

**APPENDIX C**

MORPHOLOGICAL RESTORATION OPTIONS

Table C1 Locations of morphological restoration reaches

WB ID	WB name	Reach #	Reach location	Reach length (m)	u/s		d/s	
					x	y	x	y
23315	Dee - Peterculter to tidal limit	1	Garthdee	2435	390858	802546	392889	803554
		2	Ardoe House Hotel to Inchgarth Reservoir	2150	389093	801785	390670	802509
		3	Milltimber to Ardoe House Hotel	3950	385852	800396	389093	801785
		4	Inch of Culter	915	385004	800593	385852	800396
23316	Dee - Banchory to Peterculter	1	North Tilbouries to Altries house	1460	382739	798764	383991	799062
		2	Craiglug Farm to North Tilbouries	1830	381071	798182	382739	798764
		3	Dalmaik to Craiglug Farm	1380	380227	798695	381071	798182
		4	Park House	2160	377724	796779	379365	797879
		5	A957 bridge to Kirkton of Durris	2850	375253	795811	377724	796779
		6	Banchory to A957 Bridge	3500	371924	796365	375253	795811
		7	Banchory	1500	370285	795345	371512	796113
23320	Gormack Burn	1	Blackhall to Mid-Anguston	2350	379316	801638	381392	801448
		2	Milton of Cullerlie to Blackhall	3380	376128	802150	379316	801638
		3	Milton of Finnercy to Milton of Cullerlie	2050	375595	803771	376128	802150
		4	South Kirkton to Milton of Finnercy	2380	374093	805071	375595	803771
		5	Mill of Hole House to South Kirkton	3050	371086	805350	373999	805084
23321	Leuchar Burn	1	Broadwater to North Linn	1660	380946	803784	382375	803221
		2	Garlogie to Broadwater	3360	378175	805425	380946	803784
		3	Netheron of Garlogie	12	378341	806111	378333	806098
		4	Loch Skeene	30	378330	806780	378317	806754
23322	Brodiach Burn / Ord Burn	1	Downstream Easter Ord Farm	2290	383459	804405	381675	803653
		2	B9119 Bridge to Easter Ord Farm	2200	383931	806213	383459	804405
		3	Upstream B9119 Bridge	2000	384728	807812	383931	806213
23323	Kinnernie Burn	1	Downstream of Craighedarg bridge	1830	376386	808711	377900	807876
		2	A944 Bridge to Dunecht	3290	372725	809753	375610	808861
		3	Minor bridge to A944 bridge	2280	370891	808666	372725	809753
		4	Minor bridge to minor bridge	2350	369128	807570	370891	808666
		5	Upstream minor bridge	2580	367655	805911	369128	807570
23324	Bo Burn	1	Milton Wood	145	374233	796426	374265	796344
		2	Loch of Park to Coy bridge	3120	376442	798796	374525	797696
		3	Myrebird to Loch of Park	2150	374483	799654	376442	798796
		4	Hirn bridge to Myrebird	1970	372570	799284	374483	799654
		5	A944 bridge to Hirn bridge	3200	369399	798968	372570	799284
		6	A944 bridge to A944 bridge	1500	368335	799426	369399	798968
23326	Water of Feugh - lower catchment	1	Burn of Cammie to Inverey House	2090	368384	792468	369702	793731
		2	Strachan bridge to Burn of Cammie	1820	367524	792132	368651	792488
		3	Lady's Bridge to Strachan bridge	3380	365298	792040	367524	792132
		4	Upstream Lady's Bridge	2060	363840	792076	365298	792040
23333	Beltie Burn	1	West Brathens to Bridgend	1300	366250	798618	365386	797987
		2	Torphins to Milton of Campfield	3200	362249	801407	364715	799805
		3	Wester Beltie to Torphins	1720	360924	802360	362192	801480
		4	Bogenchapel	670	361120	804572	361029	803928
23336	Dess Burn / Lumphanan Burn	1	Auchlossan to Muir of Dess	2070	357041	802579	356575	800807
		2	Lumphanan to Auchlossan	2460	358121	803980	357041	802579
		3	Lumphanan	820	358199	804794	358234	804106
23337	Dess Burn - upper	1	Downstream Mill Farm	1600	355249	802208	356603	801502
		2	Between West Mains and Mill Farm	963	354662	802841	355249	802208
		3	Between Loanend and West Mains	830	354343	803535	354662	802841
		4	Loanend	558	354057	804073	354321	803605
		5	Entire water body	5171	353364	804907	356603	801502
23338	Tarland Burn	1	Downstream Aboyne Castle	3020	352581	799510	354479	798209
		2	Coull Home Farm to Aboyne Castle	1940	351374	801079	352387	799570
		3	Bridgemd Steading to Coull Home Farm	1550	351057	802545	350979	801369
		4	Tarland to Bridgend Steading	3460	348143	804254	351057	802545
		5	Hopeswell to Tarland	4210	344593	805428	348143	804254
		6	Coldhome to Coynach	2530	343161	807230	344318	805428

Table C2 Capacity released by morphological restoration options

						Colour codes:		Improves status to Good	Improves status by 2 classes	Improves status by 1 class	Addresses SAL breach							
WB ID	WB name	Capacity used	Status	Extra capacity needed for GES	Extra capacity to move up 2 classes	Extra capacity to move up 1 class	Restoration options - capacity released								Max capacity release	Set back embankments and HIR to LIR		
							Remove EM	Set back EM	Mitigate HIR	HIR to LIR	Mitigate LIR	Remove BP	Remove croys	Remove weirs			Remove culverts	Restore vegetation
23315	Dee - Peterculter to tidal limit	130.93	Bad	105.93	80.93	55.93	17.9	16.5			6.1				1.6	25.6		
							26.0	23.9								1.7	27.7	
							26.1	24.1	38.3	31.2	26.4	0.6				3.0	94.4	55.3
							3.4	3.2								0.8	4.2	
23316	Dee - Banchory to Peterculter	32.9	Moderate	7.9	27.9	7.9	1.2	1.1				2.4	0.1			3.7		
												4.2	0.1				4.3	
												1.5	0.3				1.8	
							3.7	3.4				2.9	0.1			1.2	7.9	
							2.2	2.1				2.5	0.0			1.0	5.7	
												2.6	0.1			1.0	3.7	
23320	Gormack Burn	96.4	Bad	71.4	46.4	21.4	2.6	2.5	21.5	15.9					1.9	26.0	18.4	
							7.9	7.4	23.1	16.4					2.3	33.3	23.8	
							0.4	0.4	12.6	8.5		0.4			1.6	15.0	8.9	
									6.8	5.1	2.4				0.0	1.1	10.3	5.1
									9.5	7.0	3.3				0.0	2.5	15.3	7.0
23321	Leuchar Burn	62.2	Poor	37.2	37.2	12.2				6.6					6.6			
							3.0	2.8	43.2	39.8		0.1			3.6	43.9	42.6	
														1.9		1.9		
23322	Brodiach Burn / Ord Burn	101.6	Bad	76.6	51.6	26.6	13.1	12.2	35.2	24.1	0.4			3.9	52.6	36.3		
							1.3	1.2	25.5	17.2		0.9			2.7	31.3	18.4	
23323	Kinnernie Burn	96.1	Bad	71.1	46.1	21.1			10.8	9.3				0.0	11.9			
									28.4	26.4					0.1	3.4	32.0	
											6.4				1.5	7.9	0.0	
							1.6	1.5	15.8	10.7	1.4			1.7	20.5	12.2		
23324	Bo Burn	77.9	Bad	52.9	27.9	2.9			17.2	11.6	1.0			0.3	18.4	11.8		
							0.4	0.4	21.4	15.5		0.4		1.8	0.0	1.8	24.0	15.9
											1.4				0.4	1.8		
							9.2	8.5	5.7	4.7	3.0			1.1	19.0	13.2		
							4.4	4.1	11.8	8.7	1.9			0.0	1.7	19.8	12.8	
		1.0	0.9	4.1	2.9	0.6			0.1	0.6	6.3	3.8						

Table C2 continued

						Colour codes: Improves status to Good Improves status by 2 classes Improves status by 1 class Addresses SAL breach																			
WB ID	WB name	Capacity used	Status	Extra capacity needed for GES	Extra capacity to move up 2 classes	Extra capacity to move up 1 class	Reach #	Restoration options - capacity released								Max capacity release	Set back embankments and HIR to LIR								
								Remove EM	Set back EM	Mitigate HIR	HIR to LIR	Mitigate LIR	Remove BP	Remove croys	Remove weirs			Remove culverts	Restore vegetation						
23326	Water of Feugh - lower catchment	59.3	Poor	34.3	34.3	9.3	1							2.0	0.1	2.6			4.7						
							2	8.2	7.6													8.2			
							3	30.2	27.8															30.2	
							4	8.4	7.8							0.7								9.1	
23333	Beltie Burn	64.3	Poor	39.3	39.3	14.3	1	3.4	3.1	6.5	5.1		0.4						10.3	8.2					
							2	13.0	12.1	17.8	12.5		0.2				0.0				31.0	24.6			
							3	4.6	4.3	6.8	5.5		2.1								13.5	9.8			
							4	1.9	1.7			0.8	0.0								2.7				
23336	Dess Burn / Lumphanan Burn	67.2	Poor	42.2	42.2	17.2	1	12.4	11.5	30.2	23.3		0.8					2.1	45.5	34.8					
							2					7.6	0.6				1.1	2.6		10.8					
							3	1.3	1.2			1.8	0.1							3.2	1.2				
23337	Dess Burn - upper	105.2	Bad	80.2	55.2	30.2	1	18.8	13.9	44.1	37.2							3.5	66.4	51.1					
							2			21.8	14.7									3.0	24.8				
							3					5.8						0.2	2.6	8.4					
							4	1.0	1.0	1.8	1.1							1.2	0.3	3.1	2.1				
							5												10.1	10.1					
23338	Tarland Burn	88.6	Bad	63.6	38.6	13.6	1	9.5	8.7	1.1	0.9	4.3	0.4			0.4	0.1	2.1	17.8	9.6					
							2	0.9	0.8			2.5							1.0	4.4					
							3	5.4	5.1	8.7	5.8								1.0	15.1	10.9				
							4	3.3	3.1	19.6	13.2								2.7	25.6	16.3				
							5	6.0	5.6			7.7	0.5					0.3	2.8	17.0					
							6	0.8	0.8			2.4	0.3						0.8	0.5	4.0				

