

**A Stratified Random Selection Process for  
the Placement of IFIM/PHABSIM Transects**

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**ABSTRACT**

The process for selection of IFIM/PHABSIM transects may be improved through the use of stratified random selection techniques in many circumstances. Habitat mapping is used to describe the occurrence and frequency of habitat types (strata) within an affected stream segment. All river segments where transect may be placed are located by eliminating inaccessible or atypical segments. The least-available ecologically significant habitat type is identified and all habitat units of this type are sequentially numbered. Potential habitat units are drawn from this pool through a simple random number generator. After field verification for acceptability, one or more transects are placed within the selected unit to represent that habitat type. Transects representing the remaining habitat types are then placed in the closest possible proximity to the random selector. Additional transects are placed in the same way until the desired number of transects is obtained. The process has distinct advantages over standard transect selection methods and has been used successfully in many recent IFIM applications.