

U.S. Department of the Interior

# U.S. Geological Survey Environmental Management Technical Center

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### Memorandum

Date: 6/20/97

TO: Field Station Fish Specialists

FROM: Randy Burkhardt

SUBJECT: Addendum to the July 1995 Long Term Resource Monitoring Program Procedures: Fish Monitoring. Program Report 95-P002-1

These items will be incorporated into an addendum to the existing LTRMP Fish Procedures Manual and are to be considered in effect as of June 15, 1997. Most of these items are for the clarification/updating of existing procedures. Three items are changes that may effect future data analysis: making BWCO hoop nets an optional gear, having fish measured in 1-cm categories, and the reporting of a subsample code in user-defined field 1 to relate measured specimens to enumerated specimens.

### Page 3, Section 3.2.1, 3rd paragraph,

Since 1991, target species are no longer specifically sought after.

#### Page 4, Section 3.2.2, 2nd paragraph

Beginning in 1997, TLC size groups are 1 cm for all fish. This change will not effect the historical data set as some field stations were already measuring in 1 cm TLC size groups.

### Page 5, Section 4.1, last paragraph

A report code of 6 is recorded when ever a chase boat is used.

Due to unique wingdam characteristics (high flow/hydrograph variability) within their reach, the Open River field station begins wingdam electrofishing on the downstream side and works around towards the upstream side.

## Page 8, Section 4.2, 1st paragraph

Due to variability in flow direction from one wingdam to another, hoop nets are always set parallel with the flow on the downstream side, still having the small hoop net nearest shore.

### Page 9, Section 4.2, after 1st paragraph

Beginning in 1997, hoop net sets in backwater contiguous open habitats will become an optional gear. This change will end a four year period of record of data (1993-1996) collected for across-strata comparisons, and has the potential to seriously impact any across-strata analysis attempted in the future. The change was based on field station staff general observations of the gear's inefficiency due to lack of flow in the backwater contiguous open strata. No statistical analysis was completed at this time to support this change. A separate memorandum explaining this decision further is stored as a permanent record at the Environmental Management Technical Center in Onalaska, Wisconsin.

#### Page 9, Section 4.3, 2nd paragraph

In areas of soft sediments and high flows, a seine with a mulline and 5-mm (3/16) mesh may be used instead (optional).

#### Page 10, Section 4.4, 4th paragraph

Fyke nets are set on the upstream side of wingdams.

#### Page 13, Section 4.6, 1st paragraph

The standard unit of trawling effort is a 6-8 minute haul.

Nominal trawl lengths are about 350 m (1,148 ft).

#### Page 14, Section 4.7, 1st paragraph

replace in 2nd-to-last sentence: .. the bottom line is 29.5-kg (65-lb) lead core...

#### Page 14, Section 4.8, 2nd paragraph

Trammel nets are: 300' X 8', inside netting is 4" bar of #8 monofilament hung approximately 280 (275-285) yards per 100 yards of finished net, wall size 14" bar of #9 multifilament twine hung 200 yards per 100 yards of finished net, float line is 0.5" foamcore (2 strands on the floating nets, 1 on the bottom set nets) and leadline is leadcore (20# on the floating net, 65# on the sinking net).

#### Page 16, Section 5.1.2, 4th paragraph

and sentence replace: (as per h above) with (as per g above).

## Page 16, Section 5.1.3, 1st paragraph

Beginning in 1997, only two mandatory gears will be used.

## Page 17, Section 5.1.3, Table 2

Beginning in 1997, BWCO Hoop nets are optional; In row H, column BWC-O, u: change + to o

#### Page 18, Section 5.1.5

Beginning in 1993, each site is randomly chosen for each gear type.

Field stations staff randomly select wingdam sites by: 1.) identifying wingdams at "normal" pool; 2.) Assigning each wingdam a number and randomly picking a number from the overall set; 3.) UTM coordinates are then obtained for each random site selected.

The Open River Field Station selects a wingdam based on random sites selected within the main channel border stratum. The field crew flips a coin to determine whether to select the nearest upstream or down stream wingdam for sampling.

### Page 19, Section 5.2.2

For paddle fish, fork length refers to the distance from the front of the eye to the fork in the tail.

#### Page 20, Section 5.2.2, Table 3

change first code (0) to read: 0 or BLANK

### Page 21, Section 5.2.3 1st paragraph

Beginning in 1997, the user-defined field 1 on the measurement data sheet will be used to relate the 200 (minimum) subsampled fish to be measured back to the enumerated fish. For each specimen within the subsample (measured or enumerated), a code from a-z will be place in the user-defined-field 1. If further subsamples are required of the same species of fish within the same collection, then the subsequent letter will be used. This code is reported on the data sheet in order to insure that length data for all fish within a subsample can be related to each other during analysis. A separate memorandum rexplaining this decision further is stored as a permanent record at the Environmental Management Technical Center in Onalaska, Wisconsin.

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### Page 23, Section 5.2.6, 1st paragraph

Beginning in 1997, all fish will be measured in 1-cm intervals. This change is to obtaining better length data for analysis and should not affect the 1988-1996 data already collected.

# Page 23, Section 5.2.7, 1st paragraph

Beginning in 1997, the LTRMP crew leaders may be certified "on site" by the EMTC fish specialist.

# Pages 29-30, QF codes

A QF code of 2 indicates the readings are off scale.

#### Page 34, TFS

For paddle fish, fork length refers to the distance from the front of the eye to the fork in the tail.