COORDINATED ASSESSMENTS PARTNERSHIP

Fish and Habitat Data Exchange

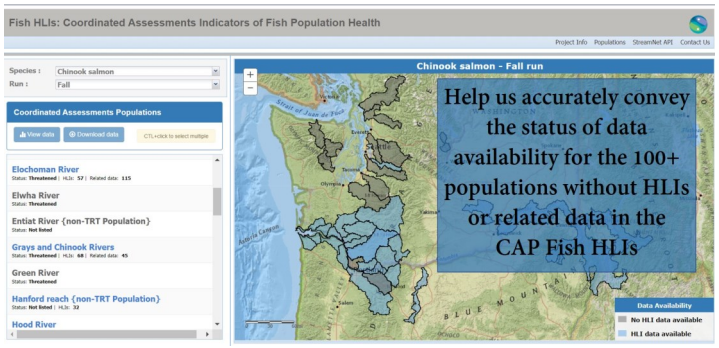
NEWSLETTER

December 2021

Upcoming Changes to CAP Fish HLIs Data Display

The Coordinated Assessments Partnership (CAP) Fish High Level Indicators (HLIs) query was originally designed to display population-scale HLIs. This initial focus limited the ability to display information in a manner that meets a broader set of regional needs. During 2021 StreamNet and PNAMP worked together through the Fish Monitoring Work Group (FMWG; see page 3) to develop recommendations to clearly convey data availability for all populations and also effectively communicate HLIs representing both population groups and population subsets. The StreamNet Executive Committee discussed and approved the recommendations from the FMWG (September 9, 2021 committee meeting documents). Upcoming changes to the CAP Fish HLIs query include:

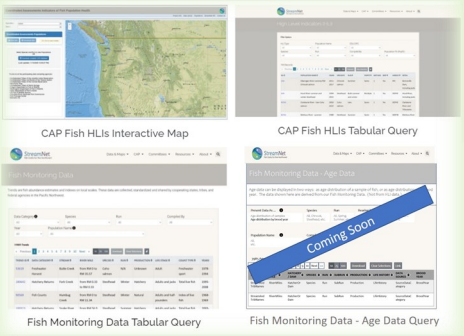
- ***Superpopulations and other groupings:*** Access to HLIs representing multiple populations will be provided through a new drop down menu. StreamNet will work with managers to agree on the terms used to refer to these groupings.
- ***Subpopulations:*** HLIs representing a subset of a population will be clearly labelled and consistently listed below HLIs representing the entire population.
- ***Populations without data in CAP Fish HLIs query:*** Data related to HLIs categories may be available for monitored populations. To accurately communicate availability and accessibility of data for these populations, StreamNet will work with fish managers to receive input on clarifying content to be



Improved Data Access via Tabular Queries

StreamNet staff improved data access from the CAP Fish HLIs and Fish Monitoring Data queries based on user input. During 2021 StreamNet:

- Released a new tabular version of the CAP Fish HLIs query with improved filter options, faster data download, and stable query links to facilitate sharing results.
- Is building a separate age data query interface for the Fish Monitoring Data query to improve accessing fish age data submitted to StreamNet. Coming soon!



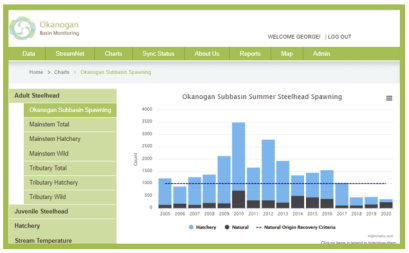
Go ahead and give them a try and let us know what you think!

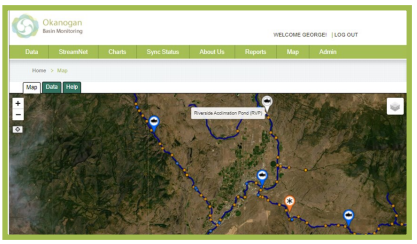
Spotlight: Colville Tribes' OBMEP Database

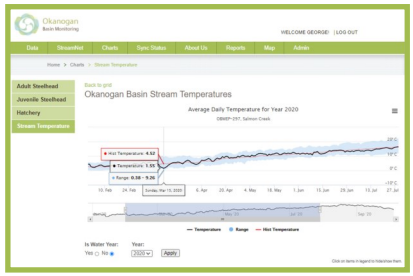
The Colville Tribes' biologists collect fish population and habitat data in the furthest upstream and northern-most extent of currently accessible anadromous salmonid habitat in the Upper Columbia River Basin, the Okanogan River system. The Colville Tribes' *Okanogan Basin Monitoring and Evaluation Program* (OBMEP) conducts status and trend monitoring to evaluate viable salmonid population (VSP) criteria (abundance, productivity, spatial structure, and diversity) and identify limiting habitat factors in the Okanogan Subbasin. Since 2004, the Colville Tribes have developed a fine-tuned protocol for collecting, storing, analyzing, and disseminating data. This protocol includes two tiers of data QA/QC: first by the biologists who collect the data, and a second time at Sitka Technology Group where data are stored in a secure, central repository, and reviewed by a data steward to ensure validation rules are met before uploading to the OBMEP database.

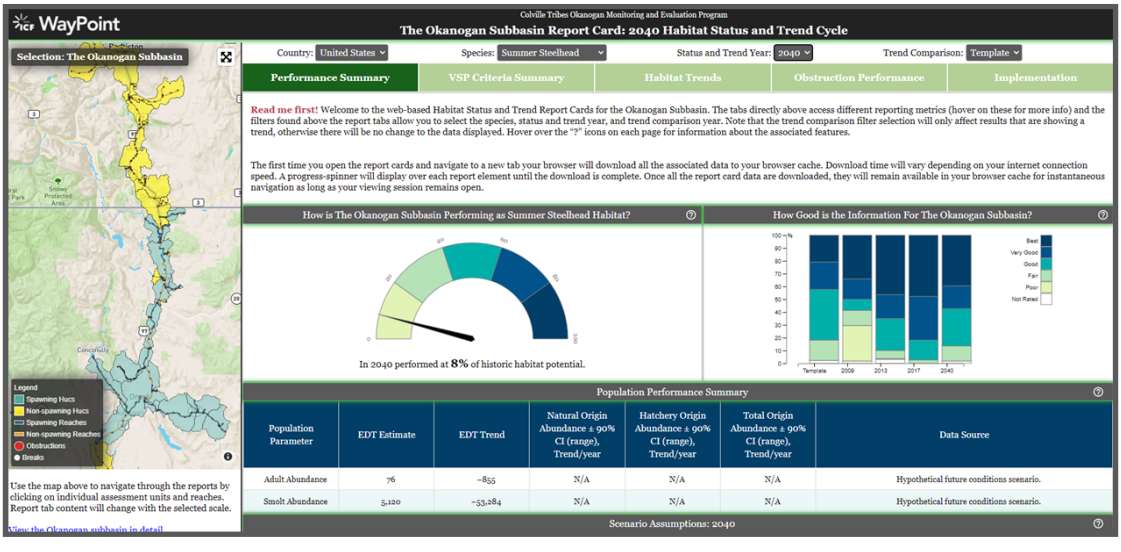
The OBMEP database fulfil multiple needs:

- ***CAP Fish HLIs***: Scripts calculate Recruits per Spawner and Smolt to Adult Return Rate HLIs, and eventually this approach will be applied to other HLIs submitted to CAP Fish HLIs.
- ***Juvenile Population Estimates***: Electroshock mark-recapture data collected in PTAGIS P4 files are stored in the OBMEP database where a SQL view calculates annual juvenile population estimates at the site, reach, and stream level.
- ***EDT Modeling***: The OBMEP database automatically calculates Level II metrics (from curated field data) that are used by the Ecosystem Diagnosis and Treatment (EDT) modeling system to predict fish populations based on fish life histories and habitat requirements. EDT results are detailed in *The Okanogan Ecosystem Report Card* and inform biologists' and fisheries managers' decisions.
- ***Okanoganmonitoring.org***: Okanogan Basin Monitoring is the primary data sharing website of OBMEP, and provides access to data, data visualizations, an interactive study area map, and reports from the OBMEP database as well as other programs.









Coordinated Assessments Data Exchange (CAX)

6

High-level Indicators

206

Columbia River Basin (CRB) & Oregon (OR) Coast Populations with HLIs

(includes partial population estimates)

27

CRB & OR Coast Superpopulations with HLIs

(HLIs based on multiple populations)

208

NOSA HLIs CRB & OR Coast

(incl. populations, partial, superpopulations)

https://www.streamnet.org/home/data-maps/fish-hlis/

CAP focused FMWG Task Groups Updates

StreamNet and PNAMP collaboration to address CAP topics that require input from biologists continues to grow through the PNAMP facilitated Fish Monitoring Work Group (FMWG). The list of StreamNet and CAP related FMWG tasks includes:

- Improve understanding of data availability and HLIs on the CAP Fish HLIs query (Tasks 6 & 7).
  - ⇒ Status: Completed. Recommendations approved by StreamNet Executive Committee (see page 1 article).
- Clarifying the juvenile out-migrant DES by better defining smolt equivalent (Task 2).
  - ⇒ Status: First meeting held November 2021.Task Leads are Mike Banach (PSMFC) and Russell Scranton (BPA).
- Defining fish populations names and boundaries for non-ESA and resident focal fish species such as bull trout (Task 5). This task will inform StreamNet maps and is responsive to the 2019 Smolt Analytics workshop suggestion of creating standard GIS layers.
  - ⇒ Status: Initiating end of 2021/early 2022. Task Leads are Van Hare (PSMFC) and Evan Brown (IDFG).
- Juvenile density data standards are also a focus of more than one task group. Tasks 10 and 11 will initiate work needed to inform exchange standards for data collected using snorkeling, electrofishing, and outmigrant traps.
  - ⇒ Status: Initiating late 2021. Task Leads are Kasey Bliesner and Polly Gibson (ODFW), and Russell Scranton (BPA).

The FMWG is also tackling a variety of tasks to improve access to standardized data for informing regional decisions.

Learn more at the FMWG webpage.

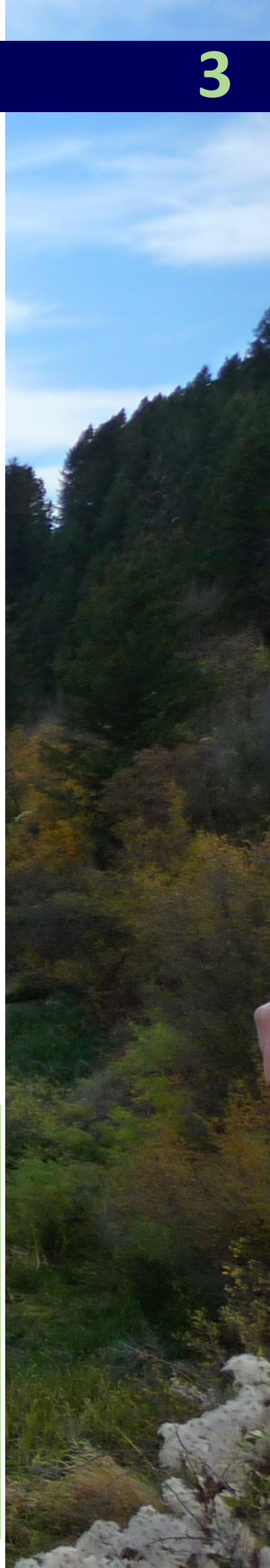
Join in by contacting PNAMP: gs-pnamp_contact@usgs.gov

Next quarterly FMWG meeting is January 20, 2022 10-11:30 (PST).

HCAX Update

Through 2021, the CAP has been working with hatchery experts to identify and define the hatchery metrics and indicators to be shared through the CAP Hatchery Coordinated Assessments Exchange (HCAX). Over 50 participants representing 20 organizations have been engaged in the HCAX effort. In December the HCAX Biologist Work Group will meet to finalize the agreed upon common terms and definitions for the three groups of indicators and metrics moving forward. This content will inform the HCAX Data Managers Work Group in 2022.

To learn more, access HCAX meeting documents at Hatchery Data Sharing (HCAX). Next steps include engaging the data stewards (i.e., HCAX Data Manager Work Group) to develop data sharing rules and procedures.



Five-Year Work Plan

The current Five-Year Plan for the Coordinated Assessments Partnership (CAP) was adopted in 2019 and revised in 2021 by the StreamNet Executive Committee. Current priorities include:

1. Maintain, update, and automate existing data flow to CAX, and maintain the data exchange standard (DES)
2. Coordinate with CRITFC tribes through the Inter-Tribal Monitoring Data Project.
3. Work with managers through the PNAMP Fish Monitoring Work Group to refine CAP DES and inform new HLI categories
4. Develop hatchery salmon and steelhead indicators through the Hatchery Coordinated Assessments Exchange (HCAX) collaborative effort.
5. Update the CAP Fish HLIs query to improve access to HLIs for groups of populations
6. Include all populations on the CAP Fish HLIs query, working with fish managers to provide info on data status availability for populations without HLIs.

CAP Participants

participants vary in their level and degree of involvement

Northwest Power and Conservation Council

StreamNet

More Resources

HCAX

https://www.pnamp.org/project/hatchery-data-sharing-hcax

CAP Fish HLIs Data

https://www.streamnet.org/home/data-maps/fish-hlis/

About CAP and Five-Year Plan for CAP

https://www.streamnet.org/cap/

CAP DES

https://www.streamnet.org/resources/exchange-tools/

CAP Events and Background

https://www.pnamp.org/project/coordinated-assessments-for-salmon-and-steelhead

PNAMP Fish Monitoring Work Group

https://www.pnamp.org/project/fish-monitoring-work-group

For more information on up-coming meetings or general information:

gs-pnamp_contact@usgs.gov

For CAP Fish HLIs data and technical assistance:

project@streamnet.org