

TECHNICAL NOTE

DEPARTMENT OF AGRICULTURE

WYOMING

NATURAL RESOURCES CONSERVATION SERVICE

BIOLOGY NO. 38

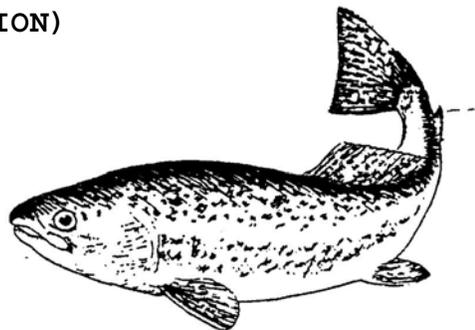
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A METHOD FOR RATING WYOMING FISH STREAM HABITAT (FOR USE IN PLANNING RESOURCE MANAGEMENT SYSTEMS)

(SUBJECT TO REVISION)



INTRODUCTION



This fish stream rating system uses information provided by the Wyoming Trout Stream Classification Map, Wyoming Game and Fish Department. This classification process utilizes various characteristics to determine the stream class ranking for an entire stream of large segments of each stream. The following characteristics are used by the WGFD: stream channel, water quality, development landscape, land ownership, access, and trout productivity.

NRCS recognizes that perennial streams occur frequently on farms and ranches in Wyoming. These streams are a part of the natural resource base, and they need to be evaluated during conservation planning. This rating method uses stream bank vegetation as the best indicator of the general "health" of perennial streams on farms and ranches. The rating method is used to determine if a planning area (usually a field) meets the minimum quality criteria found in Section III, Field Office Technical Guide, for fish habitat. This rating method will identify areas where conservation practices and management measures can be used to meet the minimum Resource Management System (RMS) standard or to meet a higher habitat quality objective of the landowner.

RATING INSTRUCTIONS

Dominant Streamside Vegetation - Evaluate perennial vegetation within the 15-foot zone of the normal water level on each bank of the stream. Evaluate vegetation as it would appear during the period June-September. Determine the percent of the total bank areas under a canopy of trees and shrubs greater than 4 feet in height. Determine the percent of the total bank area covered by perennial herbaceous and woody vegetation having stems from 1 to 4 feet in length. Emphasize vegetation that actually affects stream banks or in-stream conditions. Generally, vegetation in the 1- to 4-foot range provides the most effective bank habitat suitable for fish cover. Record in percent for right and left bank and select the rate value from the following table for the planning area. Drop rating one point if improper grazing use is evident. Enter ratings on worksheet.

PERENNIAL VEGETATION HIGHER THAN FOUR FEET IN HEIGHT

% of Total Bank Area	0% - 20%	21% - 60%	61% - 100%
Rating	0 - 2	3	2

PERENNIAL VEGETATION WITH STEMS OF ONE TO FOUR FEET IN LENGTH

% of Total Bank Area	0% - 30%	31% - 60%	61% - 100%
Rating	0 - 2	3 - 4	5 - 8

Dominant Perennial Streamside Vegetation
(within 15 feet of the stream)

	Right Bank %Cover Rating	Left Bank %Cover Rating
% Vegetation > 4 feet high	_____ _____(a)	_____ _____(c)
% Vegetation < 4 feet, but > 1 foot in length	_____ _____(b)	_____ _____(d)

Total Rate Per Bank (a+b)_____ (c+d)_____

Average Bank Score = $\frac{\text{Rt Bank (a+b)} + \text{Left Bank (c+d)}}{2}$ = _____ 1/

1/ Criteria for a RMS are met when the rating is at least 4 or greater.

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APPROVED:



Tom Jewett, Resource Conservationist

Date: _____ 7/18/96 _____

** This rating method was taken, in part, from the Cold Water Stream Appraisal Guide for Wyoming, Soil Conservation Service and Wyoming Game and Fish Department, 1984 (revised).