The pool section of the river

Engineering

The cover type present was overhanging vegetation and undercut banks and root wads exist as a major component of cover type. The cover type was extensive due to tree roots that were extensive in the water leading to an extensive undercut bank. The score for the undercut cover was calculated using the parameters that were measured from the study as follows 1+1+ 1+ 11= 14 out of a total score of 20. This is a significant score that implies thriving vegetation along the river that is competing with other organisms present in the river for oxygen and other nutrients (Luke 25). The amount of in-stream cover type present, in the river, poses a threat to the survival of most of the organisms present in the river.

The third metric was the Channel morphology that measures the quality of the stream channel that is responsible for the stability and creation of the in-stream habitat. The river had a high sinuosity with a good development of riffle and pool complexes. The stream showed no human modifications and thus, channelization was recorded as none. The stability was recorded as high due to the extensive presence of cover type that prevents erosion. The only modification present was canopy removal. The score of the metric was calculated as 4+5+ 6+ 3= 18. This is a high score, and it implies that the river has not experienced much anthropogenic disturbance (Luke 27).

The fourth metric was the riparian zone and bank erosion. This metric records the scores the quality of the plain vegetation and the riparian buffer area. The river had a moderate riparian width on both sides with plain vegetation of a forest and a swamp on both sides. The bank erosion on both sides was recorded as little or none due to the presence of the forest and swamp vegetation. The total score of the parameters was nine out of a possible ten. The fifth metric was the pool and riffle quality. The metric has

six categories that measure out the score of pool or riffle quality. The score of the pool quality was seven while that of the riffle quality was four.

The last metric that is used in the evaluation of habitat is the gradient. The gradient metric involves the calculation of the average width of all the width that represents the river. The other parameters that are measured include drainage area and local gradient. An average of all these parameters is calculated to give the final score for each. The river habitat under evaluation had an average width of six meters, a local gradient of eight, and a drainage area of 21 square miles. The habitat under study represented a good habitat because of the core values of all the metric parameters (Luke 29).