VB ID and name			Ti	me:	Surveyor names:								
. SURVEY SITE DETAILS													
			1	T		1141		T .				T =	
River/stream name Tributary to:					tecedent co cle one)	onditions	1	2	3		4	5	
					w condition	ns (circle	D	. 1 . 4 11		-4	Summer		
GPS co-ordinates				one	e):	,	Ваг	nkfull	Elev	ated	lo	w level	
No. photos taken:					verse cond			Υ			Ν		
Photo id no range:					peding surv es, describ		<u> </u>						
Ownership (if known)					,								
Access notes:													
2. STRUCTURE OF CONCE	RN												
2.1. General characteristics													
<u>-vpe</u>					Material								
Vertical		Bridge footin	ng		PCC	TME	3	PV	0		SPS		
-Notched		Niatural —	Waterfall		SST	CPC		MR			OTH:		
Sloping		barrior	Rapid Debris dam		SPA	CAL	-	CS	T				
Weir - Crump - Flat-V		Dam	Deblis dalli		Total w	idth of ba	rrier a	lona cre	est (m	):			
- Flume		Culvert			Total w	idth of ch	annel	(m):					
Stepped		Sluice				etted widt				n)			
								4.1	^				
Ford		Abstraction of	off-take			ture drow			/?		Y		
Ford		Abstraction	off-take			ture drow ture curre			/?		Y	N N	
,	.i. al.				Is struc	ture curre	ntly di	ry?	/?		Y		
2.2.Transversal sections (TS		ding barrier par	ts or passag		Is struc	ture curre	ntly di	ry?	/?		Y		
2.2.Transversal sections (TS)  Number of identified transversal		ding barrier par	ts or passag		Is struc	ture curre	ntly di	ry?	<i>!</i> ?		Y		
2.2.Transversal sections (TS	rsal s	ding barrier par ections (TS) ac	ts or passag		Is struc	ture curre	ntly di	ry?	?		Y		
2.2.Transversal sections (TS)  Number of identified transve	rsal s	ding barrier par ections (TS) ac	ts or passag cross the tota	l width	across total of the chan	ture curre	ntly di	ry? nel	?		Y	N	
2.2.Transversal sections (TS	versal s	ding barrier par ections (TS) ac rtical drop: eir, outlet drop,	ts or passag	Il width o	across total of the chan	I width of nel	chanr Oth	nel ner: mplex			Estim		
2.2.Transversal sections (TS)  Number of identified transve	versal s	ding barrier par ections (TS) ac	cross the total slope: (sloping w fords, culv sloped fish	veirs,	across total of the chan	I width of nel	chanr  Oth  Cor  wat	nel  ner: nplex erfalls,		5 1	Estimof total	ate of %	
2.2.Transversal sections (TS)  Number of identified transversal  TS description  Tick box if feature is present in the TS and	versal s	ding barrier par ections (TS) ac ectical drop: eir, outlet drop, terfall	cross the total	veirs,	across total of the chan steps: (stepped box-pass	I width of nel	chanr  Oth  Cor  wat  dan	nel  ner:  mplex erfalls, ns or	debris	5   t	Estimof tota	ate of %	
2.2.Transversal sections (TS)  Number of identified transversal sections  TS description  Tick box if feature is present in the TS and enter the order the	Ver (we wat	ding barrier par ections (TS) ac ectical drop: eir, outlet drop, terfall ershot sluice)	sts or passageross the total  Slope: (sloping was fords, culversloped fish rapids, chul	veirs, erts, nway, utes)	across total of the chan steps: (stepped box-pass ways, corapids	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan	nel  ner: nplex erfalls,	debris	5 1	Estimof totaflow g	ate of % al changoing gh time	
2.2.Transversal sections (TS)  Number of identified transversal sections  TS description  Tick box if feature is present in the TS and enter the order the features are encountered	Ver (we wat ove	ding barrier par ections (TS) ac ectical drop: eir, outlet drop, erfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu DEPTH	veirs, erts, way, utes)	Is structured across total across total of the channel steps: (stepped box-pass ways, corrapids  SWIM A.	I width of nel d weir, s fish amplex	chanr  Oth Cor wat dan con	nel  ner: mplex erfalls, ns or nbinatio	debris ins	5 1	Estimof tota	ate of % al changoing gh time	
2.2.Transversal sections (TS)  Number of identified transversal sections  TS description  Tick box if feature is present in the TS and enter the order the	Ver (we wat ove	ding barrier par ections (TS) ac ectical drop: eir, outlet drop, terfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu	veirs, erts, way, utes)	Is structured across total across total of the chan of	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan  con  SW  JUN	nel  ner: mplex erfalls, ns or mbinatio	debris ins	5 1	Estimof totaflow g	ate of % al changoing gh time	
2.2.Transversal sections (TS)  Number of identified transversal sections  TS description  Tick box if feature is present in the TS and enter the order the features are encountered by fish moving upstream across the barrier	Ver (we wat ove	ding barrier par ections (TS) ac ertical drop: eir, outlet drop, erfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu DEPTH	veirs, erts, way, utes)	Is structured across total across total of the chan of	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan  con  SW  JUN	nel  ner: mplex erfalls, ns or nbinatio	debris ins	5 1	Estimof totaflow g	ate of % al changoing gh time	
2.2.Transversal sections (TS)  Number of identified transversal sections  TS description  Tick box if feature is present in the TS and enter the order the features are encountered by fish moving upstream across the barrier	Ver (we wat ove	ding barrier par ections (TS) ac ertical drop: eir, outlet drop, erfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu DEPTH	veirs, erts, way, utes)	Is structured across total across total of the chan of	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan  con  SW  JUN	nel  ner: mplex erfalls, ns or mbinatio	debris ins	5 1	Estimof totaflow g	ate of % al changoing gh time	
2.2.Transversal sections (TS)  Number of identified transversal sections  TS description  Tick box if feature is present in the TS and enter the order the features are encountered by fish moving upstream across the barrier	Ver (we wat ove	ding barrier par ections (TS) ac ertical drop: eir, outlet drop, erfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu DEPTH	veirs, erts, way, utes)	Is structured across total across total of the chan of	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan  con  SW  JUN	nel  ner: mplex erfalls, ns or mbinatio	debris ins	5 1	Estimof totaflow g	ate of % al changoing gh time	
TS description  Tick box if feature is present in the TS and enter the order the features are encountered by fish moving upstream across the barrier  TS 1  Order (from downstream)	Ver (we wat ove	ding barrier par ections (TS) ac ertical drop: eir, outlet drop, erfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu DEPTH	veirs, erts, way, utes)	Is structured across total across total of the chan of	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan  con  SW  JUN	nel  ner: mplex erfalls, ns or mbinatio	debris ins	5 1	Estimof totaflow g	ate of % al changoing gh time	
TS description  Tick box if feature is present in the TS and enter the order the features are encountered by fish moving upstream across the barrier  TS 1  Order (from downstream) TS 2	Ver (we wat ove	ding barrier par ections (TS) ac ertical drop: eir, outlet drop, erfall ershot sluice)	Slope: (sloping w fords, culv sloped fish rapids, chu DEPTH	veirs, erts, iway, utes)	Is structured across total across total of the chan of	I width of nel d weir, s fish amplex	chanr  Oth  Cor  wat  dan  con  SW  JUN	nel  ner: mplex erfalls, ns or mbinatio	debris ins	5 1	Estimof totaflow g	ate of % al changoing gh time	

## SECTION 7 FINAL PASSABILITY ASSESSMENT FOR SITE

COMPLETE AS AN OVERALL PASSABILITY SCORE TO INCLUDE INFORMATION FROM ALL TRANSVERSAL SECTIONS Site ref no:

			UF	STREAM	MIGRAT	ION				DO	WSTREA	M MIGRA	TION		
		e	rier act	rier act	arrier	D e:	egree stimatio	of on	er	rier act	rier act	arrier	D es	egree stimati	of on
		No barrier	Partial barrier Low impact	Partial barrier High impact	Complete barrier	All measurements undertaken	Measurement partially undertaken	All measurements estimated	No barrier	Partial barrier Low impact	Partial barrier High impact	Complete barrier	All measurements sundertaken	Measurement partially undertaken	All measurements estimated
		1.0	0.6	0.3	0.0	Allm	Me partia	All m	1.0	0.6	0.3	0.0	All m su	Me partia	All me e
Adult Salmon	current conditions														
(AS)	high flows	h flows													
Adult Trout	current conditions														
(AT)	high flows														
Adult Grayling	current conditions														
(AG)	high flows														
Cyprinide (C)	current conditions														
Cyprinids (C)	high flows														
Adult Lamprey	current conditions														
(AL)	high flows														
Juvenile Eel	current conditions														
(JE)	high flows														
Juvenile	current conditions														
Salmonids (JS)	high flows														
Juvenile	current conditions														
Lamprey (JL)	high flows														
Adult Eel	current conditions														
(AE)	high flows														

Additional notes of relevance to fish passage (i.e. observations or information from other sources, and details of dry channels)

Note: Only complete scores for fish species that are known to be present in the catchment

OCITIES AN ot for abstract													Sit	e ref	110.						TS ID:		
		Outl	let / Foot	(only i	if annlic	ahla)	Mid	d-Point	(only if	applicab	Je)		In	let / cre	et		Der	oth / Veloc	assassr	nent			
	Wetted width (m)	Outi	10171001	(Only	паррпо	шысу	1011	u i Oille	(Only II	аррпсав	10)		•••	Ct / 01 C	J.					licin	Notes:		
		LB 1			4	RB 5	LB	2	0	4	RB 5	LB	2	_	4	RB 5	rier	Low	High	ete	For Upstre		
DEPTH (N	Transect point	<u> </u>	2	3	4	5	- 1		3	4	5	ı		3	4	5	No barrier	Partial barrier Impact	Partial barrier Impact	Complete barrier	passabilit assessme		
DEFIN (N	,																ž		Pa Ed E	ပိန္	1.Use both		
VELOCITY	0.6 depth																1.0	0.6	0.3	0.0	and releva		
VELOCITI	Streambed																1.0	0.0	0.5	0.0	data.		
																					2. Choose limiting fa		
Adult Salmon	(20)																≥ 0.15 m	0.11- 0.14 m	0.08 - 0.1m	≤ 0.07 m	applies to t		
	· ·		US		DS			US		DS			US		DS		<u>≤</u> 2 m/s	2.1- 2.5 m/s	2.6 - 2.9	≥3 m/s	species/gu velocity or		
use velocities at 0.	o depth																	0.075 - 0.09	m/s	2011170	(e.g. for ad (AS) if velo		
Adult Trout (A	AT)		US		DS			US		DS			US		DS		<u>&gt;</u> 0.1m	m	m	≤ 0.05 m	2.0 but dep		
use velocities at 0.	6 depth																<u>&lt;</u> 2 m/s	2.1-2.5 m/s	2.6 - 2.9 m/s	≥3 m/s	then score point is 0.3		
Adult Grayling	(AG)																≥ 0.1m	0.075 - 0.09 m	0.06 - 0.074 m	≤ 0.05 m	1		
use velocities at 0.	` ′		US		DS			US		DS			US		DS		≤1.5 m/s	1.6 - 1.9 m/s	2 - 2.8 m/s	≥ 2.9 m/s	3.Scan thro		
	·																0.4	0.075 - 0.09	0.06 - 0.074	0.05	scores and maximum		
Cyprinids (C	5)		US		DS			US		DS			US		DS		≥ 0.1m	m	m	≤0.05 m	passability		
use velocities at 0.	6 depth																<u>&lt;</u> 1m/s	1.1- 1.5 m/s	1.6 - 1.9 m/s	≥2 m/s	each applic location (in		
Adult Lamprey	(AL)																≥0.08 m	0.06 - 0.079 m	0.04 - 0.059 m	<u>&lt;</u> 0.03 m	midpoint, o		
use velocities at str	eambed		US		DS			US		DS	-		US		DS	-	≤ 0.5 m/s	0.6 - 0.99 m/s	1- 1.4 m/s	≥ 1.5 m/s			
lungaile Fel /	IE)																0.05	0.03 - 0.049	0.021-0.03	0.00	For downs passability		
Juvenile Eel (			US		DS			US		DS			US		DS		≥ 0.05 m	m	m	≤ 0.02 m	assessme		
use velocities at str climbing subst																	≤ 0.3m/s	0.31- 0.49 m/s	0.5 - 0.79 m/s	≥ 0.8 m/s	1.Only com		
-																	≥ 0.08 m	0.06 - 0.079	0.031-	≤0.03 m	inlet		
Juvenile Salmon	d (JS)		US		DS			US		DS			US		DS			m	0.059 m		2.Use only data to det		
use velocities at 0.	6 depth															ı	<u>≤</u> 1.5 m/s	1.51- 1.9 m/s	2 - 2.8 m/s	≥ 2.9 m/s	passability		
Juvenile Lampre	y (JL)												110		DO		≥ 0.02 m	0.011 - 0.019 m	0.006 - 0.01 m	≤ 0.005 m	3.Scan thro		
													US		DS		n.a.	n.a.	n.a.	n.a.	scores and		
Ad. 14 Fal (Al	-,																≥ 0.08 m	0.06 - 0.079	0.031-	≤ 0.03 m	maximum passability		
Adult Eel (Al	=)												US		DS		n.a.	m n.a.	0.059 m	n.a.	1		
	mbing substrate or																11.4.	11.a.	n.a.	ıı.a.	i		

4. PHYSICAL ATTRIBUTES FOR AN INDIVIDUAL TRANSVERSAL SECTI										Site ref r						TS ID:		
4.1. FOR	BARRIERS PR	ESE	NTING A	/ERTIC/	AL DRO	P: WEII			FORD OR	BRIDGE F	OOTING	OUTLE	TS, OVERS	HOT	SLUICE	S, WATER	FALLS	AND DEBRIS DAMS
	Vertical hydra	ulic	Eff. pool		ctive rest	•	Lip (Y, N	N)	Standing		els of		blocking struc	cture?			_	
	head (m)		depth(m)	locat	tions? (Y	,N) c	rest	foot	w ave (Y,I	N) turbulend	e (H, M, L)		(Y,N)		migran	nts present?	(Y,N)	
measure																		
												US	S D:	S		DS		
AS																		
AT																		
AG C								-										
AL																		
JE																		
JS																		
JL																		
AE																		
4.2.FOR	BARRRIERS P	RESE	NTING A	SLOPE:	WEIRS	, CUL\	/ERTS, F	ORDS	BRIDGE	FOOTINGS	, RAPID	S ,CHU	TES AND D	IVERS	ION C	HANNELS		
	Total hydraulic he		Effective	% Slope		. pool	Effective			o (Y, N)	Standi		Levels of			blocking		res damaging to DS
	(inlet-outlet, m)	le	ength(m)	70 Clop	dep	th (m)	locations	s? (Y,N)	crest	foot	w ave (Y	',N) turb	oulence (H, M,	, L)	structur	e? (Y,N)	migrar	nts present? (Y,N)
measure																		
															US	DS		DS
AS																		
AT																		
AG																		
C AL														-				
JE																		
JS																		
JL																		
AE																		
4.3.FOR	BARRIERS PR	ESEN	ITING ST	EPS: ST	EPPED	WEIRS	, BOX-T	RAVES	RSE TYP	E FISHWA			X WATERF	ALLS				
	Total Hydraulic	Effect			ep w ater	Height of	_		Number of	Effective res	· ·	(Y,N)			of turbule		blocking	Structures damaging to DS
	head (m)	length	(m) dept	h (m) d	lepth(m)	step(m	) step	p(m)	steps	locations? (	',N) crest	foot	wave (Y,N)	(1	H, M, L)	structu	re? (Y,N)	migrants present? (Y,N)
measure																US	DS	DS
AS																03	105	DS
AT							1				<u> </u>							
AG																		
C AL																		
JE																		
JS																		
JL . –																		
AE																		

Note: only complete tables in sections 4 and 5 for juvenile eels (JE) if NO climbing substrate is present

4.4 GAP	DIMENSIONS AN	D PASSABILITY	SCORES:	FOR NOTC	HED WEIRS	, CULVERTS	DEBRIS D	AMS AND UN	NDERSHOT	SLUICES		
	No	tched weirs					Culverts				Debris dams	Undershot Sluices
	Notch shape	Notch widt	h (m)	Number of pipes	Gap shape	Gap w id	dth (m)	Tide gate p	oresent?	Tide gate w idth	Gap width (m)	Gap width (m)
measure												
AS												
AT												
AG												
C AL												
JE												
JS												
JL AE												
88	RACTION POINTS	PASSARII ITV	ASSESSME	NT FOR AR	STRACTION	I POINTS BO	TH DOWN	STREAM (DS	AND LIPS	TREAM (IIS)		
J. ABOTT	KAOTIOITT OIITTE	71 AOOABILITT	AUGEOUNE	INT TOR AB	OTIVACTION	Screening f			, AILD OI O	TIVEAIN (00)	<u>'</u>	
US	Position in relation to channel flow	Angle to channel flow	Mesh gap size(m)	Effective screening?		flow through ction(%)			Depth (m) ar	nd Velocities (m	√s) to screen	Attraction flow to abstraction
magaura							Depth					
measure							Vel.					
AS												
AT AG												
C												
AL												
JE												
JS JL												
AE												
						Screening f	or DS migra	ting fish				
DS	Position in relation to channel flow	Angle to channel flow	Mesh gap size(m)	Effective screening?		flow through ction(%)		Approaching	Depth (m) ar	nd Velocities (m	√s) to screen	Attraction flow to abstraction
measure							Depth					
							Vel.					
AS AT												
AG												
C												
AL												
JE JS												
JL												
AE												

Note: only complete tables in sections 4 and 5 for juvenile eels (JE) if NO climbing substrate is present

## 6. PASSABILITY ASSESSMENT FOR AN INDIVIDUAL TRANSVERSAL SECTION (TS) Site ref no:

	_	UPSTREAM MIGRATION							DOWSTREAM MIGRATION								
Transver	sal	er	rier act	rier act	arrier		egree stimatio		er	rier act	rier act	arrier		gree timat			
Section ID:		No barrier	Partial barrier Low impact	Partial barrier High impact	Complete barrier	All measurements undertaken	Measurement partially undertaken	All measurements estimated	No barrier	Partial barrier Low impact	Partial barrier High impact	Complete barrier	All measurements sundertaken	Measurement partially undertaken	All measurements estimated		
		1.0	0.6	0.3	0.0	All me	Measur	All me e	1.0	0.6	0.3	0.0	All me sui	Measur	All me		
Adult Salmon	current conditions																
(AS)	high flows																
Adult Trout	current conditions																
(AT)	high flows																
Adult	current conditions																
Grayling (AG)	high flows																
Ounrinida (C)	current conditions																
Cyprinids (C)	high flows																
Adult	current conditions																
Lamprey (AL)	high flows																
Juvenile Eel	current conditions																
(JE)	high flows																
Juvenile Salmonids	current conditions																
(JS)	high flows																
Juvenile	current conditions																
Lamprey (JL)	high flows																
Adult Eel	current conditions																
(AE)	high flows																

Adult Eel	conditions									
(AE)	high flows									
			Add	itiona	al not	es:				

Note: Only complete scores for fish species that are known to be present in the catchment