

# APPENDIX 7 – Determining Construction Site Sediment Damage Potential

The following rating system allows objective evaluation of a particular development site's potential to discharge sediment. Permittees may use the rating system below or develop alternative process designed to identify site-specific features which indicate that the site must be inspected prior to clearing and construction. Any alternative evaluation process must be documented and provide for equivalent environmental review.

Step one is to determine if there is a sediment/erosion sensitive feature downstream of the development site. If there is such a site downstream complete step two, assessment of hydraulic nearness. If there is a sediment/erosion sensitive feature and it is hydraulically near the site then go to step three to determine the construction site sediment transport potential.

## **STEP 1 – Sediment/Erosion Sensitive Feature Identification**

Sediment/erosion sensitive features are areas subject to significant degradation due to the effect of sediment deposition or erosion. Special protection must be provided to protect them.

Sediment/erosion sensitive features include but are not limited to:

- i. Salmonid bearing fresh water streams and their tributaries or freshwater streams that would be Salmonid bearing if not for anthropogenic barriers;
- ii. Lakes;
- iii. Category I, II, and III wetlands;
- iv. Marine near-shore habitat;
- v. Sites containing contaminated soils where erosion could cause dispersal of contaminants; and
- vi. Steep slopes (25% or greater) associated with one of the above features.

Identify any sediment/erosion sensitive features, and proceed to step two. If there are none the assessment is complete.

## **STEP 2 – Hydraulic Nearness Assessment**

Sites are hydraulically near a feature if the pollutant load and peak quantity of runoff from the site will not be naturally attenuated before entering the feature. The conditions that render a site hydraulically near to a feature include, but are not limited to, the following:

- i. The feature or a buffer to protect the feature is within 200 feet downstream of the site.
- ii. Runoff from the site is tight-lined to the feature or flows to the feature through a channel or ditch.

A site is not hydraulically near a feature if one of the following takes place to provide attenuation before runoff from the site enters the feature:

- i. Sheet flow through a vegetated area with dense ground cover

- ii. Flow through a wetland not included as a sensitive feature
- iii. Flow through a significant shallow or adverse slope, not in a conveyance channel, between the site and the sensitive feature.

Identify any of the sediment/erosion sensitive features from step one that are hydraulically near the site, and proceed to step three. If none of the sediment/erosion sensitive features are hydraulically near the site the assessment is complete.

**STEP 3 – Construction Site Sediment Transport Potential**

Using the worksheet below, determine the total points for each development site. Assign points based on the most critical condition that affects 10% or more of the site.

If soil testing has been performed on site, the results should be used to determine the predominant soil type on the site. Otherwise, soil information should be obtained from the county soil survey to determine Hydrologic Soil Group (Table of Engineering Index Properties for step 1.D) and Erosion Potential (Table of Water Features for step 1.E)

When using the county soil survey, the dominant soil type may be in question, particularly when the site falls on a boundary between two soil types or when one of two soil types may be present on a site. In this case, the soil type resulting in the most points on the rating system will be assumed unless site soil tests indicate that another soil type dominates the site.

Use the point score from Step 3 to determine whether the development site has a high potential for sediment transport off of the site.

<u>Total Score</u>	<u>Transport Rating</u>
<100	Low
≥100	High

A high transport rating indicates a higher risk that the site will generate sediment contaminated runoff.

## Construction Site Sediment Transport Potential Worksheet

A. <u>Existing slope of site (average, weighted by aerial extent):</u>	Points
2% or less .....	0
>2-5% .....	5
>5-10% .....	15
>10-15% .....	30
>15% .....	50
B. <u>Site Area to be cleared and/or graded:</u>	
<5,000 sq. ft. ....	0
5,000 sq. ft. – 1 acre .....	30
>1 acres .....	50
C. <u>Quantity of cut and/or fill on site:</u>	
<500 cubic yards .....	0
500 – 5,000 cubic yards .....	5
>5,000 – 10,000 cubic yards .....	10
>10,000 – 20,000 cubic yards .....	25
>20,000 cubic yards .....	40
D. <u>Runoff potential of predominant soils (Soil Conservation Service):</u>	
Hydrologic soil group A .....	0
Hydrologic soil group B .....	10
Hydrologic soil group C .....	20
Hydrologic soil group D .....	40
E. <u>Erosion Potential of predominant soils (Unified Classification System):</u>	
GW, GP, SW, SP soils .....	0
Dual classifications (GW-GM, GP-GM, GW-GC, GP-GC, SW-SM, SW-SC, SP-SM, SP-SC) .....	10
GM, GC, SM, SC soils .....	20
ML, CL, MH, CH soils .....	40
F. <u>Surface or Groundwater entering site identified and intercepted:</u>	
Yes .....	0
No .....	25
G. <u>Depth of cut or height of fill &gt;10 feet:</u>	
Yes .....	25
No .....	0
H. <u>Clearing and grading will occur in the wet season (October 1 – May 1):</u>	
Yes .....	50
No .....	0

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**TOTAL POINTS**..... \_\_\_\_\_