Appendix A.

Preliminary site screening (Ground-truthing)

Field-data sheets

BIOMONITORING: GROUND-TRUTHING FIELD-DATA SHEETS

Assessor Name(s):	
Organisation:	
Date:	

NB: An explanation of the terminology used in the field-data sheets is given in the associated Ecological Reference Condition Project: Field-manual (Dallas 2000).

SITE INFORMATION

1. GENERAL SITE INFORMATION

Site Code:								Rive	er:							
Site Description	on:											Site Len	igth (m):			
Tributary of:								Map) Refer	er	nce:					
Political Regio	on:							Bior	egion:							
Ecoregion:								Wat	er Qua	ıli	ty Region	1:				
Secondary Cat	chme	nt Cod	e:					Cato	chment	t /	Area (kn	n^2):				
Quartenary Ca	tchme	ent Coo	de:					Rive	er Segr	ne	ent:					
Sub-region:	S	ource 7	urce Zone He		M He	Iountain eadwater Stream		Moun Strea	tain am		Foothill- Cobble Bed		Foot Grav	thill - el Bed	Lowla Floodp	and Ilain
	R Case	lejuven cades (ated Gorge	e)	Rej I	juvenated Foothill	d	Upla Floodr	nd plain		Other:				Igth (m):	
Lat: S		0			,				Long	: 1	E		0			
Source Distance	ce (kn	n):				Contou	r Ra	nge (m)	: From	:			to: _			
Stream Order:				Slope/gradient:												
Geological Ty	pe:															
Vegetation Ty	pe:															
Rainfall Regio	on:		Su	mmer		Winte	er	Aseas	onal		Other:	•				
Hydrological 7	Гуре:	"natura	al"]	Per	ennial	nial Seasonal Ephemeral Other			Other	:					
Hydrological 7	Гуре:	"preser	nt-day	/"]	Per	ennial	Se	easonal	Ep	bh	emeral	Other	:			
Comment:														-		
DWAF Gaugin	ng Sta	ution:	Yes	No)	Code:			Dis	ta	nce Upst	ream:		Or Do	wnstream:	
Associated Sys	stems:		We	etland		Estua	.ry	Other	:					Distan	nce:	
Additional Co	mmen	its:														

2. LOCATION DETAILS

Sketch a **map** of the site showing the following details: scale, north, access to site, roads, bridges/crossings, gauges/ instream barriers, buildings, flow direction. **Record the following:**

Location and Lando	Contact No.:						
					Notify Owner?	yes	no
Permit Required?	yes	no	Details:				
Key Needed?	yes	no	Details:				
Farm Name:				Farm Reg. Code:			
Comments:							

3. GEOMORPHOLOGY AND PHYSICAL CHARACTERISTICS

Tick presence of th	ne following features							
Valley form	Floodplain		Erosio	ona	al bench	Terrace		
vancy for m	Valley side bench		Pec	dir	nent	V	Terrace alley floor absent Entrenched acro-channel) thread: high ity - laterally mo nosing/anabranch and alluvial bble boul	or absent
Lateral mobility or entrenchment	Confined	Moderately confine		l	Non-confined		Entrenched	
Channel form	Compound (macro-channel present)				Simple (no macro-channel)			
Channel pattern	Single thread: low sinuc	Single thread: high sinuosity - stable-sinuous			Single thread: high sinuosity - laterally mobile			
	Multiple thread: braided (unstable)				Multiple thread:	anatom	Terrace Valley floor absent Entrenched nacro-channel) le thread: high osity - laterally mobil- mosing/anabranching k and alluvial obble boulder	abranching
	Bedroc	k			Mixed b	bedrock and alluvial		
Channel type	Alluvial with dominant t	ype(s)	sand		gravel	cot	oble	boulder

CATCHMENT CONDITION AND LAND-USE

1. PHOTOGRAPHIC RECORD

		Spool No.	Photo No.	Comments
	Upstream			
Photographs	Downstream			
	Bank to bank			
	Specific features			

2. CONDITION OF LOCAL CATCHMENT, LAND-USE AND WATER QUALITY CONDITION

Rate extent (land-use) or impact (water quality) on a scale of 0 to 4: 0 - none; 1 - limited; 2 - moderate; 3 - extensive; 4 - entire

	Within Beyond		Potential impact on	Indio	cate if:	Commonts (o.g. distanco	
Land-use	5 m of river	5 m of river	receiving water quality	Point Source	Non- point Source	upstream)	
Afforestation - general							
Afforestation - felled area							
Agriculture - crops							
Agriculture - livestock							
Agriculture - irrigation return flow							
Aquaculture							
Construction							
Impoundment (incl. weirs, farm dams etc.)							
Industrial Development							
Litter/Debris							
Nature Conservation			N/A	N/A	N/A		
Recreational							
Rural Development							
Sewage Treatment Works							
Urban Development							
Wilderness Area			N/A	N/A	N/A		
Wildlife							
Other:							

3. CHANNEL CONDITION

In-channel and bank modifications

Rate impacts on a scale of 0 to 4: 0 - none; 1 - limited; 2 - moderate; 3 - extensive; 4 - entire

In channel and hank modifications	Upst	ream	Down	stream
m-channel and bank mouncations	Impact score	Distance	Impact score	Distance
Bridge (regular)				
Bulldozing				
Canalisation				
Causeways / low-flow bridges				
Fences				
Gabions				
Gravel, cobble and/or sand extraction				
Reinforced bank				
Roads				
Water Storage Facility-large (e.g. major dam)				
Water Storage Facility-small (e.g. farm dam)				
Weirs (e.g. diversion weir)				
Other:				
Comments:				

4. PRESENT STATUS

Rate impacts on a scale of 0 to 25: 0 - none, 1 to 5 - limited, 6 to 10 - moderate, 11 to 15 - extensive, 16 to 20 - extreme, 21 to 25 - critical (see manual for explanation). As a general rule those criteria marked with an asterisk are to be assessed at the site. All others are to be assessed on a regional basis, i.e. 5km upstream.

CRITERION	Score	Comment
INSTREAM		
Water abstraction (presence of pumps, irrigation etc.)		
Extent of inundation*		
Water quality (clarity, odour, presence of macrophytes etc.)		
Flow modifications: A: Floods		
Flow modifications: B: Low flows		
Bed modification (bulldozing of bed)*		
Channel modification (e.g. bulldozing of macro-channel/floodplain)*		
Presence of exotic macrophytes (Species?)*		
Presence of exotic fauna (e.g. fish)		
Presence of solid waste / solid waste disposal*		
RIPARIAN ZONE		
Removal of indigenous vegetation from the riparian zone*		
Exotic vegetation encroachment (Species?)*		
Bank erosion*		

STREAM DIMENSIONS, SUBSTRATUM AND BIOTOPES

Dry Isolated poo			d pools	Lo	ow flow	Moderate flow	High flow	Flood
anopy	Cover (tick	appropria	ate catego	orv)				
Open	Partially	Open	Closed	(Comment:			
TREA	M DIMEN	SIONS (es	stimate w	ridths. he	ights and depth	s)		
				(m)			Comments	
Macro-	channel wid	dth						
Active-	channel wie	dth						
Water s	surface widt	h						
Bank H	leight		Ι	.B:	•		RB:	
			-		Depth (m)	Comments (s	pecify physical biot	ope type)
			A	Average				
Deep-w	ater physic	al biotope	Ν	Ainimum	1			
(c .g. pc	,01)		Ν	Aaximun	1			
			A	Average				
Shallov (e.g. rif	v-water phy	sical bioto	ope N	Ainimum	1			
(e.g. 111	110)		N	Aaximun	n			

SUBSTRATUM COMPOSITION

Material	% Cover Bed	Comments
Bedrock		
Boulder		
Cobble		
Pebble		
Gravel		
Sand		
Silt / mud / clay		
TOTAL % =	100	

BIOTOPES PRESENT (tick appropriate combinations present)

		Specific Biotope (% of general)											
SASS Biotope													
SIC	Cobble riffle	Run	Bedrock Rapid	Chute									
SIC	Cascade	Waterfall	Other										
SOOC	Backwater	Slackwater	Pool	Other									
Mg Veg	Grasses	Reeds	Shrubs	Palmiet									
wig. veg	Sedges	Other											
Aq. Veg	Sedges	Isolepis	Other										
Gravel	Backwater	Slackwater	In channel										
Sand	Backwater	Slackwater	In channel										
Silt/mud/clay	Backwater	Slackwater	In channel										