

A BACKGROUND INFORMATION *This information is being collected separately*

Altitude(m)

Solid geology

Distance from source(km)

Slope

Drift geology

Mean Annual Flow category (1-10)

Planform category

B FIELD SURVEY DETAILS *Complete all questions*

Site number:

River

Mid-section grid reference if different from
designated site:

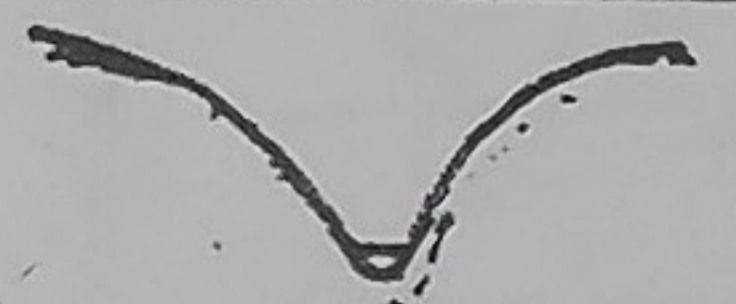
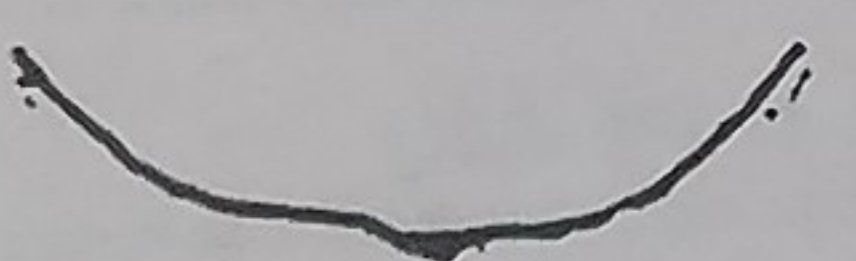
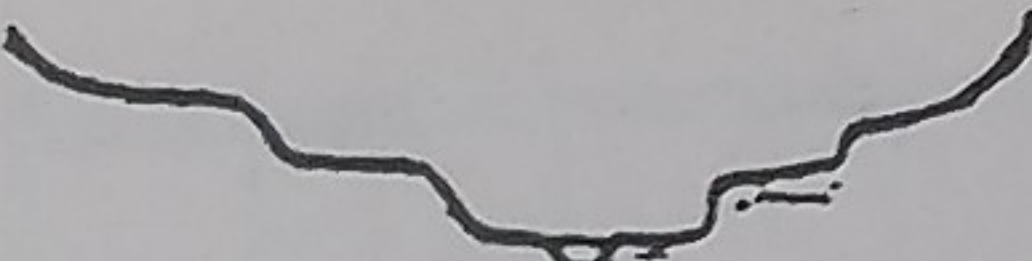
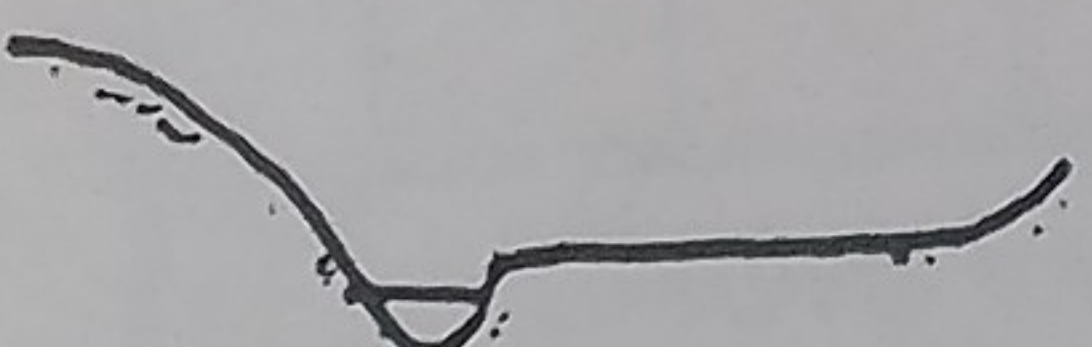
Grid Reference:

Date/....../1994

Start time:

Surveyor name

Are conditions affecting survey? No ☐ Yes ☐ *If yes, state*Bed of river visible? No ☐ partially ☐ entirely ☐ *(tick one box)*Photograph: general character? No ☐ Yes ☐ *(tick one box)*Photograph of channel measurement site? No ☐ Yes ☐ *(tick one box)*Site surveyed from: left bank ☐ right bank ☐ both banks ☐ channel ☐**PREDOMINANT VALLEY FORM**
(tick one box only)

- 
- ☐
- vee
-
- 
- ☐
- concave/bowl
-
- 
- ☐
- stepped valley
-
- floor (terraced)
-
- 
- ☐
- symmetrical
-
- 
- ☐
- asymmetrical
-
- 
- ☐
- gorge

D PREDOMINANT CHANNEL FORM
(tick one box only)

- predominantly culverted ☐
- open, but bed or banks predominantly
artificial (eg box reinforced) ☐
- open, little or no obvious reinforcement,
but resectioned and/or realigned ☐
- open, but predominantly artificially dug
(eg. mill leat, dyke) ☐
- not artificial, but dammed ☐
- no obvious modification ('semi-natural') ☐

NAVIGATION *(tick one box only)*Is there a functioning navigation? No ☐ Yes ☐ Don't know ☐**PREDOMINANT FLOW TYPE** *(tick one box only)*

- | | | | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|-----------|--------------------------|
| torrential/whitewater | ☐ | riffle-pool | ☐ | static | ☐ |
| step-pool cascade | ☐ | approximately laminar | ☐ | impounded | ☐ |

TEN SPOT CHECKS (ca 50m apart)

Spot check 1 is at: upstream end ☐ downstream end ☐ of site (Tick one box)

G PHYSICAL ATTRIBUTES (to be assessed across channel within a 1m wide zone)

Fill in each box before moving onto H and I at each spot check. Use abbreviations in spot-check key

	1	2	3	4	5	6	7	8	9	10
LEFT BANK										
Predominant bank material (one entry only)										
~ bank modification (one entry only)										
~ bank feature(s)										
CHANNEL										
Predominant channel substrate (one entry only)										
Predominant flow type (one entry only)										
~ channel modification(s)										
~ channel feature(s)										
RIGHT BANK										
Predominant bank material (one entry only)										
~ bank modification (one entry only)										
~ bank feature(s)										

H VEGETATION STRUCTURE (to be assessed over a 10m wide swathe) Fill in each box with one entry only

B = bare U = uniform S = simple C = complex Refer to spot-check key

LEFT RIPARIAN ZONE (If none, enter NO)										
LEFT BANK										
RIGHT BANK										
RIGHT RIPARIAN ZONE (If none, enter NO)										

I CHANNEL VEGETATION TYPES (fill in relevant boxes with one entry: use E ($\geq 33\%$ area) or $\checkmark$ (present))

NONE (tick as appropriate)										
Liverworts/mosses										
Emergent herbs										
Emergent reeds/sedges										
floating-leaved										
Free-floating										
Ambiphibious										
Submerged										
Lamentous algae										

Use end column for overall assessment over 500m (use E or $\checkmark$) ↑

SWEEP-UP OVER 500m

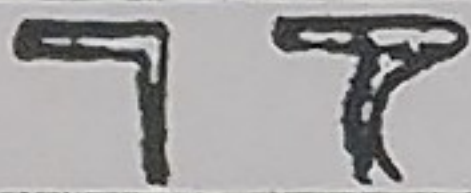
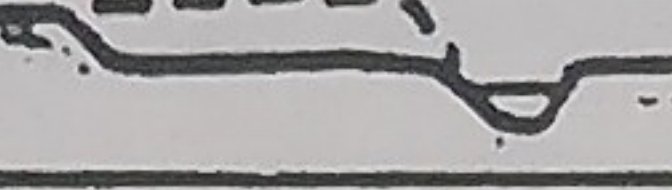
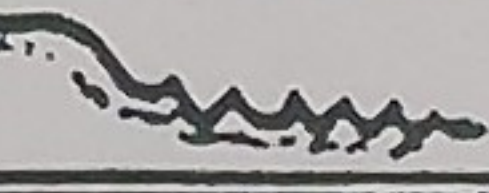
ENTER SITE NUMBER

LAND USE WITHIN 50m OF RIVER Use E ($\geq 33\%$ banklength) or $\checkmark$ if present

	L	R		L	R
Broadleaf/mixed woodland			Bog, marsh, fen		
Coniferous plantation			Improved/semi-improved grass		
Moorland/heath			Tilled land		
Scrub/rough pasture			Suburban/urban development		

LINEAR EXTENT OF RIPARIAN ZONE (tick "none" box or estimate percentage banklength if present)

Left bank None ☐ Banklength % =Right bank None ☐ Banklength % =BANK PROFILES WITHIN 500m Use E ($\geq 33\%$ banklength) or $\checkmark$ if present

Natural/unmodified	L	R	Artificial/modified	L	R
• Vertical/undercut 			• Resectioned 		
• Vertical + toe 			• Reinforced - whole bank 		
• Steep ($>45^\circ$) 			• Reinforced - top only 		
• Gentle 			• Reinforced - toe only 		
• Composite 			• Artificial two-stage 		
			• Poached 		

EMBANKMENTS (tick "none" box or estimate percentage banklength if present)

Left bank None ☐ Banklength % =Right bank None ☐ Banklength % =

EXTENT OF TREES AND ASSOCIATED FEATURES

TREES (Tick one box per bank)

ASSOCIATED FEATURES (Tick one box per feature)

	Left	Right	E $\geq 33\%$	None	Present	E
None	☐	☐		☐	☐	☐
Isolated/scattered	☐	☐		☐	☐	☐
Regularly spaced, single	☐	☐		☐	☐	☐
Occasional clumps	☐	☐		☐	☐	☐
Semi-continuous	☐	☐		☐	☐	☐
Continuous	☐	☐		☐	☐	☐

NATURAL CHANNEL FEATURES Record actual number of riffles, pools and point bars

Number of: Riffles=	Pools=	Unvegetated Point Bars=	Vegetated Point Bars=
Tick one box per feature	None Present E		None Present E
Waterfall/cascade	☐ ☐ ☐	Unvegetated mid-channel bars	☐ ☐ ☐
Torrential flow (rapids)	☐ ☐ ☐	Vegetated mid-channel bars	☐ ☐ ☐
Laminar flow (run/glide)	☐ ☐ ☐	Mature island(s)	☐ ☐ ☐
Static flow (slack)	☐ ☐ ☐	Unvegetated side bar	☐ ☐ ☐
Exposed bedrock	☐ ☐ ☐	Vegetated side bar	☐ ☐ ☐
Exposed boulders	☐ ☐ ☐	Artificial	☐ ☐ ☐

29 April 1994

RIVER HABITAT SURVEY: 1994 VERIFICATION

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DIMENSIONS AND INFLUENCES

P CHANNEL DIMENSIONS to be measured at one site on a straight uniform section, preferably across a riffle

LEFT BANK		CHANNEL		RIGHT BANK	
Bankfull height (m)		Bankfull width (m)		Bankfull height (m)	
Bank height if different (m)		Water width (m)		Bank height if different (m)	
Embanked height (m)		Water depth (m)		Embanked height (m)	

Bed material at site is: consolidated ☐ clues: algal growth compact, stable
unconsolidated ☐ clues: fresh clean gravel, easily dislodged, loose
unknown ☐ inaccessible or not visible (eg turbid water)

Location of measurements is: riffle ☐ run or glide ☐ other ☐ (tick one box)

Q TRIBUTARIES (tick one box only)

Significant tributary within 500m length? No ☐ Yes ☐

R NUMBER OF ARTIFICIAL FEATURES Use tally method, then total: tick "none" where appropriate

None ☐ Number of Culverts= Weirs= Bridges= Outfalls=

S EVIDENCE OF RECENT MANAGEMENT Obvious signs: tick box(es)

BANKS	L	R	CHANNEL	
None	☐	☐	None	☐
Resectioning	☐	☐	Dredging	☐
Bank-mowing	☐	☐	Weed-cutting	☐
Enhancement	☐	☐	Enhancement works	☐ State

T CHOKED CHANNEL

Is 33% or more of the channel over 500m choked with vegetation? NO ☐ YES ☐

U NOTABLE NUISANCE PLANT SPECIES tick box(es) No need to estimate abundance

Giant Hogweed ☐ Himalayan Balsam ☐ Japanese Knotweed ☐

V BRIEF DESCRIPTIVE SENTENCE (Indicate if spot checks representative of site as a whole)**W SPECIAL FEATURES** eg oxbows, adjacent habitats of high interest; incidental sightings**X RIVER TYPING** Refer to photographs of river types and indicate which resembles the site

Number (1-14) ☐ None of them ☐

Y TIME TAKEN

CHECK THAT THIS FORM HAS BEEN COMPLETED CORRECTLY, AND STAPLED, THEN RETURN TO:
PETER FOX, NRA NORTH WEST REGION, RICHARD FAIRCLOUGH HOUSE, WARRINGTON, WA4 1HE
TELEPHONE NUMBERS: PETER FOX 7-21-2140; PAUL RAVEN 7-10-4343; ANDREW BROOKES 7-25-5712