategic Plan Revision and Review: Nancy led a discussion on revising the CAP Strategic Plan, incorporating new sections on milestones, adaptive management, and data provider recognition, and setting a timeline for final review and approval.

- **Plan Structure and Content Updates:** The revised strategic plan reorganizes existing content, adds new goals (e.g., modernization, return on investment), and introduces sections on milestones, adaptive management, and data provider contributions. It continues to support integration with other data, QA/QC processes, and training.
- **Milestones and Metrics:** New milestones propose annual metrics for tracking progress, with the Steering Committee tasked to review and refine these measures for meaningful reporting to the Executive Committee.
- **Appendix and Data Categories:** Appendix B lists potential new data categories for regional data exchange, serving as a dynamic reference for future development and Executive Committee input. Identifying legacy data sets to secure, such as the data that went into the MAFAC CBPTF Reports, was discussed.
- **Review Timeline and Feedback Process:** Participants were instructed to review the plan, especially milestones and Appendix B, and provide feedback by October 8.

Within the Milestones discussion:
Data Sharing Agreements and Citation Practices: Participants discussed the structure and intent of data sharing agreements within Coordinated Assessments, emphasizing the importance of citation and attribution.

- **Nature of Data Sharing Agreements:** Coordinated Assessments have data sharing and use agreements posted on the website, updated in 2024, which are not legally enforceable but serve to encourage best practices, citation, and proper attribution when using shared data. The agreements explicitly exclude sensitive data, as decided in the last Executive Committee meeting. CAX provides public access to data.
- **Citation and Attribution Improvements:** Efforts were made to improve data citation and attribution several years ago, resulting in better practices for CA. The team is now moving towards automating data citation generation, including citations in data

downloads, and considering persistent identifiers for dynamic datasets to facilitate tracking and attribution.

- **Tracking Data Usage and Downloads:** The group discussed methods for tracking data usage, such as requiring user emails for downloads and using API keys for access. They acknowledged challenges in accurately counting unique users due to repeated downloads and the use of shared API keys and noted that further technical solutions would be addressed by the technical team.

QA/QC Tool Launch 2025 summary & QA/QC discussion: Greg Wilke

QA/QC Exercise for Coordinated Assessments: Greg provided an update on the third round of the QA/QC exercise for Coordinated Assessments, detailing the review process, status of agency participation, and ongoing issues with data record URLs, with others discussing next steps and potential automation.

- **Third Round QA/QC Process:** The number of records reviewed by each agency increased in this round, and the secondary review was done by Tami at the CBFW Library. The process uses a custom application to track and categorize errors, with filters for agency and reviewer.
- **Findings and Status:** ODFW and WDFW completed their reviews, while Colville and Idaho were still in progress. The secondary review by Tami was complete. No data, metrics, or display issues were found in the completed records, but persistent issues with broken or outdated URLs remained.
- **Future Directions and Automation:** The potential for automating URL checks to address recurring issues was discussed. Consider adding HCA records to random selection.

Progress Update StreamNet Tech Team and CAP: Sam Cimino

StreamNet Tech Team and Data Exchange Standards Updates: Recent updates to StreamNet Tech Team membership, the release of hatchery data exchange standards and upcoming revision of natural origin data exchange standards, and technical changes such as the addition of time series tables and improved metadata.

- **Team Membership and Leadership:** Sam is the new StreamNet tech team coordinator, outlined efforts to update team membership lists, and called for new team chairs from partner organizations outside of PSMFC. Meeting notes are available upon request.
- **Hatchery and Natural Origin DES Updates:** The new version of the Hatchery metrics Data Exchange Standard (DES) was approved and set to become effective October 5th, with plans for a more extensive update to hatchery origin spawner abundance representation in the DES to follow. The natural population HLI DES will see updates including the universal CA TimeSeriesInfo table and updates to terms and definitions.
- **Technical and Metadata Improvements:** Recent changes included standardizing terms, definitions, and data types, adding time series info and status tables, and improving

metadata for better query system integration. The team also discussed the need for machine-readable controlled vocabularies and ongoing efforts to align terminology across systems.
- **API and Data Submission Process:** API was updated to accept new data based on the revised DES.

StreamNet Member Updates (highlight notes by staff, details provided via email)

MFWP: Dawn Anderson will present their fish distribution redevelop at our next meeting

Emailed updates:

- We are rewriting our internal Fish Distribution editor tool.
    - The tool broke when our server environment was migrated to Aria (directive from State IT)
    - A version is being tested by biologists, and we are gathering feedback
    - Based on feedback, we will make edits
- Data exchange completed
- StreamNet position still vacant
- Dawn and David got a Fish Regs database walk-thru with Megan Griffiths, Greg Wilke, and Jordan Miller, PSMFC 10/6. Coordinating to ensure efficiencies are leveraged wherever possible.
- MT's Department of Administration announced they will be consolidating state IT functions. The Technology Services Division at FWP will be included in that consolidation effort which includes the Geodata Services bureau.Details aren't entirely clear. State IT's hopes to have a plan developed by April 2026.
- Agencies need to get approval to hire any vacant IT positions, which likely impacts the hiring of our StreamNet position.

IDFG: Evan Brown

Staff notes:

- Chris Harrington is retiring in November.
- Bekki has done interviews to fill Elizabeth's position. She will be the direct supervisor of the position. New position will start Nov 17th.
- Continuing to make strides on the spawning ground survey (SGS) mobile app. Chris updated the SGS desktop app to help us manage and share the data. Interesting QA/QC discussions on that data, especially with the waypoints and boundaries. Those are really the foundation of what the data rests on.

- A lot of their workflows have been automated into SQL scripts. Credit a lot of that to Elizabeth Davis.
- Sarah Maher – keeping up with the updates to the Fish and Wildlife Program.
- IDFG works on building redundancy and cross training as much as possible to cover transitions and retirements.
- Austin Foy will be taking on the role-based authorization to IFWIS. Centralized IT broke the authorization and then wouldn't give them the authorization to rebuild the authorization. They also broke the Fisheries Library and they had to build a whole new library. Tami Wilkerson helped them a lot with the Library rebuild.

CRITFC: Sheryn Olson and Denise Kelsey, provided by Jiaming Yang

Email update 02Oct2025:

- Two NOAA funded projects: Pacific Coast Salmon Recovery Fund, and ITMD/ West Coast Ocean Alliance funded by NOAA Office of Coastal Management have received funding and are proceeding as of today, Oct 2.
- BPA-Accords agreement with CRITFC was a general fund that could be distributed to different projects and ensured that unspent funds from previous years would be managed and preserved at CRITFC. As you may know, it expired this September and BPA chose not to renew it in this uncertain time. Sept 30 was a deadline to identify unspent funds from previous years and projects with recently ended fiscal years. If not identified, funds would be lost. Into the future, everyone with BPA funded Projects are doing their best to "spend down" their funds.
- NOAA grant 2025-2027 to ITMD was renewed with Jiaming (Jammin) Yang as the new co-PI. It is now underway. Purpose – to increase tribal engagement among the mainstem Columbia River tribal programs, the tribal members of the West Coast Ocean Alliance and to increase capacity to contribute to data management for the WCOA data portal. The WCOA is also developing a consolidated and more thorough coastal ocean health dashboard. – states have them separately. None include salmonid, steelhead, lamprey indicators-which can also serve as indicators for ocean health. There are expert teams: e.g. for "Kelp" and for HABs - Harmful Algal Blooms.
    - 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). If you register in the WCODP you can customize your views.
    - Esri video of the portal is here: Supporting Coastal and Marine Spatial Planning with WCODP - Esri Videos
    - See: WCODP Knowledge Base for data contributors and users

- At the Tribes: NPT still has no data steward or data manager and are advertising. Warm Springs has a new fish biologist, Mike Clark, at the Parkdale office. Mike managed the USFWS Spring Creek Fish hatchery, WA for years. YN is bringing on another data manager. CTUIR is proceeding with continuing to improve and update the CDMS and spent the summer collecting data with UASs – exploring new data collection techniques. Stacy Schumacher has asked for information from anyone who also uses drones for data collection, to discuss metrics collected for various projects, storage for large datasets, and data processing.
- CDMS Updates: we rolled out version 3.2 at CRITFC and the tribes. It adds a smoother data import workflow and stronger validation checks. We also started an ITMD Metadata Workgroup that's overseeing improvements to metadata—things like schema updates, metadata search and export tools across projects, and formatting for metadata reporting.
- CTUIR expanded drone data collection and Stacy S. requested collaboration and webinars to showcase research questions folks are addressing using UAVs - Evan will follow up with people he's familiar with. Russell S has been having conversations with folks about drone footage storage and other standards; Russell S has been having conversations with folks (Donavan and Lucianno).

Shoshone-Bannock Tribes: Kurt Tardy

Staff Notes:

- Field work has moved to digital collection. Data are flowing into CAX. Data were protected from cyber-attack with the advancement to digital collection.

ODFW: Jon Bowers

Staff Notes:

- Recovery tracker mapping is being updated.
- Kasey will be taking a more prominent role in StreamNet with Nadine's retirement
- Fish distribution steward position to be filled soon.
- Final version of the NHD – trying to update all their boundaries to it.

Colville Tribes: George Batten

Staff Notes:

- 20 years of reports migrated to the CBFW Library, thanks to Tami.
- A small shiny app was built for the Chief Joseph Hatchery to help them with some of their daily reporting on creel surveys. This year connections with DART and FPC were added to the functionality of the app.

- Colville Tribes is expanding their data collection into the Methow River basin as part of the OBMEP program.

WDFW: Brodie Cox

Staff Notes:

- Trying to get harvest and non-harvest data systems. Lots of SASS artifacts being put into actual databases. Developed an Electronic Catch Record card. Started working on a crab app.
- Started working on another data effort on the commercial side of ocean fisheries, similar to PacFin. Funded by NFWF.
- Still working on HMS to monitor hatchery management. It took a funding cut.
- Hiring two positions. With budget cuts, a lot of labs (scale, genetics, etc) have ended up with partial positions. Trying to cobble together those positions into a whole position to get data entered.
- BOSS app - bio one stop shop

BPA: Brady Allen

Staff Notes:

- Russell Scranton has data deliverables meetings with contractors; drone data storage and access discussions needed.
- BiOp 5-year report, NOAA will potentially delay their status report, so BPA will go to CAX to pull data in November to run their own report.
- They are interested in SARs and RperS to see if habitat restoration is having any benefits.

Day 2

Attendance: (name, affiliation)

In Person:
Joseph Feldhaus (ODFW), Sarah Maher (IDFG), Brodie Cox (WDFW), Jon Bowers (ODFW), Ian Tattam (ODFW), Mike Greiner (ODFW), Kasey Bliesner (ODFW), Brittany Beebe (ODFW), Evan Brown (IDFG), Nancy Leonard (PSMFC), Lara Erikson (PSMFC), Bekki Waskovich (IDFG), Chris Harrington (IDFG), Mari Williams (PSMFC), Meg Dethloff (PSMFC)

Online: Dawn Anderson (MFWP), George Batten (ESA for Colville Tribes), Jake Chambers (ODFW), David Quillin (ODFW), Greg Wilke (PSMFC), Michelle Groesbeck (WDFW), Jason Edwards (PSMFC), Jiaming Yang (CRITFC ITMD Project), Kurt Tardy (SBT), Megan Griffiths (PSMFC), Mike Banach (PSMFC), Van Hare (PSMFC), Russell Scranton (BPA), Sam Cimino

(PSMFC), Phil Sandstrom (WDFW), Sheryn Olson (CRITFC ITMD Project), Tami Wilkerson (CRITFC CBFWL), Van Hare (PSMFC), Kris Warner (WDFW)

Spotlight: E-Creel Methods for Estimating Steelhead Harvest in the Grande Ronde Basin: Mike Greiner, ODFW

Link to recording: https://youtu.be/phRS1oSiJ_0

Mike Greiner (ODFW) presented a comprehensive comparison of traditional creel surveys and the new electronic creel (E-Creel) methods for steelhead harvest monitoring in the Grand Ronde Basin, highlighting the transition to electronic data collection, its benefits, challenges, and future plans.

- **Traditional Creel Survey Overview:** Mike Greiner described the traditional creel survey methods used for approximately 40 years, including roving and access point surveys, logistical challenges such as limited access due to private land and wilderness, high costs, and partial season coverage due to staffing and budget constraints.
- **Transition to Electronic License System:** Discussed the implementation of the ODFW electronic license system (ELS) in 2018, which allows for near real-time harvest reporting, increased adoption rates among anglers, and the gradual phasing out of paper harvest cards, though both systems currently operate in parallel. Paper harvest cards are becoming increasingly expensive to provide, with WDFW experiencing steep increases as suppliers have whittled down to one single source for the paper. The E-creel app has to have service to submit data and only records harvest and only for the Oregon fishery. Having regulations that are split, either within sections of Oregon or across the boundary with Washington, leads to misreporting in boundary areas where fishing people can step across the undrawn lines with or without knowing.
- **E Creel Methodology and Assumptions:** The E-Creel approach, which uses app-based (ELS) harvest tagging and a mark-recapture framework, outlining key assumptions such as angler compliance, accurate reporting, and the independence of reporting methods, and discussed the challenges in meeting these assumptions, especially within an area of many regulation or authoritative boundaries that are not delineated on the ground.
- **Comparison of Traditional and E Creel Results:** A four-year data comparison showed that E-Creel methods generally produced higher and more precise harvest estimates, especially in previously under-sampled periods and locations, though precision varied by fishery and year, and some assumptions (e.g., consistent app usage) were violated. There is currently no CPUE available through the E-creel system. E-creel is not feasible in the Grande Ronde, but the hatchery and wild fish self-segregate well in the basin per stray rate data.
- **Implementation Outcomes and Future Plans:** Implemented E-Creel in the 2024–2025 season for the Wallowa and Imnaha fisheries, adjusted sampling schedules to improve coverage, and discussed ongoing refinements, cost savings, and the need for continued

evaluation of assumptions and data quality, with plans to further prioritize key time periods and improve the system.

HCAX Tabular Query Development (Jason Edwards)

Development of HCAX Web Query Tool: An update and demonstration of the new HCAX web query tool, soliciting feedback from participants and outlining the development process, interface features, and next steps.

- **Project Rationale and Team Roles:** The purpose of the HCAX web query tool is to make hatchery CA data (broodstock, hatchery releases, returns, SAR) easily accessible to partners and end users, with the development team meeting regularly to refine requirements and interface design.
- **User Interface and Functionality:** A mock-up and demo of the tool showcased features such as dynamic filtering, data preview, Excel export with multiple tabs, and plans for user-friendly documentation and metadata integration, with feedback requested on filter behavior and interface consistency.
- **Feedback and User Acceptance Testing:** Participants provided feedback on
    - Coordinated Assessments query interface consistency
        - During the meeting Jake recommended that the format should be consistent with the NCA query to avoid confusion from the visual differences of tabs instead of dropdown menus.
        - Provide continuity in looking at data from NCA populations to related data in HCA (Associated PopID fields)
        - Consider the data descriptions or groupings that will be included in the TimeSeriesID table when grouping HCA data
        - Email feedback from Bekki supported updating the NCA query interface to match the HCA
        - PSMFC HCA query development team agrees with the need for consistency and expects to update the NCA query once the HCA query interface has been finalized.
        - Filters might be too granular (higher level HUCs, time frames)
    - Capturing query criteria in downloaded metadata and URLs can provide dataset versioning and reproducibility
    - Suggestions for map-based selection and terminology, specifically using HUC names rather than numbers, where names are available.
    - User acceptance testing will be critical for finalizing the tool.
    - The term high level indicators is not accurate and performance metrics might be a better fit for the HCA data
    - Recommended accessibility resources from Jon Bowers - https://www.oregon.gov/pages/accessibility.aspx
    - There is current work planned to update some of the data tables, so the tool will need to be flexible for future changes.

- **Development Timeline and Next Steps:** The team is consolidating partner feedback, updating specifications, and targeting a late November release for hands-on review, with production rollout planned for early 2026, and ongoing opportunities for feedback and improvements after launch. Accessibility resources were recommended for integration by Jon Bowers, who provided this link with Oregon's resources: https://www.oregon.gov/pages/accessibility.aspx.

GIS Update (Van Hare)

GIS Support and Data Product Updates: Updates on GIS support activities at PSMFC, including platform upgrades, migration of web apps, expansion of fish distribution datasets, and coordination with the Pacific Lamprey Conservation Initiative.

- **Platform and Application Upgrades:** Van reported on the office move, network changes, and upgrade to ArcGIS Enterprise 11.5, along with the migration of web apps from legacy versions to the Experience Builder framework, aiming for completion before the next tech team meeting.
- **Fish Distribution and Facilities Data:** The generalized fish distribution dataset was expanded to include California data, and the fish facilities dataset underwent QA/QC, with new features such as direct release locations and plans for improved integration with monitoring resources and PIT tag data.
- **Pacific Lamprey Conservation Initiative Coordination:** PSMFC is supporting the transfer and stewardship of the Pacific Lamprey dataset, working with a new data committee to ensure compatibility with StreamNet standards and planning for coast-wide data integration, with ongoing discussions about agency roles and data management. ODFW's representative on the PLCI is Ben Clemens.
- **Data Consistency and Integration:** Participants discussed
    - the importance of consistent site codes across projects (PTAGIS, MR, CBFish)
        - MRid attached to the fish facilities feature if used for trapping.
    - tracking decommissioned sites – must retain facilities information for historical data linkages
    - PSMFC GIS is working on a data review app
    - the challenges of integrating funder information, which is not tracked in the fish facilities data layer but was collected as part of the RST scoping and BPA would like to see it tracked across other sites.
        - Explore relational tables for version control in tracking funding sources – this would not be done by PSMFC GIS stafff.
    - Fish Facilities will be published as both map and feature services. Facilities term was used to be broad enough to include the variety of sites in the database.
    - committing to maintain endpoint consistency (updates will not break CBFish links)

PNAMP Fish Monitoring Work Group Updates (Meg)

Carrying Capacity Standards: Currently working on a paper reviewing carrying capacity estimation methods. There is a plan to produce a white paper on Best Management Practices for use of carrying capacity methods.

PIT Tag Data and Analysis: The PIT Tag Data and Analysis Webinar Series was completed with high engagement. A survey was conducted and recommendations for future work including in-person analysis workshops, additional webinars series, or specific presentations are being considered.

Rotary Screw Trap Dashboard Redevelopment: The redevelopment of the Rotary Screw Trap dashboard has begun. The redevelopment will transition the tool from a Google Sheet supported dashboard to one using a database. While we wait to start the redevelopment, we have initiated the process of updating screw trap information by emailing Excel sheets for biologists to update their content. The updated Excel sheet will be uploaded into the dashboard. This data update process is another element that will be addressed in the redevelopment which include a user login to allow screw trap biologists to update their trap information. These improvements are pending additional non-BPA funding.

Update Terms and Definitions Used in CAP Data Standards: The CAP Terms and Definitions task group has completed the task. A summary draft is in process (Mari) and will be reviewed by the co-leads (Mike and Jen) and then the task team before being posted to the website. The terms and definition changes to the DESs have been finalized. The changes are being incorporated into the HCA and NCA DESs as they are updated according to the CA DES revision process.

Polygon Map Development for Focal Species: Nancy outlined plans to develop draft polygon maps for BPA and NPCC focal species, leveraging existing data, collaborating with Van Hare and agency biologists. These draft polygon maps will use the HUC 6th scale, enabling BPA project sponsors to accurately indicate project locations and species in proposals. These layers will use existing layers and add to these, such as incorporating new attributes such as MAFAC Columbia Basin Partnership Task Force stock names. Once a draft map is ready for review, we will convene a task group under the Fish Monitoring Work Group to bring together biologists and experts to review these layers. Developing these polygon maps will provide one source for BPA and NPCC instead of having maps being redeveloped multiple times. These maps will be labelled as drafts, and all sources of information used in their development will be included in the metadata. As managers develop official layers, these will be used to update the draft layers.

- **Data Sources and Collaboration:** The team will start with existing StreamNet and agency data, consult with biologists for additional layers, and incorporate attributes such as habitat use and stock names, labeling all products as draft until reviewed.

- **Review and Update Process:** Draft maps will be circulated for review by biologists and the Fish Monitoring Work Group, with plans to update layers as new data becomes available and to document all sources and caveats in metadata.
- **Anticipated Challenges and Benefits:** Challenges include inconsistent existing layers and gaps for non-listed stocks, while benefits include improved consistency for reporting, better integration with coordinated assessments, and enhanced support for BPA and Council reporting needs.

Upcoming Conferences and Meeting Scheduling (Mari)

Upcoming conferences that StreamNet and PNAMP will be leading and supporting include the Western Division AFS meeting and the ETIS hybrid event

- Western Division AFS
    - StreamNet and PNAMP staff will work with Kasey (ODFW) to develop a symposium focused on data management
    - PNAMP staff will work with managers/researchers to submit a symposium with a panel discussion on effectiveness monitoring
- ETIS
    - StreamNet and PNAMP are starting to plan for the next hybrid ETIS meeting
    - The 2026 ETIS will be a hybrid event at Skamania Lodge with a planning committee to be formed and session topics under discussion.
    - Based on input from the Steering Committee, an October date will be selected for the 2026 ETIS.
- **Meeting Scheduling:** The group discussed potential dates and locations for upcoming Steering Committee meetings, aiming to avoid fieldwork conflicts and federal budget constraints, with a poll to be sent by Meg for finalizing dates. IDFG and SBT will host the fall meeting in 2026. PSMFC will host the winter Steering Committee meeting in 2026. The beginning of September is not feasible for many members due to field work associated with spring summer chinook spawning ground surveys.