
Data Collection

Site Information

Assessors' names

Date of assessment

Name of site

Catchment

National grid reference

At least 8 figures
e.g. SD 1234 5678.

Proximity to tidal limit (km)

If a tidal barrier, indications of tidal state (Ebb/Flood/Slack Water)

For example, rising or falling tailwater levels (water level downstream of structure) during assessment period.

Time of assessment

Please be as accurate as possible as this information could be used later to determine the tidal state.

Is weir overtopped at high tide?

Owner and purpose of structure (if known)

How is structure accessed

Photographs

(Number of and reference)

Notes

Consider whether there are any environmental conditions that may affect the results of the day's assessment. For example, if it is not possible to survey during normal flow conditions for eel migration, record this here and how it might affect the assessment.

Plan of site

Structure Description

Type of man-made structure Tick all applicable options.	Answer
Weir	
Dam	
Culvert	
Sluice	
Ford	
Tidal Flap	
Bridge Footing	
Structure material Tick all applicable options.	Answer
Concrete	
Wood	
Rock	
Metal	
Other Include a description here.	

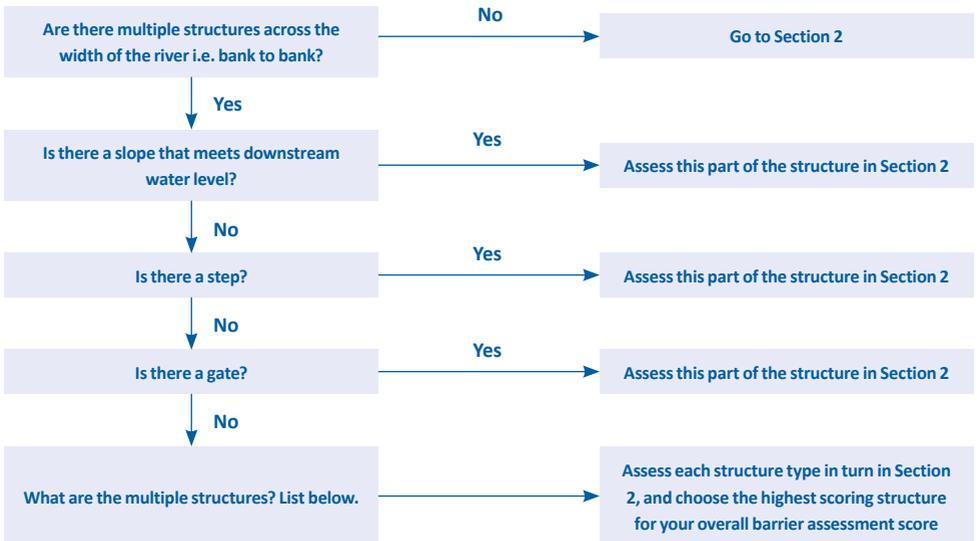
Estimates of dimensions (Estimate by eye from the bankside)	Answer
Width of channel immediately downstream of structure (metres)	
Width of structure (metres)	
Total wetted width (areas of water) at crest of structure (metres)	
Depth of water over crest of structure (metres)	
Head loss (difference in upstream to downstream water level) (metres)	

Assessment of Structure for Upstream Migration

Section 1

This flow chart is designed so that the **least** limiting transversal section of a structure (across the river's width) is assessed but that the **most** limiting features on the longitudinal section of a structure (downstream to upstream) are assessed.

This assumes that where multiple structures exist across a river's width (i.e. fixed crest weir next to sluice gate), eels migrating upstream would utilise the easiest path where possible. However, if a lip at the crest or step at the toe of a weir slope is encountered i.e. the slope does not meet the upstream and/or downstream water level because of another impediment, then this needs to be accounted for in the assessment as it presents a greater challenge for eels.



Notes

Section 2

Please circle the score for the most appropriate answer to each question

Is there a continuous path of crawling media over the structure?

Crawling media is a wetted rough substrate (such as algae, moss, other vegetation, roughened rock, decaying wood, etc.) that eels can climb or crawl across. This crawling media must be uninterrupted across the structures length (downstream to upstream). Image source: Chris Gardner, South East Rivers Trust.



Yes	No	Sub Total
3	0	

If yes, assume barrier is passable to elver

What is the approximate slope of the structure?

<1 in 4

1 in 4 – 1 in 1

>1 in 1

Variable e.g. stepped, lip at crest or step at toe



Example of stepped structure



Sub Total

4	2	1	1	
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What is the approximate length of the slope?

This applies to the slope across the whole structure, downstream to upstream.

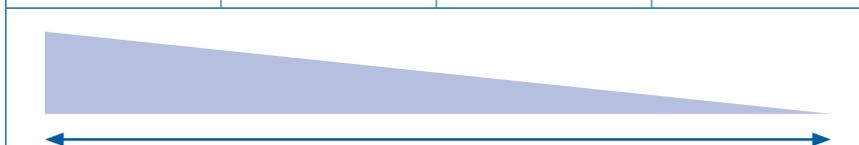
If it is stepped, count the number of steps and record as a note here:

0-2m

>2-6m

>6-9m

≥10m



Sub Total

4	3	2	1	
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What is the approximate velocity over the slope?				
If using the float method				
Very low (<0.5m/sec)	Low (0.5m-1m/sec)	Medium (>1m-2m/sec)	High (>2m/sec)	
If using the pacing method				
Slow walk	Walking	Jogging	Running	Sub Total
4	2	1	0	
Where is velocity recorded from?				

Is the structure assumed to be passable to elver, yes or no?

What is the total passability score?

Score Range	
10-15	Unlikely to represent a major barrier to upstream migration
05-09	Partial impact, obstacle may impede passage
<05	Likely to be a complete obstacle to eels migrating upstream

Escapement Potential – Passability Assessment for Downstream Migration

Are there any features of the structure that would obstruct downstream migration, such as pumps or mechanical features that could cause physical harm to eels? Does the flowing water fall onto a hard or rocky bed that could inflict physical damage on the eels and impede further downstream migration?

Notes