



StreamNet
Fish Data for the Northwest



StreamNet Steering Committee Meeting

March 4-5, 2026

Pacific States Marine Fisheries Commission – Portland, OR

Meeting Material: [2026-03-4 5-StreamNet-Steering-Committee-Meeting-Agenda V2.pdf](#)

Action Items by Agenda Topic or Task Assignment:

StreamNet Tech Team:

- Tech Team are invited to review fish facility symbiology and color choices (Sam to add to Tech Team agenda)
- Russell has a new tool that shows CRB mark-release-recapture (MRR) sites by river kilometer (rkm) and will share/present to the Tech Team (Sam to coordinate with Russell to add this to Tech Team agenda)
- Dawn will let Van know when their fish distribution layer updates will be submitted (Dawn to email Van and copy Sam and Jordan Miller, PSMFC) (Layer completed. (UPDATE: Dawn sent Van a Teams message on 4/6 asking him what he prefers. Follow up with Van upon return from leave)
- Tech Team should discuss including FMD records in the next (2027) QAQC round (Sam to add to TT agenda).

StreamNet Annual Report to BPA

- StreamNet (SN) staff to work with partners to develop diagrams (data connection visualizations) for the Recommendation “Connect Regional Data Systems” (Mari to add to Trello card, and Nancy will work with StreamNet staff to assign proposed timeline and process to address before September 2028)
- Update NPCC system of record to be published in the 2026 Program (Mari to revise text in the draft SN Annual Report to capture this revision)
- Update language on Increased Discoverability (Mari to revise text in the draft SN Annual Report to capture this revision)
- Continue exploring as the opportunity arises or new options become available options to get a Digital Object Identifier (DOI) for an individual dataset like CAP. In the meantime, StreamNet staff is to focus efforts and description of this need to include (not limited to DOI) alternatives that would provide a similar function for facilitating citation and repeatability such as creating stable

URLs if we can't establish a DOI. (Mari to revise text in the Annual Report and the CAP Strategic Plan to clarify not limited to DOI)

- Check the CAP Strategic Plan to ensure alignment (Mari to perform this check and edit the Annual Report as needed before it is finalized for BPA submittal)
- Send reminder by end of week to have edits on the Annual Report in by March 18th (Mari to send email)

QA/QC Tool and Automation Updates

- StreamNet partners to work on completing their assigned records for the fourth QA/QC review (assigned to CBFWL, Colville Tribes, IDFG, ODFW, WDFW)
- Tech Team to weigh in on adding Fish Monitoring Data (trends) records to the reviews (Sam to add to the Tech Team agenda)

CAP Strategic Plan Progress

- CAP Core Team to discuss metrics beyond downloads for assessing progress on the milestones (e.g., queries, map use) (Mari to add this topic to the CAP Core Team agenda for them to review and discuss options for tracking and communicating progress against the milestones).
- Improved StreamNet website resource page discoverability – an external group to review resource pages is needed (Mari to add this task to Trello card and Nancy to develop approach and assign timeline to address this need).
- Social media presence discussed – explore potential to leverage AFS and LinkedIn for posting CAP information. (Mari to add to CAP Core Team agenda for discussion).
- Change bullet two to “internal persistent identifier” (Mari to make edit in the CAP Strategic Plan)

Day 1 – March 4, 2026

Attendees:

In Person: Brodie Cox (WDFW), Jon Bowers (ODFW), Mari Williams (PSMFC), Meg Dethloff (PSMFC), Nancy Leonard (PSMFC), Sam Cimino (PSMFC), Tami Wilkerson (CBFWL/CRITFC)

Online: Angie Schmidt (IDFG), Bekki Waskovich (IDFG), Dawn Anderson (MFWP), Evan Brown (IDFG), Gabe Smit (PSMFC), George Batten (ESA for CCT), Greg Wilke (PSMFC), Jake Chambers (ODFW), Jordan Miller (PSMFC), Kasey Bliesner (ODFW), Katie Barnas (NOAA), Katie Walker (IDFG), Kris Warner (WDFW), Megan Griffiths (PSMFC), Michelle Groesbeck (WDFW), Mike Banach (PSMFC), Phil Sandstrom (WDFW), Russell Scranton (BPA), Todd Gilmore (USFWS)

Welcome and Opening Remarks

Nancy Leonard, Meg Dethloff

- Nancy provided updates on staff changes, including Erin Benham’s departure and current hiring efforts.

Spotlight: Columbia Basin Fish and Wildlife Library (CBFWL)

Presenter: Tami Wilkerson

Overview

- CBFWL provides both digital and physical collections, with a strong focus on grey literature.
- Services include:
 - Journal access and interlibrary loans
 - Literature searches
 - Quarterly publications and dataset mailings
 - Digitization services (slides, film), including equipment available for partner use

Key Resources

- Digital collections (images, videos, searchable newsletters dating back to 1979):
<https://cbfwl.contentdm.oclc.org/>
- Lamprey digital collection includes:
 - Sampling photos
 - Oral history interview videos with elders (now transcript-enabled)
- Submission form for contributions:
https://docs.google.com/forms/d/e/1FAIpQLSeme_uoUvMjmTiNakNcolZtts_WYYm5fuYSnl8Hwi_xF-pCjg/viewform

Current Work

- Website overhaul underway to improve accessibility and reduce text-heavy layouts
 - ADA testing completed using current best practices
 - Ongoing literature review on piscivore impacts on Pacific salmon
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PNAMP FMWG Updates

Meg Dethloff, Sam Cimino, Mari Williams

Coordinated Assessments Partnership (CAP) Terms and Definitions task

- The FMWG CAP Terms and Definitions task group has published the document summarizing their task and the terms and definitions produced: <https://pnamp.org/wp-content/uploads/2026/02/CAtermsdefs2025Final.pdf>

Carrying Capacity Standards task

- Paper nearly ready for submittal to journals. Paper is undergoing internal review by USGS and WDFW.

PIT Tag Data and Analysis task

- Resource list under development; SN SC members encouraged to submit tools/resources
- Draft mock-up of how the list of resources will be displayed on the PNAMP website is anticipated for April meeting

Focal Species Probable Native Range task

- Intended to support CBFish, StreamNet, Monitoring Resources, and regional partners
- Development of range map layers will be based on existing partner data and literature
- Partners will review data in tool before completion

Juvenile Fish Trap Data Discovery Tool task

- Tool was renamed from rotary screw traps (RST) dashboard and expanded beyond RSTs and to resident and anadromous fish
- Displays trap locations within the Columbia River Basin and beyond and supports multiple trap types.
- First task team meeting under current funding held in December 2025
- Next meeting scheduled for late March 2026 (Sam to coordinate)
- Development target: early May 2026
- Tool will allow project leads to submit and control documentation of trap data
 - Species pick lists will be allow multiple selections for target species and for non-target species encountered as "incidental catch"

Survival to Adult (SAR) / Smolt-to-Adult Return (SAS) task

- Task team expected to launch in April 2026

PNAMP MonitoringResources.org Updates

Sam Cimino

Status

- Increased coordination between Monitoring Resources and StreamNet
- Outreach underway to help project sponsors complete overdue or upcoming documentation

Digitized Fish Field Guide

- Goal is to improve accessibility and image quality for field identification
- Effort integrates existing guides (e.g., Smolt Monitoring Program) into Monitoring Resources
- Collaboration with CBFWL on image metadata and permissions
- Presentation scheduled for PTAGIS Steering Committee meeting (March 18, 2026)

Development Updates

- Organizational ownership model implemented to reduce access issues
 - Primary and secondary authorship tracked for citation and collaboration purposes
 - New layers planned for Monitoring Explorer (Columbia Basin Fish Facilities mapper, focal species probable native range map)
 - Automated metric term identification from data collection sheets when provided
 - Backend updates forthcoming
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StreamNet Technical Team Update

Sam Cimino, Greg Wilke

- January 2026 meeting held with 23 participants
- Membership lists require routine review
- Identification of partners to serve as chairs still needed to support coordination
- Hatchery Origin Broodstock Abundance (HOBA) proposal updated by IDFG and pending further StreamNet DES Data Development Team (DDT) review.
- BestValue field: data providers encouraged to incorporate review into QA/QC of historic records
- Data Exchange Standard (DES) updates completed
 - Standardization of format (removing underscores) and standardization of common fish name capitalization to the AFS standard.

Conference Updates

Kasey Bliesner, Meg Dethloff, Sam Cimino

- **WD/OR AFS:**
 - May 4-7, 2026 (Portland, OR)
 - Data Management and Effectiveness Monitoring sessions planned
- **ETIS:**
 - In-person, October 26–28 (Skamania Lodge)

- Abstracts submission period is open
- Sponsors and exhibitors still needed
- Planning committee is still meeting monthly but might ramp up as we draw closer to the event.

Day 2 – March 5, 2026

Attendees:

In Person: Brodie Cox (WDFW), Jon Bowers (ODFW), Mari Williams (PSMFC), Meg Dethloff (PSMFC), Nancy Leonard (PSMFC), Russell Scranton (BPA), Sam Cimino (PSMFC), Tami Wilkerson (CBFWL/CRITFC), Van Hare (PSMFC)

Online: Adam Peterson (MFWP), Angie Schmidt (IDFG), Anthony Thompson (MFWP), Bekki Waskovich (IDFG), David Quillin (ODFW), Dawn Anderson (MFWP), Evan Brown (IDFG), Gabe Smit (PSMFC), George Batten (ESA for CCT), Greg Wilke (PSMFC), Jake Chambers (ODFW), Jordan Miller (PSMFC), Kasey Bliesner (ODFW), Katie Barnas (NOAA), Katie Walker (IDFG), Kris Warner (WDFW), Kurt Tardy (SBT), Lara Erikson (PSMFC), Megan Griffiths (PSMFC), Michelle Groesbeck (WDFW), Mike Banach (PSMFC), Phil Sandstrom (WDFW)

Spotlight: Montana Fish, Wildlife & Parks

Presenter: Dawn Anderson

Montana Fish Distribution Editor Application

- Modernized, web-based editing tool for fish distributions
- Designed for biologists rather than GIS specialists
- Minimal custom code; high maintainability
- Supports:
 - Searchable species lists with attributes
 - Version history (historic comparisons back to 2005)
 - Overnight processing and change tracking

Key Discussion Points

- Hydrology is currently based on segmented routes (tenth of a mile) of mixed scale hydro; future transition planned to NHD 24k.
- Distribution edits rely on survey and inventory + professional judgment; formal QA/QC workflows not yet embedded
- Multiple editors supported; “last edit wins” model
- Widely used across agencies for permitting, research, and regulatory review
 - There is a public view of the map, but they cannot edit it. Publicly, it can be used as a discovery tool.

Presenter: Van Hare

- Fish facility layer updates (82 facilities added)
- Hatchery ID updates to be bulk loaded into StreamNet systems
- Improved coordination with PTAGIS on site management – PTAGIS is the authoritative source for their sites, displayed as a separate layer in the new Fish Facilities Mapper
- New West Coast Facility Mapper in development - expanding coverage in California and British Columbia (CRB to West Coast).
- Focal Species task group advancing historical distribution mapping (HUC-12)
- Regional Fish Distribution update to be published soon, along with new StreamNet Mapper
- Update will include data from ODFW & IDFW. Updates from WDFW & MFWP will be incorporated when available.
- Regional dataset will include historical distribution
- Lamprey distribution update underway in coordination with PLCI
- Tech Team are invited to review fish facility symbology and color choices (Sam to add to Tech Team agenda)
- Russell has a new tool that shows CRB mark-release-recapture (MRR) sites by river kilometer (rkm) and will share/present to the Tech Team (Sam to coordinate with Russell to add this to Tech Team agenda)
- Dawn will let Van know when their fish distribution layer updates will be submitted (Dawn to email Van and copy Sam and Jordan Miller, PSMFC) (UPDATE: Layer completed. Dawn sent Van a Teams message on 4/6 asking him what he prefers. Follow up with Van upon return from leave)

StreamNet Annual Report to BPA

Presenter: Mari Williams

Key Themes

- Reviewed Lessons Learned and Recommendations sections
- Partner feedback due March 18 for April 1 upload to CBFish

Action Item

- For Recommendation Connect Regional Data Systems - StreamNet staff to work with partners to develop diagrams (data connection visualizations) to help show the connections we'd like to see developed. Jon and Brody on board to develop and improve the documentation of regional data system connections. (Mari to add to Trello card, and Nancy will work with StreamNet staff to assign proposed timeline and process to address before September 2028).
- Update NPCC system of record to be published in the 2026 Program (Mari to revise text in the draft SN Annual Report to capture this revision)
- Update language on Increased Discoverability (Mari to revise text in the draft SN Annual Report to capture this revision)

- Continue exploring as the opportunity arises or new options become available options to get a Digital Object Identifier (DOI) for an individual dataset like CAP (Zenodo?)
 - In the meantime, StreamNet staff is to focus efforts and description of this need to include (not limited to DOI) alternatives that would provide a similar function for facilitating citation and repeatability such as creating stable URLs if we can't establish a DOI (Mari to revise text in the Annual Report and the CAP Strategic Plan to clarify not limited to DOI)
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Upcoming Development: eDNA and PBT tasks

Nancy, Lara Erikson, Mari

eDNA presence/absence

- New scoping project to begin to address interest by partners collecting eDNA to share these regionally and to explore how these data could complement presence/absence maps
- WDFW just completed a large eDNA project
 - Recommend that StreamNet staff review their work as part of this scoping exercise
- Interest in adding eDNA as a visual aid in mappers
 - Tap into work that has already been done by partners and others

PBT-GSI

- New scoping project to address interest by PSMFC member states and partners to identify which elements of PBT and GSI are a fit for sharing in a regional data system to support analysis. This scoping exercise will focus on how these data could be included under the Regional Mark and Processing Center (RMPC) Regional Mark Information System (RMIS) which manages Coded Wire Tag (CWT) data.
 - This will be presented by Lara Erikson and Mari Williams to the RCMT at the end of March 2026 as this group has discuss sharing of PBT-GSI and provide guidance to RMPC and its RMIS.
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QA/QC Tool and Automation Updates

Presenter: Greg Wilke

- URL validation identified as persistent issue
- Automated and manual URL checks agreed upon

- Fourth QA/QC review round approved for 2026 and has been initiated:
 - 50 HLI records (including hatchery data)
 - Weighted sampling for underrepresented programs
 - Automated URL review prior to partner review
 - Protocol update to reflect changes
 - HCA Query Tool near completion and now connected to database
 - StreamNet partners to work on completing their assigned records for the fourth QA/QC review (assigned to CBFWL, Colville Tribes, IDFG, MFWP, ODFW, WDFW)
 - Tech Team to weigh in on adding Fish Monitoring Data (trends) records to the reviews (Sam to add to the Tech Team agenda)
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CAP Strategic Plan Progress

Mari Williams, Nancy Leonard

Discussion Highlights

- Need for:
 - Stable URLs or internal persistent identifiers
 - Metrics beyond downloads for assessing progress on the milestones (e.g., queries, map use) (Mari to add this topic to the CAP Core Team agenda for them to review and discuss options for tracking and communicating progress against the milestones).
 - CAX user help/support/issue tracker for data system access (providers and consumers)
 - Improved StreamNet website resource page discoverability – an external group to review resource pages is needed (Mari to add this task to Trello card and Nancy to develop approach and assign timeline to address this need).
 - Social media presence discussed – explore leveraging AFS and LinkedIn for posting CAP information. Mari to add to CAP Core Team agenda for discussion).
 - Change bullet two to “internal persistent identifier” (Mari to make edit in the CAP Strategic Plan)
 - Longer-term goal: protect high-value datasets lacking maintenance or archival plans
 - Tribal engagement and knowledge-sharing identified as core priorities
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Member Updates (Selected Highlights)

- **MFWP:** Fish Distribution editor presented in Spotlight, Wildlife Distribution editor in development, working on a public amenities map service, Yellowstone cutthroat assessment underway, and undergoing website ADA compliance work.
- **USFWS:** Hatchery database transition from servers to the cloud is underway.
- **IDFG:** Website redesign (currently in process of selecting a vendor) and all their URLs may be broken during the process. They have an end of 2027 goal for the project. Working on ADA compliance for website. Corey Dondero will join them from PSMFC in Harrington’s position.

Generalized Fish Distribution and Natural range updates for Van. Refining the Spawning ground survey mobile app. Consolidating QA/QC queries by building models in ARCP, using snapshots to verify – Bekki will present this at ETIS.

- **ODFW:** Internal salmon recovery tracker making the interface more functional. EPA exchange network grant. Brittany Beebe will be taking another position. Hired someone from UI to take Ian's old position, won't start for a few more months. Effort w/inland fish science data portal/dashboard - Mining data pulls in the data and puts it in a dashboard. Hatchery facility related work to update, getting coastal data into fish facility layers. Fish Habitat GIS analyst was hired in Nov - - cold water refugia plugged in. Hiring a GIS application developer. Aquatic habitat prioritization tool – looking a habitat/temp/fish presence visualization.
 - **WDFW:** eDNA database (submitting an abstract for ETIS), hatchery management database (HMS) modernization, ballast water database for tracking AIS, mobile app development for NPMP SFR, integrating shellfish beaches into the fish harvest app, working on a SGS mobile app, a harvest data reporting queue, and ADA compliance across their websites.
 - **Colville Tribes:** Methow basin report published; 20-year data milestone
 - A link to the 2025 Methow Subbasin Monitoring Plan is available here:
<https://www.okanoganmonitoring.org/Reports/ViewReportsForType/8>
 - **BPA:** Federal hiring procedures have changed. They will have many positions posted soon. Making sure they have the proper repositories linked to projects in MR to show where the data is actually going and accessible.
 - **NPCC:** Fish & Wildlife Program comment period concluded, they held 9 public hearings, 7 consultations, and have 2500 comments. Hoping to publish the Program at the end of May.
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