

Covid-19 sampling issues and how they are coded in the UMRR Fisheries Level 1 database

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The Covid-19 pandemic affected UMRR LTRM's Fish Component sampling in calendar year. Each state partner in the UMRR implemented different policies concerning personal proximity throughout the 2+ year period of the pandemic. Most restrictive were the policies of the states of Minnesota (Lake City field office) and Wisconsin (La Crosse field office). Their state policies would not permit a 3-person crew in a single boat. So, in 2020, these field stations were able to complete all sampling allocation for netting samples (2-person crew) but were not able to complete ANY standardized LTRM allocations for Day Electrofishing samples (3-person crew). However, some Day Electrofishing occurred using a 2-person crew at each field station in 2020, but only in support of a research project headed by Dr. Kirsten Bouska (USGS) and Andy Bartels (WDNR) to gain samples in support of a project known as the Vital Rates project. That project used our database utilities and data entry application, so there remains Day Electrofishing samples in the larger database for each field station in the year 2020. However, these are non-compliant LTRM samples as they were gained using a 2-person rather than a 3-person crew, violating standard protocols and procedures and influencing sampling effort in unknown ways.

To deal with these samples as it concerns standardized long term annual estimators, each Vital Rates project Day Electrofishing sample in 2020 was assigned a new Summary Code. The Summary Code assigned was designed to make it easy to filter out these non-compliant samples when calculating long term annual design-based estimators.

Our solution was to assign these Vital Rates project samples a Summary Code of 2.9. Until now, only full integers were permitted as Summary Codes. However, assigning a non-integer value for Summary Code affords the Vital Rates project the benefits of our database, data utilities, and data entry application while making it easy to screen for fully compliant long-term samples. **To do so, one needs simply to query for samples with a Summary Code ≥ 3.0 .**

If you implement or execute scripts to calculate annual design-based estimators yourself (rather than simply gain them from USGS sources), please be aware that you should change your code (which should have had Summary Code >2 to filter for compliant samples) to Summary Code ≥ 3 .