

Step-Wise Approach to Determining Restoration Potential

With the above information as a guide, the following is a step-wise approach to determining restoration potential using the Stream Functions Pyramid Framework.

Step 1 Determine the project reach limits and delineate the catchment area to the downstream end of the reach. _____

Step 2 Complete the catchment assessment form and provide an overall rating of Good, Fair, or Poor. Review the scores for each category as well to determine if the stressor can be overcome or if it will prevent the project reach from obtaining even partial restoration. A stressor that prevents partial restoration is considered a “deal breaker” and will likely lead to a decision that the project should not be pursued until catchment-scale stressors can be improved.

Overall Catchment Rating: _____

Stressors that can be overcome by restoration activities: _____

“Deal breakers”: _____

Step 3 Compare the reach size (length and/or area) to the catchment size. Can the size and type of restoration overcome the catchment stressors and perturbations?

Refer back to the individual category ratings in Step 2. Can the fair or poor ratings for each individual catchment category be overcome by the size of the project or by doing additional work in the catchment? If many of the ratings can change from fair or poor to good, then full restoration is likely. If not, then partial restoration (or a no go) is more likely.

Step 4 Identify reach-scale human-caused constraints. Explain how they could limit restoration potential.

Step 5 Perform a function-based assessment of the project using the SQT or other assessment method.

Step 6 Determine the base line condition of the reach. If using the SQT, the tool will illustrate functional capacity by parameter and functional category.

Step 7 Using information from above, determine the Stream Evolution Model and/or Rosgen Channel Succession Stages. Is the stream moving towards greater or lesser functionality? What is the realistic final Stage or Stream Type of evolution as compared to the previously undisturbed Stage or Stream Type? And how does the final stage fit with partial and full restoration potential definitions.

SEM Stage: _____

Rosgen Channel Succession: _____

Step 8 Based on results from the above steps, described the level of restoration potential. State as Full or Partial. Explain the reasons for your selection and identify which parameters/functions could be restored to a functioning condition following the project.
