



PNAMP Fish Monitoring Work Group Juvenile Density (Snorkel and Electrofishing) Data Standards Summary

Description: Develop and propose data standards, including a data exchange standard (DES) for juvenile fish distribution/density data from snorkeling or electrofishing. Juvenile density data is used in regional models, for carrying capacity, restoration effectiveness monitoring, etc. There is no current data standard or sharing systems in place, and a need for standardization has been identified from regional partners.

Task Outcomes:

- Data standards for Juvenile Distribution and Density Data
- Document on limitation and proper use
- Recommendations for data management and sharing systems

Links to Resources:

- Supporting materials: [StreamNet CAP Data Exchange Standard \(DES\) documents](#)

The Juvenile Density Data Standards task began in October 2021 with Russel Scranton and Kasey Bliesner as tasks leads.

Steps completed:

1. Controlled Vocabulary completed.
2. Draft Data Exchange Standard created.
3. Draft DES and controlled vocabulary were verified and vetted with Dan Isaak (USFS) and Gwynne Chandler for use with the USFS Fish Data Analysis Tool - https://app.streamnet.org/datastore_search_classic.cfm?id=775&keywords=. This tool provides and estimates juvenile fish density using an SSN model.
4. Data presented at the December 6th, 2022 PNAMP Fish Monitoring Work Group (FMWG) meeting ([December 6th meeting](#) recording) and put out a call for data.
5. Draft DES and controlled vocabulary were sent to interested partners who collect juvenile fish density data on March 2, 2023.
6. Partners were asked to fill in their data using the Fish Density DES and upload it to the StreamNet Data Store or email to Dan and Gwynn to be included in the FDAT tool by April 1, 2023.
7. After use by partners for FDAT, next steps included presenting the draft DES to StreamNet for possible inclusion in the Fish Monitoring Data table and on the website.
8. At the StreamNet ExCom meeting in Fall 2023, concerns were raised by agencies with stricter sensitive data sharing policies about the possibility for the sensitive nature of fish density data. StreamNet does not host sensitive data on their websites or data exchanges and so it was decided at that time to not pursue inclusion of the draft Fish Density DES as part of StreamNet's Fish Monitoring Data exchange.
9. The Fish Density DES and controlled vocabulary are useful tools for sharing information about fish density data in a standard format and are available for participants to use. PNAMP's FMWG completed recommendations on controlled vocabulary and information that may inform data exchanges for juvenile density and/or distribution surveys. Using the standardized formats created by the FMWG may provide interoperability for dataset use in analytical tools or the use of existing system code for creating new databases and for data sharing. These formats should be considered for revisions to data entry forms. Future work on data exchange standards for juvenile fish density/distribution by data management leads may be further evaluated and pursued by individual organizations or StreamNet.
10. The Fish Density DES can be accessed by contacting Meg Dethloff (mdethloff@usgs.gov)
11. Task completed 04/16/2024