

ASSESSING FUNCTIONAL HEALTH OF A RIPARIAN SITE ^{TWS}

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An increased public awareness of the benefits of the need for ecosystem functional health has driven a movement to identify factors that operate on the landscape to enhance or degrade natural ecologic function. In cooperation with various agencies, we have developed a rapid assessment procedure for evaluating functional health of a stream reach and its associated riparian zone. The procedure quantifies an array of parameters indicating the ability of different aspects of the system to function. These quantities are weighted and factored into a formula to produce a comparative rating of riparian functional health. A land manager can use the evaluation to: 1) assess present functional health of a stream reach, 2) identify specific factors needing remedial attention, and/or 3) through repeated evaluation as a monitoring tool for assessing effectiveness of management change. The procedure, designed for use by land management professionals as well as landowners with minimal training, can be used to evaluate health of a 200 ft representative reach of stream in about 2 hours. The evaluation does not require precise measurements, but instead relies on visual estimations of readily observable parameters grouped into three categories of factors: vegetation, soils/geology, and hydrology/streambank. Estimates of ten such factors are used to develop an overall health rating. With minimal training, evaluators using this procedure have demonstrated success at calibrating their observational skills to attain consistent and repeatable results.