



Water Assessments
by Volunteer Evaluators

Habitat Assessment (Short Form) Site Coordinates _____

1. Epifaunal Substrate/Available Cover:

- A. Optimal: Greater than 70% of stable habitat with a mix of snags, submerged logs (not new fall), undercut banks cobbles etc...
- B. Marginal: 20-70% of habitat stable. New fall present but not yet appropriate for aquatic organisms to use.
- C. Poor: Less than 10% stable habitat, not a lot of variety of cover types, frequently disturbed.

2. Embeddedness:

- A. Optimal: The surface of larger rocks such as gravel, cobble and boulders, are covered with 25% of fine sediment.
- B. Marginal: The surface of larger rocks such as gravel, cobble and boulders, are covered with 25-75% of fine sediment.
- C. Poor: The surface of larger rocks such as gravel, cobble and boulders are covered with 75% or greater of fine sediment.

3. Velocity/Depth Combinations

- A. Optimal: All 4 velocity/depth combinations are present. (slow/deep, slow/shallow, fast/deep, fast/shallow)
- B. Marginal: 2 or 3 of the velocity/depth combinations are present.
- C. Poor: Dominated by 1 velocity/depth combination. (Usually slow and deep)

4. Sediment Deposition

- A. Optimal: Very little deposition of fine material like sand or clay.
- B. Marginal: Some deposition in pools, new bar development and between 5% and 50% of bottom of stream is affected by fine material
- C. Poor: Heavy deposition of fine material like sand and clay, increased bar development, pools few or absent due to deposition.

5. Channel Flow Status

- A. Optimal: Water reaches the base of both banks with minimal amount of stream channel exposed.
- B. Marginal: The channel is filled with water between 25% and 75%.
- C. Poor: Very little water in the stream channel, most of which is in the form of pools.

6. Channel Alteration

- A. Optimal: No evidence of human influence in the straightening or deepening of the stream channel; stream allowed to meander in a normal pattern
- B. Marginal: Some channelization or artificial materials present.
- C. Poor: Banks shored with gabion or cement, evidence of stream channel alteration obvious.

7. Frequency of Riffles (Bends)

- A. Optimal: Riffles are frequent throughout the sampling reach of the stream. There should be greater than 2 riffles in the sampling reach
- B. Marginal: Riffles present but infrequent. If there are 2 or less riffles in the reach then it would be considered marginal.
- C. Poor: Water is generally flat and there are no riffles or riffles are very small and shallow.

8. Bank Stability

Left Right (facing downstream)

- A. A. Optimal: Banks stable with little evidence erosion or bank failure.
- B. B. Marginal: Some sign of erosion present or possible.
- C. C. Poor: Banks unstable, obvious erosion and bank sloughing.

9. Bank Vegetative Protection

Left Right (facing downstream)

- A. A. Optimal: Greater than 90% of stream bank surfaces and immediate riparian zone covered in native vegetation such as trees, shrubs, grasses etc... Plants allowed to grow to natural height.
- B. B. Marginal: 50-90% of stream bank covered with native vegetation. Some bare patches, non native plants or disturbance such as mowing present.
- C. C. Poor: Less than 50% of stream bank and immediate riparian zone covered in vegetation, disruption obvious from mowing or grazing of animals.

10. Riparian Vegetation Zone Width

Left Right (facing downstream)

- A. A. Optimal: Width of riparian zone that is naturally vegetated is greater the 18 meters. Human activities such as parking lots, agriculture, lawns and clear cuts do not impact this zone.
- B. B. Marginal: Some signs of human activities and width of riparian zone that is naturally vegetated is between 6-18 meters.
- C. C. Poor: Width of riparian zone that is naturally vegetated is less than 6 meters. There is little or no vegetation in this zone due to human activities.