Annex 1 – U.K. Standard RHS form 1997 version and spot-check key

## Appendix 1 RHS forms and spot-check key Reproduced at 90% of actual size.

	1997 RIVE	R HABITAT SU	IRVEY	Page 1 of 4
A BACKGROUND	MAP-BASED INFOR	MATION		
Altitude (m) Solid geology code Distance from sourc Height of source (m	Slope Drift e (km) Signit ) Wate	r (m/km) geology code ficant tributary ? r Quality Class	Flow cat Planform Navigati	egory (1 - 10) a category on ?
B FIELD SURVEY I	DETAILS			
Site Number :	Mid-site C	Grid Reference :		River :
Date//1993	7 Time		Surveyor name	
Accredited Surveyor	? No 🗌	Yes	If yes, state code .	
Adverse conditions	affecting survey? No	Yes	If yes, state	
Bed of river visible ?	No 🗌 р	artially	entirely	(tick one box)
Duplicate photogra	ohs : general character ?	No 🗌	Yes	(tick one box)
Site surveyed from :	left bank 🔲 r	ight bank 🔲	channel	(tick as appropriate)
SERCON survey in a	ddition? No	Yes	(tick one box)	
C PREDOMINANT	VALLEY FORM (t	ick one box onl	γ)	
	shallow vee			concave/bowl (If U-shaped glacial valley - add "U")
	deep vee		√── □	symmetrical floodplain
	] gorge	$\checkmark$		asymmetrical floodplain
Terraced valley floor	? No 🗌	Yes 🗌		
D NUMBER OF RIF	FLES, POOLS AND P	OINT BARS	(indicate total i	number)
Riffles	Unvegetat	ed point bars		
Pools	Vegetated	point bars		

1997 RIVER HABI	TAT S	URV	E <b>Y</b> : <sup>-</sup>	TEN S	SPOT-	CHEC	CKS		Pag	ge 2 of	f 4
Spot-check 1 is at : upstream end 🔲 dov	vnstrea	m end		of	site (ti	ck one l	box)				
E PHYSICAL ATTRIBUTES (to be assesse	d acros	s chan	nel wit	hin 1n	n wide	transec	:t)				
<sup>1</sup> = one entry only	1	2	3	4	5	6	7	8	9	10	
LEFT BANK		Ring	g EC or	SC if c	ompos	ed of so	andy si	ıbstrate	2		
Material <sup>1</sup> NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, BW											
Bank modification(s) NK, NO, RS, RI, PC(B), BM, EM											
Bank feature(s) NV, NO, EC, SC, PB, VP, SB, VS											1
CHANNEL			GP- ri	ng eith	er G oi	· P if pr	edomir	nant			
Channel substrate <sup>1</sup> NV, BE, BO, CO, GP, SA, SI, CL, PE, AR											
Flow type <sup>1</sup> FF, CH, BW, UW, CF, RP, UP, SM, NP, NO											Î
Channel modification(s) NK, NO, CV, RS, RI, DA, FO											Ente pres
Channel feature(s) NV, NO, RO, MB, VB, MI, TR											ent i
RIGHT BANK		Rin	g EC or	SC if c	compos	ed of s	andy s	ubstrat	е		anne n >1
Material <sup>1</sup> NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, BW											l sub % w
Bank modification(s) NK, NO, RS, RI, PC(B), BM, EM											strat
Bank feature(s) NV, NO, EC, SC, PB, VP, SB, VS											es no site.
F BANKTOP LAND USE AND VEGETA	TION	STRU	CTUR	E (to b	e assess	ed over	a 10m	wide tro	ansect)		ot oc
Land use : choose one from BL, CP, OR, MH, SC, TH, RF	, IG, TL,	WL, O	W, SU,	RS							currin
LAND USE WITHIN 5m OF LEFT BANKTOP											g in
LEFT BANKTOP (structure within 1m) B/U/S/C											spot-
LEFT BANK FACE (structure) B/U/S/C											-chec
RIGHT BANK FACE (structure) B/U/S/C											iks b
RIGHT BANKTOP (structure within 1m) B/U/S/C											ut
LAND USE WITHIN 5m OF RIGHT BANKTOP											
G CHANNEL VEGETATION TYPES (to b	oe asses	sed ove	r a 10m	n wide t	ransect	: use E	( > 339	6 area)	or √(p	resent)	
NONE											
Liverworts/mosses/lichens											
Emergent broad-leaved herbs											
Emergent reeds/sedges/rushes											
Floating-leaved (rooted)											
Free-floating											
Amphibious											
Submerged broad-leaved											
Submerged linear-leaved											
Submerged fine-leaved											
Filamentous algae											
Use end "catch-all" column for types not occurring in s	pot che	cks as v	vell as	overall	assessn	nent ove	er 500n	ı (use E	or 🗸	)	ŧ

SITE NO.	1997 RIVER H	IABITAT	SURVEY	′ : 500m SWEEP-UP	Page 3	6 of 4
H LAND USE WIT	THIN 50m OF BA	ANKTOP	Use E	E (> 33% banklength) or √(present)		
		L	R		L	R
Broadleaf/mixed woodlar	nd <i>(BL)</i>			Rough pasture (RP)		
Coniferous plantation (CF	?)			Improved/semi-improved grass (IG)		
Orchard (OR)				Tilled land (TL)		
Moorland/heath (MH)				Wetland (eg bog, marsh, fen) (WL)		
Scrub (SC)				Open water (OW)		
Tall herbs /rank vegetatio	n <i>(TH)</i>			Suburban/urban development (SU)		
				Rock and scree (RS)		
I BANK PROFILE	<b>S</b> Use E (≥ 33%)	banklengt	h) or√(p	resent)		
Natural/unmodified		L	R	Artificial/modified	L	R
Vertical/undercut				Resectioned		
Vertical + toe				Reinforced - whole bank		
Steep (>45°)	<b></b>			Reinforced - top only		
Gentle —	~			Reinforced - toe only		
Composite	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Artificial two-stage		
				Poached The Poached		
				Embanked	-	
				Set-back embankments		
J EXTENT OF TR	EES AND ASSO	CIATED	FEATUR	ES		
TREES (tick one	box per bank)			ASSOCIATED FEATURES (tick one box per featu	ıre)	
	Left I	Right		None Prese	nt E(≽3	3%)
None				Shading of channel		
Isolated/scattered				Overhanging boughs		
Occasional clump				Underwater tree roots		
Semi-continuous				Fallen trees		
Continuous				Coarse woody debris		
K EXTENT OF CH	ANNEL FEATUR	<b>ES</b> (tr	ick one bo	x per feature)		
	None P	resent E(	>33%)	None Presen	t E(≽	≥33%)
Waterfall(s)				Marginal deadwater		
Cascade(s)				Exposed bedrock		
Rapid(s)				Exposed boulders		
Riffle(s)				Unvegetated mid-channel bar(s)		
Run(s) Boil(s)				Mature island(s)		
Glide(s)				Unvegetated side bar(s)		
Pool(s)				Vegetated side bar(s)		
Ponded Reach(es	)			Discrete silt deposit(s)		
				Discrete sand deposit(s)		

	199	7 RIVER H	ABITAT S	URVEY: [	DIMENSI	ONS ANI	D INFLUENC	ES Page	4 of 4
LC	HANNEL D	IMENSIO	<b>NS</b> (to be m	easured at	one site on	a straight ı	uniform section,	preferably acros	ss a riffle)
LEFT B	ANK			CHANNEL			RIGHT BANK		
Bankto	op height (m)			Bankfull w	idth (m)		Banktop heig	ht (m)	
ls banl height	ktop height als ? (Y or N)	o bankfull		Water wid	th (m)		ls banktop he height? (Y or	eight also bankf N)	ull
Embar	nked height (m)			Water dep	th (m)		Embanked he	ight (m)	
If trash	nline is lower th	nan banktop	break in slop	pe, indicate	e: height a	bove wate	r (m) =		
Bed m	aterial at site is	s: con	solidated (c	ompact)	unce	onsolidated	l (loose)	unl	known
Locatio	on of measure	ment is:		riffle		run	or glide 🗌		other 🗌
MA	<b>RTIFICIAL</b>	FEATURES	(indicate tot	al number	or tick appi	opriate box	;)		
None		Major	Intermedi	iate N	1inor		Major	Intermediate	Minor
	Weirs				Re	vetments			
	Sluices				0	<u>itfalls</u>			
	Bridges				Fo	rds			
	Dirages					her (state)			
Is wate	r impounded k	y weir/dam?	No 🗌	Yes, <33	3% of site	>33	3% of site	<u> </u>	
				EMENT	(tick appror	riate hov(e	c))		
							<i>s)))</i>		
None		l	Dredging			Mowing		Weed-cutting	
			nhancemer	nt 📋		Other (stat			
OF	EATURES C	F SPECIAL	. INTERES	<b>T</b> (use √ o	r E (≽33%	length)			
None									
Waterf	alls > 5m high		Artificial c	open water	· 🗌	Bog		Fringing reed-k	oank 🗆
Braide	d/side channe	ls 🗌	Natural o	pen water		Carr		Floating mat	
Debris	dams		Water me	adow		Marsh	ו 🗆	Other (state)	
Leafy o	debris		Fen			Flush			
PC	CHOKED CH	IANNEL (ti	ck one box)						
Is 33%	or more of th	e channel ch	oked with v	egetation?		No 🗌		Yes 🗌	
QN	NOTABLE N	UISANCE	PLANT SP	ECIES (U	lse √or E (≽	33% lengt	h)		
None	Giant H	Hogweed 🗌	Himala	iyan Balsan	n 🗌 🛛 J	apanese Kr	notweed	Other (state)	
RC	OVERALL CH	IARACTER	ISTICS (C	ircle appr	opriate w	ords, add	others as ne	cessary)	
Major	impacts: la	andfill - tippir	ng - litter - s	ewage - po	ollution - dr	ought - abs	straction - mill -	dam - road - ra	ail - industry
Land	-	housing - mi	ning - quari	ying - over	rdeepening bandoned	- afforesta	tion - fisheries r	nanagement - s	ilting
Anima	als: c	otter - mink - v	vater vole - k	kingfisher -	dipper - are	v waqtail - :	sand martin - he	eron - dragonflie	s/damselflies
Other	significant of	servations		<u> </u>	- FF - 5 -			, see the second s	.,
S A	ALDERS (tick	appropriate b	ox(es))						
Alders	? None 🗌	Present 🗌	Extensive	e 🗌	Diseased	Alders? N	one 🗌 Pre	esent 🗌 Ex	tensive

Page 1 of 2

## 1997 RIVER HABITAT SURVEY: SPOT-CHECK KEY

## PHYSICAL ATTRIBUTES (SECTION E)

BAN	KS	CHAN	NNEL
Predominant bank material	Bank modifications	Predominant substrate	Channel modifications
<b>NV</b> = not visible	NK = not known NO = none	NV = not visible	NK = not known NO = none
BE = bedrock BO = boulder CO = cobble GS = gravel/sand EA = earth (crumbly) EA = earth CL = sticky clay CC = concrete SP = sheet piling WP = wood piling GA = gabion BR = brick/laid stone RR = rip-rap BW = builders' waste	RS = resectioned RI = reinforced PC = poached PC(B) = poached (bare) BM = berm EM = embanked Bank features NV = not visible (eg far bank) NO = none EC = eroding earth cliff SC = stable earth cliff SC = stable earth cliff PB = unvegetated point bar VP = vegetated point bar VS = vegetated side bar VS = vegetated side bar	BE = bedrock BO = boulder CO = cobble GP = gravel/pebble (ring G or P if predominant) SA = sand SI = silt/mud CL = clay PE = peat AR = artificial Predominant flow (see below) FF = freefall CH = chute BW = broken standing waves (white-water) UW = unbroken standing wave CF = chaotic flow RP = rippled UP = upwelling SM = smooth NP = no perceptible flow NO = No flow (dry)	CV = culverted RS = resectioned RI = reinforced DA = dam/weir FO = ford (man-made) Channel features NV = not visible NO = none RO = exposed bedrock/boulders MB = unvegetated mid channel bar MB = unvegetated mid- channel bar VB = vegetated mid- channel bar VB = vegetated mid- channel bar MI = mature island TR = urban debris (trash)
FLOW TYPES	ASSOCIATED CHANN	NEL FEATURES	
FF: Free fall	clearly separates from bac	k-wall of vertical feature ~ asso	ciated with waterfalls.
CH: Chute	low curving fall in contact	with substrate.	
BW: Broken standing waves	white-water tumbling way	e must be present ~ associated	d with <i>rapids.</i>
UW: Unbroken standing wa	ves upstream facing wavelets	which are not broken ~ associa	ated with <i>riffles</i>
CF: Chaotic flow	a mixture of 3 or more 'ro	ugh' flow types on no organise	ed pattern.
RP: Rippled	no waves, but general flow associated with <i>runs</i> .	v direction is downstream with	disturbed rippled surface ~
UP: Upwelling	heaving water as upwellin	gs break the surface ~ associate	ed with <i>boils.</i>
SM: Smooth	preceptible downstream n associated with <i>glides.</i>	novement is smooth (no eddie	s) ~
NP: No perceptible flow	no net downstream flow ~	associated with pools, ponded re	eaches and marginal deadwater.
NO: No flow	dry.		

Scale	– Coarse sand Gravel	- Pabbla		
		- rebble		Cobble (to size of A4 page)
SA	GP		СО	



24 hour free emergency telephone line for reporting all environmental incidents relating to air, land and water.

Annex 2 – South Europe RHS form

South Europe River Habitat Survey		10 sj	oot-ch	iecks								
Spot-Check1 is at:	upstre	am		]	downs	tream		]	of site			
								primary	$\sim$	seconda	ry	
Physical attributes (to be assessed	across	chann	el with	<u>in 1 m</u>	wide tr	ansect	t)	T			1	
Total channel width (including bars		•	2		-	<u> </u>	7	•	•	10	-	
l eft bank	Ring EC	or SC if c	ා omposed	of sandy	J Substrate	0	1	0	9	10		
Material (NV, BE, BO, CO, GS, EA, PE, CL, CC, SP,				or survey								
WP, GA, BR, RR, BW)		*****			*****			*****				Т
Bank modification (NK, NO, RS, RI(N), PC(B), BM, EM)		A		A	A.M. B. M. B		******		A			
Bank feature (NV, NO, EC, SC, PB, VP, SB, VS)												
Number of wetted channels												
Main Channel (highest discharge)	GP-Ring	either G	or P if pre	dominant		1					1	T
Channel position (Left, Centre, Right):												Ī
Water width (m											1	
Channel substrate (NV, BE, BO, CO, GP, SA,												7
SI, CL, PE, AR) Flow type (FF, CH, BW, UW, CF, RP, UP, SM, NP,			****	*****		****			*******	*****		,
NO)	· · · · · · · ·	*****				*****					*****	_
Channel modification (NK, NO, CV, RS, RI, DA, FO)		***********		*****	***************				************	************		
Channel feature (NV, NO, RO, MB, VB, MI, TR)												
Secondary Channel	GP-Ring	either G	or P if pre	dominant						-	1	
Channel position (Left, Centre, Right):												
Water width (m												
Channel Substrate (NV, BE, BO, CO, GP, SA, SI, CL, PE, AR)				ANTONNA	A. F.	A	A. W. A. S.		A. S.	A. S.		
Flow type (FF, CH, BW, UW, CF, RP, UP, SM, NP,												7
Channel modification (NK, NO, CV, RS, RI, DA, FO)											**	+
Channel feature (NV NO RO MB VB MI TR)												
Right bank	Ring EC	l.≁ or SC if c	omposed	of sandy	substrate	Love .		leet.	1.0×*	lee*		
Material (NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, BW)												
Bank modification (NK, NO, RS, RI(N), PC(B), BM, EM)												T
Bank feature (NV NO EC SC PB VP SB VS)												
Banktop land use and vegetation							ler*					L
structure	(to be as	sessed ov	/er a 10 m	wide tran	nsect)						-	
Land use: choose one from BL, CP, OR, MH, SC, TH Land use within 5m of left bankton	I, RP, IG, 1	L, WL, O	W, SU, RS	5								
Left banktop (B, U, S, C)												
Left bank face (B, U, S, C)												
Right bank face (B, U, S, C)												
Land use within 5m of right bankton												
Channel vegetation types	to be ass	sessed ov	er a 10 m	wide trans	sect: use	E (>33% a	area) or tio	k if prese	nt	<u>.</u>		Ţ
none	*****	*******	*****	*******	******	******	******	*****	******	******	****	1
liverworts/mosses/lichens	********	******	******	**********	**********	***********	***********	******	******	******	*****	,
emergent broad-leaved herbs	*****	*******	********	******	******	*******	*****	******	******	******	******	-
emergent reeus/seages/rusnes floating-leaved (rooted)	*****	*****	******	******	******	******		******	*********	*****	******	,
free-floating	*****		*****								*****	-
amphibious	***											1
submerged broad-leaved	*****	******	********	*********	*****	*****	******	*****	******	******	*****	1
submerged linear-leaved	*****	*****	**********	*****	**********	************	***********	*****	******	*****	******	_
submerged fine-leaved	*****	******	*****	******	*****	****	*****	*****	*****	******	****	-
Tilamentous algae	********	*****	*****	*****	******	******	*********	***********	******	******	*****	1

Use end "catch-all" column for types not occurring in spot-checks as well as overall assessment over 500 m: use E (≥33% area) or tick if present.

Annex 3 – Key to determine when the application of SE\_RHS may result especially useful for STAR purposes



## KEY TO DETERMINE WHEN THE APPLICATION OF SE\_RHS MAY RESULT ESPECIALLY USEFUL FOR STAR PURPOSES

1. a. One or more wetted secondary channels are present in the river .....





















Annex 4 - U.K. Standard RHS form 2002 version

	RIVER H	ABITAT SUR	VEY	F	Page 1 of 4
A FIELD SURVEY D	ETAILS				
Circ NL L -	leave blank				
Site Number :		Mid-	site Grid Reference	coordinates :	
Site Reference :	Reach Referen	ice :	River :		
Date/20	Time		Surveyor name		
Accredited Surveyor	code:				
Is the site on a river of	r an artificial channel?	River	Artificial		
Health and safety asse	essment completed?	No 🗌	Yes 🗌		
Adverse conditions aff	ecting survey? No	Yes	If yes, state		
Bed of river visible ?	No 🗌	partially	entirely	(tick one box)	
Duplicate photograph	s showing general chara	acter? No	Yes 🗌	(tick one box)	
Site surveyed from :	left bank	ight bank 🔲	channel	(tick as appropri	iate)
B PREDOMINANT V	VALLEY FORM (wi	thin the bo	rizon limit)	(tick one boy o	volu)
		timi the nor	izon mint)		Juny)
	shallow vee	1		concave/bowl	
	deep vee				
~				U shape vallev	
	assymetric vee	C		1	
$\neg \subset$			_		
$\forall$ $\Box$	gorge			l no valley sides	obvious
Distinct flat valley bottom? No	Yes Natural ter	races No	Yes Artifici	al terraces No	Yes 🗆
C NUMBER OF RIFF	LES, POOLS AND I	POINT BARS	(indicate to	tal number)	
D:(0 ==	University	1 1			
Pools	Vegetated p	d point bars			
O ARTIFICIAL FEATURE	S (indicate total number	r or tick appropria	ate box)		
One Major	Intermediate M	inor Outfalls	Major	Intermediate	Minor
Sluices		Fords			
Culverts		Deflector	s/ crovs		
Bridges		Other (st	ate)		
ls channel realigned? Is water impounded by v	No 🗆 weir/dam? No 🗆	Yes, <3 Yes, <3	3% of site 3% of site	>33% of s	site 🗆 site 🗆

RIVER HABITAT	SUR	VEY	: TEI	N SPO	DT-CH	HECK	S		Pag	ge 2 of	f 4
Spot-check 1 is at : upstream end dow	wnstream	m end		of	site (ti	ck one	box)				
E PHYSICAL ATTRIBUTES (to be assess	ed acro	ss cha	nnel wi	ithin L	n wide	transe	ect)				(1.5m)
<sup>1</sup> = one entry only	1	2	3	4	5	6	7	8	9	10	
LEFT BANK		Ring	g EC or	SC if c	ompos	ed of s	andy si	ibstrate	•		
Material <sup>1</sup> NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, BW, FA, BI											
Bank modification(s) NK, NO, RS, RI, PC(B), BM, EM											
Bank feature(s) NV, NO, EC, SC, PB, VP, SB, VS, NB									-		
CHANNEL			GP- ri	ng eith	er G oi	P if pr	edomir	nant			
Channel substrate <sup>1</sup> NV, BE, BO, CO, GP, SA, SI, CL, PE, AR											
Flow type <sup>1</sup> FF, CH, BW, UW, CF, RP, UP, SM, NP, DR											
Channel modification(s) NK, NO, CV, RS, RI, DA, FO											Ť
Channel feature(s) NV, NO, RO, MB, VB, MI, TR, VR, EB						2					Ente
For braided rivers only: number of sub-channels Dry		/			/						ent i
RIGHT BANK		Rin	g EC or	SC if c	ompos	ed of s	andy s	ubstrat	е		anne in >1
$Material^1 \ \text{NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, BW, FA, BI}$											l sut % w
Bank modification(s) NK, NO, RS, RI, PC(B), BM, EM											ostrat
Bank feature(s) NV, NO, EC, SC, PB, VP, SB, VS, NB											es no site.
F BANKTOP LAND USE AND VEGET	<b>ITATIO</b>	N STI	RUCTI	URE (I	o be as	sessed (	over a 1	Om wid	e transe	ct)	ot oc
Land use : choose one from BL, CP, OR, MH, SC, TH, RH	P, IG, TL	, WL, O	W, SU,	RS, BP,	CW, IL,	AW, PG	, NK				currir
LAND USE WITHIN 5m OF LEFT BANKTOP											ng in
LEFT BANKTOP (structure within 1m) B/U/S/C/NV											spot
LEFT BANK FACE (structure) B/U/S/C/NV											t-che
RIGHT BANK FACE (structure) B/U/S/C/NV											cks b
RIGHT BANKTOP (structure within 1m) B/U/S/C/NV											out
LAND USE WITHIN 5m OF RIGHT BANKTOP											
G CHANNEL VEGETATION TYPES (to	be assess	ed over	a 10m v	vide tran	sect :use	E ( ≥ 3:	3% area)	or√(pre	escot) or	NV (not	visible)
NONE (🗸 ) or Not Visible (NV)											
Liverworts/mosses/lichens											
Emergent broad-leaved herbs											
Emergent reeds/sedges/rushes											
Floating-leaved (rooted)											
Free-floating											
Amphibious											
Submerged broad-leaved											
Submerged linear-leaved											
Submerged fine-leaved											
Filamentous algae											
							1				

Use end column for overall assessment over 500m including types not occurring in spot checks (use E or 🗸 or NV)

SITE NO.	RIVER HAI	BITAT	SURVE	Y: 500m SWEEP-UP	and the second	Page 3	of 4
H LAND USE WI	THIN 50m OF I	BANKT	OP Use E	(> 33% banklength) or <td></td> <td></td> <td></td>			
	-	L	R			L	R
Broadleaf/mixed woodland	l semi-natural (BL)		THAN SHE	Improved/semi-improved grass	(IG)		
Broadleaf/mixed woodlar	nd- planted (BP)		to status	Tilled land (TL)	hetelst (mi		
Coniferous forest semi-na	tural (CW)		The was	Wetland (eg bog, marsh, fen) (	WL)		
Coniferous plantation (CF	')			Natural open water (OW)	(Yan Na		
Orchard (OR)				Artificial open water (AW)	d height (m)		
Moorland/heath (MH)				Irrigated land (IL)			
Scrub (SC)				Parkland and gardens (PG)		uncary	9.10
Tall herbs /rank vegetation	n (IH)		-	Suburban/urban development	(SU)		
Rough/unimproved grassi	and/pasture (RP)			Rock, scree and sand dunes (RS)	) EPHENDENSKI HUDDEN		
I BANK PROFILI	ES Use E (≥ 33%	banklen;	gth) or √ (p	resent)			
Natural/unmodified		L	R	Artificial/modified	Any large boeth	L	R
Vertical/undercut	ms m			Resectioned	Vinne .	it:	
Vertical + toe	hm	1000		Reinforced - whole bank	m		
Steep (>45°)	1,000	C.C.W. P.		Reinforced - top only	1		
Gentle -		in a	wow [	Reinforced - toe only	hanne		1
Composite	~~~ waxay	1		Artificial two-stage			
Natural berm —	~	1000		Poached	<u> </u>		
			-	Embanked	-/ /		
the Official Indian of the C				Set_back embankments			
		CIA TEE		Set-back embankments		AND COLOR	
J EXTENT OF TR	EES AND ASSO	CIATEL	) FEATURI	5			
TREES (tick one	box per bank) Left	Right		ASSOCIATED FEATURES (tick	one box per feature	e) E (>3	3%)
None				<b>CI I C I I</b>			070)
Include allowed to an end				Shading of channel			
isolated/scattered	ı 🗆			Shading of channel Overhanging boughs			
Regularly spaced.	i 🗌			Shading of channel Overhanging boughs Exposed bankside roots			
Regularly spaced. Occasional clump	i 🗌 🗍 , single 🗍			Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots			
Regularly spaced. Occasional clump Semi-continuous	i  i  i  i  i  i  i  i  i  i  i  i  i  i			Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees			
Regularly spaced. Occasional clump Semi-continuous Continuous	i  i  i  i  i  i  i  i  i  i  i  i  i  i			Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris			
Regularly spaced. Occasional clump Semi-continuous Continuous K EXTENT OF B/	i  isingle isi	NNEL F	ÆATURES	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature)			
Regularly spaced. Occasional clump Semi-continuous Continuous K EXTENT OF B	ANK AND CHA	NNEL F	EATURES	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature)			220/1
Regularly spaced. Occasional clump Semi-continuous Continuous K EXTENT OF B/	I  single s	Present	ÆATURES E(≥33%)	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature)	Image: Constraint of the second se		33%)
Regularly spaced. Occasional clump Semi-continuous Continuous K EXTENT OF B. Free fall (Waterfall) Chute (Cascade)	ANK AND CHA	C C C C C C C C C C C C C C C C C C C	EATURES E(≥33%) □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) Exposed bedrock Exposed boulders	Image: Constraint of the second se		:33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         K         EXTENT OF B         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (B	ANK AND CHA	Present	EATURES E(≥33%) □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders	Image: Constraint of the second se		33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         Continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves	ANK AND CHA	NNEL F	EATURES E(≥33%) □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s)	Image: Constraint of the second se		:33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves         Rippled (Run)	ANK AND CHA	Present	EATURES E(≥33%) □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s)	Image: Constraint of the second se		:33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         Continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves         Rippled (Run)         Uowelling (Boil)	ANK AND CHA	NNEL F	EATURES E(≥33%) □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s) Vegetated mid-channel bar(s)	Image: Constraint of the second se		:33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves         Rippled (Run)         Upwelling (Boil)         Smooth (Clide)	ANK AND CHA	Present	EATURES E(≥33%) □ □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s) Vegetated mid-channel bar(s) Unvegetated side bar(s)	Image: Constraint of the second se		33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         Continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves         Rippled (Run)         Upwelling (Boil)         Smooth (Glide)         No perceptible flow (Pool	ANK AND CHA	NNEL F	E(≥33%) □ □ □ □ □ □ □ □ □ □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s) Vegetated mid-channel bar(s) Mature island(s) Unvegetated side bar(s) Vegetated side bar(s)	Image: Constraint of the second state of the second sta		:33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves         Rippled (Run)         Upwelling (Boil)         Smooth (Glide)         No perceptible flow (Pool         No flow (Drv)	ANK AND CHA	Present	EATURES E(≥33%) □ □ □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s) Vegetated mid-channel bar(s) Vegetated mid-channel bar(s) Unvegetated side bar(s) Vegetated side bar(s)	Image: Constraint of the second se		£33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         Continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves         Rippled (Run)         Upwelling (Boil)         Smooth (Glide)         No perceptible flow (Pool         No flow (Dry)         Marginal deadwater	ANK AND CHA		E(≥33%) □ □ □ □ □ □ □ □ □ □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) (tick one box per feature) (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s) Vegetated mid-channel bar(s) Vegetated mid-channel bar(s) Vegetated side bar(s) Unvegetated side bar(s) Vegetated side bar(s) Vegetated point bar(s)	Image:		233%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves         Rippled (Run)         Upwelling (Boil)         Smooth (Glide)         No perceptible flow (Pool         No flow (Dry)         Marginal deadwater         Eroding Cliff	ANK AND CHA	Present	E(≥33%) □ □ □ □ □ □ □ □ □ □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) (tick one box per feature) Exposed bedrock Exposed bedrock Exposed boulders Vegetated bedrock/boulders Unvegetated mid-channel bar(s) Vegetated mid-channel bar(s) Vegetated mid-channel bar(s) Unvegetated side bar(s) Unvegetated side bar(s) Unvegetated side bar(s) Vegetated point bar(s) Vegetated point bar(s) Discrete silt deposit(s)	Image:		:33%)
Isolated/scattered         Regularly spaced.         Occasional clump         Semi-continuous         K         EXTENT OF B.         Free fall (Waterfall)         Chute (Cascade)         Broken standing waves (R         Unbroken standing waves (R         Unbroken standing waves (Rippled (Run)         Upwelling (Boil)         Smooth (Glide)         No perceptible flow (Pool         No flow (Dry)         Marginal deadwater         Eroding Cliff         Stable Cliff	ANK AND CHA		EATURES E(≥33%) □ □ □ □ □ □ □	Shading of channel Overhanging boughs Exposed bankside roots Underwater tree roots Fallen trees Coarse woody debris (tick one box per feature) (tick one box	Image:		233%)

RIVER HABIT	AT SURVEY: DIMENSI	ONS AND INFLUE	NCES Page 4 of 4	
L CHANNEL DIMENSION	$\overline{\mathrm{NS}}$ (to be measured at one lo	ocation on a straight uni	form section, preferably acr	oss a riffle)
LEFT BANK	CHANNEL	RIGH	T BANK	
Banktop height (m)	Bankfull width (r	m) Bank	op height (m)	ations
ls banktop height also bankfull height? (Y or N)	Water width (m)	Is bar heigh	nktop height also bankfull nt? (Y or N)	
Embanked height (m)	Water depth (m)	) Emba	nked height (m)	
If trashline is lower than banktop	break in slope, indicate: hei	ight above water (m) =	Standard - Contracted	
Bed material at site is: con	solidated (compact)	unconsolidated (loose)	unkno	wn 🗌
Location of measurement is:	riffle 🗌	run or glide	ot	her 🗌
M FEATURES OF INTERE	ST use ≠ or E (> 33% length	1)		
None       Waterfalls > 5m high       Waterfalls < 5m high	Leafy debris     Riffles     Cascades     Backwater     Water meadow     Fen	Pools    Bog    Bog    Carr    Marsh    Flush    Oxbow lakes	Very large boulders(>1m Boulder fields/berms Fringing reed-bank Floating mat Other (state)	
N CHOKED CHANNEL (t	ick one box)			
Is 33% or more of the channel ch	oked with vegetation?	No	Yes	
	-			
O NOTABLE NUISANCE	PLANT SPECIES Use ~	or E (> 33% length)		
O NOTABLE NUISANCE	PLANT SPECIES Use ~	′or E (> 33% length)	ankface/banktop 5-50m	banktop
O NOTABLE NUISANCE	PLANT SPECIES Use ~ /banktop 5-50m banktop	or E (> 33% length) t Other (state)	ankface/banktop 5-50m	banktop
O NOTABLE NUISANCE bankface. None Giant Hogweed	PLANT SPECIES Use ~	or E (> 33% length) b Other (state)	ankface/banktop 5-50m	banktop
O NOTABLE NUISANCE bankface None Giant Hogweed Japanese Knotweed	PLANT SPECIES Use    /banktop 5-50m banktop   Image: Im	for E (> 33% length) E Other (state)	ankface/banktop 5-50m	banktop
O NOTABLE NUISANCE bankface None Giant Hogweed Japanese Knotweed Himalayan Balsam	PLANT SPECIES Use    /banktop 5-50m banktop   Image: Im	or E (> 33% length) t Other (state)	ankface/banktop 5-50m	banktop
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O NOTABLE NUISANCE bankface None Giant Hogweed Japanese Knotweed Himalayan Balsam Laurel Rhododendron P OVERALL CHARACTE	PLANT SPECIES Use    /banktop 5-50m banktop   <	for E (> 33% length) Cother (state) finite words, add oth	ers as necessary)	banktop
O NOTABLE NUISANCE bankface None Giant Hogweed Japanese Knotweed Himalayan Balsam Laurel Rhododendron P OVERALL CHARACTE Major impacts: landfill - tippin housing - min plantation - w	PLANT SPECIES Use    /banktop 5-50m banktop   <	Yor E (> 33% length) b Other (state) riate words, add oth n - drought - abstractio ning - afforestation - fist	ers as necessary) n - mill - dam - road - rail heries management - siltin	banktop
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O NOTABLE NUISANCE bankface None Giant Hogweed Japanese Knotweed Himalayan Balsam Laurel Rhododendron P OVERALL CHARACTE Major impacts: landfill - tippin housing - min plantation - w Evidence of recent managem rehabilitation Animals: otter - mink - v	PLANT SPECIES Use    /banktop 5-50m banktop   <	Yor E (> 33% length) b Other (state) riate words, add oth n - drought - abstractio ning - afforestation - fist an wing - weed cutting - er er - grey wagtail - sand m	Pankface/banktop 5-50m	banktop
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