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BED FORM

For users other than staff associated with the MO River Benthic Fish Study, this document is for reference only. This is NOT a citable document.

General Information:

Bed form is a measure of the unevenness of the bottom. Variable bottom depths can potentially offer many areas of reduced current velocity for benthic fish.

Materials:

A. Lowrance Model X-type graph recorder
B. Spare rolls of graph paper
C. Spare stylus belt
D. Spare stylus
E. Access to a 12 volt, DC battery source (ex. marine type battery)

Procedure:

Bed form will be measured at each fish collection location associated with trammel nets and the benthic trawl. A single bed form "trace" will be conducted in a parallel direction and at the mid-point of each fish collection location. The trace should cover the entire longitudinal distance sampled and duplicate the path of either the net or trawl as much as possible. Note the distance the trace covers if less than 150 m. The Lowrance unit should be running before entering the area to sampled. The **mark** key (see owners manual) should be pressed at the beginning and ending of each fish collection location. Traces can be conducted either with the current or against it (whichever gives the best trace or is safest), but it is important to maintain the boat at a constant speed.

Several models of Lowrance graph recorders are in use. Consequently, each Consortium member should read their owners manual and become familiar with their unit's specific protocols. In most cases, the units will need to simply be turned on and the sensitivity button adjusted to obtain clear bottom graphs.

After each location has been graphed, the unit should be stopped, data sheet box checked and the trace identified by the appropriate ***barcode***. Barcodes can be written on the graph paper using pencil or ink. Simply pull down the glass cover piece and write directly on the paper. (Note: the unit must be turned **off** before doing this) All traces should be stored in the unit until a new roll of paper is needed.

Traces will be quantified at a later date.

Maintenance:

Consult owners manual for proper maintenance of each unit.

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