

Worksheet 29				
Based on the Integration of Stability Indices				
Stability Category	Stable	Aggradation	Degradation	Status of Reach
1 Critical Dimensionless Shear Stress or Shear Stress (sheilds)	Sufficient depth and/or slope	Insufficient depth and/or slope (8)	Excess depth and/or slope	
2 Degree of Incision (BHR)	<1.1	N/A	>1.1	
3 Sediment Capacity Model (POWERSED)	Sediment In = Sediment Out	Insufficient transport capacity	Excess transport capacity	
4 W/d Ratio State	1.0 - 1.6	>1.6	<0.8*	
5 Stream Successional States	Current Stream Type = Potential	(C→D), (C→ High W/d C)	(C→G), (E→G), (B→G)	
6 Depositional Patterns	B1, B2, B4, B8	**B3, B5, B6, B7	N/A	
7 Meander Pattern	M1, M2, M3	M5, M6, M8	M5 or M6 with the conversion of floodplains to terraces	
8 Entrenchment Ratio	>2.2 for E and C Stream Types 1.6 - 2.2 for B Stream Types	N/A	<1.2 for E and C Stream Types <1.1 for B Stream Types	
9 Confinement	1.0 - 0.3	N/A	<0.1	

1 Sediment Competence - Entrainment using critical dimensionless shear stress (tci) in relation to the largest clast available (Di) or  
 Sediment Competence - Entrainment using Shields Diagram (critical shear stress related to largest moveable clast, see Figure 126).

2 Bank Height Ratio (BHR), see Figures 110 and 111.

3 PowerSed or similar transport model.

4 (W/d ratio) / (Reference W/d ratio). see Figure 108. \*Corresponds to an increase in bank height ratio (>1.1)

5 see Figure 42.

6 see Figure 107. \*\*Excess medium to coarse size deposition on floodplain.

7 see Figure 106.

8  $W_{fpa} / W_{bhf}$

9 Meander width ratio/Reference meander width ratio.

The analyst must identify the dominant stability categories along with supportive evidence of processes of vertical instability.

The order of stability category listing is sorted from the most influential (heavily weighted) prediction to the less sensitive or only vertical stability "indicators".

**As a minimum, at least 2 of the 9 categories must fit into the same process rating to be selected.**