

Heap Bridge RCA

Surveyor:

The River Condition Assessment was undertaken by Dominic Rigby MCIEEM, an ecologist with over 35 years continuous professional experience.

He attended the CIEEM Design considerations for BNG river and stream enhancement training in July 2024 and is an RCA Accredited Assessor, completing training/assessment in April 2024; certificate is viewable on the public register.

Methodology

The survey was undertaken on 31/07/2025. The river was accessible along the left bank only, but both banks, and the river bed, were viewable.

There were no constraints or deviations from the Morph 5/RCA methodology.

The averaged 19m wide and thus 30m five contiguous 30 modules were recorded and results entered on the Cartographer RCA app. in the field. Photographs were taken of the up, down and mid-stream points in each module.

Results

- **RCA**

The River Roch riparian zone (10m) fell within the project red line. The woodland and scrub habitats that bordered the river within the red line contrasted with the permanent agricultural grassland on the right bank.

The river ran roughly east to west and was walled for more than half of the study zone for this project, on its left bank. The river was split into two sections for BNG purposes, using the same RCA. Section One was a 37m downstream section (Modules Four and Five) and Section Two, a 76m upstream section (Modules 1-3) featured a 5m high walled section.

An RCA was conducted and the preliminary condition score of the E-type (Island braided/wandering) river was 0.882591462, and the river shape index was 4.1860466. The coarsest river bed material was cobble, and the average was gravel/pebble.

The sub reach was taken from the weir at SD8255110658 (750m east - upstream) to the River Irwell confluence (5600m west – downstream)

The preliminary condition score placed in the river in the “Moderate” category >0.2 to 1.4). The extent of INNS, particularly on the right (far) bank and the extent of walled bank side on the left (near) bank reduced the score.

- **Encroachment**

Section One had no encroachment. Section Two featured a 5m walled section (bank revetment) along its left bank side, resulting in major watercourse encroachment; as well permanent agricultural grassland at the edge of the right bank top: minor encroachment.

Conclusions

The extensive walled section on the left bank coupled with the extensive Japanese knotweed on the inaccessible right bank, limited possibilities to exercise net gain. The eradication of INNS with Section One (Modules Four and Five), would increase the preliminary score to 1.0364, still someway from the next condition category ("Fairly Good") at 1.4.

It was likely off-site credits would need to be purchased if an agreement and long-term management commitment to remove INNS from both banks could not be arranged. Given the likely annual seed and vegetative INNS deposition from upstream the eradication was not considered feasible.

The river would require protecting from disturbance from the building activities. This must be done without impact the functioning of the watercourse.

Photographs

Module Two: Japanese knotweed. Module 2, Stone Bank, left, Module Three



Module Five: Right bank, upstream and mid channel



Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Heap Bridge	Unique river section reference:	JE8731-25
GPS of MoRPh5 midpoint	SD8215410380	River section length:	150m
Rivers and streams form naturally draining networks within the wider landscape.			
RCA River Type and Habitat Description for full river section (from walkover survey)			
E- Island braided/wandering, coarsest CO, average GP			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	4	Woodland, scrub
B2	Bank top tree feature richness	2	
B3	Bank top water-related features	0	None
B4	Bank top NNIPS cover		Could be reduced to -3 if controlled in Modules 1 an 2, left bank
B5	Bank top managed ground cover	-3	Agricultural on right bank
BANK FACE			
C1	Bank face riparian vegetation structure	3	
C2	Bank face tree feature richness	3	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	4	
C5	Bank face natural bank material richness	2	
C6	Bank face bare sediment extent	1	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	-3	Walled modules 3-5
C9	Bank face reinforcement material severity	-3	Stone
C10	Bank face NNIPS cover	-4	Could be reduced to -3 if controlled in Modules 1 an 2, left bank
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation	1	
D2	Channel margin aquatic morphotype	1	
D3	Channel margin physical feature extent	2	
D4	Channel margin physical feature richness	2	
D5	Channel margin artificial features	-1	
CHANNEL BED			
E1	Channel aquatic morphotype richness	4	
E2	Channel bed tree features richness	2	
E3	Channel bed hydraulic features richness	3	
E4	Channel bed natural features extent	3	
E5	Channel bed natural features richness	3	
E6	Channel bed material richness	3	
E7	Channel bed siltation	0	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	-2	Minor weir
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY SCORE:	0.882591462	River Type and class bands:	E >0.2 to 1.4
River Shape index:	4.1860466	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	NO
River Condition Assessment FINAL CLASS:	MODERATE	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	NO
Summary of RCA results (and Encroachment where applicable) with recommendations for improvements			
Left bank side was largely walled, restricting opportunities; Extensive Japanese knotweed on right bank (outside project scope).			
Suggested enhancement interventions to improve the river condition score			
Control of INNS along left bank.			