

**RIVER HABITAT SURVEY 2003 VERSION: SITE HEALTH AND SAFETY ASSESSMENT**

|  |                       |                                      |                            |
|--|-----------------------|--------------------------------------|----------------------------|
| Site Number <sup>1</sup> :                           | Site Ref:             | River Name:                          | Date:                      |
| Grid References/Co-ordinates:                        | Spot 1 <sup>2</sup> : | Mid-site:                            | End of site <sup>2</sup> : |
| Surveyor Name:                                       |                       | Accredited Surveyor Code:            |                            |
| <small><sup>1</sup> Leave blank if new site.</small> |                       | <small><sup>2</sup> Optional</small> |                            |

Weather Conditions:

Flow Conditions:

| <b>Site details:</b> (enter comments or circle if applicable and give details)                  | <b>Risk Level</b><br><b>(Low/Mod/High)</b> |
|---|--|
| Access and Parking:<br>(entry & exit)   |  |
| Conditions: comment on ground stability, footing, exposure/remoteness                           |  |
| Obstacles/Hazards: fencing, stiles, dense vegetation, steep bank                                |  |
| Occupied/Unoccupied: people, livestock, animals   |  |
| Activities/Land-use: agriculture, woodland, residential, industrial, construction, recreational |  |
| Risk if lone-working  |  |

**IF THERE ARE ANY HIGH RISKS OR MORE THAN THREE MODERATE RISKS  
DO NOT CONTINUE WITH THE SURVEY.**

**Weil's Disease (Leptospirosis)**

Instructions to card holders

1. As infection may enter through breaks in the skin, ensure that any cut, scratch or abrasion is thoroughly cleansed and covered with a waterproof plaster.
2. Avoid rubbing your eyes, nose and mouth during work.
3. Clean protective clothing, footwear and equipment etc. after use
4. After work, and particularly before taking food or drink, wash hands thoroughly.
5. Report all accidents and/or injuries, however slight.
6. Keep your card with you at all times.

**Lyme Disease**

1. Dress appropriately with skin covered up.
2. Regularly inspect for ticks when in the field.
3. Check for, and remove, any ticks as soon as possible after leaving the site.
4. Seek medical attention if bitten by a tick.

**PHYSICAL ATTRIBUTES (SECTION E)**

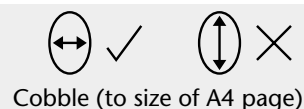
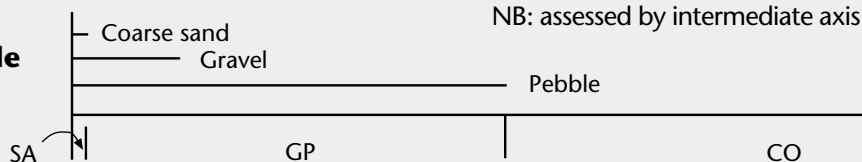
| BANKS   |   | CHANNEL   |   |
|---|---|---|---|
| <p><b>Predominant bank material</b></p> <p><b>NV</b> = not visible</p> <p><b>BE</b> = bedrock<br/> <b>BO</b> = boulder<br/> <b>CO</b> = cobble<br/> <b>GS</b> = gravel/sand<br/> <b>EA</b> = earth (crumbly)<br/> <b>PE</b> = peat<br/> <b>CL</b> = sticky clay</p> <p><b>CC</b> = concrete<br/> <b>SP</b> = sheet piling<br/> <b>WP</b> = wood piling<br/> <b>GA</b> = gabion<br/> <b>BR</b> = brick/laid stone<br/> <b>RR</b> = rip-rap<br/> <b>TD</b> = tipped debris<br/> <b>FA</b> = fabric<br/> <b>BI</b> = bio-engineering materials</p> | <p><b>Bank modifications</b></p> <p><b>NK</b> = not known<br/> <b>NO</b> = none</p> <p><b>RS</b> = resectioned (reprofiled)<br/> <b>RI</b> = reinforced<br/> <b>PC</b> = poached<br/> <b>PC(B)</b> = poached (bare)<br/> <b>BM</b> = artificial berm<br/> <b>EM</b> = embanked</p> <p><b>Marginal and bank features</b></p> <p><b>NV</b> = not visible (e.g. far bank)<br/> <b>NO</b> = none</p> <p><b>EC</b> = eroding cliff (<b>EC</b> if sandy substrate)<br/> <b>SC</b> = stable cliff (<b>SC</b> if sandy substrate)</p> <p><b>PB</b> = unvegetated point bar<br/> <b>VP</b> = vegetated point bar</p> <p><b>SB</b> = unvegetated side bar<br/> <b>VS</b> = vegetated side bar</p> <p><b>NB</b> = natural berm</p> | <p><b>Predominant substrate</b></p> <p><b>NV</b> = not visible</p> <p><b>BE</b> = bedrock<br/> <b>BO</b> = boulder<br/> <b>CO</b> = cobble<br/> <b>GP</b> = gravel/pebble (<b>G</b> or <b>P</b> if predominant)<br/> <b>SA</b> = sand<br/> <b>SI</b> = silt<br/> <b>CL</b> = clay<br/> <b>PE</b> = peat<br/> <b>EA</b> = earth<br/> <b>AR</b> = artificial</p> <p><b>Predominant flow-type</b></p> <p><b>NV</b> = not visible<br/> <b>FF</b> = free fall<br/> <b>CH</b> = chute<br/> <b>BW</b> = broken standing waves (white water)<br/> <b>UW</b> = unbroken standing waves<br/> <b>CF</b> = chaotic flow<br/> <b>RP</b> = rippled<br/> <b>UP</b> = upwelling<br/> <b>SM</b> = smooth<br/> <b>NP</b> = no perceptible flow<br/> <b>DR</b> = no flow (dry)</p> | <p><b>Channel modifications</b></p> <p><b>NK</b> = not known<br/> <b>NO</b> = none</p> <p><b>CV</b> = culverted<br/> <b>RS</b> = resectioned<br/> <b>RI</b> = reinforced<br/> <b>DA</b> = dam/weir/slucice<br/> <b>FO</b> = ford (man-made)</p> <p><b>Channel features</b></p> <p><b>NV</b> = not visible<br/> <b>NO</b> = none</p> <p><b>EB</b> = exposed bedrock<br/> <b>RO</b> = exposed boulders<br/> <b>VR</b> = vegetated rock<br/> <b>MB</b> = unvegetated mid-channel bar<br/> <b>VB</b> = vegetated mid-channel bar<br/> <b>MI</b> = mature island<br/> <b>TR</b> = Trash (urban debris)</p> |

**FLOW-TYPES**

**DESCRIPTION**

|                                    |   |
|------------------------------------|---|
| <b>FF: Free fall</b>               | clearly separates from back-wall of vertical feature ~ associated with waterfalls                               |
| <b>CH: Chute</b>                   | low curving fall in contact with substrate ~ often associated with cascades                                     |
| <b>BW: Broken standing waves</b>   | white-water tumbling waves must be present ~ mostly associated with rapids                                      |
| <b>UW: Unbroken standing waves</b> | upstream facing wavelets which are not broken ~ mostly associated with riffles                                  |
| <b>CF: Chaotic flow</b>            | a chaotic mixture of three or more of the four fast flow-types with no predominant one obvious                  |
| <b>RP: Rippled</b>                 | no waves, but general flow direction is downstream with disturbed rippled surface ~ mostly associated with runs |
| <b>UP: Upwelling</b>               | heaving water as upwellings break the surface ~ associated with boils.  |
| <b>SM: Smooth</b>                  | perceptible downstream movement is smooth (no eddies) ~ mostly associated with glides                           |
| <b>NP: No perceptible flow</b>     | no net downstream flow ~ associated with pools, ponded reaches and marginal deadwater                           |
| <b>DR: No flow (dry)</b>           | dry river bed   |

**Scale**



LEFT

Banks are determined by looking downstream

RIGHT

**CHANNEL MODIFICATION INDICATORS**




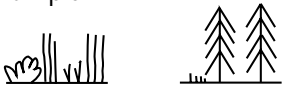




One or more of the following may be indicative of resectioning:

1. Uniform bank profile
2. Straightened planform
3. Bankfull width/bankfull height ratio <4:1
4. Uniform/low energy flow-types
5. No trees/uniformly-aged trees along bank
6. Intensive/urban land-use

**LAND-USE WITHIN 5m OF BANKTOP (SECTION F) & 50m (SECTION H)**

|   |  |                                 |
|---|--|---------------------------------|
| <b>BL</b> = Broadleaf/mixed woodland (semi-natural) | <b>AW</b> = Artificial open water              | <b>TL</b> = Tilled land         |
| <b>BP</b> = Broadleaf/mixed plantation              | <b>OW</b> = Natural open water                 | <b>IL</b> = Irrigated land      |
| <b>CW</b> = Coniferous woodland (semi-natural)      | <b>RP</b> = Rough unimproved grassland/pasture | <b>PG</b> = Parkland or gardens |
| <b>CP</b> = Coniferous plantation                   | <b>IG</b> = Improved/semi-improved grassland   | <b>NV</b> = Not visible         |
| <b>SH</b> = Scrub & shrubs                          | <b>TH</b> = Tall herb/rank vegetation          |                                 |
| <b>OR</b> = Orchard                                 | <b>RD</b> = Rock, scree or sand dunes          |                                 |
| <b>WL</b> = Wetland (e.g. bog, marsh, fen)          | <b>SU</b> = Suburban/urban development         |                                 |
| <b>MH</b> = Moorland/heath                          |  |                                 |

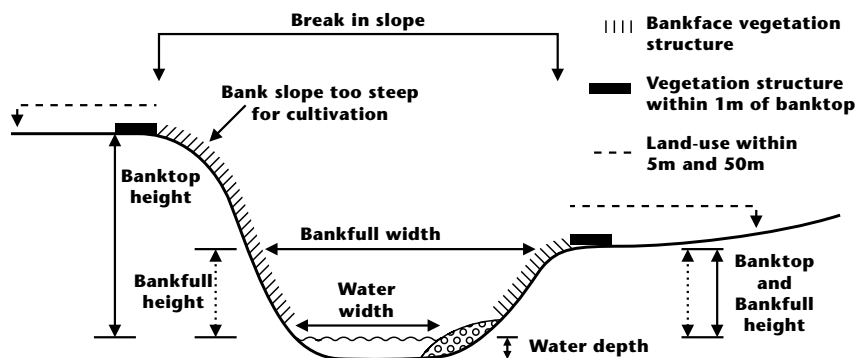
**BANKTOP AND BANKFACE VEGETATION STRUCTURE To be assessed within a 10m wide transect (SECTION F)**

|  |   |  |   |
|--|---|--|---|
| bare   | B | bare earth/rock etc.                       | vegetation types  |
| uniform<br>   | U | predominantly one type (no scrub or trees) |  bryophytes<br> short/creeping herbs or grasses |
| simple<br>  | S | two or three vegetation types              |  tall herbs/grasses<br> scrub or shrubs      |
| complex<br> | C | four or more types                         |  saplings and trees  |

**Channel dimensions guidance (Section L)**

- Select location on uniform section.
- If riffle is present, measure there. If not, measure at straightest and shallowest point.
- **Banktop** = first major break in slope above which cultivation or development is possible.
- **Bankfull** = point where river first spills on to floodplain.

**Cross-section of channel showing definitions used to define where spot-check recording and channel dimensions measured**



**EMERGENCY HOTLINE 0800 80 70 60**

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

**A FIELD SURVEY DETAILS**

Site Number:

Site Reference:

Spot-check 1 Grid Ref:

Spot-check 6 Grid Ref:

End of site Grid Ref:

Reach Reference:

River name:

Date / /20      Time:

Surveyor name:

Accredited Surveyor code:

Is the site part of a river or an artificial channel? River  Artificial

Are adverse conditions affecting survey? No  Yes

If yes, state .....

Is bed of river visible? barely or not  partially  ±entirely

Is health and safety assessment form attached? Yes  No

Number of photographs taken:

Photo references:

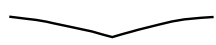






Site surveyed from: left bank  right bank  channel

**When options shown with 'shadow boxes', tick one box only**

**LEFT      banks determined by facing downstream      RIGHT**

**B PREDOMINANT VALLEY FORM (within the horizon limit) (tick one box only)**

(tick one box only)

|   |                                      |  |  |
|---|--------------------------------------|--|--|
|   | <input type="checkbox"/> shallow vee |   | <input type="checkbox"/> concave/bowl            |
|  | <input type="checkbox"/> deep vee    |  | <input type="checkbox"/> asymmetrical valley     |
|  | <input type="checkbox"/> gorge       |  | <input type="checkbox"/> U-shape valley          |
|   |                                      |  | <input type="checkbox"/> no obvious valley sides |

Distinct flat valley bottom? No  Yes       Natural terraces? No  Yes

**C NUMBER OF RIFFLES, POOLS AND POINT BARS (enter total number in boxes)**

|                                |   |
|--------------------------------|---|
| Riffle(s) <input type="text"/> | Unvegetated point bar(s) <input type="text"/> |
| Pool(s) <input type="text"/>   | Vegetated point bar(s) <input type="text"/>   |

**D ARTIFICIAL FEATURES (indicate total number of occurrences of each category within the 500m site)**

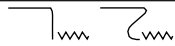


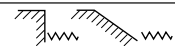
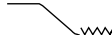







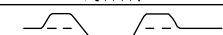
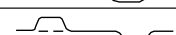
| If none, tick box <input type="checkbox"/> | Weirs/slucices                     |              |       | Outfalls/intakes |              |       |
|--|------------------------------------|--------------|-------|------------------|--------------|-------|
|  | Major                              | Intermediate | Minor | Major            | Intermediate | Minor |
|  |                                    |              |       |                  |              |       |
|  |                                    |              |       |                  |              |       |
|  |                                    |              |       |                  |              |       |
|  |                                    |              |       |                  |              |       |
|  | Other - state <input type="text"/> |              |       |                  |              |       |

**Is channel obviously realigned?** No  Yes, <33% of site  ≥33% of site

**Is channel obviously over-deepened?** No  Yes, <33% of site  ≥33% of site

**Is water impounded by weir/dam?** No  Yes, <33% of site  ≥33% of site

|   |  |   |   |   |   |                    |   |   |   |    |  |
|---|--|---|---|---|---|--------------------|---|---|---|----|--|
| SITE REF.   | <b>RIVER HABITAT SURVEY: TEN SPOT-CHECKS</b> |   |   |   |   | <b>Page 2 of 4</b> |   |   |   |    |  |
| Spot-check 1 is at: upstream end <input type="checkbox"/> downstream end <input type="checkbox"/> of site (tick one box)        |  |   |   |   |   |                    |   |   |   |    |  |
| <b>E PHYSICAL ATTRIBUTES</b> (to be assessed across channel within 1m wide transect)  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>When boxes 'bordered', only one entry allowed</b>  |  |   |   |   |   |                    |   |   |   |    |  |
|   | <b>1 GPS</b>                                 | 2 | 3 | 4 | 5 | <b>6 GPS</b>       | 7 | 8 | 9 | 10 | <b>GPS</b>   |
| <b>LEFT BANK</b>  | Ring EC or SC if composed of sandy substrate |   |   |   |   |                    |   |   |   |    | ↑ Enter channel substrate(s) not occurring as predominant in spot-checks but present in >1% of whole site. |
| <b>Material</b> NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, TD, FA, BI  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Bank modification(s)</b> NK, NO, RS, RI, PC(B), BM, EM   |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Marginal &amp; bank feature(s)</b> NV, NO, EC, SC, PB, VP, SB, VS, NB  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>CHANNEL</b>  | GP- ring either G or P if predominant        |   |   |   |   |                    |   |   |   |    |  |
| <b>Channel substrate</b> NV, BE, BO, CO, GP, SA, SI, CL, PE, EA, AR   |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Flow-type</b> NV, FF, CH, BW, UW, CF, RP, UP, SM, NP, DR   |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Channel modification(s)</b> NK, NO, CV, RS, RI, DA, FO   |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Channel feature(s)</b> NV, NO, EB, RO, VR, MB, VB, MI, TR  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>For braided rivers only: number of sub-channels</b>  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>RIGHT BANK</b>   | Ring EC or SC if composed of sandy substrate |   |   |   |   |                    |   |   |   |    |  |
| <b>Material</b> NV, BE, BO, CO, GS, EA, PE, CL, CC, SP, WP, GA, BR, RR, TD, FA, BI  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Bank modification(s)</b> NK, NO, RS, RI, PC(B), BM, EM   |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Marginal &amp; bank feature(s)</b> NV, NO, EC, SC, PB, VP, SB, VS, NB  |  |   |   |   |   |                    |   |   |   |    |  |
| <b>F BANKTOP LAND-USE AND VEGETATION STRUCTURE</b> (to be assessed over a 10m wide transect)                                    |  |   |   |   |   |                    |   |   |   |    |  |
| <b>Land-use: choose one from BL, BP, CW, CP, SH, OR, WL, MH, AW, OW, RP, IG, TH, RD, SU, TL, IL, PG, NV</b>                     |  |   |   |   |   |                    |   |   |   |    |  |
| LAND-USE WITHIN 5m OF LEFT BANKTOP  |  |   |   |   |   |                    |   |   |   |    |  |
| LEFT BANKTOP (structure within 1m) B/U/S/C/NV   |  |   |   |   |   |                    |   |   |   |    |  |
| LEFT BANK-FACE (structure) B/U/S/C/NV   |  |   |   |   |   |                    |   |   |   |    |  |
| RIGHT BANK-FACE (structure) B/U/S/C/NV  |  |   |   |   |   |                    |   |   |   |    |  |
| RIGHT BANKTOP (structure within 1m) B/U/S/C/NV  |  |   |   |   |   |                    |   |   |   |    |  |
| LAND-USE WITHIN 5m OF RIGHT BANKTOP   |  |   |   |   |   |                    |   |   |   |    |  |
| <b>G CHANNEL VEGETATION TYPES</b> (to be assessed over a 10m wide transect: use E (≥ 33% area), ✓(present) or NV (not visible)) |  |   |   |   |   |                    |   |   |   |    |  |
| None (✓) or Not Visible (NV)  |  |   |   |   |   |                    |   |   |   |    |  |
| Liverworts/mosses/lichens   |  |   |   |   |   |                    |   |   |   |    |  |
| Emergent broad-leaved herbs   |  |   |   |   |   |                    |   |   |   |    |  |
| Emergent reeds/sedges/rushes/grasses/horsetails   |  |   |   |   |   |                    |   |   |   |    |  |
| Floating-leaved (rooted)  |  |   |   |   |   |                    |   |   |   |    |  |
| Free-floating   |  |   |   |   |   |                    |   |   |   |    |  |
| Amphibious  |  |   |   |   |   |                    |   |   |   |    |  |
| Submerged broad-leaved  |  |   |   |   |   |                    |   |   |   |    |  |
| Submerged linear-leaved   |  |   |   |   |   |                    |   |   |   |    |  |
| Submerged fine-leaved   |  |   |   |   |   |                    |   |   |   |    |  |
| Filamentous algae   |  |   |   |   |   |                    |   |   |   |    |  |
| Use end column for overall assessment over 500m, including types not occurring in spot-checks (use ✓, E or NV) ————— ↑          |  |   |   |   |   |                    |   |   |   |    |  |

|   |   |                          |  |   |                          |                          |                          |
|---|---|--------------------------|--|---|--------------------------|--------------------------|--------------------------|
| SITE REF.   | <b>RIVER HABITAT SURVEY : 500m SWEEP-UP</b> |                          |  |   | <b>Page 3 of 4</b>       |                          |                          |
| <b>H LAND-USE WITHIN 50m OF BANKTOP</b> Use ✓ (present) or E (≥ 33% banklength)                     |   |                          |  |   |                          |                          |                          |
|   | L   | R                        |  | L                                       | R                        |                          |                          |
| Broadleaf/mixed woodland (semi-natural) (BL)  |   |                          | Natural open water (OW)  |   |                          |                          |                          |
| Broadleaf/mixed plantation (BP)   |   |                          | Rough/unimproved grassland/pasture (RP)  |   |                          |                          |                          |
| Coniferous woodland (semi-natural) (CW)   |   |                          | Improved/semi-improved grassland (IG)  |   |                          |                          |                          |
| Coniferous plantation (CP)  |   |                          | Tall herb/rank vegetation (TH)   |   |                          |                          |                          |
| Scrub & shrubs (SH)   |   |                          | Rock, scree or sand dunes (RD)   |   |                          |                          |                          |
| Orchard (OR)  |   |                          | Suburban/urban development (SU)  |   |                          |                          |                          |
| Wetland (e.g. bog, marsh, fen) (WL)   |   |                          | Tilled land (TL)   |   |                          |                          |                          |
| Moorland/heath (MH)   |   |                          | Irrigated land (IL)  |   |                          |                          |                          |
| Artificial open water (AW)  |   |                          | Parkland or gardens (PG)   |   |                          |                          |                          |
|   |   |                          | Not visible (NV)   |   |                          |                          |                          |
| <b>I BANK PROFILES</b> Use ✓ (present) or E (≥ 33% banklength)                                      |   |                          |  |   |                          |                          |                          |
| <b>Natural/unmodified</b>   | L   | R                        | <b>Artificial/modified</b>   | L                                       | R                        |                          |                          |
| Vertical/undercut  |   |                          | Resectioned (reprofiled)  |   |                          |                          |                          |
| Vertical with toe  |   |                          | Reinforced - whole        |   |                          |                          |                          |
| Steep (>45°)       |   |                          | Reinforced - top only     |   |                          |                          |                          |
| Gentle             |   |                          | Reinforced - toe only     |   |                          |                          |                          |
| Composite          |   |                          | Artificial two-stage       |   |                          |                          |                          |
| Natural berm      |   |                          | Poached bank             |   |                          |                          |                          |
|   |   |                          | Embanked                |   |                          |                          |                          |
|   |   |                          | Set-back embankment     |   |                          |                          |                          |
| <b>J EXTENT OF TREES AND ASSOCIATED FEATURES</b> *record even if <1%                                |   |                          |  |   |                          |                          |                          |
| <b>TREES</b> (tick one box per bank)  |   |                          | <b>ASSOCIATED FEATURES</b> (tick one box per feature)  |   |                          |                          |                          |
|   | Left  | Right                    |  | None                                    | Present                  | E (≥33%)                 |                          |
| None  | <input type="checkbox"/>                    | <input type="checkbox"/> | Shading of channel   | <input type="checkbox"/>                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Isolated/scattered  | <input type="checkbox"/>                    | <input type="checkbox"/> | *Overhanging boughs  | <input type="checkbox"/>                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Regularly spaced, single  | <input type="checkbox"/>                    | <input type="checkbox"/> | *Exposed bankside roots  | <input type="checkbox"/>                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Occasional clumps   | <input type="checkbox"/>                    | <input type="checkbox"/> | *Underwater tree roots   | <input type="checkbox"/>                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Semi-continuous   | <input type="checkbox"/>                    | <input type="checkbox"/> | Fallen trees   | <input type="checkbox"/>                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Continuous  | <input type="checkbox"/>                    | <input type="checkbox"/> | Large woody debris   | <input type="checkbox"/>                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| <b>K EXTENT OF CHANNEL AND BANK FEATURES</b> (tick one box for each feature) *record even if <1%    |   |                          |  |   |                          |                          |                          |
|   | None  | Present                  | E(≥33%)  |   | None                     | Present                  | E(≥33%)                  |
| *Free fall flow   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Exposed bedrock                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Chute flow  | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Exposed boulders                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Broken standing waves   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Vegetated bedrock/boulders              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Unbroken standing waves   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Unvegetated mid-channel bar(s)          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rippled flow  | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Vegetated mid-channel bar(s)            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| *Upwelling  | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Mature island(s)                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Smooth flow   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Unvegetated side bar(s)                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| No perceptible flow   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Vegetated side bar(s)                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| No flow (dry)   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Unvegetated point bar(s)                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Marginal deadwater  | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | Vegetated point bar(s)                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Eroding cliff(s)  | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | *Unvegetated silt deposit(s)            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Stable cliff(s)   | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/>   | *Discrete unvegetated sand deposit(s)   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   |   |                          |  | *Discrete unvegetated gravel deposit(s) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|   |  |  |                          |   |                          |   |                          |
|---|--|--|--------------------------|---|--------------------------|---|--------------------------|
| SITE REF.   | <b>RIVER HABITAT SURVEY : DIMENSIONS AND INFLUENCES</b> <span style="float: right;">Page 4 of 4</span> |  |                          |   |                          |   |                          |
| <b>L CHANNEL DIMENSIONS</b> (to be measured at one location on a straight uniform section, preferably across a riffle)  |  |  |                          |   |                          |   |                          |
| LEFT BANK   |  | CHANNEL  |                          | RIGHT BANK  |                          |   |                          |
| Banktop height (m)  |  | Bankfull width (m)                                 |                          | Banktop height (m)  |                          |   |                          |
| Is banktop height also bankfull height? (Y or N)  |  | Water width (m)                                    |                          | Is banktop height also bankfull height? (Y or N)  |                          |   |                          |
| Embanked height (m)   |  | Water depth (m)                                    |                          | Embanked height (m)   |                          |   |                          |
| If trashline lower than banktop, indicate: height above water (m) = _____ width from bank to bank (m) = _____   |  |  |                          |   |                          |   |                          |
| Bed material at site is: consolidated <input type="checkbox"/> unconsolidated (loose) <input type="checkbox"/> unknown <input type="checkbox"/>   |  |  |                          |   |                          |   |                          |
| Location of measurements is: riffle <input type="checkbox"/> other <input type="checkbox"/> (state)   |  |  |                          |   |                          |   |                          |
| <b>M FEATURES OF SPECIAL INTEREST</b> Use ✓ or E (≥ 33% length) *record even if <1%   |  |  |                          |   |                          |   |                          |
| None <input type="checkbox"/>   | <input type="checkbox"/>   | Very large boulders (>1m) <input type="checkbox"/> | <input type="checkbox"/> | Backwater(s) <input type="checkbox"/>   | <input type="checkbox"/> | Marsh(es) <input type="checkbox"/>          |                          |
| Braided channels <input type="checkbox"/>   | <input type="checkbox"/>   | *Debris dam(s) <input type="checkbox"/>            | <input type="checkbox"/> | Floodplain boulder deposits <input type="checkbox"/>  | <input type="checkbox"/> | Flush(es) <input type="checkbox"/>          |                          |
| Side channel(s) <input type="checkbox"/>  | <input type="checkbox"/>   | *Leafy debris <input type="checkbox"/>             | <input type="checkbox"/> | Water meadow(s) <input type="checkbox"/>  | <input type="checkbox"/> | Natural open water <input type="checkbox"/> |                          |
| *Natural waterfall(s) > 5m high <input type="checkbox"/>  | <input type="checkbox"/>   | Fringing reed-bank(s) <input type="checkbox"/>     | <input type="checkbox"/> | Fen(s) <input type="checkbox"/>   | <input type="checkbox"/> | Others (state) <input type="checkbox"/>     |                          |
| *Natural waterfall(s) < 5m high <input type="checkbox"/>  | <input type="checkbox"/>   | Quaking bank(s) <input type="checkbox"/>           | <input type="checkbox"/> | Bog(s) <input type="checkbox"/>   | <input type="checkbox"/> |   |                          |
| Natural cascade(s) <input type="checkbox"/>   | <input type="checkbox"/>   | *Sink hole(s) <input type="checkbox"/>             | <input type="checkbox"/> | Wet woodland(s) <input type="checkbox"/>  | <input type="checkbox"/> |   |                          |
| <b>N CHOKED CHANNEL</b> (tick one box)  |  |  |                          |   |                          |   |                          |
| Is 33% or more of the channel choked with vegetation? No <input type="checkbox"/> Yes <input type="checkbox"/>  |  |  |                          |   |                          |   |                          |
| <b>O NOTABLE NUISANCE PLANT SPECIES</b> Use ✓ or E (≥ 33% length) *record even if <1%   |  |  |                          |   |                          |   |                          |
| None <input type="checkbox"/>   | <input type="checkbox"/>   | bankface   | banktop to 50m           | <input type="checkbox"/>  | <input type="checkbox"/> | bankface                                    | banktop to 50m           |
| *Giant hogweed <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>                           | <input type="checkbox"/> | *Himalayan balsam <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>                    | <input type="checkbox"/> |
| *Japanese knotweed <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>                           | <input type="checkbox"/> | *Other (state)..... <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>                    | <input type="checkbox"/> |
| <b>P OVERALL CHARACTERISTICS</b> (Circle appropriate words, add others as necessary)  |  |  |                          |   |                          |   |                          |
| <b>Major impacts:</b> landfill - tipping - litter - sewage - pollution - drought - abstraction - mill - dam - road - rail - industry - housing mining - quarrying - overdeepening - afforestation - fisheries management - silting - waterlogging - hydroelectric power |  |  |                          |   |                          |   |                          |
| <b>Evidence of recent management:</b> dredging - bank mowing - weed cutting - enhancement - river rehabilitation - gravel extraction - other (please specify)   |  |  |                          |   |                          |   |                          |
| <b>Animals:</b> otter - mink - water vole - kingfisher - dipper - grey wagtail - sand martin - heron - dragonflies/damselflies  |  |  |                          |   |                          |   |                          |
| <b>Other significant observations:</b> if necessary use separate sheet to describe overall characteristics and relevant observations  |  |  |                          |   |                          |   |                          |
| <b>Q ALDERS</b> (tick one box in each of the two categories) *record even if <1%  |  |  |                          |   |                          |   |                          |
| *Alders? None <input type="checkbox"/> Present <input type="checkbox"/> Extensive <input type="checkbox"/>  |  |  |                          | *Diseased Alders? None <input type="checkbox"/> Present <input type="checkbox"/> Extensive <input type="checkbox"/> |                          |   |                          |
| <b>R FIELD SURVEY QUALITY CONTROL</b> ( ✓ boxes to confirm checks)  |  |  |                          |   |                          |   |                          |
| Have you taken at least two photos that illustrate the general character of the site and additional photos of any weirs/ sluices and major/intermediate structures across the channel? <input type="checkbox"/>   |  |  |                          |   |                          |   |                          |
| Have you completed all ten spot-checks and made entries in all boxes in E & F on page 2? <input type="checkbox"/>   |  |  |                          |   |                          |   |                          |
| Have you completed column 11 of section G (and E if appropriate) on page 1? <input type="checkbox"/>  |  |  |                          |   |                          |   |                          |
| Have you recorded in section C the number of riffles, pools and point bars (even if 0) on page 1? <input type="checkbox"/>  |  |  |                          |   |                          |   |                          |
| Have you given an accurate (alphanumeric) grid reference for spot-checks 1, 6 and end of site (page 1)? <input type="checkbox"/>  |  |  |                          |   |                          |   |                          |
| Have you stated whether spot-check 1 is at the upstream or downstream end of the site (top of page 2)? <input type="checkbox"/>   |  |  |                          |   |                          |   |                          |
| Have you cross-checked your spot-check and sweep-up responses with the channel modification indicators given on page 2 of the spot-check key? <input type="checkbox"/>  |  |  |                          |   |                          |   |                          |