

# Riparian Quality Index calculation

22/03/2019

The Riparian Quality Index (RQI) represents the **complexity**, **naturalness** and **continuity** of the riparian zone. The riparian zone is defined as the zone comprising the bank face, bank top and a buffer from 5m of the bank top assessed as part of the River Habitat Survey (RHS).

The RQI features three sub-scores for **complexity**, **naturalness** and **continuity** that are calculated separately for each bank and added to yield a final site score between 0 and 120. The final RQI is classed into five equal quintiles to represent increasing riparian quality from 'Very Low' (1<sup>st</sup> quintile) to 'Very High' quality (Last quintile).

## Complexity sub-score (maximum: 60)

Score each bank separately. For each spot-check, score the bank face and bank top vegetation structure using the following table and add the scores for both banks.

Bank top vegetation structure	Bank face vegetation structure	Score
Complex or Simple	Complex	3
Complex	Complex or Simple	3
Simple	Simple	2
Complex or Simple	Uniform or Bare	1
Uniform or Bare	Complex or Simple	1
Uniform or Bare	Uniform or Bare	0

## Naturalness sub-score (maximum: 40)

Score each bank separately. For each spot-check:

- **score 1** if the bank material is **natural** and **no modifications** were recorded.
- **score 1** if the 5m land use is **natural**

Add the scores for both banks

## Continuity sub-score (maximum: 20)

Score each bank separately. Count the number of spot-checks with **simple or complex** vegetation structure on the bankface **OR** on the banktop that are **contiguous**. Add the scores for both banks.

Examples: Left bank vegetation structure B = Bare; U = Uniform; S = Simple; C = Complex. In grey are highlighted valid scoring spot-checks.

Spot-check	1	2	3	4	5	6	7	8	9	10	Score
Bank face	S	U	B	U	S	B	U	S	S	U	7
Bank top	S	S	U	C	C	S	U	S	S	U	

Spot-check	1	2	3	4	5	6	7	8	9	10	Score
Bank face	S	S	U	S	C	B	S	B	S	U	4
Bank top	S	C	U	U	S	B	U	U	S	U	

Spot-check	1	2	3	4	5	6	7	8	9	10	Score
Bank face	S	U	S	U	C	B	C	B	S	U	0
Bank top	S	U	S	U	C	B	C	U	S	U	