

INTERIM REPORT ON

THE BIOLOGICAL SURVEY OF RIVER QUALITY

RESULTS OF THE

2003

INVESTIGATIONS

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INTERIM REPORT ON THE BIOLOGICAL SURVEY OF RIVER QUALITY RESULTS OF THE 2003 INVESTIGATIONS

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PREFACE

Section 65 (3c) of the Environmental Protection Agency Act, 1992, requires the Environmental Protection Agency (EPA) to "carry out, cause to be carried out, or arrange for such monitoring as it may consider necessary for the purposes of the programme". The "programme" referred to is the national environmental monitoring programme which the Agency is responsible for implementing or having implemented. In the present context the objectives of this programme are

- a) to establish the ongoing quality status of our rivers and streams
- b) to monitor quality changes and trends over time
- c) to assess the performance of pollution control and abatement measures
- d) to provide feedback to the responsible control agencies and
- e) to inform the general public

In relation to the "control agencies" mentioned above the responsibility for the licensing and regulation of large/complex industrial and other processes (including intensive agriculture) rests with EPA whereas the control and abatement of pollution from older and "non-scheduled" industry, from sewage and from agriculture remains the statutory responsibility of the local authorities.

The biological survey which is currently carried out by Agency biologists in Dublin, Kilkenny and Castlebar forms an essential element of the national monitoring programme. This survey was initiated by the then An Foras Forbartha (AFF) in 1971 when some 2,900km of channel on the larger rivers and their more important tributaries were biologically assessed for the first time. Since then the scope of the investigations has been steadily extended so that by 1990 virtually all of the rivers and streams depicted on the Ordnance Survey Map entitled "Rivers and their Catchment Basins" had been examined .

Although there are very many smaller streams which do not appear on this map, and which are not included in the survey, those which are shown are considered to form an acceptably representative national baseline.

The total number of rivers and streams in this baseline now stands at 1072; these are biologically surveyed at some 3,100 locations extending over 13,100 kilometres of channel. For logistical reasons just a third of this baseline can be surveyed in any year and thus the baseline takes three years to survey.

The survey is complemented by the physicochemical measurements of river quality made by the Regional Water Laboratories at Castlebar, Kilkenny and Monaghan and those of the many local authority laboratories. Such chemical data are required to assess compliance with prescribed physico-chemical standards and for the precise identification and quantification of pollutants in waters.

This interim report continues the series issued by AFF from 1973 to 1986 and by the Environmental Research Unit (ERU) from 1989 to 1991.

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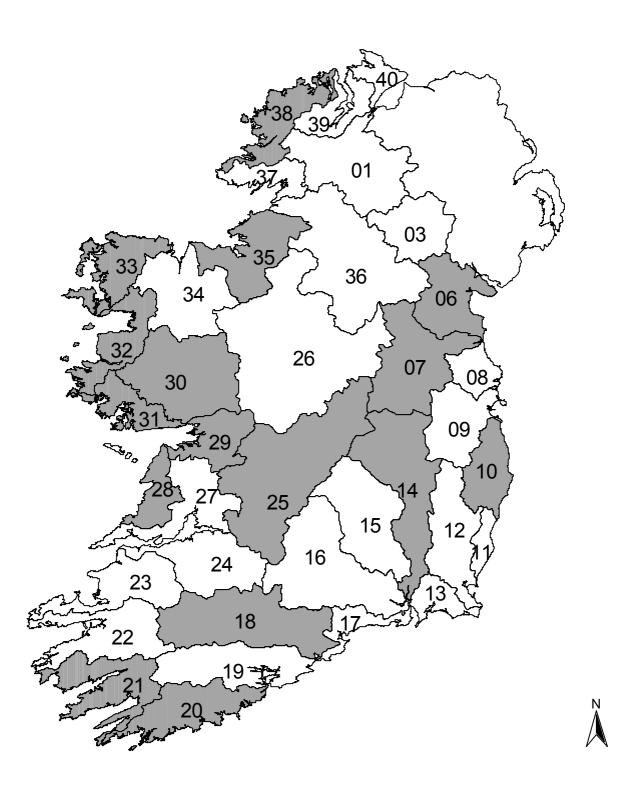


Fig. 1. The principal Hydrometric Areas surveyed in 2003

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INTRODUCTION

This report presents the results of the biological river quality investigations carried out in the year 2003 in which 1300 locations on 476 rivers and streams were surveyed in those Hydrometric Areas indicated on the facing page (Fig. 1).

For each Hydrometric Area (HA) the total number of locations surveyed in 1998-200 and 2001-2003 and the percentages falling into the four biological quality classes A, B, C and D is shown in Table 1 overleaf.

This is the third year in the current 3-year cycle of investigation (2001–2003) in which the national baseline of some 13,100 km of river channel is to be reassessed. All available biological and physico-chemical data acquired in the previous (1998–2000) cycle are set out and discussed in a two-part report published by the Environmental Protection Agency (EPA) in February 2001 (McGarrigle et al., 2001)

POLLUTION TYPES AND SOURCES

The commonest type of pollution - organic pollution - is caused by sewage, animal manure slurries and food processing wastes: as the waste is consumed by the organisms of decay the oxygen in the water is used up and the breakdown products (including phosphorus and nitrogen compounds) are released into the water. main effects of organic pollution are therefore, the depletion of oxygen in the area immediately below the discharge eutrophication (i.e., enrichment) in the recovery zone further downstream. Eutrophication, which is also caused by the inappropriate and/or excessive application of organic (slurry) and inorganic (artificial) manure to agricultural and forestry lands, has become very widespread in recent years and in the period 1998- 2000 it was estimated that approximately one third of river channel length surveyed was affected to some The characteristic symptom eutrophication in rivers is abnormally luxuriant growths of water weed and filamentous algae which cause a variety of problems in affected waters.

Toxic pollution is commonly caused by poisons

such as sheep dip, mining wastes and industrial discharges and its effects are recognisably different to those caused by organic wastes. Physical pollution refers to siltation arising from quarrying, bog and forestry development and arterial drainage.

Some wastes (e.g., sewage and manure slurries) commonly exert the three effects viz. organic, toxic and physical.

WATER QUALITY ASSESSMENT

As more fully discussed in Appendix I, water quality and water pollution assessment methods fall into two main categories - biological methods and chemical methods. Each approach has its own particular applications, strengths and weaknesses but ideally a combination of both is preferable to either on its own.

Biological Surveys: General

Biological surveys are usually undertaken in the summer–autumn period (June–September) when flows are likely to be relatively low and water temperatures highest. Surveys during this period are likely, therefore, to coincide with the worst conditions to be expected in those reaches affected by waste inputs. Material for examination is obtained by a 'kick' sampling technique in the faster-flowing areas of the river or stream (riffles) and the examination and assessment of water quality is made on site.

Measurements of DO saturation and water temperature, as well as observations on macrophyte and algal abundance, substratum type, water appearance and other biological and physical features are also recorded.

The Survey of 2003

In the pages which follow the biotic index ascribed to each location surveyed in the current year is set out together with the Q values recorded in the previous surveys plus a brief assessment of the current quality position. Following this is a section setting out details of sampling locations and general catchment characteristics.

A summary and explanation of the terminology employed in these assessments is set out in Appendix I.

Table 1.

Analysis by Hydrometric Area (see Fig. 1) of the <u>numbers of river locations</u> surveyed in 2003 and also in the period 1998-2000 showing total number surveyed and the percentages in the Biological Quality Classes:- A - Unpolluted, B - Slightly polluted, C - Moderately polluted and D - Seriously polluted.

Excludes those Hydrometric Areas only partially surveyed in 2003 (16, 19, 24, 25, 31 and 33).

Hydrometric	Sta	atus in 1	998 - 20	000		Sta	atus in 2	2003	
Area	A	В	\mathbf{C}	D	A	В	\mathbf{C}	D	Total
Number	%	%	%	%	%	%	%	%	No.
06	46	31	22	0	49	19	30	1	67
07	25	44	30	2	20	48	33	0	101
10	61	13	25	2	61	16	21	2	61
14	36	33	29	3	35	36	26	3	143
18	71	20	10	0	78	14	8	1	198
20	74	21	5	0	92	6	2	0	84
21	92	6	1	0	91	9	0	0	79
28	75	8	17	0	83	10	6	0	48
29	67	11	22	0	64	14	19	3	36
30	59	16	25	0	63	24	13	0	97
32	87	6	8	0	81	13	6	0	52
35	88	4	8	0	88	9	3	0	92
38	87	3	10	0	87	3	4	6	71

THE PHOSPHORUS REGULATIONS

Government Regulations (S.I. No. 258 of 1998) intended to counter eutrophication have been introduced in recent years. In order to comply with the requirements of the Regulations and also with the Dangerous Substances in Water Directive (CEC 1976) phosphorus inputs to surface waters must be curtailed. The effectiveness or otherwise of measures designed to achieve this objective must be assessed and the Regulations allow chemical either or biological assessment methods to be used. This approach is proposed because of the statistically robust cause-effect relationship which has been established between concentrations eutrophication status (McGarrigle et. al., 1992).

As stated above, quality ratings of Q4 and higher represent satisfactory conditions where eutrophication is unlikely to be a problem. Because annual median P values in such waters rarely exceed 30 µg P/l this concentration has been adopted as the target value to be achieved by 2007. Because of the relationship between P values eutrophication, progress towards achieving the specified targets may assessed with reference to EPA biological surveys or by chemical analysis. Table 2 below summarises the requirements of Regulations. Only those rivers and streams biologically surveyed by EPA in the period 1995-1997 are covered by the Regulations: these are set out in the floppy disc which accompanies the National Water Quality Report for that period (Lucey et. al., 1999).

TABLE 2. Phospho	rus Standards Regulations tar	get values for Irish Rivers
If		Then
The current Q-Value ¹ falls into the category below:	Either The minimum Q-Value ¹ to be achieved is:	Or The annual median orthophosphate concentration ² (ugP/l) to be achieved is:
5	5	15
4-5	4-5	20
4	4	30
3-4	4	30
3	3-4	50
2-3	3-4	50
≤2	3	70

¹ Biological Quality Rating (Q-Value) as assessed by EPA staff during National River Monitoring Programmes.

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² Molybdate-Reactive Phosphate (MRP) Median concentration to be determined as a minimum of 10 samples taken at intervals of four weeks or longer in any twelve consecutive month period. Where the requisite number of samples has not been taken within such period, the median concentration shall be determined from sampling conducted over such period, being a period not exceeding 24 months, as required to obtain a minimum of 15 samples taken at intervals of four weeks or longer.

HYDROMETRIC AREA 06.

Newry, Fane, Glyde and Dee

Ballykelly	06B03
[#] Ballymascanlan	06B02
Big	06B01
Castletown	06C01
County Water	06C03
Cully Water	06C02
Dee	06D01
Drumsallagh Stream*	06D07
Fane	06F01
Flurry	06F02
Gentle Owen's Lake Stream*	06G04
Glyde	06G02
Kilcurry	06K02
Killary Water	06K01
Kilmainham*	06K04
Magheracloone Stream *	06M01
Proules	06P01
Raskeagh	06R02
Termonfeckin	06T01
White	06W01

[#] Serious oil pollution in upper reaches of Ballymascanlan River in 2003.

^{*} Drumsallagh Stream formerly reported as Drumsallagh Branch of the River Glyde

^{*} Gentle Owen's Lake Stream formerly reported as the East Branch of the Fane River.

^{*} Kilmainham formerly reported as Kilmainham Wood Branch of River Dee

Magheracloone Stream formerly reported as Magheracloone Branch of River Glyde

River and Code : **BALLYKELLY** 06/B/03

Tributary of : Fane OS Catchment No: 94
OS Grid Ref : H 969 034 Date(s) Surveyed : 14/08/2003

Samp	ling Stations	Biologi	cal Quality	Ratings (Q	Values)
No.	Location	1994	1997	2000	2003
0500	Br E of Ballykelly X-Rds	3	3	3	_
0700	Br u/s Fane R confl	3	3	_	3*

Assessment: The lower reaches of this small stream (0700) were adversely affected by heavy bottom siltation and by suspected groundwater input at the time of this survey in mid-August 2003. Cattle access suspected as the source of the siltation. Unsatisfactory. No change. *Silt

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Br E of Ballykelly X-Rds	294623	303285	36	LH
0700	Br u/s Fane R confl	296730	303492	36	LH

River and Code : **BALLYMASCANLAN** 06/B/02

Tributary of : Flurry OS Catchment No: 91
OS Grid Ref : J 081 100 Date(s) Surveyed : 11/08/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1990	1991	1994	1997	2000	2003		
0100	Jonesborough Br	2-3	_	3/0	4	3/0	2/0		
0300	New Br	4-5	-	-	-	3	-		
0500	Ballymascanlan Br	1-2	1	3	4	3	-		

Assessment: Oil pollution had worsened at Jonesborough (0100) in mid-August 2003 but because of insufficient biological data an assessment was not possible at Ballymascanlan (0500) where the river is heavily shaded, flow is very sluggish and the inhospitable sand substrate is unsuited to the more important macroinvertebrate indicator species.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Jonesborough Br	306465	314446	29	LH
0300	New Br	307128	311816	29	LH
0500	Ballymascanlan Br	308085	310187	29	LH

River and Code : **BIG (LOUTH)** 06/B/01

Tributary of : Dundalk Bay OS Catchment No: 90
OS Grid Ref : J 168 054 Date(s) Surveyed : 11/08/2003

Biological Quality Ratings (Q Values) **Stations** 1971 1973 1978 1980 1982 1984 1986 1990 1991 1994 1997 2000 2003 No. 5 5 4-5 4-5 0100 1/0 1 1 2 1 1 1-2 2 2 4-5 0300 3-4 4 4

Assessment: Continuing satisfactory but lower reaches (0300) could be better.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ballygoly Br	315156	309883	36	LH
0300	Riverstown Br	316519	306642	36	LH

River and Code : **CASTLETOWN** 06/C/01
Tributary of : Sea - Dundalk Harbour OS Grid Ref : T 047 083 OS Catchment No: 92
Date(s) Surveyed : 12/08/2003

Statio	ns					Biolo	ogical Qu	ality Rati	ings (Q V	(alues)
No.	1971	1974	1978	1982	1986	1990	1994	1997	2000	2003
0050	_	_	_	_	_	_	4	4	4-5	3
0200	4-5	5	5	4-5	4-5	4-5	4	4	4	4
0300	4-5	4	4-5	3-4	4	3-4	-	-	-	-
0310	_	_	_	_	_	_	3-4	4	4-5	4

Assessment: A major deterioration was recorded at Ballybinaby Bridge (0050) where the river was assessed as moderately polluted in August 2003: the cause of this was not immediately apparent. Elsewhere (0200, 0310) quality was no better than 'Fair'.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Ballybinaby Br	295791	311768	28	LH
0200	Ford's Bridge	300729	309852	36	LH
0300	St John's Br	303001	309682	36	LH
0310	Weir d/s John's Br	303197	309544	36	LH

River and Code : COUNTY WATER 06/C/03

Tributary of : Lough Muckno OS Catchment No: 94
OS Grid Ref : H 847 202 Date(s) Surveyed : 13/08/2003

Sampl	ling Stations		В	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1980	1984	1990	1994	1997	2000	2003
0050	County Br	_	_	_	_	_	3*	3
0080	Br u/s Tullycollive Br	-	_	_	-	_	3-4*	3
0100	Tullycollive Br	4-5	3	4-5	3	3	-	-
0170	Br u/s Wallace's Br	-	-	-	-	-	3-4	3*
0200	Wallace's Br	4	3	4	3-4	3	-	-

Assessment: Significantly polluted at all points surveyed in 2003. Unsatisfactory. Quality has deteriorated at Mullaghduff (0080) and in the lower reaches (0170) since 2000. Slurry and sewage suspected. *Silt

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	County Br	289250	324600	28	MN/AH
0080	Br u/s Tullycollive Br	288450	320950	28	MN/AH
0100	Tullycollive Br	287115	320900	28	MN
0170	Br u/s Wallace's Br	285596	321605	28	MN
0200	Wallace's Br	284958	320419	28	MN

River and Code : CULLY WATER 06/C/02

Tributary of : Kilcurry OS Catchment No: 92
OS Grid Ref : J 025 109 Date(s) Surveyed : 12/08/2003

Sampling Stations				Biolog	ical Qu	iality F	Ratings	(Q Va	lues)
No.	Location	1978	1982	1986	1990	1994	1997	2000	2003
0100	Dungooly Br	4-5	5	4-5	4-5	4-5	4-5	4-5	4
0200	Br u/s Kilcurry R confl	4-5	4-5	4-5	4-5	3-4	4-5	4-5	4-5

Assessment: Continuing satisfactory for the moment. Moderate growths of the green, blanket-weed Cladophora sp. at Dungooly Bridge (0100) indicate increasing eutrophication in the upper reaches.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Dungooly Br	300322	314006	29	LH
0200	Br u/s Kilcurry R confl	302435	310849	29	LH

River and Code : **DEE**Tributary of : Glyde OS Catchment No: 96
OS Grid Ref : O 086 935

Date(s) Surveyed : 20/08/2003

Stations Biological Quality Ratings (Q Values										alues)		
No.	1971	1974	1977	1978	1980	1983	1986	1990	1994	1997	2000	2003
$E_{\nu m}$	Lough	Branc	h									
•	Lougn	Drunc	n									
0016	-	-	-	-	-	-	-	4-5	4	4	3-4	4
0025	-	-	-	-	-	-	-	5	4	4	4	4
0035	-	-	-	-	-	-	-	4-5	3	3	3-4	3
Main	Chan	nel										
0200	4	3-4	-	2-3	3-4	4	4	4	3	3	3-4	3-4
0360	-	-	-	-	-	-	-	4	3-4	3-4	4	4
0450	-	-	-	-	-	-	-	-	3-4	3-4	3-4	3-4
0600	4-5	4	3-4	4	4	4-5	3-4	4-5	3-4	3	4	4
0680	-	-	-	-	-	4	4	4	3-4	3-4	4	3-4
0710	-	-	-	-	-	-	-	4	3-4	3-4	3-4	3
0800	4	4	3-4	3-4	4	4	3-4	4-5	3	3	3-4	3
1000	4	4	3-4	3	3-4	3-4	3-4	3-4	3	3	3-4	3

Assessment: Water quality in the River Dee was nowhere better than 'Fair' (Q4) in August 2003. The Kilmainham Wood Branch (or Kilmainham River) maintained its satisfactory (Q4) status at each of the three points examined (0055, 0075, 0100) as did the middle reaches of the Ervy Lough Branch (0025). However, although a slight improvement was apparent in the upper reaches of this latter branch (0016) a deterioration was recorded at Tom's Bridge (0035) in the lower reaches just upstream of Whitewood Lake. As indicated primarily by the luxuriant weed and algal growths observed and by the wide DO fluctuations recorded (e.g., 59% at 0035, 59% at 0200, 125% at 0450, 121% at 0680, 79% at 0800) the Main Channel continued to be generally over-enriched upstream of Ardee (0200 to 0680) and hypertrophic/moderately polluted below the town (0710 to 1000): sensitive macroinvertebrate species were either not observed (0710, 1000)or were extremely rare (0800) in this lowermost reach.Unrestricted cattle access caused localised bed and bank damage at several locations (0016, 0035, 0200 and 0600) while extensive bank erosion, of unknown origin was apparent at Hem Bridge (0450).

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0016	Br u/s Ervy Lough	276240	294830	35	CN
0025	Br to N. of Ervy X-Rds	277250	292710	35	MH
0035	Tom's Br	279580	289130	35	MH
0200	Deegvee Br	283040	285760	35	MH
0360	Rockfield Br	287143	285571	35	MH
0450	Hem Br	289630	288065	35	MH
0600	Burley Br	292551	289685	36	LH/MH
0680	Dawson's Br	296593	290520	36	LH
0710	150 m d/s Old Rly Br (LHS)	297279	291051	36	LH
0800	Drumgoolestown Br	303066	290878	36	LH
1000	Br at Drumcar	306596	291170	36	LH

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River and Code : **DRUMSALLAGH STREAM* 06/D/07**Tributary of : Glyde OS Catchment No: 95
OS Grid Ref : N 803 981 Date(s) Surveyed : 19/08/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0056	Br W of Drumsallagh	5	3	4-5	4-5	4-5			
0066	Murphy's Br	4-5	4-5	4-5	4	4			
0070	County Br (u/s Magheracloone Branch)	4-5	4-5	4-5	4-5	4-5			

Assessment: Continuing satisfactory. No change. Formerly reported as the Drumsallagh Branch of the Glyde River.

Formerly: 06G02 Glyde Drumsallagh Branch

Samp	oling Stations	National G	rid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0056	Br W of Drumsallagh	276200	297520	35	Cn
0066	Murphy's Br	278130	297220	35	Cn
0070	County Br (u/s Magheracloone B	Branch) 280160	298260	35	Cn/Mn

River and Code : **FANE**Tributary of : Sea - Dundalk Bay OS Catchment No: 94
OS Grid Ref : J 064 018 Date(s) Surveyed : 13/08/2003

Statio	ns					Biological Quality Ratings (Q					
No.	1971	1974	1976	1980	1982	1986	1990	1994	1997	2000	2003
Carri	ckaslaı	ne Loug	gh Bran	ch							
0115	-	-	-	-	-	-	4	4	3-4	4	3*
West	Branch	h									
0155	-	-	-	-	-	-	-	2-3	2-3	2-3	2-3
0180	-	-	-	-	-	-	-	3	3	3	3
0200	4	-	3-4	4	3-4	3-4	3-4	3	3-4	3	3
Main	Chani	ıel									
0300	3	-	3-4	3-4	3-4	3-4	3-4	3	3	3	3
0400	-	-	-	3	3	3	3-4	3	3	3-4	3
0500	5	-	5	5	4-5	4	4-5	4	4	4	4
0650	-	-	-	-	-	-	5	3-4	4	4	3-4
0700	5	5	5	5	4	4	5	4	4-5	4-5	4
0900	5	5	5	4	4-5	-	4	3-4	4-5	4-5	4

Assessment: The Main Channel of the Fane was in a generally similar or slightly worse condition to that recorded in 2000. Lough Muckno continued to exert marked adverse effects on the reach immediately downstream (0300, 0400) but from Magoney Bridge (0500) onwards quality continued to be generally satisfactory. However, excessive

FANE Continued

Cladophora sp. growths reflected some considerable artificial enrichment at Enniskean (0650). In contrast to the branches where water levels were quite low levels were not particularly low in the Main Channel. In the East Branch heavy siltation and the effects of watering cattle combined to reduce biological quality upstream of Muckno Mill Lough (0040) but quality had improved considerably below this lake (0100) since 2000. By contrast a marked deterioration was recorded at the location surveyed on the Carrickaslane Lough Branch (0115) were the stream was very heavily silted and the water quite turbid due to ongoing land clearance upstream. As in the previous survey sensitive macroinvertebrate species were not observed anywhere in the West Branch indicating some considerable pollution at each of the three points surveyed (0155, 0180, 0200): the low Dissolved Oxygen (47%) recorded at Derrycreevy Bridge (0200) confirms this assessment.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0115	Br u/s Carrickaslane L	280540	324500	28	MN
0155	South Br Dunfelimy	276630	324080	28	MN
0180	2nd Br u/s Laragh L (Main Rd)	279200	322360	28	MN
0200	Derrycreevy Br	282770	320680	28	MN
0300	Clarebane Br	287357	316783	28	MN
0400	Ballynacarry Br	287460	314120	28	MN/AH
0500	Magoney Br	290853	309669	35	MN
0650	Innishkeen Br	293175	307040	36	MN
0700	Castlering Br	296636	303711	36	LH
0900	Stephenstown Br	301390	301567	36	LH

River and Code : **FLURRY**Tributary of : Sea - Dundalk Bay OS Catchment No: 91
OS Grid Ref : J 075 097

Date(s) Surveyed : 12/08/2003

Statio	ns					Biological Quality Ratings (Q Values)					
No.	1978	1980	1982	1984	1986	1990	1994	1997	2000	2003	
0100	4-5	4-5	4-5	4	4	3	3-4	3/0	3	3	
0300	4-5	4-5	5	4-5	4-5	4-5	4-5	4	3	3	
0600	3	2	1-2	2-3	2-3	3	3-4	4	-	-	
0700	-	3-4	1-2	3	3	4	3-4	4	3	3	

Assessment: Sensitive macroinvertebrates were not observed at any of the three locations surveyed on the Flurry in August 2003 a situation typical of rivers subject to considerable ecological stress. It is, therefore assessed as moderately polluted, an unsatisfactory condition and one which has not changed since 2000.

FLURRY Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Flurry Br	307242	317697	29	LH/AH
0300	Curralhir Br	308151	314457	29	LH
0600	Proleek: Br near old Smithy	308639	311293	29	LH
0700	Ballymascanlan Br	308137	310098	29	LH

River and Code : **GENTLE OWEN'S LAKE STREAM 06/G/04**Tributary of : Lough Muckno (Fane) OS Catchment No: 94
OS Grid Ref : H 829 206 Date(s) Surveyed : 13/08/2003

Station	ns						Biologic	al Quali	ity Ratin	gs (Q V	alues)
No.	1971	1974	1976	1980	1982	1986	1990	1994	1997	2000	2003
0040	_	_	_	_	_	_	_	3-4	4-5	4	3-4*
0100	4	_	3	4	4-5	3-4	3	3-4	3	3	4

Assessment: Heavy siltation and the effects of watering cattle combined to reduce biological quality upstream of Muckno Mill Lough (0040) but quality had improved considerably below this lake (0100) since 2000. *Silt

Formerly: 06F01 Fane East Branch

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Br in Creaghanroe	283280	325060	28	Mn
0100	Br 1.5km d/s Muckno Mill L	283430	321440	28	Mn

River and Code : GLYDE 06/G/02
Tributary of : Sea - at Annagassan OS Catchment No: 95
OS Grid Ref : O 090 940 Date(s) Surveyed : 14/08/2003

Statio	ns						Bio	ological	Quality	Rating	s (Q Va	alues)
No.	1971	1977	1978	1979	1981	1983	1985	1990	1994	1997	2000	2003
0100			2		1 5	4	_	1 5	1 5	1 5	1 5	4
0100	-	-	3	-	4-5	4	5	4-5	4-5	4-5	4-5	4
0400	-	-	4	-	4	4	3-4	4	4	3	4	4
0500	4	4	-	3-4	4	3-4	3-4	3	3	-	4	4
0600	4-5	4-5	-	4	4	5	4-5	4-5	4	3-4	4	4
0700	4-5	4	-	-	-	4	4	4	3-4	3-4	3-4	3-4
0900	-	-	-	4	4	4-5	4-5	5	3-4	3	4	4-5
1002	-	-	-	-	1	1	2-3	4	3	4	4	4-5
1200	3/0	3-4	-	3-4	3-4	4	3	3-4	3-4	3-4	3-4	3-4

Assessment: As in 2000 the Glyde was in a generally satisfactory quality condition when surveyed in August 2003. Excessively luxuriant Cladophora sp. growths indicated some considerable artificial enrichment due to suspected sewage discharges at Tallanstown (0700) and Castlebellingham (1200). No major changes recorded.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Cormey Br	280537	297971	35	CN/MN
0400	Lagan Br	287438	296456	35	LH/MN
0500	Aclint Br	289375	298093	35	LH/MN
0600	Br W of Mullacrew	294294	299538	36	LH
0700	Tallanstown Br	295497	297731	36	LH
0900	Mapastown Br	298637	295436	36	LH
1002	Mansfieldstown Br (RHS)	302322	295237	36	LH
1200	Castlebellingham Br	305976	295149	36	LH

River and Code : KILCURRY 06/K/02

Tributary of : Castletown OS Catchment No: 92
OS Grid Ref : J 028 098 Date(s) Surveyed : 12/08/2003

 Sampling Stations
 Biological Quality Ratings (Q Values)

 No.
 Location
 1978 1982 1986 1990 1994 1997 2000 2003

0200 Br at Mill nr Falmore Hall 4 4-5 4-5 4-5 3 4-5 4 4

Assessment: Continuing satisfactory.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br at Mill nr Falmore Hall	302451	310875	29	LH

River and Code : KILLARY WATER 06/K/01

Tributary of : Dee OS Catchment No: 96
OS Grid Ref : N 884 760 Date(s) Surveyed : 20/08/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	(alues)
No.	Location	1990	1994	1997	2000	2003
0100	Killary Br Upper	3	3	3-4	3-4	3-4
0500	SW Br u/s Dee R confl	3-4	3-4	3-4	3-4	4

Assessment: Continuing artificial eutrophication was indicated by excessive algal growths at Station 0100 where cattle damage to banks and soiling of bed were observed. Despite heavy calcification the macroinvertebrate composition at Station 0500 indicated that the lower reaches were in a satisfactory condition, a slight improvement since 2000.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Killary Br Upper	287865	281331	35	MH
0500	SW Br u/s Dee R confl	288601	285461	35	MH

River and Code : KILMAINHAM 06/K/04

Tributary of : Dee OS Catchment No: 96
OS Grid Ref : N 792 885 Date(s) Surveyed : 19/08/2003

Statio	ns						Bio	ological	Quality	Rating	gs (Q Va	alues)
No.	1971	1974	1977	1978	1980	1983	1986	1990	1994	1997	2000	2003
00.55										2.4		
0055	-	-	-	-	-	-	-	-	4	3-4	4	4
0075	-	-	-	-	-	-	-	-	3	4	4	4
0100	4-5	5	-	4-5	4	4-5	4-5	4-5	4-5	4	4	4

Assessment: The Kilmainham River formerly reported as the Kilmainham Wood Branch of the River Dee maintained its satisfactory (Q4) status at each of the three points examined (0055, 0075, 0100) in 2003.

Formerly 06D01:Dee Kilmainham Wood Branch

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0055	Breaky Br	274500	291870	35	Mh
0075	Br N of Kilflannan (at T junction)	275880	290540	35	Mh
0100	Br u/s Whitewood L	278950	289180	35	Mh

River and Code : MAGHERACLOONE STREAM 06/M/01
Tributary of : Glyde OS Catchment No: 95
OS Grid Ref : N 803 981 Date(s) Surveyed : 18/08/2003

 Sampling Stations
 Biological Quality Ratings (Q Values)

 No.
 Location

 1990
 1994
 1997
 2000
 2003

 0096
 Br N of Lisnakeeny
 4-5
 4-5
 4-5
 4

Assessment: Continuing satisfactory. Formerly reported as the Magheracloone Branch of the Glyde River

Formerly Magheracloone Branch of the Glyde River 06G02

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0096	Br N of Lisnakeeny	279550	299580	35	Mn

River and Code : PROULES 06/P/01

Tributary of : Glyde OS Catchment No: 95

OS Grid Ref : N 912 993 Date(s) Surveyed : 18/08/2003

Statio	ns							Biolog	gical Q	uality l	Ratings	(Q Va	lues)
No.	1971	1974	1976	1978	1980	1982	1984	1990	1991	1994	1997	2000	2003
0100	5	-	5	5	5	4	4-5	5	-	4	4-5	-	-
0110	-	-	-	-	-	-	-	3	-	-	-	4-5	4-5
0300	1	1	1	3	1	3	3-4	1-2	1-2	2-3	2	2-3	2-3
0400	2	2	2-3	2-3	2	3-4	3	2	2	2	2	2-3	3
0600	4	-	4	3-4	4	4	4	3-4	-	3	3	3-4	3

Assessment: Continuing satisfactory upstream of Carrickmacross (0110) and significantly polluted at each of the three points surveyed below the town. Subsequent information (Bill Quirke pers. comm.) has revealed unsatisfactory conditions (Q2-3) at the Ardee Road Bridge (Station 0200): this is upstream of the sewage discharge indicating the presence of other pollution sources in the environs of the town.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Dry Br	283385	304013	35	MN
0110	500m d/s Dry Br (d/s St 0100)	283385	304013	35	MN
0300	Just u/s Lough Naglack	284961	302669	35	MN
0400	Broken Br	285669	302902	35	MN
0600	Br at Killanny	289348	301043	35	LH

River and Code : RASKEAGH 06/R/02

Tributary of : Sea - Dundalk Harbour OS Catchment No: 93

OS Grid Ref : J 067 092 Date(s) Surveyed : 12/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0200	Br S of Old Windmill	4	3	3	3	3			
0600	Br W of Strandfield	-	-	-	3-4	3-4*			

Assessment: This little stream was heavily silted at both locations and sensitive macroinvertebrates were not observed anywhere at the time of this survey in August 2003. Unsatisfactory. No change. *Silt

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br S of Old Windmill	305082	311385	29	LH
0600	Br W of Strandfield	305575	310461	29	LH

River and Code : **TERMONFECKIN**Tributary of : Sea - N. of Drogheda OS Catchment No: 97
OS Grid Ref : O 156 804 Date(s) Surveyed : 21/08/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)						
No.	Location	1978	1983	1986	1990	1994	1997	2000	2003
0350	Sandpit Br	_	3-4	3	3	_	_	3*	3*
0400	Br in Termonfeckin	-	3-4	3	2-3	3	3/0	3-4	3-4

Assessment: As in 2000 the Termonfeckin River was in an unsatisfactory condition at the time of this survey in 2003: it was heavily silted at Sandpit Bridge (0350) and obviously over-enriched and dirty at Termonfeckin (0400). Very low flows undoubtedly contributed to this unsatisfactory state of affairs. *Silt

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0350	Sandpit Br	311830	282094	36	LH
0400	Br in Termonfeckin	313905	280448	36	LH

River and Code : WHITE (LOUTH) 06/W/01
Tributary of : Dee OS Catchment No: 96
OS Grid Ref : O 062 908 Date(s) Surveyed : 21/08/2003

Statio		40=4	40=6	40.00	1000	4000	1006		_	-	Ratings		
No.	1971	1974	1976	1978	1980	1982	1986	1990	1991	1994	1997	2000	2003
0040	-	-	-	_	-	-	_	4	_	4-5	4-5	3-4	4
0100	-	-	-	3-4	4-5	3-4	4-5	4-5	-	4	4	3-4	3-4
0200	4	3	3	3-4	4	4-5	4-5	4	-	-	-	-	-
0290	-	-	-	-	-	-	-	3-4	-	3	3	3-4	3-4
0500	2-3/0	2-3/0	1/0	3/0	3	3/0	1/0	2	2	2-3	2-3	3-4	3-4

Assessment: Marginally improved in upper reaches (0040) since 2000 but elsewhere obviously over-enriched and biologically impoverished. Generally unsatisfactory. Agriculture suspected.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location X Y		Series No.	Code	
0040	Br u/s White River Br	300889	284557	36	LH
0100	New Br	304628	285661	36	LH
0200	Athclare Br	305896	286586	36	Lh
0290	Grangebellew Rd Br Dunleer	305873	287870	36	LH
0500	Coneyburrow Br	305719	289280	36	LH

HYDROMETRIC AREA 07

Boyne

07A01
07B01 07B02 07B03
07B04
07C04 07C05
07D01 07D02 07D03
07G02
07K01 07K02
07L01
07M01 07M04 07M03
07N01
07R01 07R04
07S01 07S02
07Y01 07Y02

River and Code : **ATHBOY**Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 774 566 Date(s) Surveyed : 24/09/2003

Statio	ns						Biologic	al Quali	ity Ratin	gs (Q Va	alues)
No.	1971	1973	1975	1979	1981	1985	1990	1994	1997	2000	2003
0020								4	4	2.4	4
0020	-	-	-	-	-	-	-	4	4	3-4	4
0050	-	-	-	-	-	-	3-4	3-4	3-4	3	3-4
0070	-	-	-	-	-	-	4	4	4	3	4
0100	-	-	-	-	4	3-4	3-4	3-4	4	4	3-4
0200	4	4-5	4	3-4	4	3	3-4	3	3	3-4	3
0300	3-4	3-4	2-3	2-3	3-4	4	3-4	3-4	3-4	3-4	3
0400	3-4	3	3	3-4	4	4	3-4	3-4	3-4	-	-
0500	-	3-4	4	3-4	4	3	3-4	3	3	3-4	3-4

Assessment: Improvements were recorded at three points in the upper reaches (0020, 0050, 0070) of the Athboy River but minor deteriorations were indicated in and below the town (0100, 0200, 0300) in September 2003. As a result of these changes the river was in a mostly satisfactory condition above Athboy but pollution effects were somewhat more pronounced below the town. The substrata of hard-water rivers such as the Athboy can become heavily calcified as a result of raised pH brought about by intense photosynthesis in eutrophic conditions. Ecological niches are then reduced or lost with the result that biological diversity is lowered and sensitive species can disappear as was apparent in and below Athboy at the time of this survey.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br NW of Dogstown	262637	275950	42	MH
0050	Br W of Kilskeer	264793	271654	42	MH
0070	Br W of Johnsbrook Ho	267591	269148	42	MH
0100	Br nr Clonleasan Ho	269518	268149	42	MH
0200	Just u/s Athboy Br	271686	264261	42	MH
0300	Br 2km SE of Athboy	272823	262772	42	MH
0400	Tremblestown Br	275605	257665	42	MH
0500	Kilnagross Br	277055	256686	42	MH

River and Code : **BLACKWATER (KELLS)** 07/B/01

Tributary of : Boyne OS Catchment No: 159

OS Grid Ref : N 872 680 Date(s) Surveyed : 11/09/2003

Statio	ns							Biolog	gical Q	uality l	Ratings	(Q Va	ılues)
No.	1971	1974	1977	1978	1980	1982	1984	1987	1990	1994	1997	2000	2003
0100		2.4		15	4	1 5	1 5			4	4	1 5	1 5
0100	-	3-4	1	4-5	4	4-5	4-5	1	1	4 2	4	4-5	4-5
0170	-		1	-	1	1	1	1	1		2-3	2	2-3
0200	1	1-2	-	1	1	1	1/0	1	1	2	-	-	-
0280	-	-	-	-	-	-	-	-	3	3	3	3	3*
0420	-	-	-	-	-	-	3-4	-	3-4	3-4	3-4	4	3-4
0500	5	4-5	5	4-5	3-4	3-4	3-4	-	4	3-4	3-4	3-4	4
0600	-	-	-	4	4	3-4	3-4	-	3-4	3-4	3-4	3-4	3-4
0800	5	5	-	4	4	4	4	-	4	3-4	4	4	4
0900	3-4	3-4	-	2-3	3	-	3	-	3	3	3	3	3
1000	4	4	-	3-4	-	3-4	4	-	3-4	3	3	3-4	3
1100	5	4-5	-	4	4	-	4	-	4	4	4	4	3-4
1200	5	5	-	4-5	4	-	4-5	-	4	3-4	4	3-4	3-4
1300	5	4-5	-	4	3-4	-	3-4	-	4	3-4	3-4	3-4	3-4
1400	5	-	5	-	4	-	4	-	4	4	4	4	4
1500	5	-	5	-	4	-	4	-	4	3-4	4	3-4	4
1790	-	-	-	-	-	-	-	-	-	-	-	3-4	3-4
1800	4-5	-	4-5	-	4	-	3-4	-	4	3-4	3	-	-

With quality at the bulk of sites (i.e., 9 stations) unchanged since the Assessment: previous survey the Blackwater continued in a generally unsatisfactory condition in 2003. Slight improvements were recorded at Drumbannan (0170), Killinkere (0500) and Donaghpatrick (1500) and minor deteriorations were seen below Parker's Bridge (0420), Daly's Bridge (1000) and Carnaross (1100). The improvement at Drumbannan takes that location out of the seriously polluted category but the influence of the various discharges in the Bailieboro' area are reflected in the Q3 below Castle Lake (0280) and also by the low DO value (60%) at that point. DO concentrations at the next location (128% at Station 0420) reflect the eutrophic condition of the river in this area. The outflow from Lough Ramor continued to adversely affect the river for some considerable distance downstream: this is evident from the fact that sensitive macroinvertebrates were not observed in the reach immediately below the lake (0900, 1000) and they were very scarce further downstream i.e., from Carnaross (1100) to Kells (1200). Compounding this situation is impact of the sewage discharge from this town which is suspected as contributing to the eutrophic status of the river at Headford Bridge (1300). The presence of several sensitive species was indicative of a return to satisfactory conditions at Bloomsbury and Donaghpatrick Bridges (1400, 1500) but by the time it reached Navan ((1790) the river was again obviously over-enriched and additionally heavily silted: attention is again drawn to the fact that an untreated sewage effluent continues to access the river at this point i.e., 150m d/s the new bypass bridge on the right hand or south side.

BLACKWATER (KELLS) Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br 2km NE of Bailieborough	269725	298169	35	CN
0170	Br at Drumbannon	267540	298104	35	CN
0200	Footbridge u/s Castle L	267057	298780	35	CN
0280	3rd Br d/s Castle L	265973	298103	35	CN
0420	Br d/s Parker's Br	263602	296696	35	CN
0500	Br in Killinkere	261085	293566	35	CN
0600	Stramaquerty Br (nr Drumagolan)	259535	292018	35	CN
0800	Just u/s L Ramor (RHS)	260413	287071	35	CN
0900	Nine Eyes Bridge	263056	283388	35	CN
1000	Daly's Br	265306	280332	35	CN/MH
1100	Br nr Carnaross	268635	277954	42	MH
1200	Mabe's Br	273697	277272	42	MH
1300	Sedenrath Br (Headford Br)	276335	275822	42	MH
1400	Bloomsberry Br (250m u/s)	279186	274042	42	MH
1500	Donaghpatrick Br	281941	272314	42	MH
1790	100m d/s New Bypass Br	286845	268194	42	MH
1800	Pollboy Br (Slane Rd) Navan	287182	268027	42	MH

River and Code : **BLACKWATER (LONGWOOD)** 07/B/02
Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 712 503 Date(s) Surveyed : 16/09/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1976	1981	1985	1990	1994	1997	2003	
0050	Br nr Derrycrib	_	_	_	2	3	_	_	
0060	Br S of Hortland	-	-	-	-	-	4	3	
0070	Br N of Hortland	-	-	-	3	4	-	-	
0100	Br at Johnstown	4	3-4	3-4	3-4	4	4	4	
0200	Blackwater Br	-	4	3-4	3-4	3-4	3-4	3	
0400	Br NE of Longwood	4-5	4	3-4	3-4	3-4	3-4	3-4	
0600	Br u/s Boyne R confl	4	5	4	4-5	4	3-4	3-4	

Assessment: Insect nymphs (e.g., young stages of certain mayflies and dragonflies etc.) normally associated with sluggish conditions were not observed in the heavily silted and weedy upper reaches of the Blackwater (0060) in September 2003 indicating significant ecological upset in this area. By the time Johnstown was reached (0100) quality had recovered to 'Fair' but then as in previous years conditions consistent with considerable artificial eutrophication were recorded at the two locations downstream of this village. Sewage suspected.

BLACKWATER (LONGWOOD) Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Br nr Derrycrib	281660	234270	49	Ke
0060	Br S of Hortland	281194	236178	49	KE
0070	Br N of Hortland	0	0	49	Ke
0100	Br at Johnstown	276636	239935	49	KE/MH
0200	Blackwater Br	273771	242304	49	KE/MH
0400	Br NE of Longwood	272132	246468	49	MH
0600	Br u/s Boyne R confl	271288	250088	42	MH

River and Code : **BOYCETOWN** 07/B/03

Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 833 564 Date(s) Surveyed : 24/09/2003

Sampl	ling Stations		Bi	iological	l Quality	y Rating	gs (Q Va	alues)
No.	Location	1976	1981	1985	1990	1994	1997	2003
0200	Br N of Martinstown	_	3	3	3-4	3-4	3	3*
	Scurlockstown Br	4	3-4	4	4	3-4	3	3*

Assessment: Heavily silted at both locations and additionally highly eutrophic and calcified in the lower reaches (0300). Unsatisfactory. No change. *Silt

Sampling Stations		National (Grid Ref.	Discovery	County
No. Location		X	Y	Series No.	Code
0200 Br N of Martinst	own	287220	253489	42	MH
0300 Scurlockstown E	r	283237	256131	42	MH

River and Code : **BOYNE** 07/B/04

Tributary of : Sea - Drogheda Harbour OS Catchment No: 159

OS Grid Ref : O 091 751 Date(s) Surveyed : 22/08/2003

Statio	ns							Biolog	gical Q	uality I	Ratings	s (Q Va	lues)
No.	1971	1973	1974	1975	1977	1979	1981		1990	1994	1997	2000	2003
0100	4.5						2.4	4	4		2	2.4	2
0100	4-5	-	-	-	-	-	3-4	4	4	-	3	3-4	3
0200	2-3	3-4	-	3-4	3	4	4	4	3	4	2-3	3-4	3
0300	2-3	2-3	-	2	1-2	2-3	4	4	-	3	2	1-2	3
0400	4-5	3	-	-	4-5	4	4	4	4	4	3	3	4
0600	4-5	-	4	-	4	4	4	4-5	4	4	3-4	3	3
0800	4-5	-	3	-	-	4	4-5	4-5	4	4	3-4	3-4	4
0900	5	-	3-4	-	-	4-5	5	5	4	4	4	4	3-4
1000	5	-	4	-	-	4	5	5	3-4	3-4	4	3-4	4
1200	-	-	4-5	-	-	-	4	4-5	3-4	3-4	4	3-4	3-4
1400	-	-	4	-	-	3-4	3-4	4	3-4	3-4	3	3	3-4
1500	5	-	4-5	-	-	4-5	5	4	3-4	3-4	3-4	3-4	3-4
1600	-	-	-	-	-	-	4	4-5	3-4	3-4	3-4	3-4	3-4
1700	5	-	4	-	-	3-4	4	4-5	3-4	-	-	-	-
1800	-	-	-	-	-	4	4-5	4-5	3-4	3-4	3-4	3-4	3-4
1900	4	4	-	4	3-4	3	3-4	4	2-3	3	2-3	3-4	3-4
2010	-	-	-	-	-	-	-	4	3-4	3-4	3	3-4	3-4
2100	4-5	4-5	-	4	4	4	4-5	4	4	3-4	3	3-4	3-4
2150	-	-	-	-	-	-	-	-	4-5	3-4	3-4	4	3-4
2200	5	4-5	-	3-4	4	4	4	4	-	-	3-4	3-4	3-4

With just three of the eighteen locations achieving 'Fair' (Q4) quality the overall condition of the Boyne continued to be of a less than satisfactory standard in September 2003. The upper reaches (0100, 0200) had deteriorated somewhat being assessed as moderately polluted and similar conditions were again recorded at Ashfield Bridge (0600) below the Kinnegad and Glash river confluences: very heavy siltation was noted at both of these locations and again at Scarriff Bridge (0900) downstream. By contrast significant improvements were recorded below Edenderry (0300, 0400) and again below Trim (1400) and this is attributed to the upgrading of the sewage treatment plants at these towns. However, as the O3 and 67% D.O. recorded at Kinnafad Bridge (0300) indicates some further improvement is required in this area. The lower half of the river remained in a slightly less than satisfactory condition due to widespread eutrophication, the most obvious symptom of which was the abnormally luxuriant growth of filamentous algae which can seriously upset the dissolved oxygen (DO) regime and stimulate the precipitation of calcium carbonate (marl) on the river bed thus obliterating essential niches for a variety of mayfly and stonefly indicator species. Heavy calcification and DO supersaturation were recorded above and below Trim (1200, 1400) and below Navan (1900, 2010) at the time of this survey.

BOYNE Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	River Br	266855	232768	49	KE
0200	Boyne Br	263605	234529	49	KE/OY
0300	Kinnafad Br	261428	235002	49	KE/OY
0400	Ballyboggan Br	263807	240222	49	KE/WH
0600	Ashfield Br	268374	244832	49	KE/WH
0800	Inchamore Br	271089	250000	42	MH
0900	Scarriff Br	273445	252734	42	MH
1000	Derrinydaly Br	276708	253872	42	MH
1200	West Br Trim	279859	257008	42	MH
1400	u/s Knightsbrook R confl (RHS)	282514	256693	42	MH
1500	Bective Br	286090	259816	42	MH
1600	Ballinter Br	289519	262675	42	MH
1700	Kilcarn Old Bridge	288535	265524	42	MH
1800	Railway Br Navan	287430	267428	42	MH
1900	2km d/s Navan (LHS)	288493	269122	42	MH
2010	d/s Broadboyne Br (RHS)	292440	271435	43	MH
2100	Slane Br	296414	273631	43	MH
2150	Ford S of Broc Ho	300050	271830	43	MH
2200	Obelisk Br	304510	276200	43	MH

River and Code : **CASTLEJORDAN**Tributary of : Yellow (Castlejordan)

OS Grid Ref : N 592 378

OS Catchment No: 159

Date(s) Surveyed : 15/09/2003

Sampl	ing Stations	Stations Biological Quality Ratings (Q Values)							lues)
No.	Location	1976	1981	1985	1990	1994	1997	2000	2003
0060	SE of Rahinine	-	-	-	3-4	2-3	2-3	3	-
0100	Baltinoran Br	-	4-5	3-4	4	3-4	3-4	4	3
0190	Castlejordan Br	-	-	-	4	3-4	3-4	4	3
0200	0.5km d/s Castlejordan Br	4-5	4	3-4	-	-	-	-	-

Assessment: The Castlejordan river in 2003 was in the worst condition it has been since surveys began in 1976. The upper reaches (0060) were inaccessible but it is likely that the cause of the moderate pollution recorded at the two locations sampled was sewage from Rochfortbridge.

Sampling Stations	National	Grid Ref.	Discovery	County
No. Location	X	Y	Series No.	Code
0060 SE of Rahinine	247546	240452	48	WH
0100 Baltinoran Br	255347	240809	49	OY/WH
0190 Castlejordan Br	259054	238765	49	OY

River and Code : **CHAPEL LAKE STREAM** 07/C/05

Tributary of : Blackwater (Kells) OS Catchment No: 159
OS Grid Ref : N 614 945 Date(s) Surveyed : 08/09/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0400	Br E of Drumanespick	_	_	4	4	_			
0700	Br u/s Blackwater R confl	3	4	4	4	4-5			

Assessment: As indicated by the variety of sensitive species present in its lower reaches (0700) the Chapel Lake Stream was in a very satisfactory condition at the time of this survey in early September 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br E of Drumanespick	262734	298537	35	CN
0700	Br u/s Blackwater R confl	261581	295009	35	CN

River and Code : **DEEL (RAHARNEY)**Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 695 496 Date(s) Surveyed : 17/09/2003

Statio	ons					Biolo	ogical Qu	ality Rati	ings (Q V	(alues)
No.	1971	1976	1978	1982	1985	1990	1994	1997	2000	2003
Loug	h Lene E	Branch								
0040	-	-	-	-	-	4-5	4	3-4	4	3-4
Main	Channe	el –								
0070	-	-	-	-	-	4	4	4-5	4	3-4
0090	-	-	-	-	-	3	3-4	4	3-4	3-4
0200	5	4-5	4-5	4	4-5	4-5	3-4	3-4	3-4	3-4
0300	-	5	4-5	4-5	4-5	4	3-4	3-4	3-4	3
0400	5	4	4-5	4-5	5	3-4	3-4	3-4	3-4	3-4
0600	5	4	4	4-5	4-5	4-5	4	3-4	4	3-4

Assessment: The Lough Lene Branch of the Deel River was weed-choked and heavily silted at the point examined (0040) in mid-September 2003, indicating a significant increase in nutrient input since 2000. In the upper Main Channel well developed growths of a grey-black slime indicated something amiss in the Drumcree area (0070) and, following a slight deterioration in the lowermost reaches (0600), none of the points surveyed reached a satisfactory quality rating: this was due to eutrophication and siltation, primarily from suspected agriculture. The river was heavily silted at most locations but in particular at Raharney (0300) where heavy deposits of black silt, possibly manure slurry, were observed and where a very unbalanced macroinvertebrate fauna indicated a significant deterioration since 2000.

DEEL (RAHARNEY) Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Br u/s Lough Adeel	254280	268320	42	WH
0070	Br W of Mabestown	255836	265448	42	WH
0090	E Br u/s Lough Analla	256442	262515	42	WH
0200	Cummer Br	258463	257653	42	WH
0300	Raharney Br	260104	252985	42	WH
0400	Inan Br	263385	250390	42	MH/WH
0600	Br u/s Boyne R confl	269102	249317	49	MH

River and Code : **DEVLIN'S**Tributary of : Mattock OS Catchment No: 159
OS Grid Ref : O 001 763 Date(s) Surveyed : 29/09/2003

Sampling Stations Biological Quality Rat							Ratings	(Q Va	lues)
No.	Location	1976	1981	1985	1990	1994	1997	2000	2003
0140	Br S of Grange X-Rds	-	-	-	-	3-4	2/0	3	3-4*
0200	Devlin's Br	4-5	4-5	3/0	4	-	-	-	-
0300	Ford u/s Mattock R confl	_	4	4	_	3-4	3	3-4	3-4

Assessment: Continuing unsatisfactory. Heavily silted in upper reaches (0140) and highly eutrophic in lower (0300). Agriculture suspected.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0140	Br S of Grange X-Rds	295524	278502	43	MH
0200	Devlin's Br	0	0	43	Mh
0300	Ford u/s Mattock R confl	300000	276327	43	MH

River and Code : **DRUMKEERY LOUGH STREAM** 07/D/03

Tributary of : Castle Lough OS Catchment No: 159
OS Grid Ref : N 668 990 Date(s) Surveyed : 08/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1982	1990	1994	1997	2000	2003		
0100	Br d/s Skeagh Lough	2-3	3	3	3	4	-		
0400	Just u/s Castle Lough	-	4	3	3	2-3	2-3		

Assessment: The stream was inaccessible at Station 0100 but the very poor faunal diversity at Station 0400 indicated no improvement in the unsatisfactory status of the afforested lower reaches in 2003.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br d/s Skeagh Lough	264528	299971	35	CN
0400	Just u/s Castle Lough	266752	299053	35	CN

River and Code : GLASH

Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 667 423

Date(s) Surveyed : 12/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0400	Clonuff Br	-	3	3	3-4	3*			
0600	Br u/s Boyne R confl	4	3-4	3	3-4	3			

Assessment: A widespread deterioration was indicated by the unsatisfactory conditions recorded at both locations surveyed in the Glash River in 2003. In addition to excessive siltation and weed growth an extremely high conductivity reading (1739 μ S/cm) was recorded at Clonuff Bridge on the 12th September and verified next day. Chemical investigation is need to ascertain the cause of this. Conditions have deteriorated since 2000.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Clonuff Br	269059	240886	49	KE
0600	Br u/s Boyne R confl	266961	243485	49	KE

River and Code : **KINNEGAD**Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 678 446 Date(s) Surveyed : 12/09/2003

Samp	ling Stations				Biolog	gical Q	uality	Rating	gs (Q V	alues)
No.	Location	1976	1978	1981	1983	1985	1990	1994	1997	2003
									_	
0060	Br SE of Cloonfad Ho	-	-	-	-	-	3-4	2-3	3	3-4*
0100	Ballivor Rd Br Kinnegad	1-2	1	3	3	3	1	3-4	3-4	3*
0300	Clonard Br	2	1	4-5	3-4	3	3-4	3-4	3	3-4

Assessment: Unsatisfactory due to siltation in the upper reaches (0060), eutrophication in the lower (0300) and a combination of both in the middle (0100). Minor improvement noted at Clonard Bridge. *Silt

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0060	Br SE of Cloonfad Ho	255729	244371	49	WH	
0100	Ballivor Rd Br Kinnegad	260303	245270	49	MH/WH	
0300	Clonard Br	265731	244909	49	MH	

River and Code : KNIGHTSBROOK 07/K/02

Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 829 564 Date(s) Surveyed : 25/09/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)							
No.	Location	1976	1981	1985	1990	1994	1997	2000	2003	
0100	14 1 D		2.4	2		2				
0100	Moynalvy Br	-	3-4	3	-	3	-	-	-	
0300	Dangan Br	-	3-4	3	3	3	3	2-3	2-3	
0360	Br nr Summerstown Ho	-	-	-	-	3-4	3-4	3	4	
0500	Br u/s Boyne R confl	4	4	4	3-4	4	4	3	3-4	

Assessment: The upper surveyed reaches of the Knightsbrook River (0300) were again very considerably polluted in late September 2003 but a marked improvement was recorded in the middle reaches (0360) where quality was assessed as satisfactory. The lower reaches (0500) had also improved somewhat since 2000.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Moynalvy Br	0	0	42	Mh
0300	Dangan Br	283265	250874	42	MH
0360	Br nr Summerstown Ho	280346	252154	42	MH
0500	Br u/s Boyne R confl	282990	256345	42	MH

River and Code : LISLEA 07/L/01

Tributary of : Lough Ramor OS Catchment No: 159
OS Grid Ref : N 622 862 Date(s) Surveyed : 09/09/2003

Sampling Stations Biological Quality Ratings (Q Values) 1994 1997 Location 1980 1988 2000 2003 No. 4 4 4 4 0100 Br u/s Lough Ramor 4 4

Assessment: Continuing satisfactory. Trout fingerling and a dipper observed.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br u/s Lough Ramor	262295	286204	35	CN

River and Code : MATTOCK

Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : O 037 757 Date(s) Surveyed : 29/09/2003

Sampling Stations				Biolog	ical Qu	iality F	Ratings	ings (Q Values)					
No.	Location	1976	1981	1985	1990	1994	1997	2000	2003				
0050	Slane Rd Br Collon	-	-	-	4	4	3-4	3-4	3-4*				
0100	Boyd's Br	-	4-5	4	3	3-4	3	3-4	3-4*				
0200	Br u/s Devlins R confl	5	4-5	4-5	4-5	3-4	3-4	4	4				
0300	New Br u/s Boyne R confl	-	5	4-5	-	3-4	4	3	-				

Assessment: Very heavy siltation depressed biological diversity in and below Collon (0050, 0100) in 2003. As indicated by the quantities of manure in the stream at Boyd's Bridge (0100) and Wood Mill Bridge (0200) there is a need to restrict cattle access, particularly at times of low flow. Sampling was impossible at New Bridge (0300) because of deep water due to tidal push-back at the time of this survey.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Slane Rd Br Collon	299751	281708	36	LH
0100	Boyd's Br	301855	280761	36	LH/MH
0200	Br u/s Devlins R confl	300458	276919	43	LH/MH
0300	New Br u/s Boyne R confl	303686	275639	43	LH/MH

River and Code : MILLTOWNPASS 07/M/04

Tributary of : Castlejordan OS Catchment No: 159

OS Grid Ref : N 530 420 Date(s) Surveyed : 15/09/2003

Samp	ling Stations	ality Rati	ngs (Q V	alues)		
No.	Location	1990	1994	1997	2000	2003
0400	Br in Milltownpass	3-4	3-4	3	3	3

Assessment: Biological composition indicates continuing significant pollution at the location surveyed in this stream. The low DO (61%) and temperature (13.6oC) recorded at the time of this survey may be due to groundwater but an organic input is indicated by the unexpected frequency of occurrence of Asellus sp, the water hog louse.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br in Milltownpass	250184	243724	48	WH

River and Code : MOYNALTY 07/M/03

Tributary of : Blackwater (Kells) OS Catchment No: 159
OS Grid Ref : N 787 742 Date(s) Surveyed : 10/09/2003

Statio	Stations Biological Quality Ratings (Q Values)												
No.	1971	1978	1980	1984	1986	1990	1994	1997	2000	2003			
Main	Channe	el											
0050	-	_	-	-	-	4	4	3	3-4	3-4			
0070	-	-	-	-	-	3	3	3-4	3	4			
0090	-	-	-	-	-	-	3	4	3-4	4			
0100	-	5	3-4	4	3-4	3	-	-	-	-			
0300	-	4	3-4	3-4	3-4	3-4	3-4	3	3	3-4			
Mulla	igh Brai	nch											
0400	-	3	3-4	3-4	3	3	3	3	3	3			
Main	Channe	el											
0600	-	4-5	3-4	_	3-4	3-4	4	3-4	3-4	3-4			
0800	-	-	4	-	4	4	4	3-4	3	3-4			
0900	5	3-4	4	-	4	-	4	4	3	3-4			

Assessment: Although still affected by widespread eutrophication due to suspected agriculture, indications are of an overall improvement in water quality in the Moynalty, Main Channel in 2003: this is indicated by higher than previous biotic indices (Q values) at five of the nine locations surveyed, two of which (0070, 0090) indicated a return to satisfactory, 'Fair' quality conditions. The Mullagh Branch (0400), however, continued to be in an unsatisfactory condition due to a suspected sewage discharge.

MOYNALTY Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County	
No.	Location	X	\mathbf{X} \mathbf{Y}		Code	
0050	Br nr Lurganbane	269219	295381	35	CN	
0070	Cloggagh Br	267572	291639	35	CN/MH	
0090	Skearke Br	269016	287986	35	CN/MH	
0100	Rathbourne's Br	270228	287014	35	CN/MH	
0300	Br d/s Rosehill Br	271134	284151	35	CN/MH	
0400	Br u/s Main Ch confl	271106	284039	35	CN/MH	
0600	Moynalty Br	273499	282537	35	MH	
0800	Carlanstown Br	276484	279242	42	MH	
0900	Fyanstown Br	279048	275738	42	MH	

River and Code : **NADREEGEEL LOUGH STREAM** 07/N/01
Tributary of : Lough Ramor OS Catchment No: 159
OS Grid Ref : N 594 870 Date(s) Surveyed : 09/09/2003

Sampl	Sampling Stations Biological Quality Ratings (Q Values)									
No.	Location	1978	1980	1982	1984	1990	1994	1997	2000	2003
0100	Assan Br	-	4-5	4-5	3-4	3-4	3-4	4-5	3-4	3-4
0200	Billis Br	4	4	4-5	4	3	3	3	4	3-4
0500	Br nr Cranadillon	4	4	3-4	4	3-4	3-4	3-4	3-4	3-4

Assessment: Over-enriched, weedy and silted. Very low water levels exacerbate eutrophication of suspected agricultural origin.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Assan Br	255351	296117	35	CN
0200	Billis Br	256152	293392	35	CN
0500	Br nr Cranadillon	259039	288042	35	CN

River and Code : RIVERSTOWN 07/R/01

Tributary of : Deel (Raharney) OS Catchment No: 159

OS Grid Ref : N 607 515 Date(s) Surveyed : 17/09/2003

Sampl No.	ing Stations Location	Biological Quality Ratings (Q Val 1976 1981 1985 1990 1994 1997 2000							
~	Branch Br nr Knockmant	-	-	-	-	4	4	4	3
0100	Channel Riverstown Br Br u/s Deel R confl	- 4-5	3 4	4-5 4-5	3 3-4	3-4 3-4	3-4	3 3	3 3

Assessment: Sensitive species were not observed at any of the three locations surveyed on the Riverstown in 2003 indicating unsatisfactory conditions at those points. Sewage and agriculture suspected.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0090	Br nr Knockmant	252850	250500	42	WH
0100	Riverstown Br	256526	250823	42	WH
0200	Br u/s Deel R confl	259120	250609	42	WH

River and Code : **ROCHFORTBRIDGE STREAM** 07/R/04
Tributary of : Castlejordan OS Catchment No: 159
OS Grid Ref : N 470 404 Date(s) Surveyed : 15/09/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0300	Br SE of Derry	3	4	3-4	3	3			

Assessment: Abundant pond-weed *Lemna minor*, heavy siltation and a lack of sensitive species indicated no improvement in the quality status of this stream, also known as the Derry River in 2003. Moderate pollution indicated. Several empty herbicide containers were observed on the bankside at the time of this survey.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br SE of Derry	246414	241558	48	WH

River and Code : **SKANE**Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 871 613
Date(s) Surveyed : 25/09/2003

Station No.	ns 1979	1981	1983	1985	1987	1989	Bio 1990	ological 1991	Quality 1994	Rating 1997	gs (Q Va 2000	alues) 2003
0100	3-4	3-4	2-3	2-3	3	_	2-3	_	_	_	_	_
0150	-	-	-	-	-	-	3-4	-	3	2-3	2-3	2-3
0200	1	3	3	2	2	2	2	2	-	-	-	-
0300	-	-	3	2-3	2	2	2	2	2-3	2-3	3	2-3
0510	-	-	-	-	-	-	3	-	3	3	3	3-4
0600	3-4	3-4	3-4	3	-	-	3-4	-	3	3	3	3-4*

Assessment: Sewage from Dunshaughlin is suspected as being the main cause of the continuing pollution of the upper Skane river (0150, 0300) but a sewage plant under construction at the time of this survey should rectify this situation. The lower river was highly eutrophic at this time and in addition the river was very heavily silted at Dowdstown (0600) due to recent dredging just upstream of the bridge. *Silt.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Drumree Br	0	0	43	Mh
0150	2 km d/s Drumree Br	293338	253207	43	MH
0200	Dunsany Br	0	0	42	Mh
0300	Athronan Br	290252	255398	42	MH
0510	Br NE of Balgeeth	289128	260094	42	MH
0600	Dowdstown Br	290379	262357	42	MH

River and Code : **STONYFORD**Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 737 531 Date(s) Surveyed : 24/09/2003

Sampl	ing Stations	Biological Quality Ratings (Q Valu					lues)		
No.	Location	1976	1981	1985	1990	1994	1997	2000	2003
F 4 F									
East B									
0015	Br N of Boherard	-	-	-	-	4-5	3	3	-
0030	Snipe's Br	-	-	-	4	3-4	3	3-4	3-4
West E	Branch								
0045	Br NW of Geehanstown	-	-	-	-	4-5	3-4	3-4	-
0055	Curlingford Br	-	-	-	4	4-5	3-4	3-4	3-4
Main	Channel								
0065	Br SW of Ballinlough	-	-	-	-	-	-	3-4	3-4
0070	Br SW of Clonmaskill	-	-	-	3-4	3-4	3-4	-	-
0075	Br E of Ballyhealy Lr	-	-	-	-	-	-	3-4	3-4
0080	Lisclogher Br	-	-	-	3-4	4	3-4	-	-
0090	Br u/s Rathkenna Br	-	-	-	3-4	4	4	4	4
0300	Shanco Br	-	4	4	4	4	4	4	4
0400	Stonyford Br	4-5	4	4	3-4	4	4	4	4

As in 2000 the upper Main Channel and both branches of the Stonyford River were almost completely overgrown with weed and/or filamentous algae indicating no change to their highly eutrophic status since the previous survey. The DO recorded at Snipe's Bridge on the morning of the 19th of September was just 34%, an indication of the kind of diurnal variations to be expected in such conditions. The lower river (from 0090) was enriched and calcified but was assessed as satisfactory at the points examined. Overall no change.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0015	Br N of Boherard	262030	270330	42	Mh
0030	Snipe's Br	262370	267300	42	Mh
0045	Br NW of Geehanstown	258780	269580	42	MH/WH
0055	Curlingford Br	261270	267220	42	MH/WH
0065	Br SW of Ballinlough	262021	264277	42	WH
0070	Br SW of Clonmaskill	262106	262651	42	WH
0075	Br E of Ballyhealy Lr	263795	261679	42	WH
0080	Lisclogher Br	265560	261141	42	WH
0090	Br u/s Rathkenna Br	267670	258150	42	MH
0300	Shanco Br	270865	254492	42	MH
0400	Stonyford Br	273137	253326	42	MH

River and Code : YELLOW (BLACKWATER) 07/Y/01

Tributary of : Blackwater (Kells) OS Catchment No: 159

OS Grid Ref : N 834 710 Date(s) Surveyed : 11/09/2003

Sampling Stations Biological Quality Ratings (Q Values) 1990 No. Location 1971 1994 1997 2000 2003 1100 Br u/s Blackwater R confl 4-5 3 3 3 4 3-4

Assessment: Unsatisfactory. Faunistically very unbalanced. Agriculture suspected. No change.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
1100	Br u/s Blackwater R confl	283534	271090	42	МН

River and Code : YELLOW (CASTLEJORDAN) 07/Y/02
Tributary of : Boyne OS Catchment No: 159
OS Grid Ref : N 612 372 Date(s) Surveyed : 15/09/2003

Sampl	ing Stations	Biological Quality Ratings (Q V					(Q Va	lues)	
No.	Location	1976	1981	1985	1990	1994	1997	2000	2003
0060	Nr Derryarkin	-	-	-	-	4	4	4	3
0100	Garr Br	-	3-4	4	3-4	4	3-4	3	3-4
0300	Clongall Br	4-5	4-5	4	4	4	4	4	4

Assessment: Intensive agriculture is suspected as the cause of the doubtful quality in the upper reaches (0060, 0070) of the Yellow River where there has been a marked deterioration since the survey of 2000. The lower river (0300) had been recently dredged and as a result algal crops had not been re-established but macroinvertebrate populations had recovered sufficiently to indicate the likelihood of satisfactory water quality there.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Nr Derryarkin	247910	236210	48	OY
0100	Garr Br	253177	236902	49	OY
0300	Clongall Br	259439	237542	49	MH/OY

HYDROMETRIC AREA 10

Avoca - Vartry

Askanagap Stream Aughrim *Avoca Avonbeg Avonmore	10A06 10A02 10A03 10A04 10A05
Ballycreen Brook Ballyduff Stream	10B02 10B01
Cloghoge Brook Coolalug Stream	10C01 10C02
Dargle Derry Water	10D01 10D02
Glencree Glencullen Glendasan Glenealo Glenmacnass Gold Mine	10G01 10G02 10G06 10G05 10G03 10G04
Kill of the Grange Stream [Kilmacanoge]	10K02 [10K03]
Newcastle Newtownmountkennedy	10N01 10N02
Ow	10001
Potters	10P01
Redcross	10R01
Shanganagh	10S01
Templerainy Stream Three Mile Water	10T04 10T01
Vartry	10V01

indicates rivers having seriously polluted stretches at time of this survey.

[The Kilmacanoge was not surveyed in 2003. Inaccessible]

River and Code : ASKANAGAP STREAM 10/A/06

Tributary of : Derry Water OS Catchment No: 171 OS Grid Ref : T 057 766 Date(s) Surveyed : 10/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1990

1994

1997

2000

2003

0400 Br u/s Derry R confl 4 5 4-5 4-5

Assessment: Continuing satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br u/s Derry R confl	305728	176712	62	WW

River and Code : **AUGHRIM (WICKLOW)** 10/A/02
Tributary of : Avoca OS Catchment No: 171
OS Grid Ref : T 196 768 Date(s) Surveyed : 10/07/2003

Sampl	ling Stations	Biol	ogical Qu	ality Ratings (Q 1997 1999 4-5 4-5		/alues)
No.	Location	1990	1994	1997	1999	2003
0200	Coat's Br	4	5	4-5	4-5	3
0400	Wooden Br	5	4-5	4-5	4	4

Assessment: Extensive slime growths and the absence of sensitive mayfly species indicated unsatisfactory water quality conditions at Coat's Bridge in July 2003; this represents a significant deterioration since 1999. Quality continued to be satisfactory in the lower reaches (0400).

Sampling Stations		National C	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Coat's Br	314795	178944	62	WW
0400	Wooden Br	318993	177029	62	WW

River and Code : **AVOCA** 10/A/03

Tributary of : Sea - Arklow Harbour OS Catchment No: 171

OS Grid Ref : T 256 729 Date(s) Surveyed : 11/07/2003

Stations				Biological Quality Ratings (Q Values)						
No.	1971	1974	1977	1981	1986	1990	1994	1997	2000	2003
0680	_	_	_	_	_	4-5	5	4	4	3-4
0700	1/0	1/0	1/0	1/0	1/0	1/0	1/0	flood	1/0	-
0900	-	-	-	-	2/0	2/0	1/0	flood	-	-

Assessment: Biological diversity has been deteriorating in the upper Avoca River since 1994 and because of the virtual absence of sensitive species which were formerly present, quality failed to reach a satisfactory (Q4) standard in the area upstream of the mines (0680) in 2003. As indicated by the Q1/0 at Avoca village (0700 sampled in 2002) the middle and lower reaches continued to be seriously polluted by acid mine drainage effluent.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0680	1km d/s Avonbeg R confl	319661	182146	62	WW
0700	Avoca Br	320331	179794	62	WW
0900	Footbr 0.5km d/s Aughrim R	320245	176469	62	WW

River and Code : **AVONBEG**Tributary of : Avoca OS Catchment No: 171
OS Grid Ref : T 190 832

Date(s) Surveyed : 09/07/2003

Sampl	ing Stations	Biological Quality Ratings (Q Val				
No.	Location	1990	1994	1997	2000	2003
0100	Ford nr Barravore	5	3-4*	4	3-4	3-4
0400	Drumgoff Br	5	4	4	4	3
0600	Greenan Br	4	4	4	3-4*	3-4*
0800	Meetings Br	4-5	4	4-5	4	3

Assessment: Following further significant deterioration at Drumgoff and Meetings Bridges (0400, 0800) none of the four Avonbeg locations surveyed were in a satisfactory condition in July 2003. Algal and slime growths were well developed in the upper and lower reaches (0100, 0600) and the substratum was also heavily silted at the latter location. Conditions are unsatisfactory and deteriorating. The recent deterioration in the upper Avoca River (q.v.) appears to be related. Forestry activities suspected. *Silt

AVONBEG Continued

Samp	oling Stations	National	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ford nr Barravore	306591	194165	56	WW
0400	Drumgoff Br	310549	190670	56	WW
0600	Greenan Br	314516	187510	62	WW
0800	Meetings Br	319040	182999	62	WW

River and Code : **AVONMORE**Tributary of : Avoca OS Catchment No: 171
OS Grid Ref : T 190 832 Date(s) Surveyed : 09/07/2003

Sampl	ing Stations				Biological Quality Ratings (Q Value					'alues)
No.	Location	1971	1974	1981	1985	1990	1994	1997	2000	2003
0010	Old Bridge	-	-	-	-	5	-	4-5	5	4-5
0050	Br in Annamoe	-	-	-	-	4	4	4	4	4
0100	Ballard Br	-	-	5	4-5	4-5	4	4	4	4-5
0200	Clara Br	-	4-5	5	4-5	4-5	4-5	4-5	4	4
0300	Rathdrum Br	5	3-4	5	4-5	4	4-5	4-5	4	4
0500	Lion's Br	5	5	5	5	5	4	4	4-5	4

Assessment: Continuing generally Fair quality. Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Old Bridge	316092	206179	56	WW
0050	Br in Annamoe	317278	199225	56	WW
0100	Ballard Br	314404	195635	56	WW
0200	Clara Br	316871	192098	56	WW
0300	Rathdrum Br	319259	188727	62	WW
0500	Lion's Br	319206	183295	62	WW

River and Code : **BALLYCREEN BROOK** 10/B/02
Tributary of : Aughrim OS Catchment No: 171
OS Grid Ref : T 130 796 Date(s) Surveyed : 07/07/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0400	Br W of Macreddin	5	4-5	4	4-5	4-5		
0700	Tinnakilly Br	5	4-5	4	4-5	4-5		

Assessment: Indications are of continuing satisfactory quality despite considerable bottom siltation in the middle reaches (0400).

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br W of Macreddin	312082	182555	62	WW
0700	Tinnakilly Br	313312	179756	62	WW

River and Code : **BALLYDUFF STREAM (WICKLOW)** 10/B/01
Tributary of : Avoca OS Catchment No: 171
OS Grid Ref : T 224 748 Date(s) Surveyed : 07/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

3-4 3-4 3 3/0 3-4*

Assessment: Appears to be improving but remains impacted by heavy siltation. Indications are of an abatement of the suspected toxicity previously (2000) reported.*Silt

Sampling Stations	National Grid Re	ef. Discovery County
No. Location	\mathbf{X} \mathbf{Y}	Series No. Code
0200 Ballyduff Br	322229 17313	8 62 WW

River and Code : CLOGHOGE BROOK
Tributary of : Avonmore OS Catchment No: 171
OS Grid Ref : O 161 059 Date(s) Surveyed : 08/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

1000 Br u/s Annamoe R confl

5 5 5 4-5 4-5

Assessment: This ultra-oligotrophic, acid sensitive stream was again assessed as satisfactory in July 2003. This type of catchment is not suited to coniferous forestry development.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br u/s Annamoe R confl	315895	206011	56	WW

River and Code : COOLALUG STREAM 10/C/02
Tributary of : Derry Water OS Catchment No: 171
OS Grid Ref : T 070 747 Date(s) Surveyed : 10/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
	Coolalug Br Br d/s Killaveny Br	4 3-4	4 3-4	4-5 4-5	3/0 3*	4 4	

Assessment: Following a marked improvement at both locations surveyed the Coolalug Stream was assessed as satisfactory in July 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Coolalug Br	307571	172974	62	WW
0500	Br d/s Killaveny Br	307456	174944	62	WW

River and Code : **DARGLE**Tributary of : Sea - at Bray Harbour OS Catchment No: 169
OS Grid Ref : O 268 193

Date(s) Surveyed : 24/06/2003

Stations					Biological Quality Ratings (Q Value				alues)	
No.	1971	1974	1978	1982	1986	1990	1994	1997	2000	2003
0010	_	_	_	5	5	5	5	4-5	4-5	5
0100	-	_	_	5	4-5	4-5	4-5	4	3	4
0200	5	5	5	5	5	-	-	-	-	-
0250	-	-	-	-	-	4-5	4	3-4	3	3-4

Assessment: The upper reaches (0010) of the Dargle River continued to be in a highly satisfactory condition in late June 2003 and, following a significant improvement since 2000, the area just upstream of the Glencullen River (0100) was restored to a Fair quality condition. The lower reaches (0250) had also improved somewhat but remained below a satisfactory standard due to eutrophication and substratum siltation.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Br u/s Tinnehinch Br	320394	214724	56	WW
0100	Br u/s Glencullen R	324343	217074	56	WW
0200	D/s Glencullen R confl	324518	217311	56	WW
0250	1km u/s Bray Br	325499	218426	56	WW

River and Code : **DERRY WATER**Tributary of : Aughrim OS Catchment No: 171
OS Grid Ref : T 118 788 Date(s) Surveyed : 10/07/2003

Sampl	ing Stations	Biological Quality Ratings (Q V			alues)	
No.	Location	1990	1994	1997	2000	2003
0300	Br NW of Moyne	-	4-5	4	4	4-5
0600	Ballinglen Br	5	5	4-5	4-5	5
0800	Annacurragh Br	4	4	4-5	3-4	4

Assessment: Following a widespread improvement the Derry Water was in a satisfactory quality condition at each of the three locations surveyed in 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br NW of Moyne	303137	180187	62	WW
0600	Ballinglen Br	306604	175870	62	WW
0800	Annacurragh Br	310913	177873	62	WW

River and Code : **GLENCREE**Tributary of : Dargle OS Catchment No: 169
OS Grid Ref : O 204 148 Date(s) Surveyed : 24/06/2003

ling Stations Location	1982		_	l Quality 1994	•		alues) 2003
Wooden Br SE of Ballycoyle Br u/s Dargle R confl	- 5	5 5	5 5	5 5	- 5	4 5	5

Assessment: The upper location (0100) was inaccessible in 2003 but the biota at Station 0200 indicated waters of the highest quality standard in the lower river. Highly Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Wooden Br SE of Ballycoyle	316795	215697	56	WW
0200	Br u/s Dargle R confl	320256	214888	56	WW

River and Code : GLENCULLEN 10/G/02

Tributary of : Dargle OS Catchment No: 169
OS Grid Ref : O 246 174 Date(s) Surveyed : 24/06/2003

Sampl	Sampling Stations Biological Quality Ratings (Q Values)									
No.	Location	1971	1974	1978	1985	1990	1994	1997	2000	2003
	a	_	_	_	_	_	_	_	_	
0100	Glencullen Br	5	5	5	5	5	5	5	5	-
0300	2km u/s Enniskerry Br	4-5	5	5	5	4-5	4-5	4-5	4-5	4
0400	1.5km d/s Enniskerry Br	5	4-5	4	4-5	-	-	-	-	-
0500	Just u/s Dargle R confl	-	-	-	-	4-5	4-5	3-4	4	4

Assessment: Despite indications of increasing widespread eutrophication water quality in the Glencullen River continued to be of a satisfactory quality standard in 2003. Domestic dwellings and agriculture suspected as the source of the incipient eutrophication.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Glencullen Br	319222	219343	56	WW
0300	2km u/s Enniskerry Br	321413	218176	56	WW
0400	1.5km d/s Enniskerry Br	0	0	56	WW
0500	Just u/s Dargle R confl	324264	217183	56	WW

River and Code : GLENDASAN 10/G/06
Tributary of : Glenealo OS Catchment No: 171
OS Grid Ref : T 124 963 Date(s) Surveyed : 08/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Br nr Old Lead Works	3/0	4-5	5	5	_		
	Br u/s Glenealo R confl	5	4	5	4	4		

Assessment: Continuing satisfactory (Fair quality) in 2003. The uppermost location (0100) has been discontinued (surplus to requirements).

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br nr Old Lead Works	309896	198218	56	WW
0200	Br u/s Glenealo R confl	312332	196920	56	WW

River and Code : **GLENEALO**Tributary of : Avonmore OS Catchment No: 171
OS Grid Ref : T 142 957

Date(s) Surveyed : 08/07/2003

Sampl	ing Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Ford u/s Upper Lake	4-5	4	5	5	_		
0200	Br d/s Upper Lake	3	3/0	3/0	3/0	3/0		
0400	Just u/s Avonmore R	4	3-4	4	4	4-5		

Assessment: The upper reaches of the Glenealo River (0100) were inaccessible in 2003. Forestry is suspected as causing the unsatisfactory conditions in the stretch just below Glendalough Upper (0200) but for most of its course the indications were of satisfactory quality conditions.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ford u/s Upper Lake	309042	196177	56	WW
0200	Br d/s Upper Lake	310987	196386	56	WW
0400	Just u/s Avonmore R	314368	195611	56	WW

River and Code : GLENMACNASS 10/G/03

Tributary of : Avonmore OS Catchment No: 171 OS Grid Ref : T 144 964 Date(s) Surveyed : 08/07/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	(Ford) Br SE of Mall Hill	4-5	4	5	4	4
0500	Laragh Br	4-5	4	4-5	4-5	4

Assessment: Quality was assessed as 'Fair' at both points surveyed on the Glenmacnass River in July 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	(Ford) Br SE of Mall Hill	312372	200062	56	WW
0500	Laragh Br	314352	196633	56	WW

River and Code : GOLD MINE 10/G/04

Tributary of : Aughrim OS Grid Ref : T 190 770 OS Catchment No: 171

Date(s) Surveyed : 11/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

5 4-5 4-5 3 3-4

Assessment: Has improved since 2000 but further improvement is required before fully satisfactory conditions are restored. Locals report occasional slurry pollution.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Br u/s Aughrim R confl	318944	176840	62	WW

River and Code : **KILL OF THE GRANGE STREAM** 10/K/02

Tributary of : Sea - at Killiney OS Catchment No: x1
OS Grid Ref : O 237 260 Date(s) Surveyed : 23/06/2003

Sampl	Sampling Stations Biological Quality Ratings (Q Va				alues)		
No.	Location	1990	1991	1994	1997	2000	2003
0100	Nr Kill Lane National Sch	2	1	1-2	1-2	2-3	_
0200	Footbridge Meadowvale	-	-	-	-	-	2-3
0280	Br on Johnstown Rd	2	1	2-3	3	3	-
0500	Killiney Hill Rd Br	2	2	2-3	3	3	2-3

Assessment: Unsatisfactory. Hypertrophic and heavily silted. No change.

Samp	oling Stations	tions National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Nr Kill Lane National Sch	322677	226782	50	D
0200	Footbridge Meadowvale	0	0	50	D
0280	Br on Johnstown Rd	323602	225497	50	D
0500	Killiney Hill Rd Br	325548	223298	50	D

River and Code : **KILMACANOGE**Tributary of : Dargle OS Catchment No: 169
OS Grid Ref : O 248 174 Date(s) Surveyed : 23/06/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)		alues)		
No.	Location	1990	1994	1997	2000	2003
0300	Br in Kilmacanoge	3	3	3/0	3	_
0600	Br nr Kilbride Church	3	3	3	3	-

Assessment: The stream was inaccessible at both points in 2003. Propose to discontinue surveying due to inaccessibility.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br in Kilmacanoge	324759	214716	56	WW
0600	Br nr Kilbride Church	324476	216982	56	WW

River and Code : **NEWCASTLE (WICKLOW)** 10/N/01
Tributary of : Sea - near Six Mile Point OS Catchment No: y1
OS Grid Ref : O 317 032 Date(s) Surveyed : 25/06/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)			alues)	
No.	Location	1990	1994	1997	2000	2003
0400	Br S of Bloomfield	4	3-4	1/0	4	3
0600	0.5km d/s Newcastle Br	3	3	3	3-4	3

Assessment: Indications were of significant quality impairment above and below Newcastle in 2003. Has deteriorated since 2000. Unsatisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0400	Br S of Bloomfield	329088	204028	56	WW	
0600	0.5km d/s Newcastle Br	330370	204111	56	WW	

River and Code : **NEWTOWNMOUNTKENNEDY** 10/N/02
Tributary of : Sea - S. of Kilcoole OS Catchment No: y1
OS Grid Ref : O 315 064 Date(s) Surveyed : 25/06/2003

Sampling Stations Biological Quality Ratings (Q			ngs (Q V	alues)		
No.	Location	1990	1994	1997	2000	2003
0100	Br nr Hermitage	5	4-5	4-5	4-5	5
0500	Br nr Kilmullin	2-3	2-3	3	3	3*
0600	Br S of Ballyphilip	4	3	3-4	3	3

Assessment: The uppermost reaches of this stream (0100) were again in a highly satisfactory condition in 2003 but as in previous years quality was significantly impaired by heavy siltation in the Druid's Glen area (0500) and by suspected sewage from Newtown in the lower reaches (0600).*Silt

Sampling Stations	National	National Grid Ref.		County
No. Location	X	Y	Series No.	Code
0100 Br nr Hermitage	324883	207790	56	WW
0500 Br nr Kilmullin	328432	206389	56	WW
0600 Br S of Ballyphilip	329594	206255	56	WW

River and Code : OW 10/O/01
Tributary of : Aughrim OS Catchment No: 171
OS Grid Ref : T 118 788 Date(s) Surveyed : 07/07/2003

Sampling Stations Biological Quality Ratings (Q V			ngs (Q V	alues)		
No.	Location	1990	1994	1997	2000	2003
0100	Br near Aghavannagh Bks	5	4	4	4	4
0300	Ballymanus Br	5	4-5	5	4	4
0400	Roddenagh Br	5	5	5	4	4

Assessment: Biological diversity has declined in this river over the years since 1990 when water quality was highly satisfactory at all three locations; the two most recent surveys, however indicate quality to be just 'Fair' i.e., satisfactory but only just. Forestry in the upper catchment is suspected as causing this deterioration.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br near Aghavannagh Bks	305566	186103	62	WW
0300	Ballymanus Br	309307	181515	62	WW
0400	Roddenagh Br	311673	179166	62	WW

River and Code : **POTTER'S**Tributary of : Sea - at Brittas Bay OS Catchment No: 173
OS Grid Ref : T 319 847

Date(s) Surveyed : 26/06/2003

Samp	ling Stations	Biological Quality Ratings (Q Valu				alues)
No.	Location	1990	1994	1997	2000	2003
0300	Kilboy Br	-	4	4	4	3-4*
0500	Castletimon Br	4	3	4	4	4

Assessment: The Potters River was adversely impacted by heavy siltation from motorway construction at Kilboy Bridge (0300) in 2003 but it then recovered to a satisfactory condition in its lower reaches (0500).*Silt

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Kilboy Br	326892	187590	62	WW
0500	Castletimon Br	329700	185202	62	WW

River and Code : **REDCROSS**Tributary of : Sea - N. of Arklow OS Catchment No: 174
OS Grid Ref : T 279 785

Date(s) Surveyed : 26/06/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Br in Redcross	1	3	3	4	4		
0300	Kilpatrick Br	4-5	4	4	4	4		

Assessment: Continuing satisfactory. No change.

Sampling Stations		National C	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br in Redcross	325175	183881	62	WW
0300	Kilpatrick Br	326516	181008	62	WW

River and Code : SHANGANAGH

Tributary of : Sea - at Killiney Bay OS Catchment No: x1
OS Grid Ref : O 261 236 Date(s) Surveyed : 24/06/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
Carrio	ckmines Branch						
0200	Glenamuck Rd Br (Friarsland/Priorsland)	3	3	3	3	3	
0400	Br at Loughlinstown	2-3	3	3	3	3	
Main Channel							
0440	Enniskerry Rd Br	-	-	-	3-4	-	
0450	Br N of Ballycorus Lead Wks	3	4	-	-	-	
0460	Br SSW of Carns (Heron Ford Lane)	-	-	4	3	4	
0600	At Commons Road	3	3	4	3-4	3-4	

Assessment: A major improvement was recorded at Heron's Ford Lane (0460) on the Main Channel of the Shanganagh River in 2003 but there were indications of slight pollution again in the lower reaches (0600). The Carrickmines Branch continued to be in an unsatisfactory condition due to very heavy siltation at Friarsland (0200) and hypertrophic conditions at Loughlinstown (0400).

Samp	Sampling Stations		National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Glenamuck Rd Br (Friarsland)	321900	224100	50	D
0400	Br at Loughlinstown	324614	223251	50	D
0440	Enniskerry Rd Br	320788	221814	50	D
0450	Br N of Ballycorus Lead Wks	0	0	50	D
0460	Br SSW of Carns (Heron Ford La	ne) 323152	222333	50	D
0600	At Commons Road	325296	222967	50	D

River and Code : **TEMPLERAINY STREAM** 10/T/04

Tributary of : Sea - N. of Arklow OS Catchment No: c2 OS Grid Ref : T 261 748 Date(s) Surveyed : 07/07/2003

Sampling Stations	Biological Quality Ratings (Q Values)						
No. Location	1990	1994	1997	2000	2003		
0300 Templerainy Br	4	3	3	3*	3		
0500 Porter's Br	3-4	3	3-4	3-4*	3		

Assessment: Unsatisfactory. No change. Agriculture suspected.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Templerainy Br	324849	176603	62	WW
0500	Porter's Br	325702	174770	62	WW

River and Code : **THREE MILE WATER 10/T/01**Tributary of : Sea - S. of Wicklow OS Catchment No: 172
OS Grid Ref : T 325 874 Date(s) Surveyed : 26/06/2003

Sampling Stations		Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0200	Br SW of The Beehive	3-4	3-4	3	3*	_			
0300	Br S of Ballinteskin X rds	-	-	-	4	4			
0500	Br nr Magherabeg	3	3	4	3-4	4			

Assessment: Following an improvement in the lower reaches (0500) conditions were assessed as satisfactory at both locations surveyed on this stream in 2003.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br SW of The Beehive	327704	190276	56	WW
0300	Br S of Ballinteskin X rds	329353	189832	62	WW
0500	Br nr Magherabeg	331789	188038	62	WW

River and Code : VARTRY 10/V/01
Tributary of : Broad Lough OS Catchment No: 170
OS Grid Ref : T 321 942 Date(s) Surveyed : 25/06/2003

Stations						Biological Quality Ratings (Q Values)				
No.	1971	1974	1978	1982	1986	1990	1994	1997	2000	2003
0050	_	_	_	_	5	5	4-5	5	4-5	4
0100	-	-	5	4-5	5	4-5	4	4	4-5	4
0150	-	-	-	-	-	-	5	5	4-5	-
0300	5	4	5	4-5	5	4	4-5	4	3-4	3-4

Assessment: Land disturbance by suspected forestry operations is the most likely source of the heavy silt deposition observed above and below the Vartry Reservoir (0050, 0100) in 2003. Quality was assessed as just 'Fair' at these points. Slight pollution was again indicated at Newrath Bridge (0300) where there was a smell of sewage at the time of this investigation.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Ballinastoe Br	321899	207607	56	WW
0100	Annagolan Br	322155	199221	56	WW
0150	Nun's Cross Br	325753	197804	56	WW
0300	Newrath Br	328602	196685	56	WW

HYDROMETRIC AREA 14 Barrow

Aghalona	14A02	Glenlahan	14G02
Athy Stream	14A06	#Gowran	14G03
Aughavaud	14A04	Graney (Lerr)	14G07
Aughnabrisky	14A05	Grangecon Stream	14G06
Aughnacrew	14A07	Greese	14G04
Ballynaboley Stream	14B08	Lerr	14L01
Barrow	14B01	Levitstown Stream	14L02
Black (Borris)	14B06		
Blackwater (Laois)	14B03	Monefelim	14M03
Bothoge	14B04	Mountain (Carlow)	14M01
Burren	14B05		
		Old Leighlin Stream	14001
Cloncumber Stream	14C17	Owenass	14001
Crooked (Stradbally)	14C02		
Cushina	14C04	Palatine Stream	14P04
		Pollmounty	14P03
Daingean	14D06	Powerstown	14P02
Douglas (Laois	14D03		
Duiske	14D04	Rosenallis Stream	14R01
Dunrally Stream	14D05		
•		#Slate	14S01
Enaghan Stream	14E02	Stradbally	14S02
Esker Stream	14E01	·	
		Triogue	14T01
# Figile	14F01	#Tully Stream	14T02
Fuer	14F02	•	
Fushoge	14F03		
C			

[#] indicates rivers having seriously polluted stretches at time of this survey.

River and Code : AGHALONA 14/A/02
Tributary of : Burren OS Catchment No: 183
OS Grid Ref : S 793 730 Date(s) Surveyed : 30/09/2003

Sampling Stations			Biological Quality Ratings (Q Valu						lues)
No.	Location	1980	1982	1985	1989	1993	1997	2000	2003
0100	Friarstown Br	2	3	3	3	3	3	3	-
0150	Grangeford Br (u/s side)	-	-	-	3-4	3-4	3	3-4	3-4*
0200	Br nr Moatalusha House	4	3-4	4	4	3	3	3-4	3-4

Assessment: This sluggish, lowland stream was again excessively weedy and silted at Station 0150 and, as indicated by the luxuriant algal growths and the substratum calcification it was also distinctly eutrophic at Station 0200. Agriculture suspected. *Silt.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{X} \mathbf{Y}		Code
0100	Friarstown Br	280461	177301	61	CW
0150	Grangeford Br (u/s side)	281537	175144	61	CW
0200	Br nr Moatalusha House	280896	172839	61	CW

River and Code : **ATHY STREAM**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 682 942 Date(s) Surveyed : 01/09/2003

Sampl	ing Stations	Biological Quality Ratings (Q				alues)
No.	Location	1989	1993	1997	2000	2003
				_		
0200	Inch Br	3-4	3-4	3	3-4	3*
0300	Barkersford Br	3	3	-	-	-
0400	1st Br d/s Barkersford Br	-	-	3-4	3-4	3-4
0600	Br just u/s Barrow R	4	4	-	-	-

Assessment: Upper reaches (0200) heavily silted and weedy, lower reaches heavily calcified. Sensitive species not observed at either location. Unsatisfactory. Agriculture suspected. *Silt

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X Y		Series No.	Code
0200	Inch Br	273616	194684	55	KE
0300	Barkersford Br	270500	195000	0	Ke
0400	1st Br d/s Barkersford Br	269696	195791	55	KE
0600	Br just u/s Barrow R	0	0	0	Ke

River and Code : AUGHAVAUD 14/A/04
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 730 378 Date(s) Surveyed : 08/10/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0300	Br u/s Turra Br	4	4	_	_	_		
0400	Turra Br	3-4	4	3-4	4	3-4		
0600	Br at St Mullins	4	4	4	4	4		

Assessment: The improvement recorded in 2000 at Turra Bridge (0400) was not maintained in 2003 and, as the luxuriant weed and algal growths there indicate, the stream was once again suffering the effects of excessive nutrient enrichment in that area. Further downstream at St. Mullins (0600) the macroinvertebrate composition was consistent with satisfactory conditions but the presence of black silt (suspected slurry) and slime growths here does not auger well for the maintenance of good quality in the lower reaches. This stream is at risk and agriculture (slurry) is suspected.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br u/s Turra Br	0	0	0	-
0400	Turra Br	274449	139854	68	CW
0600	Br at St Mullins	272954	137799	68	CW

River and Code : **AUGHNABRISKY** 14/A/05

Tributary of : Mountain (Carlow) OS Catchment No: 183
OS Grid Ref : S 782 511 Date(s) Surveyed : 07/10/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0200	Scullogue Br	4	4	3-4	4	_		
0300	Br d/s Sculloge Br	-	-	-	-	5		
0500	Br just u/s Mountain R confl	4	4-5	4-5	4	4		

Assessment: Quality was assessed as satisfactory at both locations surveyed in 2003 and it was of the highest standard in the Sculloge Bridge area (0300) but the lower reaches(0500) had become much more weedy and silted since the previous survey indicating increasing eutrophication due to suspected agriculture (slurry).

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Scullogue Br	282662	147839	68	WX
0300	Br d/s Sculloge Br	0	0	0	Cw
0500	Br just u/s Mountain R confl	278268	151013	68	CW

River and Code : **AUGHNACREW**Tributary of : Pollmounty OS Catchment No: 183
OS Grid Ref : S 767 334 Date(s) Surveyed : 09/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0300	Ballyvegga Br	3-4	3-4	3-4	3-4	3		
0400	West Br S of Ballywilliam	3-4	3-4	-	-	-		
0500	Br just u/s Pollmounty R confl	3-4	3-4	3-4	4	4		

Assessment: An impoverished fauna lacking sensitive macroinvertebrates indicated some considerable ecological upset in the middle reaches (0300) of this stream in October 2003 but the lower reaches (0500) although quite weedy were assessed as satisfactory for the time being.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ballyvegga Br	279119	132617	76	WX
0400	West Br S of Ballywilliam	0	0	0	-
0500	Br just u/s Pollmounty R confl	276216	134365	76	WX

River and Code : **BALLYNABOLEY STREAM** 14/B/08
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 703 678 Date(s) Surveyed : 02/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1993 1997 2000 2003

4 3-4 3 3-4 3-4

Assessment: As in previous surveys indications were of somewhat less than satisfactory quality in this small stream in 2003. Unsatisfactory. No change.

Sampling Stations	National Grid Ref	. Discovery	County
No. Location	X Y	Series No.	Code
0700 Orchard Br	270362 167670	61	CW

River and Code : **BARROW** 14/B/01
Tributary of : Barrow/Nore/Suir Estuary OS Catchment No: 183
OS Grid Ref : S 722 388 Date(s) Surveyed : 06/10/2003

Station	Stations Biological Quality Ratings (Q Values)													
No.	1971	1974	1975	1976	1978	1979	1980	1982	1986	1989	1994	1997	2000	2003
0050							5	5	5	5	5	4-5	4-5	4-5
0100	-	-	-	-	-	-	3-4	<i>3</i>	4	3	3-4	4 - 3	4 - 3	3-4
0200	4	4	-	-	-	_	4	4-3	4	3-4	3-4	4	4	3-4
0300	4-5	3-4	-	-	-	-	5	-	4	3 -4	3 -4	3-4	4	3 -4 4
0500	3-4	3- 4 3-4	-	3	- 3-4	-	<i>3</i>	-	4	4	3-4	3- 4 3-4	3-4	3-4
0600	3 -4 4	3- 4 3-4	-	<i>3</i>	3- 4 3-4	-	4	-	4	4	3 -4 4	3 -4 4	3- 4 3-4	3- 4 3-4
0700	4	3 -4	-	-	3 -4 4	-	4	- 4	4-5	4 4-5	4	4	3 -4	3 -4 4
0760			-		4		4	-		_			4	
0800	- 4	-	-	-	2-3	-	- 3-4	-	- 4	- 4	- 4	-		-
0900	4	- 4-5	-	2-3	2-3 3-4	-	3 -4 4	- 4	4	4	4	- 3-4	- 3-4	3-4
1000	4-5	4-5 4-5		2-3 4-5	_		4	4	4-5	4	4	3- 4 3-4	3- 4 3-4	3- 4 4
1200	4-5 4-5	4-5 4-5	-		-	-	5	-	4-3 4	3	3	_	_	
1300			-	-	-	-	3 4	-	4 4-5	3 3-4	<i>3</i>	-	- 3-4	3-4
1400	- 5	5	-	-	-	-	4	-	4-3 4	3-4 4	4	- 4	3-4 4	3-4 4
1500	<i>3</i>		-	-	-		4	- 4	4	4	4	3-4	3-4	4
1590	-	-	-	-	-	-		4	4	=	-	3-4 3-4	3-4 3-4	
1600	- 1-2	3	-	- 1-2	- 1-2	-	3	3-4	- 4	- 3-4	- 3-4	_	3-4	3-4
		2	-	1-2 2-3	2	-		3-4 4	4	3-4 4	3-4 4	- 3-4	- 4	-
1900	1 1-2	2	-			-	4			3		_		4
2000			-	-	2	-	3	3-4	3-4	_	4	3-4	4	4
2200	3-4	2-3 2	-	2	3 2	-	-	2	- 1	-	-	-	3	4
2400	2		-			-	-		1	-	-	-	-	-
2450	-	-	-	2.4	-	-	- 2.4	3	3-4	4	3	3	3	3
2600	3	3	-	3-4	2	-	3-4	3	3	3-4	3-4	3	3	3-4
2680	-	-	-	-	-	-	-	2.4	2.4	3	-	3-4	3-4	4
2700	4	-	4	4	4	-	3	3-4	3-4	_	3	-	-	-
2750	-	-	-	-	-	-	-	-	-	-	-	4	4	4
2900	4	-	4	-	-	3-4	3	2-3	2-3	2-3	3	3-4	3-4	4
2910	4	-	4	-	-	3-4	-	-	3-4	3-4	4	4	3-4	3-4
3000	-	-	-	-	-	-	4	4	3-4	3-4	3-4	3-4	4	3-4
3400	4	-	5	-	-	4	5	4	4	4	3-4	4	4	-
3500	4	-	3-4	-	-	4	4	4	4	3-4	3-4	3-4	3-4	3-4

Assisted by the net increase (of two) in the number of Class A locations and a corresponding reduction in Class C and because the number of locations showing some improvement (six) exceeded the number deteriorating (three) it is clear that there has been an overall improvement in the Barrow since 2000. This despite the fact that water levels were generally below normal everywhere and were very low in the upper river thus providing less dilution capacity for wastes. However, eutrophication continued to be widespread due to suspected agriculture in the upper river (0100, 0200) and to suspected sewage and other discharges from Portlaoise (0500, 0600), Portarlington (0900), Monasterevan (1300), Carlow (2450) and Bagenalstown (2910, 3000).

BARROW Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Tinnahinch Br	235155	210490	54	LS
0100	Ford S of Rearyvalley	236128	213025	54	LS
0200	Ballyclare Br	238591	214722	54	LS
0300	Twomile Br	242280	211786	54	LS
0500	Borness Br	246396	209279	54	LS
0600	Portnahinch Br	249067	210029	54	OY
0700	Kilnahown Br	251371	210753	54	LS
0760	Barrow Br	253997	212626	55	LS/OY
0800	1km d/s Portarlington	0	0	55	Ls
0900	Ford S of Trascan	258196	212310	55	LS/OY
1000	Pass Br	262277	210933	55	KE
1200	1km d/s Monasterevan Br	0	0	55	Ke
1300	Ford E of Fisherstown House	263295	205798	55	KE/LS
1400	Dunrally Br	263649	201794	55	KE/LS
1500	Bert Br	265925	196929	55	KE
1590	u/s Athy at Boat Club	268061	194455	55	KE
1600	Athy Br	0	0	55	Ke
1900	Tankardstown Br	270366	188203	61	KE/LS
2000	Maganey Br	271712	184733	61	KE/LS
2400	1.5km d/s Graigue Br	0	0	61	Cw/Ls
2450	Footbridge Dolmen Hotel	270638	174158	61	CW/LS
2600	Milford Br	269917	170497	61	CW
2680	Cardinal Moran Br	269482	166332	61	CW
2700	Leighlinbridge	269067	165467	61	CW
2750	At Island nr Killinane Ho	269534	163800	61	CW
2900	Royal Oak Br (LHS)	268937	161444	61	CW
2910	Royal Oak Br (RHS)	268937	161444	61	CW
3000	Fenniscourt Lock	269757	159377	68	CW
3400	Clashganny Lock	273456	145889	68	KK/CW
3500	Graiguenamanagh Br	270973	143540	68	KK/CW

River and Code : **BLACK (BORRIS)**Tributary of : Mountain (Carlow) OS Catchment No: 183
OS Grid Ref : S 728 480 Date(s) Surveyed : 29/07/2003

Sampl	ing Stations	Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1989	1993	1997	2000	2003
0200	Br SW of Ballynakill	3-4	3	_	_	_
0300	Aghline Br	3	3-4	-	-	-
0700	Corries Br	-	-	4-5	4	4
0900	Dunroe Br	4	4	-	-	-
1000	Aghnamannoge Br	-	-	4-5	4	4
1300	Kilcloney Br	4	4	-	-	-
1380	1.2 km u/s Br in Borris	-	-	4-5	4-5	4
1400	Br in Borris	4	4	-	-	-

Assessment: Quality was assessed as 'Fair' at each of the three points surveyed on the Black River in late July 2003. Satisfactory. No change.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br SW of Ballynakill	0	0	0	_
0300	Aghline Br	0	0	0	-
0700	Corries Br	274968	155827	68	CW
0900	Dunroe Br	0	0	0	_
1000	Aghnamannoge Br	273428	154565	68	CW
1300	Kilcloney Br	0	0	0	_
1380	1.2 km u/s Br in Borris	273295	151081	68	CW
1400	Br in Borris	0	0	0	-

River and Code : **BLACKWATER (LAOIS)** 14/B/03

Tributary of : Owenass OS Catchment No: 183
OS Grid Ref : N 433 057 Date(s) Surveyed : 15/07/2003

Samp	ling Stations	Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1989	1993	1997	2000	2003
0400	Br SE of Camcloon	-	_	3-4	_	_
0500	Br SW of Clonygowan	3-4	3-4	-	-	-
0800	Br nr Clontyglass	-	-	-	4-5	4
0900	SW of Clonsoghey	3	3-4	4	-	-
1000	Blackwater Br	3-4	3-4	3-4	3-4	3-4

Assessment: Continuing as before i.e., satisfactory at Clontyglass (0800) but slightly below par in the lower reaches.

BLACKWATER (LAOIS) Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br SE of Camcloon	239802	202485	54	LS
0500	Br SW of Clonygowan	0	0	0	Ls
0500	Br SW of Clonygowan	0	0	0	Ls
0800	Br nr Clontyglass	242797	202551	54	LS
0800	Br nr Clontyglass	242797	202551	54	LS
0900	SW of Clonsoghey	243988	203232	54	LS
1000	Blackwater Br	243586	205685	54	LS

River and Code : **BOTHOGE**Tributary of : Greese OS Catchment No: 183
OS Grid Ref : S 794 936 Date(s) Surveyed : 02/09/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)			alues)	
No.	Location	1989	1993	1997	2000	2003
0100	Rathtoole Br	3	3	3/0	3	3-4
0200	Ballycore Br	3/0	3	-	-	-
0300	Br to S of Timolin	3/0	3-4	3/0	3-4	3-4

Assessment: Has improved somewhat at Rathtoe Bridge (0100) but weed growth was excessive at both locations surveyed in 2003. Further improvement is required before a satisfactory quality status is achieved.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Rathtoole Br	282675	192892	55	WW
0200	Ballycore Br	0	0	0	Ke/Ww
0300	Br to S of Timolin	279928	193235	55	KE

River and Code : **BURREN**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 717 765

Date(s) Surveyed : 30/09/2003

Sampl	ing Stations		Bi	ologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1976	1980	1984	1989	1993	1997	2003
0020	Burren Br Coolasnaghta				4-5	4-5	4-5	4-5
0060	Milltown Br	_	_	_	3	4-3	2-3	3
0100	Ullard Br	_	5	4	4	4	4	4
0200	Ballintrane Br	_	5	4	4-5	4	3-4	3-4
0300	Rathtoe Br	_	4	4	4	4	3-4	4
0400	Staplestown Br	4	4	4	4	3-4	3	3-4
0485	Ring Rd Br Carlow (d/s side)	-	-	-	-	-	-	3-4
0490	Shopping Centre Br Carlow	-	-	-	-	-	3	-
0500	Burren Br (RHS)	4	4	4	4	3-4	-	-

Assessment: With the exception of the uppermost reaches (0020) where water quality continued to be of a high standard the Burren River was in a generally over-enriched, eutrophic condition at the time of this survey in late September/early October 2003. Slight pollution was again recorded in the middle and lower reaches (0200, and 0400) reversing the improvements recorded in these areas in 2000 while a more marked deterioration was apparent downstream of a trout farm at Milltown Bridge (0060). By contrast, the lowermost reaches (0485) were in a somewhat better condition than formerly but overall there is considerable room for improvement throughout the river.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Burren Br Coolasnaghta	281929	156877	68	CW
0060	Milltown Br	278822	158784	68	CW
0100	Ullard Br	279287	162876	61	CW
0200	Ballintrane Br	279706	167716	61	CW
0300	Rathtoe Br	280786	171368	61	CW
0400	Staplestown Br	275361	174616	61	CW
0485	Ring Rd Br Carlow (d/s side)	0	0	0	_
0490	Shopping Centre Br Carlow	272115	176502	61	CW
0500	Burren Br (RHS)	0	0	0	-

River and Code : CLONCUMBER STREAM 14/C/17
Tributary of : Slate OS Catchment No: 183
OS Grid Ref : N 723 233 Date(s) Surveyed : 26/08/2003

Samp	ling Stations	Biologi	ical Quality	Ratings (Q	Values)
No.	Location	1993	1997	2000	2003
0100	Br at Wheelam Crossroads	-	3	3*	3-4*
0200	Old River Br (W)	3-4	3-4	3*	3-4

Assessment: The Cloncumber or Pollardstown Stream was heavily silted in its upper reaches and eutrophic in its lower reaches in late August 2003. *Siltation plus suspected ground water effects.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br at Wheelam Crossroads	275661	217505	55	KE
0200	Old River Br (W)	274410	220978	49	KE

River and Code : **CROOKED (STRADBALLY)** 14/C/02
Tributary of : Stradbally (Laois) OS Catchment No: 183
OS Grid Ref : S 569 957 Date(s) Surveyed : 01/09/2003

Samp	ling Stations	Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1989	1993	1997	2000	2003		
0200	D. W. CI	4	4.5	4	2.4	4		
0200	Br W of Luggacurren	4	4-5	4	3-4	4		
0400	Blue Br	4	4	-	-	4		
0600	Timogue Br	4	4	3-4	3	3*		
0800	2nd Br u/s Stradbally R confl	-	-	3-4	3-4	3-4		
0900	Pole's Br	4	3-4	_	_	-		

Assessment: Indications at Stations 0200 and 0400 were of a recovery to satisfactory conditions in the upper half of the Crooked River but, following recent dredging at and above Timoge Bridge (0600), the lower half of the river was very heavily silted and in a distinctly unsatisfactory condition in late August 2003.*Silt

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br W of Luggacurren	258598	188759	61	LS
0600	Timogue Br	255408	193702	55	LS
0800	2nd Br u/s Stradbally R confl	256041	194795	55	LS
0900	Pole's Br	256990	195585	0	Ls

River and Code : CUSHINA 14/C/04
Tributary of : Figile OS Catchment No: 183
OS Grid Ref : N 607 157 Date(s) Surveyed : 27/08/2003

Sampling Stations		Biological Quality Ratings (Q Value						
No.	Location	1980	1985	1989	1993	1997	2000	2003
0050	Br NE of Clonygowan	_	_	3-4	3-4	3	3-4	3
	Kelly's Br	-	-	3-4	3-4	3	4-5	4
0100	Cushina Br	4	4	4-5	4-5	3-4	4	4

Assessment: Heavy usage by watering animals is suspected as being the most likely cause of the further deterioration and the unsatisfactory condition of the upper river (0050) but, as indicated by the 'Fair' (Q4) quality at Stations 0080 and 0100, the lower half was likely to have been satisfactory in 2003.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Br NE of Clonygowan	248590	216504	54	OY
0080	Kelly's Br	253351	216341	55	OY
0100	Cushina Br	255960	216138	55	OY

River and Code : **DAINGEAN**Tributary of : Figile OS Catchment No: 183
OS Grid Ref : N 605 238

Date(s) Surveyed : 25/08/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	gs (Q V	alues)
No.	Location	1981	1984	1986	1989	1990	1993	1997	2000	2003
0100	Island Br	3-4	3-4	3-4	2-3	-	3	3	2-3	2-3
0200	Br d/s Island Br	3	3	3	2	2	2-3	2-3	2	3
0400	Br E of Mount Lucas House	1	2	3	2/0	2	3-4	3	3	3
0520	Nr Esker Br	-	-	3-4	3	-	3	3-4	3	3-4
0600	1 km u/s Figile R confl	-	3	3-4	-	-	-	-	4	3

Assessment: While no change was apparent in the uppermost reaches of this river a significant improvement was recorded below Daingean (0200) in 2003; serious pollution was no longer indicated at that point but further recovery will be required before satisfactory conditions are restored there. The unsatisfactory condition of the upper river was indicated by poor biological indicators and by the very low DO (21%) recorded at Island Bridge (0100) at the time of this survey. A minor improvement was recorded near Esker Bridge (0520) but a marked deterioration in the lower reaches was indicated by the complete absence of insect life formerly present at Station 0600. Overall condition unsatisfactory.

DAINGEAN Continued

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Island Br	247785	226932	48	OY
0200	Br d/s Island Br	248366	227674	48	OY
0400	Br E of Mount Lucas House	252621	227635	49	OY
0520	Nr Esker Br	255720	227107	49	OY
0600	1 km u/s Figile R confl	259791	223342	49	OY

River and Code : **DOUGLAS (LAOIS)**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 714 825 Date(s) Surveyed : 04/09/2003

Sampl	ing Stations			Biolog	ical Qu	iality F	Ratings	(Q Va	lues)
No.	Location	1976	1980	1984	1989	1993	1997	2000	2003
			_						
0050	Wandesford Br	-	5	4-5	4-5	4	-	-	-
0080	Br d/s Wandesford Br	-	-	-	-	-	4-5	3-4	3-4
0090	Br u/s Gale's Br	-	-	-	4-5	4	-	-	-
0100	Gale's Br	-	4	4	4	4-5	4-5	4	4
0200	Br d/s Gale's Br (Coolanagh)	-	4	3	3-4	3-4	3-4	3-4	3-4
0300	Grange Br	4	3	3	3-4	3	4	3	3-4*

Assessment: The overall quality situation in the Douglas river in 2003 was very similar to the generally unsatisfactory condition recorded in the previous survey: marked eutrophication was again apparent at 0080 and 0200 and the lower reaches (0300), although slightly improved since 2000, were heavily silted. Severe bank erosion was apparent at the upper surveyed location (0080).*Silt.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Wandesford Br	0	0	0	Ls
0080	Br d/s Wandesford Br	264191	185620	61	LS
0090	Br u/s Gale's Br	0	0	0	Ls
0100	Gale's Br	265901	186004	61	LS
0200	Br d/s Gale's Br (Coolanagh)	268890	183898	61	LS
0300	Grange Br	271097	182299	61	LS

River and Code : **DUISKE**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 708 437 Date(s) Surveyed : 08/10/2003

Sampl	ling Stations			Biolog	ical Qu	ality F	Ratings	(Q Va	lues)
No.	Location	1980	1982	1985	1989	1993	1997	2000	2003
0100	A -11 D.:	4	4	2.4	2.4	4	4	4	4.5
0100	Aghclare Br	4	4	3-4	3-4	4	4	4	4-5
0200	Br in Graiguenamanagh	2	3	3	3-4	4	3	3	3

Assessment: This little stream continued to be in a satisfactory condition upstream of Graiguenamanagh (0100) in 2003 but, as in former years, it then became significantly polluted in the town.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Aghclare Br	268452	144414	68	KK
0200	Br in Graiguenamanagh	270911	143520	68	KK

River and Code : **DUNRALLY STREAM** 14/D/05
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 634 023 Date(s) Surveyed : 28/08/2003

Samp	0100 Br WNW of Garrymaddock	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0100	Br WNW of Garrymaddock	-	_	3-4	3-4	3-4		
0200	Br NNE of Rossmore Crossroads	4	3	4	3-4	3-4		
0400	Br u/s Barrow R confl	3-4	4	3-4	3-4	3*		

Assessment: Widespread eutrophication plus heavy siltation by watering cattle in the lower reaches (0400) again reflect the unsatisfactory quality status of this stream. High conductivity values indicated a groundwater input at Stations 0100 and 0200. *Silt.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br WNW of Garrymaddock	256358	202544	55	LS
0200	Br NNE of Rossmore Crossroads	258197	203911	55	LS
0400	Br u/s Barrow R confl	262941	202614	55	LS

River and Code : **ENAGHAN STREAM** 14/E/02

Tributary of : Coolnagillagh Stream OS Catchment No: 183 OS Grid Ref : N 531 168 Date(s) Surveyed : 27/08/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1989	1993	1997	2000	2003
0100	(East) Br W of Garrymona	_	_	_	3*	_
	Br u/s Coolnagillagh Str confl	4-5	4	4	4	4

Assessment: Continuing satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	(East) Br W of Garrymona	250199	219521	54	OY
0300	Br u/s Coolnagillagh Str confl	253125	216747	55	OY

River and Code : **ESKER STREAM**Tributary of : Daingean OS Catchment No: 183
OS Grid Ref : N 558 271 Date(s) Surveyed : 17/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1989	1993	1997	2000	2003	
0100	Newtown Br	3	3-4	4	4-5	3-4	
0200	Esker Br	3	4	4-5	4	3-4	

Assessment: As indicated by the unbalanced macroinvertebrate fauna and also by the DO values recorded (55% & 73%) conditions were assessed as unsatisfactory at both locations surveyed in 2003. Has deteriorated since 2000. Agriculture suspected.

Sampling Stations		National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Newtown Br	252987	228548	49	OY
0200	Esker Br	255900	227294	49	OY

River and Code : **FIGILE**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 618 114 Date(s) Surveyed : 25/08/2003

Sampl	ing Stations				Biological Quality Ratings (Q Val					
No.	Location	1975	1976	1979	1986	1989	1993	1997	2000	2003
						_	_	4.40		_
0050	Br S of Ticknevin Br	-	-	-	-	2	2	1/0	1-2	2
0100	Cushaling Br	-	-	-	3-4	3-4	3-4	2	3	3
0200	Kilcumber Br	-	-	-	3-4	3	3-4	3	3-4	3-4
0300	Br in Clonbulloge	3-4	4	4	4	4	-	3-4	4-5	4
0400	Derrygarran Br	-	-	-	4	4	4	3-4	3-4	3-4
0500	Ardra Br	-	4	5	4	4	4	3-4	4	4
0600	1 km u/s Barrow R confl	-	-	5	4	4	4	-	-	-

Assessment: With just two of the six surveyed locations indicating a satisfactory condition (0300, 0500) the overall quality situation in the Figile River in August 2003 was unsatisfactory and was unchanged in comparison with its condition in 2000. The uppermost surveyed location (0050) was again seriously polluted by suspected industrial and/or sewage discharges which are suspected as polluting the river for a considerable distance downstream i.e., to Cushaling Bridge (0100) and beyond. DO values recorded at the locations listed above were, respectively, 50%, 68%, 63%, 60%, 66% and 119%.

Samp	oling Stations	National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0050	Br S of Ticknevin Br	269695	230157	49	KE	
0100	Cushaling Br	265101	225853	49	KE/OY	
0200	Kilcumber Br	261057	226788	49	OY	
0300	Br in Clonbulloge	260979	223490	49	OY	
0400	Derrygarran Br	261891	220896	49	KE/OY	
0500	Ardra Br	259556	217964	55	OY	
0600	1 km u/s Barrow R confl	0	0	0	Ls/Ke	

River and Code : **FUER**Tributary of : Douglas (Laois)
OS Grid Ref : S 657 859

14/F/02
OS Catchment No: 183
Date(s) Surveyed : 04/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0400	Br u/s Douglas R confl	2-3	3	3-4	_	_		

Assessment: As in 2000 extremely low water levels prevented sampling but from the quantities of animal manure observed on the substratum at Fuer Bridge it would be reasonable to assume that quality was unlikely to have been of a satisfactory standard in 2003. It is proposed to drop this stream from future surveys.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0400	Br u/s Douglas R confl	264898	186064	61	LS

River and Code : **FUSHOGE**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 696 736 Date(s) Surveyed : 01/10/2003

Sampling Stations			Biological Quality Ratings (Q Value						lues)
No.	Location	1976	1980	1986	1989	1993	1997	2000	2003
0050	Strand Br	_	_	_	_	_	4	4-5	4
0100	1 km SE of Ballickmoyler	-	-	-	4	4	-	-	-
0200	Curragh Br	-	4	4	4	4	-	-	-
0220	Ballykillen Br	-	-	-	-	-	3-4	3-4	4-5
0250	Br S of Crockaun	-	-	-	4-5	3-4	-	-	-
0290	Fushoge Br	-	-	-	-	-	-	-	4
0300	Clogrenan Br	4	4	4	4	4	3-4	3	-

Assessment: Following a marked improvement in its lower reaches (0290) water quality was assessed as satisfactory at each of the three locations surveyed on the Fushoge River in early October 2003. However, heavy siltation and substratum disturbance by watering cattle threatened this situation at Strand Bridge (0050).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Strand Br	265441	180437	61	LS
0100	1 km SE of Ballickmoyler	0	0	0	-
0200	Curragh Br	0	0	0	-
0220	Ballykillen Br	269302	177210	61	LS
0290	Fushoge Br	0	0	0	Ls
0300	Clogrenan Br	269679	173962	61	LS

River and Code : GLENLAHAN 14/G/02
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 347 110 Date(s) Surveyed : 14/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1997 2000 2003

4-5 4-5 4-5 4-5 4

Assessment: Quality slightly lower than previously (i.e., 'Fair') but continuing satisfactory where surveyed.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Clarahill Br	234580	210808	54	LS

River and Code : GOWRAN 14/G/03

Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 682 540 Date(s) Surveyed : 07/10/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	gs (Q V	Values)
No.	Location	1976	1980	1985	1989	1990	1993	1997	2000	2003
0020	Br E of Freneystown	-	-	-	2-3	-	4	4-5	3	2
0050	Br S of Blanchvillespark	-	5	3	2-3	-	3-4	4	4	4
0100	Br at W side of Gowran	-	-	-	4	-	4	3	3	3-4
0200	Goat's Br	4	4	4	4	-	3	-	-	-
0220	1st Br d/s Goat's Br	-	-	-	-	-	-	3	4	3
0300	Br N of Goresbridge	-	-	-	4	-	4	3	3	3
0400	Br at Red Mill (N Channel)	-	-	3-4	2	2-3	3	3	3	2-3

Assessment: The Gowran River was in a generally unsatisfactory condition due to widespread eutrophication in October 2003; just one of the six locations surveyed (i.e., 0050) was satisfactory. Abundant sewage fungus and the virtual absence of resident macroinvertebrates pointed to serious pollution of agricultural origin (silage suspected) in the Freneystown area (0020) while municipal and industrial discharges are suspected for the unsatisfactory, hypertrophic condition of the river in and below Gowran (0100, 0220, 0300 and 0400).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br E of Freneystown	259800	159235	67	KK
0050	Br S of Blanchvillespark	260907	155563	68	KK
0100	Br at W side of Gowran	262853	153090	68	KK
0200	Goat's Br	0	0	0	-
0220	1st Br d/s Goat's Br	265443	153327	68	KK
0300	Br N of Goresbridge (S Channel)	268220	153896	68	KK
0400	Br at Red Mill (N Channel)	268153	154292	68	KK

River and Code : **GRANEY (LERR)**Tributary of : Lerr OS Catchment No: 183
OS Grid Ref : S 784 850 Date(s) Surveyed : 04/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0100	Miller's Br	3	3	3	3	_		
0200	Br in Graney	3	4	3-4	3	3		
0310	Just u/s Lerr R confl	4	4	4	3	3-4		

Assessment: This hard-water stream was hypertrophic and heavily silted in Graney (0200) and heavily calcified in its lower reaches (0310) in early September 2003. Unsatisfactory. No change. Agriculture suspected.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Miller's Br	284414	185411	61	KE/WW
0200	Br in Graney	281714	183963	61	KE
0310	Just u/s Lerr R confl	278523	184979	61	KE

River and Code : **GRANGECON STREAM** 14/G/06
Tributary of : Greese OS Catchment No: 183
OS Grid Ref : S 833 978 Date(s) Surveyed : 02/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0100	Ardsillish Br	4-5	4	4	3-4	4		
0400	Br SE of Ballynure	4	4	4	-	3-4		

Assessment: Following minor changes at both locations surveyed this stream was assessed as satisfactory ('Fair' quality) at Ardsillish Bridge (0100) but slightly polluted and distinctly over-enriched in its lower reaches (0400) in early September 2003: DO at the latter point was 142%. Agriculture suspected.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ardsillish Br	286270	195494	55	WW
0400	Br SE of Ballynure	283600	196700	55	WW

River and Code : GREESE 14/G/04
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 712 830 Date(s) Surveyed : 02/09/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)					
No.	Location	1980	1985	1989	1993	1997	2000	2003
0040	N Br Naas Rd Dunlavin	_	_	3-4	4	3-4	_	_
0050	Br NE of Milltown	-	-	_	_	_	3	3
0070	Br NW of Cross Keys	-	-	1	2-3	2	2	3
0100	Spratstown Br	4	4	4	4	3-4	3	3-4
0200	Br nr Greese Bank	4	3-4	3	3-4	3	3	3
0300	Moone Br	4	3-4	3	3-4	-	-	-
0350	Br NE of Belan House	4	3-4	3-4	4	3-4	3	3
0400	Kilkea Br	4	3	3-4	4	3-4	3-4	3
0500	Br W of Castleroe Crossroads	4	4	4	3-4	3-4	3	3
0600	Br u/s Barrow R confl	4	3-4	4	3-4	3-4	3-4	3-4

Assessment: Despite a significant improvement in the Cross Keys area (0070) where serious pollution had abated, quality was nowhere satisfactory in the Greese River in early September 2003: all but two of the locations surveyed (0100, 0600) were significantly polluted. Industrial discharges are suspected at Cross Keys, sewage at Greese Bank (0200) and a combination of sewage and industrial wastes at Station 0350. Unsatisfactory.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	N Br Naas Rd Dunlavin	287400	202200	55	WW
0050	Br NE of Milltown	286377	201613	55	WW
0070	Br NW of Cross Keys	286164	201087	55	WW
0100	Spratstown Br	282424	198042	55	KE
0300	Moone Br	0	0	0	Ke
0350	Br NE of Belan House	277550	190633	55	KE
0400	Kilkea Br	274554	188305	61	KE
0600	Br u/s Barrow R confl	271695	182946	61	KE

River and Code : LERR

Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 714 815
Date(s) Surveyed : 04/09/2003

Sampling Stations Biological Quality Ratings (Q Val			lues)						
No.	Location	1976	1980	1985	1989	1993	1997	2000	2003
0080	E Br Castledermot	-	-	-	-	-	3-4	3	3-4
0100	Br S of Castledermot	-	4	4	4	4	-	-	-
0150	Br E of Woodlands House	-	-	-	3	3	3	-	-
0155	Agric Br S of Woodlands House	-	-	-	-	-	-	3	3
0200	Br W of Prumplestown House	-	4	4	3-4	3	-	-	-
0250	Ballaghmoon Br	-	-	-	3-4	3-4	3-4	3	3
0300	Lerr Br	4-5	4	4	4	3-4	3-4	3	3

LERR Continued

Assessment: The Lerr River was completely overgrown with the water-weed Apium sp. in Castledermot (0080) in September 2003 indicating considerable trophic enhancement while downstream of the town its quality status was assessed as doubtful at each of the three points surveyed. Sewage from Castledermot is suspected as the main reason for the unsatisfactory conditions below the town but ground-water input is suspected as a contributory factor in the lower reaches (0250, 0300).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	E Br Castledermot	278562	185386	61	KE
0100	Br S of Castledermot	0	0	0	Ke
0150	Br E of Woodlands House	276825	184177	61	KE
0155	Agric Br S of Woodlands House	276782	184109	61	KE
0200	Br W of Prumplestown House	275934	183183	0	Ke
0250	Ballaghmoon Br	274255	181486	61	KE
0300	Lerr Br	271808	181498	61	CW/KE

River and Code : LEVITSTOWN STREAM 14/L/02
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 710 865 Date(s) Surveyed : 03/09/2003

Samp	npling Stations Biological Quality Rating			ngs (Q V	alues)	
No.	Location	1989	1994	1997	2000	2003
0200	Br W of Duke Street	3-4	_	3-4	3-4	3-4
0300	Br u/s Barrow R confl	3-4	3	-	-	-

Assessment: Overgrown with water-weed and devoid of sensitive macroinvertebrates. Impacted by watering cattle and possibly by ground-water input.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br W of Duke Street	272153	187904	61	KE
0300	Br u/s Barrow R confl	0	0	0	Ke

River and Code : MONEFELIM 14/M/03

Tributary of : Barrow OS Catchment No: 183

OS Grid Ref : S 685 555 Date(s) Surveyed : 03/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1989	1993	1997	2000	2003	
0100	Castlewerren Dr	4	4	5	4-5	15	
0300	Castlewarren Br Br SE of Ballyvalden (100m d/s)	4	4	<i>5</i>	4-3 4-5	4-5 5	
0600	Br SW of Garryduff Crossroads	4	4	-	-	-	
0800	Br d/s Monefelim Br	-	-	3	4	3-4	
0900	Barraghcore Br	4	3-4	-	-	-	
1000	Br u/s Barrow R confl (d/s side)	4	4	3	4	3-4	

Assessment: The Monefelim River was in a mostly satisfactory condition as regards water quality in October 2003 but the lower reaches (0800, 1000) were assessed as eutrophic due to suspected agriculture (slurry), a reversal of the recovery recorded in the previous survey of 2000.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Castlewarren Br	261047	160893	61	KK
0300	Br SE of Ballyvalden (100m d/s)	262946	158668	68	KK
0600	Br SW of Garryduff Crossroads	0	0	0	Kk
0800	Br d/s Monefelim Br	266584	156494	68	KK
0900	Barraghcore Br	0	0	0	Kk
1000	Br u/s Barrow R confl (d/s side)	268471	155575	68	KK

River and Code : MOUNTAIN (CARLOW) 14/M/01
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 733 499 Date(s) Surveyed : 07/10/2003

Sampling Stations			Bi	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1980	1984	1989	1993	1997	2000	2003
0020	Br u/s Killedmond Br	_	_	4	4	4	4	5
0050	Br W of Killedmond	-	4-5	4-5	4-5	4-5	4	4-5
0070	Brook Lodge	-	-	4-5	4-5	5	4	5
0100	Ballycoppigan Br	5	4-5	4-5	4-5	-	-	-
0200	Just u/s Barrow R confl	5	4	3-4	4	4-5	4	-

Assessment: Highly satisfactory where surveyed and considerably improved since 2000. The lower reaches (0200) were inaccessible in 2003.

MOUNTAIN (CARLOW) Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br u/s Killedmond Br	279559	152135	68	CW
0050	Br W of Killedmond	276930	151603	68	CW
0070	Brook Lodge	274424	151004	68	CW
0100	Ballycoppigan Br	273437	149877	68	WD
0200	Just u/s Barrow R confl	272969	149751	68	CW

River and Code : **OLD LEIGHLIN STREAM** 14/O/02
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : \$ 690 647 Date(s) Surveyed : 02/10/2003

Sampli	ing Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
Parkn	akyle Branch							
0300	Ballynolan Br	2-3	3-4	4	3-4	-		
Main	Channel							
0400	Br in Old Leighlin	-	-	4-5	4	-		
0500	Br at E side of Old Leighlin	-	-	4-5	-	4-5		
0700	Madlin Br	4	3	4	3-4	3-4		

Assessment: Water levels were very low in this small stream in October 2003 when quality was assessed as satisfactory at Old Leighlin (0500) but excessive algal growths indicated significant eutrophication in the lower reaches (0700) where the DO concentration was 158 percent of saturation at the time of this survey.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ballynolan Br	268347	165090	61	CW
0400	Br in Old Leighlin	265981	165347	61	CW
0700	Madlin Br	268738	164563	61	CW

River and Code : **OWENASS**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 460 092 Date(s) Surveyed : 15/07/2003

Statio	ns						Bio	ological	Quality	Rating	s (Q Va	alues)
No.	1971	1974	1976	1978	1980	1984	1986	1989	1993	1997	2000	2003
0050					_			1 5	1.5	1 5	1.5	4.5
0050	-	-	-	-	5	-	-	4-5	4-5	4-5	4-5	4-5
0100	5	5	5	5	5	4-5	4-5	4	4	-	-	-
0120	-	-	-	-	-	-	-	-	-	5	5	4-5
0200	5	4-5	4-5	4-5	4	4	4	4	3-4	-	-	-
0220	-	-	-	-	-	-	-	3-4	3-4	4	3-4	3-4
0300	2	2	1-2	1-2	3	2	3-4	3-4	3-4	3-4	3-4	3-4

Assessment: The appearance of slime growths below the water treatment plant at Cathole Bridge (0050) is an unwelcome development but because biological diversity was not significantly affected, conditions were assessed as satisfactory there in July 2003. The lower reaches (0220, 0300) were again slightly polluted by suspected sewage.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Cathole Br	237703	204894	54	LS
0100	Br W of Barkmill	0	0	0	Ls
0120	Fords N of Barkmill	241476	205109	54	LS
0200	Owenass Br	0	0	0	Ls
0220	Br N of Irishtown Ho	244998	207295	54	LS
0300	1.7 km d/s Mountmellick	245973	208897	54	LS

River and Code : PALATINE STREAM 14/P/04
Tributary of : Lerr OS Catchment No: 183
OS Grid Ref : S 751 819 Date(s) Surveyed : 03/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)							
No.	Location	1989	1993	1997	2000	2003			
0200	Gorteen Br	3	3	4	3	3			

Assessment: Luxuriant Apium sp. growth (total cover) and a lack of sensitive macroinvertebrates indicated highly eutrophic conditions in this stream in September 2003. Agriculture suspected. Unsatisfactory. No change.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Gorteen Br	275836	181622	61	KE

River and Code : **POLLMOUNTY**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 737 352 Date(s) Surveyed : 08/10/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1980	1984	1989	1993	1997	2000	2003	
0100	Br N of Ballywilliam	4	3-4	3-4	3-4	4	4	4-5	
0200	750 m d/s Mill NW of Ballywilliam	1 4	4	4	4	4	4	-	
0300	D/s Aughananagh R confl	4	4	2-3	3	3	3	3-4	

Assessment: The 2003 survey revealed that the Pollmounty River was in a slightly better overall condition to that recorded in previous surveys: the middle reaches (0100) were again satisfactory and the lower reaches continued to be affected by fish-farm effluent but not as severely as heretofore.

Samp	Sampling Stations		l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br N of Ballywilliam	277291	135021	76	WX
0200	750 m d/s Mill NW of Ballywilliam	275748	135016	76	WX
0300	D/s Aughananagh R confl	274468	135507	76	WX

River and Code : **POWERSTOWN**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 687 523 Date(s) Surveyed : 29/07/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1989	1993	1997	2000	2003			
0200	Br SE of Powerstown	4	3-4	3-4	3-4	3-4			
0400	Br u/s Barrow R confl	4	4	3-4	3-4	4			

Assessment: An improvement to 'Fair' quality was recorded in the lower reaches (0400) of this small stream in late July 2003. The upper reaches were again over-enriched as in previous surveys.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br SE of Powerstown	266638	150792	68	KK
0400	Br u/s Barrow R confl	268492	152047	68	KK

River and Code : ROSENALLIS STREAM 14/R/01
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 422 119 Date(s) Surveyed : 14/07/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1989	1993	1997	2000	2003			
0100	Br at Mill W. of Rosenallis	3-4	3-4	_	_	_			
0300	Br N of Rosenallis	-	-	4	-	-			
0400	Br u/s Barrow R confl	3	3-4	4	3-4	4			

Assessment: Indications were of an improvement since 2000 restoring satisfactory water quality in the lower reaches of the Rosenallis Stream in July 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br at Mill W. of Rosenallis	239300	209700	0	Ls
0300	Br N of Rosenallis	239420	211251	54	LS
0400	Br u/s Barrow R confl	241916	211835	54	LS

River and Code : SLATE

Tributary of : Figile OS Catchment No: 183
OS Grid Ref : N 608 163

Date(s) Surveyed : 25/08/2003

Sampl	Sampling Stations				Biological Quality Ratings (Q Valu						
No.	Location	1976	1978	1980	1985	1989	1993	1997	2000	2003	
								_		_	
0020	Quigley's Br	-	-	-	-	2-3	2-3	3	2-3	2	
0050	Ford Br	-	-	-	-	3	3	3	3	2-3	
0100	Agar Br	4	5	4-5	3-4	3	3	3	3	3	
0150	E Br Rathangan (nr Church	n) -	-	-	-	-	-	3-4	3-4	3-4	
0200	100 m u/s Br nr Spencer Br	3-4	4	4	3-4	4	3-4	-	-	-	
0210	100 m d/s Br nr Spencer Br	1	3	4	4	3	3	3-4	3-4	3-4	
0300	River Br	3-4	4-5	4	3-4	4	4	-	4	4	

Assessment: The Slate River was seriously polluted by suspected sewage and domestic wastes in its upper reaches (0020) in late August 2003 and as the Q ratings at Ford and Agar Bridges (0050, 0100) indicate, quality remained significantly depressed for a considerable distance downstream. DO values recorded at the upper three stations were, respectively, 15%, 30% and 79% at the time of this survey. Indications at Stations 0150 and 0210 are of considerable eutrophication in the middle and lower reaches and only the lowermost section (0300) could be considered satisfactory.

SLATE Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Quigley's Br	278790	226708	49	KE
0050	Ford Br	276170	225422	49	KE
0100	Agar Br	270325	221669	49	KE
0150	E Br Rathangan (Opp Church)	267595	219555	55	KE
0200	100 m u/s Br nr Spencer Br	0	0	0	Ke
0210	100 m d/s Br nr Spencer Br	266578	219142	55	KE
0300	River Br	261457	216703	55	OY

River and Code : **STRADBALLY (LAOIS)**14/S/02
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : S 630 994 Date(s) Surveyed : 01/09/2003

Sampl	ing Stations		Biological Quality Ratings (Q Valu						
No.	Location	1976	1980	1984	1989	1993	1997	2000	2003
0020	Da NIVI - CD-III ada-						4	1.5	4
0030	Br NW of Ballintlea	-	-	-	-	-	4	4-5	4
0040	Upstream Br Timahoe	-	-	-	4	4	-	-	-
0050	Br on Portlaoise Rd Timahoe	-	5	4	3-4	4	-	-	-
0100	Br nr Bauteoge	-	4	3-4	3-4	4	3-4	3-4	3
0200	Stradbally Br	-	4	4	4	4	-	-	-
0300	Dowlings Br (in Brockley Park)	3-4	4	3-4	3	3	-	-	-
0350	Br WNW of Ballykilevan Ho	-	4	3-4	3-4	3-4	3	3-4	3
0400	Br nr Camac Aqueduct	-	4	3	4	4	3-4	3-4	3-4

Assessment: Low water levels are likely to have exacerbated pollution effects in the Stradbally river in 2003 and this was particularly evident at Bauteoge (0100) upstream of Stradbally and again at Ballykilevan (0350) below the town: both locations were assessed as moderately polluted, a deterioration in comparison to their previous status. The upper reaches (0030) continued to be satisfactory.

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Br NW of Ballintlea	253181	189624	61	LS
0040	Upstream Br Timahoe	0	0	0	Ls
0050	Br on Portlaoise Rd Timahoe	0	0	0	-
0100	Br nr Bauteoge	255244	193990	55	LS
0200	Stradbally Br	0	0	0	Ls
0300	Dowlings Br (in Brockley Park)	0	0	0	Ls
0350	Br WNW of Ballykilevan Ho	259624	197163	55	LS
0400	Br nr Camac Aqueduct	261383	199088	55	LS

River and Code : **TRIOGUE**Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 472 096 Date(s) Surveyed : 16/07/2003

Statio	ns						Bio	ological	Quality	Rating	s (Q Va	alues)
No.	1971	1974	1978	1980	1981	1984	1986	1989	1993	1997	2000	2003
0060	_	_	_	_	_	_	_	3	3	3	3-4	3
0100	5	4	4-5	4	4	4	4-5	4	4	4	3-4	3
0200	1	1-2	1	1	1	2	2	2-3	3	2	2	-
0300	3	2-3	2-3	3-4	1-2	2	2-3	2-3	3	2	2-3	3
0400	_	_	_	_	_	_	_	3	3-4	3	3	3

Assessment: Unsatisfactory due to widespread moderate pollution. Has further deteriorated upstream of Portlaoise (0060, 0100). Kyle Bridge (0200) inadvertently omitted this cycle.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Cush Br	247100	193900	54	LS
0100	Br 1.6 km u/s Portlaoise	247861	197129	54	LS
0200	Kyle Br	246374	200499	54	LS
0300	Br near Eyne	247474	204196	54	LS
0400	Br u/s Barrow R confl	247579	207414	54	LS

River and Code : TULLY STREAM 14/T/02
Tributary of : Barrow OS Catchment No: 183
OS Grid Ref : N 637 024 Date(s) Surveyed : 27/08/2003

Statio	ns					Biological Quality Ratings (Q Values)						
No.	1981	1986	1987	1988	1989	1990	1993	1997	2000	2003		
0100	4	4	_	_	3-4	_	3	3	3	3-4		
0200	2	2	2	2	2	2	2-3	2	2	2-3		
0300	4	2	2	2	3	-	3	2-3	2-3	1-2		
0390	-	-	-	-	-	-	-	-	2-3	2		
0400	3-4	2-3	-	2-3	3	-	3	3	-	-		
0500	4	3	-	-	3	-	3-4	3	3	3		
0600	-	4	-	-	3-4	-	4	3-4	4	4		

Assessment: Minor improvements at 0100 and 0200 contrast with substantial deterioration at 0300 and 0390 where the river was seriously polluted at the time of this survey in late August 2003.

TULLY STREAM Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br nr Tully House	273434	210936	55	KE
0200	500 m d/s Br near Tully Ho	273386	210508	55	KE
0300	Kilberrin Br	271724	207883	55	KE
0390	Soomeragh Br	270955	206649	55	KE
0400	Br u/s Nurney	271268	205987	55	KE
0500	Br d/s Cherrymills Br	268191	204332	55	KE
0600	Cloney Br	265497	201233	55	KE

HYDROMETRIC AREA 16 (Balance*)

Suir

Ara	16A03
Aughnaglanny	16A05
Borrisoleigh Stream	16B06
Clodiagh (Tipperary)	16C02
Farneybridge	16F02
Fidaghta	16F01
Fishmoyne	16F03
Glasha	16G01
# Halfway House Stream	16H02
Multeen	16M02
Owenbeg (Tipperary)	16O02

indicates rivers currently having seriously polluted stretches.

^{*}Most of the rivers in the Suir Catchment were surveyed in 2002.

River and Code : ARA 16/A/03

Tributary of : Aherlow OS Catchment No: 182

OS Grid Ref : S 002 296 Date(s) Surveyed : 18/06/2003

Statio	ns						Bio	ological	Quality	Rating	s (Q Va	alues)
No.	1971	1974	1976	1979	1981	1983	1985	1988	1992	1996	1999	2003
0100	_	_	_	_	_	_	_	3-4	3	3	3	3-4
0200	_	4-5	4	3-4	3-4	3-4	3-4	3-4	3-4	3	3-4	3-4
0300	2	1	1	1	3	3	2-3	3	3	3	1-2	3
0400	1	1	1	1	3	3	3	3	3	-	-	-
0440	-	-	-	-	-	-	-	3	3-4	3	3	3-4
0500	-	-	-	3-4	3-4	3-4	4	3	3-4	3-4	3	3-4
0600	2	3	3-4	3-4	3-4	3-4	4	3-4	3	3-4	3	3
0700	-	_	_	4	4	4	4	4	3-4	3-4	3-4	3-4

Assessment: Continuing wholly unsatisfactory, due mostly to slightly polluted conditions, despite improvements being recorded upstream (0100) and downstream of Tipperary town (0300, 0440) as well as at Bansha (0500) since the previous survey.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bohereenbuee Br	184792	134548	66	TY
0200	Br on R662 just u/s Tipperary	188215	135268	66	TY
0300	1 km d/s Tipperary nr Railway Br	189740	135160	66	TY
0400	Br nr Cordangan Manor	0	0	66	TY
0440	Br NE of Lacken	192434	133849	66	TY
0500	Bansha Br	195556	133145	66	TY
0600	Ara Br 2.8 km d/s Bansha	197459	131994	11	TY
0700	Ara Br u/s Aherlow R confl	199233	130224	11	TY

River and Code : **AUGHNAGLANNY** 16/A/05

Tributary of : Multeen (North) OS Catchment No: 182

OS Grid Ref : R 994 470 Date(s) Surveyed : 02/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1977 1980 1985 1988 1992 1996 1999 2003

0100 Victoria Br 4-5 5 5 4-5 4-5 4 4-5 4-5

Assessment: Continuing satisfactory.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Victoria Br	199031	148463	66	TY

River and Code : **BORRISOLEIGH STREAM** 16/B/06
Tributary of : Fishmoyne OS Catchment No: 182
OS Grid Ref : S 042 639 Date(s) Surveyed : 30/07/2003

Samp	ling Stations		Biological Quality Ratings (Q Values)							
No.	Location	1980	1981	1988	1992	1996	1999	2003		
0200	Br NE of Ballyduff	_	_	_	_	4	4	4		
0400	Ballyroan Br	-	-	4	4	4	4	4		
0600	Br 0.5 km SE of Borrisoleigh	3	4	3	2-3	2-3	3	3		
0700	Br u/s Fishmovne R confl	-	_	3-4	3	3	3	3-4		

Assessment: Continuing satisfactory upstream of Borrisoleigh (0200, 0400) and moderately polluted downstream of the town (0600) with some amelioration, to slight pollution, further downstream (0700) apparent since the previous survey. Also known as Cromoge River.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br NE of Ballyduff	198737	166942	59	TY
0400	Ballyroan Br	202057	167348	59	TY
0600	Br 0.5 km SE of Borrisoleigh	203439	166401	59	TY
0700	Br u/s Fishmoyne R confl	204086	164008	59	TY

River and Code : CLODIAGH (TIPPERARY) 16/C/02
Tributary of : Suir OS Catchment No: 182
OS Grid Ref : S 063 503 Date(s) Surveyed : 13/08/2003

Sampling Stations			Biological Quality Ratings (Q Values)						lues)
No.	Location	1976	1980	1986	1988	1992	1996	1999	2003
0040	Gorteenabarna Br	-	-	-	5	4	4	4	4-5
0070	Br W of Rathcardan	-	-	-	4-5	4-5	-	-	-
0080	Pallas Br	-	-	-	-	-	5	4-5	4-5
0100	Annfield Br	-	5	4-5	4-5	4	-	-	-
0200	Drumminnagleagh Br	-	-	-	4-5	4	4-5	4	4
0300	Ballyoughter Br	5	5	4-5	4-5	4	-	-	-
0400	Derrymore Br	5	5	4	4	4	3-4	4	4
0500	Rathkennan Br	-	-	-	4-5	4-5	-	-	4
0600	1.5 km d/s Rathkennan Br	5	5	4-5	4-5	4	4	4	4

Assessment: Continuing satisfactory. Both protected aquatic invertebrate species, the pearl mussel and crayfish, live in this river. Drainage work was being undertaken at the time of the survey in the stretch above Drumminnagleagh Bridge (0200).

CLODIAGH (TIPPERARY) Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Gorteenabarna Br	198173	165027	59	TY
0070	Br W of Rathcardan	0	0	0	-
0080	Pallas Br	202241	163820	59	TY
0100	Annfield Br	0	0	0	-
0200	Drumminnagleagh Br	204512	159766	66	TY
0300	Ballyoughter Br	0	0	0	-
0400	Derrymore Br	205008	154453	66	TY
0500	Rathkennan Br	0	0	0	-
0600	1.5 km d/s Rathkennan Br	204862	151371	66	TY

River and Code : **FARNEYBRIDGE**Tributary of : Clodiagh (Tipperary) OS Catchment No: 182
OS Grid Ref : S 054 543 Date(s) Surveyed : 13/08/2003

Sampling Stations Biologic					iality Rat	ings (Q V	'alues)
No.	Location	1988	1989	1992	1996	1999	2003
0100	Br E of Ballypatrick	3-4	_	3-4	_	_	_
0200	Br ENE of The Rag	2	2-3	3	3	3	3
0300	Br SE of The Rag	2-3	3	3	-	-	-
0500	Ballynahow Br	3	-	3	3	3	3
0600	Farney Br	3	-	4	4	4	4
0700	Just u/s Clodiagh R confl	3-4	-	4	4	4	4-5

Assessment: No significant change with upper reaches (0200, 0500) continuing unsatisfactory due to moderate pollution and lower reaches remaining satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br E of Ballypatrick	207140	164835	0	_
0200	Br ENE of The Rag	206715	163105	59	WD
0300	Br SE of The Rag	207215	161800	0	_
0500	Ballynahow Br	208602	159682	66	TY
0600	Farney Br	206679	157893	66	TY
0700	Just u/s Clodiagh R confl	205460	154326	66	TY

River and Code : FIDAGHTA 16/F/01
Tributary of : Suir OS Catchment No: 182
OS Grid Ref : S 013 314 Date(s) Surveyed : 15/08/2003

Sampling Stations					Biolog	gical Q	uality	Rating	s (Q V	(alues)
No.	Location	1976	1977	1981	1985	1988	1992	1996	1999	2003
0100	Br nr Aughnagower x-roads	_	_	3-4	3-4	3-4	3-4	3-4	3-4	3-4
	Fidaghta Br	-	3-4	4	3-4	3-4			3-4	3-4
0300	Kilnacask Br	4-5	_	3-4	4	4	3	3	4	4

Assessment: This spring-influenced river was again satisfactory in its lower reaches (0300) but continued to exhibit a reduced faunal response at the other two locations.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br nr Aughnagower Crossroads	195733	135009	66	TY
0200	Fidaghta Br	198492	133344	66	TY
0300	Kilnacask Br	200736	131700	66	TY

River and Code : **FISHMOYNE** 16/F/03

Tributary of : Clodiagh (Tipperary) OS Catchment No: 182
OS Grid Ref : S 043 638 Date(s) Surveyed : 30/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1988	1992	1996	1999	2003		
0040	D NIW CD			2	2	2.4		
0040	Br NW of Drom	-	-	3	3	3-4		
0080	Br SE of Kilfithmone Crossroads	4	4	-	-			
0200	Rathmoy Br	4	4	4	4	4		
0300	Monroe Br	4	3-4	3-4	4	4		

Assessment: Satisfactory in middle and lower reaches (0200, 0300) but continuing unsatisfactory in upper reaches although a slight improvement was recorded there since previous survey.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Br NW of Drom	206082	169044	59	TY
0080	Br SE of Kilfithmone Crossroads	0	0	0	_
0200	Rathmoy Br	204815	165661	59	TY
0300	Monroe Br	205071	162559	59	TY

River and Code : GLASHA (WATERFORD) 16/G/01
Tributary of : Suir OS Catchment No: 182
OS Grid Ref : S 298 232 Date(s) Surveyed : 15/08/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1988	1992	1996	1999	2003		
0200	Boola Br	-	_	4-5	4-5	4-5		
0300	Glenpatrick Br	4-5	4-5	-	-	-		
0400	Glen Br	4-5	4-5	4-5	4	4-5		

Assessment: Continuing satisfactory with no significant change.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Boola Br	227654	119980	75	WD
0300	Glenpatrick Br	0	0	0	_
0400	Glen Br	230312	122670	75	WD

River and Code : **HALFWAY HOUSE STREAM** 16/H/02
Tributary of : Suir Estuary OS Catchment No: 184
OS Grid Ref : S 659 099 Date(s) Surveyed : 09/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1993	1996	1999	2003		
0200	Br SW of Foxmount	3	3	3-4	3-4		
0300	Br to NW of Halfway Ho	3	3	3	2		

Assessment: Continuing unsatisfactory with significant deterioration, to seriously polluted conditions, at the second location (0300) where substantial slime growths were established due to a discharge of agricultural waste. This watercourse, which is also known as the Ballycanvan Stream, flows to the Kings Channel of the Suir Estuary below Waterford city.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br SW of Foxmount	265939	108586	76	WD
0300	Br to NW of Halfway Ho	266003	109661	76	WD

River and Code : **MULTEEN**Tributary of : Suir OS Catchment No: 182
OS Grid Ref : S 007 395

Date(s) Surveyed : 03/07/2003

Sampl	ing Stations			Biolog	ical Qı	ıality F	Ratings	(Q Va	lues)		
No.	Location	1976	1980	1985	1988	1992	1996	1999	2003		
East (Channel										
0030	Br NW of Falleennafinoga	-	-	-	-	-	4-5	4	4		
0100	Turraheen Br	-	5	5	5	5	3-4	4-5	4-5		
0200	Rossmore Br (RHS)	-	5	5	4	4-5	-	-	-		
0300	Clonedarby Br	-	5	4-5	5	4-5	4	3-4	4		
0400	Black Br	-	5	5	4	4	4	4-5	4		
0500	Aughnagross Br	5	5	5	4-5	4-5	4	4	4		
West Channel											
0540	Metal Br	-	-	-	4	4	3-4	4	4		
0600	1 km SE of Inchinsquillib	-	_	_	_	_	3-4	4	4		
0650	Br just u/s Glasheenyreagha R cont	f -	-	-	4-5	4-5	_	-	-		
0700	Ironmills Br	-	5	5	4-5	4-5	_	-	-		
0780	Br SW of Annacarty	-	_	_	_	_	4	4-5	4-5		
0800	Hawarden Br	5	5	5	4-5	5	_	-	-		
0900	Morpeth Br	-	5	_	5	4	4-5	4-5	4-5		
1000	Ballinaclogh Br	4-5	4	_	4	4	4	4	4		
1100	Ballygriffin Br	5	4	_	4	4	4	4	4		
	- 70	-	-		-	-	-	-			

Assessment: Following further improvement, since the previous survey, all locations were satisfactory in July 2003. The two protected aquatic invertebrate species, pearl mussel and crayfish, live in parts of the river.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Br NW of Falleennafinoga	195148	157683	66	TY
0100	Turraheen Br	199992	154422	66	TY
0200	Rossmore Br (RHS)	0	0	0	-
0300	Clonedarby Br	200142	149225	66	TY
0400	Black Br	198507	144704	66	TY
0500	Aughnagross Br	199098	141307	66	TY
0540	Metal Br	191884	153031	66	TY
0600	1 km SE of Inchinsquillib	191291	149635	66	TY
0650	Br just u/s Glasheenyreagha R conf	. 0	0	0	-
0700	Ironmills Br	0	0	0	-
0780	Br SW of Annacarty	191814	145111	66	TY
0800	Hawarden Br	0	0	0	-
0900	Morpeth Br	194074	141705	66	TY
1000	Ballinaclogh Br	198561	140864	66	TY
1100	Ballygriffin Br	200582	140392	66	TY
1100	Ballygriffin Br	200582	140392	66	TY

River and Code : **OWENBEG (TIPPERARY)** 16/O/02
Tributary of : Clodiagh (Tipperary) OS Catchment No: 182
OS Grid Ref : S 038 564 Date(s) Surveyed : 14/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1988	1992	1996	1999	2003			
0200	Br nr Roan	_	_	4	4	4			
0300	NNE of Knockmehil	4-5	4	-	-	-			
0400	Br SW of Rossoulty	4-5	4	4	4	4			
0500	Ford u/s Mulgrave Br	4-5	4-5	-	-	-			
0700	Br u/s Clodiagh R confl	4-5	4	4	4-5	4			

Assessment: Continuing satisfactory. No significant change.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br nr Roan	198577	160362	59	TY
0300	NNE of Knockmehil	0	0	0	_
0400	Br SW of Rossoulty	201652	159248	66	TY
0500	Ford u/s Mulgrave Br	0	0	0	_
0700	Br u/s Clodiagh R confl	203861	156460	66	TY

HYDROMETRIC AREA 18

Blackwater (Munster)

Allow	18A02	Glenakeefe	18G06
Araglin	18A03	Glencorra Stream	18G05
Awbeg (Buttevant)	18A05	Glendine (Blackwater)	18G07
Awnaskirtaun	18A07	Glenlara	18G08
		Glennafallia	18G10
Ballard Stream	18B10	Glenshelane	18G11
Ballyclough Stream	18B08	Goish	18G12
Behanagh	18B01	Gradoge ¹	18G13
# Blackwater (Munster)	18B02		
Bregoge	18B04	Knoppoge	18K02
Bride (Blackwater)	18B08		
# Brogeen	18B06	Licky	18L01
		Lyre	18L02
Clyda	18C02	,	
Coom	18C03	Monavugga	18M01
Crinnaghtane	18C07		
Cullavaw Stream	18C04	Nad	18N01
Curraheen (Cork)	18C06		
		Ogeen	18001
Dalua	18D01	Owbeg (Waterford) 18O02	
Douglas (Araglin)	18D03	Owenageeragh	18003
Douglas (Bride)	18D02	Owenanare	18004
		Owenbaun (Rathcoole)	18005
Farahy	18F01	Owenkeal	18006
Farnane	18F06	Owennagloo	18007
Finisk	18F02	Owennashad	18008
Finnow (Blackwater)	18F03	Owentaraglin	18009
Flesk (Bride)	18F04		
Funshion	18F05	Rathcool	18R01
		Ross (Killavullen)	18R02
Glashanabrack	18G02	,	
Glashawee (Allow)	18G03	Sheep	18S03
Glen (Banteer)	18G04	1	_
Glenaboy	18G05	Tourig	18T03
		C	

[#] indicates rivers having seriously polluted stretches at time of this survey.

¹Gradoge River is not shown on OS Rivers Catchment Map: is not a baseline river.

River and Code : ALLOW 18/A/02

Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 385 988 Date(s) Surveyed : 12/06/2003

Statio	ns						Bio	ological	Quality	Rating	s (Q Va	alues)
No.	1971	1974	1975	1978	1980	1982	1986	1990	1994	1997	2000	2003
0020	-	-	-	-	-	-	-	4-5	4-5	4-5	4-5	4-5
0100	5	-	5	5	5	-	4-5	4-5	4-5	4-5	4-5	4-5
0200	3-4	3-4	4	3	4	-	4	3	4	4	4	4
0300	4-5	3	4	3-4	4	4	4	4	4	4-5	4-5	4-5
0400	-	-	-	-	3-4	3-4	3-4	5	4-5	4-5	4-5	4
0490	-	-	-	-	-	3-4	3-4	3-4	3-4	3-4	3-4	3-4
0600	2	3	2-3	3-4	3-4	3-4	3-4	3-4	4-5	4	4	4

Assessment: Continuing satisfactory at all locations except downstream of Kanturk (0490) where again slightly polluted due to sewage. The protected pearl mussel lives in parts of the river.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br nr Rowls Aldworth	131300	116419	72	CK
0100	Raheen Br	136531	115606	72	CK
0200	Allow Br Freemount	139292	113807	4	CK
0300	John's Br	139481	109832	72	CK
0400	0.5km u/s Kanturk Br	138173	103724	72	CK
0490	1.3km d/s Kanturk Br	138385	101989	72	CK
0600	Leader's Br	138494	98912	79	CK

River and Code : **ARAGLIN (BLACKWATER)** 18/A/03

Tributary of : Blackwater (Munster) OS Catchment No: 190

OS Grid Ref : R 845 006 Date(s) Surveyed : 29/08/2003

Sampl	ing Stations				Biological Quality Ratings (Q Values					
No.	Location	1971	1975	1979	1983	1990	1994	1997	2000	2003
0080	Kingston Br	-	-	-	-	4-5	5	4-5	4-5	4-5
0200	Elizabeth's Br	-	-	5	5	4-5	5	4-5	4-5	4
0350	Glenfinnish Br is on trib	-	-	-	-	-	4-5	4-5	4	4-5
0400	Araglin Br	5	5	5	5	-	-	-	-	
0500	Coolalisheen Br	-	-	-	-	4	4-5	4-5	4-5	4-5

Assessment: Continuing satisfactory. No significant change.

ARAGLIN (BLACKWATER) Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	Kingston Br	194609	105971	74	WD
0200	Elizabeth's Br	190184	105216	74	CK
0350	Glenfinnish Br is on trib	187237	101833	74	CK
0400	Araglin Br	0	0	0	-
0500	Coolalisheen Br	184988	100586	74	CK

River and Code : **AWBEG (BUTTEVANT)** 18/A/05

Tributary of : Blackwater (Munster) OS Catchment No: 190

OS Grid Ref : R 693 001 Date(s) Surveyed : 11/07/2003

Statio	Stations Biological Quality Ratings (Q Values)													
No.	1971	1975	1979	1981	1985	1990	1994	1997	2000	2003				
East	Branch													
0120	-	-	-	-	-	4	3	3-4	3-4	4				
0160	-	-	-	-	-	3-4	3-4	4	3-4	4				
0250	-	-	-	-	-	4	3	3-4	3-4	4				
West	Branch	!												
0300	-	-	3	3-4	3	3-4	3-4	3	4	3				
0400	-	-	3	3-4	3	3	3	3	3-4	4				
Main	Chann	el												
0550	4-5	-	-	-	-	4	3	3-4	3-4	4				
0600	4-5	4	2-3	3-4	3	3-4	-	-	-	-				
0700	-	-	-	-	-	3	3	3	3	3				
0900	4-5	5	4	4	3-4	4	3-4	3-4	3-4	3-4				
1000	-	-	4	4	3-4	4	3	3	3	3				
1100	4-5	4	4	3-4	4	4	4	4	4	4				
1200	-	-	4	4	4	4	4	4	4	4-5				
1300	4-5	4-5	4	4	4	4	4	4	4	4				

Assessment: Overall increase in water quality status. Improved at all locations on the East Branch with the result that it is in satisfactory condition for the first time. Significantly deteriorated, however, at one (0300) of the two locations on the West Branch which is immediately downstream of a farmyard. An improvement was also recorded at one (0550) of the locations on the Main Channel. Continuing moderately polluted in Buttevant (0700) and Doneraile (1000) due to sewage discharges. The crayfish lives in this river which is the only known locus for the protected species in county Cork.

AWBEG (Buttevant) (Continued)

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0120	Br S of Ballincarroona	159346	121122	73	LK
0160	Br NW of Pruntus	155224	119941	73	CK
0250	Longford Br	153388	116722	73	CK
0300	Br E of Snfort	145974	113680	73	CK
0400	Annagh Br	149806	115577	73	CK
0550	Br d/s Scart Br	152819	114337	73	CK
0600	Br N of Buttevant	0	0	0	-
0700	Buttevant Old Br	154413	109316	73	CK
0900	Cahermee Br	156713	108220	73	CK
1000	Br in Doneraile	160317	107512	73	CK
1100	Ballynamona Br	165638	107560	73	CK
1200	Ballywalter Br	167825	105614	73	CK
1300	Kilcummer Br	169093	100477	73	CK

River and Code : **AWNASKIRTAUN**Tributary of : Blackwater (Munster)
OS Grid Ref : W 188 929
OS Catchment No: 190
Date(s) Surveyed : 20/08/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0200	Hollymount Br	4-5	5	4-5	4-5	4-5		
0300	Inchibeg Br	4	4-5	4	4	4		

Assessment: Continuing satisfactory. No change.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Hollymount Br	117019	91112	79	CK
0300	Inchibeg Br	118696	92450	79	CK

River and Code : **BALLARD STREAM**Tributary of : Araglin (Blackwater) OS Catchment No: 190
OS Grid Ref : R 887 048 Date(s) Surveyed : 25/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

O400 Coolmoohan Br

- 4 4 4 3-4

Assessment: Loss of biological quality at the only location examined which is approximately 60 metres upstream of the River Araglin. This is the first time in the sampling history that the stream has failed to reach a satisfactory status.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	No. Location		Y	Series No.	Code
0400	Coolmoohan Br	188630	104709	74	CK

River and Code : **BALLYCLOGH STREAM** 18/B/08
Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 508 980 Date(s) Surveyed : 11/06/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	East Br Ballyclogh	3	3	3	3	3		
0500	Br u/s Blackwater R confl	3	3	3	3	3-4		

Assessment: Continuing unsatisfactory at both locations.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	East Br Ballyclogh	149487	101999	7	CK
0500	Br u/s Blackwater R confl	150744	98109	80	CK

River and Code : **BEHANAGH**Tributary of : Funshion OS Catchment No: 190
OS Grid Ref : R 856 158

Date(s) Surveyed : 24/06/2003

Samp	ling Stations	Biological Quality Ratings (Q Value						
No.	Location	1990	1994	1997	2000	2003		
0300	Br NW of Carrigeen	5	5	5	4-5	5		
0500	Mill Bridge	5	5	5	4	4		

Assessment: Continuing satisfactory.

Samp	pling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br NW of Carrigeen	186529	119186	74	LK
0500	Mill Bridge	185896	116142	74	LK

River and Code : **BREGOGE**Tributary of : Awbeg (Buttevant) OS Catchment No: 190
OS Grid Ref : R 595 079 Date(s) Surveyed : 28/08/2003

Sampl	ing Stations	Biolo	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003			
0100	Streamhill Br	-	5	4-5	4	4			
0400	Oldcourt Br	4	3	3	4	3			

Assessment: Only one of the two locations was satisfactory in 2003 representing deterioration since previous survey and reversion to conditions prevailing in 1997. The conductivity of the water increases four-fold between the two locations suggesting spring, or groundwater, influence at the lowermost location.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Streamhill Br	160268	111642	73	CK
0400	Oldcourt Br	159705	108187	73	CK

River and Code : **BLACKWATER (MUNSTER)** 18/B/02
Tributary of : Sea - Youghal Bay OS Catchment No: 190
OS Grid Ref : X 098 997 Date(s) Surveyed : 22/08/2003

Station	ns							Bi	iologic	al Qua	ality Ra	atings	(Q Va	lues)
No.	1971	1974	1975	1978	1979	1980	1982	1984	1986	1990	1994	1997	2000	2003
0050	_		_							4	4	1.5	4	2.4
	5	-	5	-	-	-	-	-	-	4	4	4-5	4	3-4
0060	-	-	1 5	-	-	-	-	-	-	4	4 4	4	4 4	4
0075	5	-	4-5	-	-	-	-	-	-	4	-	4	-	3-4
0100	-	-	-	-	-	-	-	-	-	4	4	4	4	4
0200	5	-	5	5	-	5		-	4	4	4	4	4-5	4
0300	4-5	4-5	4	4-5	-	4-5	4-5	4-5	4-5	4	-	-	-	-
0400	3-4	3	1	3	-	4	3-4	2-3	3	3	4	3-4	4	3-4
0600	4-5	4-5	4	4	-	4	-	4	4	4	4	4-5	4-5	4-5
0700	5	-	4-5	-	4	4	-	-	4	4	-	-	-	-
0750	-	-	-	-	-	-	-	-	-	-	4-5	4-5	4-5	4-5
0800	5	-	5	-	5	4	-	-	4	4	4	4	4-5	4
0810	5	-	5	-	5	4	-	-	2-3	4	4	4	4-5	4
0900	-	-	-	-	4-5	4	-	-	4	4-5	5	4-5	4-5	4
1000	5	-	5	-	5	5	-	-	4-5	4-5	4-5	4-5	4-5	4-5
1100	-	-	-	-	5	5	-	-	4-5	4	5	4-5	4	4-5
1200	5	-	5	-	4-5	5	-	-	4-5	4-5	4-5	4-5	4	4
1300	5	-	5	-	4-5	5	-	-	3-4	4	5	4-5	4	4
1400	5	5	5	4-5	-	5	4-5	4-5	4	4	4	4	4	4
1500	-	-	-	-	-	-	4	3	3-4	3	4	3-4	3-4	3-4
1510	4	3	4	3-4	-	3-4	3	3	3-4	3	4	3-4	3-4	3-4
1800	3	3	2-3	3	_	3	3	3	3	3	4-5	3-4	3-4	4
1900	4	3	3-4	3-4	-	3	3-4	3	3	3-4	4	3-4	3-4	4
2000	4	_	4	-	_	4	4	_	3-4	3-4	4-5	3-4	4	4
2100	4	_	4	_	_	4	3-4	_	3-4	4	_	-	_	-
2200	_	_	_	_	_	_	_	_	_	_	4	3	3	2
2210	_	_	_	_	_	_	_	_	_	_	4	3-4	3-4	4
2300	4	_	4	_	_	_	3-4	_	_	_	_	_	_	_
2450	5	_	5	_	_	4	4	_	4	_	4-5	4	3-4	4
2500	5	_	5	_	_	3-4	4	_	4	4	4	3-4	4	4
2600	-	_	-	_	_	4	_	_	4	3-4	4	4	4	4
2700	5	-	5	-	-	3-4	4	-	3-4	3-4	4	4	4	4

Assessment: Overall, 21 of the 27 locations examined were satisfactory in the latest survey of the Blackwater. Four (0050, 0075, 0400, 2200) of the six unsatisfactory sites had deteriorated since the previous survey; the three in the upper reaches showed increased signs of enrichment whilst the left-hand-side of the river at Fermoy was seriously polluted by sewage. Four other locations (1800, 1900, 2210, 2450) showed an increase in biological quality in the same time; one of these, Killavullen Bridge, was satisfactory for only the third time since surveys began in 1971. The river still supports significant populations of the pearl mussel albeit much reduced in numbers over former times. The fish recorded during the survey were: salmon, trout, eel, dace, minnow, stoneloach, stickleback and flounder.

BLACKWATER (MUNSTER) (Continued)

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Doctor's Hill Br	114486	106717	72	CK
0060	Kingwilliamstown Br	115164	103781	72	CK
0075	Newquarter Br	115294	100829	72	KY
0100	Lisheen Br	115976	97496	79	KY
0200	Nohaval Br	117274	94272	79	KY
0300	Duncannon Br	118006	93143	79	KY
0400	U/s Awnaskirtaun R confl	118644	93139	79	CK
0600	Shamrock Br	122125	93563	79	CK
0700	Charles' Br	124818	94397	79	CK
0750	Ford SW of Dromsicane	126834	92720	79	CK
0800	Keale Br (RHS)	129518	93541	79	CK
0810	Keale Br (LHS)	129518	93541	79	CK
0900	Colthurst Br	132816	95469	79	CK
1000	Ballymaquirk Br	138152	98787	79	CK
1100	1.5km d/s Ballymaquirk Br	139545	99251	79	CK
1200	Roskeen Br	144272	98875	80	CK
1300	Lombardstown Br	146412	96954	80	CK
1400	Longfield's Br	151654	97625	80	CK
1500	Rly Br Mallow (LHS)	155040	97910	80	CK
1510	Rly Br Mallow (RHS)	155040	97910	80	CK
1800	Ne of Ballymagooly	159473	99156	80	CK
1900	Killavullen Br	164841	99774	80	CK
2000	Ballyhooly Br	172905	98743	80	CK
2100	Cregg Castle	177904	98435	80	CK
2200	Br in Fermoy (LHS)	181219	98556	81	CK
2210	Br in Fermoy (RHS)	181227	98557	81	CK
2300	2km d/s Fermoy Br	182523	99572	81	C80
2450	W of Kilmurry South	187495	99578	81	CK
2500	Ballyduff Br	196540	99120	81	WD
2600	Lismore Br	204832	98762	81	WD
2700	2km d/s Lismore Br	206647	98827	81	WD

River and Code : **BRIDE (WATERFORD)** 18/B/05

Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : X 088 912 Date(s) Surveyed : 24/07/2003

Statio	ns					Biological Quality Ratings (Q Values)					
No.	1971	1975	1979	1983	1986	1990	1994	1997	2000	2003	
0050	_	_	_	_	_	4-5	4	4-5	4	4	
0100	_	_	5	5	5	4-5	-	-	-	-	
0120	-	-	-	-	-	-	4-5	4	4	4	
0200	-	-	5	5	5	4-5	-	-	-	-	
0220	-	-	-	-	-	-	4-5	4	4	3-4	
0300	5	4-5	5	4-5	4-5	4	4	4	4	4	
0400	5	4	5	4-5	4-5	4	-	-	-	-	
0430	4	-	-	4-5	4-5	4	4	4	4	4	
0440	-	-	-	-	-	3	3-4	3-4	3	3	
0450	4	-	-	4-5	4-5	-	-	-	-	-	
0500	-	-	4-5	4	4-5	4	4	4	3-4	3-4	
0600	5	4-5	4-5	3-4	4	4	4	4	4	4	
0700	-	-	4-5	3-4	4-5	4	4	4	4	4	
0800	4	4	4	3-4	4	4	4	4	4	4	

Assessment: Continuing mostly satisfactory but with deterioration, to slightly polluted conditions, near Shanbally (0220) since previous survey; farmyard slurry was reaching a nearby stream at the time of the survey. Continuing moderately polluted, due to sewage discharges, on left-hand-side of river below Bridebridge (0440) and slightly polluted at Bealacoon Foot-bridge.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bride Br	168405	90161	6	CK
0100	Bride Br (Old)	171427	89505	80	CK
0120	Keam Br	171920	88752	80	CK
0200	Br S of Glanreagh Br	0	0	0	-
0220	SE of Shanbally	176159	89174	80	CK
0300	Rathcormack Br	180898	90669	81	CK
0400	Bridebridge	184513	91657	81	CK
0430	0.3km d/s Bride Br (RHS)	184797	91708	81	CK
0440	0.3km d/s Bride Br (LHS)	184797	91708	81	CK
0450	1km d/s Bride Br	185310	91345	0	-
0500	Foot Bridge N of Ballynella	187881	92029	81	CK
0600	Conna Br	192494	93432	81	CK
0700	Mogeely Br	195625	94145	81	CK
0800	Tallowbridge	199869	94335	81	WD

River and Code : **BROGEEN**Tributary of : Allow OS Catchment No: 190
OS Grid Ref : R 385 018

Date(s) Surveyed : 13/06/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Br N of Islandav	3	3	4	3	2		
0200	Brogeen Br	3-4	3-4	3-4	3-4	4		
0300	Br NW of Derrygalun	3-4	3-4	3-4	4	3		
0600	Br nr millview Cross	3-4	4	4	4	4		
0800	Br u/s Allow R confl	4	4	4	4	4		

Assessment: Significant deterioration at two locations (0100, 0300) and improvement at another (0200) since previous survey. Seriously polluted, with moderate/abundant slime growths, at the uppermost location due to silage liqueur reaching the river prior to and on 13 June 2003. Moderately polluted at Br NNW of Derrygalun (0300) also apparently as a result of silage. Although improved, from slight pollution, at Br N of Ballyhoolahan (0200) there has been a serious decline in water quality since previous examination.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{X} \mathbf{Y}		Code
0100	Br N of Islandav	125361	102072	72	CK
0200	Brogeen Br	128741	102764	72	CK
0300	Br NW of Derrygalun	132721	102407	72	CK
0600	Br nr millview Cross	136070	102325	72	CK
0800	Br u/s Allow R confl	138346	101842	72	CK

River and Code : **CLYDA** 18/C/02

Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 533 977 Date(s) Surveyed : 09/07/2003

Sampl	Sampling Stations			Biological Quality Ratings (Q Values)					
No.	Location	1981	1986	1990	1994	1997	2000	2003	
0030	Br SW of Bweeng	_	_	4-5	_	_	_	_	
0050	Br u/s Ahadallane Br	_	_	-	4	4	4	4	
0060	Ahadallane Br	-	-	4-5	-	-	-	-	
0070	Athnalacka Br	-	-	-	3-4	4	4	4-5	
0080	50m d/s Millford Br	-	-	4	-	-	-	-	
0090	Athnaleenta Br	-	-	-	4-5	4	3-4	4	
0200	Clyda Br (Upr)	4-5	4-5	-	4-5	4-5	3-4	-	
0300	Clyda Br (Lower)	4	4	3	4	3-4	3-4	4	

CLYDA Continued

Assessment: Satisfactory where sampled with improvement at two locations (0090, 0300) since previous survey. Sampling at Clyda Bridge (0200) was prevented by lack of access due to road resurfacing work by Cork County Council at the time of the survey.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Br SW of Bweeng	0	0	0	-
0050	Br u/s Ahadallane Br	151116	86874	80	CK
0060	Ahadallane Br	0	0	0	-
0070	Athnalacka Br	153498	88800	80	CK
0080	50m d/s Millford Br	0	0	0	-
0090	Athnaleenta Br	155583	90492	80	CK
0200	Clyda Br (Upr)	154285	95906	80	CK
0300	Clyda Br (Lower)	153962	97505	80	CK

River and Code : COOM 18/C/03

Tributary of : Bride (Waterford) OS Catchment No: 190
OS Grid Ref : W 684 901 Date(s) Surveyed : 24/07/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0100	Br u/s Toor R confl	4	4	4	4	4			
0400	Coom Br	4	4	3-4	3-4	4			

Assessment: Satisfactory following improvement, since previous survey, at Coom Bridge (0400).

Samp	oling Stations	National (Grid Ref.	Discovery	County	
No.	Location	X	\mathbf{Y}	Series No.	Code	
0100	Br u/s Toor R confl	165433	88818	80	CK	
0400	Coom Br	168280	89839	80	CK	

River and Code : **CRINNAGHTANE**Tributary of : Araglin (Blackwater)
OS Grid Ref : R 905 055

CRINNAGHTANE
OS Catchment No: 190
Date(s) Surveyed : 25/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

4 4 4-5 4 4

Assessment: Satisfactory. No change.

CRINNAGHTANE Continued

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0300	Br at Araglin R confl	190697	105461	74	CK	

River and Code : CULLAVAW STREAM 18/C/04
Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 176 935 Date(s) Surveyed : 19/08/2003

Sampl	ling Stations	Biological Quality Ratings (Q Valu						
No.	Location	1990	1994	1997	2000	2003		
0100	Cullavaw Br (Upr)	3-4	3-4	3-4	4	3-4		
0300	Just u/s Blackwater R confl	4	4	4	4	3-4		

Assessment: Deterioration at both locations since previous survey. A milky-coloured discharge was reaching the river some 30 metres upstream of Cullavaw Bridge (0100), from right-hand-side, at the time of the latest survey. Here the river configuration has changed due to the construction of a new bridge. At the other location, which is just upstream Blackwater River confluence (0300), excessive enrichment was recorded in the low-flow conditions prevailing.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Cullavaw Br (Upr)	113963	92142	79	KY
0300	Just u/s Blackwater R confl	117443	93501	79	KY

River and Code : **CURRAHEEN (CORK)**Tributary of : Bride (Waterford) OS Catchment No: 190
OS Grid Ref : W 948 940 Date(s) Surveyed : 23/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

4 4 4 4 4 4

Assessment: Again satisfactory at the only location examined on this river which is also known as Shanakill.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	\mathbf{X}	X		Code	
0400	Br u/s Bride R confl	194800	93682	81	CK	

River and Code : **DALUA**Tributary of : Allow OS Catchment No: 190
OS Grid Ref : R 382 032 Date(s) Surveyed : 27/08/2003

Sampl	Sampling Stations		Biological Quality Ratings (Q Value						lues)
No.	Location	1971	1981	1986	1990	1994	1997	2000	2003
0050	Br NE of Meengorman	_	_	_	4	4-5	4	_	3-4
0100	Aldworth Br	-	5	5	4-5	4	3-4	4	4
0200	0.3km d/s Anne's Br (RHS)	-	4	4	3	4	3	3	3
0210	0.3km d/s Anne's Br (LHS)	-	-	-	-	3	3	3	3
0300	Foot-bridge SW of Liscongill	-	5	5	4-5	4-5	4-5	4	4
0500	Just d/s Owenare R confl	-	5	5	5	4	4-5	3-4	4
0600	Foot-bridge in Kanturk	1	5	4	4-5	4-5	4-5	3	3-4

Assessment: Some improvement at two locations (0500, 0600) but had deteriorated at first sampling station (0050), where eutrophic, since previous survey. Continuing moderately polluted, due to sewage, downstream of Anne's Bridge (0200), where slime growths were again recorded, Still not returned to former (pre-2000) satisfactory condition in Kanturk (0600).

Sampling Stations		National Grid Ref.		Discovery	County	
No.	Location	X	Y	Series No.	Code	
0050	Br NE of Meengorman	128710	111961	72	CK	
0100	Aldworth Br	130403	107778	72	CK	
0200	0.3km d/s Anne's Br (RHS)	131015	106672	72	CK	
0210	0.3km d/s Anne's Br (LHS)	131015	106672	72	CK	
0300	Foot-bridge SW of Liscongill	132477	104581	72	CK	
0500	Just d/s Owenare R confl	136564	104458	72	CK	
0600	Foot-bridge in Kanturk	137903	103294	72	CK	

River and Code : **DOUGLAS (ARAGLIN)** 18/D/03

Tributary of : Araglin (Blackwater) OS Catchment No: 190

OS Grid Ref : R 849 018 Date(s) Surveyed : 25/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0300	Ford d/s West Branch confl	_	5	_	_		
0400	Glansheskin Br	4-5	-	4-5	4-5	4-5	
0500	Douglas Br	4	4	4	3	3-4	

Assessment: Despite some amelioration, from moderate to slight pollution, remaining unsatisfactory at one of the two locations sampled, Douglas Bridge (0500, apparently as a result of the effects of sewage.

DOUGLAS (ARAGLIN) Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ford d/s West Branch confl	0	0	0	-
0400	Glansheskin Br	183972	103411	74	CK
0500	Douglas Br	184743	102135	74	CK

River and Code : **DOUGLAS (BRIDE)**Tributary of : Bride (Waterford) OS Catchment No: 190
OS Grid Ref : W 883 917 Date(s) Surveyed : 23/07/2003

Sampling Stations	Biological Quality Ratings (Q Values)					
No. Location	1990	1994	1997	2000	2003	
0300 Togher Br	4-5	3-4	3-4	3	3	
0500 Athnafola Br	3-4	4	4	4	4	
0800 Br u/s Bride R confl	4	3-4	3-4	4	4	

Assessment: Continuing moderately polluted at first location which is downstream of Ballynoe. Continuing satisfactory at other two locations.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Togher Br	192791	89535	81	CK
0500	Athnafola Br	190941	90908	81	CK
0800	Br u/s Bride R confl	188362	91661	81	CK

River and Code : **FARAHY**Tributary of : Funshion OS Catchment No: 190
OS Grid Ref : R 720 084 Date(s) Surveyed : 10/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0200	Da an Dolly course o North		3-4	3-4*	4	4	
	Br nr Ballyguyroe North	-			4	4	
	Ballyguyroe Br	4	4-5	4	4-5	4	
0500	1st Br d/s Farahy	4	4	4	3	4-5	

Assessment: Satisfactory following significant improvement at lowermost location examined, downstream of Farahy (0500), since 2000.

FARAHY Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br nr Ballyguyroe North	167210	113125	73	CK
0300	Ballyguyroe Br	167694	111560	73	CK
0500	1st Br d/s Farahy	169808	109913	73	CK

River and Code : **FARNANE**Tributary of : Finisk OS Catchment No: 190
OS Grid Ref : S 170 013 Date(s) Surveyed : 15/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0300 D/s Derry Br Millstreet

4-5 4-5 4-5 4 4-5

Assessment: Continuing satisfactory with no significant change.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	D/s Derry Br Millstreet	217265	101185	82	WD

River and Code : **FINISK**Tributary of : Blackwater (Munster)

OS Grid Ref : X 107 968

18/F/02

OS Catchment No: 190

Date(s) Surveyed : 15/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0090	Priestown Br	4	4	4	4	4		
0190	Millinacoorka Br	4	4-5	4-5	4	4-5		
0300	Modelligo Br	4	4	4-5	4	4		
0350	Finisk Br	4	4-5	4-5	4	4		
0500	Kilmolash Br	4	4	4-5	4-5	4		

Assessment: Continuing satisfactory. No significant change.

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0090	Priestown Br	217409	107161	74	WD/TY
0190	Millinacoorka Br	218682	103948	82	WD
0300	Modelligo Br	217572	99267	82	WD
0350	Finisk Br	216233	96622	82	WD
0500	Kilmolash Br	213027	94870	82	WD

River and Code : **FINNOW (BLACKWATER)** 18/F/03
Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 284 925 Date(s) Surveyed : 08/07/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	gs (Q V	alues)
No.	Location	1971	1975	1980	1985	1990	1994	1997	2000	2003
							_	_		
0060	Kilmeedy Br	-	-	-	-	4	5	5	4-5	4-5
0200	Inchileigh Br	-	-	5	4-5	4-5	4-5	5	4	4-5
0400	Wallis's Br	4-5	5	5	4-5	4	4	4	4	3

Assessment: Satisfactory apart from final location, upstream of Blackwater River confluence (0400), where a discharge from right-hand-side downstream of bridge was leading to unsatisfactory localised conditions.

Samp	oling Stations	Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Kilmeedy Br	126763	87673	79	CK
0200	Inchileigh Br	126490	90342	79	CK
0400	Wallis's Br	128384	92532	79	CK

River and Code : **FLESK (BRIDE)**Tributary of : Bride (Waterford) OS Catchment No: 190
OS Grid Ref : W 824 912 Date(s) Surveyed : 26/08/2003

Sampling Stations	Biological Quality Ratings (Q Values)							
No. Location	1990	1994	1997	2000	2003			
Main Channel								
0200 Br S of Coosane	2-3	3-4	3-4	3-4	3			
0500 Ballinaltig Br	3	4	4	4	3-4			
0700 Ballyglissane Br	4	4	4	4	4			
1000 Br u/s Bride R confl	4	4	4	4	4			
South Branch								
1200 Condonstown Br	-	3	3	3	3			

Assessment: Overall deterioration on Main Channel since previous survey with moderate pollution recorded at the first location (0200) and slight pollution on the second (0500). Continuing moderately polluted at the location (1200) on the South Channel as a result of suspected sewage discharges from Watergrasshill.

FLESK (BRIDE) Continued

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br S of Coosane	175746	87330	80	CK
0500	Ballinaltig Br	177572	87502	80	CK
0700	Ballyglissane Br	180383	89277	81	CK
1000	Br u/s Bride R confl	181897	90607	81	CK
1200	Condonstown Br	177186	85682	0	-

River and Code : **FUNSHION**Tributary of : Blackwater (Munster)

OS Grid Ref : W 837 002

Date(s) Surveyed : 26/06/2003

Statio	ns							Bi	ologic	al Qua	ality R	atings	(Q Va	lues)
No.	1971	1974	1975	1978	1979	1980	1982	1985	1986	1990	1994	1997	2000	2003
0020										_				
0020	-	-	-	-	-	-	-	-	-	5	-	-	-	-
0030	-	-	-	-	-	-	-	-	-	-	5	5	5	5
0060	-	-	-	-	-	-	-	-	-	4	3	4	-	-
0100	5	5	5	5	-	4	5	4-5	4-5	4-5	4-5	4-5	4	4-5
0200	1	1	1-2	3	-	3	3	2-3	3	3	3	2-3	3	3
0300	1-2	1-2	2	3	-	3	-	2-3	2-3	3-4	3	3-4	3-4	3-4
0310	-	-	-	-	-	-	-	-	-	2-3	-	3-4	3-4	3-4
0400	2-3	3	2-3	4	-	3	-	3	-	3-4	3	4	3-4	4
0500	4	4	4-5	4	-	4	-	3-4	-	4	3-4	4	4	4
0510	-	-	-	-	-	-	-	-	-	-	-	3	3	3-4
0700	4-5	-	4-5	-	4	-	-	4	-	4	3-4	4	4	4
0780	-	-	-	-	-	-	-	-	-	-	3-4	-	-	-
0800	-	-	-	-	3-4	-	4	4	-	4	4	4	4	4
0900	5	-	5	-	4	-	4	4	-	4-5	4	4-5	4	4
1000	-	-	-	-	4-5	-	4	4	-	4	4-5	4	4	4
1100	4-5	-	4	-	4-5	-	_	4	-	4	4	4	4	4

Assessment: Overall improvement particularly at Marshalstown Bridge (0400); also slight amelioration of effects of Kildorrery sewage at Glenavuddig Bridge (0510). Continuing moderately polluted downstream of Gradoge River confluence (0200) due to suspected sewage discharged from Mitchelstown. Carry-over effects together with suspected agricultural sources (piggeries) lead to slightly polluted conditions at Killee Bridge (0300). The sensitive pearl mussel may have died out in the river as only empty shells were found during the survey.

FUNSHION Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Brackbaun Br	188956	116822	74	LK/TY
0060	Kilbeheny Br	185977	115732	74	LK/CK
0100	Ballyaghaderg Br	180857	114836	74	LK/CK
0200	0.5km d/s Gradoge R confl	179379	113488	73	CK
0300	Killee Br (LHS)	177951	112601	73	CK
0310	Killee Br (RHS)	177951	112601	73	CK
0400	Marshalstown Br	174948	111772	73	CK
0500	Glenavuddig Br (LHS)	172317	110808	73	CK
0510	Glenavuddig Br (RHS)	172317	110808	73	CK
0700	Bealalaboga Br	173765	106836	73	CK
0800	Glanworth Br	175889	103956	73	CK
0900	Ballynahow Br	179256	102997	73	CK
1000	Downing Br	182314	101833	74	CK
1100	Ballyfean Br	183463	100603	74	CK

River and Code : **GLASHANABRACK** 18/G/02

Tributary of : Bride (Waterford) OS Catchment No: 190
OS Grid Ref : W 720 887 Date(s) Surveyed : 24/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

4 4 4-5 4 4-5

Assessment: Continuing satisfactory.

Sampling Stations		National C	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Trout Rock Br	171812	87664	80	CK

River and Code : **GLASHAWEE (ALLOW)** 18/G/03
Tributary of : Allow OS Catchment No: 190
OS Grid Ref : R 322 165 Date(s) Surveyed : 12/06/2003

Samp	ling Stations	Biological Quality Ratings (Q Values					
No.	Location	1990	1994	1997	2000	2003	
0200	Br u/s Glashawee Br	_	4	4	3-4	4	
0500	Br u/s Allow R confl	4	3	3-4	3-4	4	

Assessment: Improvement in biological quality with both locations satisfactory for first time.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br u/s Glashawee Br	130319	118913	72	CK/LK
0500	Br u/s Allow R confl	132190	116771	72	CK/LK

River and Code : **GLEN (BANTEER)**Tributary of : Blackwater (Munster)

OS Grid Ref : W 392 985

18/G/04

OS Catchment No: 190

Date(s) Surveyed : 11/06/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Glencam Br	5	4-5	4-5	4-5	4-5	
0600	Lacka Br	5	4-5	4-5	4	4-5	
0900	Ford S of Coolroe Beg	-	4-5	4-5	4-5	4-5	
1100	Banteer Br	4-5	5	4-5	4	4-5	

Assessment: Cotinuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Glencam Br	142197	87895	80	CK
0600	Lacka Br	142567	92177	80	CK
0900	Ford S of Coolroe Beg	140341	94419	80	CK
1100	Banteer Br	139451	98205	79	CK

River and Code : **GLENABOY**Tributary of : Bride (Waterford)
OS Grid Ref : W 995 943

18/G/05
OS Catchment No: 190
Date(s) Surveyed : 23/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0200	Ballyclough Br	4	4	4	4	4	
0400	South Br Tallow	3	4	-	-	-	
0600	Br u/s Bride R confl	4	4	4	3-4	3-4	

Assessment: No change. Continuing slightly polluted below Tallow (0600).

Samp	oling Stations	g Stations National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Ballyclough Br	198572	89703	81	CK/WD
0400	South Br Tallow	0	0	0	-
0600	Br u/s Bride R confl	199588	94095	81	WD

River and Code : **GLENAKEEFE**Tributary of : Owennashad OS Catchment No: 190
OS Grid Ref : S 050 017

Date(s) Surveyed : 18/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)				
No.	Location	1990	1994	1997	2000	2003
0100	Glenakeefe Br	4-5	5	4-5	4-5	5
0400	Br u/s Owennashad R confl	4-5	5	4-5	4-5	5

Assessment: Continuing satisfactory wit high ecological quality recorded at both locations in the latest survey.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Glenakeefe Br	206204	105719	74	WD
0400	Br u/s Owennashad R confl	205194	101657	74	WD

River and Code : **GLENCORRA STREAM** 18/G/15
Tributary of : Funshion OS Catchment No: 190
OS Grid Ref : R 812 030 Date(s) Surveyed : 26/06/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

4 4 4 3-4 4

Assessment: Satisfactory following improvement since last survey and reversion to status quo ante.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Glencorra Br	181405	103115	74	CK

River and Code : **GLENDINE (BLACKWATER)** 18/G/07
Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : X 077 824 Date(s) Surveyed : 22/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

0290 Glendine Ch E of Ballycondon

4-5
4-5
4
4
3-4

Assessment: Less than satisfactory for the first time in 2003 when slightly polluted at the only location sampled.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0290	Glendine Ch E of Ballycondon	206385	83465	0	WD

River and Code : GLENLARA 18/G/08
Tributary of : Dalua OS Catchment No: 190
OS Grid Ref : R 308 073 Date(s) Surveyed : 28/08/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0360	Br S of Inchantotane	_	3-4	4	3-4	3-4	
	Ballyduane Br	4-5	4	4	4	4	
0500	Ford N of Curraduff	4-5	5	3	3-4	4	

Assessment: Mostly satisfactory following improvement at final location (0500) but with continuing enrichment at the first location (0360).

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0360	Br S of Inchantotane	125464	109253	72	CK
0400	Ballyduane Br	127790	107260	72	CK
0500	Ford N of Curraduff	129903	107470	72	CK

River and Code : **GLENNAFALLIA** 18/G/10
Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : X 097 992 Date(s) Surveyed : 17/07/2003

Sampling Stations			Biol	ogical Qu	uality Rat	ings (Q V	alues)
No.	Location	1986	1990	1994	1997	2000	2003
0040	Br NW of Crow Hill	_	4-5	5	4-5	4-5	4-5
0060	Lyre Br 1.5km d/s Monavugg	ga R -	4	5	5	4-5	4-5
0200	Little Br (Cappoquin)	4	4	3-4	4	3-4	4

Assessment: Satisfactory throughout length examined following improvement at final location (0200) since last survey.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Br NW of Crow Hill	210881	105078	74	WD
0060	LyreBr 1.5km d/s Monavugga R c	onf 210857	101124	10	WD
0200	Little Br (Cappoquin)	210336	99160	81	WD

River and Code : **GLENSHELANE**Tributary of : Glennafallia OS Catchment No: 190
OS Grid Ref : S 115 009 Date(s) Surveyed : 17/07/2003

Sampling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	'alues)
No. Location	1990	1994	1997	2000	2003
0100 Br S of Knocknasculloge	4	4-5	_	_	_
0300 Just u/s Glennafallia R confl	4-5	4-5	4-5	4-5	4-5

Assessment: Continuing satisfactory.

Samp	oling Stations	National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br S of Knocknasculloge	0	0	0	-
0300	Just u/s Glennafallia R confl	211604	100900	74	WD

River and Code : GOISH 18/G/12

Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : X 096 920 Date(s) Surveyed : 17/07/2003

Sampling Stations Biological Quali			ality Rati	lity Ratings (Q Values)			
No.	Location	1990	1994	1997	2000	2003	
0050	Broken Br	-	4	4	4	4	
0200	Coolroe Br	4	4	4	4	3-4	
0300	Br 2km NW of Aglish	4	4	4	3-4	4	

Assessment: No net overall change in status with one location again less than satisfactory. However, the change has been that the second location (0200) has deteriorated while the final location (0300) has improved.

Samp	oling Stations	National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0050	Broken Br	215187	89274	82	WD
0200	Coolroe Br	212119	90300	82	WD
0300	Br 2km NW of Aglish	210470	91409	81	WD

River and Code : **GRADOGE***Tributary of : Funshion OS Catchment No: 190
OS Grid Ref : R 797 137

Date(s) Surveyed : 24/06/2003

Stations Biological Quality Ratings (Q Values)
No. **1971 1974 1975 1978 1980 1982 1985 1986 1988 1989 1990 1994 1997 2000 2003**0200 1 1 1 1 2 1 1 1 2 2-3 2-3 2-3 2-3 3 3-4

Assessment: While again less than satisfactory, a further improvement in biological quality was recorded in 2003 when the only sample location, just upstream of Funshion River confluence, was slightly polluted. There has been a long history of pollution of the Gradoge by industrial and municipal discharges.

Samp	oling Stations	National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Just u/s Funshion R confl	179869	113521	73	CK

^{*} Does not appear on OS Rivers catchment map therefore is not a baseline river.

River and Code : **KNOPPOGE**Tributary of : Owenageeragh OS Catchment No: 190
OS Grid Ref : W 826 892 Date(s) Surveyed : 26/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values			alues)	
No.	Location	1990	1994	1997	2000	2003
0300	Br u/s Ballinwillin Br	-	3-4	4	3-4	3-4
0500	Br S of Bluebell Br	4	4	4-5	4	4

Assessment: No change. Again slightly polluted at the first of the two locations examined.

Samp	oling Stations	National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br u/s Ballinwillin Br	182048	87666	81	CK
0500	Br S of Bluebell Br	182631	89133	81	CK

River and Code : LICKY

Tributary of : Blackwater (Munster)
OS Grid Ref : X 103 844

Date(s) Surveyed : 16/07/2003

Sampling Stations Biological Quality Ratings (Q Va				alues)		
No.	Location	1990	1994	1997	2000	2003
0050	Br SE of Pulla	4-5	4	3-4	3-4	3-4
0100	Br NE of Glenlicky	4-5	-	-	-	-
0120	Br WNW of Kiely's X-Rds	-	4	4	3-4	4
0150	Grallagh Br	4-5	4-5	4-5	4	4-5
0200	Licky Br	4	4	4	3-4	4

Assessment: Overall improvement, since 2000, with reversion to status obtaining in 1997 when just the first location, Bridge South of Pulla (0050), was enriched. The pearl mussel, a protected species which is intolerant of enrichment, lives in part of the river.

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0050	Br SE of Pulla	223464	87456	82	WD
0100	Br NE of Glenlicky	0	0	0	-
0120	Br WNW of Kiely's X-Rds	219805	84655	82	WD
0150	Grallagh Br	216726	83850	82	WD
0200	Licky Br	213140	82795	82	WD

River and Code : LYRE 18/L/02

Tributary of : Clyda OS Catchment No: 190
OS Grid Ref : W 558 934 Date(s) Surveyed : 09/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)			alues)	
No.	Location	1990	1994	1997	2000	2003
0300	Br u/s Ballysimon	4-5	4	4	4	4
0900	Lyre Br	4-5	4	4	3-4	4
1100	Atkinson's Br	5	4-5	4	4	4

Assessment: Satisfactory, following improvement at Lyre Bridge (0900), as had been the position prior to 2000.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br u/s Ballysimon	149221	92402	80	CK
0900	Lyre Br	152524	92695	80	CK
1100	Atkinson's Br	155553	93087	80	CK

River and Code : MONAVUGGA 18/M/01
Tributary of : Glennafallia OS Catchment No: 190
OS Grid Ref : S 104 022 Date(s) Surveyed : 17/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

4-5
4
4
4
4
4-5

Assessment: Continuing satisfactory at the only location examined which is also known as Melleray Bridge (built in 1864).

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br u/s Glennafallia R confl	210066	102275	74	WD

River and Code : NAD

Tributary of : Glen (Banteer)
OS Grid Ref : W 437 913

18/N/01
OS Catchment No: 190
Date(s) Surveyed : 11/06/2003

Sampling Stations Bio		Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	Nadbeg Br	4	4-5	4-5	4-5	4-5
0400	Nad Br	4	4-5	4-5	4-5	4-5

Assessment: Continuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Nadbeg Br	141262	89855	80	CK
0400	Nad Br	142686	91273	80	CK

River and Code : OGEEN 18/O/01
Tributary of : Awbeg (Buttevant) OS Catchment No: 190
OS Grid Ref : W 635 074 Date(s) Surveyed : 28/08/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	Ballintlea Br	4-5	4-5	4	4	4
0400	Labbavacun Br	4-5	4-5	4	3	4

Assessment: Satisfactory at both locations again following improvement at Labbavacun Bridge (0400) since 2000.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Ballintlea Br	165136	112981	73	CK
0400	Labbavacun Br	162602	108149	73	CK

River and Code : **OWBEG (WATERFORD)** 18/O/02

Tributary of : Blackwater (Munster) OS Catchment No: 190

OS Grid Ref : X 090 952 Date(s) Surveyed : 22/07/2003

Sampl	ing Stations	Biological Quality Ratings (Q Values			(alues)	
No.	Location	1990	1994	1997	2000	2003
0100	D. W. CT		2.4	2		
0100	Br W of Toortane Ho	-	3-4	3	-	-
0400	Br u/s Owbeg Br	-	4	3-4	3-4	3
0800	S Br u/s Killahaly Br	3-4	4	3-4	3-4	4

Assessment: Change in biological quality at both locations since 2000; with deterioration at one (0400) and improvement at the other (0800).

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br W of Toortane Ho	202013	96804	81	WD
0400	Br u/s Owbeg Br	204573	96250	81	WD
0800	S Br u/s Killahaly Br	207511	96016	81	WD

River and Code : **OWENAGEERAGH**Tributary of : Flesk (Bride) OS Catchment No: 190
OS Grid Ref : W 818 897 Date(s) Surveyed : 26/08/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	Br S of Killawillin	-	4	4-5	4	4
0300	Bluebell Br	3-4	4	4	4	4

Assessment: Continuing satisfactory. However, the first location is being used to mix agricultural chemical (five discarded fungicide cantainers at the site) and the river there had been 'dammed' to facilitate the practice.

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Br S of Killawillin	184422	89494	81	CK
0300	Bluebell Br	182666	89194	81	CK

River and Code : **OWENANARE**Tributary of : Dalua OS Catchment No: 190
OS Grid Ref : R 366 045 Date(s) Surveyed : 27/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Value			alues)	
No.	Location	1990	1994	1997	2000	2003
0200	Barleyhill Br	4-5	4	4	4	4
0300	Priory Br	5	4-5	4	4	4
0600	Just u/s Dalua R confl	4-5	4	4	4	4

Assessment: Continuing satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Barleyhill Br	133278	110758	72	CK
0300	Priory Br	134606	108490	72	CK
0600	Just u/s Dalua R confl	135221	106540	72	CK

River and Code : **OWENBAUN (RATHCOOL)** 18/O/05
Tributary of : Rathcool OS Catchment No: 190
OS Grid Ref : W 336 937 Date(s) Surveyed : 07/07/2003

Sampl	ling Stations	Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	Br d/s Br NE of Knocknakilla	4	4	4	4	4
0500	0.5km d/s Owenbaun Br	3	4-5	4	4	3-4
0700	Clashatrake Br	4-5	5	4-5	4	4-5
0900	Bride's Br	4	4-5	4-5	4-5	4-5

Assessment: Mostly satisfactory but has become eutrophic, since previous survey, downstream of Owenbaun Bridge (0500).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br d/s Br NE of Knocknakilla	130515	87079	79	CK
0500	0.5km d/s Owenbaun Br	130739	88449	79	CK
0700	Clashatrake Br	131459	91630	79	CK
0900	Bride's Br	133484	93229	79	CK

River and Code : **OWENKEAL**Tributary of : Dalua OS Catchment No: 190
OS Grid Ref : R 307 050 Date(s) Surveyed : 27/08/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)				
No.	Location	1990	1994	1997	2000	2003	
0500	Clashykinleen Br	4	4-5	4	4	4	
0600	Long Br	4-5	4-5	4-5	4-5	4-5	

Assessment: Continuing satisfactory with no change in biological quality. The pearl mussel lives in part of the river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Clashykinleen Br	124450	106580	72	CK
0600	Long Br	129833	104856	72	CK

River and Code : **OWENNAGLOO**Tributary of : Finnow (Blackwater) OS Catchment No: 190
OS Grid Ref : W 263 918 Date(s) Surveyed : 08/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0200	Ahaphooca Br	4	4-5	4	4	4	
0500	Ferm Br	2-3	4-5	4	4	4	
0700	Br u/s Finnow R confl	4	4-5	4	4	4	

Assessment: Continuing satisfactory. Also known as the Owennagloor River.

Samp	oling Stations	National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Ahaphooca Br	122203	89308	79	CK
0500	Ferm Br	122933	90847	79	CK
0700	Br u/s Finnow R confl	124737	91480	79	CK

River and Code : **OWENNASHAD**Tributary of : Blackwater (Munster)
OS Grid Ref : X 048 989

18/O/08
OS Catchment No: 190
Date(s) Surveyed : 18/07/2003

Sampling Stations			Biol	logical Qu	uality Rat	ings (Q V	alues)
No.	Location	1986	1990	1994	1997	2000	2003
0060	Footbridge nr Moneygorm Br	_	_	5	5	4-5	4-5
0140	Drumber Br	-	4-5	5	4-5	4-5	5
0200	Br u/s Blackwater R confl	5	4-5	4	4	3-4	4

Assessment: Back to satisfactory conditions throughout length in 2003 following improvement at the final location since previous survey.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Footbridge nr Moneygorm Br	204662	104198	74	WD
0140	Drumber Br	204680	101653	74	WD
0200	Br u/s Blackwater R confl	204817	98938	81	WD

River and Code : **OWENTARAGLIN**Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 223 935 Date(s) Surveyed : 18/08/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0400	Br d/s Garrison Br	4	3-4	4	4	3-4
0600	Br W of Rascalstreet	4	3-4	4	4	4
0900	Br SW of Dromskarragh More	4	3-4	4	4	4
1000	Doon Br	4	4-5	4-5	4	4
1100	Cullen Br	4	4	4	4	4
1200	Br u/s Blackwater R confl	4-5	4-5	4-5	4-5	4-5

Assessment: Satisfactory at all but the first location (0400) where eutrophic. The pearl mussel, the largest and most sensitive invertebrate in the river, occurs at some locations. The river is known locally as the Araglen.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br d/s Garrison Br	119141	107135	72	CK
0600	Br W of Rascalstreet	119668	105575	72	CK
0900	Br SW of Dromskarragh More	121937	101179	72	CK
1000	Doon Br	122677	99285	79	CK
1100	Cullen Br	123363	95978	79	CK
1200	Br u/s Blackwater R confl	122167	93694	79	CK

River and Code : RATHCOOL 18/R/01

Tributary of : Blackwater (Munster) OS Catchment No: 190

OS Grid Ref : W 329 955 Date(s) Surveyed : 07/07/2003

Sampling Stations	Biological Quality Ratings (Q Value				alues)
No. Location	1990	1994	1997	2000	2003
0100 Finnanfield Br	4-5	4-5	4	4	4
0400 Br nr Killeen	-	5	4-5	4-5	4
0700 Rathcool Br	4	4-5	4-5	4-5	4-5

Assessment: Continuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Finnanfield Br	133294	89608	79	CK
0400	Br nr Killeen	135056	91341	79	CK
0700	Rathcool Br	133463	93988	79	CK

River and Code : ROSS (KILLAVULLEN) 18/R/02
Tributary of : Blackwater (Munster) OS Catchment No: 190
OS Grid Ref : W 655 993 Date(s) Surveyed : 21/08/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	Br NE of Toormore	4-5	5	4-5	4-5	4
0500	0.3km u/s Blackwater R confl	4	5	3-4	3	4

Assessment: Satisfactory. Much improved at 0500, following commissioning of new sewage treatment works for Killavullen.

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Br NE of Toormore	163218	96022	80	CK
0500	0.3km u/s Blackwater R confl	165163	99632	80	CK

River and Code : SHEEP 18/S/03

Tributary of : Funshion OS Catchment No: 190
OS Grid Ref : W 737 116 Date(s) Surveyed : 25/06/2003

Sampling Stations	Biological Quality Ratings (Q Values)						
No. Location	1990	1994	2000	2003			
	_						
0200 Annaglug Br	3	4	4	4			
0400 Kilclooney Br	4	4	4	4			
0600 O'Brien's Br	4	4	4	4			

Assessment: Continuing satisfactory. No change.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Annaglug Br	174491	120039	73	LK
0400	Kilclooney Br	173856	115337	73	CK
0600	O'Brien's Br	173809	111789	73	CK

River and Code : **TOURIG**Tributary of : Blackwater (Munster)
OS Grid Ref : X 093 804

OS Catchment No: 190
Date(s) Surveyed : 22/07/2003

Sampling Stations		Biologi	cal Quality	Ratings (Q	Values)
No.	Location	1990	1994	1997	2003
0200	Br SE of Ballycolman	4-5	4	4	-
0300	Br N of Meenoughter	4-5	4	4	4
0500	Br nr Youghalpark	4-5	4-5	4	4
0700	Br SW of Tourig Hall	4	4-5	4	4

Assessment: Continuing satisfactory. No change.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	\mathbf{Y}	Series No.	Code	
0200	Br SE of Ballycolman	201388	83511	81	CK	
0300	Br N of Meenoughter	201388	83511	81	CK	
0500	Br nr Youghalpark	203894	79923	81	CK	
0700	Br SW of Tourig Hall	206436	80222	81	CK	

HYDROMETRIC AREA 19 (BALANCE)

Lee, Cork Harbour and Youghal Bay

Note: Most of the rivers in this area were surveyed in 2002

Aughnaboy (Cork) 19/A/02

Bride (Lee) 19/B/04

Dungourney 19D07

Owenboy (Cork) 19001

Owennacurra 19003

Templebodan 19T01

indicates rivers having seriously polluted stretches at time of this survey.

River and Code : **AUGHNABOY (CORK)** 19/A/02 Tributary of : Owenboy (Cork) OS Catchment No: 230

OS Grid Ref : W 558 608 Date(s) Surveyed : 23/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	1999	2003		
0100	East Br nr Belrose	4	3	3	3	4		
0300	Br 0.7km SE of Cross Barry	4	3-4	3-4	3-4	4		

Assessment: Significantly improved with the result that both locations were satisfactory for the first time since the original survey of 1990.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	East Br nr Belrose	154661	63704	87	CK	
0300	Br 0.7km SE of Cross Barry	155886	60792	87	CK	

River and Code : BRIDE (LEE)

19/B/04

Tributary of : Lee (Corls)

OS Cataloguet No: 228

Tributary of : Lee (Cork) OS Catchment No: 228 OS Grid Ref : W 564 708 Date(s) Surveyed : 30/10/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	(alues)
No.	Location	1990	1994	1997	1999	2003
0400	Hornhill Br	4	4	4	4	4
0600	Br at Crookstown LHS	4-5	4	4	4	4-5
0610	Br at Crookstown RHS	-	3	2	3	2
0900	Coolmucky Br	5	4-5	4	4-5	4-5
1300	Kilcrea Br	4	4	4	4	4
1400	Br at Killumney	4	4	4-5	4-5	4
1600	Br u/s Lee R confl	4	4	3-4	4	3-4*

Assessment: Satisfactory except for two locations. Seriously polluted, due to sewage discharges, at right-hand-side of river at Crookstown (0610); this location was also seriously polluted in 1997. Macroinvertebrate fauna affected at the final location, Bridge u/s Lee River confluence (1600), by siltation. *Siltation effects

Bridge d/s Lee River confidence (1000), by sittation.				Diltati	on chects
Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0400	Hornhill Br	138436	62860	86	CK
0600	Br at Crookstown LHS	142645	65936	86	CK
0610	Br at Crookstown RHS	142645	65936	86	CK
0900	Coolmucky Br	146046	67832	86	CK
1300	Kilcrea Br	150906	68380	87	CK
1400	Br at Killumney	154670	68652	87	CK
1600	Br u/s Lee R confl	156277	70712	87	CK

River and Code : **DUNGOURNEY**Tributary of : Owennacurra OS Catchment No: 192
OS Grid Ref : W 897 731 Date(s) Surveyed : 31/10/2003

Sampl	ling Stations	Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1988	1994	1997	1999	2003
0200	Ballynona Br (Upper)	4	4	4	3-4	4
0400	Br d/s Dungourney	4	4	4-5	4	4
0500	Ballynona Br	4	4	4-5	4-5	4-5
0600	Br SE of Killeagh	4	4	4	4	4
0700	Br in Midleton	3	4	4	3	3

Assessment: Satisfactory except for final location in Midleton (0700) where again moderately polluted. Reversion to satisfactory conditions at first location, Bridge SW of Rathorgan (0200), since previous survey. A protected lamprey species was recorded in the river.

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Ballynona Br (Upper)	191174	81754	81	CK
0400	Br d/s Dungourney	192975	78828	81	CK
0500	Ballynona Br	193284	75928	81	CK
0600	Br SE of Killeagh	190499	74690	81	CK
0700	Br in Midleton	188405	73368	81	CK

River and Code : **OWENBOY (CORK)** 19/0/01

Tributary of : Sea - Cork Harbour OS Catchment No: 230

OS Grid Ref : W 800 620 Date(s) Surveyed : 22/10/2003

Sampling Stations		Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	1999	2003
0200	Br SE of Crushnalanauv	3	3	3	3	4
0400	Br nr Killeady	3	3	3-4	3	4
0600	Priest's Br	3-4	3*	3-4	3-4	3-4
0800	Paddy's Br	3-4	3-4	3-4	3	4
1000	Bealahareagh Br	3-4	3-4	4	3-4	4
1400	Ballea Br (Lower)	3-4	3-4	3-4	3-4	3-4

Assessment: Significant improvement at all except two of the locations, Priest's Bridge (0600) and Ballea Bridge (1400), where continuing slightly polluted. The 2003 survey marked the first time since surveys began that more than one location was satisfactory.

OWENBOY (CORK) Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{X} \mathbf{Y}		Code
0200	Br SE of Crushnalanauv	156885	63060	87	CK
0400	Br nr Killeady	156747	61378	87	CK
0600	Priest's Br	160484	61293	87	CK
0800	Paddy's Br	164269	62379	87	CK
1000	Bealahareagh Br	168419	63229	87	CK
1400	Ballea Br (Lower)	171238	62764	87	CK

River and Code : **OWENNACURRA** 19/0/03

Tributary of : Sea - Lough Mahon OS Catchment No: 192

OS Grid Ref : W 877 731 Date(s) Surveyed : 29/10/2003

Statio	ns					Biolo	ogical Qu	ality Rati	ings (Q V	alues)
No.	1971	1976	1981	1983	1986	1988	1994	1997	1999	2003
0050	_	_	_	_	_	_	4-5	4-5	4	4
0100	-	-	4	3-4	4	4	-	-	-	-
0200	4	4	4	3-4	4-5	4	-	-	-	-
0220	-	-	-	-	-	-	4-5	4-5	4	4
0300	-	-	4	3-4	4	4	-	-	-	-
0400	4	4-5	3-4	3-4	4-5	4	4	4-5	4	4-5
0500	-	-	2-3	2-3	3-4	3-4	4	3-4	3-4	3-4
0600	2-3	2-3	2-3	2-3	3-4	3	4	3-4	3-4	-

Assessment: Mostly satisfactory with no significant change. Continuing slightly polluted in Midleton (0500); a location 500m downstream (0600) was formerly sampled but given the proximity of the two and the fact that sewage waste from Midleton is no longer discharged to this stretch of the river has been discontinued.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Br N of Ballysallagh	181575	81945	81	CK
0100	Br S of Ballincurrig	0	0	0	CK
0200	Br NE of Lisgoold	0	0	0	CK
0220	Lisgoold Br	185211	79841	81	CK
0300	Ballynaclashy Br	0	0	0	CK
0400	Br SW of Ballyedmond	186429	76152	81	CK
0500	Cork Br Midleton	187923	73794	0	CK
0600	0.5km d/s Cork Br	187967	73287	81	CK

River and Code : **TEMPLEBODAN**Tributary of : Owennacurra OS Catchment No: 192
OS Grid Ref : W 852 809 Date(s) Surveyed : 29/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1988 1994 1997 1999 2003

4 4-5 4-5 4 4

Assessment: Continuing satisfactory at the only location examined which is at the Bridge SE of Templebodan (or Templebodant).

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0100	Aughnabroga Br	185134	82766	81	CK

HYDROMETRIC AREA 20

Bandon - Ilen

Argideen	20A02
Ballinspittle Ballymahane Bandon Bawnaknockane Bealanascartane Blackwater (Bandon) Brinny Burrane	20B09 20B01 20B02 20B03 20B08 20B04 20B07 20B10
Caha Carhoo Cashel Clodagh Clonakilty Stream Cullenagh Lake Stream	20C01 20C06 20C02 20C03 20C05 20C04
Dirty	20D01
Glashagloragh	20G02
Ilen	20I01
Ilen Kilbrittain	20I01 20K01
Kilbrittain Leamawaddra	20K01 20L01
Kilbrittain Leamawaddra Leap Stream	20K01 20L01 20L04
Kilbrittain Leamawaddra Leap Stream Minane Owenkeagh Owennashingaun	20K01 20L01 20L04 20M01 20O01 20O02
Kilbrittain Leamawaddra Leap Stream Minane Owenkeagh Owennashingaun Ownahinchy Rathruane	20K01 20L01 20L04 20M01 20O01 20O02 20O03

River and Code : **ARGIDEEN**Tributary of : Sea - at Courtmacsherry OS Grid Ref : W 473 437

OS Grid Ref : W 473 437

Date(s) Surveyed : 14/10/2003

Sampl	Sampling Stations Biological Quality Ratings (Q Values) No. Location 1971 1976 1981 1985 1989 1994 1997 2000 2003									
No.	Location	1971	1976	1981	1985	1989	1994	1997	2000	2003
0020	D/- Clll- D	a				4	2.4	4	1 5	4.5
0030	Br u/s Glashagloragh R con	II -	-	-	-	4	3-4	4	4-5	4-5
0050	Gearagh Br	-	-	-	-	4	4	4	4	4
0060	Ballaghcummer Br	-	-	-	-	4	4	4-5	3-4	4
0100	Lisselane br	5	5	5	4	3-4	4	4	3-4	4
0200	Kilmaloda Br	5	5	5	3-4	4	4	4	4	4

Assessment: Satisfactory throughout following improvement at two locations (0060, 0100) since previous survey. Unsightly sludge from the waterworks, for Clonakilty, had again accumulated along the right-hand-side of the river at Bridge S of Lisselan (0100).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Br u/s Glashagloragh R confl	128862	44332	89	CK
0050	Gearagh Br	132316	45572	89	CK
0060	Ballaghcummer Br	136233	45411	89	CK
0100	Lisselane br	140467	44445	89	CK
0200	Kilmaloda Br	145181	45571	89	CK

River and Code : **BALLINSPITTLE**Tributary of : Sea - Kinsale Harbour OS Catchment No: w2
OS Grid Ref : W 568 510 Date(s) Surveyed : 13/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1997 2000 2003

0100 Br in Ballinspittle

4 4 3-4 4

Assessment: Satisfactory.

Sampling Stations		National Gri	d Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br in Ballinspittle	158719 4	6103	87	CK

River and Code : **BALLYMAHANE** 20/B/01

Tributary of : Sall OS Catchment No: 229 OS Grid Ref : W 493 586 Date(s) Surveyed : 04/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003		
0200	Br NNW of Tullyglass	4	4	4	4	4		
0700	Alcock's Br	-	4	4-5	4-5	4		
1000	Ballymahane Br	4	4	4-5	4	4		

Assessment: Continuing satisfactory. The stream entering just downstream of 0200 (Bridge N of Tullyglas), which was grossly polluted in 2000, was clean in 2003; the location, however, was still being used to mix agricultural chemicals.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0200	Br NNW of Tullyglass	141394	58077	86	CK
0700	Alcock's Br	145182	57347	86	CK
1000	Ballymahane Br	149040	58753	87	CK

River and Code : **BANDON** 20/B/02

Tributary of : Sea - Kinsale Harbour OS Catchment No: 229

OS Grid Ref : W 653 474 Date(s) Surveyed : 03/09/2003

Statio	ons					Biolo	ogical Qu	ality Rati	ings (Q V	'alues)
No.	1971	1976	1978	1982	1986	1989	1994	1997	2000	2003
0050	_	_	_	_	_	4-5	4-5	4	4-5	4-5
0100	5	4-5	4-5	4-5	4	3-4	-	-	-	-
0150	-	-	-	-	4-5	4	4	4	4	4
0300	5	4-5	4-5	4	4	4	4	4	3-4	3-4
0400	5	4-5	4	4	4	3-4	4	3-4	3-4	3-4
0550	-	-	-	-	-	4	4-5	4	3-4	4
0600	5	5	5	3-4	3-4	4	4-5	4	4	4
0700	5	4-5	4	3-4	4	3-4	4-5	4	4	4
0800	5	3	2-3	3	4	3	3-4	3	3	3
0900	5	4-5	4	4	4	3-4	4	4	4	4

Assessment: Mostly satisfactory with some improvement at one location (0550) since the previous survey. Continuing slightly polluted downstream of Dunmanway (0300, 0400) and moderately polluted downstream of Bandon (0800). Unsightly sludge from a waterworks had accumulated along the left-hand-side of river upstream of Bandon (0700). A protected invertebrate (pearl mussel) lives in part of the river while the fish fauna includes salmonids (salmon and trout) and cyprinids (minnow) as well as sticklebacks.

BANDON Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Keenrath Br	118687	56660	85	CK
0100	Br u/s Ardcahan Br	0	0	0	CK
0150	Ardcahan Br	124259	55684	86	CK
0300	Bealboy Br	125690	51288	89	CK
0400	Manch Br	129274	52082	86	CK
0550	Enniskeen Br	135743	54019	86	CK
0600	Murragh Br	138063	54062	86	CK
0700	Baxter's Br	144140	54621	86	CK
0800	1.5km d/s Bandon Br	150489	55904	87	CK
0900	Inishannon Br	154155	57051	87	CK

River and Code : **BAWNAKNOCKANE**Tributary of : Sea - Roaring Water Bay OS Catchment No: 236
OS Grid Ref : V 989 358 Os Catchment No: 15/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1997 2000 2003

0200 Ford N of Coolcaha

3 4 4 4 4

Assessment: Continuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0200	Ford N of Coolcaha	98606	37606	88	CK

River and Code : **BEALANASCARTANE** 20/B/08
Tributary of : Bandon OS Catchment No: 229
OS Grid Ref : W 267 517 Date(s) Surveyed : 02/09/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003		
0100	Curraghlicky Br	4	3	4	3-4	4		
0300	Br SE of Drinagh East	4	4	4	4	4		
0700	(E) Br u/s Bandon R confl	4	4	3-4	3-4	4		
Distri	Distributary							

Assessment: Satisfactory throughout length examined, for the first time since surveys began in 1989, following improvement at two locations (0100, 0700).

2/0

4

4

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0800 (W) Br u/s Bandon R confl

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Curraghlicky Br	122357	46732	89	CK
0300	Br SE of Drinagh East	125336	47568	89	CK
0700	(E) Br u/s Bandon R confl	126687	51379	89	CK
0800	(W) Br u/s Bandon R confl	126683	51409	89	CK

River and Code : **BLACKWATER (BANDON)** 20/B/04
Tributary of : Bandon OS Catchment No: 229
OS Grid Ref : W 319 535 Date(s) Surveyed : 03/09/2003

Samp	Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003		
0300	Geara Br	4	4	4	4	4-5		
0600	Br NW of Teenah	4	4-5	4	3-4	3-4		
0800	Blackwater Br	4	4-5	4-5	4-5	4-5		

Assessment: Continuing eutrophic in middle reaches (0600) otherwise satisfactory. The protected pearl mussel still survives in parts of this river.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Geara Br	129268	59187	86	CK
0600	Br NW of Teenah	129118	56374	86	CK
0800	Blackwater Br	131203	53534	86	CK

River and Code : **BRINNY**Tributary of : Bandon OS Catchment No: 229
OS Grid Ref : W 532 573

Date(s) Surveyed : 04/09/2003

Sampling Stations Biological Quality					uality	Rating	s (Q V	alues)		
No.	Location	1976	1978	1982	1986	1989	1994	1997	2000	2003
0030	Br S of Aghnamorroge X-F	Rds -	-	-	-	4	4	4	4	4
0070	Tuough Br	-	-	-	-	4-5	4	3-4	4	3-4
0100	Brinny Br	-	5	5	4-5	4-5	4-5	4	4	4-5
0200	Downdaniel Br	4-5	4	4	4	4-5	4-5	4-5	4	4

Assessment: Mostly satisfactory but reversion to slightly polluted conditions at Tuough Bridge (0070) since previous survey.

Samp	ling Stations	National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Br S of Aghnamorroge Cross Roads	148919	64266	87	CK
0070	Tuough Br	151380	62171	87	CK
0100	Brinny Br	151672	59131	87	CK
0200	Downdaniel Br	153129	57380	87	CK

River and Code : **BURRANE** 20/B/10

Tributary of : Argideen Estuary OS Grid Ref : W 473 455

Date(s) Surveyed : 13/10/2003

Samp	ling Stations	Biolo	Biological Quality Ratings (Q Values						
No.	Location	1989	1994	1997	2000	2003			
0200	Burrane Br	3	3	3-4	3-4	4			

Assessment: Satisfactory for first time since first surveyed in 1989. Previously affected by farm slurry.

Sampling Stations		National (Discovery	County	
No.	Location	X	Y	Series No.	Code
0200	Burrane Br	146980	46186	89	CK

River and Code : CAHA

Tributary of : Bandon OS Catchment No: 229
OS Grid Ref : W 241 558

Date(s) Surveyed : 03/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003	
0100	Br N of Coolcaum	-	4-5	4-5	4-5	4	
0400	Poulnaberry Br	4	4	4-5	4	4	
0700	Caha Br	4	4-5	4	4	4	

Assessment: Continuing satisfactory with no significant change. The protected pearl mussel lives in parts of the river whose fish fauna includes trout and sticklebacks.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br N of Coolcaum	118397	61836	85	CK
0400	Poulnaberry Br	121926	59246	85	CK
0700	Caha Br	124342	56018	86	CK

River and Code : CARHOO 20/C/06

Tributary of : Sea - Clonakilty Bay OS Catchment No: x2
OS Grid Ref : W 377 397 Date(s) Surveyed : 17/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1997 2000 2003

0300 Br SE of Carhoo 4 4 4 4

Assessment: Continuing satisfactory.

Samp	oling Stations	National C	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br SE of Carhoo	137048	39547	89	CK

River and Code : CASHEL (CORK)

Tributary of : Roury OS Catchment No: 234
OS Grid Ref : W 242 386 Date(s) Surveyed : 16/10/2003

Sampling Stations	Biological Quality Ratings (Q Values)						
No. Location	1989	1994	1997	2000	2003		
0600 Br NE of Cashel	3	3-4	3-4	4	4		
0800 Connonagh Br	4	4-5	4	4	4-5		
0810 Connonagh Br	2	3	4	4	4-5		

Assessment: Continuing satisfactory with the improvement recorded, at 0600, in 2000 being sustained.

Samp	oling Stations	National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0600	Br NE of Cashel	126397	40176	89	CK
0800	Connonagh Br	124373	38696	89	CK
0810	Connonagh Br	124373	38696	89	CK

River and Code : CLODAGH 20/C/03
Tributary of : Ilen OS Catchment No: 233
OS Grid Ref : W 126 473 Date(s) Surveyed : 30/09/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	(alues)
No.	Location	1989	1994	1997	2000	2003
0300 0400	Pookeen Br Ahanafunshion Br	- 4-5	4-5 4-5	4-5 4	4-5 4-5	4-5 4

Assessment: Continuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Pookeen Br	114437	49868	89	CK
0400	Ahanafunshion Br	112835	47357	89	CK

River and Code : CLONAKILTY STREAM 20/C/05

Tributary of : Sea - Clonakilty Bay OS Catchment No: x2 OS Grid Ref : W 387 413 Date(s) Surveyed : 17/10/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	(alues)
No.	Location	1989	1994	1997	2000	2003
0100	Br ESE of Garralacka	4	4	4	4	4
0300	Second Br d/s Br ESE of Garralacka	3-4	4	4	4	4

Assessment: Continuing satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br ESE of Garralacka	135645	41136	89	CK
0300	Second Br d/s Br ESE of Garralacka	137697	41310	89	CK

River and Code : **CULLENAGH LAKE STREAM** 20/C/04
Tributary of : Bandon OS Catchment No: 229
OS Grid Ref : W 168 558 Date(s) Surveyed : 02/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1997 2000 2003

0100 Farnanes Br

4 4 4 4 4-5

Assessment: Continuing satisfactory. The protected pearl mussel lives in a part of this river.

Sampling Stations National Grid Ref		Frid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code
0100	Farnanes Br	116621	55137	85	CK

River and Code : DIRTY

Tributary of : Bandon OS Catchment No: 229
OS Grid Ref : W 240 523 Date(s) Surveyed : 02/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)						lues)
No.	Location	1978	1982	1985	1989	1994	1997	2000	2003
0005	Sillahertane Br	_	_	_	4	4	4	4	4
0050	Br NW of Tonafora	-	3-4	3-4	3	4	4	4	3-4*
0100	Br u/s Bandon R confl	3-4	3-4	3-4	3-4	4	4	3-4	4

Assessment: Satisfactory apart from the effects of ill-conceived, albeit well-meaning, clearance of river at Bridge SW of Woodbrook (0050) which led to a reduced diversity of macroinvertebrates. This takes somewhat from the improvement recorded since previous survey at the final location (0100) *Siltation effects

Samp	oling Stations	National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0005	Sillahertane Br	117892	51163	89	CK
0050	Br NW of Tonafora	121880	52220	85	CK
0100	Br u/s Bandon R confl	123542	52544	85	CK

River and Code : **GLASHAGLORAGH (CORK)** 20/G/02
Tributary of : Argideen OS Catchment No: 232
OS Grid Ref : W 293 443 Date(s) Surveyed : 14/10/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003			
	Kippagh Br	3-4	3	3-4	3-4	4			
0400	Inchinattin Br	4-5	3-4	4	4	4			

Assessment: Satisfactory at both locations for the first time since surveys began on this river. There was a fish-kill on this river in April 1997.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200) Kippagh Br	125816	45072	89	CK
0400) Inchinattin Br	129127	44758	89	CK

River and Code : ILEN 20/I/01

Tributary of : Sea - Baltimore Bay OS Catchment No: 233

OS Grid Ref : W 073 315 Date(s) Surveyed : 01/10/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	s (Q V	values)
No.	Location	1971	1976		1985	_		_		
0020	Castledonovan Br	_	_	_	_	_	4-5	4-5	4-5	4
0100	Moyny Br	5	5	5	4-5	5	5	4-5	4-5	4
0160	Br NW of Bishops Village	-	-	-	-	-	4-5	4-5	4-5	4
0200	Br near Madore	5	5	5	4-5	4	-	-	-	-
0240	Just u/s Saivnose R confl	-	-	-	-	4	3-4	4	4	4-5
0300	Ballyhilty Br	5	4-5	4-5	4	3-4	3-4	4	4	4

Assessment: Continuing satisfactory. A sensitive element of the fauna, a stonefly, was absent from the three uppermost locations (0020, 0100, 0160). Another sensitive macroinvertebrate, the pearl mussel, lives in parts of the river.

Samp	oling Stations	National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0020	Castledonovan Br	111395	49341	89	CK
0100	Moyny Br	111517	46628	89	CK
0160	Br NW of Bishops Village	110509	42956	89	CK
0200	Br near Madore	0	0	0	CK
0240	Just u/s Saivnose R confl	112031	40123	89	CK
0300	Ballyhilty Br	111765	36352	89	CK

River and Code : **KILBRITTAIN**Tributary of : Sea - Courtmacsherry OS Grid Ref : W 532 468

Code : **KILBRITTAIN**OS Catchment No: w2

Date(s) Surveyed : 13/10/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003		
0100	Maulmane Br	-	4	4	4	4		
0300	Kilbrittain Br	4	4	4	3-4	4		

Assessment: Both locations satisfactory following improvement in Kilbrittain (0300) since previous survey.

Sampling Stations		Nationa	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Maulmane Br	150412	48890	87	CK
0300	Kilbrittain Br	152496	46951	87	CK

River and Code : **LEAMAWADDRA**Tributary of : Sea - Roaring Water Bay
OS Grid Ref : W 019 342

CS Catchment No: 235
Date(s) Surveyed : 15/10/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1989	1994	1997	2000	2003
0200	Br SW of Derreenard	4-5	4	4-5	4-5	4-5
0400	Crooked Br	4	4	4-5	4-5	4-5

Assessment: Continuing satisfactory. The protected pearl mussel, a species intolerant of nutrient enrichment, lives in parts of the river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br SW of Derreenard	101990	37974	88	CK
0400	Crooked Br	102293	34843	88	CK

River and Code : **LEAP STREAM**Tributary of : Glandore Harbour OS Catchment No: y2
OS Grid Ref : W 207 368

Date(s) Surveyed : 16/10/2003

Samp	ling Stations	Biologi	cal Quality	Ratings (Q	Values)
No.	Location	1994	1997	2000	2003
0100	U/s of bridge in Leap	4	4	4	4

Assessment: Continuing satisfactory at the only location examined which is some 80 metres upstream of Leap Bridge.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	U/s of bridge in Leap	120711	37092	89	CK	

River and Code : MINANE 20/M/01

Tributary of : Sea - Ringabella Bay OS Catchment No: u2
OS Grid Ref : W 760 569 Date(s) Surveyed : 21/10/2003

Samp	ling Stations	Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003		
0100	Br at Ballyfeard	3-4	3-4	3-4	3-4	4		
0200	Minane Br	3-4	3-4	3	3	3		

Assessment: Improvement at uppermost location (0100) with the result that 2003 was the first time either sampling site on the river achieved a satisfactory status since surveys began in 1989.

Sampling Stations		National Grid	Ref. Discovery	County
No.	Location	X	Y Series No.	Code
0100	Br at Ballyfeard	172036 55	664 87	CK
0200	Minane Br	174340 56	680 87	CK

River and Code : **OWENKEAGH**Tributary of : Argideen OS Catchment No: 232
OS Grid Ref : W 452 457

Date(s) Surveyed : 14/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003	
0200	Ford nr Tullig	3-4	3-4	3-4	3-4	4	
0600	Skeaf Br	4	4	3-4	3-4	4	

Assessment: Both locations satisfactory for the first time.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Ford nr Tullig	140134	47970	89	CK
0600	Skeaf Br	144073	46851	89	CK

River and Code: **OWENNASHINGAUN**

Tributary of : Ilen OS Catchment No: 233

20/O/02

OS Grid Ref : W 095 445 Date(s) Surveyed : 01/10/2003

Sampling Stations Biological Quality Rating			ngs (Q V	alues)		
No.	Location	1989	1994	1997	2000	2003
0200	Trovilahana Dr		4-5	4-5	4-5	1.5
	Trawlebane Br	-				4-5
0400	Dromore Br	4-5	4	4-5	4-5	4
0700	Inchingerig Br	4-5	4-5	4-5	4-5	4

Assessment: Continuing satisfactory but with increase in filamentous algae at two lowermost locations (0400, 0700). The protected pearl mussel, a species sensitive to nutrient enrichment, still survives in part of the river.

Samp	oling Stations	ns National Grid Ref. Disc		Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Trawlebane Br	104989	48101	85	CK
0400	Dromore Br	106164	45624	88	CK
0700	Inchingerig Br	109028	45278	89	CK

River and Code : **OWNAHINCHY** 20/O/03

Tributary of : Sea - Roscarbery Bay OS Catchment No: x2 OS Grid Ref : W 307 353 Date(s) Surveyed : 16/10/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003		
0000	D G CD 1.1			2.4		,		
0080	Br S of Bealad	-	4	3-4	4	4		
0200	Kilruane Br	1	3-4	3	4	4		
0400	Br u/s Ownahinchy Br	3-4	4	4	4	4		

Assessment: Satisfactory. The improvement registered at two of the locations (0080, 0200) in 2000 has been sustained into the latest survey.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	Br S of Bealad	131684	42450	89	CK
0200	Kilruane Br	132692	38569	89	CK
0400	Br u/s Ownahinchy Br	130863	36552	89	CK

River and Code : **RATHRUANE**Tributary of : Bawnaknockane OS Catchment No: 236
OS Grid Ref : V 989 358

Date(s) Surveyed : 15/10/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	Br SE of Raheenroe	4	3	3-4	3-4	4
0400	Coolagh Br	4	4	4	4	4

Assessment: Satisfactory at both locations for the first time since the original survey of this river in 1990.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0200	Br SE of Raheenroe	94908	36536	88	CK
0400	Coolagh Br	98128	35855	88	CK

River and Code : **ROURY**Tributary of : Sea - Mill Cove OS Catchment No: 234
OS Grid Ref : W 267 348

Date(s) Surveyed : 16/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003	
0100	Corran Br	4	4	4	4	4	
0400	Third Br d/s Corran Lake	4	4	4	4	4	
0800	Inchnanoon Br	4	4-5	4	4	4-5	
1000	Ballyvireen Br	3-4	4	4	4	4	

Assessment: Satisfactory. No significant change. The pearl mussel, a species sensitive to nutrient enrichment, was previously recorded from this river.

Sampling Stations		National Grid Ref.			County
No.	Location	X	Y	Series No.	Code
0100	Corran Br	121676	40257	89	CK
0400	Third Br d/s Corran Lake	123063	39858	89	CK
0800	Inchnanoon Br	124966	37841	89	CK
1000	Ballyvireen Br	126420	35390	89	CK

River and Code : **SAIVNOSE**Tributary of : Ilen OS Catchment No: 233
OS Grid Ref : W 121 400 Date(s) Surveyed : 01/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No. Location		1989	1994	1997	2000	2003	
0200 Br d/s Coomatallin	ı Br	-	4-5	4	4	4	
0400 Carrigbaun Br		4	4	4	4	4	
0600 Br SE of Bredagh (Cross Rds	3-4	4	-	-	-	
0900 Derreeny Br		4	4-5	4	4	4	

Assessment: Satisfactory. No change.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br d/s Coomatallin Br	121556	44375	89	CK
0400	Carrigbaun Br	117103	42577	89	CK
0600	Br SE of Bredagh Cross Rds	0	0	0	CK
0900	Derreeny Br	112389	39919	89	CK

River and Code : SALL 20/S/02
Tributary of : Brinny OS Catchment No: 229
OS Grid Ref : W 513 519 Date(s) Surveyed : 04/09/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003		
0200	First Br d/s Tanyard Br	-	3	4	3-4	4		
0500	Scarthamuck Br	-	4	4-5	4	4		
0700	0.8km u/s Brinny R confl	3-4	4	4	3-4	4		

Assessment: Satisfactory at all three locations for only the second occasion since first surveyed in 1989.

Sampling Stations		pling Stations National Grid Ref.			County
No.	Location	X	Y	Series No.	Code
0200	First Br d/s Tanyard Br	144852	60430	86	CK
0500	Scarthamuck Br	147464	59584	86	CK
0700	0.8km u/s Brinny R confl	151047	59199	87	CK

River and Code : STICK 20/S/03

Tributary of : Sea - Oyster Haven OS Catchment No: 231

OS Grid Ref : W 687 493 Date(s) Surveyed : 22/10/2003

Sample No.	ing Stations Location	Biolog 1989	gical Qua 1994	lity Rati	ngs (Q V 2000	alues) 2003
•	nartle Branch Br u/s confl with Main Channel	-	4	3-4	4	4-5
Main (0300 0600 0800	Channel Coolkirky Br Br d/s Ballymartle Branch Aghafantaun Br	3 4 3-4	3 4 4	3 4 4	3 4 4	3-4 4 4

Assessment: Satisfactory apart fom first location (0300) on Main Channel where some improvement over previous years was recorded.

Sampling Stations		National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0240	Br u/s confl with Main Channel	165681	57024	87	CK
0300	Coolkirky Br	166101	59432	87	CK
0600	Br d/s Ballymartle Branch	165771	56446	87	CK
0800	Aghafantaun Br	166345	54243	87	CK

River and Code : **TINNEEL STREAM**Tributary of : Sea at Roscarbery Bay OS Catchment No: x2
OS Grid Ref : W 289 370 Date(s) Surveyed : 16/10/2003

Sampling Stations		Biologic	cal Quality	Ratings (Q	Values)
No.	Location	1994	1997	2000	2003
0050	Br SE of Cahermore	-	3	3	4

Assessment: Satisfactory for the first time, at the only location examined, following significant improvement. The river here was previously polluted by a stream carrying farm waste.

Sampling Stations		National	National Grid Ref.		County	
No.	Location	X	Y	Series No.	Code	
0050	Br SE of Cahermore	128548	38517	89	CK	

HYDROMETRIC AREA 21

Dunmanus-Bantry-Kenmare

Adrigole	21A01	Kealduff	21K01
Ardsheelhane	21A02	Kealincha	21K02
Blackwater (Kerry)	21B03	Lough Fadda Stream	21L03
C1 4	21,002	Magannagan Straam	21M02
Cleady	21C02	Magannagan Stream	21M02 21M01
Cloghane (Allihies)	21C08	Mealagh	21 NIO1
Cloonee	21C06		• • • • •
Coomeelan Stream	21C14	Owbeg (Roughty)	21002
Coomhola	21C03	Owenbeg (Owvane)	21003
Croanshagh	21C05	Owenshagh	21008
Cummeragh	21C04	Ownagappul	21009
\mathcal{E}		Owngar (Cork)	21004
Derreendarragh	21D03	Owreagh	21005
Drimminboy	21D01	Owroe	21006
Drumoghty	21D04	Owvane (Cork)	21007
		_	
Emlaghmore	21E01	Roughty	21R01
Finnihy	21F01	Sheen	21S01
-			21802
Four Mile Water	21F02	Slaheny	
		Sneem	21S03
Glan Stream	21G13		
Glengarriff	21G03	Tahilla	21T01
		Trafrask Stream	21T03 21T03
Inny (Kerry)	21I01		
Isknagahiny L. Stream	21I03		

River and Code : **ADRIGOLE**Tributary of : Sea - Adrigole Harbour OS Catchment No: 224
OS Grid Ref : V 807 502

Date(s) Surveyed : 08/10/2003

Sampling Stations	Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No. Location	1990	1994	1997	2000	2003
0200 Adrigole Br	4-5	4-5	4-5	4-5	4-5

Assessment: Continuing satisfactory. The protected pearl mussel lives in this river.

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Adrigole Br	81180	50719	84	CK

River and Code : **ARDSHEELHANE**Tributary of : Sneem OS Catchment No: 214
OS Grid Ref : V 688 673 Date(s) Surveyed : 07/08/2003

Sampling Stations		Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	Coomyanna Br	-	5	4-5	4-5	4-5
0200	Just u/s Sneem R confl	4-5	4-5	4-5	4-5	3-4

Assessment: Significant deterioration, to eutrophic conditions, since previous survey at lowermost location; moderate-abundant growths of filamentous algae were recorded at this site which is immediately upstream of Sneem River confluence. The significant algal growths are an impediment to the protected pearl mussel which lives in the river. The water temperature at the time of survey was 23.5 degrees Celsius (°C).

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Coomyanna Br	71724	72982	78	KY
0200	Just u/s Sneem R confl	69026	67588	84	KY

River and Code : **BLACKWATER (KERRY)** 21/B/03

Tributary of : Kenmare River OS Catchment No: 215

OS Grid Ref : V 797 684 Date(s) Surveyed : 08/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Gearha Br	4-5	4-5	4-5	5	5	
0200	SW of Old Dromore Ho	4-5	4-5	4-5	4-5	5	

Assessment: Continuing satisfactory with high ecological quality recorded at both locations. This river supports large populations of the protected pearl mussel.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Gearha Br	78267	72126	78	KY
0200	SW of Old Dromore Ho	79380	69461	84	KY

River and Code : CLEADY

Tributary of : Roughty OS Catchment No: 217
OS Grid Ref : V 942 719 Date(s) Surveyed : 24/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1987 1993 1997 2000 2003

4 4 4 4 4

Assessment: Continuing satisfactory. Fish recorded included elvers and salmonid parr.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0300	Cleady Br	94319	72220	78	KY	

River and Code : **CLOGHANE** 21/C/08

Tributary of : Sea - at Allihies (W of Bear Is) OS Catchment No: g3
OS Grid Ref : V 584 407 Date(s) Surveyed : 08/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

Values
4
4
4
4-5
4

Assessment: Continuing satisfactory. Protected lamprey fish species inhabit this small river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Knockroe Br	60150	41259	84	CK

River and Code : CLOONEE (KERRY) 21/C/06

Tributary of : Sea - Kenmare River OS Catchment No: 220
OS Grid Ref : V 775 628 Date(s) Surveyed : 23/09/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	Just u/s Lough Inchiquin	-	4-5	4	4-5	4
0200	Just d/s Lough Inchiquin	-	3-4	3-4	4	3-4
0400	Casha Br	3-4	3-4	3-4	3-4	3-4

Assessment: Satisfactory at just one of the locations, i.e. upstream of Inchiquin Lough (0100). Both other locations (0200, 0400) exhibited lake effects, i.e. suppressed but enriched type faunal response. The minnow, an introduced fish species, inhabits the river and its lakes.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Just u/s Lough Inchiquin	84488	62541	85	KY
0200	Just d/s Lough Inchiquin	83521	63706	84	KY
0400	Casha Br	79278	63502	84	KY

River and Code : COOMEELAN STREAM 21/C/14

Tributary of : Sheen OS Catchment No: 218

OS Grid Ref : V 950 644 Date(s) Surveyed : 25/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0200 Br u/s Sheen R confl
4-5
4-5
4-5

Assessment: Continuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No	. Location	X	Y	Series No.	Code
020	00 Br u/s Sheen R confl	95777	63913	85	KY

River and Code : **COOMHOLA**Tributary of : Sea - Bantry Bay OS Catchment No: 225
OS Grid Ref : V 998 545

Date(s) Surveyed : 09/10/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1993	1997	2000	2003	
0200	Br nr Knockanecosduff	4-5	4-5	4-5	4-5	4-5	
0300	Br NE of Coorloum	4-5	4-5	-	-	-	
0500	Coomhola Br	4-5	4-5	4-5	4-5	4-5	

Assessment: Continuing satisfactory with no change in quality evident in the five surveys undertaken since 1990. The protected pearl mussel lives in parts of the river.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br nr Knockanecosduff	103911	60037	85	CK
0300	Br NE of Coorloum	0	0	0	-
0500	Coomhola Br	99448	55526	85	CK

River and Code : **CROANSHAGH** 21/C/05

Tributary of : Sea - Kilmackilloge Harbour OS Catchment No: 222

OS Grid Ref : V 770 572 Date(s) Surveyed : 07/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)				alues)
No.	Location	1990	1994	1997	2000	2003
0100	Glanmore Br	4	4	4-5	4-5	4-5
0200	0.6km u/s Croanshagh Br	4	4	4	4	4

Assessment: Continuing satisfactory. No change.

Samp	oling Stations	National	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Glanmore Br	77343	53628	84	KY
0200	0.6km u/s Croanshagh Br	77028	56798	84	KY

River and Code : CUMMERAGH

Tributary of : Sea - Ballinskelligs Bay OS Catchment No: 213
OS Grid Ref : V 500 650 Date(s) Surveyed : 06/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)				alues)
No.	Location	1990	1994	1997	2000	2003
0200	Just d/s Derriana Lough	4-5	4	4	4	4
0400	Fords d/s Cummeragh Br	4	3-4	4	4	4
0600	Dromkeare Br	4-5	4-5	4	4	4-5

Assessment: Continuing satisfactory. The protected pearl mussel lives in parts of the river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Just d/s Derriana Lough	59939	72696	83	KY
0400	Fords d/s Cummeragh Br	58008	71420	83	KY
0600	Dromkeare Br	54537	68551	84	KY

River and Code : **DERREENDARRAGH** 21/D/03

Tributary of : Blackwater (Kerry) OS Catchment No: 215

OS Grid Ref : V 791 714 Date(s) Surveyed : 08/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0300 Br near Derreendarragh

4-5 4-5 4-5 4-5

Assessment: Continuing satisfactory with no change in quality since first surveyed in 1990. The protected pearl mussel is among the fauna of this river.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br near Derreendarragh	79543	72590	78	KY

River and Code : **DRIMMINBOY**Tributary of : Croanshagh OS Catchment No: 222
OS Grid Ref : V 767 562 Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0100 Br SE of Shronebirrane

4-5
4-5
4
4

Assessment: Continuing satisfactory but again with a slightly lower ecological quality rating recorded.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br SE of Shronebirrane	75477	55306	84	KY

River and Code : **DRUMOGHTY**Tributary of : Sea - Kenmare River OS Catchment No: j3

OS Grid Ref : V 875 680 Date(s) Surveyed : 25/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1994

1997

2000

2003

0400 Dawros Br 4 4 4 4-5

Assessment: Continuing satisfactory. The protected pearl mussel lives in part of the river.

Samp	oling Stations	Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Dawros Br	87776	67666	85	KY

River and Code : **EMLAGHMORE**Tributary of : Sea - Ballinskelligs Bay
OS Grid Ref : V 453 682

CS Catchment No: O3
Date(s) Surveyed : 06/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0400 Emlaghmore Br

4
3
3
3-4

Assessment: Continuing unsatisfactory but with slight improvement in ecological quality recorded since previous survey.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Emlaghmore Br	44588	68776	84	KY

River and Code : **FINNIHY**Tributary of : Sea - Kenmare River OS Catchment No: 216
OS Grid Ref : V 903 707

Date(s) Surveyed : 25/09/2003

Samp	ling Stations		Biological Quality Ratings (Q V					
No.	Location	1986	1990	1994	1997	2000	2003	
0200	Gerah Br	4	4	4	4	4	4	
0300	Sahaleen Br	4	4	4	4	4	4	
0500	Kenmare: Finnihy Br (RHS)	4-5	4	4	4	4	3-4	
0510	Kenmare: Finnihy Br (LHS)	4-5	3	3-4	3-4	3-4	3-4	

Assessment: Satisfactory apart from in Kenmare where there has been further deterioration - extending to right-hand side of river (0500). Building development, being carried outjust upstream at the time of survey, was the latest pressure on water quality, adding to the long documented effect, on left-hand side of river (0510), of a moderately polluted stream. The small remaining population of pearl mussels is seriously threatened by the effects of latest development.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Gerah Br	87772	74120	78	KY
0300	Sahaleen Br	90013	73375	78	KY
0500	Kenmare: Finnihy Br (RHS)	90885	71012	78	KY
0510	Kenmare: Finnihy Br (LHS)	90885	71012	78	KY

River and Code : **FOUR MILE WATER**Tributary of : Sea - Dunmanus Bay OS Catchment No: 237
OS Grid Ref : V 944 419 Date(s) Surveyed : 15/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1989	1994	1997	2000	2003	
0200	Footbridge u/s Letterlicky Br (RHS)	-	4	4-5	4	4	
0210	Footbridge u/s Letterlicky Br (LHS)	-	3	3-4	4	4	
0400	SW of Maulinward	4-5	4-5	4-5	4-5	4	
0500	Br u/s Durrus	4	4-5	4-5	4-5	4-5	

Assessment: Satisfactory. The protected pearl mussel lives in part of the river.

Samp	ling Stations	National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Footbridge u/s Letterlicky Br (RHS)	100868	44314	88	CK
0210	Footbridge u/s Letterlicky Br (LHS)	100868	44314	88	CK
0400	SW of Maulinward	98047	43360	88	CK
0500	Br u/s Durrus	94790	42265	88	CK

River and Code : **GLAN STREAM**Tributary of : Dunmanus Harbour OS Catchment No: b3
OS Grid Ref : V 855 336

Date(s) Surveyed : 15/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0400 Br SE of Knockeens

4
4
3-4
3-4

Assessment: Continuing unsatisfactory due to eutrophication. The slightly polluted conditions have resulted in the demise of the local population of the protected pearl mussel. The apparent cause of the enrichment is agriculture in the hinterland.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br SE of Knockeens	86572	33553	88	CK

River and Code : **GLENGARRIFF**Tributary of : Sea - Glengarriff Harbour OS Catchment No: 219
OS Grid Ref : V 932 561 Date(s) Surveyed : 08/10/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	Br W of Skehil	4-5	5	5	5	5
0300	Foot-bridge NW of Glengarriff	4-5	4-5	4-5	4-5	4-5

Assessment: Continuing satisfactory. The pearl mussel, a protected species, is a component of the invertebrate fauna in parts of the river.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br W of Skehil	89720	58306	85	CK
0300	Foot-bridge NW of Glengarriff	91750	56879	85	CK

River and Code : INNY (KERRY) 21/I/01

Tributary of : Sea - Ballinskelligs Bay OS Catchment No: 212

OS Grid Ref : V 496 692 Date(s) Surveyed : 06/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0300	Ballynakilly Br	4	4	4	4	4		
0400	Killeenagh Br	4	4	4	4	4		
0500	Foildrenagh Br	4	4	3-4	3-4	4		
0900	2km u/s Inny Br	4	4	4	3-4	4		

Assessment: Satisfactory following improvement at the two lowermost locations (0500, 0900) since the previous survey.

Samp	oling Stations	Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ballynakilly Br	61578	77159	83	KY
0400	Killeenagh Br	57893	74578	83	KY
0500	Foildrenagh Br	55719	72847	83	KY
0900	2km u/s Inny Br	51818	70317	83	KY

River and Code : **ISKNAGAHINY LOUGH STREAM** 21/I/03
Tributary of : Lough Currane OS Catchment No: 213
OS Grid Ref : V 564 655 Date(s) Surveyed : 06/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0100 Br NW of Caunteens

4-5
4-5
4
4

Assessment: Continuing satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Br NW of Caunteens	59762	65805	84	KY	

River and Code : **KEALDUFF**Tributary of : Blackwater (Kerry) OS Catchment No: 215
OS Grid Ref : V 772 728 Date(s) Surveyed : 08/08/2003

 Sampling Stations
 Biological Quality Ratings (Q Values)

 No.
 Location

 1990
 1994
 1997
 2000
 2003

 0100
 Br nr Gearha
 4-5
 4-5
 4-5
 4

Assessment: Slight decrease in ecological quality. An increase in algal cover recorded since previous survey is a significant development for the pollution-sensitive pearl mussel population of the river. The increased algal growth may be attributable to forestry plantation upstream.

Sampling Stations		National	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Br nr Gearha	77412	73502	78	KY

River and Code : **KEALINCHA** 21/K/02
Tributary of : Sea - Coulagh Bay OS Catchment No: 223
OS Grid Ref : V 637 502 Date(s) Surveyed : 08/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Br NW of Kilmackowen	-	4	4-5	4-5	4-5	
0300	Drehidawillaun Br	3-4	4	4	4	4-5	

Assessment: Continuing satisfactory with an increase in ecological quality recorded at the lowermost location (0300) since previous survey.

Sampling Stations		National	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Br NW of Kilmackowen	67605	50105	84	CK
0300	Drehidawillaun Br	64782	49721	84	CK

River and Code : LOUGH FADDA STREAM 21/L/03

Tributary of : Ownagappul OS Catchment No: h3
OS Grid Ref : V 684 555 Date(s) Surveyed : 08/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1994
1997
2000
2003

0100 Br d/s Lough Fadda 4 4 4

Assessment: Continuing satisfactory.

Sampling Stations		National	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Br d/s Lough Fadda	67693	54934	84	CK

River and Code : MAGANNAGAN STREAM 21/M/02
Tributary of : Sea - Glengarriff Harbour OS Catchment No: f3
OS Grid Ref : V 923 545 Date(s) Surveyed : 08/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0100 Mangannagan Br

4-5
4-5
4-5

Assessment: Continuing satisfactory with no change in ecological quality recorded in the decade since surveys beagan.

Sampling Stations		National C	National Grid Ref.		County	
No.	Location	X	Y	Series No.	Code	
0100	Mangannagan Br	92344	54766	85	CK	

River and Code : MEALAGH

Tributary of : Sea - Bantry Bay OS Catchment No: 227

OS Grid Ref : W 005 501 Date(s) Surveyed : 10/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1987	1994	1997	2000	2003		
0100	Mealagh Br	4	4	4	4-5	4-5		
0200	Br SE of Ards More	5	5	5	5	4-5		
0300	Br nr Inchiclogh	5	5	4-5	4-5	4-5		
0400	Dunnamark Br	3-4	4	4	4	4		

Assessment: Continuing satisfactory.

Sampling Stations		National (National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0100	Mealagh Br	111820	53322	85	CK
0200	Br SE of Ards More	106464	52915	85	CK
0300	Br nr Inchiclogh	102733	51248	85	CK
0400	Dunnamark Br	100575	49990	85	CK

River and Code : **OWBEG (ROUGHTY)** 21/O/02
Tributary of : Roughty OS Catchment No: 217
OS Grid Ref : V 986 729 Date(s) Surveyed : 24/09/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)						
No.	Location	1987	1993	1997	2000	2003			
0200	Mangerton Br	4-5	4-5	4-5	4-5	4-5			
0500	Ardtully Br	4-5	4-5	4-5	4	4-5			

Assessment: Continuing satisfactory.

Sampling Stations		Nationa	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Mangerton Br	99495	76153	78	KY
0500	Ardtully Br	98731	73326	78	KY

River and Code : **OWENBEG (OWVANE)**

Tributary of : Owvane (Cork) OS Catchment No: 226 OS Grid Ref : W 032 556 Date(s) Surveyed : 09/10/2003

21/O/03

Sampling Stations Biological Quality Ratings (Q Values) Location 1987 1993 1997 2000 No. 2003 0200 Br E of Maugha 4 4 4-5 4 0400 Br u/s Owvane R confl 4 4 4 4 4

Assessment: Continuing satisfactory.

Sampling Stations		National	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Br E of Maugha	107136	60147	85	CK
0400	Br u/s Owvane R confl	104409	56761	85	CK

River and Code : **OWENSHAGH**Tributary of : Sea - Kilmackilloge Harbour OS Catchment No: 221

OS Grid Ref : V 774 584

Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

4 4-5 4 4

Assessment: Continuing satisfactory.

Sampling Stations		National C	Frid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Lauragh Br	77844	58522	84	KY	

River and Code : **OWNAGAPPUL** 21/O/09
Tributary of : Sea - Ardgroom Harbour OS Grid Ref : V 689 557
OS Grid Ref : V 689 557
Date(s) Surveyed : 08/10/2003

Sampling Stations	Biolog	ical Quality	Ratings (Q	Values)
No. Location	1994	1997	2000	2003
0200 Slieve Br	4	4	4	4-5

Assessment: Continuing satisfactory at the single location, in Ardgroom, examined. The pearl mussel, a protected species, lives in a part of this river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Slieve Br	69006	55038	84	CK

River and Code : **OWNGAR (CORK)** 21/O/04 Tributary of : Owvane (Cork) OS Catchment No: 226 OS Grid Ref : W 063 571 Date(s) Surveyed: 09/10/2003 **Sampling Stations** Biological Quality Ratings (Q Values) No. Location 1987 1994 1997 2000 2003 0200 SW of Ballynamought 4 4 4 4-5 4-5

Assessment: Continuing satisfactory with no change in ecological quality. As well as native salmonid fish, the introduced species, minnow, lives in the river.

4

4-5

4-5

4-5

4-5

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	SW of Ballynamought	109355	57321	85	CK
0400	Cahermoanteen Br	106465	56629	85	CK

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0400 Cahermoanteen Br

River and Code : **OWREAGH** 21/O/05

Tributary of : Sea - Sneem Estuary OS Catchment No: 214

OS Grid Ref : V 686 663 Date(s) Surveyed : 07/08/2003

Sampling Stations		Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003		
0100	Br S of Coomnahorna	_	4	5	4-5	4		
		4	4-5	4-5	4-5	4		

Assessment: Satisfactory but with a drop in ecological quality evident at both locations since previous survey. The increased filamentous algal growth recorded in the river could have a negative effect on the eutrophic-sensitive pearl mussels which inhabit certain reaches.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br S of Coomnahorna	64852	66134	84	KY
0300	Br W of Sneem	68024	66707	84	KY

River and Code : **OWROE**Tributary of : Inny (Kerry)

OS Grid Ref : V 612 770

OS Catchment No: 212

Date(s) Surveyed : 05/08/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Toorsadeen Br	4	4	4-5	4-5	4	
0200	Owroe Br	4	4	4	4	4	

Assessment: Continuing satisfactory. River temperatures on the day of the survey reached over 23 degree Celsius (°C).

Sampling Stations		National (Grid Ref.	Discovery County		
No.	Location	X	Y	Series No.	Code	
0100	Toorsadeen Br	61670	79257	83	KY	
0200	Owroe Br	61157	77482	83	KY	

River and Code : **OWVANE (CORK)**Tributary of : Sea - Bantry Bay OS Catchment No: 226
OS Grid Ref : W 006 533 Date(s) Surveyed : 09/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1987	1993	1997	2000	2003		
0200	Cappabo Br	5	4	4-5	4-5	4-5		
0300	Carriganass Br	4-5	4	4-5	4-5	4		
0400	Lisheen Br	4-5	4-5	4-5	4-5	4		
0410	Lisheen Br	4-5	4-5	4-5	3	4		

Assessment: Satisfactory at all locations following cessation of domestic sewage discharge, at Pierson's Bridge (0410), since previous survey. The protected pearl mussel has been recorded in a part of the river.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Cappabo Br	108845	59017	85	CK
0300	Carriganass Br	104832	56567	85	CK
0400	Lisheen Br	102397	54522	85	CK
0410	Lisheen Br	102379	54484	85	CK

River and Code : **ROUGHTY**Tributary of : Sea - Kenmare Bay OS Catchment No: 217
OS Grid Ref : V 910 700 Date(s) Surveyed : 24/09/2003

Sampl	ling Stations		Bi	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1982	1986	1990	1993	1997	2000	2003
0020	Br NE of Knockanruddig	-	-	4-5	4	4-5	4-5	4-5
0060	Inchee Br (RHS)	-	-	4-5	4	4-5	4-5	4-5
0070	Inchee Br (LHS)	-	-	3	4	4-5	4-5	4-5
0100	Morley's Br	5	4-5	4-5	4-5	4-5	4-5	5
0250	Ford d/s Slaheny R confl	-	-	4	4	4	4	4
0350	Ford NW of Kilgortaree	_	-	4	4	4	4	4

Assessment: Continuing satisfactory. In 1990 a stream entering the river upstream of Inchee Bridge (0070) was grossly polluted but has been clean since that time. The pearl mussel, a protected species, lives in the river.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br NE of Knockanruddig	108779	70951	79	KY
0060	Inchee Br (RHS)	107735	73939	79	KY
0070	Inchee Br (LHS)	107735	73939	79	KY
0100	Morley's Br	104756	75262	79	KY
0250	Ford d/s Slaheny R confl	99832	72862	78	KY
0350	Ford NW of Kilgortaree	95928	72217	78	KY

River and Code : SHEEN 21/S/01

Tributary of : Kenmare River OS Catchment No: 218

OS Grid Ref : V 924 702 Date(s) Surveyed : 25/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1987	1994	1997	2000	2003		
0100	Releagh Br	4	4-5	4-5	4-5	5		
0400	Ford d/s Dromagorteen Br	4	4-5	4-5	4-5	4-5		
0700	1.1km u/s Sheen Br	-	4	4	4	4		
0700	1.1km u/s Sheen Br	-	4	4	4	4		

Assessment: Continuing satisfactory. The right-hand bank of the river has been raised substantially at the final location (0700) to facilitate the building of two large dwelling houses, and to prevent these flooding, which has severely hindered access for sampling. The pollution-sensitive pearl mussel, which is a protected species, lives in the river. Known as the Baurearagh River in upper reaches.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Releagh Br	92320	62907	85	KY
0400	Ford d/s Dromagorteen Br	94934	65576	85	KY
0700	1.1km u/s Sheen Br	92964	70081	78	KY
0700	1.1km u/s Sheen Br	92964	70081	78	KY

River and Code : **SLAHENY**Tributary of : Roughty OS Catchment No: 217
OS Grid Ref : W 004 730 Date(s) Surveyed : 24/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1987	1994	1997	2000	2003		
	Ford NE of Shandrum Coolyard Br	5 4-5	4-5 4	4-5 4-5	4-5 4	4-5 4-5		

Assessment: Continuing satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0300	Ford NE of Shandrum	101923	69685	85	KY	
0500	Coolyard Br	100426	72709	79	KY	

River and Code : SNEEM 21/S/03

Tributary of : Kenmare River OS Catchment No: 214

OS Grid Ref : V 690 667 Date(s) Surveyed : 07/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0200	Br E of Dromtine Lough	_	4-5	4-5	4-5	4-5		
0400	Br u/s Ardsheelhane R confl	4	4	4-5	4-5	4-5		

Assessment: Continuing satisfactory. The protected pearl mussel is a component of the macroinvertebrate fauna in parts of the river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br E of Dromtine Lough	67057	69862	84	KY
0400	Br u/s Ardsheelhane R confl	68914	67532	84	KY

River and Code : **TAHILLA**Tributary of : Sea - Coongar Harbour
OS Grid Ref : V 743 655

Date(s) Surveyed : 04/08/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1994	1997	2000	2003			
0200	Tahilla Br	4-5	4-5	3	4			

Assessment: Satisfactory following improvement since previous survey but not back to ecological quality attained in earlier surveys.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0200	Tahilla Br	74433	65811	84	KY	

River and Code : **TRAFRASK STREAM**Tributary of : Sea - East of Adrigole Harbour OS Grid Ref : V 848 494

Code : **TRAFRASK STREAM**OS Catchment No: f3
Date(s) Surveyed : 08/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

4-5
4-5
4-5

Assessment: Continuing satisfactory with no change apparent in a decade of surveys.

Sampling Stations		Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Trafrask Br	85145	49578	85	CK

HYDROMETRIC AREA 24 (BALANCE)

Shannon Estuary South

Note: Most of the rivers in this area were surveyed in 2002.

Barnakyle 24B05

Camoge 24C01

Charleville Stream 24C02

Mahore 24M04

River and Code : **BARNAKYLE** 24/B/05
Tributary of : Maigue OS Catchment No: 155
OS Grid Ref : R 481 529 Date(s) Surveyed : 11/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1988	1994	1996	1999	2003		
0300	Br SW of Kilpeacon Crossroads	_	3	3-4	3	3		
0400	Dooneen Br	-	3	3-4	3-4	3-4		
0600	Br SE of Clarina	3-4	3	2-3	3	3		

Assessment: Continuing unsatisfactory with no change. This is a naturally heavily calcified river.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br SW of Kilpeacon Crossroads	156264	147695	65	LK
0400	Dooneen Br	154611	149862	65	LK
0600	Br SE of Clarina	151064	153057	65	LK

River and Code : **CAMOGE**Tributary of : Maigue OS Catchment No: 155
OS Grid Ref : R 522 394

Date(s) Surveyed : 11/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1976	1981	1984	1988	1993	1996	1999	2003
0100	Cloghansoun Br	-	3	3-4	3-4	3-4	3-4	4	3-4
0200	Longford Br	-	3-4	3-4	3-4	3-4	4	4	3-4
0250	Nr Ballycullane	-	3-4	3-4	3-4	4	3-4	4	3-4
0400	Gray's Br	-	4	3-4	3-4	3-4	3-4	3-4	3-4
0500	Monaster Br	-	3-4	3-4	3-4	4	3-4	3-4	3-4
0600	Cloghanduff Br	4-5	4	4	4	3-4	3-4	3-4	3-4

Assessment: Eutrophic throughout in latest biological assessment signalling deterioration at three locations (0100, 0200, 0250) since previous survey. Despite its enriched status the river supports good populations of the protected crayfish.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Cloghansoun Br	167600	141268	65	LK
0200	Longford Br	164528	143496	65	LK
0250	Nr Ballycullane	160346	142417	65	LK
0400	Gray's Br	157970	140345	65	LK
0400	Gray's Br	157970	140345	65	LK
0500	Monaster Br	154902	140887	65	LK
0600	Cloghanduff Br	152484	139518	65	LK

River and Code : **CHARLEVILLE STREAM** 24/C/02
Tributary of : Maigue OS Catchment No: 155
OS Grid Ref : R 543 274 Date(s) Surveyed : 10/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1986	1988	1989	1994	1996	1999	2003	
					_	_		_	
0200	New Line Br [Glen R]	-	-	-	3	3	2-3	3	
0500	Br NW of Ballincolly	2	2	2-3	2-3	2-3	2-3	2-3	
0800	Just u/s Maigue R confl	3	2	2-3	2-3	3	3	3	

Assessment: Continuing unsatisfactory with moderately polluted conditions again recorded at all three locations. Also known as River Glen.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	New Line Br [Glen R]	153534	122380	73	CK
0400	Br S of Ballincolly	0	0	0	-
0500	Br NW of Ballincolly	154136	125076	73	LK
0800	Just u/s Maigue R confl	154304	127653	73	KY

River and Code : MAHORE 24/M/04
Tributary of : Camoge OS Catchment No: 155
OS Grid Ref : R 688 385 Date(s) Surveyed : 12/09/2003

Sampling Stations	Biological Quality Ratings (Q Values)				
No. Location	1988	1993	1996	1999	2003
				_	
0500 Ballynaveen Br	3-4	3	3	3	3-4
0700 Hospital Br	3-4	3	3	3	3
0900 O'Carroll's Br	3-4	3-4	3	3-4	3-4

Assessment: Unsatisfactory due to slightly (0500, 0900) and moderately polluted (0700) conditions.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0500	Ballynaveen Br	172861	135204	65	TY
0700	Hospital Br	170604	136254	65	LK
0900	O'Carroll's Br	168953	137988	65	LK

HYDROMETRIC AREA 25 (PART)

Lower Shannon

Note: Most of the rivers in this area were surveyed in 2002

Ayle	25A07
Ballinlough Stream Barnacullia Stream* [Black (Ballyboy) Bleach	25B15 25B14 25B04] 25B07
Cappagh Cloghaun Coos Corra	25C03 25C07 25C08 25C09
Drumandoora Drumkeary Stream Duniry	25D06 25D11 25D07
Eyrecourt Stream	25E01
# Graney	25G04
Kilcrow	25K01
Lisduff Lisduff Stream*	25L06 25L07
Scarriff Stream	25S08
Woodford	25W01

Note: Black (Ballyboy) inadvertently omitted this cycle.

^{*}Seriously polluted below Scarriff.

^{*} Indicates non-baseline rivers i.e., those which do not appear on the OS Rivers Catchment map

River and Code : AYLE 25/A/07
Tributary of : Cloghaun OS Catchment No: 155
OS Grid Ref : R 543 827 Date(s) Surveyed : 02/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)				
No.	Location	1988	1993	1996	1999	2003
0300	Ayle Br	5	5	4-5	5	-
0400	Br u/s Cloghaun R confl	5	5	4-5	4-5	4-5

Assessment: Continuing satisfactory. Locals report occasional weekend pollution in the lower reaches.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ayle Br	153893	184793	58	CE
0400	Br u/s Cloghaun R confl	154346	183526	58	CE

River and Code : **BALLINLOUGH STREAM** 25/B/15
Tributary of : Cappagh OS Catchment No: 155
OS Grid Ref : M 775 051 Date(s) Surveyed : 04/11/2003

Sampl	ling Stations	Biol	logical Qu	uality Rat	ings (Q V	alues)	
No.	Location	1987	1989	1993	1996	1999	2003
0050	Br S Acres	-	5	4-5	4-5	4	4-5
0100	First Br d/s Ballin Lough	-	4	4	-	-	-
0200	Br E of Silverstream House	-	-	-	4-5	4	-
0300	Br at Ballygowan	-	5	-	-	-	4-5
0400	Br N of Brookville	-	-	4-5	-	-	-
0500	Bridge u/s Cappagh River	4	4-5	4	3	4-5	4-5

Assessment: The Ballinlough River was in satisfactory condition when surveyed in November 2003.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0050	Br S Acres	167848	202290	52	GY	
0100	First Br d/s Ballin Lough	168879	202651	52	GY	
0200	Br E of Silverstream House	171875	202970	52	GY	
0300	Br at Ballygowan	173200	204075	53	GY	
0400	Br N of Brookville	0	0	53	GY	
0500	Bridge u/s Cappagh River	176786	205015	53	GY	

River and Code : **BARNACULLIA STREAM*** 25/B/14

Tributary of : Lisduff OS Catchment No: 155

OS Grid Ref : M 766 138 Date(s) Surveyed : 11/11/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1982 1983 1984 1986 1987 1988 1993 1996 2003

0100 Bridge at Barnacullia 1/0 1/0 2/0 3/0 2/0 2-3/0 3/0 3/0 2/0

Assessment: The Barnacullia Stream is a small stream that adjoins the old Tynagh Mines tailings pond. Only four invertebrates taxa were found in the sample indicating toxic conditions. There appears to have been a decrease in diversity and abundance of invertebrates in comparison with the most recent previous samples taken here.

Sam	pling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge at Barnacullia	175178	213471	53	GY

^{*}This stream is not a baseline river as it is not shown on the OS Rivers Catchment Map.

River and Code : **BLACK (BALLYBOY)** 25/B/04

Tributary of : Silver (Kilcormac) OS Catchment No: 155

OS Grid Ref : N 247 130 Date(s) Surveyed : 01/06/2003

 Sampling Stations
 Biological Quality Ratings (Q Values)

 No.
 Location
 1987
 1993
 1996
 1999
 2002
 2003

 0200
 Br 0.5 km u/s Silver R
 4-5
 4
 4-5
 4-5

Assessment: Inadvertently omitted this cycle. No change in quality assumed.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0200	Br 0.5 km u/s Silver R	224737	212704	54	OY

River and Code : **BLEACH**Tributary of : Lough Graney OS Catchment No: 155
OS Grid Ref : R 556 949

Date(s) Surveyed : 30/06/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1987	1989	1993	1996	1999	2002	2003	
0100	Corlea Br	-	5	-	4-5	4-5	-	4-5	
0200	Bleach Br	5	5	5	4-5	4-5	-	4-5	

Assessment: The river was in high flood at the time of this survey in late June 2003 and as a consequence the sample obtained was less than optimal. However, there was no evidence of any significant change in conditions since the previous survey in 1999 when water quality was assessed as satisfactory.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Corlea Br	160125	196179	52	CE
0200	Bleach Br	157008	195709	52	CE

River and Code : CAPPAGH (GALWAY) 25/C/03

Tributary of : Kilcrow OS Catchment No: 155

OS Grid Ref : M 795 042 Date(s) Surveyed : 04/11/2003

Sampl	Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1975	1979	1983	1987	1993	1996	1999	2003	
0100	Metal Bridge	-	_	_	4-5	4	3-4	3-4	3-4	
0200	Bridge W. of Duniry Village	4	4	4	3-4	4	3	4	4	
0300	1.5 km N.E. of Abbey	-	-	4	4	4	4	4-5	-	
0400	Cappagh Bridge	-	-	4	4	4	-	-	4-5	
0500	Cloonmoylan Bridge	4-5	5	4	4	4	4	4	-	

Assessment: The farm pollution recorded at Metal Bridge (0100) in 1999 is still apparent. Water quality improves over the course of the river and was quite good at Cappagh Bridge (0400) when sampled in November 2003.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Metal Bridge	168182	211277	52	GY
0200	Bridge W. of Duniry Village	172362	209351	53	GY
0300	1.5 km N.E. of Abbey	175240	207147	53	GY
0400	Cappagh Bridge	177220	205615	53	GY
0500	Cloonmoylan Bridge	178780	204688	53	GY

River and Code : CLOGHAUN 25/C/07
Tributary of : Graney OS Catchment No: 155
OS Grid Ref : R 602 844 Date(s) Surveyed : 02/07/2003

Sampling Stations Biological Quality Ratings (Q Value					alues)			
No.	Location	1986	1987	1989	1993	1996	1999	2003
0200	Br N of Gortacummer	_	_	5	4	4-5	4-5	4-5
0400	Annaghneal Br	-	-	4-5	-	4-5	4	4
0500	Cloghaun Br	-	-	4	-	3-4	3-4	3-4
0600	Core Br	4	4-5	5	4-5	3-4	4	3-4

Assessment: The Cloghaun River continued in a satisfactory quality condition in the reach upstream of Loughanillaun in July 2003 but, as indicated by the biotic indices (Q3-4) at Stations 0500 and 0600, conditions were less than satisfactory in the reach below this lake. Agriculture (slurry) suspected.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0200	Br N of Gortacummer	152101	183895	58	CE
0400	Annaghneal Br	155747	182673	58	CE
0500	Cloghaun Br	157574	182766	58	CE
0600	Core Br	159779	184402	58	CE

River and Code : COOS 25/C/08

Tributary of : Lough Derg OS Catchment No: 155
OS Grid Ref : R 763 946 Date(s) Surveyed : 02/07/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	s (Q V	alues)
No.	Location	1975	1979	1984	1987	1989	1993	1996	1999	2003
0010	Br N of Boleynabrone	-	_	-	_	_	_	5	4-5	4
0180	Br N of Tooreeny	-	-	-	4	-	4-5	3	-	-
0200	Tooreeny Br	3-4	5	4	1	3	2-3	-	1	3

Assessment: Moss growth had increased considerably in the upper river (0010) since the previous survey but water quality continued to be of a satisfactory standard there. Although still significantly polluted by suspected agriculture there had been a significant improvement in the lower reaches (0200) where serious pollution was no longer evident in 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Br N of Boleynabrone	170700	194698	52	GY
0180	Br N of Tooreeny	174793	193936	53	GY
0200	Tooreeny Br	175169	193760	53	GY

River and Code : CORRA 25/C/09
Tributary of : Graney OS Catchment No: 155
OS Grid Ref : R 594 888 Date(s) Surveyed : 01/07/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1987	1989	1993	1996	1999	2003		
0100	Br SE of Corrakyle	-	5	-	5	5	4-5		
0400	Gortaderry Br	5	5	5	5	5	5		

Assessment: Continuing highly satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br SE of Corrakyle	161499	191278	52	CE
0400	Gortaderry Br	159503	189303	58	CE

River and Code : **DRUMANDOORA** 25/D/06

Tributary of : Lough Graney OS Catchment No: 155

OS Grid Ref : R 551 951 Date(s) Surveyed : 30/06/2003

Sampl	ing Stations		Bi	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1987	1989	1993	1994	1996	1999	2003
0200	Br N of Drumandoora West	-	5	-	5	4	4-5	4-5
0500	2nd Br u/s Lough Graney	-	-	-	-	-	4-5	4
0600	Br u/s L Graney	4	4	-	4-5	4	-	-

Assessment: Satisfactory. Lower reaches becoming enriched.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br N of Drumandoora West	150711	194288	52	CE
0500	2nd Br u/s Lough Graney	153711	195643	52	CE
0600	Br u/s L Graney	153681	195648	52	CE

River and Code : **DRUMKEARY STREAM** 25/D/11

Tributary of : Duniry OS Catchment No: 155

OS Grid Ref : M 698 088 Date(s) Surveyed : 05/11/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1987	1989	1993	1996	1999	2003	
0300	Bridge N.W. of Drumkeary	_	4	4-5	4-5	4-5	4	
0350	Second Br u/s Duniry River	5	-	5	-	4-5	4-5	
0500	Just u/s Duniry R confl.	-	-	-	4-5	-	-	

Assessment: Water quality was satisfactory in the Drumkeary Stream - a tributary of the Duniry River (qv)

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Bridge N.W. of Drumkeary	167822	206490	52	GY
0350	Second Br u/s Duniry River	169636	207376	52	GY
0500	Just u/s Duniry R confl.	169616	208641	52	GY

River and Code : **DUNIRY**Tributary of : Cappagh (Galway)

OS Grid Ref : M 723 090

OS Catchment No: 155

Date(s) Surveyed : 05/11/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1987	1989	1993	1996	1999	2003		
0100	Cullenagh Bridge	5	5	4-5	5	4-5	4-5		
0200	Bridge u/s Ballinasack Br	-	5	4-5	5	4-5	4-5		
0300	Ballinasack Bridge	5	-	-	-	-	-		
0400	Just u/s Cappagh River confl	5	5	5	5	5	5		

Assessment: Quality was generally high over the course of the Duniry with little change since the previous survey.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Cullenagh Bridge	164876	207685	52	GY
0200	Bridge u/s Ballinasack Br	169103	208710	52	GY
0300	Ballinasack Bridge	0	0	52	GY
0400	Just u/s Cappagh River confl	172204	208956	53	GY

River and Code : **EYRECOURT STREAM** 25/E/01
Tributary of : Shannon OS Catchment No: 155
OS Grid Ref : M 957 152 Date(s) Surveyed : 07/11/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)								
No.	Location	1983	1986	1988	1993	1996	1999	2003		
0050	Bridge W.S.W. of Eyrecourt	3-4	3-4	3-4	4	_	4	3		
0100	Bridge N.N.E. of Fearmore	3	3	2-3	3	2	2-3	2-3		
0200	Br at Kilhonerush	-	3	3	3	-	3	3		

Assessment: The Eyrecourt Stream was moderately polluted over its length.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge W.S.W. of Eyrecourt	190557	216424	53	GY
0100	Bridge N.N.E. of Fearmore	193323	215927	53	GY
0200	Br at Kilhonerush	195174	215015	53	GY

River and Code : **GRANEY (SHANNON)**Tributary of : Lough Derg OS Catchment No: 155
OS Grid Ref : R 658 837

Date(s) Surveyed : 30/06/2003

Statio	ns						Bio	ological	Quality	Rating	s (Q Va	alues)
No.	1971	1975	1979	1981	1984	1986	1987	1993	1994	1996	1999	2003
0010					4		4.5	_		_	_	4.5
0010	-	-	-	-	4	-	4-5	5	-	3	5	4-5
0025	-	-	-	-	4-5	-	5	5	-	5	5	5
0100	-	-	4	-	4	-	4	4	-	3	4	4-5
0200	5	5	4	-	5	-	5	-	5	4	4	5
0300	5	5	4	5	4	4-5	4	-	-	4	-	3*
0400	-	-	-	-	-	-	-	-	-	3	3	2

Assessment: Continuing satisfactory for most of its course but quality had deteriorated upstream of Scarriff (0300) and again below the town (0400) where a very peculiar fauna plus sewage detritus indicated a serious degree of water quality impairment in July 2003. *Very heavy siltation.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{X} \mathbf{Y}		Code
0010	Br d/s Lough Ea	152204	189165	58	CE
0025	Caher Br	155396	190000	52	CE
0100	Aughaderreen Br	158150	189587	58	CE
0200	Cooleen Br	160294	186009	58	CE
0300	1 km u/s Scarriff Br	163300	184296	58	CE
0400	400 m d/s Scarriff Br	164559	183801	58	CE

River and Code : KILCROW

Tributary of : Lough Derg OS Catchment No: 155
OS Grid Ref : M 801 031 Date(s) Surveyed : 02/10/2003

Sampl No.	ing Stations Location	1075		Biolog: 1983	_	-	_		
NO.	Location	1773	17/7	1703	1700	1773	1770	1)))	2003
Carro	wreagh Branch								
0005	3rd Br u/s Main Channel	-	-	-	-	-	-	-	-
0009	Br u/s Main Channel (at 209' mark) -	-	-	-	4	2-3	4	2-3
Main	Channel								
0020	Killoran Br	-	-	-	4	-	4	4	4
0100	Ahanageleery Bridge	-	-	4	4	3	3	3	3-4
0200	Oxgrove Bridge	2	4	3-4	4	4	3	4	-
0300	Hearnesbrook Bridge	-	-	3	4	4	3	3-4	3-4
0350	East Br 2 km d/s Samp St 0300	-	-	3	-	-	-	-	-
0360	West Br 2 km d/s Samp St 0300	-	-	-	4	3-4	2-3	4	4
0400	Killeen Bridge	-	-	3-4	3-4	4	-	3-4	3
0500	Moat Bridge	4	4	4	4	3	2-3	3	-
0600	Newbridge	-	-	4-5	4	3-4	3	4	3-4
0700	Ballyshrule Bridge	4	4	4-5	4	3	3-4	4	4

Assessment: The Kilcrow is a very hard water river (conductivities $>500\mu S/cm$) that shows signs of eutrophication over its length. The 2003 survey showed some improvement and some deterioration in comparison with 1999. The overall impression is one of a eutrophic river.

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0005	3rd Br u/s Main Channel	0	0	53	GY
0009	Br u/s Main Channel (at 209' mark)	180627	218695	53	GY
0020	Killoran Br	176312	221925	47	GY
0100	Ahanageleery Bridge	180635	217254	53	GY
0200	Oxgrove Bridge	180049	214999	53	GY
0300	Hearnesbrook Bridge	179740	213025	53	GY
0350	East Br 2 km d/s Samp St 0300	180000	211900	53	GY
0360	West Br 2 km d/s Samp St 0300	179720	211753	53	GY
0400	Killeen Bridge	179768	211016	53	GY
0500	Moat Bridge	180011	210096	53	GY
0600	Newbridge	179395	207298	53	GY
0700	Ballyshrule Bridge	179792	205702	53	GY

River and Code : LISDUFF (KILCROW) 25/L/06

Tributary of : Kilcrow OS Catchment No: 155

OS Grid Ref : M 793 124 Date(s) Surveyed : 11/11/2003

Sampl No.	ing Stations Location	1980					Ratings 1996		
0060	Br S.W. of Carrowshanbally	_	_	_	3	_	2-3	3-4	_
0100	Castletown Bridge	_	-	_	3	3-4	3	-	4
0200	Bridge at Coolagh	-	3-4	4	4	3	-	4	3
0300	Bridge at Old Corn Mill	3	3-4/0	3	3/0	3	-	-	-
0400	300 m d/s Samp Station 0300	-	4-5	3	3/0	3	3	4	3
0500	Just u/s Kilcrow River confl	-	3-4	3	3/0	-	-	-	-

Assessment: The upper station sampled (0100) was satisfactory but the lower sites (0200, 0400) had deteriorated in comparison with the most recent previous survey. The lowermost site (0400) sampled is downstream of the principal surface water streams that drain the old Tynagh mine site i.e. the Barnacullia Stream (qv) and the Lisduff Stream (qv). The Lisduff River also drains the wider region of the Tynagh Mines ore body and background lead and zinc concentrations are relatively high. The soils in the area are well drained, grey brown podzolics on limestone bedrock. There are some karstified aquifers and productive fractured bedrock aquifer and the river channel has been subjected to arterial drainage. The land use is predominantly pasture for cattle and sheep.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Br S.W. of Carrowshanbally	171265	216054	52	GY
0100	Castletown Bridge	173995	215375	53	GY
0200	Bridge at Coolagh	175744	214522	53	GY
0300	Bridge at Old Corn Mill	0	0	53	GY
0400	300 m d/s Samp Station 0300	177365	213133	53	GY
0500	Just u/s Kilcrow River confl	0	0	53	GY

River and Code : LISDUFF STREAM * 25/L/07
Tributary of : Mill Stream (Tynagh) OS Catchment No: 155
OS Grid Ref : M 773 136 Date(s) Surveyed : 11/11/2003

Sampl				Biolog	gical Q	uality	Rating	gs (Q V	alues)	
No.	Location	1982	1983	1984	1986	1987	1988	1993	1996	2003
0050	1.5 km S.W. Lisduff House	_	-	-	3	2/0	1/0	3/0	3/0	3/0
0100	Bridge at Lisduff House	1/0	-	1-2	1-2	2-3/0	2-3	-	-	-
0200	Just u/s Mill Stream confl	1/0	1/0	3/0	3	2-3/0	-	2-3	2	2-3

Assessment: The Lisduff Stream is impacted by the Tynagh Mines lake outflow (the lake covers what was an open cast section of the mine), which contains relatively high heavy metal concentrations. The fauna indicates that toxic conditions still persist reducing the diversity and abundance of the faunal community.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	1.5 km S.W. Lisduff House	175531	212700	53	GY
0100	Bridge at Lisduff House	0	0	53	-
0200	Just u/s Mill Stream confl	177094	213405	53	GY

^{*}This stream is not a baseline river as it is not shown on the OS Rivers Catchment Map.

River and Code : SCARRIFF STREAM

Tributary of : Graney OS Catchment No: 155
OS Grid Ref : R 641 844 Date(s) Surveyed : 01/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)								
No.	Location	1994	1996	1999	2003					
0400	West Br Scarriff	1	3 /	1	3					

Assessment: Quality was assessed as 'Doubtful' at the point surveyed (0400) on this stream representing a significant deterioration since the survey of 1999.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	X Y		Code	
0400	West Br Scarriff	164100	184608	58	CE	

River and Code : WOODFORD (GALWAY) 25/W/01
Tributary of : Lough Derg OS Catchment No: 155
OS Grid Ref : R 786 968 Date(s) Surveyed : 03/07/2003

Sampl No.	ing Stations Location	1975	1979	Biolog 1984					
0040	Br NW of Featherstone Lodg	_	_	_	_	_	_	3*	4
0050	Br N of Featherstone Lodge	_	-	4	4-5	4	5	_	_
0060	Br N of Lough Alee	-	-	-	-	4	-	3-4*	-
0100	Woodford Br	-	5	4-5	4	4	-	-	-
0200	Bolag Br	-	5	4	4-5	4	3-4	4	4
0300	Rossmore Br	4-5	5	4-5	5	4-5	3-4	4	4-5

Assessment: The Woodford River had recovered from the heavy siltation observed in 1999 and was assessed as satisfactory at each of the three locations surveyed in early July 2003.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0040	Br NW of Featherstone Lodg	168964	199154	52	GY
0050	Br N of Featherstone Lodge	169302	199263	52	GY
0060	Br N of Lough Alee	170669	199974	52	GY
0100	Woodford Br	0	0	53	GY
0200	Bolag Br	174192	199691	53	GY
0300	Rossmore Br	177206	198435	53	GY

HYDROMETRIC AREA 28 Mal Bay

Aille (Clare) Annageeragh	28A01 28A02
Annagh (Clare)	28A03
Aughaglanna	28A06
Aughaveema	28A04
Ballinphonta Ballymacravan	28B03 28B02
Caher (Clare)	28C01
Castlepark Stream	28C09
Clooneenagh Stream	28C08
Cooleen	28C05
• • • • • • • • • • • • • • • • • • • •	28C02
Creegh	28002
Dealagh	28D01
Doonbeg	28D02
Freagh	28F01
Glendine (Clare)	28G02
Inagh	28I01
Kildeema	28K01
Sruhaunakitt Stream	28S04

River and Code : **AILLE (CLARE)**Tributary of : Sea - at Roadford OS Catchment No: 148
OS Grid Ref : R 065 964 Date(s) Surveyed : 14/10/2003

Sampl No.	ing Stations Location	1980		Biolog 1986			_		
0100	Ballyteigue Br	_	_	_	4	5	5	4	4-5
0190	U/s Spectacle Bridge	-	-	-	3	3-4	-	-	-
0200	Spectacle Bridge	3-4	2	3	3	2-3	2-3	2-3	4
0300	Drehidnalacken Bridge	3-4	3	3-4	3	3-4	-	2-3	4
0400	Bridge in Roadford	4	3-4	4	4	4	3-4	3	3-4

Assessment: Water quality in the Aille (Clare) was satisfactory at its upper station although this site continues to be a location for fly tipping of domestic rubbish - a lead acid car battery was removed from the river, for example, on the day of the survey. This is unfortunate as Ballyteigue Bridge (0100) adjoins the Ballyteigue SAC. At Spectacle Bridge a major improvement in water quality was noted. Here the old percolating filter sewage works has been shut down and replaced by a modern works further downstream. A big improvement in water quality was also evident at Station 0300 some 1.6 km downstream from Spectacle Bridge. The last site sampled, at Roadford, was slightly polluted, however, with significant degree of eutrophication noticed there. A septic tank discharge just upstream of the bridge accounted for some, but not all, of the eutrophication noticed.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ballyteigue Br	115189	198079	51	CE
0200	Spectacle Bridge	112249	197834	51	CE
0300	Drehidnalacken Bridge	111036	197120	51	CE
0400	Bridge in Roadford	107993	197284	51	CE

River and Code : ANNAGEERAGH

Tributary of : Sea - Lough O'Donnell OS Grid Ref : R 005 710

OS Grid Ref : Date(s) Surveyed : 16/10/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1980	1983	1988	1991	1997	2000	2003	
0010	Br u/s Doo Lough	-	-	-	4-5	3-4	3-4	4	
0050	Bridge u/s Moyglass Bridge	-	-	4-5	4	4	3-4	3	
0100	Moyglass Bridge	5	5	5	4-5	-	-	-	
0200	Knocknahila Bridge	5	5	5	4-5	4-5	4-5	4	
0300	Annageeragh Br	4	4	4-5	4-5	-	-	-	
0400	Lissyneillan Bridge	-	-	4	4-5	4	4	4	

Assessment: There was a sign of recovery in the upper Annageeragh where it flows into Doo Lough (0010). The station at the outflow from the Doo Lough water works (0050) was polluted due to discharges from the works. The lower Annageeragh (0200, 0400) was in satisfactory condition.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Br u/s Doo Lough	114679	171884	57	CE
0050	Bridge u/s Moyglass Bridge	109577	172657	57	CE
0100	Moyglass Bridge	108007	172392	57	CE
0200	Knocknahila Bridge	105697	171148	57	CE
0300	Annageeragh Br	103135	170908	57	CE
0400	Lissyneillan Bridge	102705	171042	57	CE

River and Code : **ANNAGH (CLARE)**Tributary of : Sea - Spanish Point OS Grid Ref : R 036 773

OS Catchment No: 150
Date(s) Surveyed : 30/10/2003

Sampl	ing Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1988	1991	1997	2000	2003
0200	Br at Drehidenagh	4	4	4	4-5	4
0400	Aghy Br	4	4-5	4	4	4
0700	Carrowduff Bridge	4-5	4-5	-	-	-
0800	Stackpoole's Bridge	5	5	-	-	-
0900	Bealaclugga Br	4-5	4-5	4-5	4	4

Assessment: The Annagh was in satisfactory condition when surveyed in 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br at Drehidenagh	111298	176005	57	CE
0400	Aghy Br	107529	175232	57	CE
0900	Bealaclugga Br	103725	177123	57	CE

River and Code : **AUGHAGLANNA** 28/A/06

Tributary of : Inagh (Ennistymon) OS Catchment No: 149

OS Grid Ref : R 218 775 Date(s) Surveyed : 17/10/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	(alues)
No.	Location	1988	1991	1997	2000	2003
0200	Bridge N.W. of Reanaglisha	4	4	4	4	4
0500	Aughaglanna Bridge	4-5	4	-	-	-
0700	Bridge u/s Inagh river confl	4-5	4	5	4	4-5

Assessment: Water quality in the Aughaglanna River was satisfactory at both locations sampled in 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge N.W. of Reanaglisha	118908	174801	57	CE
0700	Bridge u/s Inagh river confl	121286	177346	57	CE

River and Code : **AUGHAVEEMA**Tributary of : Sea - S. of Lurga Point OS Grid Ref : Q 998 724

OS Grid Ref : Q 998 724

28/A/04

OS Catchment No: 151

Date(s) Surveyed: 16/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Va				(alues)
No.	Location	1988	1991	1997	2000	2003
0300	Drehidnacarriga	4	4-5	4	4	4
0500	Kilmurry Bridge	3	3-4	-	-	-
0600	Ballynabean Bridge	4	3	4	3	3-4

Assessment: The mid to upper Aughaveema (0300) was satisfactory but the lower station (0400) had excessive amounts of *Cladophora* (blanket weed) indicating eutrophic conditions.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Drehidnacarriga	105257	173195	57	CE
0600	Ballynabean Bridge	101359	173612	57	CE

River and Code : **BALLINPHONTA**Tributary of : Sea - N. of Spanish Point OS Grid Ref : R 037 397

OS Grid Ref : R 037 397

Date(s) Surveyed : 30/10/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1988	1991	1997	2000	2003
0300	Bridge S.W. of Ballinphonta	4	3	4	4	4
0500	Cleedagh Bridge	4-5	3-4	3-4	4	4

Assessment: The Ballinaphonta was generally satisfactory but it was quite eutrophic in the lower reaches where it is just on the border of unsatisfactory quality.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Bridge S.W. of Ballinphonta	105904	180269	57	CE
0500	Cleedagh Bridge	103865	179758	57	CE

River and Code : **BALLYMACRAVAN** 28/B/02

Tributary of : Inagh (Ennistymon) OS Catchment No: 149
OS Grid Ref : R 123 887 Date(s) Surveyed : 29/10/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1988	1991	1997	2000	2003
0100	Br just d/s Lickeen Lough	3-4	3-4	3-4	Dry	dry
0110	d/s Fish farm d/s Lickeen Lough	-	3-4	-	-	-
0300	Ballymacravan Br	-	-	4	-	-
0400	Calluragh Br	-	3	-	4	3/0

Assessment: The upper Ballymacravan (0100) was dry in late October – i.e. no water was flowing from Lickeen Lough into the river. Signs of toxicity were apparent at Calluragh Bridge (0400) where faunal diversity was down sharply on previous years with a number of key indicator species missing. This station is impacted by discharges from a drinking water treatment plant (the water is abstracted from Lickeen Lough).

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br just d/s Lickeen Lough	116279	190900	51	CE
0110	d/s Fish farm d/s Lickeen Lough	116005	190965	51	CE
0300	Ballymacravan Br	113919	190260	51	CE
0400	Calluragh Br	113636	189929	57	CE

River and Code : **CAHER (CLARE)**Tributary of : Sea - Black Head OS Catchment No: 147
OS Grid Ref : M 137 083

Date(s) Surveyed : 14/10/2003

Sampling Stations		Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1988	1991	1997	2000	2003
0100	Br S Formoyle East	5	5	-	-	-
0200	Carha Br	5	5	5	5	4-5
0300	Fanore Br	5	5	-	-	-

Assessment: The Caher catchment is almost entirely within the Black Head, Poulsallagh complex SAC and is itself a unique river being almost the only river that flows all year round in the Burren area. In the past it has been characterised by large numbers of Dinocras. This species appear to have declined dramatically in numbers, however, in 2003 with only one specimen taken in the main sample. This is a worrying decline in a key element of the river's biodiversity and it is to be hoped that it is merely due to year-to-year variation as opposed to a pollution impact. A number of new houses were noted in the catchment and it is vital that local water abstraction does not cause the river to run dry or reach critically low levels in summer. Similarly, in a highly vulnerable groundwater zone such as the Caher catchment, septic tank discharges are liable to contaminate the river. In karst areas such as this the flow pathways from groundwater to surface water and from surface to groundwater are very direct.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br S Formoyle East	117331	206789	51	CE
0200	Carha Br	116316	208235	51	CE
0300	Fanore Br	114453	208917	51	CE

River and Code : **CASTLEPARK STREAM** 28/C/09
Tributary of : Creegh OS Catchment No: 153
OS Grid Ref : R 091 667 Date(s) Surveyed : 16/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1988 1991 1997 2000 2003

4 4-5 4-5 4-5 4

Assessment: Satisfactory, but a deterioration in quality was noted with increased levels of siltation in the river.

Previously reported as part of the Creegh 28C02

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br NW Castlepark	109732	167376	57	CE

River and Code : CLOONEENAGH STREAM 28/C/08
Tributary of : Creegh OS Catchment No: 153
OS Grid Ref : R 048 668 Date(s) Surveyed : 16/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1988 1991 1997 2000 2003

1100 Creegh North Br

4 4 - 4-5 4-5

Assessment: Satisfactory - no change.

Previously reported as part of the Creegh 28C02

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
1100	Creegh North Br	105305	167360	57	CE

River and Code : COOLEEN

Tributary of : Carrowkeel OS Catchment No: 149
OS Grid Ref : R 129 924 Date(s) Surveyed : 14/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1988	1991	1997	2000	2003		
0300	Tooreen Br	4-5	5	_	3-4	4-5		
0400	Cooleen Br	-	-	4	-	-		
0500	400 m u/s Carrowkeel River	4	4	-	4	4		

Assessment: Satisfactory, with an improvement noted in the upper stretches (0300) in comparison with the 2000 survey.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Tooreen Br	113028	194556	51	CE
0400	Cooleen Br	113038	193323	51	CE
0500	400 m u/s Carrowkeel River	112779	192671	51	CE

River and Code : CREEGH 28/C/02
Tributary of : Sea - Doughmore Bay OS Catchment No: 153
OS Grid Ref : Q 984 672 Date(s) Surveyed : 15/10/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)					
No.	Location	1979	1985	1988	1991	1997	2000	2003
0100					2.4			
0100	Sorrel Island Bridge (South)	-	4	4	3-4	4	4	4
0200	Bridge E. of Greygrove	4-5	4	-	-	-	-	-
0800	Cahermurphy Bridge	-	-	4	4	-	4-5	4-5
1300	Br S Clooneenagh Cross Roads	-	-	3	4-5	4	4	4
1400	Creegh Br	-	-	4	4	4	4	3-4
1600	Coomacreehaun Br	-	-	4-5	4	-	-	-
1700	Mountrivers Br	-	-	4-5	4	4	4	4

Assessment: The upper Creegh was satisfactory at Sites 0100, 0800 and 1300. Deterioration in quality was noted at Creegh Bridge where signs of an earlier organic pollution event were still evident. The lower section at Mountrivers was satisfactory. Note that station 0100 and 0200 were previously reported as part of the Doonbeg River (qv).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Sorrel Island Bridge (South)	116741	167614	57	CE
0200	Bridge E. of Greygrove	114972	165912	57	CE
0800	Cahermurphy Bridge	110370	166076	57	CE
1300	Br S Clooneenagh Cross Roads	107192	166800	57	CE
1400	Creegh Br	103383	166892	57	CE
1600	Coomacreehaun Br	100260	166050	57	CE
1700	Mountrivers Br	99110	166021	63	CE

River and Code : **DEALAGH**Tributary of : Sea - Inagh Estuary OS Catchment No: 149
OS Grid Ref : R 092 895

Date(s) Surveyed : 29/10/2003

Sampl	Sampling Stations			iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1980	1986	1988	1991	1997	2000	2003
0040	Ballygoonaun Bridge	_	_	3-4	4	4	3	4
0100	Bridge S.W. of Lisdoony	5	4	3-4	4-5	-	-	-
0200	Bridge near Smithstown House	4	4-5	4	4-5	4	4	3-4
0300	Carrowduff Bridge	5	4-5	4	4-5	-	-	-
0350	Aughvackeen Br	-	-	-	-	4	3-4	4
0400	Derry Bridge	5	4	4	4-5	-	-	-

Assessment: The Dealagh River improved in quality at the upper site (0040) compared with 2000. A decline to slightly polluted conditions at 0200. At this location residual 'sewage fungus' growths were noted indicating organic pollution earlier in the year. Water quality at the lowermost site examined (0350) downstream of the confluence of the Cooleen River (qv) was satisfactory.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Ballygoonaun Bridge	117053	195707	51	CE
0100	Bridge S.W. of Lisdoony	115600	194800	0	CE
0200	Bridge near Smithstown House	114790	194135	51	CE
0300	Carrowduff Bridge	112800	192200	0	CE
0350	Aughvackeen Br	112033	191942	51	CE
0400	Derry Bridge	111300	191200	0	CE

River and Code : **DOONBEG**Tributary of : Sea - Doonbeg Bay OS Catchment No: 154
OS Grid Ref : Q 966 660 Date(s) Surveyed : 15/10/2003

Sampl	Sampling Stations Biological Quality Ratings (Q Values)									
No.	Location	1971	1975	1979	1985	1988	1991	1997	2000	2003
0300	Ballydunneen Bridge	-	-	-	-	4	4	4	4	4
0330	Bridge d/s Ballydunneen Br	-	-	-	-	3-4	5	-	-	-
0400	Goulbourne Bridge	-	-	4-5	3-4	4	4-5	-	4-5	4
0500	Derrycrossaun Bridge	-	-	-	-	4	4	4	-	-
0550	Br u/s Clooncullin Br	-	-	-	-	-	-	-	4	4
0600	Clooncullin Bridge	5	5	4-5	3-4	3-4	4	-	-	-
0650	Bridge in Cooraclare	-	-	-	-	4	4	4	4	4
0700	Bridge at Aughagarna	4	4-5	4-5	3-4	4	4	-	-	-
0725	Bridge N.E. of Lochnavar H	lo -	-	-	-	4	4	4	4-5	4-5
0750	Bridge near Mountrivers	-	-	-	-	4	-	-	-	-
0770	Br 1km d/s Br nr Mountrive	rs -	-	-	-	-	-	4	4-5	3-4

Assessment: The Doonbeg was satisfactory at all points sampled apart from the last site upstream of Doonbeg (0770) where slightly polluted conditions were noted.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ballydunneen Bridge	115282	162952	57	CE
0400	Goulbourne Bridge	111966	161962	57	CE
0500	Derrycrossaun Bridge	109079	161695	57	CE
0550	Br u/s Clooncullin Br	107984	160779	57	CE
0600	Clooncullin Bridge	106255	161755	57	CE
0650	Bridge in Cooraclare	103997	162057	57	CE
0700	Bridge at Aughagarna	102101	162114	57	CE
0725	Bridge N.E. of Lochnavar Ho	99724	163033	63	CE
0770	Br 1km d/s Br nr Mountrivers	97834	164371	63	CE

River and Code : FREAGH 28/F/01
Tributary of : Sea - near Freagh Island OS Catchment No: g4
OS Grid Ref : R 035 814 Date(s) Surveyed : 29/10/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1988	1991	1997	2000	2003		
0200	Bridge d/s Br E. of Greenaun	3	3	4	3	_		
0300	Castle Bridge	3	3	-	-	3		

Assessment: The Freagh was moderately polluted at Castle Bridge (0300) when sampled in October 2003. This is a small stream in a catchment with relatively intensive grazing and a growing number of houses with septic tanks.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge d/s Br E. of Greenaun	105026	181918	57	CE
0300	Castle Bridge	103440	181465	57	CE

River and Code : **GLENDINE (CLARE)**Tributary of : Annagh (Clare) OS Catchment No: 150
OS Grid Ref : R 047 371 Date(s) Surveyed : 18/11/2003

Sampling Stations Biological Quality Ratings (Q Values)					alues)			
No.	Location	1980	1985	1988	1991	1997	2000	2003
0080	Second Bridge u/s Honan's Br	_	_	4	4	3	4	4
0100	Honan's Bridge	5	5	4-5	4-5	-	-	-
0200	Knockloskeraun Bridge	5	5	4-5	4-5	4	5	4-5
0300	Bridge u/s Annagh River	_	_	4-5	_	_	_	-

Assessment: The Glendine was in satisfactory condition when surveyed in 2003.

Sampling Stations Na		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	Second Bridge u/s Honan's Br	108976	178790	57	CE
0100	Honan's Bridge	116272	190788	57	CE
0200	Knockloskeraun Bridge	105187	177404	57	CE

River and Code : **INAGH (ENNISTYMON)** 28/I/01
Tributary of : Sea - Liscannor Bay OS Catchment No: 149
OS Grid Ref : R 085 888 Date(s) Surveyed : 17/10/2003

Sampling Stations Biological Quality Ratings (Q V					'alues)					
No.	Location	1971	1975	1979	1985	1988	1991	1997	2000	2003
				_	_			_		
0100	Crow's Bridge	-	-	5	5	4-5	4-5	5	4-5	4
0150	Br d/s Aughaglanna confl	-	-	-	-	-	4-5	-	-	-
0200	Bridge at Inagh	5	5	5	5	4-5	4	4	4	4
0250	Renalicka Bridge	-	-	-	-	3-4	4	-	-	-
0300	Moananagh Bridge	5	4-5	4-5	4-5	4	4	4	4	4
0400	At Old Mill- u/s Ennistymor	n 5	4-5	4-5	4-5	4-5	4-5	-	-	-
0450	0.2 km u/s Ennistymon Br	-	-	-	-	-	-	4	3	4

Assessment: The Inagh River was in satisfactory condition over its length. Quality had reduced somewhat in the upper reaches (0100) where substantial quantities of silt were noted on the riverbed. An improvement was noted in Ennistymon in comparison with the 2000 survey.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Crow's Bridge	120228	177939	57	CE
0200	Bridge at Inagh	120854	181269	57	CE
0300	Moananagh Bridge	117037	184914	57	CE
0300	Moananagh Bridge	117037	184914	57	CE
0400	At Old Mill- u/s Ennistymon	113196	188194	57	CE
0450	0.2 km u/s Ennistymon Br	113070	188313	57	CE

River and Code : **KILDEEMA**Tributary of : Annagh (Clare) OS Catchment No: 150
OS Grid Ref : R 050 762 Date(s) Surveyed : 18/11/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1988	1991	1997	2000	2003		
0500	Doonsallagh Bridge	4-5	4-5	4	4	4		
0600	Bridge d/s Doonsallagh Br	5	5	-	-			
0800	Bridge u/s Annagh River	4-5	4-5	4	4	4-5		

Assessment: Satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Doonsallagh Bridge	109363	176752	57	CE
0800	Bridge u/s Annagh River	105048	176101	57	CE

River and Code : **SRUHAUNAKIT STREAM 28/S/04**Tributary of : Annageeragh OS Catchment No: 152
OS Grid Ref : Null Date(s) Surveyed : 16/10/2004

Sampl	ling Stations		Bi	iologica	l Quality	y Rating	gs (Q Va	alues)
No.	Location	1980	1983	1988	1991	1997	2000	2003
0500	C11-i4 Di-1			_			2	
0300	Sruhaunakit Bridge	-	-	3	-	-	3	-
0600	Br d/s Sruhaunakit Br	-	-	5	4	-	-	4

Assessment: This Annageeragh tributary was satisfactory in October 2003.

Previously reported as part of the Annageeragh 28A02

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0500	Sruhaunakit Bridge	109735	173240	57	CE	
0600	Br d/s Sruhaunakit Br	109360	172865	57	CE	

HYDROMETRIC AREA 29

Galway Bay South East

Ballymabilla Beagh Boleyneendorrish	29B03 29B02 29B04
Cannahowna Carra Stream Clarinbridge	29C01 29C03 29C02
Kilcolgan Knocknarebana	29K01 29K04
Lecarrow Stream	29L01
# Owendalulleegh	29001
Raford	29R01
Toberdoney	29T01

Seriously impacted by bog slide.

River and Code : **BALLYMABILLA**Tributary of : Raford OS Catchment No: 145
OS Grid Ref : M 649 274

Date(s) Surveyed : 30/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003		
0200	Br WNW Treanbaun	4	_	_	4	4		
0300	Bellafa Bridge	2-3	3	4	3-4	3-4		

Assessment: The Ballymabilla, a tributary of the Raford (qv), was of satisfactory quality in the upper region (0200) but significantly eutrophic at the lower station (0300) where abundant filamentous algal growths were noted. There are no towns in the catchment and the catchment is predominantly a grassland mixed sheep and cattle pasture.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br WNW Treanbaun	168261	226212	46	GY
0300	Bellafa Bridge	165867	226922	46	GY

River and Code : **BEAGH**Tributary of : Goes underground - Cannahowna OS Catchment No: 146
OS Grid Ref : M 455 001 Date(s) Surveyed : 18/11/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003		
0100	S Cloghnakeava	4-5	4-5	4	4	4		

Assessment: The Beagh River flows from Lough Cutra. The 2003 survey was carried out after the bog slide that occurred on 16/17 October 2003 at Derrybrien and which affected the Owendalulleegh River (qv) and Lough Cutra. Particular attention was paid to any potential changes in the river's ecology that may have occurred as a consequence of the accident. Straw bales had been placed at the lake outflow in order to help to settle peat silt and prevent it from causing siltation in the river. No major impact was noted with the range of species quite similar to that found on previous occasions and water quality was satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	S Cloghnakeava	146728	200612	52	GY	

River and Code : **BOLEYNEENDORRISH** 29/B/04

Tributary of : (Goes underground) OS Catchment No: 146
OS Grid Ref : M 479 047 Date(s) Surveyed : 12/11/2003

Sampl	Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003			
0100	Br NW Knockapollboy	5	_	5	4-5	5			
0200	Bridge N. of Hollymount	5	5	-	-	-			
0300	Kenny's Br	-	-	5	5	5			
0400	Br NE Islandmore	5	4-5	-	4-5	4-5			
0500	Bridge N. of Cloon Bridge	4-5	-	-	-	-			
0600	Cloon Bridge (on tributary)	3	4	-	-	-			
0800	Ford N. of Streamstown	5	4	4	4	4-5			

Assessment: The Boleyneendorrish River is of particularly good quality. The upland part of the catchment on old red sandstone bedrock is quite heavily forested on peat while the lower part of the catchment is grassland in a karst limestone region.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br NW Knockapollboy	155541	206823	52	GY
0200	Bridge N. of Hollymount	152615	206010	52	GY
0300	Kenny's Br	151415	205622	52	GY
0400	Br NE Islandmore	149675	205655	52	GY
0600	Cloon Bridge (on tributary)	147995	204410	52	GY
0800	Ford N. of Streamstown	148173	206044	52	GY

River and Code : **CANNAHOWNA**Tributary of : (Goes underground)

OS Grid Ref : M 452 018

29/C/01

OS Catchment No: 146

Date(s) Surveyed : 18/11/2003

Samp	ling Stations		B	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1980	1985	1989	1994	1997	2000	2003
0100	Bridge in Gort	5	4	4	4	_	4	4
0200	At Old Mill N. of Gort	3-4	4	3	3-4	4-5	4	4

Assessment: The Gort River was satisfactory at both sites examined in November 2003.

Samp	oling Stations	National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Bridge in Gort	145255	201943	52	GY	
0200	At Old Mill N. of Gort	145881	205027	52	GY	

River and Code : **CARRA STREAM**Tributary of : Toberdoney OS Catchment No: 145
OS Grid Ref : M 553 214

Date(s) Surveyed : 01/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1990	1994	1997	2000	2003			
0900	Br at Nogginstown	_	_	3-4	3	3			
1000	Carra Bridge	3-4	4	-	3	3-4			
1500	Tonnawansa Bridge	4	-	-	-	-			
1700	Br ESE Dunsandle	4	4	-	4	4			
2000	Br at Ballynahivnia	4-5	3-4	-	4	4			

Assessment: The upper section of the Carra Stream (0900, 1000) was satisfactory. but improves again in the lower reaches (1700, 2000). The stream is a low gradient one flowing through a grassland catchment with reasonably intensive sheep grazing. The catchment has a low population density.

NOTE: Former upper reaches now reported as Lecarrow Stream 29L01 (q.v.)

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0900	Br at Nogginstown	170392	222014	46	GY
1000	Carra Bridge	166152	223188	46	GY
1500	Tonnawansa Bridge	161385	221770	46	GY
1700	Br ESE Dunsandle	158590	221376	46	GY
2000	Br at Ballynahivnia	155512	221132	46	GY

River and Code : **CLARINBRIDGE**Tributary of : Sea - Galway Bay

OS Grid Ref : M 413 200

OS Catchment No: 144

Date(s) Surveyed : 06/11/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	s (Q V	alues)
No.	Location	1980	1982	1984	1986	1989	1994	1997	2000	2003
0020	D. A. C.					2.4				
0030	Br at Lisdoran	-	-	-	-	3-4	-	4-5	-	-
0035	D/s Br S of Cloonkeen	-	-	-	-	-	4	-	-	-
0040	Bridge N. of Ballyboggan	-	-	-	-	3	4	4	4	4
0050	Bridge 1.6 km u/s Athenry	4	4-5	4	4-5	4	-	4	3	4
0200	Athenry: South Bridge	4	4-5	4	4	4	-	-	-	-
0300	Br N Mulpit	2	2	1-2	2-3	3-4	4	2-3	2-3	2-3
0400	Whistle Bridge	3	-	-	3	3-4	-	3	3	3
0450	Toberbracken Br	3	-	-	3	-	-	4	4	3
0500	Clarin Bridge	3	3	2	3-4	3	2-3	3	3	3

Assessment: The Clarinbridge River was of satisfactory quality in the upper reaches above Athenry town (0040, 0050). A significant deterioration in water quality was noted downstream of Athenry, however, (0300) where it was bordering on serious pollution. The lower section of the river to Clarinbridge village appears to be impacted by Athenry sewage also - although the fact that the river usually dries up for part of the summer each year (00400, 0450) makes it difficult to assess from the purely biological point of view and the assessment is based primarily on non-insect species and the dominance of Asellus and tubificid worms and leeches in the faunal community.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	Br at Lisdoran	156625	205637	46	GY
0040	Bridge N. of Ballyboggan	154969	230288	46	GY
0050	Bridge 1.6 km u/s Athenry	151294	229122	46	GY
0200	Athenry: South Bridge	150211	227295	46	GY
0300	Br N Mulpit	148794	226293	46	GY
0400	Whistle Bridge	146986	223067	46	GY
0450	Toberbracken Br	143934	222090	46	GY
0500	Clarin Bridge	141213	220027	46	GY

River and Code : **KILCOLGAN**Tributary of : Sea - Dunbulvaun Bay OS Catchment No: 145
OS Grid Ref : M 417 184 Date(s) Surveyed : 30/09/2003

Statio	ns						Biologic	al Quali	ty Ratin	gs (Q V	alues)
No.	1971	1973	1977	1980	1983	1986	1989	1994	1997	2000	2003
0100	4	_	_	3-4	3-4	3-4	3	_	_	3	_
0200	4	4	3	3	3	3	4	4	2	2-3	3
0280	-	-	-	-	-	-	-	3-4	-	-	-
0300	4-5	-	-	4	4	4	4	-	3-4	4	4
0400	4-5	5	4	4	4	4	4	4	3	4	4
0500	-	-	-	4	-	-	3-4	4	3-4	3-4	-
0600	-	-	-	4	-	-	-	3-4	3	3-4	3-4

Assessment: The upper Kilcolgan River is impacted by sewage discharges (0200). The middle section (0300,0400) was satisfactory and evidence of eutrophication was noted in the lower section (0600). No major change in water quality was noted in comparison with the 2000 survey.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	White Mill N. of Loughrea*	162190	217900	52	GY
0200	Killilan Bridge	157984	219743	52	GY
0280	Br just u/s Toberdoney at Caherkin	153850	220611	46	GY
0300	Bridge at Strongfort Lodge	152589	220060	46	GY
0400	Old Road Bridge Craughwell	151051	220017	52	GY
0500	Dunkellin Bridge	145425	218405	52	GY
0600	Kilcolgan Bridge	144213	218418	52	GY

River and Code : **KNOCKNAREBANA**Tributary of : Owendalulleegh OS Catchment No: 146
OS Grid Ref : R 556 990 Date(s) Surveyed : 06/11/2003

Sampling Stations		Biologic	al Quality	Ratings (Q	Values)
No.	Location	1994	1997	2000	2003
0100	Br W of Toorayoola	4-5	4-5	4-5	4

Assessment: The Knocknarabena River is a tributary of the Owendalulleegh (qv). Water quality was satisfactory although it had declined somewhat in comparison with previous surveys when a greater range of sensitive species was found.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br W of Tooravoola	155313	201183	52	GY

River and Code : LECARROW STREAM 29/L/01

Tributary of : Carra Stream OS Catchment No: 145 OS Grid Ref : R 625 217 Date(s) Surveyed : 01/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)				
No.	Location	1990	1994	1997	2000	2003
0400	Br at Lisduff	-	3-4	3	_	4
0500	Bridge N. of Kincullia	3-4	-	-	-	-
0600	Br at Bullaun	4-5	4	-	4	4

Assessment: This tributary of the Carra Stream (qv) was in satisfactory condition when surveyed in 2003.

Previously reported as part of the Carra (29C03)

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br at Lisduff	164634	220261	46	GY
0500	Bridge N. of Kincullia	164285	220420	46	GY
0600	Br at Bullaun	163039	221393	46	GY

River and Code : **OWENDALULLEEGH**Tributary of : Lough Cutra OS Catchment No: 146
OS Grid Ref : R 478 976 Date(s) Surveyed : 17/11/2003

Samp	ling Stations		Biol	logical Qı	uality Rat	ings (Q V	alues)
No.	Location	1989	1990	1994	1997	2000	2003
0100	Bridge E.S.E. of Knocknamona	_	4-5	_	_	_	_
0200	Br S.S.E. of Knockmoyle West	-	4-5	-	-	-	-
0400	Bridge N. of Derreennamucka	-	3-4	-	-	-	-
0500	Ford at Tooraglassa	5	-	4-5	4-5	4-5	2*
0600	Ford S. of Knock	5	-	-	-	-	-
0700	Ford at Inchamore	-	_	4-5	4-5	5	3-4*
0800	Br 750m N of Scalp	5	-	-	-	5	4*
0900	Ford at Derreen	-	4-5	4-5	4-5	5	4
1000	Br SE Killafeen	-	5	4-5	4-5	4-5	4

Assessment: The Owendalulleegh River was seriously impacted by the Derrybrien landslide which occurred on 16/17 October 2003. This biological survey was undertaken one month later and attempted to assess the impact of the large

OWENDALULLEEGH Continued

volume of peat and debris that was washed down the river. The survey is primarily based on the response of the macroinvertebrate fauna. A number of other surveys were undertaken by other agencies to assess the impact on fish stocks and other aspects of this major event. The upper tributaries of the Owendalulleegh coming from Derrybrien were more or less completely scoured out by the peat and associated forestry debris. The first site examined in detail (0500), the ford West of Tooraglassa, is normally of high quality with a wide range of highly sensitive macroinvertebrate taxa present including Perla, Rhithrogena, Ecdvonurus. In October 2003 only five taxa were found (typically 20 would be expected at this site). None of the five types is regarded as being pollution sensitive. The physical environment was drastically altered in comparison with previous years with peat silt, woody debris, straw, plant roots, branches of coniferous trees littering the riverbed and banks. It was felt that the sheer physical scouring of the riverbed was primarily responsible for the loss of invertebrate species. The next site (0700) showed a definite recovery with two pollution-sensitive taxa present (Rhithrogena and Protonemura). The physical environment was still dramatically impacted, however, with peat silt accumulating in 'sumps' in the riparian zone where it had settled following the floods that occurred after the initial landslide. A lot of forest debris was still obvious in the river channel. The Q3-4 is modified by an asterisk to indicate that the fauna of themselves would not indicate the degree of damage to the ecosystem as a whole - particularly in comparison with previous surveys. At Station 0800 a further improvement had occurred. This site is over 12 km downstream of the origin of the landslide. Most of the major sensitive macroinvertebrate types were found in the sample taken at this site including Perla, Ecdyonurus and Rhithrogena. Again a lot of detritus and tree branch debris was noted and heavy patches of siltation were obvious in slower flowing areas of the channel. The amount of peat accumulation on the riparian zone was less than upstream. At Station 0900 a further recovery was noted although macroinvertebrates were somewhat depleted in comparison with previous surveys. Some deep peat deposits were recorded on the riverbank riparian zone. A mix of peat, sand and plant root material was deposited. The final station surveyed (1000) is the last bridge upstream of Lough Cutra on the Owendalulleegh River. Here the impact of the landslide was surprisingly low. The fauna was recognisably similar to what has normally been recorded here. Mid-stream kick sampling did not raise peat silt and species that require clean stones such as Perla, Rhithrogena were present. Deposits of fine peat were again noted in the riparian zone and some matted light-coloured, grasslike, plant debris was present among the stones but the amount of larger woody debris was less than at the upstream sites. In general it appears that while the upper 5 km section of the river was effectively wiped out, the impact on the lower section was not as bad as might have been feared initially. It is felt that a good recovery should be made by the invertebrate species generally although the upper section may take some time to recolonise.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0500	Ford at Tooraglassa	160197	201219	52	GY
0700	Ford at Inchamore	156156	199607	52	GY
0800	Br 750m N of Scalp	154668	198941	52	GY
0900	Ford at Derreen	151724	198386	52	GY
1000	Br SE Killafeen	148354	197128	52	GY

River and Code : RAFORD 29/R/01

Tributary of : Kilcolgan OS Catchment No: 145
OS Grid Ref : M 522 200 Date(s) Surveyed : 30/09/2003

Sampling Stations			Bi	ologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1981	1985	1990	1994	1997	2000	2003
0100	Beech Hill Bridge	4	4	4	4	4	4	4
0150	Br at Island, NW Bellafa	3-4	3-4	4-5	3-4	4	4	4
0200	Raford Bridge	4-5	4	3-4	3-4	4	3-4	3-4
0300	Bridge E. of Kiltullagh	3-4	4	4	4	-	-	-
0400	Rattys Bridge	4	4	3-4	4	3-4	3-4	4
0500	Bridge u/s Kilcolgan River	dry	4	4	dry	flood	-	dry

Assessment: The upper Raford was satisfactory when surveyed in September 2003. Eutrophication was again noted in the middle section Raford Bridge (0200). The lower section at Station 0400 was satisfactory but the last station, where the river flows over karst limestone, was dry so it was not possible to sample there.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Beech Hill Bridge	164839	229078	46	GY	
0150	Br at Island, NW Bellafa	164759	227032	46	GY	
0200	Raford Bridge	160833	226097	46	GY	
0300	Bridge E. of Kiltullagh	157926	225019	46	GY	
0400	Rattys Bridge	154734	223261	46	GY	
0500	Bridge u/s Kilcolgan River	152173	220267	46	GY	

River and Code : **TOBERDONEY**Tributary of : Kilcolgan OS Catchment No: 145
OS Grid Ref : M 553 215 Date(s) Surveyed : 01/10/2003

Sampl	ling Stations	Biological Quality Ratings (Q Va		alues)		
No.	Location	1989	1994	1997	2000	2003
0300	Ballykeeran Bridge	4	3	-	3	3
0500	Bridge W. of Dunsandle	4	-	4-5	4-5	4
0600	Br NE Caherkinmonwee	-	4	-	-	-
0700	Just u/s Kilcolgan R confl	-	-	3	-	4

Assessment: The Toberdoney remained highly eutrophic in nature in the upper reaches (0300). Quality was satisfactory in the middle and lower sections (0500, 0700).

TOBERDONEY Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Ballykeeran Bridge	160956	223244	46	GY
0500	Bridge W. of Dunsandle	156044	221566	46	GY
0600	Br NE Caherkinmonwee	154475	221285	46	GY
0700	Just u/s Kilcolgan R confl	153776	220692	46	GY

HYDROMETRIC AREA 30 Corrib

Abbert	30A01	Gortgarrow Stream	30G05
Aghinish	30A03	Grange (Galway)	30G02
Aille (Mayo)	30A02		
, , ,		Joyce's	30J01
Ballindine	30B03	•	
*Ballyquirke	30B14	Knockaunranny Stream	30K02
Bealanabrack	30B01		
Black (Shrule)	30B02	Levally Stream	30L07
Bunowen (Oughterard)	30B08	Loughkip	30L01
(8 /		Lough Nacorralea Stream	30L03
Cammanagh	30C04		
Clare	30C01	Nanny (Tuam)	30N01
Claureen (Mayo)	30C02		• • • • • •
Cloondaver Stream North	30C09	Owenbrin	30001
Cloonfad	30C11	Owenriff (Corrib)	30002
Cong Canal	30C06	Owenwee (Corrib)	30O03
[Corrib]	[30C02]		
Cregg	30C03	Robe	30R01
		0 1	20004
Dalgan	30D01	Scardaun	30S04
Dooghta	30D02	Sinking	30S01
Drimneen	30D03		
		*Srah Stream	30S02
Failmore	30F01	Srahnalong	30S03
Finny	30F03	Terryland	30T01
Fooey	30F02	Tullaghaun	30T03
Glennamucka Stream	30G04	Yellow (Sinking)	30Y01
Glensaul	30G01		

^{*} Indicates non-baseline rivers which do not appear on the OS Rivers Catchment Map. [The Corrib River was inadvertently omitted this cycle]

River and Code : **ABBERT** 30/A/01

Tributary of : Clare (Galway) OS Catchment No: 143

OS Grid Ref : M 415 483 Date(s) Surveyed : 26/08/2003

Statio	Stations					Biological Quality Ratings (Q Values)					
No.	1971	1977	1981	1985	1987	1989	1994	1997	2000	2003	
0020								4	2.4		
0028	-	-	-	-	-	-	-	4	3-4	-	
0030	-	-	-	-	-	3-4	dry	-	-	-	
0050	-	-	4-5	4	4	3-4	-	-	-	-	
0070	-	-	-	-	-	-	4	4	3-4	4	
0100	-	-	4-5	5	4	4	4	4	4	3-4	
0200	-	-	3-4	4	3-4	4	4	4	4	3-4	
0300	-	4-5	4	4	4	4	4	3-4	3	3	
0400	-	-	4-5	4	4	4	4	4	4	4	
0500	4-5	4-5	5	3-4	4	4	4	4	3	3-4	

Assessment: The upper section of the Abbert River (0070) was satisfactory when surveyed in August 2003. The mid-section, however, had deteriorated significantly in comparison with the 2000 survey and was quite eutrophic (0100, 0200, 0300). Water quality was satisfactory at Station 0400 but slightly polluted (eutrophic) at the final sampling station 0500 Bullaun Bridge. This is a limestone catchment with conductivities ranging from 463 to $589\mu\text{S/cm}$. Its crayfish population appears to be in decline as none were found in the 2000 or 2003 surveys whereas they were commonly found previously. While this is not a definitive result, in the sense that the capture of crayfish by kick-sampling with a pond net is somewhat dependent on water flow velocities, it is worrying to see an apparent decline in this protected species and suggests that more detailed surveys may be needed to confirm the current distribution of crayfish in the Abbert River.

Note: The upper branch of the Abbert is now reported as Glennamucka Stream (qv)

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0028	400 m u/s Br S Ballyglass Ho	160620	233183	46	GY
0070	Licklea Br	155736	233602	46	GY
0100	Killaclogher Bridge	155928	237967	46	GY
0200	Abbert Bridge	155685	242729	46	GY
0300	Bridge u/s Abbey Bridge	151688	243646	46	GY
0400	Pallas Bridge	147219	242306	46	GY
0500	Bridge at Bullaun	143625	240783	46	GY

River and Code : **AGHINISH**Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 155 672

Date(s) Surveyed : 25/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1985	1989	1994	1996	2000	2003		
0100	Keel Bridge	4	4-5	4	4-5	4	4		

Assessment: The Aghinish at keel Bridge was in satisfactory condition. This is the main outflowing river from Lough Carra and is influenced by the lake water.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Keel Bridge	116236	268054	38	MO

River and Code : **AILLE (MAYO)**Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 136 727 Date(s) Surveyed : 03/09/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)							
No.	Location	1980	1984	1989	1993	1996	2000	2003		
0010	Br NE Croaghrimbeg	3-4	4-5	4-5	3	4-5	3-4	3-4		
0050	Arderry Br	5	4-5	5	4	4	4-5	4		
	Near Mill u/s Aille Caves	-	-	-	4	4	4-5	-		
0100	Bridge S. of Killawullaun	4	4-5	4-5	4-5	-	-	-		
0110	Bridge NW of Claureen	-	-	-	-	4-5	5	4-5		
0200	Bridge W. of Cartronbower	-	5	4-5	4-5	-	-	-		
0250	Bridge u/s Cloon Lough	-	-	5	4-5	4	4-5	4		
0300	Bridge d/s Cloon Lough	4	4	4-5	4-5	-	-	-		
0400	Bridge u/s Lough Mask	_	4	_	_	4	4	3-4		

Assessment: The uppermost Aille station (0050) showed signs of eutrophication as in some previous surveys. Water quality recovers over the middle section upstream of the Aille Caves (0050) and in the stretch to Cloon Lough (0110, 0250). A slight overall deterioration in quality was, however, noted in comparison with the July 2000 survey. A most serious situation was observed at the Identification of the algal species involved showed an intense bloom comprised almost entirely of the planktonic cyanobacterial species, Oscillatoria agardhii. Irish rivers generally have relatively rapid flow-through times that are too rapid to allow phytoplankton populations to develop in the river water itself. Thus, phytoplankton blooms such as this one

AILLE (MAYO) Continued

generally emanate from eutrophic upstream lakes. In this case the sample station is 2.8 km downstream of Cloon Lough and it is believed that the source of the bloom is most likely to be Cloon Lough (as opposed to Lough Nacorralea which is some 5km upstream – see also Lough Nacorralea Stream). Cloon Lough on examination was almost entirely weed-choked, however, and it was not possible to launch a boat into the lake in early September 2003. A full investigation of the situation in the Cloon Lough catchment is required in order to prevent a more serious impact on Lough Mask – particularly as the major Lough Mask Water Supply Scheme intake point is only some 3 km from the point where the Aille River flows into Lough Mask.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Br NE Croaghrimbeg	103865	272113	38	MO
0050	Arderry Br	105615	275984	38	MO
0060	Near Mill u/s Aille Caves	106772	280477	38	MO
0100	Bridge S. of Killawullaun	111287	280373	31	MO
0110	Bridge NW of Claureen	112255	280068	31	MO
0200	Bridge W. of Cartronbower	0	0	0	-
0250	Bridge u/s Cloon Lough	114284	276081	38	MO
0300	Bridge d/s Cloon Lough	114390	273586	38	MO
0400	Bridge u/s Lough Mask	113494	272577	38	MO

River and Code : **BALLINDINE** 30/B/03

Tributary of : Robe OS Catchment No: 143
OS Grid Ref : M 349 709 Date(s) Surveyed : 28/10/2003

Sampling Stations			Biological Quality Ratings (Q Values)							
No.	Location	1979	1986	1989	1994	1996	2000	2003		
0100	Ballindine Bridge	-	3-4	3	3	1-2	2-3	3/0		
0200	Bridge u/s Robe River confl	3	3-4	2-3	2-3	2-3	3-4	2-3		

Assessment: The upper Ballindine station (0100) in Ballindine Village (upstream of the sewage treatment works) appeared to be suffering from toxic influences. A smell of diesel was noted and an oil slick was obvious on the river surface. An investigation into the source of the diesel is required. The lower station just upstream of its confluence with the River Robe (qv) indicated moderate organic pollution. This site is downstream of the Ballindine sewage works.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ballindine Bridge	136558	269227	39	MO
0200	Bridge u/s Robe River confl	134907	270841	39	MO

River and Code : **BALLYCUIRKE***Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : M 241 332 Date(s) Surveyed : 02/12/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1993 1997 2000 2003

0100 Railway Br d/s Ballycuirke Lough

3-4 3-4 3 3 3

Assessment: No change was noted in the status of the Ballycuirke River which is sampled at the outflow point of Ballycuirke Lake. The lake is impacted by Moycullen sewage discharges.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Railway Br d/s Ballycuirke Lough	123190	232555	45	GY	

^{*}Indicates non-baseline rivers which do not appear on the OS Rivers Catchment Map.

River and Code : **BEALANABRACK**Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : L 975 522 Date(s) Surveyed : 27/08/2003

Sampling Stations			Biological Quality Ratings (Q Values)							
No.	Location	1982	1985	1989	1994	1996	2000	2003		
0050	Footbridge N Knockaunbaun	_	_	_	_	_	_	4		
0100	Bridge u/s Joyce's River	5	5	5	4-5	4-5	4-5	3		
0200	Maam Bridge	5	-	5	4	4-5	4-5	4		

Assessment: When the Bealanabrack River was surveyed in August 2003, quality had declined significantly at station 0100, upstream of its confluence with the Joyce's River (qv) in comparison 2000 and earlier years. None of the pollution-sensitive species normally found here were present in the sample. A new sample site (0050) was added (3 km upstream) in order to determine the extent of the pollution problem more precisely. Water quality was satisfactory at this new station although some signs of eutrophication were apparent there.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Footbridge N Knockaunbaun	90248	255014	38	GY
0100	Bridge u/s Joyce's River	92031	254742	38	GY
0200	Maam Bridge	96497	252808	38	GY

River and Code : **BLACK (SHRULE)**Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : M 198 578

Date(s) Surveyed : 26/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1977	1980	1984	1989	1994	1997	2000	2003
0100	Bridge at Kilshanvy	_	3-4	3-4	3-4	3-4	4	3-4	4
0120	Bridge W. of Carrabaun	-	_	-	4	_	-	-	-
0200	Bridge in Shrule	4-5	4-5	4	4-5	4-5	4-5	4	4-5
0280	Nr Old Castle E. of Toorard	-	_	-	4	_	-	-	-
0300	Moyne Br	4-5	4-5	3	3-4	3-4	4	4	3-4
0400	Bridge N.W. of Ower House	-	-	-	-	-	4	-	-
0500	Second Bridge u/s L Corrib	5	5	4	4-5	-	-	-	-
0600	First Bridge u/s L Corrib	-	-	4	4	4	-	4	4

Assessment: The Black (Shrule) River was satisfactory at Kilshanvy (0100) close to its source. The river flows from a karst spring with naturally low dissolved oxygen levels. Quality was satisfactory also in Shrule itself (0200) but deteriorated significantly at Moyne Bridge (0300) both in comparison with upstream and in comparison with the 1997 and 2000 surveys. The last station upstream of Lough Corrib was again satisfactory.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge at Kilshanvy	131862	257689	38	GY
0200	Bridge in Shrule	128031	252598	38	GY/MO
0300	Moyne Br	125579	249084	45	GY/MO
0300	Moyne Br	125579	249084	45	GY/MO
0400	Bridge N.W. of Ower House	122473	248337	45	GY/MO
0600	First Bridge u/s L Corrib	120586	247820	45	GY/MO

River and Code : **BUNOWEN (OUGHTERARD)** 30/B/08

Tributary of : Lough Ateeaun OS Catchment No: 143
OS Grid Ref : M 090 414 Date(s) Surveyed : 06/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1997 2000 2003

0100 Glengowla Bridge

4-5 4-5 4 3-4 4

Assessment: The Bunowen is a tributary of the Owenriff (Oughterard) (qv). Water quality was better than in 2000.

Sam	pling Stations	National Gri	d Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Glengowla Bridge	108353 2	42380	45	GY

River and Code : CAMMANAGH

Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : L 996 568 Date(s) Surveyed : 29/08/2003

Samp	Sampling Stations			logical Qu	uality Rat	ings (Q	Values)
No.	Location	1985	1989	1994	1996	2000	2003
0100	Bridge u/s Lough Mask	5	5	4-5	5	4	4-5

Assessment: The Cammanagh had improved in 2003 following on bridge construction in 2000. The substratum, however, had a significant covering of musty organic mats with a dark green algal covering, which indicated deterioration relative to the river's reference condition state.

Samp	oling Stations	National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Bridge u/s Lough Mask	97834	256851	38	GY	

River and Code : CLARE (GALWAY)

30/C/01

Tributory of . Level Comib.

Tributary of : Lough Corrib OS Catchment No: 143 OS Grid Ref : M 303 314 Date(s) Surveyed : 22/07/2003

Station	ns							Bi	ologic	al Qua	ility Ra	atings	(Q Va	lues)
No.	1971	1973	1975	1977	1979	1980	1982	1985	_	_	-	_	2000	2003
0100	4-5	4	_	4	_	4	_	3-4	4	3	_	3-4	3-4	4
0200	4-5	5	_	4	-	4	_	4	3-4	3	-	J- -	J- -	-
0300	-	-	-	-	-	5	-	4	4	3-4	-	3	4	4
0400	-	-	-	-	-	5	-	4	4	4	-	-	-	-
0500	5	5	4	4	-	4-5	-	4	4	4	-	3	4	4
0600	-	-	-	-	-	-	-	4	4-5	3-4	-	-	-	-
0650	3	3	3-4	4	4	3-4	3	3	2-3	3	-	3	4	3-4
0675	-	-	-	-	-	3-4	3	3	3	3-4	-	-	-	-
0700	3-4	3	3-4	4	4	4	4	3	3-4	3	-	3	3-4	4-5
0800	4	4	4	4	4	4	3-4	4	3-4	3	3-4	4	3	3-4
0900	-	-	-	-	-	4	3-4	3-4	3-4	3-4	-	3-4	4	4
1000	-	-	-	-	-	-	-	-	4	4	-	3	4	3-4
1100	-	-	-	-	-	4	-	3-4	4	3-4	-	3-4	3	4
1200	4	-	-	5	-	-	-	3-4	4	3	-	3	3-4	3-4
1300	-	-	-	-	-	4	-	4	4	4	-	4	4	4

Assessment: The upper stretch of the Clare River (0100) had improved in comparison with 2000 giving satisfactory water quality as far as Tuam. A slight deterioration was noted downstream of Weir Br (0650) where the river was quite eutrophic and exhibited a deterioration compared with the situation in 2000. A significant improvement was noted, however, at Killeelaun Br (0700) where the best ever quality was recorded here (i.e. since 1971 when surveys commenced). Corofin Bridge (0800), downstream of the confluence of the Grange River (qv), was slightly polluted. Station 0900 downstream of the Abbert River (qv) was satisfactory and water quality was on the border between satisfactory and unsatisfactory conditions over the remainder of its length to Lough Corrib (1000 to 1300). As noted previously in the 2000 biological report on river quality a major reduction in the amount of phosphorus which passes through the Clare River has been brought about by the introduction of phosphorus removal at the Tuam sewage treatment works. Similarly, the improvements noted at the Ballyhaunis IPC licensed meat factory on the Dalgan River (qv) has also given rise to reductions in phosphorus loading. Benefits have been noted in Lower Lough Corrib as a result (King pers. comm.). The question of less than satisfactory water quality at stations 0800, 1000 and 1200, however, remains. In general these sites are still somewhat eutrophic and they have not improved significantly in the past 10 years. The Clare River was subjected to a major arterial drainage programme and the catchment overlies a karstified aguifer. Soils in the catchment are generally dry and devoted primarily to pasture for sheep and cattle. The river is notable for the disappearance and reappearance of water from station to station as it interacts with groundwater. It is important that diffuse sources of pollution such as agriculture and septic tanks are carefully controlled in addition to the major point sources such as Tuam and Ballyhaunis. More detailed risk assessment and

CLARE (GALWAY) Continued

investigative monitoring is recommended in an attempt to pinpoint the pathways by which diffuse pollutants are reaching the Clare River.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br 1.5 km u/s Milltown	141291	263709	39	GY
0200	Liskeevy Bridge	139161	261218	39	GY
0300	Fartamore Bridge	139437	258772	39	GY
0400	Kilcreevanty Bridge	141038	256256	39	GY
0500	Ballygaddy Bridge	142020	253774	39	GY
0600	Weir Br (Main Channel)	141470	252775	39	GY
0650	100 m d/s Weir Br (LHS)	141593	252819	39	GY
0675	At Temple Jarlath	139800	252000	0	-
0700	Cloonmore Br	140827	249846	46	GY
0800	Corrofin Bridge	142705	243204	46	GY
0900	Dalys Br	141533	240374	46	GY
1000	Lackagh Br	141843	236407	46	GY
1100	Cregmore Bridge	141011	232809	46	GY
1200	Claregalway Bridge	137185	233239	46	GY
1300	Curraghmore Bridge	132111	232828	46	GY

River and Code : **CLAUREEN (MAYO)**Tributary of : Aille (Mayo) OS Catchment No: 143
OS Grid Ref : M 134 794 Date(s) Surveyed : 10/11/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1989	1993	1996	2000	2003	
0400	Bridge in Ballyhean	3	3-4	2-3	3	3	
0700	Claureen Bridge	4-5	4	4	4	4	

Assessment: The Claureen was again moderately polluted in Ballyheane (0400) but satisfactory at Station 0700 downstream of Cooley Lough. The Claureen is also a tributary of Cloon Lough which was implicated in a major algal bloom in the Aille River (qv) which in turn impacted on Lough Mask. It is recommended that an investigative study of the Cloon Lough Catchment be undertaken in order to protect the Lough Mask Water supply.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0400	Bridge in Ballyhean	113427	283326	31	MO	
0700	Claureen Bridge	113202	280262	31	MO	

area.

River and Code : CLOONDAVER STREAM (NORTH) 30/C/09
Tributary of : Lough Carra OS Catchment No: 143
OS Grid Ref : M 200 727 Date(s) Surveyed : 24/11/2003

Samp	Sampling Stations			Biological Quality Ratings (Q Value				
No.	Location	1985	1989	1993	1996	2000	2003	
0100	Mullingar Bridge	3-4	3-4	4	3	3-4	3-4	
0200	Bridge N.E. of Cloondaver	4-5	4	4-5	3-4	4	3	

Assessment: Assessment: This is one of the most important tributaries to Lough Carra. Lough Carra has again been highlighted recently as a most important and scientifically important large western lake in a recent conference dealing specifically with the great western lakes of Mayo and Galway. Long-term limnological data from the Central and Western Fisheries Boards has shown that while the lake is generally in good condition there is an increasing level of eutrophication in the lake (Champ pers. comm.). Water quality at Mullingar Bridge has not been satisfactory over the past decade and it is undoubtedly also contributing to the overall nutrient loading to Lough Carra. The second station (0200) sampled had been dredged shortly before the sample was taken and a full biological assessment was not possible although the presence of Chironomus type larvae in the sample is a worrying sign. (In passing it is noted that a survey of the hydrological flow network is required to establish the precise flow path from Mullingar Bridge to the lake).

Samp	Sampling Stations		Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
	Mullingar Bridge	122372	273337	38	MO	
0200	Bridge N.E. of Cloondaver	120583	272744	38	MO	

River and Code : CLOONFAD 30/C/11
Tributary of : Dalgan OS Catchment No: 143
OS Grid Ref : M 477 721 Date(s) Surveyed : 28/10/2003

Samp	ling Stations	Biolo	Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1996	2000	2003			
0110	Bridge E. of Cloonfad	4	4	4	4	4			
0300	Blackford Bridge	2-3	3-4	3	3	3-4			

Assessment: The upper Cloonfad (0110) was satisfactory where sampled. A slight improvement in quality was noted at Blackford Bridge (0300) in comparison with the 2000 and 1996 surveys.

CLOONFAD Continued

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0110	Bridge E. of Cloonfad	151737	271155	39	RN
0300	Blackford Bridge	149226	271082	39	RN

River and Code : CONG CANAL 30/C/06

Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : M 149 545 Date(s) Surveyed : 27/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1994	1997	2000	2003		
0200	Br N.W. of Strandhill House	4	4	_	_	_		
0250	Br at old Church in Cong	-	-	4-5	4-5	4-5		

Assessment: The Cong Canal was in satisfactory condition when sampled in August 2000.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br N.W. of Strandhill House	114652	255315	38	GY
0250	Br at old Church in Cong	114616	255091	38	GY

River and Code : **CREGG**Tributary of : Lough Corrib

OS Grid Ref : M 297 341

OS Grid Ref : M 297 341

Date(s) Surveyed : 04/09/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1981	1985	1989	1993	1996	2000	2003	
0050	Bridge near Aucloggeen	5	5	4	4-5	_	_	_	
0100	Bridge near Drumgriffin	5	4	4	4	4	4	4	
0200	Bridge S. of Addergoole	4	4	4	4	4-5	4	-	

Assessment: The Cregg was satisfactory where sampled at Drumgriffin. Dissolved oxygen is naturally low in this spring-fed river and the normal range of oxygen-sensitive species are not present.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge near Aucloggeen	135996	238520	46	GY
0100	Bridge near Drumgriffin	135386	237853	46	GY
0200	Bridge S. of Addergoole	132288	234991	46	GY

River and Code : DALGAN

Tributary of : Clare (Galway)
OS Grid Ref : M 432 638

OS Catchment No: 143
Date(s) Surveyed : 29/09/2003

Station No.	ns 1979	1981	1983	1985	1987	1988	1989	Biolog 1990	gical Q 1991	uality I 1994	_	(Q Va 2000	lues) 2003
0100	4-5	4	4	4	4	4	4	_	_	4	3-4	4	4
0200	1	1	1	1-2	1	1-2	1-2	1/0	1	1-2	1-2	2-3	3
0300	4	3	3	-	2	2-3	3	-	-	3	2-3	3	3-4
0400	4	4	3-4	3	2-3	3	3-4	-	-	3	3	3	4
0500	4	4	3-4	3	3	3-4	3	-	-	3-4	3-4	4	4
0600	4	4	3-4	3-4	3	3-4	4	-	-	3-4	3-4	3	3-4

Assessment: A further improvement was noted downstream of Ballyhaunis at stations (0200, 0300 and 0400). This is believed to be due to reductions in pollutant loadings from Ballyhaunis, particularly the large meat factory and rendering plant in the town, which are subject to an EPA IPC licence. Moderate pollution remains immediately downstream (0200) but the situation is vastly superior to that pertaining in the 1990s and earlier. The lower stations on the Dalgan (0500,0600) also showed some improvements compared with 2000, particularly at 0600.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ballyhaunis Bridge	149654	279461	39	MO
0200	2 km S.W. of Ballyhaunis	148752	278064	39	MO
0300	Cottage Bridge	148048	274909	39	MO
0400	Culnacleha Bridge	147536	271685	39	MO
0500	Doonmacreena Bridge	143090	267519	39	MO
0600	Dalgin Bridge	143086	264301	39	GY

River and Code : **DOOGHTA**Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : M 057 520 Date(s) Surveyed : 27/08/2003

Samp	Sampling Stations			Biological Quality Ratings (Q Values)				
No.	Location	1985	1989	1994	1997	2000	2003	
0100	Ford to W. of Dooghta	5	4-5	5	4-5	4-5	4-5	
	Bridge u/s Lough Corrib	5	5	4	4	4-5	4-5	

Assessment: Quality remains satisfactory at both sites on the Dooghta.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ford to W. of Dooghta	101405	253056	38	GY
0200	Bridge u/s Lough Corrib	103977	252588	38	GY

River and Code : **DRIMNEEN**Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : M 157 419 Date(s) Surveyed : 06/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0400	Bridge E. of Carrowndulla	5	4	_	_	-		
0600	Natural Bridge	4-5	4-5	4-5	4-5	4		

Assessment: The Drimneen was in satisfactory condition albeit somewhat poorer than in 2000.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0400	Bridge E. of Carrowndulla	0	0	0	-
0600	Natural Bridge	114729	240903	45	GY

River and Code : **FAILMORE**Tributary of : Bealanabrack OS Catchment No: 143
OS Grid Ref : L 974 522 Date(s) Surveyed : 27/08/2003

 Sampling Stations
 Biological Quality Ratings (Q Values)

 No.
 Location
 1982
 1985
 1989
 1994
 1996
 2000
 2003

 0100
 Teernakill Bridge
 5
 5
 5
 5
 4-5
 4-5

Assessment: The Failmore River was satisfactory when surveyed in August 2003 with little change on 2000.

Sampling Stations		National G	rid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0100	Teernakill Bridge	96247	252111	38	GY

River and Code : **FINNY** 30/F/03

Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 018 582 Date(s) Surveyed : 29/08/2003

Sampling Stations Biological Quality Ratings (Q Values) No. Location 1985 1989 1993 1996 2000 2003 0100 S.W. of Finny 5 5 4 4-5 4-5 4-5

Assessment: This Lough Mask tributary was again in satisfactory condition in August 2003.

Sampling Stations		National G	rid Ref.	Discovery	County
No.	Location	\mathbf{X}	Y	Series No.	Code
0100	S.W. of Finny	101024	258646	38	GY

River and Code : **FOOEY**Tributary of : Lough Nafooey OS Catchment No: 143
OS Grid Ref : L 953 596
Date(s) Surveyed : 29/08/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1985	1989	1994	1996	2000	2003		
0100	Bridge u/s Lough Nafooey	5	5	4	5	4-5	3-4		

Assessment: The River Fooey was quite turbid when sampled in August 2003. Land drainage upstream appears to be responsible for increased levels of turbidity and siltation. Iron deposits and enhanced algal growth were also noted. Slurry spreading was noted in the immediate upstream catchment at Station 0100. The sample site is located in a region of sandy soil.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge u/s Lough Nafooey	94714	260050	38	GY

River and Code : **GLENNAMUCKA STREAM** 30/G/04
Tributary of : Abbert OS Catchment No: 143
OS Grid Ref : Null Date(s) Surveyed : 26/08/2003

Statio	ons				Biolo	ogical Qu	ality Rati	ings (Q V	alues)	
No.	1971	1977	1981	1985	1987	1989	1994	1997	2000	2003
0015	_	_	_	_	_	4	4	3-4	3	4

Assessment: Water quality was satisfactory with an improvement noted in comparison with 2000. The Glennamucka Stream was formerly reported upon as part of the upper Abbert River system (qv).

Note: Previously reported as part of the Abbert 30A01

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0015	Br at Ballyglass	160526	234877	46	GY	

River and Code : GLENSAUL 30/G/01
Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 106 678 Date(s) Surveyed : 03/09/2003

Sampl	ling Stations		В	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1980	1984	1989	1993	1996	2000	2003
0010	S of Garaanagerra (roadside)	_	_	_	_	3-4	3-4	4
0100	200 m u/s Tourmakeady Bridge	5	5	5	4-5	-	-	-
0200	Bridge in Tourmakeady	5	5	5	4-5	4-5	4-5	-
0250	0.25 km d/s Br in Tourmakeady	-	-	-	-	-	-	4

Assessment: The Glensaul was satisfactory but significant filamentous algal growth was noted at Station 0250 a new station added downstream of Tourmakeady Village in order to better assess local impacts.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	S of Garaanagerra (roadside)	105317	265869	38	MO
0100	200 m u/s Tourmakeady Bridge	109385	267833	38	MO
0200	Bridge in Tourmakeady	109687	268116	38	MO
0250	0.25 km d/s Br in Tourmakeady	109936	267975	38	MO

River and Code : **GORTGARROW STREAM** 30/G/05
Tributary of : Sinking OS Catchment No: 143
OS Grid Ref : Null Date(s) Surveyed : 22/07/2003

Statio	ns					Biolo	ogical Qu	ality Rati	ings (Q V	alues)
No.	1971	1973	1977	1979	1984	1989	1994	1996	2000	2003
0010	_	_	_	_	-	-	3-4	2-3	2-3	3
0025	-	-	-	-	_	3-4	3-4	3	4	3-4

Assessment: The Gortgarrow was previously reported as a branch of the Sinking River. Quality was unsatisfactory at both sites surveyed.

Note: Previously reported as part of the Sinking 30S01

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Br at Gortgarrow*	157514	259081	39	GY
0025	Bridge W. of Parkbaun	158766	260999	39	GY

River and Code : **GRANGE** (**GALWAY**) 30/G/02

Tributary of : Clare (Galway) OS Catchment No: 143 OS Grid Ref : M 430 450 Date(s) Surveyed: 11/08/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	s (Q V	alues)
No.	Location	1971	1977	1980	1985	1989	1994	1997	2000	2003
0120	Cloonkeen Bridge	-	-	-	-	4	4	4	3	4
0200	Bridge near Cloondahamper	· -	-	3	4	4	3-4	4	4	3
0300	Ford N.N.W. of Cornacartan	1 -	-	5	4	4	3-4	3	4	3-4
0400	Grange Bridge	-	-	4	4-5	4-5	3-4	3	3-4	3-4
0500	Cahergal Bridge	-	-	4	4	4	3	3-4	4	4
0600	Ballinderry Bridge	5	4-5	5	4	4	4	4	4	-
0700	Mahanagh Bridge (lower)	-	-	-	-	-	-	-	-	4

The Grange River was satisfactory in its upper reaches (0120). The middle section of the river remains quite eutrophic, however, (0200,0300,0400) with a recovery in the lower sections (0500, 0700).

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0120	Cloonkeen Bridge	159204	251985	39	GY
0200	Bridge near Cloondahamper	155263	251505	39	GY
0300	Ford N.N.W. of Cornacartan	150944	251664	39	GY
0400	Grange Bridge	147920	249890	46	GY
0500	Cahergal Bridge	147702	247620	46	GY
0600	Ballinderry Bridge	144578	246953	46	GY
0700	Mahanagh Bridge (lower)	144075	246125	46	GY

River and Code : **JOYCE'S** 30/J/01 Tributary of : Bealanabrack OS Catchment No: 143 OS Grid Ref : L 930 548 Date(s) Surveyed: 27/08/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)							
No.	Location	1982	1989	1994	1996	2000	2003			
0075	Ford SW of Rinavore	-	-	-	5	-	-			
0100	Ford W.N.W. of Griggins	5	5	4	-	4	4			
0200	Br u/s Bealanabrack River	-	5	4	4	4	4			

The upper site on the Joyce's River (0100) is badly silted and has significant algal growths. There were still sufficient sensitive macroinvertebrates 226

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JOYCE'S Continued

present in this fast-flowing stretch of river to merit a Q4, but the loss of taxa, such as Perla in particular, which were found at this site in the 1990s is disappointing and indicative of a decline in quality. Forestry and sheep are the main pressures in the catchment. The lower site upstream of the confluence with the Bealanabrack River (qv) was satisfactory in August 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0075	Ford SW of Rinavore	90906	257663	37	GY
0100	Ford W.N.W. of Griggins	91573	257044	37	GY
0200	Br u/s Bealanabrack River	93093	254846	38	GY

River and Code : **KNOCKAUNRANNY STREAM** 30/K/02
Tributary of : Ross Lake OS Catchment No: 143
OS Grid Ref : M 197 357 Date(s) Surveyed : 06/10/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1997	2000	2003		
0100	Bridge u/s Ross Lake	5	4-5	4	-	-		
0200	Br u/s Ross Lake (side road)	-	-	-	4-5	4-5		

Assessment: This tributary of Ross Lake was in satisfactory condition.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge u/s Ross Lake	118921	235439	45	GY
0200	Br u/s Ross Lake (side road)	119208	235788	45	GY

River and Code : LEVALLY STREAM 30/L/07

Tributary of : Grange (GY) OS Catchment No: 143 OS Grid Ref : Null Date(s) Surveyed : 11/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1971 1977 1980 1985 1989 1994 1997 2000 2003

0050 Bridge N. of Mahanagh - - 3-4 4 3 - - - - - 0100 Bridge near Levally - - 4 4 3 4 4 3-4 4

Assessment: The Levally Stream was formerly reported upon as the Levally branch of the River Grange. Quality had improved since 2000 with less filamentous algae present and fewer pollution-tolerant taxa such as *Asellus*.

Note: Previously reported as part of the Grange 30G02

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge N. of Mahanagh	156000	254200	39	GY
0100	Bridge near Levally	154636	252462	39	GY

River and Code : LOUGHKIP 30/L/01

Tributary of : Ballycuirke Lough OS Catchment No: 143

OS Grid Ref : M 241 333 Date(s) Surveyed : 01/10/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1985	1989	1993	1997	2000	2003		
0100	Laughil Bridge	_	4	4	4	4	4-5		
0200	Bridge u/s Ballycuirke Lough	4-5	5	4	4-5	4-5	4-5		

Assessment: The upper section of the Loughkip River had improved in quality in comparison with recent surveys. This river is a tributary of Ballycuirke Lake.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Laughil Bridge	118675	229834	45	GY
0200	Bridge u/s Ballycuirke Lough	122211	231218	45	GY

River and Code : LOUGH NACORRALEA STREAM 30/L/03
Tributary of : Aille (Mayo) OS Catchment No: 143
OS Grid Ref : M 139 737 Date(s) Surveyed : 10/11/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1989	1993	1996	2000	2003		
0100	Bridge d/s Lough Nacorralea	4-5	4	_	_	-		
0400	Bridge E. of Cloonee	4	4	4-5	3-4	4-5		

Assessment: Quality was satisfactory in this stream, which flows from Lough Nacorralea into the Aille River (qv). The results suggest that this stream is not responsible for the major algal bloom noted just upstream of Lough Mask on the Aille River.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge d/s Lough Nacorralea	0	0	0	-
0400	Bridge E. of Cloonee	113055	274654	38	MO

River and Code : NANNY (TUAM)

Tributary of : Clare (Galway)

OS Grid Ref : M 418 529

OS Catchment No: 143

Date(s) Surveyed : 04/09/2003

Statio	Stations							Biological Quality Ratings (Q Value						lues)
No.	1971	1973	1975	1979	1981	1983	1987	1989	1990	1991	1994	1997	2000	2003
0050	_	_	_	_	4	5	4	_	_	_	_	_	_	_
0100	-	-	-	-	5	5	4	3	-	-	4	-	4-5	4
0200	-	-	-	-	4	3-4	3	-	-	-	-	-	-	-
0210	-	-	-	-	-	-	-	3	-	-	-	-	-	-
0300	2	1-2	1	1	1	1	1	1	1	1	2-3	4	4	4

Assessment: The upper section of the Nanny (0100) had deteriorated slightly in comparison with 2000. In part this is likely to be due to the presence quantities of cow dung on the riverbed in the vicinity of a cattle access point. The river flows over a karst limestone bedrock and its flow in summer tends to be lower than expected for its apparent catchment size. Thus, allowing cattle to access the river during summer is likely to have an adverse impact on water quality. Downstream of Tuam town (0300), at the point where the Nanny joins the Clare River (qv), water quality in the Nanny has been maintained at satisfactory status albeit with a somewhat low dissolved oxygen status - perhaps due to the karst nature of the catchment and to summer groundwater inflows. Water quality is now vastly superior to the situation in the early 1990s and previous to that.

NANNY (TUAM) Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge N.E. of Stripe	149000	253400	0	-
0100	Br NW Loughpark	145518	252926	39	GY
0200	Tuam: Shop Street Bridge	143459	252086	39	GY
0300	u/s Weir Bridge	141798	252990	39	GY

River and Code : **OWENBRIN**Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 058 626 Date(s) Surveyed : 29/08/2003

Sampl	ling Stations		Biological Quality Ratings (
No.	Location	1985	1989	1993	1996	2000	2003	
0050	Br WNW Barnahowna	-	5	3*	3-4	4	3-4	
0800	600 m u/s Sampling Stat 0100	-	5*	-	-	-	-	
0100	Bridge N.E. of Cappanacreha	5	3*	3*	-	-	-	
0200	Bridge u/s Lough Mask	5	4*	3*	3	3	3	

Assessment: The striking contrast between the Owenbrin River today and its condition in 1985 before the river was impacted by the overgrazing problem is still very noticeable. The hydromorphological damage caused to the river channel by the severe erosion of the catchment is visually very dramatic. The instability of the river channel which has resulted from this has impacted severely on faunal diversity and abundance. Undue algal growth was also noted in this remote mountain river. Both sites surveyed are still well below their 1985 status.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Br WNW Barnahowna	102974	264278	38	MO
0200	Bridge u/s Lough Mask	105558	262764	38	MO

River and Code : **OWENRIFF (CORRIB)** 30/O/02

Tributary of : Lough Corrib OS Catchment No: 143 OS Grid Ref : M 130 435 Date(s) Surveyed : 06/10/2003

Statio	Stations						Biological Quality Ratings (Q Values)				
No.	1971	1973	1977	1981	1985	1989	1994	1997	2000	2003	
0070	_	_	_	_	_	4	4	4	4	4	
0100	4-5	4	4	5	4	4-5	4	4	4	4	
0190	4	4	4-5	4-5	4	3-4	3-4	3-4	4-5	4-5	

The Owenriff was in satisfactory condition over its length on the Assessment: date of the survey. Nonetheless the quantity of filamentous algae found in the river is significantly greater than would be expected for a river of its type. Its catchment includes a significant portion of the Connemara Bog Complex SAC/NHA in its upper catchment and the Lough Corrib SAC in the lower main river channel. The river catchment requires particularly careful management in order to avoid deterioration due to e.g. forestry operations, farming and, in particular, the control of urban impacts in Oughterard itself is required. A mechanical digger was noted operating very close to the riverbank in Oughterard, for example, on the day of the survey. Frequently such operations give rise to silt and turbidity, although no problems were noted on the day of the survey. Siltation is particularly injurious to the protected species found in this highly sensitive SAC. Filamentous algae are also causing ongoing problems particularly in the Oughterard stretch of the river. Serious eutrophication was noted in the lower Owenriff in early 2004 following a dry spell and investigations were undertaken in the catchment by the Western Fisheries Board and National Parks and Wildlife staff.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0070	1 km d/s Lough Agraffard	107289	242061	45	GY
0100	1 km u/s Oughterard Bridge	110778	242519	45	GY
0190	Bridge u/s Lough Corrib	112247	243183	45	GY

River and Code : **OWENWEE (CORRIB)**Tributary of : Lough Corrib OS Catchment No: 143
OS Grid Ref : M 014 484 Date(s) Surveyed : 06/10/2003

Sampl	ing Stations		Biol	ogical Qu	iality Rat	ity Ratings (Q Values)		
No.	Location	1985	1989	1994	1997	2000	2003	
0100	Bridge S.E. of Bofin Lodge	4-5	4-5	-	-	-	-	
0180	200 m d/s Tawnaghbeg Lough	-	4	4	3	4	4-5	

Assessment: Satisfactory.

OWENWEE (CORRIB) Continued

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge S.E. of Bofin Lodge	102247	245182	0	-
0180	200 m d/s Tawnaghbeg Lough	101408	246968	45	GY

River and Code : ROBE 30/R/01

Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 153 658 Date(s) Surveyed : 25/09/2003

Statio	ns							Biolog	gical Q	uality l	Ratings	(Q Va	lues)
No.	1971	1977	1980	1982	1983	1985	1987	1989	1994	1996	1997	2000	2003
0015									4-5	4		3	4
	-	-	-	-	-	-	-	-		4	-	-	
0030	-	-	-	-	-	-	-	3	3-4	-	4	3-4	4
0050	-	-	4	3-4	-	4-5	-	4	-	-	-	-	-
0100	5	-	4	3-4	-	4-5	3-4	-	-	-	-	-	-
0110	-	-	-	-	-	-	-	3-4	3-4	-	4	4	4
0200	4-5	4-5	4	3	-	4	4	3-4	3-4	-	3	3-4	4
0300	-	-	4	3-4	-	4	4	3-4	-	-	-	-	-
0310	-	-	-	-	-	-	-	-	3	-	3	3-4	3-4
0400	5	5	4	4	-	3-4	3-4	4	3	-	3-4	3	3
0500	-	-	4	4	-	4	3-4	4	-	-	-	-	-
0510	-	-	-	-	-	-	-	-	4	-	4	3	4
0600	4-5	4	4	4	-	4	4	4-5	3	-	4	3	3-4
0700	4	4	4-5	4	3	3-4	3	4	-	-	-	-	-
0800	-	-	4	3	3	-	-	-	-	-	-	-	-
0900	-	-	-	-	-	3	3-4	3	3	-	-	4	dry
0950	-	-	-	-	-	-	-	-	-	-	4	3	4
1000	_	_	_	3-4	_	_	4	3-4	3-4	_	_	_	_

Assessment: The upper section of the Robe showed an improvement in quality in comparison with the 2000 survey (0015, 0030). Unusual earth moving practices in the vicinity of Kilnock Bridge (0030), however, appear to be delivering large volumes of silt into the river channel causing problems for spawning gravels and habitat right down the river channel. Siltation was noted at many of the downstream sites and it is felt that the land clearing practices seen here – such as the scraping away of all riverbank vegetation and bulldozing large embankments of earth is leading to significant loss of top soil into the river. At Castlemagarrett (0110) water quality was satisfactory if somewhat eutrophic and below its full potential. An improvement was noted at Crossboyne (0200) downstream of both Claremorris and Ballindine towns. Quality deteriorated, however, in the section to Hollymount Bridge (0310, 0400). A slight recovery at Robeen Bridge (0510) although a surprisingly faunal low diversity was noted at this site suggesting that it may have been in recovery following an earlier pollution incident. There were sufficient sensitive taxa present to warrant a Q4 rating,

ROBE Continued

however, on the day of sampling. Slight pollution was again noted just upstream of Ballinrobe town (0600) albeit somewhat improved on the 2000 results. (The small side channel at 0900 was dry and no sample was taken). Downstream of Ballinrobe a distinct improvement was noted although again significant quantities of filamentous algae were recorded there.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0015	Br S of Cloonbullan	143566	276981	39	MO
0030	Kilknock Bridge	141001	273651	39	MO
0050	Br 4 km E. of Claremorris	138240	274855	39	MO
0100	Br S.W. of Meelick	136231	272376	39	MO
0110	Br S.E. of Castlemagarrett	135734	271557	39	MO
0200	Bridge in Crossboyne	133871	271034	39	MO
0300	Bridge near Tagheen	128677	271657	38	MO
0310	Hollybrook Br	128280	272033	38	MO
0400	Hollymount Bridge	125839	268640	38	MO
0500	Foxhall Bridge	123742	268184	38	MO
0510	Robeen Bridge	123326	268656	38	MO
0600	Akit Bridge	119464	264943	38	MO
0700	E. Br N.E. of Sprgvale H	118107	264881	38	MO
0800	W. Br N.E. of Sprgvale H	117996	264944	38	MO
0900	100m d/s Station 0800	117721	264923	38	MO
0950	North of Curragh	116794	264817	38	MO
1000	1 km u/s Lough Mask	116122	265546	38	MO

River and Code : SCARDAUN 30/S/04
Tributary of : Robe OS Catchment No: 143
OS Grid Ref : M 322 704 Date(s) Surveyed : 24/11/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1989	1994	1996	2000	2003			
0100	Bridge at Scardaun	2-3	3	2-3	4	4			
0400	At Curraghadooey	3	-	-	-	-			
0500	Just u/s Robe River confluence	-	3	3	3	-			

Assessment: The Scardaun was satisfactory where sampled in Scardaun village maintaining the improvement noted in 2000.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge at Scardaun	133371	267972	39	MO
0500	Just u/s Robe River confluence	132097	270185	39	MO

River and Code : **SINKING**Tributary of : Clare (Galway)

OS Grid Ref : M 432 638

OS Catchment No: 143

Date(s) Surveyed : 22/07/2003

Statio	Stations						Biological Quality Ratings (Q Values)					
No.	1971	1973	1977	1979	1984	1989	1994	1996	2000	2003		
0060	_	_	_	_	_	4	_	_	_	_		
0080	-	_	-	_	_	-	3-4	3	4	_		
0100	5	-	4-5	4-5	4	4	-	-	-	3-4		
0200	-	-	-	-	4	4	-	-	-	-		
0300	4	5	4	4	4	3-4	3-4	-	3	3-4		
0320	-	-	-	-	-	-	4	-	3	4		
0350	4-5	-	4	4-5	4	-	-	-	-	-		
0400	-	-	-	-	-	4	4	-	3	-		

Assessment: The Sinking River was slightly polluted upstream of Dunmore town (0100). Downstream of Dunmore slight pollution was also noted (0300) close to the sewage works discharge point. An improvement is noted at the site some 3.5km downstream of the town (0320). The upper branches of the Sinking are now reported on separately as the Gortgarrow Stream (qv) and the Yellow (Sinking) (qv).

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	Br SSW of Ballinlass	153497	262008	39	GY
0100	Br 3 km u/s Dunmore Bridge	152528	262094	39	GY
0200	Dunmore Bridge	150920	263507	39	GY
0300	Br at Dunmore Castle	150201	263985	39	GY
0320	Ballymoney Br	148329	263237	39	GY
0400	Cloonagh Br	144296	263500	39	GY

River and Code : **SRAH STREAM***Tributary of : Lough Mask OS Grid Ref : M 123 718

OS Grid Ref : M 123 718

OS Catchment No: 143

Date(s) Surveyed : 10/11/2003

Sampl	ing Stations		Biological Quality Ratings (Q Value						
No.	Location	1985	1986	1988	1989	1993	1996	2000	2003
Uppei	r Branch								
0100	E Br at Srah	-	4-5	4-5	5	-	-	-	-
Lower	r Branch								
0220	'Br' W of Drumcoggy	-		4-5			-	-	-
0240	100 m d/s 'Br' W of Drumcoggy	-	2-3	5	5	4-5	-	-	-
0300	Br 1.4 km u/s confluence	-	3/0	5	5	-	-	-	-
Main	Channel								
0400	Br u/s Lough Mask	5	4/0	4	5	3	4-5	4-5	4-5

Assessment: Water quality was satisfactory at the bridge just upstream of the Srah Stream's confluence with Lough Mask.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br u/s Lough Mask	111845	272439	38	MO

^{*}Indicates non-baseline rivers which do not appear on the OS Rivers Catchment Map.

River and Code : **SRAHNALONG** 30/S/03

Tributary of : Lough Mask OS Catchment No: 143
OS Grid Ref : M 019 613 Date(s) Surveyed : 29/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)							
No.	Location	1985	1989	1993	1996	2000	2003		
0100	Bridge u/s Lough Mask	5	5	4	5	4	4		

Assessment: The Srahnalong River was satisfactory with little change since 2000.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	X Y		Code	
0100	Bridge u/s Lough Mask	100885	261418	38	MO	

River and Code : **TERRYLAND**Tributary of : Corrib (Distributary)
OS Grid Ref : M 295 265

OS Catchment No: 143
Date(s) Surveyed : 01/12/2003

Sampl	ling Stations			Biolog	ical Qı	ıality F	Ratings	(Q Va	lues)
No.	Location	1980	1982	1984	1989	1994	1997	2000	2003
0200	Bridge on Galway-Headford Rd	4	4	4	4	3-4	3	3	_
0400	400 m d/s Terryland Bridge	1/0	3/0	3	3/0	2-3	2-3	-	-
0500	Br d/s Terryland Br on ring road	-	-	-	-	-	-	2-3	2-3

Assessment: The Terryland River was again moderately polluted at the point sampled in Galway City.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Br d/s Terryland Br on ring road	131333	227263	45	GY

River and Code : TULLAGHAUN 30/T/03

Tributary of : Dalgan OS Catchment No: 143
OS Grid Ref : M 484 738 Date(s) Surveyed : 28/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1989 1994 1996 2000 2003

0300 Bridge u/s Dalgan River

4 4 4 4 4 4

Assessment: This tributary of the Dalgan River (qv) was in satisfactory condition when surveyed in October 2003. No significant change in status was noted.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	X Y		Code	
0300	Bridge u/s Dalgan River	148698	274092	39	MO	

River and Code : YELLOW (SINKING) 30/Y/01
Tributary of : Sinking OS Catchment No: 143
OS Grid Ref : Null Date(s) Surveyed : 22/07/2003

Statio	Stations						ogical Qu	ality Rati	ings (Q V	alues)
No.	1971	1973	1977	1979	1984	1989	1994	1996	2000	2003
0045	-	-	-	-	-	3-4	4	3-4*	4	3
0055	-	-	-	-	-	3-4	3-4	4	4	4

Assessment: Water quality was unsatisfactory at the upper station (0045) on the Yellow River. The lower site (0055) exhibited an improvement with water quality satisfactory at that point and maintaining its status as per 2000. The Yellow (Sinking) was previously reported as part of the Sinking River.

Note: Previously reported as part of the Sinking 30S01

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0045	Bridge S. of Cloonkeen	159443	265257	39	GY
0055	Woodfield Br	157151	263736	39	GY

HYDROMETRIC AREA 31 (Balance) Galway Bay North

Cashla	31C01
Glencoaghan Gowlabeg	31G01 31G03
Invermore	31I01
Knockadoagh	31K02
Loughnabrocky Stream	31N10
Owenboliska Owengowla Owentooey	31O01 31O02 31O03
Recess	31R01
Screeb	31S01
Tooreenacoona	31T01

The Crumlin, Knock(Furbo), Loughinch, Owenriff, and Polleen rivers were surveyed in 2002.

The Loughnabrocky Stream was previously reported as part of the Owengowla River.

River and Code : CASHLA 31/C/01
Tributary of : Sea - Cashla Bay OS Catchment No: 138
OS Grid Ref : L 973 264 Date(s) Surveyed : 03/12/2003

Sampling Stations Biological Quality Ratings (Q Values) Location 1994 1997 1999 2003 No. 1986 0100 Cashla Bridge 4-5 4 4 4-5 4-5 4-5

Assessment: Satisfactory.

Sampling Stations		Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Cashla Bridge	97806	226404	45	GY

River and Code : **GLENCOAGHAN** 31/G/01
Tributary of : Ballynahinch Lough OS Catchment No: 136
OS Grid Ref : L 798 474 Date(s) Surveyed : 23/10/2003

Sampling Stations			Biological Quality Ratings (Q Values)					
No.	Location	1986	1990	1994	1997	1999	2003	
0100	Br SE of Derrynavglaun	-	4-5	_	4-5	4	3-4	
0200	Glencoaghan Bridge	5	4-5	4-5	-	-	-	

Assessment: The Glencoaghan River drains a catchment lying on Precambrian quartzite, schist and gneiss with a few small pockets of Precambrian marble. Conductivity was 63.6 µS/cm on the day of sampling – indicating quite acid conditions. The river was notable for a dense growth of light green filamentous algae, possibly including *Spirogyra*, and a lack of any pollution-sensitive macroinvertebrate species. While this may be simply due to a dry spell and low flows in the river, the results suggest a O-Value indicating slight pollution. All previous visits to this site have produced both Heptageniidae and sensitive plecopteran species. The catchment is in the Twelve Pins / Garraun Complex SAC and it appears to be a very pristine catchment with a GIS analysis also suggesting very low pressures from e.g. livestock density, forestry or other obvious environmental pressures. Local reports a good salmon run in the winter of 2002-2003 and a number of sea trout were caught in 2003. It is recommended that an investigation into any potential pollution sources be carried out in order to ascertain why the most pollution-sensitive species have disappeared from the river

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br SE of Derrynavglaun	80151	248606	44	GY
0200	Glencoaghan Bridge	79693	247592	0	GY

River and Code : **GOWLABEG**Tributary of : Sea - Bertraghboy Bay OS Catchment No: 137
OS Grid Ref : L 817 392 Date(s) Surveyed : 23/10/2003

Sampling Stations			Biological Quality Ratings (Q Values)					
No.	Location	1986	1990	1994	1997	1999	2003	
0100	Bridge S.W. of Gowla	4-5	4	4-5	4-5	4	4-5	

Assessment: Water quality was satisfactory in the Gowlabeg when surveyed in October 2003.

Samp	oling Stations	National	Grid Ref.	Discovery	County	
No.	Location	X	X Y		Code	
0100	Bridge S.W. of Gowla	81584	239089	44	GY	

River and Code : INVERMORE

Tributary of : Sea - Kilkieran Bay OS Catchment No: r4
OS Grid Ref : L 899 391 Date(s) Surveyed : 03/12/2003

Samp	ling Stations	Biologi	cal Quality	Ratings (Q	Values)
No.	Location	1994	1997	1999	2003
0080	0.4 km d/s Lough Bunnahask	-	4	4	4
0500	Br d/s Invermore Lough	3-4	3-4	4	3-4

Assessment: Quality was satisfactory at the upper site where some 15 taxa were present in the sample including some pollution-sensitive species. The lower site, however, had only 8 taxa and no sensitive types were present. The catchment is a very acid one and no mayflies (Ephemeroptera) were present in the samples. The Invermore catchment is extensively forested.

Samp	Sampling Stations		Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0080	0.4 km d/s Lough Bunnahask	89990	240943	44	GY	
0500	Br d/s Invermore Lough	89891	238982	44	GY	

River and Code : KNOCKADOAGH 31/K/02

Tributary of : Glenicmurran Lough OS Grid Ref : M 005 301 OS Catchment No: 138

Date(s) Surveyed : 03/12/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2003

0100 Bridge N. of Knockadoagh

4 4 4 4 4-5

Assessment: Satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge N. of Knockadoagh	101058	229747	45	GY

River and Code : LOUGH NABROCKY STREAM 31/N/10
Tributary of : Owengowla OS Catchment No: 137
OS Grid Ref : Null Date(s) Surveyed : 23/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

1986

1990

1994

1997

1999

2003

Assessment: The Lough Nabrocky Stream is in the Connemara Bog Complex SAC. It is a very acidic system flowing across granite bedrock and the land cover is comprised entirely of intact bog. The invertebrate fauna appears to be naturally sparse due to the acidic conditions and filamentous green algae such as *Spirogyra* are quite abundant in the stream. If is believed that the lack of grazing pressure from invertebrates leads to enhanced algal growth during dry periods in particular.

Previously reported as part of the Owengowla 31002

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge E. of Loughanillaun S.	85658.	240124	0	GY

River and Code: **OWENBOLISKA**Tributary of : Sea - Galway Bay

OS Catchment No: 141

OS Grid Ref : M 127 223 Date(s) Surveyed : 01/12/2003

Sampling Stations			Bio	logical Qu	uality Rat	ings (Q	Q Values)			
No.	Location	1986	1990	1994	1997	1999	2003			
0100	U/s Lough Boliska	4	4	3-4	4	4	Flood			
0200	Bridge in Spiddal	4	4	4	4	4-5	4-5			

Assessment: The upper Owenboliska was flooded on a number of occasions when sampling attempts were made. The lower site showed satisfactory conditions.

Samp	oling Stations	National G	rid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0100	U/s Lough Boliska	112147	228726	45	GY
0200	Bridge in Spiddal	112742	222517	45	GY

River and Code : **OWENGOWLA**Tributary of : Sea - Bertraghboy Bay OS Catchment No: 137

OS Grid Ref : L 811 395 Date(s) Surveyed : 23/10/2003

Samp	ling Stations		Biol	ogical Qu	uality Rat	ings (Q V	alues)
No.	Location	1986	1990	1994	1997	1999	2003
0200	Bridge u/s Bunnahown Bridge	-	4	-	-	-	-
0300	Bunnahown Bridge	4-5	4	4	4	4	4-5

Assessment: Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0300	Bunnahown Bridge	81826	239769	44	GY

River and Code : **OWENTOOEY**Tributary of : Recess OS Catchment No: 136
OS Grid Ref : L 870 472 Date(s) Surveyed : 23/10/2003

Sampling Stations			Biol	ogical Qu	uality Rat	ings (Q V	/alues)
No.	Location	1986	1990	1994	1997	1999	2003
	Bridge u/s Lehanagh Lough	-	4-5	<u>-</u>	-	-	-
0100	Tullywee Bridge	4-5	4-5	4	4	4	4-5

Assessment: Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Tullywee Bridge	87223	247478	44	GY

River and Code : **RECESS**Tributary of : Sea - Bertraghboy Bay OS Catchment No: 136
OS Grid Ref : L 757 446 Date(s) Surveyed : 05/09/2003

Samp	Sampling Stations		Biological Quality Ratings (Q Values)				
No.	Location	1986	1990	1994	1997	1999	2003
0100	Bunskannive Bridge	4-5	5	4	4-5	4	4
200	Cloonloppeen Bridge	4-5	4	4	4-5	-	4
0300	D/s Owentooey River confl	4	4	-	4-5	4	4
0400	Weir Bridge	-	4	4	4	-	4
0700	Cloonbeg Bridge	-	4	5	4	4-5	4-5
0780	1 km u/s Toombeola Bridge	_	4	_	_	-	_

Assessment: The Recess River was in satisfactory condition at all sites examined in early September 2003.

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{X} \mathbf{Y}		Code
0100	Bunskannive Bridge	93634	246316	45	GY
0200	Cloonloppeen Bridge	90343	246100	44	GY
0300	D/s Owentooey River confl	85925	247120	44	GY
0400	Weir Bridge	83359	247725	44	GY
0700	Cloonbeg Bridge	75897	246571	44	GY

River and Code : SCREEB 31/S/01

Tributary of : Sea - Camus Bay OS Catchment No: r4

OS Grid Ref : L 951 383 Date(s) Surveyed : 03/12/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	1999	2003	
0100	Old Railway Br u/s L. Shindilla	-	4-5	4-5	4-5	4-5	
0200	Bridge u/s Lough Nahasleam	4-5	4-5	4	4	-	
0400	Bridge d/s Loughaunfree	4	-	-	-	-	
0570	U/s Lough Ahalia North	4	3-4	3-4	3-4	3-4	

Assessment: The upper Screeb (0100) was in good condition but slight pollution was noted upstream of Lough Ahalia North apparently due to fish farm effluents.

Sampling Stations		National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Old Railway Br u/s L. Shindilla	94626	246000	45	GY
0200	Bridge u/s Lough Nahasleam	97459	244283	45	GY
0570	U/s Lough Ahalia North	97356	240320	45	GY

River and Code : TOOREENACOONA 31/T/01

Tributary of : Lough Inagh OS Catchment No: 136
OS Grid Ref : L 825 545 Date(s) Surveyed : 05/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
1999
2003

0200
Bridge u/s Lough Inagh

4-5
4-5
5
4-5
4

Assessment: This Lough Inagh tributary was in satisfactory condition albeit quality has dropped somewhat since the most recent previous survey.

Sampling Stations		National	National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0200	Bridge u/s Lough Inagh	82446	255514	37	GY

HYDROMETRIC AREA 32

Erriff - Clew Bay

Altaconey	32A02
Ballinaboy Bundorragha Bunnahowna Bunowen (Louisburg)	32B07 32B01 32B02 32B03
Carrowbeg (Westport) Carrownisky Clogher (Moyour) * Cross (Mayo) * Crumpaun Culfin	32C05 32C01 32C07 32C02 32C03 32C04
Dawros Derrycraff Derryehorraun	32D01 32D02 32D04
Erriff	32E01
Glaishwy* Glendavock Glenisland Glenlaur Glennamong Glenummera Goulaun	32G12 32G01 32G07 32G02 32G03 32G05 32G06
Moyour	32M01
Newport (Mayo)	32N01
Owenduff (Erriff) Owengarve (Mayo) Owenglin Owennabrockagh Owennadornaun Owenwee (Mayo)	32O08 32O02 32O03 32O04 32O07 32O06
Skerdagh [Srahmore Streamstown (Clifden)	32S01 32S02] 32S04
Traheen	32T01

^{*} Indicates non-baseline rivers which do not appear on the OS Rivers Catchment Map. [The Srahmore was in flood on each occasion visited; sample impossible.]

River and Code : **ALTACONEY**Tributary of : Srahmore OS Catchment No: 107
OS Grid Ref : F 967 043

Date(s) Surveyed : 07/10/2002

Sampling Stations				_		•	gs (Q Va	
		1981	1980	1990	1994	1997	1999	2002
0100	1 km N.N.W. of Lough Gall	5	5	5	-	-	-	-
0300	1.5 km d/s Goulaun River	5	5	5	4-5	4-5	4-5	4-5

Assessment: The Altaconey River retained its satisfactory status in 2002. A slight drop in quality was noted due to the impact of the Goulan River (qv) upstream, which suffered a major ecological decline in 2002. The Altaconey is a soft water river primarily on quartzite bedrock.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	1.5 km d/s Goulaun River	96892	306150	23	MO

River and Code : **BALLINABOY** 32/B/07
Tributary of : Sea: Ardbear Bay OS Catchment No: t4
OS Grid Ref : L 660 480 Date(s) Surveyed : 14/10/2002

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1994	1997	1999	2002			
0100	Br. d/s L. Beaghcauneen	3	3	3	2-3			
0300	Br WSW of L. Nagilky	4	3-4	4	4			

Assessment: The Ballinaboy continues to be impacted by a fish farm located near the river outflow from Lake Beaghcauneen. Station 0100 is still moderately polluted with a recovery noted at Stn 0300. The Ballinaboy catchment is unique in that it has 114 individual lakes contained within its watershed and they comprise approximately 30% of the catchment's total surface area.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br. d/s L. Beaghcauneen	68093	247523	44	GY
0300	Br WSW of L. Nagilky	66764	247768	44	GY

River and Code : **BUNDORRAGHA**Tributary of : Sea - Killary Harbour OS Catchment No: 130
OS Grid Ref : L 842 632 Date(s) Surveyed : 23/08/2002

Sampl	ling Stations		В	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1982	1986	1990	1994	1997	1999	2002
0100	100 m u/s Fin Lough	5	5	4-5	4-5	4-5	4-5	_
0120	Bridge d/s Fin Lough	-	-	4	-	-	-	-
0200	Bridge E. of Bundorragha	5	4-5	4-5	4-5	4-5	4-5	4-5

Assessment: The Bundorragha was satisfactory when surveyed in August 2002 with the presence of some rare species noted.

Note: The upper Bundorragha section flowing into Doo Lough (i.e. the stations previously reported as 32B01 0010, 0040 and 0080 are now included as part of the Glenummera River (32G05) (qv).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	100 m u/s Fin Lough	84519	266435	37	MO
0200	Bridge E. of Bundorragha	84182	263413	37	MO

River and Code : **BUNNAHOWNA** 32/B/02
Tributary of : Sea - Clew Bay OS Catchment No: i5
OS Grid Ref : L 855 962 Date(s) Surveyed : 19/08/2002

Samp	ling Stations	Biological Quality Ratings (Q Value				alues)
No.	Location	1990	· · · · · · · · · · · · · · · · · · ·		1999	2002
0100	Bunnahowna Bridge	5	4-5	4-5	4-5	3-4

Assessment: The Bunnahowna River suffered a significant decline in quality when compared with all previous surveys. This river is a steep mountain river dropping from over 200m to 20 m in just over 4km. The catchment has no forestry but sheep numbers are high in this region. A water treatment works was investigated also as a possible cause of the pollution problem at Station 0100 but on an initial inspection did not seem to be the main source of the problem as the effluent from the plant seeped into a wetlands/bog area and enter the main channel downstream of the point sampled. Significant algal growth was noted in what should be a pristine catchment. Further investigation is required into the cause of the problem.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bunnahowna Bridge	85656	296511	30	MO

River and Code : **BUNOWEN (LOUISBURGH)** 32/B/03
Tributary of : Sea - Clew Bay OS Catchment No: 127
OS Grid Ref : L 803 818 Date(s) Surveyed : 22/08/2002

Sampl	ling Stations		В	iologica	y Ratings (Q Values)			
No.	Location	1981	1986	1990	1994	1997	1999	2002
0050	Br N laghta Eighter	_	_	_	_	_	_	5
0100	Tully Bridge	5	5	5	5	5	5	4-5
0150	Bridge in Louisburgh	4-5	4-5	4	4	4	4	4
0200	Louisburgh: 1 km d/s Bridge	4	-	-	-	-	-	-

Assessment: A new station (0050) was added to the survey of the Bunowen River in the upper reaches. Quality here was high. A slight deterioration was noted, however, at Tully Br (0100) where musty organic mats with cyanobacterial coatings were noted for the first time at this location, indicating that drainage activities in the catchment are now impacting on water quality. More extensive algal growth was noted at this station than heretofore also. There is a forestry plantation of some 4.5km² immediately upstream of Stn 0100. Sheep overgrazing is also noticeable in the catchment between 0050 and 0100 plus there is also an extensive area impacted by mechanical peat harvesting. The lower stretch of the Bunowen in Louisburg (0150) was satisfactory but quality was nonetheless lower than expected in view of the nature of the land-use and its catchment. A report of careless slurry spreading in the catchment of the Bellakip River, a tributary of the Bunowen, was received by the EPA subsequent to the survey and requires investigation. The Bellakip River joins the main Bunowen upstream of Stn 0150 in Louisburg.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Br N laghta Eighter	85176	275060	37	MO
0100	Tully Bridge	81965	277956	37	MO
0150	Bridge in Louisburgh	80678	280689	30	MO
0200	Louisburgh: 1 km d/s Bridge	80409	280915	30	MO

River and Code : **CARROWBEG (WESTPORT)** 32/C/05
Tributary of : Sea - Westport Bay OS Catchment No: 125
OS Grid Ref : L 982 846 Date(s) Surveyed : 23/09/2002

Statio	Stations						Biological Quality Ratings (Q			
No.	1980	1986	1988	1990	1991	1994	1997	1999	2002	2003
0010	4	4	-	_	_	_	_	_	_	-
0050	4	5	-	5	5	4-5	4-5	4	4	4-5
0060	-	-	-	-	4	-	-	-	-	-
0080	-	-	-	4	-	-	-	-	-	-
0100	4	4	-	4-5	-	4-5	4	4	-	4
0200	-	4	4	3	-	-	-	-	-	-
0300	-	-	-	3	-	3	3	2-3	-	3-4

Assessment: The upper section (0050) and middle section (0100) of the Carrowbeg were satisfactory. In Westport Town water quality was less than satisfactory and slight pollution was recorded at Station 0300. Some oil was noted in the substratum at this location.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Bridge N. of Cordarragh	100679	276856	38	MO
0050	Cloghan Bridge	101084	279825	38	MO
0060	Br d/s Knappabeg Lake	101290	280778	31	MO
0080	Bridge W. of Mountbrown Ho	102015	282190	31	MO
0100	Cooloughra Bridge	102283	282745	31	MO
0200	Westport Bridge	99815	284473	31	MO
0300	2nd Br u/s Lake Westport Ho	99338	284501	31	MO

River and Code : **CARROWNISKY**Tributary of : Sea - S of Clew Bay OS Catchment No: 128
OS Grid Ref : L 745 765 Date(s) Surveyed : 22/08/2002

Sampl	ing Stations		Biological Quality Ratings (
No.	Location	1982	1986	1990	1994	1997	1999	2002
0020	Glenkeen Bridge	_	_	5	5	5	4-5	4-5
0100	Br at Srahwee	4-5	5	5	4	4-5	4-5	3-4
0150	1 km u/s Sampling Stat 0200	-	4-5	-	-	-	-	-
0200	Br S. of Carrownisky Cross	4	5	4-5	4	4	4	-
0250	Ford 1.7 km u/s Roonagh Lough	-	-	-	-	-	-	3-4

Assessment: The upper Carrownisky River (0020) is highly erosive and unstable in nature with large mounds of drifting stones in the channel. The river has an average gradient of 8% to this point, which makes it a particularly energetic system especially when an effective rainfall of 1600mm per annum is also taken into account. Historically high sheep numbers in the catchment have undoubtedly aggravated the

CARROWNISKY Continued

natural tendency for high erosion rates. The fauna and flora are sparse at this point but water quality *per se* is good in the upper section. A major change in quality was noted in the mid-section (0100) where the faunal community has suffered a major decline in diversity - dropping from an average of 20 taxa in the last three surveys to just 10 taxa in the current survey. The lower section of the Carrownisky was also polluted with signs of eutrophication apparent here. This new site (0250) was added to replace Stn 0200 in order to assess the impact of some reasonably intensive farms downstream of Stn 0200. One of these farms had spread slurry on a sloping field adjacent to the river just downstream of Stn 0200 just before some particularly wet weather. Following the heavy rain most of the slurry was washed into the river. The soils in this region are gleys and generally impermeable such that slurry spreading near water is a high risk activity.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Glenkeen Bridge	81858	272370	37	MO
0100	Br at Srahwee	80051	274109	37	MO
0200	Br S. of Carrownisky Cross	76986	277377	37	MO
0250	Ford 1.7 km u/s Roonagh Lough	76060	277405	37	MO

River and Code : CLOGHER (MOYOUR)* 32/C/07
Tributary of : Moyour OS Catchment No: 124
OS Grid Ref : M 029 888 Date(s) Surveyed : 16/09/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)

2002

0600 Br d/s Clogher Lake

4

Assessment: This tributary of the Moyour was sampled for the first time in 2002. Water quality was satisfactory downstream of Clogher Lake.

Sampling Stations		oling Stations	National (Grid Ref.	Discovery	County	
	No.	Location	X	Y	Series No.	Code	
	0600	Br d/s Clogher Lake	103370	288620	31	MO	

^{*}Indicates non-baseline rivers which do not appear on the OS Rivers Catchment Map

River and Code : CROSS (MAYO)*

Tributary of : Derrycraff OS Catchment No: 131
OS Grid Ref : L 992 723 Date(s) Surveyed : 13/08/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
2002

0100 Derrinkee Bridge

5 4 4

Assessment: The Cross (Mayo) is a tributary of the Derrycraff River (qv). It has its source at 212 m in Lough Glenawough on Ordovician bedrock and is a soft water river and had a conductivity of 49 μ S/cm on the day of the survey. The river is highly energetic with an average slope of 3.5% over the 4.5km from source to station 0100. The channel shows signs of instability and at 18m wide it is relatively wide for the catchment area of just 13 km² upstream of Derrinkee Bridge. The catchment is partially forested and there are significant sheep populations in the local area. The faunal community lacked Heptageniidae, which were found there on both previous sampling occasions.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Derrinkee Bridge	100530	272273	38	MO

^{*}Indicates non-baseline rivers i.e., those which do not appear on the OS Rivers Catchment Map

River and Code : **CRUMPAUN**Tributary of : Beltra Lough OS Catchment No: 108
OS Grid Ref : M 082 998 Date(s) Surveyed : 09/08/2002

Sampl	Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1982	1986	1990	1994	1997	1999	2002		
0050	Bridge at Bogadoon	4	4	4-5	3-4	4-5	4	4		
0080	1.3 km d/s Derryroe River	-	-	4-5	-	-	-	-		
0100	Bridge u/s Crumpaun Bridge	5	5	-	-	-	-	-		
0150	N. of Lough Beltra	5	5	5	4	4-5	4	4		

Assessment: Satisfactory with little change since 1999. The Crumpaun, however, is not achieving its full potential and remains poorer in quality terms than it was in 1997.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0050	Bridge at Bogadoon	106742	306774	23	MO	
0150	N. of Lough Beltra	109004	301432	31	MO	

River and Code : **CULFIN**Tributary of : Sea - near Killary Harbour OS Grid Ref : L 747 636

Sea - near Killary Harbour OS Catchment No: 132

Date(s) Surveyed : 29/08/2002

Sampling Stations			Bi	ologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1982	1986	1990	1994	1997	1999	2002
0010	Bridge u/s L Nacarrigeen	_	_	4	_	_	_	_
0020	Owenduff Bridge	_	-	5	4-5	4	4	4
0040	Between L Fee and L Muck	-	-	4	4	4	4	4
0060	400 m d/s Lough Muck	-	-	4-5	-	-	-	-
0200	Br NW of Townacarra	5	5	4	4	4	4-5	4-5

Assessment: The Culfin was satisfactory at all locations surveyed.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0020	Owenduff Bridge	81021	259611	37	GY	
0040	Between L Fee and L Muck	77868	262129	37	GY	
0200	Br NW of Townacarra	75045	263473	37	GY	

River and Code : **DAWROS**Tributary of : Sea - Ballynakill Harbour OS Catchment No: 133
OS Grid Ref : L 701 598

Date(s) Surveyed : 08/10/2002

Sampl	Sampling Stations			Biological Quality Ratings (Q Values)					
No.	Location	1982	1986	1990	1994	1997	1999	2002	
0000				-		-	4.5	4.5	
0020	Ford u/s Kylemore Lough	-	-	5	4-5	5	4-5	4-5	
0060	Br d/s Pollacappul Lough	-	-	-	-	-	-	4	
0080	D/s L. Maladrolaun	-	-	-	-	-	-	4-5	
0100	Tullywee Bridge	5	5	5	4-5	3-4	4-5	5	
0200	Dawros Bridge	5	5	5	4-5	4-5	4-5	4-5	

Assessment: The Dawros River was in satisfactory condition when surveyed in 2002. Some algal growth was noted in the upper reaches (0020) including Cladophora. Signs of channel instability were, however, noted in this region, which has a large sheep population. Some additional investigative monitoring sites were added in the 2002 survey in the vicinity of and immediately downstream of Kylemore Abbey (0060, 0080). This was done in response to a complaint received by the EPA concerning water quality in the lowermost section of the Dawros River at Dawros Bridge (0200) - some 6km downstream of the Kylemore Abbey visitor centre. Quality was satisfactory at both Station 0060 and 0080. Quality was also satisfactory at the next site, Tullywee Bridge (0100), which approximately 2km downstream of Pollacappul Lough again with no obvious impacts apparent. (Continued)

DAWROS Continued

The sample at Dawros Bridge (0200) did show some unusual diatom colonies in the reach upstream of the bridge, which had not previously been recorded at that point. The observed growths resembled 'sewage fungus' but microscopic investigation showed that the growths were composed predominantly of diatoms (*Didymosphenia*) rather than bacteria such as *Sphaerotilus*. This species is characteristic of soft water rivers and can be profuse in its growth pattern. It was concluded that Kylemore Abbey was not responsible for the growths observed at Dawros Bridge (it is possible that they were associated with the decay of a sheep's body in the river).

In the 1997 survey a decline in quality was noted at Tullywee Bridge vis a vis previous years (Q3-4). Status has recovered since then but it is important that the Dawros River, which provides habitat for a number of important protected species, is rigorously protected from all point and diffuse discharges. Oligotrophic systems such as this can be impacted by single events such as a sheep being dumped in the river or an accidental release from a treatment plant or septic tank. Similarly, logging or tree planting in the catchment must be handled with extreme sensitivity in order to avoid ecological damage.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0020	Ford u/s Kylemore Lough	80028	257445	37	GY
0060	Br d/s Pollacappul Lough	74134	258600	37	GY
0080	D/s L. Maladrolaun	74684	258285	37	GY
0100	Tullywee Bridge	72917	258490	37	GY
0200	Dawros Bridge	70180	259745	37	GY

River and Code : **DERRYCRAFF** 32/D/02
Tributary of : Erriff OS Catchment No: 131
OS Grid Ref : L 976 707 Date(s) Surveyed : 13/08/2002

Sampling Stations			B	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1982	1986	1990	1994	1997	1999	2002
0100	Br NW Tullywee L.	_	5	5	4	4-5	4	4
	Br u/s Erriff R confluence	4-5	5	-	4	4	4	3-4
0200	300 m u/s Erriff River confl	4-5	4-5	4	_	_	-	_

Assessment: The Derrycraff River has a number of large quarries in its catchment. The upper station (0100) was satisfactory in quality although bank erosion and siltation were noticeable. The lower station (0150) has declined in quality quite significantly since these surveys began. Whereas highly sensitive species such as (Continued)

DERRYCRAFF Continued

Perla were found at this site in the early 1980s, this is no longer the case. It is felt that excessive siltation due sand quarrying, forestry drainage activities and to a lesser extent sheep grazing have impacted significantly on this river. The ecological status of the river has decline and water quality is affected by excessive suspended solids concentrations. The Derrycraff is a major tributary of the River Erriff, one of the more important salmon angling rivers in the West of Ireland. A catchment management programme which deals with the particular problems of the catchment is required if further deterioration is to be avoided.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br NW Tullywee L.	101522	273525	38	MO
0150	Br u/s Erriff R confluence	97850	270547	38	MO
0200	300 m u/s Erriff River confl	97735	270540	38	MO

River and Code : **DERRYEHORRAUN**Tributary of : Sea - Ardbear Bay OS Catchment No: t4
OS Grid Ref : L 659 490 Date(s) Surveyed : 14/10/2002

Sampling Stations		Biological Quality Ratings (Q Values)				
No.	Location	1990	1994	1997	1999	2002
	Bridge N.W. of Winnahenry Just u/s Salt Lough	4 4-5	- 4	- 4-5	- 4-5	- 4-5

Assessment: The Derryhorraun River was in satisfactory condition when sampled in October 2002.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Just u/s Salt Lough	67132	249373	44	GY

River and Code : **ERRIFF** 32/E/01

Tributary of : Sea - Killary Harbour OS Catchment No: 131

OS Grid Ref : L 894 643 Date(s) Surveyed : 23/08/2002

Sampling Stations			В	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1981	1986	1990	1994	1997	1999	2002
0030	The Wooden Bridge	_	_	5	4-5	4-5	4-5	4-5
0050	Owenmore Bridge	5	5	-	-	-	-	-
0100	Srahlea Bridge	5	5	5	4	4-5	4-5	4-5
0200	Erriff Bridge	5	5	5	4-5	4-5	4-5	4-5
0300	Aasleagh Bridge	5	5	5	4-5	4	4	4

Assessment: The Erriff was in generally satisfactory condition in August 2002. The catchment has, however, been damaged by sheep overgrazing and extensive quarrying activities (see for example, the Derrycraff River). The presence of organic mats on the substratum in places also indicated the impact of land drainage for forestry and other purposes. Over 75% of the 166 km² of land in the catchment is bog and moorland with significant sheep populations. Overgrazing has been quite noticeable in the lower sections of the catchment. Thus, while the water quality is still in reasonably good condition, the Erriff is not achieving its full potential when compared with its reference state. As the Erriff is a major salmon angling river it is important that its ecological integrity is maintained.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	The Wooden Bridge	91536	274307	37	MO
0100	Srahlea Bridge	97646	271169	38	MO
0200	Erriff Bridge	96087	268311	38	MO
0300	Aasleagh Bridge	89485	264549	37	MO

River and Code : GLAISHWY*

Tributary of : Lough Beltra OS Catchment No: 108
OS Grid Ref : M 050 960 Date(s) Surveyed : 20/06/2002

Sampling Stations Biological Quality Ratings (Q Values) No. Location 2000 2001 2002 2003(S) 2003(W) 3 0100 Glaishwy Bridge 3 3-4 3 3-4

Assessment: The Glaishwy Stream is in the same catchment as the Derrinumera landfill facility and special ecological monitoring is carried out on a twice-yearly basis. The Glaishwy flows into Lough Beltra near the outflow of the Newport River (qv). The upstream catchment is approximately 4.6 km² in area and in addition to the landfill facility over 50% is afforested with significant areas clear-felled in the past 10 years. A sample taken on 20 June 2002 at Glaishwy Bridge showed the river to be moderately polluted at that point (Q3). The second survey on 10 December 2002 showed an improvement with a Q-Value of 3-4, slightly polluted, and the highest quality recorded in the stream to date. Significant amounts of silt were noted in December and it is believed that this was due to bank clearance works carried out by Mayo County Council. Effluent from the landfill facility has been collected for some time now and treated in the Castlebar municipal waster water treatment plant. Significant engineering works have been carried out at the facility and it is felt that in combination these measures have resulted in a significant improvement in water quality in the Glaishwy and improved protection for Lough Beltra and the Newport River downstream.

Sampling Stations		National C	Frid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Glaishwy Bridge	105015	296043	31	MO

^{*}Indicates non-baseline rivers i.e., those which do not appear on the OS Rivers Catchment Map

River and Code : GLENDAVOCK

Tributary of : Tawnyard Lough OS Catchment No: 131
OS Grid Ref : L 908 674 Date(s) Surveyed : 13/08/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2002

0100 1.1 km u/s Tawnyard Lough

5 3-4 4 4 4

Assessment: The Glendavock River and its catchment are impacted by sheep overgrazing. Water quality is passable but not as good as it should be in a remote mountain river such as this. Filamentous algal growth was noticeable and the substratum is very unstable leading to a lower than expected ecological status.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	1.1 km u/s Tawnyard Lough	90038	267626	37	MO

River and Code : **GLENISLAND**Tributary of : Beltra Lough OS Catchment No: 108
OS Grid Ref : M 072 972 Date(s) Surveyed : 09/08/2002

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	1999	2002	
0100	Bridge S. of Kilhale	4-5	_	-	_	-	
0300	Bridge u/s Lough Beltra	5	4	4-5	4-5	4-5	

Assessment: The Glenisland River retained its satisfactory status in 2002.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Bridge u/s Lough Beltra	107304	296716	31	MO

River and Code : GLENLAUR 32/G/02
Tributary of : Erriff OS Catchment No: 131
OS Grid Ref : L 948 713 Date(s) Surveyed : 13/08/2002

Sampling Stations Biological Quality Ratings (Q Values) Location 1990 1994 1997 1999 2002 No. 5 4-5 5 4-5 4-5 0200 400 m d/s Sheefry Bridge

Assessment: The Glenlaur was in satisfactory condition when surveyed in August 2002.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	400 m d/s Sheefry Bridge	92072	269298	38	MO

River and Code : **GLENNAMONG** 32/G/03

Tributary of : Lough Feeagh OS Catchment No: 107

OS Grid Ref : F 957 018 Date(s) Surveyed : 07/10/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2002

0100 Bridge u/s Lough Feeagh

4-5 3-4 4 3-4 4

Assessment: An improvement was noted in October 2002 in comparison with the September 1999 survey. The fauna remains very sparse, however, and much less diverse than was the case when this river was first studied in the 1960s (DeEyto pers comm). A study is being undertaken by the Salmon Management Services Division of the Marine Institute aimed at providing a detailed comparison of the faunal communities present in the Glennamong River in the 1960s with those in a recent set of samples taken in 2002. The Glennamong River drains an acid sensitive catchment that is heavily forested. Over 30% of the 15 km² catchment upstream of Stn 0100 is forested with the bulk of the plantation directly adjacent to the river's main channel.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge u/s Lough Feeagh	94735	302444	31	MO

River and Code : **GLENUMMERA** 32/G/05

Tributary of : Doo Lough/ Bundorragha 32B01 OS Catchment No: 130
OS Grid Ref : L 845 650 Date(s) Surveyed : 23/08/2002

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	1999	2002
0010	N of Glendavock (w of 88m bmark)	-	-	-	-	5
0040	Roadside NW Trig pt 232	5	4-5	5	4-5	-
0070	1km u/s Doo Lough	-	-	-	-	4-5
0080	Br just u/s Doo Lough	5	-	-	-	-

Assessment: The Glenummera was in satisfactory condition when surveyed in August 2002. Some concern had been expressed to the EPA about insecticide usage in the catchment and additional stations were surveyed as a result. High quality was noted at both sites surveyed and it was judged unlikely that there were any toxicity problems in the river. The Glenummera is the principal tributary of Doo Lough in the Delphi Valley.

Previously reported as part of the Bundorragha (32B01)

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	N of Glendavock (w of 88m bmark)	88486	268260	37	MO
0040	Roadside NW Trig pt 232	87170	267552	37	MO
0070	1km u/s Doo Lough	85340	267585	37	MO

River and Code : GOULAUN 32/G/06
Tributary of : Srahmore OS Catchment No: 107
OS Grid Ref : F 967 070 Date(s) Surveyed : 07/10/2002

 Sampling Stations
 Biological Quality Ratings (Q Values)

 No.
 Location
 1981
 1986
 1990
 1994
 1997
 1999
 2002

 0100
 1.4 km d/s Bunaveela Lough
 5
 4-5
 5
 4
 4
 4
 3/0

Assessment: The Goulan had deteriorated very significantly in comparison with all previous surveys. A thick musty organic mat was found to be coating the substratum and riverbed. This had eliminated most of the previously existing macroinvertebrate community - which ranged from 17 to 19 taxa in 1994, 1997 and 1999 but is now reduced to a mere 7 taxa. All stones had thick organic mats. This is typically caused by inappropriate drainage activities in catchments releasing iron and other coagulants. A cyanobacterial coating was also noted. The source of the problem in the Goulan was traced to a smaller stream that flows into Bunaveela Lough quite close to the outflow as the Goulan - the Fidaunaveela River, which is not on the main survey programme. This latter stream was of a very high quality in early 2002 when examined during the course of an EPA/UCD research project. The study site had to be abandoned due to a change in water quality. At the time the extent of the problem was not realised but the present survey shows that it is in fact causing extensive downstream problems also. A fuller investigation is required to determine precisely what gave rise to the pollution problem initially but extensive release of an iron leachate is almost certainly the cause of the observed final problem. Typically this type of problem arises when upland blanket bog is drained for planting trees or other purposes. This is a most unfortunate event and illustrates that great care is required in the management of land use sensitive catchments such as these Nephin Beg rivers.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	1.4 km d/s Bunaveela Lough	98226	307834	23	MO

River and Code : MOYOUR 32/M/01
Tributary of : Sea - Clew Bay OS Catchment No: 124
OS Grid Ref : L 943 876 Date(s) Surveyed : 16/09/2002

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	1999	2002		
0100	Br SW of Slinaun	4	3*	3	3	3-4		
0400	Br S of Lugnafahy	3-4	4	3	3	4		
0500	Bridge N. of Kilmeena	4	-	-	-	-		
0700	Moyour Bridge	4	4-5	4	4	4		

Assessment: The Moyour still shows some signs of pollution in the upper reaches (0100) but a significant improvement was noted especially in the middle reaches (0400) in comparison with 1999 and 1997. Some of the previous farm discharges have been brought under control. It is to be hoped that further improvements will occur and that those noted in 2002 will be maintained.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br SW of Slinaun	102985	288802	31	MO
0400	Br S of Lugnafahy	101317	288984	31	MO
0700	Moyour Bridge	96641	287896	31	MO

River and Code : **NEWPORT (MAYO)**Tributary of : Sea - Newport Bay OS Catchment No: 108
OS Grid Ref : L 977 941 Date(s) Surveyed : 19/08/2002

Sampl	Sampling Stations		Bi	Biological Quality Ratings (Q Values)				
No.	Location	1981	1986	1990	1994	1997	1999	2002
0020	Br 1.25km d/s Lough Beltra	-	-	-	-	-	-	-
0050	3.3 km u/s New Bridge	5	4-5	4-5	4-5	4-5	4-5	4-5
0100	New Bridge	5	5	5	-	-	-	-
0190	400 m u/s Newport Bridge	4-5	5	4-5	4-5	4-5	4-5	4-5

Assessment: The Newport River, flowing from Lough Beltra, was again in good condition when surveyed in August 2002. Water quality was good and ecological status was high. The macroinvertebrate and plant communities were apparently unaffected at the locations sampled by any potential discharges from the Derrinumera landfill, which is an EPA-licensed facility operated by Mayo County Council. The Glaishwy Stream (qv) is biologically sampled twice yearly to gauge the impact of the latter on watercourses downstream. The Newport River is a most important salmonid angling river and regarded as a highly sensitive water. (Continued)

NEWPORT (MAYO) Continued

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br 1.25km d/s Lough Beltra	104300	297305	31	MO
0050	3.3 km u/s New Bridge	101288	295387	31	MO
0100	New Bridge	99489	294122	31	MO
0190	400 m u/s Newport Bridge	98815	293847	31	MO

River and Code : **OWENDUFF (ERRIFF)** 32/O/08

Tributary of : Erriff OS Catchment No: 131

OS Grid Ref : L 951 678 Date(s) Surveyed : 08/10/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2002

0100 Bridge d/s Tawnyard Lough

4-5 4 4 4 4-5

Assessment: Satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Bridge d/s Tawnyard Lough	92782	267499	38	MO	

River and Code : **OWENGARVE (MAYO)** 32/O/02
Tributary of : Sea - Clew Bay OS Catchment No: i5
OS Grid Ref : L 882 961 Date(s) Surveyed : 19/08/2002

Samp	ling Stations		Biological Quality Ratings (Q V				
No.	Location	1982	1990	1994	1997	1999	2002
0100	Br NNE Carheenbrack Lough	5	4-5	3	4	4	3-4
0200	Rosgalliv Br.	4-5	4-5	4	4	3-4	4

Assessment: The Upper Owengarve (0100) is still impacted by erosion and peat silt depositing on the substratum most likely due to a combination of forestry activities and sheep overgrazing. Musty-smelling organic mats were noted on the substratum due to the damage done to the hillsides. A significant portion of the catchment upstream of Station 0100 is afforested with conifer trees (pine and spruce). The DED in which the Owengarve is located had in the early 1990s a sheep stocking density of approximately double the recommended rates for upland blanket bog regions such as this. A recovery was noted in the lower reaches (0200) where small numbers of more sensitive invertebrates were found.

OWENGARVE (MAYO) Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br NNE Carheenbrack Lough	91166	297901	30	MO
0200	Rosgalliv Br.	88653	296317	30	MO

River and Code : **OWENGLIN**Tributary of : Sea - Clifden Bay OS Catchment No: 135
OS Grid Ref : L 658 506 Date(s) Surveyed : 29/08/2002

Sampling Stations			Biological Quality Ratings (Q Values)					
No.	Location	1986	1990	1994	1997	1999	2002	
0100	N. of Barnanoraun	_	5	5	4	4	4-5	
0200	Bridge S.W. of Clifden Lodge	5	5	5	5	5	4-5	
0300	Br at S.E. end of Clifden	4	4	5	4	4	4	

Assessment: The Owenglin was in satisfactory condition over its length. The uppermost section (0100), draining an upland forestry plantation, has a sensitive faunal community but was also characterised by fairly extensive *Cladophora* growths. A drop in quality was noted in the mid section downstream of the Clifden Village housing development (0200). In Clifden itself (0300) quality was not as good as it has been in previous years albeit still satisfactory.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	N. of Barnanoraun	74401	251236	37	GY
0200	Bridge S.W. of Clifden Lodge	67553	250454	37	GY
0300	Br at S.E. end of Clifden	66057	250392	37	GY

River and Code : **OWENNABROCKAGH** 32/O/04

Tributary of : Sea - Newport Bay OS Catchment No: 109
OS Grid Ref : L 973 901 Date(s) Surveyed : 18/09/2002

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	1999	2002		
0150	Dridge W. of Lough Sellagher	4						
0150	Bridge W. of Lough Sallagher	4	-	-	-	4.5		
0250	Br NE Derrintloura	-	4	-	4	4-5		
0300	Ass Bridge	4-5	-	-	-	-		
0380	Brockagh Bridge	-	4-5	4	4	4-5		
0400	At Castle S.E. of Brockagh	4-5	-	-	-	-		
0500	Knocknaboley Bridge	4-5	4	4	4	4		

Assessment: The Owennabrockagh was in satisfactory condition at all sites surveyed in September 2002.

Samp	Sampling Stations		National Grid Ref.		County
No.	Location	X	Y	Series No.	Code
0150	Bridge W. of Lough Sallagher	108910	293395	31	MO
0250	Br NE Derrintloura	106081	291958	31	MO
0300	Ass Bridge	104920	292290	31	MO
0380	Brockagh Bridge	101565	290723	31	MO
0400	At Castle S.E. of Brockagh	100745	290295	31	MO
0500	Knocknaboley Bridge	98061	289842	31	MO

River and Code : **OWENNADORNAUN**Tributary of : Sea - South of Clew Bay OS Catchment No: 129
OS Grid Ref : L 740 713 Date(s) Surveyed : 23/08/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2002

0100 Bridge S. of Killary Lodge

4 4 4 3-4 4

Assessment: Water quality improved in comparison with 1999 and is once again satisfactory.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge S. of Killary Lodge	75945	270245	37	MO

River and Code : **OWENWEE (MAYO)**Tributary of : Sea - Westport Bay

OS Catchment No: 126

OS Grid Ref : L 958 824 Date(s) Surveyed : 05/09/2003

Sampl	ling Stations	Biological Quality Ratings (Q Va			alues)		
No.	Location	1982	1990	1994	1997	1999	2003
0200	Bridge S. of Brackloon	4-5	4-5	4	4-5	4	3/0
0400	Br d/s Ford nr Aghamore Br	-	4-5	-	-	-	-
0600	Belclare Bridge	4-5	4-5	4	4-5	4-5	3-4

Assessment: When surveyed in 2003 the Owenwee River was polluted at Brackloon just upstream of Brackloon Wood SAC. The river had a distinct blue tinge to it indicating a severe pollution event. Faunal diversity was reduced to a mere six taxa where typically it would have had 20 taxa. The sparse fauna suggested that toxic influences were responsible. An extensive filamentous algal growth was also present significantly in excess of what would be expected for a river in this area. Thus, the right hand branch of the Owenwee at Station 0200 flowing from Moher Lough and Liscarney was moderately polluted with suspected toxic influences. The source of the problem is unclear - site clearance was in progress further upstream but further investigation is required. The lower site at Belclare Bridge (0600) was enriched with significant quantities of algae present.

Sampling Stations		National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge S. of Brackloon	97275	279172	38	MO
0600	Belclare Bridge	95958	282153	31	MO

River and Code : **SKERDAGH**Tributary of : Newport (Mayo) OS Catchment No: 108
OS Grid Ref : M 034 965 Date(s) Surveyed : 09/08/2002

Sampling Stations		Biological Quality Ratings (Q Values)				
No.	Location	1990	1994	1997	1999	2002
	1.8 km u/s Skerdagh Bridge Knockmoyle Bridge	5 5	- 4	- 4-5	- 4-5	- 4-5

Assessment: The Skerdagh, a tributary of the Newport River (qv), again had satisfactory water quality at Knockmoyle Bridge (0300). Some siltation was noted and thought to be due to relatively recent clear-felling and replanting of sections of forest within the catchment.

SKERDAGH Continued

Samp	oling Stations	Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Knockmoyle Bridge	102692	297588	31	MO

River and Code : **STREAMSTOWN (CLIFDEN)** 32/S/04
Tributary of : Sea - Streamstown Bay OS Catchment No: u4

OS Grid Ref : L 645 532 Date(s) Surveyed : 14/10/2002

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
1999
2002

0200 Bridge SW of Glenbrickeen 4 4 4-5 4 4-5

Assessment: The Streamstown was in satisfactory condition where surveyed in October 2001.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge SW of Glenbrickeen	64642	253141	37	GY

River and Code : **TRAHEEN**Tributary of : Sea - Ballynakill Harbour OS Grid Ref : L 687 571

OS Grid Ref : L 687 571

OS Catchment No: 134

Date(s) Surveyed : 14/10/2002

Sampling Stations Biological Quality Ratings (Q Values) Location 1982 1990 1994 1997 1999 No. 1986 4-5 5 4-5 4-5 0100 Traheen Bridge 5 4-5

Assessment: The Traheen was satisfactory and retained its high quality.

Samp	oling Stations	Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Traheen Bridge	68756	256850	37	GY

HYDROMETRIC AREA 33 (BALANCE) Blacksod - Broadhaven

Bunanioo 33B09

Dooega Doolough Stream 33D01 33D02

Note: Most of the rivers in this area were surveyed in 2002

©EPA 2004 269 River and Code : **BUNANIOO** 33/B/09

Tributary of : Sea - Achill Sound OS Catchment No: i5
OS Grid Ref : L 735 947 Date(s) Surveyed : 21/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2003

0100 Bunanioo Bridge

5 4 4-5 4 4

Assessment: The Bunanioo is located entirely in the Corraun Plateau SAC. Unfortunately the land has been quite badly damaged by overgrazing along the bay to the south of Achill Sound and especially to the north of the Bunanioo catchment. Quality is satisfactory but poorer than would be expected. The river substratum has layers of a musty organic mat that is typical of sites where iron pan leaches due to disturbance such as drainage or erosion.

Samp	oling Stations	Nationa	d Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bunanioo Bridge	73722	294193	30	MO

River and Code : **DOOEGA** 33/D/01

Tributary of : Sea - Pollbaun Point OS Catchment No: i5
OS Grid Ref : L 671 987 Date(s) Surveyed : 21/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
1999
2003

0200 South Bridge at Dooega
4
3-4
4
4

Assessment: Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	South Bridge at Dooega	66984	299109	30	MO

River and Code : **DOOLOUGH STREAM** 33/D/02

Tributary of : Sea - Blacksod Bay OS Catchment No: k5
OS Grid Ref : F 745 246 Date(s) Surveyed : 21/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 1999 2003

0100 Bridge S. of Lough Nahelly

3-4 3 3 3-4 3-4

Assessment: The Doolough Stream was slightly polluted in July 2003. The catchment contains part of the Tristia Bog NHA but land use within the catchment is primarily exploited lowland blanket bog and forestry. The Belmullet Srahnabogroneen landfill facility and the Glancré peat and sludge drying facility are located within the catchment.

Samp	oling Stations	National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge S. of Lough Nahelly	74973	324758	22	MO

HYDROMETRIC AREA 35

Sligo Bay and Drowes

Sugo Duy una Drowes	
Ballymote Stream	35B04
Ballysodare	35B05
Bonet	35B06
Brackary	35B10
Bradoge	35B07
Buncrowey	35B09
Bunnanaddan Stream	35B08
Bullianadan Su'cam	32800
Cashel Stream (Bonet)	35C03
Clooneen (Sligo)	35C01
ereenten (enge)	20001
Diffreen	35D01
Doonbeakin	35D09
Doonflin	35D10
Doonowney	35D12
Douglas (Sligo)	35D02
Drowes	35D02
Drumcliff	35D03
Drumfin	35D11
Duff	35D05
Dunmoran	35D16
Dunneill	35D06
- ·	2.5004
Easky	35E01
TC' 1	25001
Finned	35F01
Garavoge	35G01
Glenaniff	35G01
Gowlan (Sligo)	35G03
Grange (Sligo)	35G04
Gurteen Stream*	35G05
Killanummery	35K03
•	
Killoran Lough Stream	35K02
Liskeagh	35L02
•	35L02
Lugdoon Stream	33L01
Newtown Manor Stream	35N01
110WtoWii Manor Stream	331101
Owenbeg (Coolaney)	35001
Owenmore (Manorhamilton)	35008
Owenmore (Sligo)	35006
Gweimiore (Bligo)	33000
Shanvaus	35S01
	20201
Tullinwillin Stream	35T03
Tullynascreen	35T06
3	
Unshin	35U01
*******	A 51770 :
Willsborough Stream	35W01

^{*} Indicates non-baseline rivers which do not appear on the OS Rivers Catchment Map.

River and Code : **BALLYMOTE STREAM** 35/B/04

Tributary of : Owenmore (Sligo) OS Catchment No: 116
OS Grid Ref : G 657 132 Date(s) Surveyed : 28/07/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	s (Q V	alues)
No.	Location	1979	1980	1984	1986	1990	1994	1997	2000	2003
0040	Ballymote: Br S.E. of Church	ch -	_	_	_	2-3	4	3-4	3	4
0050	Ballymote: N. of Old Mill	-	-	4	4-5	2	-	-	-	-
0100	Br NW Woodfield	1	2	1	3-4	3	4	4	3	4

Assessment: The Ballymote Stream was unpolluted at both sites examined - a significant improvement on the situation in 2000.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0040	Ballymote: Br S.E. of Church	166606	315530	25	SO
0100	Br NW Woodfield	166163	314621	25	SO

River and Code : **BALLYSODARE**Tributary of : Sea - Ballysodare Bay OS Catchment No: 116
OS Grid Ref : G 667 296 Date(s) Surveyed : 30/07/2003

Statio	ons						Biologic	cal Qual	ity Ratin	igs (Q V	alues)
No.	1971	1973	1977	1979	1982	1986	1990	1994	1997	2000	2003
0100	5	5	5	5	5	5	4	4-5	4	4-5	4-5

Assessment: The Ballysodare is formed by the confluence of two large rivers, the Unshin (qv) and Owenmore (qv) and is an important salmon river. Water quality was satisfactory in July 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ballysodare Bridge	166847	329027	25	SO

River and Code : **BONET**Tributary of : Lough Gill OS Catchment No: 117

OS Grid Ref : G 782 335

Date(s) Surveyed : 06/08/2003

Statio	ns					Biolo	ogical Qu	ality Rati	ings (Q V	alues)
No.	1971	1973	1977	1980	1984	1990	1994	1997	2000	2003
0010	_	_	_	_	_	5	5	4-5	5	5
0050	-	-	-	4	4-5	4	4-5	4-5	4	4-5
0100	5	5	4-5	4-5	4-5	4-5	5	4-5	4-5	4-5
0200	5	5	4-5	4	4	5	4-5	4	4	4
0350	-	-	-	-	4	4-5	-	-	-	-
0400	5	5	4-5	4-5	4	4-5	4-5	4	4-5	4
0500	5	5	5	5	3	4-5	4-5	4	4	4-5
0520	-	-	-	-	-	-	-	-	-	4
0550	-	-	-	-	-	-	-	-	-	4
0600	5	5	4-5	4	4	4	4	4	4-5	4
0700	-	-	-	-	-	4	4	-	-	-

The Bonet River as a whole was satisfactory over its length. The river flows from Glenade Lake to Lough Gill. The upper section of the Bonet (0010, 005, 0100) as far as Manorhamilton was in very good condition in August 2003. Quality was satisfactory from Manorhamilton to Dromahaire although a drop in quality was noted downstream of Manorhamilton. Two new stations were added in 2003 – (0520 and 0550) – the first to assess the impact of a discharge upstream of Dromahaire (0520). A noticeable effluent was observed here with fine particulate organic matter noted in the water column. It did not impact too severely on the local macroinvertebrate fauna or phytobenthos communities at the sample point. It is possible, nonetheless, that this fine organic material will settle in slower flowing reaches further downstream and cause oxygen sags at that point. Therefore it is important to maintain ongoing controls on this discharge and ensure that it does not cause pollution in the river. The second new monitoring station (0550) was added with the intention of providing an additional reference by which to gauge the impact of any discharges in the town of Dromahaire itself. This thus provided an improved control for gauging any change in status at Station 0600 and to separate town impacts from the effect of upstream discharge approximately 1km upstream of Station 0550 in Dromahaire. Water quality was satisfactory downstream of Dromahaire albeit with a slight deterioration in comparison with 0550. The station here was verging on Q3-4 or slightly polluted. This is mentioned in light of the increasing incidence of algal blooms in Lough Gill and the need to keep a strict control on nutrient loadings to this important lake.

Continued

BONET Continued

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0010	Bridge u/s Glenade Lough	182231	347144	16	LM
0050	Bridge 1.5 km d/s Glenade L	184026	344768	16	LM
0100	New Bridge	186973	341274	16	LM
0200	Bridge d/s Owenmore River	187132	338978	16	LM
0350	Ford W. of Boggaun	1	1	26	LM
0400	Bridge at Gortgarrigan	184846	333896	26	LM
0500	Bellanamore Bridge	181855	330229	26	LM
0520	Just u/s Killanummery confl.	180688	330349	26	LM
0550	Br in Dromahaire	180553	330900	26	LM
0600	1.8 km d/s Dromahaire Bridge	179801	331722	25	LM
0700	500 m u/s Lough Gill	-	-	25	LM/SO

River and Code : **BRACKARY** 35/B/10

Tributary of : Owenmore (Manorhamilton) OS Catchment No: 117

OS Grid Ref : G 885 395 Date(s) Surveyed : 01/08/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0200	Bridge nr Curraghfore School	4-5	4-5	4-5	4-5	4-5
0300	Manorhamilton: Garrison Rd Br	4-5	-	-	-	-
0500	Bridge u/s Owenmore River	3-4	3-4	3	4	4

Assessment: Satisfactory upstream and downstream of Manorhamilton. The improvement in quality noted at Station 0500 in Manorhamilton in the 2000 survey was maintained in 2003.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0200	Bridge nr Curraghfore School	188890	341262	16	LM	
0500	Bridge u/s Owenmore River	188379	339387	16	LM	

River and Code : **BRADOGE**Tributary of : Sea - Donegal Bay OS Catchment No: 122
OS Grid Ref : G 818 588 Date(s) Surveyed : 12/08/2003

Sampl	ing Stations		Bi	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1982	1986	1990	1994	1997	2000	2003
0060	Bridge N. of Cornaglah	_	_	3	3-4	3-4	3	4
0100	Bridge S.W. of Rathglass	5	3	4	4	4	3-4	4
0200	U/s Bridge in Bundoran	3-4	4	4	4	3-4	3-4	2-3

Assessment: The Bradoge showed a considerable improvement in quality at the upper sites (0060, 0100). A severe deterioration in quality has occurred, however, in the stretch flowing through Bundoran town (0200). Sewage discharges were observed and species tolerant of serious organic pollution such as *Chironomus* and *Asellus* were present in the sample taken.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Bridge N. of Cornaglah	188430	357407	16	LM
0100	Bridge S.W. of Rathglass	184574	358258	16	DL
0200	U/s Bridge in Bundoran	181864	358807	16	DL

River and Code : **BUNCROWEY**Tributary of : Easky OS Catchment No: 114
OS Grid Ref : G 402 317 Date(s) Surveyed : 05/08/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	Br near Old Shooting Lodge	3	3	3	3	4
0300	Ford N.E. of Fartannan	5	-	-	-	-
0400	Ford N of Fartannan	-	4-5	-	-	4
0500	Br u/s confluence with Easky R.	5	-	5	4-5	-

Assessment: An improvement was noted in the upper Buncrowey (0100) which had suffered from severe acidification and forestry drainage impacts since the early 1990s. Conductivity was 41.6 μ S/cm on the day of sampling indicating that conditions were still likely to be quite acidic. A reasonable number of acid-sensitive mayflies (Baetis), however, were found here for the first time. The lower Buncrowey was satisfactory - the river has increased acid neutralising capacity here as the water is naturally much harder due to the influence of calcareous limestone bedrocks in the lower half of the catchment.

Continued

BUNCROWEY Continued

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br near Old Shooting Lodge	144088	327180	24	SO
0300	Ford N.E. of Fartannan	142172	329619	24	SO
0400	Ford N of Fartannan	141404	330416	24	SO
0500	Br u/s confluence with Easky R.	140534	331031	24	SO

River and Code : **BUNNANADDAN STREAM** 35/B/08

Tributary of : Cloonacleigha Lough OS Catchment No: 116

OS Grid Ref : G 607 145 Date(s) Surveyed : 28/07/2003

Sampl	Sampling Stations			Biolog	ical Qı	ıality F	Ratings	(Q Va	lues)
No.	Location	1979	1981	1986	1990	1994	1997	2000	2003
0100	Bridge W. of Bunnanaddan	4	4	4	4	_	_	_	_
0200	Ford N.W. of Bunnanaddan	4-5	4	4	4	4	3-4	4	3

Assessment: While the Bunnanaddan Stream is a spring-fed stream with naturally low oxygen concentrations, the occurrence of *Chironomus* which is a particularly tolerant form is not expected at such sites. The stream also appears to be significantly more silted than in previous years.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge W. of Bunnanaddan	159811	311778	25	SO
0200	Ford N.W. of Bunnanaddan	160045	312072	25	SO

River and Code : **CASHEL STREAM (BONET)** 35/C/03
Tributary of : Bonet OS Catchment No: 117
OS Grid Ref : G 822 304 Date(s) Surveyed : 31/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0200	Bridge W. of Corratimore	5	4-5	4-5	4-5	4-5		
0400	Br u/s Trib from Belhavel L	4	-	-	-	-		
0500	Br d/s Trib from Belhavel L	4	-	-	-	-		
0700	Br. SE of Glebe	-	4-5	4-5	4-5	4		
0800	Bridge S. of Cashel	5	-	-	-	-		
1000	Br u/s Camoge Br	-	-	-	-	4		
1200	Bridge d/s Camoge Bridge	4-5	5	4-5	4	-		

Assessment: The Cashel Stream was in satisfactory condition at all sites sampled in July 2003.

CASHEL STREAM (BONET) Continued

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge W. of Corratimore	184966	327185	26	LM
0700	Br. SE of Glebe	185906	329569	26	LM
1000	Br u/s Camoge Br	182373	330227	26	LM
1200	Bridge d/s Camoge Bridge	182300	330363	26	LM

River and Code : CLOONEEN (SLIGO) 35/C/01
Tributary of : Owenmore (Sligo) OS Catchment No: 116
OS Grid Ref : G 652 136 Date(s) Surveyed : 28/07/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0200	Br NW Flughany	5	4	4	4-5	4		
0400	Bridge E. of Rathbaun	4-5	-	-	-	-		
0500	Br SW Ardminnan (nr school)	4	4	4	4	3-4		
0600	Br SE Aughris	5	3	4	3-4	4		

Assessment: The Clooneen River was in satisfactory condition in its upper and lower reaches but was quite eutrophic in its middle reaches (0500).

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br NW Flughany	160290	307507	32	MO
0500	Br SW Ardminnan (nr school)	163690	310048	25	SO
0600	Br SE Aughris	164862	313260	25	SO

River and Code : **DIFFREEN**Tributary of : Glencar Lake OS Catchment No: 119
OS Grid Ref : G 763 431

Date(s) Surveyed : 13/08/2003

Samp	ling Stations		В	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1980	1986	1990	1994	1997	2000	2003
0060	Bridge u/s Diffreen Bridge	-	_	5	-	-	-	_
0100	Bridge u/s Glencar Lake	4	5	5	5	5	4-5	4

Assessment: This Glencar Lake tributary was satisfactory although water quality was reduced in comparison with previous sampling occasions with fewer pollution-sensitive species present.

Continued

DIFFREEN Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Bridge u/s Diffreen Bridge	_	-	26	-
0100	Bridge u/s Glencar Lake	177621	342400	16	LM

River and Code : **DOONBEAKIN** 35/D/09

Tributary of : Dunneill OS Catchment No: 115
OS Grid Ref : G 438 342 Date(s) Surveyed : 09/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0200	Bridge S. of Doonbeakin	5	4	4-5	4-5	4	
0400	Ford u/s Dunneill River	4	-	4	4-5	4	
0410	D/s Ford u/s Dunneill River confl.	-	4-5	-	-	-	

Assessment: While there was a decline in quality in comparison with 2000, the Doonbeakin was unpolluted when surveyed in September 2003.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge S. of Doonbeakin	145053	330768	24	SO
0400	Ford u/s Dunneill River	143811	334000	24	SO

River and Code : **DOONFLIN** 35/D/10

Tributary of : Sea - S. of Aughris Head OS Catchment No: u5
OS Grid Ref : G 506 360 Date(s) Surveyed : 07/08/2003

Sampling Stations		Biolog	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0400	Bridge near Doonflin Lower	4-5	4	4-5	4-5	4-5
0600	S.E. of Aughris	2-3	4	4	4	4

Assessment: Water quality in the Doonflin was satisfactory in August 2003 with no significant change in comparison with the 200 survey.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Bridge near Doonflin Lower	150785	332460	25	SO
0600	S.E. of Aughris	150511	335842	25	SO

River and Code : **DOONOWNEY** 35/D/12

Tributary of : Sea - at Drumcliff OS Catchment No: x5

OS Grid Ref : G 627 440 Date(s) Surveyed : 13/08/2004

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0800 Bridge u/s Drumcliff Bay

3-4 - 3-4 4 3-4

Assessment: The Doonowney was slightly impacted at the site sampled near Lissadell House. The decline in quality since 2000 may be in part due to saline intrusion as the sample point is almost on the beach.

Sampling Stations		National (Grid Ref.	Discovery	County	
N	0.	Location	X	Y	Series No.	Code
08	800	Bridge u/s Drumcliff Bay	162511	344115	16	SO

River and Code : **DOUGLAS (SLIGO)**Tributary of : Unshin OS Catchment No: 116
OS Grid Ref : G 732 208 Date(s) Surveyed : 30/07/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
		_						
0300	Br S.E. of Coola Cross Roads	5	-	-	-	-		
0800	Bridge N. of Rockbrook House	4	-	-	-	-		
0900	Br u/s North Branch confl	4	-	-	-	-		
1400	Riverstown: North Bridge	3-4	4-5	4-5	4-5	4		

Assessment: The Douglas was sampled in Riverstown. While quality was still satisfactory, a drop in quality was apparent in comparison with the previous three surveys.

Sam	pling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
1400	Riverstown: North Bridge	174313	320493	25	SO

River and Code : **DROWES**Tributary of : Sea - Donegal Bay OS Catchment No: 121
OS Grid Ref : G 792 583

Date(s) Surveyed : 12/08/2003

Sampling Stations			Biological Quality Ratings (Q Values)						
No.	Location	1973	1982	1986	1990	1994	1997	2000	2003
0100	Lennox's Bridge	-	4	4-5	4	4	3-4	4-5	4
0200	Bundrowes Bridge	5	5	4-5	4	4	4	4	4

Assessment: The Drowes was satisfactory at both sites examined in August 2003.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Lennox's Bridge	181843	357276	16	LM	
0200	Bundrowes Bridge	179241	358300	16	LM	

River and Code : **DRUMCLIFF**Tributary of : Sea - Drumcliff Bay OS Catchment No: 119
OS Grid Ref : G 674 423 Date(s) Surveyed : 13/08/2003

Sampling Stations				Biological Quality Ratings (Q Value						
No.	Location	1980	1986	1990	1994	1997	2000	2003		
0200	Bridge d/s Glencar Lake	4	4	4	_	_	_	_		
0250	Collinsford Bridge	-	-	5	4-5	4	4-5	3-4		
0300	Br 2 km u/s Drumcliff Bridge	5	4	4	-	-	-	-		
0400	Ford 500 m u/s Drumcliff Br	-	-	4	4	4	4-5	4		

Assessment: The Drumcliff River flows from Glencar Lake. A drop in quality occurred at Station 0250 approximately 2.5 km downstream of the lake outflow. No sensitive species were found here although salmonid parr were noted. The river is lake-influenced. A good range of sensitive species have, however, been found at station 0250 in the past. Water quality was satisfactory at the lowermost site just upstream of Drumcliff village.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	\mathbf{X} \mathbf{Y}		Series No.	Code
0100	Bridge u/s Glencar Lake	173500	343300	16	SO
0200	Bridge d/s Glencar Lake	173299	342988	16	SO
0250	Collinsford Bridge	171062	342018	16	SO
0300	Br 2 km u/s Drumcliff Bridge	169309	341967	16	SO
0400	Ford 500 m u/s Drumcliff Br	167912	342188	16	SO

River and Code : **DRUMFIN**Tributary of : Unshin OS Catchment No: 116
OS Grid Ref : G 714 208 Date(s) Surveyed : 29/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0500	Bridge N. of Kingsbrook	4	4	4	4-5	4		
0800	Closkeybeg Bridge	4	4	4	4	4		

Assessment: Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Bridge N. of Kingsbrook	171776	317829	25	SO
0800	Closkeybeg Bridge	171426	320488	25	SO

River and Code : **DUFF**Tributary of : Sea - Donegal Bay OS Catchment No: 120
OS Grid Ref : G 752 578 Date(s) Surveyed : 12/08/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)					
No.	Location	1982	1986	1990	1994	1997	2000	2003
0020	Br E of Cloontyprughlish	_	_	_	_	_	5	5
0100	Bridge S. of Largydonnell	5	4-5	5	4-5	4	4-5	4-5
0200	Ford W. of Muckrum	5	4-5	4-5	-	-	-	-
0250	Brocky Bridge	-	-	-	-	-	4-5	4
0300	Liscally Bridge	5	5	5	4-5	-	-	-
0400	Bunduff Bridge	5	4-5	5	5	4-5	4-5	4

Assessment: The Duff River was satisfactory at all sites sampled in August 2003.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br E of Cloontyprughlish	179056	348081	16	LM
0100	Bridge S. of Largydonnell	179289	351138	16	LM
0200	Ford W. of Muckrum	179035	352525	16	LM/SO
0250	Brocky Bridge	175221	353206	16	SO
0300	Liscally Bridge	174310	353945	16	LM
0400	Bunduff Bridge	175463	356848	16	LM/SO

River and Code : **DUNMORAN**Tributary of : Sea - Sligo Bay OS Catchment No: u5
OS Grid Ref : G 522 355

Date(s) Surveyed : 07/08/2003

Sampl	ling Stations		Biologi	ical Quality	Ratings (Q	Values)
No.	Location	1990	1994	1997	2000	2003
1000	Br WNW Longford Demesne	4	4-5	4	4-5	4-5
1400	Ardnaglass Bridge	4-5	4	4-5	4-5	4

Assessment: Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
1000	Br WNW Longford Demesne	155096	330598	25	SO
1400	Ardnaglass Bridge	153100	334286	25	SO

River and Code : **DUNNEILL**Tributary of : Sea - Sligo Bay OS Catchment No: 115
OS Grid Ref : G 440 352 Date(s) Surveyed : 09/10/2003

Sampling Stations Biological Quality Ratings (Q Value						alues)		
No.	Location	1981	1986	1990	1994	1997	2000	2003
0050	Br E Water Treatment Works	-	-	-	5	5	4-5	4-5
0100	Br NE Dunneill	5	5	5	5	4-5	5	5
0200	Donaghintraine Bridge	4-5	4-5	5	4-5	4	5	4-5

Assessment: Ecological status remains high in the Dunneill River.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Br E Water Treatment Works	144492	329228	24	SO
0100	Br NE Dunneill	143741	332461	24	SO
0200	Donaghintraine Bridge	143850	334381	24	SO

River and Code : **EASKY**Tributary of : Sea - W. of Sligo Bay OS Catchment No: 114
OS Grid Ref : G 379 386 Date(s) Surveyed : 08/08/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)					
No.	Location	1981	1986	1990	1994	1997	2000	2003
0010	Trasgarve d/s Lough Easky	_	4-5	4	4	4-5	4-5	3-4
0020	Bridge u/s Gowlan River	_	5	5	5	4-5	4-5	4
0100	Bridge at Camcuill	5	5	4-5	5	4-5	4-5	4
0150	Ford u/s Easky Bridge	-	5	-	-	-	-	-
0200	Easky Bridge	4-5	5	-	4-5	4-5	4-5	4-5
0300	400 m d/s Samp Stat 0200	4-5	4-5	4	-	-	-	-

Assessment: A drop in quality was noted downstream of Lough Easky (0010). Increased siltation at Station 0020 and 0100 was also noticed with a drop in the presence of key pollution-sensitive species. Water quality at the sample site at Easky Bridge (0200) was satisfactory. The Easky River is an important salmon angling river and Lough Easky is a major water supply source. The Easky catchment is a particularly sensitive one and great care is needed with agricultural land clearance, fertiliser and slurry spreading as with clear felling and tree planting activities in order to protect this important aquatic resource as well as the catchment's wider biodiversity.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Trasgarve d/s Lough Easky	144514	325070	24	SO
0020	Bridge u/s Gowlan River	139322	326605	24	SO
0100	Bridge at Camcuill	139976	333226	24	SO
0200	Easky Bridge	137557	337782	24	SO
0300	400 m d/s Samp Stat 0200	137561	338244	24	SO

River and Code : **FINNED**Tributary of : Sea - W. of Sligo Bay OS Catchment No: 113
OS Grid Ref : G 350 386

Date(s) Surveyed : 08/08/2003

Sampl	ing Stations		Bi	ologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1982	1986	1990	1994	1997	2000	2003
0100	Bridge E.N.E. of Rathmacurkey	5	5	5	4-5	4-5	4-5	4-5
0150	Bridge N.E. of Srahatorrew	-	-	4-5	-	-	-	-
0200	Bridge S. of Ballycummin	4-5	4-5	-	4	4-5	3	4
0220	Fords just S. of Ballycummin	-	-	4	-	-	-	-
0300	Finned Bridge	4-5	4-5	4	4	4	4	4

Assessment: The Finned River was satisfactory at all sites. This is an extremely hard water river with conductivities of over 600µS/cm measured. Quality had improved at Site 0200 in comparison with the most recent survey, with a return of some sensitive species previously eliminated due to pollution events. The last station Finned Bridge was quite eutrophic and bordering on unsatisfactory quality. A water temperature exceeding 25°C was measured at this site with dissolved oxygen levels of 121% saturation. Large numbers of small trout were seen congregating in pools below a series of natural weirs and small numbers of pollution-sensitive macroinvertebrates were found in the river. On the day of sampling it was apparent that the river was under maximum stress with high temperatures and low flow conditions. Nonetheless the macroinvertebrates and fish had tolerated the severe conditions up to that point – indicating that the degree of eutrophication, while quite marked, was not excessive.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge E.N.E. of Rathmacurkey	136984	330873	24	SO
0200	Bridge S. of Ballycummin	137035	333995	24	SO
0300	Finned Bridge	135301	337169	24	SO

River and Code : **GARAVOGUE**Tributary of : Sea - Sligo Bay OS Catchment No: 117
OS Grid Ref : G 692 362 Date(s) Surveyed : 07/08/2003

Stations						Biolo	ogical Qu	ality Rati	ngs (Q V	'alues)
No.	1971	1973	1977	1980	1986	1990	1994	1997	2000	2003
0100	-	-	-	-	4	4	-	-	-	-
0200	5	4	4	4	4	4	4	4	4	4-5

Assessment: An improvement in quality was noted at The Mall in Sligo with a wider range of sensitive taxa found in August 2003 than in the previous surveys. Continued

GARAVOGUE Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	\mathbf{Y}	Series No.	Code
0100	D/s Hazelwood/N. of Cleveragh	171052	335275	16	SO
0200	Sligo: The Mall	169442	335968	16	SO

River and Code : **GLENANIFF**Tributary of : Lough Melvin OS Catchment No: 121
OS Grid Ref : G 922 500 Date(s) Surveyed : 12/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Bridge N.E. of Aghnahaha	5	-	-	_	_		
0200	Bridge u/s Lough Melvin	5	4-5	4-5	4-5	4-5		

Assessment: This Lough Melvin tributary was in satisfactory condition in August 2003.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0200	Bridge u/s Lough Melvin	192043	349681	17	LM	

River and Code : **GOWLAN (SLIGO)**Tributary of : Easky OS Catchment No: 114
OS Grid Ref : G 390 272 Date(s) Surveyed : 05/08/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Ford u/s Easky River confl	4-5	4-5	4-5	5	4-5	

Assessment: Water quality was satisfactory in the Gowlan River. The Gowlan is an Easky (qv) tributary draining a catchment which has a substantial amount of limestone bedrock. It has much harder water than the upper Easky and Buncrowey rivers and has a naturally more diverse fauna.

Samp	oling Stations	National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Ford u/s Easky River confl	138828	326554	24	SO	

River and Code : **GRANGE (SLIGO)**Tributary of : Sea - S. of Connor's Island OS Catchment No: x5
OS Grid Ref : G 648 495
Date(s) Surveyed : 13/08/2003

	ling Stations Location	Biological Quality Ratings (Q Val 1980 1982 1986 1990 1994 1997 2000							
	Luke's Bridge	-	-	-	5		5	5	4-5
0200	Ford N Cloontyprocklis	3-4	4	4	4	4	4-5	4	4

Assessment: A slight deterioration in quality was noted at the upper site (0080), which is close to a water abstraction point. Increased siltation was noticed here and was attributed to erosion due to sheep overgrazing. Quality downstream of Grange Village was maintained although some oil was released from the substratum at the ford sampling point where vehicles cross the river.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	Lukes Bridge	169769	347329	16	SO
0200	Ford N Cloontyprocklis	165069	349516	16	SO

River and Code : **GURTEEN STREAM***Tributary of : Owenmore (Sligo) OS Catchment No: 116
OS Grid Ref : G 677 055 Date(s) Surveyed : 24/07/2003

Statio	ns				Biolo	ogical Qu	ality Rati	ings (Q V	alues)	
No.	1979	1980	1982	1984	1986	1990	1994	1997	2000	2003
0150	_	1	2	1	3-4	2	_	_	_	_
0200	3	3	3	2-3	2-3	2	2-3	3-4	3	2-3

Assessment: The Gurteen was again moderately polluted in July 2003.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0150	Bridge N.W. of Gurteen	165877	305419	32	SO
0200	Bridge N.E. of Gurteen	166628	305329	32	SO

^{*}Not a baseline river: is not shown on OS Catchment map.

River and Code : KILLANUMMERY 35/K/03

Tributary of : Bonet OS Catchment No: 117

OS Grid Ref : G 806 303 Date(s) Surveyed : 31/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0400	Bridge N of Garvagh Glebe	-	4	3-4	4	3-4		
0500	Bridge N.N.W. of Corglancy	4-5	-	-	-	-		
0600	Bridge S.S.W. of Killanummery	4-5	4-5	4	4-5	4		
0900	Bridge u/s Bonet River confl	4-5	4-5	4-5	4-5	4		

Assessment: The upper site on the Killanummery (0400) had deteriorated in comparison with the 2000 survey. The upper catchment is intensively forested with coniferous trees and this appears to be the main pressure affecting water quality here. A drop in quality was also noted in the middle reaches (0600) but quality was unchanged in comparison with 2000 at the lowermost site examined (0900) upstream of the Bonet.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Bridge N of Garvagh Glebe	183760	325154	26	LM
0600	Bridge S.S.W. of Killanummery	180169	328218	26	LM
0900	Bridge u/s Bonet River confl	180598	330247	26	LM

River and Code : **KILLORAN LOUGH STREAM** 35/K/02

Tributary of : Owenmore (Sligo) OS Catchment No: 116

OS Grid Ref : G 636 225 Date(s) Surveyed : 29/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0500	Br N Rathgran	-	_	_	4	4	
0600	Bridge N.W. of Rathnarrow	4	-	-	-	-	
1000	Bridge u/s Owenmore River	4	4-5	4	4	3-4	

Assessment: The upper section of the Killoran Lough Stream (500) was satisfactory and unchanged. The lower site (1000) just upstream of the Owenmore River (qv) had deteriorated slightly in comparison with the 2000 survey.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Br N Rathgran	160670	322652	25	SO
1000	Bridge u/s Owenmore River	163620	322589	25	SO

River and Code : LISKEAGH 35/L/02

Tributary of : Owenmore (Sligo) OS Catchment No: 116

OS Grid Ref : G 677 073 Date(s) Surveyed : 24/07/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Bridge N.W. of Meenmore	4-5	_	_	_	_		
0200	Bridge SE of Liskeagh	-	4-5	4-5	-	-		
0900	Br WNW Liskeagh	-	-	-	4	-		
1100	Br at Clooneagh	-	3	4-5	4-5	4-5		

Assessment: Satisfactory - no change.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge N.W. of Meenmore	173075	306113	33	SO
0200	Bridge SE of Liskeagh	172363	306346	33	SO
0900	Br WNW Liskeagh	171016	306583	32	SO
1100	Br at Clooneagh	169260	305819	32	SO

River and Code : **LUGDOON STREAM** 35/L/01

Tributary of : Sea - Sligo Bay OS Catchment No: u5
OS Grid Ref : G 462 341 Date(s) Surveyed : 07/08/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0200	Bridge near Cartron	4-5	-	-	-	-		
0400	Bridge E. of Fort Villa	4-5	4	4-5	4-5	4		

Assessment: Satisfactory but a decline in quality was noted in the Lugdoon Stream in comparison with previous surveys.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	X Y		Code
0400	Bridge E. of Fort Villa	146191	334004	24	SO

River and Code : **NEWTOWN MANOR STREAM** 35/N/01
Tributary of : Lough Gill OS Catchment No: 117
OS Grid Ref : G 785 353 Date(s) Surveyed : 07/08/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)				
No.	Location	1990	1997	2000	2003	
0300	Bridge d/s Doon Lough	4	_	-	-	
0400	Br in Newtown Manor	-	dry	-	-	
0500	Br u/s L. Gill	-	dry	4	dry	

Assessment: The Newtown Manor Stream was dry in early August 2003. This tributary of Lough Gill is located in a karst limestone region and it regularly dries up in summer.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br in Newtown Manor	178800	336154	16	LM
0500	Br u/s L. Gill	178634	335229	16	LM

River and Code : **OWENBEG (COOLANEY)** 35/O/01
Tributary of : Owenmore (Sligo) OS Catchment No: 116
OS Grid Ref : G 656 251 Date(s) Surveyed : 29/07/2003

Sampl	ing Stations		Biological Quality Ratings (Q Values)					
No.	Location	1981	1986	1990	1994	1997	2000	2003
0030	NE of Carha at Carrownabanny	-	-	4	4-5	4	4-5	4-5
0050	Br S.E. of Carrownaskeagh L	-	5	4	-	-	-	-
0070	Br N Knockadoo	-	-	-	5	4-5	5	4-5
0100	Ford N. of Shancough	4-5	5	4-5	-	-	-	-
0200	Coolaney Bridge	4	5	4	4	4	4	4
0400	Bridge u/s Owenmore River confl	-	-	-	4-5	4-5	4-5	4-5

Assessment: The Owenbeg (Coolaney) was satisfactory over its length with little change in comparison with previous surveys.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0030	NE of Carha at Carrownabanny	154367	324372	25	SO
0070	Br N Knockadoo	157005	323189	25	SO
0100	Ford N. of Shancough	159411	324579	25	SO
0200	Coolaney Bridge	160722	325231	25	SO
0400	Bridge u/s Owenmore River	165291	325549	25	SO

River and Code : **OWENMORE (MANORHAMILTON)** 35/O/08
Tributary of : Bonet OS Catchment No: 117
OS Grid Ref : G 873 393 Date(s) Surveyed : 01/08/2003

Statio No.	ns 1971	1973	1977	1980	1986	Biolo 1990	ogical Qu 1994	ality Rati 1997	ngs (Q V 2000	(alues) 2003
0100	_	_	_	_	4	4-5	_	_	_	_
0200	_	_	_	_	4	4-5	_	_	_	_
0220	-	-	-	-	-	-	4	flood	4-5	4
0260	-	-	-	-	-	4-5	-	-	-	-
0300	-	-	-	5	5	5	-	-	-	-
0400	5	4-5	4	4	4-5	4-5	3-4	-	4	4

Assessment: The Owenmore (Manorhamilton) was satisfactory in early August 2003.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge S.S.W. of Munnagashel	192095	336605	16	LM
0200	Bridge W. of Munakill Loughs	192270	339040	16	LM
0220	Bellanaginny Bridge	192223	339456	16	LM
0260	Bridge W. of Leminea	190457	339820	16	LM
0300	Curley Bridge	189347	339282	16	LM
0400	Windy Bridge	187751	339227	16	LM

River and Code : **OWENMORE (SLIGO)**Tributary of : Ballysodare OS Catchment No: 116
OS Grid Ref : G 687 270 Date(s) Surveyed : 24/07/2003

Statio	ns					Biological Quality Ratings (Q Values)					
No.	1971	1973	1977	1979	1980	1984	1990	1994	1997	2000	2003
0020	_	_	_	_	_	_	_	_	_	4-5	4
0025	_	_	_	_	5	4-5	4	5	4-5	4-5	4-5
0050	_	_	-	-	4	4-5	3-4	4-5	4-5	4	4-5
0100	-	-	-	-	5	4-5	4	4	4	4	4-5
0200	-	-	5	5	4	4	4	4	3-4	3-4	4
0250	-	-	-	-	-	-	3-4	4	3-4	3	4
0300	-	-	5	5	4	4-5	4	-	-	-	-
0400	5	5	4-5	-	4	4	4-5	4-5	4	4	4
0500	-	-	-	-	4	4	4	4	4	4	4
0600	5	5	4-5	-	5	5	3-4	-	-	-	-
0610	-	-	-	-	-	-	-	4-5	4	4-5	4-5
0700	-	-	-	-	5	4-5	5	-	-	4-5	4-5
0900	4-5	5	4-5	-	4	4	4	5	3-4	4	4-5
Conti	Continued										

OWENMORE (SLIGO) Continued

Assessment: The upper Owenmore was satisfactory in 2003 with an improvement noted in comparison with the 2000 survey at stations (0050 and 0100). A particularly significant improvement in water quality was noted at Stations 0200 and 0250. Water quality was satisfactory upstream and downstream of Templehouse lake. The last three stations examined were of consistently good quality upstream and downstream of Collooney before the confluence with the Unshin River (qv) to form the Ballysodare River (qv). The Owenmore has shown an overall improvement in water quality in comparison with 1997 and 2000 in particular.

Samp	ling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0020	Br at Kilstraghlan or Ragwood	165347	304431	32	SO
0025	Gorteen Bridge	168158	304378	32	SO
0050	Bridge S.W. of Moydough	167041	305699	32	SO
0100	Br 2 km E.S.E. of Kilshalvy	167756	307063	32	SO
0200	Br S.S.W. of Emlaghfad	166612	312348	25	SO
0250	1 km d/s Ballymote Stream	165400	313592	25	SO
0300	Ford at Ballynaglogh	164092	313626	25	SO
0400	Carrowroagh Br (u/s Templehouse)	162111	315460	25	SO
0500	Templehouse Br (d/s)	162524	318528	25	SO
0600	Bridge E. of Thorn Hill	164229	321818	25	SO
0610	Br N Cloonacurra	164372	322707	25	SO
0700	1.2 km u/s Collooney Bridge	166797	325768	25	SO
0900	300 m u/s Unshin River confl	168469	326673	25	SO

River and Code : SHANVAUS 35/S/01
Tributary of : Bonet OS Catchment No: 117
OS Grid Ref : M 865 378 Date(s) Surveyed : 01/08/2003

Sampl	ing Stations	Biolo	Biological Quality Ratings (Q Values)					
No.	Location	1990	1990 1994		2000	2003		
0400	Second Br u/s Shanvaus Br	4	4-5	4-5	4-5	4-5		
0800	Second Br d/s Shanvaus Br	4	-	-	-	-		
1100	Bridge u/s Bonet River confl	4	4-5	flood	4	4-5		

Assessment: Satisfactory.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Second Br u/s Shanvaus Br	183696	340732	16	LM
1100	Bridge u/s Bonet River confl	186433	337773	16	LM

River and Code : **TULLINWILLIN STREAM** 35/T/03

Tributary of : Belhavel Lough OS Catchment No: 117

OS Grid Ref : G 882 296 Date(s) Surveyed : 31/07/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0200 Bridge u/s Belhavel Lough

4-5 4-5 4 4-5 4-5

Assessment: This tributary of Belhavel Lough was in satisfactory condition in late July 2003. No change was noted when compared with the most recent previous survey.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge u/s Belhavel Lough	187861	329848	26	LM

River and Code : **TULLYNASCREEN**Tributary of : Killanummery OS Catchment No: 117
OS Grid Ref : G 809 269 Date(s) Surveyed : 31/07/2003

Sampl	ing Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Br NW Tullynascreen	-	4	4	4	-	
0200	Br NE Sracummer	5	-	-	-	4	

Assessment: The Tullynascreen was satisfactory when surveyed in July 2003. This was previously reported as a branch of the Killanummery (qv). Note: Previously reported as part of the Killanummery (35K03)

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br NW Tullynascreen	181499	325100	26	LM
0200	Br NE Sracummer	180906	325956	26	LM

River and Code : UNSHIN

Tributary of : Ballysodare OS Catchment No: 116
OS Grid Ref : G 687 270 Date(s) Surveyed : 30/07/2003

Station No.	ns 1971	1973	1977	1980	1984	Biolo 1990	ogical Qu 1994	ality Rati	ings (Q V 2000	(alues) 2003
0100	_	_	_	4-5	4-5	4-5	_	3-4	4	3-4
0150	-	-	-	-	-	-	4	-	-	-
0200	-	-	-	5	4	4	4	4-5	4	4-5
0300	-	-	-	5	4	4	4	4	4	-
0400	-	_	-	4	4-5	4	4	4-5	4	4
0500	_	5	4-5	5	4-5	4-5	4-5	4-5	4-5	4-5
0600	4-5	5	4	4	4	4	4	4-5	4-5	4-5

Assessment: The Unshin was slightly polluted at the point where it flows out of Lough Arrow (0100). None of the normal pollution-sensitive species were found there - perhaps reflecting the current trophic state of Lough Arrow where algal blooms have caused problems in recent years. The overall ecological condition of the river at Bellarush Bridge, however, is quite good especially when the intact riparian zone is taken into account. This site has scored very highly as an excellent example of what constitutes a near pristine riparian zone. It is notable for its ecological gradation from terrestrial ecosystems through wetland areas and into the main river channel, which has not been drained or altered. Thus, while the water quality is impacted by the outflow from the lake, the upper Unshin is nonetheless a very important ecological site of scientific interest and is an important SAC that most be handed on intact to the next generation as a rare example of a limestone river which has not been subjected to major arterial drainage. Water quality improves and satisfactory water quality was found down to its confluence with the Owenmore (Sligo) (qv).

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bellarush Bridge	176694	315793	25	SO
0150	Bridge N of Knocknacross	175857	318529	25	SO
0200	Riverstown Bridge	173955	320174	25	SO
0300	Br W. of Cooperhill House	171862	321017	25	SO
0400	Lisconny Bridge	169792	322912	25	SO
0500	Ballygrania Bridge	169500	325904	25	SO
0600	Bridge u/s Ballysodare River	168616	326911	25	SO

River and Code : **WILLSBOROUGH STREAM** 35/W/01
Tributary of : Sea - Sligo Bay OS Catchment No: 118
OS Grid Ref : G 689 373 Date(s) Surveyed : 09/09/2003

Sampling Stations			Biological Quality Ratings (Q Values)				
No.	Location	1982	1990	1994	1997	2000	2003
0060	Bridge S. of Glackbaun	_	4-5	_	4	4-5	4-5
0080	Bridge N. of Doonally House	-	4-5	-	-	-	-
0100	Br S.E. of Doonally House	3-4	-	-	4-5	4-5	-
0150	Br ESE Shannon Oughter	-	-	4	-	-	4-5
0200	Br NW Rathbraghan	4	4	-	-	-	-
0300	Br on Sligo-Bundoran Road	5	4	3-4	3-4	4-5	3-4

Assessment: The upper and middle sections of the Willsborough Stream (0060, 0150) were satisfactory in September 2003. The construction of a new dam may have been responsible for the reduced flow at Station 0150 but quality was nonetheless satisfactory. The future impact of the extended reservoir on the hydrological regime of the river will have to be assessed when the new dam is completed and operational. The last station (0300) on the main Sligo Bundoran Road did show a drop in quality when compared with 2000 in particular with definite eutrophication impacts obvious here.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0060	Bridge S. of Glackbaun	174417	339454	16	SO
0100	Br S.E. of Doonally House	171805	338978	16	SO
0150	Br ESE Shannon Oughter	171212	338308	16	SO
0200	Br NW Rathbraghan	169980	337959	16	SO
0300	Br on Sligo-Bundoran Road	169233	337360	16	SO

HYDROMETRIC AREA 38

Gweebarra-Sheephaven

Abberachrin	38A01	Vaal Laugh Chroom	201/01
# Aighe	38A03	Keel Lough Stream	38K01
Aspick	38A02	FT 1 13	F201 013
D. D	20002	[Lackagh]	[38L01]
Big Burn	38B03	Lough Agher	38L02
Bracky	38B02	Loughkeel Burn	38L03
Bunlin	38B04	// T. T. T.	
Burnside	38B05	# Murlin	38M03
Calabber	38C01	Owenator	38O01
Carrownamaddy	38C02	Owenawillin	38O10
Clady	38C04	Owencarrow	38003
Cloghernagore	38C07	Owencronahulla	38009
Corveen	38C05	Owenea	38004
Cronaniv Burn	38C06	Owennamarve	38005
		Owentocker	38006
Devlin	38D01	Owenveagh	38O14
Dungloe	38D02	Owenwee (Doocharry)	38007
Duntally	38D03	Owenwee (Dunlewey)	38O12
Duvoge	38D05	Owenwee (Glen Lough)	38O13
Duvowen (Ray)	38D04	Owenwee (Loughros)	38008
Faymore	38F01	Port Stream	38P01
Glen (Lackagh)	38G04	Ray	38R01
Glen (Meenclady)	38G05	•	
Glenleheen Stream	38G07	Shallogan	38S03
Glenna	38G01	Sruhannameel	38S02
Glentornan	38G06	Stracashel (Lower)	38S01
Gweebarra	38G02	,	
Gweedore	38G03	# Tullaghobegly	38T01
		<i>C C i</i>	

Lackagh River discontinued - Tidal

Indicates rivers having seriously polluted stretch(es) at time of this survey

River and Code : **ABBERACHRIN** 38/A/01

Tributary of : Sea - Loughros More Bay OS Catchment No: 49
OS Grid Ref : G 703 947 Date(s) Surveyed : 14/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0200 Kilclooney Bridge

4 4 4 4 4

Assessment: The Kilclooney Bridge site on the Abberachrin River drains a bog catchment containing some 14 lakes. While the fauna is of low diversity, water quality was satisfactory.

Samp	oling Stations	National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Kilclooney Bridge	171667	395510	10	DL

River and Code : AIGHE 38/A/03

Tributary of : Bracky OS Catchment No: h6
OS Grid Ref : G 726 877 Date(s) Surveyed : 14/08/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0140	200 m u/s Br NNW Cashel	_	_	4	_	_	
0150	Br NNW of Cashel	-	-	1/0	4	2/0	
0200	Just u/s Bracky River confl	4-5	4-5	2/0	-	_	

Assessment: The Aighe was seriously polluted once again due to industrial discharges. The recovery previously noted in the 2000 survey has not been maintained.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0140	200 m u/s Br NNW Cashel	172802	388264	10	DL
0150	Br NNW of Cashel	172816	388322	10	DL
0200	Just u/s Bracky River confl	172839	389126	10	DL

River and Code : ASPICK 38/A/02

Tributary of : Glenna OS Catchment No: 21

OS Grid Ref : B 909 288 Date(s) Surveyed : 22/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

Bridge d/s Aspick Bridge

5 4-5 4-5 4 4-5

Assessment: The Aspick was of satisfactory status when surveyed in Oct 2003.

3	Samp	oling Stations	National	Grid Ref.	Discovery	County
-	No.	Location	X	Y	Series No.	Code
(0300	Bridge d/s Aspick Bridge	190044	425457	1	DL

River and Code : **BIG BURN**Tributary of : Sea - Mulroy Bay OS Catchment No: 28
OS Grid Ref : C 196 329 Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

O500 Cranford Bridge

4-5 3-4 4-5 4 4

Assessment: The Big Burn was in satisfactory when surveyed in October 2003. The catchment land use is dominated by peat bogs and moorland and the underlying geology is predominantly quartzite with low conductivity recorded 88μS/cm on the day of sampling.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0500	Cranford Bridge	219272	432669	2	DL

River and Code : **BRACKY** 38/B/02

Tributary of : Sea - Loughros Beg Bay OS Catchment No: h6
OS Grid Ref : G 720 900 Date(s) Surveyed : 14/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

5 5 3/0 3* 4

Assessment: The Bracky had substantially recovered from the major scouring due to upland erosion (overgrazing) noted in the Glengesh system in 2000. The Aighe River (qv), which is a tributary of the Bracky, was again polluted in 2003 and this may have also reduced the Q-Value in the Bracky. The catchment land use is predominantly peat bog and moorland and it is a low conductivity system on underlying bedrock of Precambrian quartzite, schist & gneiss with some granite also present.

Sam	pling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bracky Bridge	172741	389529	10	DL

River and Code : **BUNLIN** 38/B/04

Tributary of : Mulroy Bay OS Grid Ref : C 181 278 OS Catchment No: 29

Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

Oldon Br. S of Drumard (near tomb)

- - - 4 4-5

Assessment: The Bunlin was in satisfactory condition when sampled in October 2003.

Sam	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br. S of Drumard (near tomb)	215955	425602	2	DL

River and Code : **BURNSIDE**Tributary of : Sea - Mulroy Bay OS Catchment No: u6
OS Grid Ref : C 210 328 Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0400 150 m d/s Br S. of Bridgetown

4 4 4 4 4 4

Assessment: The Burnside was satisfactory at the bridge in Carrowkeel although a lot of domestic rubbish was present in the river. An apparent sewage discharge to the river was noted just downstream of the bridge in Carrowkeel village.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
040	0 150 m d/s Br S. of Bridgetown	221316	432475	2	DL

River and Code : CALABBER 38/C/01
Tributary of : Owencarrow OS Catchment No: 27
OS Grid Ref : C 048 242 Date(s) Surveyed : 08/10/2003

Sampl	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	Meennamolt Bridge	4-5	4	4-5	4-5	4-5
0200	Calabber Bridge	4-5	-	-	-	-
0300	2 km d/s Calabber Bridge	-	4-5	4-5	4-5	4-5

Assessment: The Calabber was in satisfactory condition at both sites sampled in 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Meennamolt Bridge	199865	423516	6	DL
0300	2 km d/s Calabber Bridge	203369	423980	6	DL

River and Code : **CARROWNAMADDY** 38/C/02
Tributary of : Sea - Clonmass Bay (Sheep Haven) OS Catchment No: 2
OS Grid Ref : C 053 342 Date(s) Surveyed : 08/10/2003

Sampl	ling Stations		Biol	ogical Qu	uality Rat	ings (Q V	alues)
No.	Location	1973	1990	1994	1997	2000	2003
0100	Stranamarragh Bridge	5	5	_	_	_	_
0300	Bridge S.E. of Swillybrin	5	4-5	4	4-5	4-5	4-5

Assessment: The Carrownamaddy was satisfactory where sampled at Swilly Bridge. A large sand quarry adjacent to the river upstream of the monitoring point is a potential source of the turbidity that has been noted in the river especially during flood conditions. The river flows NE from Muckish Mountain.

Samp	ling Stations Nati	ional Gr	id Ref.	Discovery	County
No.	Location	X	Y	SeriesNo.	Code
0300	Bridge S.E. of Swillybrin	204327	433521	2	DL

River and Code : **CLADY (DONEGAL)**Tributary of : Sea - Gweedore Bay OS Catchment No: 23
OS Grid Ref : B 804 234 Date(s) Surveyed : 22/10/2003

Sampl	ing Stations				Biolog	gical Q	uality	Rating	s (Q V	alues)
No.	Location	1973	1977	1980	1985	1990	1994	1997	2000	2003
0150	Bryan's Bridge (Gweedore)	-	-	4	4	4-5	4	4-5	4-5	4
0175	Ford S. of Lough Clogher	5	5	5	5	5	-	-	-	-
0300	Bridge u/s Bunbeg	4-5	4-5	5	4-5	4-5	4	4	4	4

Assessment: The Clady is influenced by Lough Nacung and Dunlewy Lough which are impounded water bodies providing water and hydroelectricity. There appears to be a problem caused by a floc in the river near the bridge in Gweedore (0150), immediately downstream of Lough Nacung, which has also been noted on previous occasions. The presence of musty-smelling organic mats on the substratum are also characteristic of water works discharges or iron released during drainage activities in upland bogs. Clouds of a light coloured floc were noted beneath the bridge - chemical characterisation of this substance is advised. Water quality was satisfactory at Clady Bridge in Bunbeg although some impairment due to the presence of musty organic mats on the substratum was again noted. The river is located within an SAC - Fawnbog/ Lough Nacung.

Continued

CLADY (DONEGAL) Continued

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0150	Bryan's Bridge (Gweedore)	185255	422485	1	DL
0175	Ford S. of Lough Clogher	186300	422900	1	DL
0300	Bridge u/s Bunbeg	180893	423661	1	DL

River and Code : **CLOGHERNAGORE**Tributary of : Abroe OS Catchment No: 48
OS Grid Ref : B 903 066 Date(s) Surveyed : 11/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0100 Br S of Cloghernagore

4 - - 4-5 4

Assessment: Water quality was satisfactory in this river. The Cloghernagore is an acidic system (conductivity 63.3 μ S/cm) draining a granite catchment dominated by peat bog and moorland. The river forms part of the Cloghernagore Bog SAC, which is contiguous with Glenveagh National Park. The river has a low macroinvertebrate diversity (only eight taxa recorded) and it also lacks many of the typical sensitive species. The Cloghernagore site examined is also notable for its extensive growths of filamentous algae. It is thus somewhat unusual, but the absence of any obvious pressures suggests that the acidity of the system has significantly reduced the ability of grazers to control filamentous algae and that reduced grazing pressure may have resulted in the significant biomass of filamentous algae that was observed. The dry summer of 2003 may also have led to reduced sloughing off of filamentous algae.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br S of Cloghernagore	191423	406379	11	DL

OS Grid Ref : B 828 273 Date(s) Surveyed : 22/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0200 Br at Owencronahulla R confl

4-5 4 4 3-4 3-4

Assessment: The Corveen Burn appears to have declined somewhat in quality in comparison with previous surveys with few taxa present (13) and only one sensitive species present. It also had significant filamentous algal growths when surveyed in September 2003. The catchment is an acidic catchment underlain by granite. It has a small amount of forestry and generally low intensity agriculture. The dominant land cover is blanket bog. In general the catchment appears to be subject to a low level of impact but there are a number of one-off houses in the catchment. This type of river is likely to be highly sensitive to inputs from point and diffuse sources.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br at Owencronahulla R confl	182610	427433	1	DL

River and Code : CRONANIV BURN 38/C/06

Tributary of : Dunlewy Lough OS Catchment No: 23 OS Grid Ref : B 928 190 Date(s) Surveyed : 12/09/2003

Sampling Stations Biological Quality Ratings (Q Values) 1994 No. Location 1990 1997 2000 2003 0100 Bridge u/s Dunlewy Lough 4-5 4 5 5 4-5

Assessment: The Cronaniv Burn was in satisfactory condition when sampled in September 2003.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Bridge u/s Dunlewy Lough	193109	418649	1	DL	

River and Code : **DEVLIN (DONEGAL)** 38/D/01

Tributary of : Dunlewy Lough OS Catchment No: 23 OS Grid Ref : B 927 188 Date(s) Surveyed : 10/09/2003

Samp	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0080	0.5km u/s Br u/s Dunlewy L	4-5	4	5	5	5		

Assessment: This naturally acidic river was in satisfactory condition when surveyed in September 2003. Its catchment is one of the most pristine catchments in Ireland in the sense that there are no intensive land use pressures upstream of the sample point. Unexploited upland bogs, moorland and some natural grasslands are the only land use categories on the CORINE land cover map for the catchment. It is part of the Glenveagh/Cloghernagore SAC/NHA.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0080	0.5km u/s Br u/s Dunlewy L	192884	418619	1	DL

River and Code : **DUNGLOE**Tributary of : Sea - near Gweebarra Bay OS Catchment No: 16
OS Grid Ref : B 768 115 Date(s) Surveyed : 12/09/2003

Samp	ling Stations		Biological Quality Ratings (Q V						lues)
No.	Location	1973	1980	1985	1990	1994	1997	2000	2003
0010	B:1 / I I I								
0010	Bridge u/s Lough Sallagh	-	-	-	4	-	-	-	-
0020	Bridge u/s Lough Fad	-	-	-	4	4	4-5	4-5	4
0100	Br between L Craghy/Dungloe L	4	-	-	4	-	5	-	-
0150	Bridge u/s Dungloe Lough	-	5	5	4	4	4	4-5	4
0200	East Bridge- Dungloe	5	4	4	4	-	-	-	-
0250	West Bridge - Dungloe	-	-	-	3	3	3	3	3
0300	200 m d/s West Br- Dungloe	-	-	4	3	-	-	-	-

Assessment: The upper tributaries of the Dungloe River were satisfactory (0020, 0150). The lowermost section in Dunglow town (0250), however, was of lower quality than expected with significant quantities of domestic refuse also noted in the river.

Samp	Sampling Stations		Grid Ref.	Discovery	County
No.	Location	\mathbf{X} \mathbf{Y}		Series No.	Code
0020	Bridge u/s Lough Fad	179696	409026	1	DL
0100	Br between L Craghy/Dungloe L	178933	412038	1	DL
0150	Bridge u/s Dungloe Lough	178082	413043	1	DL
0200	East Bridge- Dungloe	176900	411600	0	DL
0250	West Bridge - Dungloe	176827	411506	1	DL

River and Code : **DUNTALLY** 38/D/03

Tributary of : Sea - Sheep Haven OS Catchment No: 26
OS Grid Ref : C 084 314 Date(s) Surveyed : 08/10/2003

Sampling Stations	Biological Quality Ratings (Q Values)						
No. Location	1990	1994	1997	2000	2003		
0200 Old Bridge SE Grogagh	-	3	3	4-5	4-5		
0300 Bridge E. of Cloghglass	5	-	-	-	-		
0500 Bridge E. of Creeslough	4	4	4	4	4		

Assessment: The Duntally was satisfactory when surveyed in October 2003.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Old Bridge SE Grogagh	205670	428143	2	DL
0500	Bridge E. of Creeslough	206863	430284	2	DL

River and Code : **DUVOGE**Tributary of : Sheskinmore Lough OS Grid Ref : G 703 961

OS Grid Ref : DUVOGE OS Catchment No: 49

Date(s) Surveyed : 14/08/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

0300 Br u/s Lough Sheskinmore

4
4-5
4
4

Assessment: The Duvoge River was satisfactory when surveyed in August 2003.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Br u/s Lough Sheskinmore	170772	396356	10	DL

River and Code : **DUVOWEN (RAY)** 38/D/04

Tributary of : Ray OS Catchment No: 3 OS Grid Ref : B 973 276 Date(s) Surveyed : 21/10/2003

Samp	ling Stations	Biolo	gical Qua	ality Rati	ngs (Q V	alues)
No.	Location	1990	1994	1997	2000	2003
0100	500 m u/s Ray River confl	5	4	3	3	4

Assessment: The Duvowen drains the catchment which contains the closed Muckish Landfill. Clear evidence of the impact of landfill leachate could be seen in the river, particularly the presence of musty/ammoniacal smelling organic mats on the substratum. Nonetheless there was sufficient presence of sensitive macroinvertebrate taxa to warrant a Q4 or satisfactory assessment at a point approximately 3km downstream of the landfill. Thus, it is satisfactory from a water quality point of view but is still below its full ecological potential. The landfill is due to be capped in 2004 and this should further reduce the quantity of leachate arising.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	500 m u/s Ray River confl	196622	428028	2	DL

River and Code : **FAYMORE** 38/F/01

Tributary of : Sea - Sheep Haven OS Catchment No: 25

OS Grid Ref : C 060 317 Date(s) Surveyed : 08/10/2003

Sampling Stations			B	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1973	1986	1990	1994	1997	2000	2003
0050	Bridge S of Creenasmear	5	3-4	5	4-5	3	4*	4-5
0100	Bridge at Old Flax Mill	-	4	4-5	-	-	-	-
0200	Clon Bridge	5	3-4	4	4	3-4	4	3

Assessment: The upper Faymore (0050) was satisfactory in 2003 with less signs of siltation compared with the 2000 survey. The lower Faymore was moderately polluted with *Chironomus* noted in the fauna - an indicator of serious organic pollution. The source of organic pollutants is believed to be the sewage discharges from Creeslough. This assessment represents a significant deterioration on previous years.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge S of Creenasmear	203236	429226	2	DL
0200	Clon Bridge	205369	431672	2	DL

River and Code : GLEN (LACKAGH) 38/G/04

Tributary of : Glen Lough OS Catchment No: 27 OS Grid Ref : C 117 307 Date(s) Surveyed : 07/10/2003

Sampling Stations		Biological Quality Ratings (Q Values				
No.	Location	1990	1994	1997	2000	2003
0400	Br NW of Highglen	5	4-5	_	4-5	_
0900	Br u/s Glen Lough	5	4	4-5	4-5	4-5

Assessment: The Glen (Lackagh) was sampled just upstream of Glen Lough at Glen Bridge (0900). Quality was satisfactory at this location and the upstream catchment comprising mainly upland bog and moorland appears to be in good condition with plenty of heather present - i.e. not overgrazed. There are a few small forestry plantations also present but in general pressures are low.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Br NW of Highglen	213706	429668	2	DL
0900	Br u/s Glen Lough	211832	431043	2	DL

River and Code : GLEN (MEENACLADY) 38/G/05

Tributary of : Sea - W. of Currans Point OS Catchment No: n6 OS Grid Ref : B 857 335 Date(s) Surveyed : 22/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

0200 Br SW Meenaclady 4 4-5 4 4-5 4

Assessment: Satisfactory.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Br SW Meenaclady	186051	432398	1	DL

River and Code : **GLENLEHEEN STREAM** 38/G/07
Tributary of : Abroe OS Catchment No: 48
OS Grid Ref : B 902 067 Date(s) Surveyed : 11/09/2003

Sampling Stations		Biological Quality Ratings (Q Value					
No.	Location	1990	1994	1997	2000	2003	
0200	Bridge d/s Lough Errig	4	_	_	_	_	
0300	Glenleheen Bridge	5	4-5	4-5	4-5	4	

Assessment: The Glenleheen was satisfactory at Stn 0300 in 2003. The substratum is still somewhat unstable following road construction in the vicinity of Glenleheen Bridge. The upstream portion of the catchment is primarily upland bog, moorland and natural grasslands in nature with some more intensive pasture immediately upstream and downstream of the sample point.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Glenleheen Bridge	190293	403976	11	DL

River and Code : GLENNA 38/G/01
Tributary of : Sea - Ballyness Bay OS Catchment No: 21
OS Grid Ref : B 911 303 Date(s) Surveyed : 22/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Bridge E. of Fawnboy Lower	4	4	3-4	4	4-5	
0200	Bedlam Bridge	4	4	4*	4	4-5	

Assessment: The Glenna was satisfactory with a slight improvement in status noted at both sites in comparison with 2000.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge E. of Fawnboy Lower	191568	426896	1	DL
0200	Bedlam Bridge	191063	430012	1	DL

River and Code : **GLENTORNAN** 38/G/06

Tributary of : Lough Nacung Upper OS Catchment No: 23

OS Grid Ref : B 898 191 Date(s) Surveyed : 12/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0100 Just u/s Lough Nacung

5 5 5 4-5 4-5

Assessment: This is an acid stream running into Lough Nacung. Quality is satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Just u/s Lough Nacung	189617	419165	1	DL

River and Code : **GWEEBARRA** 38/G/02

Tributary of : Sea - Gweebarra Bay OS Catchment No: 48
OS Grid Ref : G 797 997 Date(s) Surveyed : 11/09/2003

Sampling Stations				Biolog	ical Qu	iality F	Ratings	(Q Va	lues)
No.	Location	1973	1980	1985	1990	1994	1997	2000	2003
0100	Pollglass Bridge	-	5	5	5	4-5	5	5	4-5
0200	SE of L. Natangaduff	-	5	-	-	3	3-4	4-5	4
0300	Bridge in Doocharry	5	5	5	4-5	4-5	5	4-5	5

Assessment: The Gweebarra was in satisfactory condition over its length in September 2003. The river is located in the Cloghernagore Bog and Glenveagh National Park SAC/NHA region.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Pollglass Bridge	195017	414076	1	DL
0200	SE of L. Natangaduff	189731	407697	11	DL
0300	Bridge in Doocharry	186813	406457	11	DL

River and Code : **GWEEDORE** 38/G/03

Tributary of : Sea - Gweedore Bay OS Catchment No: 22

OS Grid Ref : B 827 212 Date(s) Surveyed : 12/09/2003

ing Stations Location	1973	1977		Biolog 1985		_		values) 2003
Br E Meenderrynasloe Br E Derrymansher	4 4	4 4-5	4 4-5	4 4-5	 		4-5 4-5	4 4

Assessment: The main Gweedore channel was in satisfactory condition, although not quite as good as it should be. Lough Anure, which is relatively eutrophic, has a discernible impact on the Gweedore River causing it to be somewhat more eutrophic than would be expected for this type of river. The catchment of the Gweedore River and Lough Anure is primarily a peaty one with poorly drained, persistently wet soils. The relatively high density of one-off houses with septic tanks in the catchment is felt to be one of the main causes of the eutrophication of Lough Anure. The eastern tributary of the Gweedore formerly included as part of the Gweedore River (Stn 38G030200) is now treated as part of a separate river, The Keel Lough Stream (38K01) (qv). This tributary is impacted by discharges from a water treatment plant and this also has an impact on the lower Gweedore station (0300) where organic mats are visible on the substratum.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br E Meenderrynasloe	182980	419085	1	DL
0300	Br E Derrymansher	182686	420913	1	DL

River and Code	: KEEL LOUC	GH STREAM 38/K/01
Tributary of	: Gweedore	OS Catchment No: 22
OS Grid Ref	: B 833 196	Date(s) Surveyed: 12/09/2003

Sampl	Sampling Stations Biological Quality Ratings (Q Values) No. Location 1973 1977 1980 1985 1990 1994 1997 2000 2003									
No.	Location	1973	1977	1980	1985	1990	1994	1997	2000	2003
0200	1.2 km u/s Crolly Bridge	5	4	4	4	4	3-4	3	3	2/0

Assessment: The Keel Lough Stream was again badly impacted by discharges from a water treatment works. This river was formerly reported as part of the Gweedore River (qv).

Note: Previously reported as part of the Gweedore 38G03

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	1.2 km u/s Crolly Bridge	183671	418644	1	DL

River and Code : LACKAGH 38/L/01
Tributary of : Sea - Sheep Haven OS Catchment No: 27
OS Grid Ref : C 094 312 Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

Oldon Lackagh Bridge

4 4 4 4 tidal

Assessment: At Lackagh Bridge the river was strongly affected by saline tidal waters when visited in October 2003 - this should be regarded as a transitional water body.

Sampling Stations		National (Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0100	Lackagh Bridge	209569	430880	2	DL	

River and Code : LOUGH AGHER STREAM 38/L/02
Tributary of : Ray OS Catchment No: 3
OS Grid Ref : B 959 311 Date(s) Surveyed : 21/10/2003

Sampling Stations Biological Quality Ratings (Q Values) Location 1990 1994 1997 2000 No. 1973 1986 2003 0100 Ford 1.5 km u/s Ray River 5 4-5 4-5 0200 Br 0.6km u/s Ray R confl 4 5 4 4 4-5 4-5

Assessment: The Lough Agher was again in satisfactory condition when surveyed in October 2003.

Sampling Stations		National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0200	Br 0.6km u/s Ray R confl	196067	430825	2	DL	

River and Code : LOUGHKEEL BURN 38/L/03

Tributary of : Bunlin OS Catchment No: 30 OS Grid Ref : C 183 279 Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

0400 Bridge u/s Bunlin River confl 4-5 4 4 3 4

Assessment: The Loughkeel Burn was in satisfactory condition when examined in October 2003.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0400	Bridge u/s Bunlin River confl	218393	427814	2	DL

River and Code : MURLIN 38/M/03
Tributary of : Sea - Glen Bay OS Catchment No: h6
OS Grid Ref : G 527 847 Date(s) Surveyed : 09/12/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1980	1986	1990	1994	1997	2000	2003	
0100	D'I M CM I		-						
0100	Bridge N. of Meenadreen	-	5	-	-	-	-	-	
0200	Bridge at Kilgoly	-	5	4-5	-	-	-	-	
0250	Ford 1km u/s Gannew Br	-	-	-	-	-	-	4	
0300	Gannew Bridge	5	4	4-5	-	-	-	2/0	
0400	Straid Bridge	5	5	4-5	4-5	4-5	4-5	2/0	

Assessment: The Murlin River had suffered from a serious toxic pollution incident some time prior to the ecological assessment carried out in December 2003. Additional samples were taken at sites 0250, 0300 upstream of Station 0400 in order to pinpoint the start of the polluted stretch on the main river channel. In this way the source of the pollutant was narrowed down to approximately 1km length of channel. Donegal County Council were notified and subsequently this stretch was investigated in more detail. The cause of the pollution was identified as being most likely due to sheep dip chemicals. Approximately 1 km of river channel to the sea was effectively wiped out by this incident and it mars the excellent record of high water quality in the Murlin over the years. The pollution will also have given rise to a serious impact on the water quality of Glen Bay into which the Murlin River flows although no samples were taken there.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0250	Ford 1km u/s Gannew Br	154640	384580	0	DL
0300	Gannew Bridge	153725	384750	0	DL
0400	Straid Bridge	153229	384816	10	DL

River and Code : **OWENATOR**Tributary of : Lough Anure OS Catchment No: 22
OS Grid Ref : B 823 168

Date(s) Surveyed : 13/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0100 Ford N. of Lough Agher

4 4 4-5 4-5 4-5

Assessment: The Owenator was again in satisfactory condition when surveyed in September 2003.

Sam	pling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Ford N. of Lough Agher	184263	415002	1	DL

River and Code : **OWENAWILLIN**Tributary of : Sea - Ballyness Bay OS Catchment No: 20
OS Grid Ref : B 895 310 Date(s) Surveyed : 22/10/2003

Sampling Stations Biological Quality Ratings (O Values) No. Location 1990 1994 1997 2000 2003 Binanea Bridge 4 0200 3-4 3-4 0300 Bridge E. of Derryconor 4

Assessment: The Owenawillin has a low faunal diversity and is lacking some of the typical sensitive mayfly species but this may be due to the acidic nature of the system which drains a granite catchment with a predominantly blanket peat soil with some pasture in the vicinity of the sampling station 0200. The corry lake Lough Lagha is located at the top of the catchment at 121m altitude.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Binanea Bridge	189000	431012	1	DL
0300	Bridge E. of Derryconor	0	0	0	DL

River and Code : **OWENCARROW** 38/O/03

Tributary of : Glen Lough OS Catchment No: 27 OS Grid Ref : C 087 278 Date(s) Surveyed : 08/10/2003

Sampl	ling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1973	1980	1985	1990	1994	1997	2000	2003
0100	Glenveagh Bridge	4	4	_	_	_	_	_	-
0150	500 m d/s Glenveagh Bridge	-	-	4	4-5	4	4	4-5	4-5
0200	Owencarrow Bridge	-	5	5	5	-	-	-	-
0300	New Bridge	5	-	5	5	4	4-5	4-5	4-5

Assessment: The Owencarrow River was of high quality in October 2003. This river flows from the Glenveagh National Park.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Glenveagh Bridge	204164	423018	6	DL
0150	500 m d/s Glenveagh Bridge	204314	423444	6	DL
0200	Owencarrow Bridge	206196	425780	2	DL
0300	New Bridge	207803	427068	2	DL

River and Code : **OWENCRONAHULLA** 38/O/09

Tributary of : Sea - N. of Gweedore Bay OS Catchment No: 19 OS Grid Ref : B 809 266 Date(s) Surveyed : 22/01/2003

Sampl	ling Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Near Attatantee	5	-	_	_	-		
0300	Stramartin Bridge	5	4-5	4-5	4-5	4-5		

Assessment: Satisfactory.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Near Attatantee	0	0	0	DL
0300	Stramartin Bridge	181881	427328	1	DL

River and Code : **OWENEA**Tributary of : Sea - Loughros More Bay OS Catchment No: 50
OS Grid Ref : G 734 919

Date(s) Surveyed : 10/09/2003

Statio	Stations						ogical Qu	ality Rati	ings (Q V	(alues)
No.	1971	1973	1977	1980	1984	1990	1994	1997	2000	2003
0020	_	_	_	_	_	4-5	_	_	_	_
0040	_	_	_	-	_	_	5	4-5	4-5	4-5
0050	-	-	-	5	5	5	-	-	-	-
0100	5	5	5	5	4-5	5	5	4-5	4-5	4
0200	-	-	-	5	3-4	4-5	-	-	-	-
0300	5	5	5	5	5	4	4	5	4	4
0400	-	-	-	4	4	4-5	-	-	-	-
0500	5	5	5	4	4	4	4	4-5	4	4

Assessment: Water quality in Owenea River was satisfactory when sampled in September 2003. The upper site sampled (0040) is marred by an unsightly, illegal rubbish dump.

Samp	oling Stations	National	Grid Ref.	Discovery	County	
No.	Location	X	Y	Series No.	Code	
0040	Br SW Tangaveane	189049	393792	11	DL	
0050	Martin's Bridge	188500	394100	0	DL	
0100	Bridge S. of Mullanmore	184774	393748	11	DL	
0200	Mullanierin Bridge	181489	393601	11	DL	
0300	Footbr 2 km d/s Stracashel R	180635	393332	11	DL	
0400	N. of Clonconwal	176607	392715	10	DL	
0500	Owenea Bridge	173693	392030	10	DL	

River and Code : **OWENNAMARVE**Tributary of : Sea - Trawenagh Bay OS Catchment No: 47
OS Grid Ref : B 781 066 Date(s) Surveyed : 10/09/2003

Sampl	ing Stations	Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0100	Owennamarve Bridge	4	4	-	4-5	4		
0200	Bridge d/s Lough Namurrig	4	-	-	-			
0300	Derrydruck Bridge	4	4	4-5	4-5	4-5		

Assessment: Satisfactory.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Owennamarve Bridge	183552	408021	1	DL
0300	Derrydruck Bridge	178564	406572	10	DL

River and Code : **OWENTOCKER**Tributary of : Sea - Loughros More Bay
OS Grid Ref : G 728 906

OS Catchment No: 56
Date(s) Surveyed : 14/08/2003

Statio		10.00	40	1000		ogical Qu				
No.	1971	1973	1977	1980	1984	1990	1994	1997	2000	2003
0010	_	-	-	-	-	-	4	4-5	4-5	4
0020	-	-	-	5	5	5	-	-	-	-
0050	-	5	-	5	5	5	4	4-5	4-5	4
0090	-	-	-	-	-	4-5	-	-	-	-
0100	-	-	5	5	5	-	4-5	-	4-5	4
0200	-	-	-	5	4-5	-	-	-	-	-
0300	5	5	5	4	3-4	4	4	4	2-3	3

Assessment: While quality was satisfactory in the upper Owentocker (0010, 0050, 0100), quality was reduced in comparison with 2000. A lower abundance of some key pollution-sensitive taxa moderate amounts of filamentous algae and a greater degree of siltation was noted. Downstream of Ardara moderate pollution was noted due to discharges emanating from the town.

Samp	oling Stations	National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0010	Ford E Tullybane	183410	389177	11	DL
0020	Bridge E. of Lough Nillan	181000	388900	11	DL
0050	Bridge S. of Kilrean	179485	390738	10	DL
0090	Br E. of Garvegort	177495	391577	10	DL
0100	Br NW Cashel	176335	390800	10	DL
0200	Bridge S. of Doochill	174894	390595	10	DL
0300	500 m d/s Bridge in Ardara	173089	390680	10	DL

River and Code : **OWENVEAGH**Tributary of : Lough Veagh OS Catchment No: 27
OS Grid Ref : C 004 190 Date(s) Surveyed : 08/10/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0080	At Glenveagh Cottage	5	5	5	5	5		

Assessment: The Owenveagh River located in the Glenveagh National Park was in satisfactory condition with little change from previous surveys.

Sampling Stations		National	National Grid Ref.		County	
No.	Location	X	Y	Series No.	Code	
0080	At Glenveagh Cottage	199353	418299	6	DL	

River and Code : **OWENWEE (DOOCHARRY)** 38/O/07
Tributary of : Gweebarra OS Catchment No: 48
OS Grid Ref : B 870 069 Date(s) Surveyed : 11/09/2003

Sampl	ing Stations	Biological Quality Ratings (Q Values)					
No.	Location	1990	1994	1997	2000	2003	
0100	Br 500 m N.E. of Dernafanogy Br	5	4-5	-	4-5	5	
0250	500 m u/s Gweebarra River	5	4-5	4-5	5	4-5	

Assessment: The Owenwee (Doocharry) was in satisfactory condition over its length. At Station 0100, however, a car had been dumped into the river causing some potential for oil spills into the river. The car should be removed in order to minimise such impacts.

Sampling Stations		National Grid Ref.		Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br 500 m N.E. of Dernafanogy Br	190696	410020	1	DL
0250	500 m u/s Gweebarra River	187425	407336	11	DL

River and Code : **OWENWEE (DUNLEWY)** 38/O/12
Tributary of : Cronaniv Burn OS Catchment No: 23
OS Grid Ref : B 930 187 Date(s) Surveyed : 12/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)						
No.	Location	1990	1994	1997	2000	2003		
0200	Bridge u/s Cronaniv Burn	5	4	5	4-5	4-5		

Assessment: This tributary of Dunlewy Lough was again satisfactory in September 2003. A slight but noticeable amount of siltation and algal growth prevented it from reaching the highest Q5 status.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0200	Bridge u/s Cronaniv Burn	193125	418757	1	DL

River and Code : **OWENWEE (GLEN LOUGH)** 38/O/13
Tributary of : Glen Lough OS Catchment No: 27
OS Grid Ref : C 099 284 Date(s) Surveyed : 07/10/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0100 Bridge u/s Glen Lough

5 5 4-5 4-5 5

Assessment: This Glen Lough tributary was of high quality when surveyed in October 2003. The catchment upstream is predominantly upland bog and sections of it are in the Derriscligh Bog NHA. A significant number of new houses have been built recently in a ribbon along the south east shore of Lough Glen - it is vital that septic tanks are maintained in areas of wet soils and poor drainage adjacent to a sensitive lake such as Glen Lough if water pollution is to be avoided.

Sampling Stations		Nationa	l Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge u/s Glen Lough	210361	428281	2	DL

River and Code : **OWENWEE (LOUGHROS)** 38/O/08
Tributary of : Sea - Loughros Beg Bay OS Catchment No: h6
OS Grid Ref : G 664 905 Date(s) Surveyed : 14/08/2003

Sampling Stations Biological Quality Ratings (O Values) Location 1990 1994 1997 2000 2003 No. 4-5 4-5 4 0050 Bridge 1 km u/s Maghera 4-5 4-5

Assessment: This Loughros Bay tributary was satisfactory. A significant decline in the number of sensitive macroinvertebrates species was noted, however, in 2003. Based on the species composition which included some brackish water species it is felt that this was most likely due to a saline intrusion event rather than being due to pollution from the catchment upstream - although there is some severe overgrazing in the upper catchment. This is part of the Slieve Tooey NHA and the catchment has significant areas of natural grasslands.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge 1 km u/s Maghera	166107	390108	10	DL

River and Code : **PORT STREAM**Tributary of : Sea: N. of Sturrall OS Catchment No: h6
OS Grid Ref : G 547 890 Date(s) Surveyed : 09/12/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1994
1997
2000
2003

0100 Br S of Port

3-4
4-5
5
4-5

Assessment: Satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Br S of Port	154967	388982	10	DL

River and Code : RAY

Tributary of : Sea - S.W. of Dooros Point OS Catchment No: 3
OS Grid Ref : B 948 348

Date(s) Surveyed : 21/10/2003

Sampl	ing Stations		\mathbf{B}^{i}	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1973	1985	1990	1994	1997	2000	2003
0050	Altderry Bridge	-	-	5	-	-	-	-
0100	Bridge u/s Fiddlers Bridge	4-5	4-5	5	4	4	4	4
0200	Drumavoghy Bridge	5	5	5	4-5	4-5	4	4

Assessment: The Ray is impacted by the Muckish Landfill leachate, which affects the Duvowen River (qv) to a certain degree. Quality is satisfactory but it is not achieving its full potential with too much algal growth and a lower number of sensitive species than would be expected for a river in this upland blanket bog and moorland location. The Ray drains two SAC regions - Muckish Mountain and the Cloghernagore Bog/Glenveagh National Park complex.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Bridge u/s Fiddlers Bridge	195906	429693	1	DL
0200	Drumavoghy Bridge	195221	432634	1	DL

River and Code : SHALLOGAN 38/S/03

Tributary of : Stracashel OS Catchment No: 50 OS Grid Ref : G 838 965 Date(s) Surveyed : 10/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990
1994
1997
2000
2003

0300 Just u/s Stracashel River 4-5 4-5 4-5 4

Assessment: Satisfactory.

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0300	Just u/s Stracashel River	183748	396566	11	DL

River and Code : SRUHANNAMEEL 38/S/02

Tributary of : Lough Nacung Upper OS Catchment No: 23 OS Grid Ref : B 902 188 Date(s) Surveyed : 12/09/2003

Sampling Stations
No. Location

Biological Quality Ratings (Q Values)
1990 1994 1997 2000 2003

0100 Just u/s Lough Nacung

5 4 4 4-5 4-5

Assessment: The Sruhannameel was unpolluted when surveyed in September 2003. The entire catchment is in the Cloghernagore/Glenveagh SAC.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0100	Just u/s Lough Nacung	190140	418846	1	DL

River and Code : STRACASHEL 38/S/01

Tributary of : Owenea OS Catchment No: 50 OS Grid Ref : G 813 937 Date(s) Surveyed : 10/09/2003

Sampling Stations		Biological Quality Ratings (Q Values)					lues)		
No.	Location	1973	1977	1981	1990	1994	1997	2000	2003
0050	Bridge d/s Shallogan River	_	_	5	5	4-5	5	5	4-5
0100	Bridge S.E. of Woodtown	5	5	5	-	-	-	-	-
0200	500 m d/s Bridge in Glenties	4-5	3-4	4-5	3-4	4	4	4	3

Assessment: The upper Stracashel (0050) and its tributary the Shallogan are in satisfactory condition. Downstream of Glenties, however, there is clear evidence of sewage pollution (0200).

STRACASHEL Continued

Sampling Stations		National (Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0050	Bridge d/s Shallogan River	183825	396395	11	DL
0100	Bridge S.E. of Woodtown	182100	395200	0	DL
0200	500 m d/s Bridge in Glenties	181655	394017	11	DL

River and Code : **TULLAGHOBEGLY**Tributary of : Sea - Ballyness Bay OS Catchment No: 24
OS Grid Ref : B 923 320 Date(s) Surveyed : 22/10/2003

Sampl	ling Stations		Bi	iologica	l Qualit	y Rating	gs (Q Va	alues)
No.	Location	1973	1986	1990	1994	1997	2000	2003
0090	U/s Ford 1.5 km d/s L Altan	_	_	5	4-5	4-5	4-5	4
0100	Bridge 1.5 km d/s Lough Altan.	-	5	2-3	2-3	2	2-3	1-2
0190	W. of Meendarragh	-	-	4-5	-	-	-	-
0200	2.5 km S.W. of Drumfin	5	4	-	-	-	-	-
0300	Big Bridge	-	5	5	-	-	-	-
0400	Bellina Bridge	-	5	5	4-5	4-5	4	4-5

Assessment: A further deterioration was noted in the Tullaghobegly downstream of the smolt rearing unit below L. Altan (Stn 0100) where it is now seriously polluted. The river recovers by the time it reaches Falcarragh (0400) and quality was once again satisfactory at that point.

Sampling Stations		National	Grid Ref.	Discovery	County
No.	Location	X	Y	Series No.	Code
0090	U/s Ford 1.5 km d/s L Altan	193774	426110	1	DL
0100	Bridge 1.5 km d/s Lough Altan.	193618	426266	1	DL
0200	2.5 km S.W. of Drumfin	192600	432000	0	DL
0400	Bellina Bridge	192500	432072	1	DL

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APPENDIX I

BIOLOGICAL AND PHYSICO-CHEMICAL SURVEILLANCE AND WATER QUALITY ASSESSMENT OF RIVERS

APPENDIX I BIOLOGICAL AND PHYSICO-CHEMICAL SURVEILLANCE AND WATER QUALITY ASSESSMENT OF RIVERS

INTRODUCTION

The various uses of rivers inevitably involve conflicting interests and often such uses disrupt river ecology. The fact that several of the more important beneficial uses of rivers (e.g. amenity, waste disposal) abstraction, dependent on biological processes is rarely appreciated: if the self-purification process, for example, is disrupted (e.g. by pollution, drainage or over-abstraction) some or all beneficial uses may be impaired or lost. It is important, therefore, to keep ecological disruption to a minimum and to maintain the aquatic ecosystem in a healthy, functional condition. Progress towards this goal can be monitored by chemical or biological means or, preferably, by a combination of both. In general it could be said that whilst physico-chemical analysis may measure the causes of pollution (i.e. the pollutants) biological analysis is the only means whereby the ecological effects of pollution can be measured.

The most commonly encountered forms of pollution in this country are eutrophication and organic pollution; less frequently encountered are non-organic types such as toxic pollution (e.g. by sheep dip or industrial chemicals), arising from over-grazing, siltation (e.g. drainage, quarrying or stone-cutting operations) and, in recent years, acidification in sensitive afforested areas. The term eutrophication is used to describe the abnormal production of plants of all kinds (micro- and macroscopic) in surface waters affected by excessive inputs of the plant nutrients nitrogen and phosphorus. Such inputs arise a) by the leaching or overland runoff from agricultural lands of inorganic nitrogen and phosphorus and b) by the breakdown of organic matter such as sewage, food-processing or other industrial wastes or land-spread animal manure slurries. Eutrophication of surface waters may be also encountered in areas where land is disturbed for peat harvesting or forestry purposes. Organic pollution is a term used to describe the oxygen depleting effects caused by the breakdown of

organic wastes (e.g. sewage) in receiving waters. This bio-degradation or self-purification process, as it is called, is dependent, initially at least, on aerobic micro-organisms which reduce the organic material to its constituent elements and in the process consume oxygen. In the presence of organic matter, therefore, ambient dissolved oxygen (DO) levels fall whilst the biochemical oxygen demand (BOD) - a measurement of the rate of oxygen usage by aerobic micro-organisms - rises; this process also leads to eutrophication due to the release of compounds of nitrogen and phosphorus.

The measurement of the ambient concentrations of such parameters, therefore, gives a good indication of the condition of the water as regards contamination by organic waste. Traditionally, this type of waste has mostly originated at 'point-source' discharges (sewage, industrial wastes), but in recent years an ever increasing proportion arises from 'diffuse' agricultural sources i.e., run-off from land of wastes from intensive animal-rearing operations, the development of which in the past 15 to 20 years has been accompanied by a very marked increase in the extent of eutrophication.

All types of pollution cause physico-chemical and biological changes in receiving waters and so the assessment of water quality/pollution may be approached from the chemical or the biological aspect. In practice, a combination of both approaches is preferable to either on its own.

Biological Assessment

In the presence of pollution, characteristic and well-documented changes are induced in the flora and fauna of rivers and streams. Particularly well documented are the changes brought about by organic pollution in the macroinvertebrate community i.e., the immature aquatic stages of aerial insects (mayflies,

stoneflies etc.) together with Crustacea (e.g. shrimps), Mollusca (e.g. snails and bivalves), Oligochaeta (worms) and Hirudinea (leeches). The changes which occur are due to the varying sensitivities of the different components of the community to the stresses caused by pollution. It is known that similar organisms inhabit similar habitats and that the most sensitive species inhabit the riffle areas. It is also well known that community diversity declines in the presence of pollution and that sensitive species are progressively replaced by more tolerant forms as pollution increases. Ideally, all the components of the aquatic biota (the micro- and macro-fauna and flora) should be utilised but in practice macroinvertebrate community analysis is found to be satisfactory for routine water quality monitoring purposes.

For the purposes of the EPA assessment procedure benthic macroinvertebrates have been divided into five arbitrary 'Indicator Groups' as follows: Group A, the sensitive forms, Group B, the less sensitive forms, Group C, the tolerant forms, Group D, the very tolerant forms and Group E, the most tolerant forms. These groups, and their relationships with the Biotic Index (Q values) are set out below.

In contrast to physico-chemical surveys which extend throughout the year, biological surveys are usually undertaken in the summer-autumn period (June-October) when flows are likely to be relatively low and water temperatures highest. Surveys during this period are likely, therefore, to coincide with the worst conditions to be expected in those reaches affected by waste inputs.

Biological material for examination is obtained by sampling in the shallower, faster-flowing areas (riffles) and the assessment of water quality is made on site. Having determined the relative proportions of the various organisms in the sample, water quality is inferred by a comparison of this data with that which might be expected from unpolluted habitats of the type under investigation. Other relevant factors such as the intensity of algal and/or weed development, water turbidity, bottom siltation, substratum type, current speed and water depth, DO saturation and water temperature, are also taken into account in the assessment procedure. Relationships between water quality macroinvertebrate community structure are usually described by means of a numerical scale

of values. Such a compression of biological information inevitably results in a loss of meaningful information but some such procedure is essential if this information is to be meaningful to non-biologists. The EPA scheme of Biotic Indices or Quality (Q) Values and its relationship to water quality is set out here.

'Q'	Communi	ty Water	
Value	Diversity	Quality	Condition*
Q5	High	Good	Satisfactory
Q4	Reduced	Fair	Satisfactory
Q3	Low Do	oubtful	Unsatisfactory
Q2	Very Low	Poor	Unsatisfactory
Q1	Little/Non	e Bad	Unsatisfactory

* 'Condition' refers to the likelihood of interference with beneficial or potential beneficial uses.

The intermediate values (Q1-2, 2-3, 3-4 etc.) denote transitional conditions. The scheme mainly reflects the effects of organic pollution (i.e. deoxygenation and eutrophication) but where a toxic effect is apparent or suspected the suffix '0' is added to the biotic index (e.g. Q1/0, 2/0 or 3/0). An asterisk after the Q value indicates something worthy of special attention, typically heavy siltation of the substratum. The scheme may be further simplified as shown by the classification set out below:-

Biotic	Quality Quali	ty
Index	Status	Class
Q5, Q4-5, Q4	Unpolluted	Class A
Q3-4	Slightly Polluted	Class B
Q3, Q2-3	Moderately Polluted	Class C
Q2, Q1-2, Q1	Seriously Polluted	Class D

Class A waters are those in which problems relating to existing or potential beneficial uses are unlikely to arise and they are, therefore, regarded as being in a 'satisfactory' condition. Classes B, C and D are to a lesser or greater extent 'unsatisfactory' in this regard. For example, the main characteristic of Classes B and C waters is eutrophication which may interfere with the amenity, abstraction or fisheries potential. In Class D waters excessive organic loading lead to deoxygenation and may produce 'sewage fungus' growths, and as a consequence most beneficial uses are severely curtailed or eliminated.

Biolog	gical Assessment	of Water Quality in	Eroding Reaches	(Riffles & Glide	es) of Rivers and	Streams*
Biotic	Indices (Q Values) and	l typical associated macroi	nvertebrate community	structure. See overlea	f for details of the Fau	nal Groups.
Macroinvertebrate Faunal Groups**	Q5	Q4	Q3-4	Q3	Q2	Q1
Group A	At least 3 taxa well represented	At least 1 taxon in reasonable numbers	At least 1 taxon Few - Common	Absent	Absent	Absent
Group B	Few to Numerous	Few to Numerous	Few/Absent to Numerous	Few/Absent	Absent	Absent
Group C	Few	Common to Numerous Baetis rhodani often Abundant Others: never Excessive	Common to Excessive (usually Dominant or Excessive)	Dominant to Excessive	Few or Absent	Absent
Group D	Few or Absent	Few or Absent	Few/Absent to Common	Few/Absent to Common	Dominant to Excessive	Few or Absent
Group E	Few or Absent	Few or Absent	Few or Absent	Few or Absent	Few / Absent to Common	Dominant
		Add	itional Qualifying Cri	teria		
Cladophora spp. Abundance	Trace only or None	Moderate growths (if present)	May be Abundant to Excessive growths	May be Excessive growths	Few or Absent	None
Macrophytes (Typical abundance)	Normal growths or absent	Enhanced growths	May be Luxuriant growths	May be Excessive growths	Absent to Abundant	Present/Absent
Slime Growths (Sewage Fungus)	Never	Never	Trace or None	May be Abundant	May be Abundant	None
Dissolved Oxygen Saturation	Close to 100% at all times	80% - 120%	Fluctuates from < 80% to >120%	Very unstable. Potential fish-kills	Low (but > 20%)	Very low, sometimes zero
Substratum Siltation	None	May be light	May be light	May be considerable	Usually heavy	Usually very heavy and anaerobic

Note occurrence/abundance of groups in above table refers to <u>some</u> but not necessarily <u>all</u> of the constituents of the group. The Additional Qualifying Criteria apply in virtually all circumstances. Single specimens may be ignored. Seasonal and other relevant factors (i.e., drought, floods) must be taken into account.

^{*} Macroinvertebrate criteria do not apply to rivers with mud, bedrock or sand substrata, very sluggish or torrential flow, head-water or high altitude streams and those affected by significant ground water input, excessive calcification, drainage, canalisation, culverting, marked shading etc.

** See Further Observations overleaf.

	Macroinvertebrat	es grouped according	g to their sensitivity to	organic pollution	
TAXA	Group A	Group B	Group C	Group D	Group E
	Sensitive	Less Sensitive	Tolerant	Very Tolerant	Most Tolerant
Plecoptera	All except <i>Leuctra</i> spp.	Leuctra spp.		·	
	Heptageniidae	Baetidae	Baetis rhodani		
Ephemeroptera	Siphlonuriidae	(excl. Baetis rhodani)	Caenidae		
_	Ephemera danica	Leptophlebidae	Ephemerellidae		
Trichoptera		Cased spp.	Uncased spp.		
Odonata		All taxa			
Megaloptera				Sialidae	
Hemiptera		Aphelocheirus aestivalis	All except A. aestivalis		
Coleoptera			Coleoptera		
•			Chironomidae (excl.		Chironomus spp.
Diptera			Chironomus spp.)		Eristalis sp.
-			Simuliidae Tipulidae		-
Hydracarina			Hydracarina		
			Gammarus spp.	Asellus spp.	
Crustacea			Austropotamobius	Crangonyx spp.	
			pallipes	- ,	
			Gastropoda	Lymnaea peregra	
Gastropoda			(excl. Lymnaea peregra	Physa sp.	
-			& Physa sp.)	, ,	
Lamellibranchiata	Margaritifera		Anodonta spp.	Sphaeriidae	
	margaritifera				
Hirudinea			Piscicola sp.	All except <i>Piscicola</i> sp.	
Oligochaeta					Tubificidae
Platyhelminthes			All		

Observations on Q Determination Scheme Q5 assigned if:-

- a) Group A at least common*: Typically with either one or more Heptageniidae spp or Ephemera sp. plus three or more Plecoptera spp or else four or more Plecoptera species present
- b) Group B ranging from scarce/absent to numerous
- c) Group C not more than *common** <u>but</u>
 <u>B. rhodani may be dominant*</u>
- d) Groups D and E scarce* or absent.
- e) Macrophytes, if present, diverse and not excessive in development.
- f) Filamentous algae if present not excessive
- g) *Cladophora*, sewage 'fungus' and other slime growths/complexes absent.
- h) substrata clean and unsilted.
- i) DO close to 100% at all times.
- * As defined below.

Q3 assigned if:-

- a) Group A absent.
- b) Group B fair numbers*, scarce* or absent
- c) Group C usually *excessive** (*Gammarus*, *Hydropsyche* etc. may be fungus infested).
- a) Groups D (excl. Asellus) common*, scarce* or absent
- e) Group E scarce* or absent
- f) Macrophytes, if present often silted and/or infested with epiphytic algae.
- g) Cladophora usually excessive.
- h) Sewage 'fungus' and other slime growths/complexes may be considerable.
- i) Substrata may be heavily silted.
- j) DO ranging from <80 to >120%.

Q4 asssigned if:-

- a) At least *one* Group A taxon present in, at least, *fair numbers**
- b) Group B taxa may be *common**, *scarce** or absent
- c) B. rhodani usually dominant* Other Group C taxa never excessive*
- d) Groups D and E may be present in *small* numbers* or absent
- e) Macrophyte & algal growths not excessive
- f) Cladophora, if present, not excessive
- g) Sewage 'fungus' and other slime growths
- h) Substrata may be lightly silted
- i) DO ranging from 80 to 120%

Q2 assigned if:-

- a) Groups A and B absent.
- b) Group C scarce* or absent.
- c) Asellus sp. common* to excessive*. Other Group D taxa may be common*, numerous* or excessive*.
- d) Group E may be common*.
- e) Macrophytes, if present silted and/or infested with epiphytic algae/sewage fungus.
- f) Cladophora not usually apparent.
- g) Sewage fungus and other slime growths/complexes usually considerable.
- h) Substrata usually heavily silted. Often smells of sewage/detergent.
- i) DO usually quite low (20 50%)

Q3-4 assigned if:-

- a) At least *one* Group A taxon present in, at least *small numbers**.
- b) Group B common*, scarce* or absent
- c) Group C numerous*, dominant* or excessive*.
- d) Group D common*, scarce* or absent
- e) Group E scarce* or absent.
- f) Macrophytes and algal growths usually luxuriant, often excessive.
- g) Cladophora, usually excessive.
- h) Sewage 'fungus' and other slime growths sometimes present in small amounts.
- i) Substrata may be considerably silted.
- j) DO ranging from < 80 to > 120%.

Q1 assigned if:-

- a) Groups A, B and C absent.
- b) Groups D scarce* or absent
- c) Group E dominant*.
- d) Macrophytes absent.
- e) Cladophora absent.
- f) Sewage 'fungus' and other slime growths/complexes present or absent.
- g) Substrata usually heavily silted with anaerobic deposits. Often smells of H₂S.
- h) DO usually very low, sometimes zero.

Continued

- 1) The above scheme outlines the typical macroinvertebrate composition of rivers and streams unaffected (Q5) or variously affected (Q4 to Q1) by organic waste inputs.
- 2) Where possible all available habitats should be sampled by kick sampling, stone washing and weed sweeping.
- 3) Single specimens may be ignored as they are likely to have drifted from upstream.
- 4) Q5 only ascribed in absolutely pristine conditions with diverse and balanced faunal community.
- 5) Providing points f and g (at Q5 and Q4 above) not breached Q5 and Q4 may be <u>also</u> ascribed where faunal criteria not met due to:-
- a) significant ground-water input
- b) very hard, calcareous conditions
- c) very oligotrophic conditions
- d)other relevant factors
- 6) The terms "Taxon/Taxa" are defined by the level of identification for each Class/Order as follows:-

Platyhelminthes	genus
Oligochaeta	family
Hirudinea	genus
Mollusca	genus
Crustacea	family
Plecoptera	genus
Ephemeroptera	genus
Trichoptera	genus
Odonata	genus
Megaloptera	genus
Hemiptera	genus
Coleoptera	family
Diptera	family
(Chironomidae :-	thummi-plumosus
or non-thum	ımi-plumosus)
Hydracarina	presence

Abundance	Approximate Percentage
Category	Frequency of Occurrence*
Present	1 or 2 individuals
Scarce/Few	<1%
Small numbers	<5%
Fair numbers	5 -10%
Common	10 - 20%
Numerous	25 - 50%
Dominant	50 - 75%
Excessive	>75%

^{*} Per 2 minute kick sample + stone washing.

Eutrophication is typically to be found in the recovery zones below seriously or moderately organically polluted reaches or, as stated above it may arise as a consequence of the run-off of nutrients from agricultural or forestry land. Waters assessed as Q3-4 (slightly polluted - Class B) are essentially transitional between the satisfactory Class A and the unsatisfactory Class C but it was considered prudent to classify such waters as unsatisfactory primarily because of the potential adverse effects on game fish (salmon and trout) and game fisheries. Wild game-fish will be severely stressed or killed by nocturnal DO depletion which may occur in such waters, particularly in times of low flow and elevated temperature. Where such stress is a regular feature game fish will disappear and they may be replaced by more tolerant varieties of coarse fish. Even if game fish survive, the angling potential of such waters may be severely impaired by the filamentous algal and/or weed growths which are a common feature of slightly polluted waters.

Table I.1 (below) sets out some of the principal characteristics of the four water quality classes and the relationship between these and the biotic indices (Q1 to Q5).

Physico-Chemical Assessment of Water Quality

For the assessment of organic pollution the more commonly measured parameters include DO, BOD, Oxidised Nitrogen Ammonia, (Nitrites plus Nitrates) and Phosphates. Continuous records of concentration and flow would form the ideal basis for water quality assessment but in practice this is impossible for financial, technical and logistical reasons. Reliance must, therefore, be placed on discrete samples; because such samples constitute only a minute fraction of the whole body of water under investigation and because they are only representative of conditions at the particular time of sampling the interpretation of data arising from such samples requires great care.

Unlike the biological assessment of water quality, where the incidence and intensity of pollution is based on the degree to which the chosen organism association deviates from its expected natural diversity, the physico-chemical assessment is usually based on a comparison of the measurements made with water quality criteria or with standards derived from such criteria. The setting of national standards for water, sewage and other effluents by the Minister for the Environment is provided for

Table I.1 General characteristics of the various Biological Quality Classes

Quality Classes	Clas	s A	Class B	Class C	Cla	ass D
Quality Ratings (Q)	Q5	Q4	Q3-4	Q3	Q2	Q1
Pollution Status	Pristine, unpolluted	Unpolluted	Slight Pollution	Moderate Pollution	Heavy Pollution	Gross Pollution
Organic Waste Load	None	None	Light	Considerable	Heavy	Excessive
Maximum B.O.D.	Low (< 3 mg/l)	Low (< 3 mg/l)	Often elevated	High at times	Usually high	Usually very high
Dissolved Oxygen	Close to 100%	80%-120%	<80% to >120%	Very unstable.	Low to zero	Very low or zero
Annual Median ortho- Phosphate	~0.015 mg P/l	~0.030 mg P/l	~0.045 mg P/l	~0.070 mg P/l	usually > 0.1 mg P/l	usually > 0.1 mg P/l
Siltation	None	May be light	May be light	May be considerable	Usually heavy	Usually v. heavy and anaerobic
'Sewage Fungus'	Never	Never	Never	May be some	Usually abundant	May be abundant
Filamentous Algae	Limited development	Diverse communities	Cladophora may be abundant	Cladophora may be excessive	May be abundant	Usually none
Macrophytes	Good diversity Limited growths	Considerable growths	Reduced diversity Luxuriant growths	Limited diversity Excessive growths	Tolerant species only. May be abundant.	Usually none or tolerant species only.
Macroinvertebrates (from shallow riffles)	Diverse communities. Normal density. Sensitive forms usually numerous.	High diversity. Increased density. Sensitive forms scarce or common.	Very high diversity. Very high density. Sensitive forms scarce.	Sensitive forms absent. Tolerant forms common. Low diversity.	Tolerant forms only. Very low diversity.	Most tolerant forms. Minimal diversity.
Water Quality	Highest quality	Fair quality	Variable quality	Doubtful quality	Poor quality	Bad quality
Abstraction Potential	Suitable for all	Suitable for all	Potential problems	Advanced treatment	Low grade abstractions	Extremely limited
Fishery Potential	Game fisheries	Good game fisheries	Game fish at risk	Coarse fisheries	Fish usually absent	Fish absent
Amenity value	Very high	High	Considerable	Reduced	Low	Zero
Condition	Satisfactory	Satisfactory	Transitional	Unsatisfactory	Unsatisfactory	Unsatisfactory

under the Local Government (Water Pollution) Act, 1977 and the Environmental Protection Agency Act, 1992. Regulations setting standards for phosphorus (S.I. No. 258 of 1998) have been issued under the Water Pollution Act by the Minister in order to combat eutrophication of surface waters and to give effect to the requirements of Council Directive 76/464/EEC on pollution caused by certain dangerous substances. The recently issued phosphorus regulations are unique in that they not only set standards for the element in question but they also take into account the biological quality of rivers and the trophic status of lakes as assessed by EPA. This is a recognition of the eutrophication effects of excess phosphorus and of the biological assessment schemes used by EPA. The Regulations apply to rivers and lakes assessed by EPA in the period 1995 to 1997 and require that *either* the chemical or the biological criteria specified must be met by the 31st of December 2007 unless there are good reasons - which are specified - why these criteria cannot be met. For waters surveyed subsequent to 1997 the standards must be met within ten years of the first survey.

Standards for Phosphorus in Rivers

 $(_{II}g P/I = micro-grammes per litre).$

The annual *median* concentration of <u>molybdate</u> reactive phosphate shall not exceed

a) $15 \mu g P/l$ in Q5 waters b) $20 \mu g P/l$ in Q4-5 waters c) $30 \mu g P/l$ in Q4 waters d) $50 \mu g P/l$ in Q3-4 waters e) $70 \mu g P/l$ in Q3 waters or

f) that existing satisfactory biological quality conditions (i.e., Q5, Q4-5 and Q4) be maintained and

g) that less than satisfactory biological conditions (Q3-4 or less) be improved. In general the improvement required is of half a quality rating (e.g., Q3-4 to Q4) but seriously polluted waters (Q2 or less) must be restored to Q3 as a minimum requirement

Standards for Phosphorus in Lakes

The annual **mean** concentration of <u>total</u> <u>phosphorus</u> shall fall within the ranges

- a) \leq 5 $_{\mu}g$ P/l in Ultra-Oligotrophic lakes
- b) >5 to $\le 10 \, \mu g \, P/l$ in Oligotrophic lakes
- c) >10 to $\le 20 \,\mu g \, P/l$ in Mesotrophic lakes
- d) >20 to \leq 50 μ g P/l in Eutrophic lakes.

or

- e) that existing satisfactory biological quality conditions (defined as Ultra-Oligotrophic, Oligotrophic and Mesotrophic status) be maintained and
- f) that unsatisfactory biological conditions (Eutrophic, Hypertrophic) be improved as follows Eutrophic waters to achieve Mesotrophic status and Hypertrophic waters to achieve Eutrophic status.

In addition to the phosphorus regulations, legally binding standards for water quality in Ireland arise from various EC Directives. Of particular relevance in the present context are the 'Surface Water' and 'Freshwater Fish' Directives (C.E.C., 1975, 1978). The former deals with the quality requirements of waters used as sources of public supply while the latter sets standards for waters harbouring game or coarse fisheries, although these are legally binding only in the case of 'designated' waters. Both of these Directives are now the subject of National Regulations, (Minister for the Environment, 1988, 1989). A digest of these standards and guidelines for the more important of the physico-chemical parameters of pollution by organic wastes as appropriate to fishery salmonid) waters is set out below:

FreshwaterFish	Water Quality
Regulations	Guidelines

Dissolved Oxygen (DO):

50% of samples $\geq 9 \text{ mg/l O}_2$ 50% of samples $\geq 9 \text{ mg/l O}_2$ 95% of samples $\geq 6 \text{ mg/l O}_2$ No sample < 4 mg/l O₂

Biochemical Oxygen Demand (BOD):

\leq 5 mg/1	<u>≤</u> 4 mg/1
Ammonia:	
\leq 0.02 mg/l NH3 or	\leq 0.02 mg/l NH3
\leq 0.016 mg/l N*	<0.016mg/l N*
\leq 0.8 mg/l N**	_
-	

* = un-ionised ** = total

These limits are more stringent than those applicable to the same parameters in abstraction

waters receiving standard -treatment, as set out in the 'Surface Water' Regulations. The same position holds in the case of most other water quality parameters so that the suitability of waters for fisheries is usually a good assurance of their suitability for abstraction and for many other uses. The major exceptions are nitrate and microbiological quality in which cases even high levels of contamination will not *directly* affect fish life.

Advantages and Shortcomings of the two **Quality Assessment Methods**

Physico-chemical techniques have the merit of being precise, discriminatory and quantitative and they are, therefore, essential if unpolluted waters are to be chemically typed or if pollutants in water are to be identified and their concentrations quantified. Information of this type is essential to good water management as it provides the basic information required by licensing authorities for the assessment of compliance by licensed discharges with prescribed standards. With regard to general water quality monitoring, however, and particularly where a large number of clean rivers are to be monitored - as in this country - a distinct disadvantage of a purely chemical approach is the cost; whereas just two biological samples per annum (winter and summer) would normally provide a reasonably accurate assessment of average water quality, a considerably greater number of physico-chemical samples would normally be required to achieve such an assessment with the same degree of confidence.

A knowledge of the types of pollutants likely to be present is a prerequisite for effective chemical monitoring. With the increasing complexity of many industrial effluents this may prove to be certain difficult not impossible in circumstances. Furthermore, if a discharge is irregular or surreptitious there is a good chance that it will not be detected at all by routine chemical monitoring programmes. Since benthic macroinvertebrate communities respond to a wide range of water quality characteristics and pollutants and because they can reflect the effects of mixed pollutants these shortcomings can often be overcome by biological analysis.

A disadvantage of the biological approach is that, although capable of detecting ecological change, indicative of water quality change, it does not identify the specific cause of a change; for this physico-chemical analysis is essential, especially in the case of toxic pollution. It should also be pointed out that whilst water indicated to be of poor quality on biological grounds is suspect for most uses, water indicated to be of good quality on such grounds, although acceptable for most uses including fisheries, may not always be free from pathogens or harmful trace organics and may not therefore be acceptable as drinking water. Assessment of this aspect requires specific microbiological and physico-chemical tests. Finally, in assessing water quality from data involving benthic communities due recognition must be given to the influences of other ecological factors such as depth and flow rate, substratum type, the influence of shading and seasonal changes in life cycle.

From the foregoing it may be appreciated that both physico-chemical and biological water quality assessment techniques have their own particular applications, advantages and disadvantages so that only by a combination of both may the limitations of each be overcome and a thorough understanding of the total situation be gained. The advantages and shortcomings of the two approaches are summarised below.

Comparison of Biological and Chemical Water Quality Assessment Techniques

REALM	PERFO	ORMANCE
	Chemical	Biological
Precision (Pollutant concentra	Good ation assessn	Poor nent)
Discrimination (Pollutant identification)	Good ation)	Poor
Measure of Effects	No No	Yes
Cost	High	Low
Single Sample Val	ue Poor	Good
CONCLUSION: techniques preferate	Combina	

Note on Alternative River Names

The great majority of the names assigned to rivers in this Report are those shown on the One-Inch Ordnance Survey Maps and which are in everyday usage. However, in many instances the maps denote different reaches of rivers by separate names, at times without there being an obvious boundary between the designations. In addition, very many of the rivers (major watercourses such as the Barrow, Erne or Shannon excepted) will have local names which do not find their way onto official maps or records. Clearly, the topic is one of great complexity and one which is unlikely ever to be covered definitively.

The names adopted in this Report reflect the usages of the monitoring agencies, national and local, and are considered to be the most reasonable choices. It is recognised that some of the designations are arbitrary, but this is unavoidable. However, where the compilers of this Report are aware of alternative river names details have been presented in the table below. It should be noted that some of such alternative river names may, on maps or in local usage, refer to specific reaches rather than to rivers as a whole.

River Name

River Name adopted in Report

ACORE See MONEFELIM [14/M/03]

AFFICK See RINE [27/R/01]

AGHASLANE See AGHACASHLAUN [36/A/03]
AGHAGRANIA STREAM See DRUMSHANBO STREAM [26D05]
AHACLARE See OWENOGARNEY [27/O/01]

AHAPHUCA See SHEEP [18/S/03]

ALTDERG See OWENMORE [MAYO] [33/O/04]

ALTNACALLY STREAM See GWEEBARRA [38/G/02]

ANNAGH [GALWAY] See BOLEYNEENDORRISH [29/B/04]

ANNAMOE See AVONMORE [10/A/05] ANNESTOWN See DUNHILL [17D02]

ARAGLEN See OWENTARAGLIN [18/O/09]
ARDNAGLASS See DUNMORAN [35D16]
ARDSOLLUS See RINE [27/R/01]

ARDULTAGH
ARTYCHRAAN
See KILCROW [25/K/01]
See FUNSHION [18/F/05]

AUGHASLANE See AGHACASHLAUN [36/A/03]

AUGHAVARIA See BILBOA [25/B/03]

BACK BURN See MILL [DONEGAL] [39/M/02]

BALLINLOUGH (Longford) See RHINE (26/R/04)

BALLINTRILLICK See BALLAGHNATRILLICK [35/B/02] BALLYBEG [TIPPERARY] See BREAGAGH [TIPP] [16/B/03]

BALLYGRIFFY See SHALLEE [27/S/01]

BALLYMACDONNELL

BALLYMAHON [SUIR]

BALLYNAHOW

See FARNEYBRIDGE [16/F/02]

BALLYNAHOW

See FARNEYBRIDGE [16/F/02]

BALTRACEY

See CLONSHANBO [09/C/03]

BARDINCH

See SULLANE [19/S/02]

BARNES

See ESKE [37/E/05]

BARNES See ESKE [37/E/05]
BARORA See Moynalty (07M03)
BARRA See GWEEBARRA [38/G/02]
BAURERAGH See SHEEN [21/S/01]

BAUTEOGE See STRADBALLY [14/S/02]

BAWNDUFF See OWENDUFF [BLACKSOD] [33/O/01] BEALBOY See YELLOW [FOXFORD] [34/Y/01]

BEALNACARRA See RECESS [31/R/01]
BELLADOOAN See BREAGHWY [34/B/06]

River Name

River Name adopted in Report

BELVIEW See ATHBOY [07/A/01]
BLACK [DRISH] See DRISH [16/D/02]
BLACK [KILDARE/LAOIS] See FIGILE [14F01]
BLACK [LOUTH] See RASKEAGH [06/R/02]
BOHERBAUN See TULLY STREAM [14/7]

BOHERBAUN See TULLY STREAM [14/T/02] BOOLAHALLAGH See FINISK [18/F/02] BOOLYREE See RINE [27/R/01]

BREANOGE See AUGHBOY [WEXFORD] [11/A/02] BROCKAGH See OWENNABROCKAGH [32/O/04]

BUINGEA

BUNGOSTEEN

See STRAGAR [37/S/02]

BUNOWEN [SUCK]

BUNRATTY

See OWENOGARNEY [27/O/01]

CAHER

See GRANEY [SHANNON] [25/G/04]

CALVERSTOWN STREAM

See KILCULLEN STREAM [09/K/02]

CAMOWEN See CRANA [39/C/02] CAPPAGH [FLESK] See FINOW [22/F/04] CARHEENY See MOYREE [27/M/02]

CARN See CLOONALAGHAN [33/C/01]

CARNAHORNA
See FAYMORE [38/F/01]
CARROWBEG [WESTPORT]
CARROWKEEL [DEALAGH]
CASTLE
CASTLE
CASTLEPOOK
See BREGOGE [18/B/04]
CLADDAGH
See SWANLINBAR [36/S/01]

CLARE [TIPPERARY] See ANNAGH [TIPPERARY] [25/A/02]

CLARIN See CLARINBRIDGE [29/C/02] See INCH [CLARE] [27/I/01] CLAUREEN [CLARE] See MOATE STREAM (25/M/05) CLOGHATANNY **CLOGHER BURN** See CLOGHER [FINN] [01/C/06] **CLOGHOGE RIVER** See AVONMORE [10/A/05] See KINNEGAD [07/K/01] **CLONARD** See AHASCRAGH [26/A/01] CLONBROCK **CLONYMEATH** See KNIGHTSBROOK [07/K/02] CLOON [MAYO] See AILLE [MAYO] [30/A/02] See FRANCIS [26/F/05] **CLOONARD** CLOONASCRAGH See BALLINURE [26/B/01]

CLYDAGH [KERRY] See FLESK [KERRY] [22/F/02] COARSE See OWENGARVE [SLIGO] [34/O/03]

COOKSTOWN See GLENCULLEN [10/G/02]
COORACLARE See DOONBEG [28/D/02]
CORBAUN See RHINE [26/C/08]
CORKER See OILY [37/O/01]

CORDUFF See BALLOUGH STREAM [08/B/03]

CORLEA See BLEACH [25/B/07]

CORRIES

CORRYDOO

COUNTY (SLIGO/FERMANAGH)

See BACK [BORRIS] [14/B/06]

See CARTRON [33/C/02]

See KILCOO [35/K/04]

COUMNAGUN

CREGGAN

CROAGH

CROAGH

CROLLY

See OWENOGARNEY [27/O/01]

See CASTLETOWN [06/C/01]

See BUNCROWEY [35/B/09]

See GWEEDORE [38/G/03]

River Name adopted in Report

CROMOGE See FISHMOYNE [16/F/03]
CRONAMUCK See CLOGHER [FINN] [01/C/06]
CRONANTY BURN See CRONANIV BURN [38/C/06]
CROWAGH See BUNCROWEY [35/B/09]
CRUMLIN [CORRIB] See DOOGHTA [30/D/02]

CRUMPAUN (LAOIS) See Killeen Stream (Douglas) (14/K/04)

CUCKOO STREAM See MAYNE [09/M/03]
CULLEEN See LEAFFONY [34/L/01]

CULLENAGH See INAGH [ENNISTYMON] [28/I/01]

CULLYHANNA See CASTLETOWN [06/C/01]
CULLY STREAM See SMALL (25/S/05)
CURMEEN STREAM See CLYDA [18/C/02]
CUSH See Triogue [14T01]7
CUSHALING See FIGILE [14/F/01]

DANGAN See KNIGHTSBROOK [07/K/02] DANGANSALLAGH See FINNOW [FOHERISH] [19/F/01]

DEANSGRANGE STREAM See KILL OF THE GRANGE STREAM [10/K/02]
DERRY [ROCHFORTBRIDGE] See ROCHFORTBRIDGE STREAM [07/R/04]

DERRYPATRICK See BOYCETOWN [07/B/03]

DERRYRAANE See O'CALLAGHANSMILLS [27/O/03]
DININ [BARROW] See BLACK [BORRIS] [14/B/06]

DONARD BROOK See BROWNS BECK BROOK [12/B/03]

DOONANALLA See OWENNAYLE (26/O/05)
DOOYERTHA See RAFORD [29/R/01]

DRUMSILLAGH See Mountrice 25/M/03 DUNDONNELL STREAM See KILLEGLAN [26/K/04] DUNKELLIN See KILCOLGAN [29/K/01]

DURRUS See FOUR MILE WATER [21/F/02]
EEL WEIR STREAM See KILTACLARE STREAM [26/K/06]
FINNOW STREAM See BALLYCLOGH STREAM [18B08]

FINSHENAGH STREAM See CLONSHIRE [24/C/03] FORKHILL See KILCURRY [06/K/02]

FRIAR'S LOUGH STREAM See LORRHA STREAM [25/L/05]
FUARAWN See CLAREEN STREAM (25C13)
FURROOR See INCH [CLARE] [27/I/01]
GALLANAGH STREAM See CONAWARY [03/C/02]
GARRA See DRUMCONRATH [06/D/04]

GEESLAUN

GEESLAUN

GLANAGEENTY

GLANMORE

See POLLAGH [34/P/01]

See LITTLE MAINE [22/L/02]

See CROANSHAGH [21/C/05]

GLASHA (LAOIS) See DUNRALLY STREAM [14D05] GLASHA STREAM (BARROW) See LEVITSTOWN STREAM (14/L/02)

GLENDREE See CLOGHAUN [25/C/07] GLENEELY See CULDAFF [40/C/02] GLENGLOSH See BEALANABRACK [30 GLENMALURE See AVONBEG [10/A/04]

GLENNADEEGAN See TARSAGHAUNMORE [33/T/01]

GLENOMRA See BROADFORD [27/B/02] GLENNTOGHER See DONAGH [40/D/01]

GLENUMMERA See BUNDORRAGHA [32/B/01] GLOREEN See BALLYROAN [15/B/01] GORT See CANNAHOWNA [29/C/01]

River Name adopted in Report

GORTLOUGHRA See OWVANE [CORK] [21/O/07]
GRAIGUE See AWBEG [BUTTEVANT] [18/A/05]

GRANGE [ROSCOMMON] See OWENUR [26/O/06] GREYGROVE See DOONBEG [28/D/02]

HARTWELL STREAM See RATHMORE STREAM [09/R/02]

HOLLYMOUNT See MOYREE [27/M/02]

INCHALUGHOGE

IRE

See OWENOGARNEY [27/O/01]

See ISKE SULLAS (16/I/01)

ISKULE STREAM

See ALLAGHAUN [23/A/01]

IVALE

See RATHCOOL [18/R/01]

KEELOGYBOY STREAM See WILLSBOROUGH STREAM [35/W/01]

KERRY See GLENGARRIFF [21/G/03]
KILGORMAN SeeINCH [WEXFORD] [11/I/01]
KILL [LIFFEY] See PAINESTOWN [09/P/01
KILLACLOGHER See ABBERT [30/A/01]

KILLEEN STREAM See MILLTOWN STREAM [12/M/02]

KILLEGAR See CULLIES [36/C/03]

KILLEGAR STREAM See LAHEEN STREAM [36/L/02]

KILLIMOR See KILCROW [25/K/01]

KILLINAPARSON STREAM See COUNTY [LAOIS/OFFALY] [25/C/21]

KILLORAN See KILCROW [25/K/01] KILMAINHAM See DEE [06/D/01]

KILMALEY
See INCH [CLARE] [27/I/01]
KILMASHOGE
See OWENADOHER [09O01]
KILTHA
See WOMANAGH [19/W/01]
KILWARDEN
See KINNEGAD [07/K/01]

LABBADISH See LESLIE HILL STREAM [39/L/05]

LAGAN See GLYDE [06/G/02] LATOON See RINE [27/R/01]

LAVALLY See CLARINBRIDGE [29/C/02] LEGAN STREAM See LENAMORE STREAM [26/L/06] LISFARRELL STREAM See CLOONCOOSE STREAM [26/C/20]

LOUGH ALICK STREAM See CORROY [34/C/06] LOUGH TALT See EIGHNAGH [34/E/01]

LOUGHEA See GRANEY [SHANNON] [25/G/04] LOUGHINN See GLENNAGANNON [40/G/01]

MEENGILCARRY See STRAGAR [37S02] MEENATOMISH See CRANA [39/C/02]

MILL [GALWAY] See CLARINBRIDGE [29/C/02]

MOANAHA See NENAGH [25/N/01]

MOINEEN See BISHOP'S LOUGH STREAM [26/B/13]

MONGAGH See CASTLEJORDAN [07/C/04]

MOONEEN See BUNOW [25/B/25]

MOYNALVY See KNIGHTSBROOK [07/K/02] MUINGERROON NORTH Stream See BELLANABOY [33/B/07]

MULKEAR [TIPPERARY] See NEWPORT [TIPPERARY] [25/N/02] MULLAHEERA See DEEL [NEWCASTLEWEST] [24/D/02]

NEWBRIDGE See CULLIES [36/C/03]
OILTIAGH BROOK See KNICKEEN [12/K/01]
OULYSALLIS See DIRTY [20/D/01]

OWBAUN See OWBEG [ROUGHTY] [21/O/02]

OWENABINDERG See STRAID [40/S/01]

River Name adopted in Report

OWENACHARRA See INNY (26/I/01) OWENAGLAGGIN See NAD [18/N/01] OWENALTDERRY See RAY [38/R/01]

OWENBEAGH See OWENVEAGH [38/O/14]

OWENBEG [CALABBER] See CALABBER [38/C

OWENBEG [NORE] See OWVEG [NORE] [15/O/01]

OWENBOY [COOLANEY] See OWENBEG [COOLANEY] [35/O/01]

OWENCAM See CULDAFF [40/C/02]
OWENDUFF [SLIGO] See DUNNEILL [35/D/06]
OWENGARR See BUNDORRAGHA [32/B/01]
OWENINY See OWENMORE [MAYO] [33/O/04]
OWENKILLEW See MILL [DONEGAL] [39/M/02]

OWENMORE [BALLINA] See GLENREE [34/G/01] OWENMORE [CLIFDEN] See RECESS [31/R/01]

OWENMORE [CLOONAGHMORE]See CLOONAGHMORE [34/C/03]

OWENMORE [ERRIFF] See ERRIFF [32/E/01]
OWENNASHRONE See LEE [CORK] [19/L/03]
OWENROE [MOYNALTY] See Moynalty (07M03)
OWENROE [OWENTOCKER] See OWENTOCKER [38/O/06]

OWENYKEEVAN See FINNED [35/F/01]

PARK See NADREEGEEL L. STREAM [07/N/01]
POLLARDSTOWN STREAM See CLONCUMBER STREAM [14C17]
POULANEIGH See BREAGAGH [TIPPERARY] [16/B/03]

QUIN See RINE [27/R/01]

RAMPART STREAM See BLACKWATER [KELLS] [07/B/01]
RAMPART STREAM [18/N/02]

RATHROE See BREAGHWY [34/B/06]
RATTY See OWENOGARNEY [27/O/01]
RIVERSTOWN See BIG [LOUTH] [06/B/01]
ROSNAMUCKYDUFF See BELLAWADDY [34/B/05]

SCAR See CLERISTOWN STREAM [13C04]

SCARDAN See OWENMORE [M'HAMILTON] [35/O/02]

SCARRIFF See GRANEY 25/G/04

SCRAMOGE [SOUTH] See LISSAPHOBBLE [26/L/04]

SHANOW
See BRICK [23/B/03]
SHANOWEN [DONEGAL]
SHEAN
See SHEEN [21/S/01]
SHIVEN [NORTH]
SKIVILEEN
See CREEGH [28/C/02]

SLIEVENOHERA See KILLEENGARRIFF [25/K/02] SOOLVANE See FARNEYBRIDGE [16/F/02] SRUELL See EANYMORE WATER [37/E/02]

SRUHANACROW MORE See SHALLOGAN [38/S/03] STONESTOWN See STONYFORD [07/S/02] STRANAGARTAN STREAM See GLEN [CARRICK] [37/G/01]

TICKNOCK STREAM See TEMPLERAINY STREAM [10/T/04] TIMOGUE See CROOKED [STRADBALLY] 14C02

TIMAHOE See STRADBALLY [14S02]

TOGHER See DOUGLAS [BRIDE] [18/D/02]

TOMEEN See RINE [27/R/01]

TOOR BROOK See LEMONSTOWN STREAM [09/L/03]

TOOREEN See COOLEEN [28/C/05]

TUAM

TURRA

TULLYVALLAN

River Name adopted in Report

TOORMORE (Mayo) See CASTLEBAR [34/C/01]
TRAMORE [CORK] See DOUGLAS [LEE] [19/D/05]

TREMBLESTOWN See ATHBOY [07/A/01]

TROUGH See BLACKWATER [CLARE] [25/B/06]

See NANNY [TUAM] [30/N/01] See CASTLETOWN [06/C/01]

See BOLEYNEENDORRISH [29/B/04]

TWO MILE WATER See ABBEY [36/A/01]

WHITE [LIMERICK] See OWVANE [LIMERICK] [24/O/02]

WHITEHOUSE See STRAID [40/S/01]

Catchment Characteristics

Altitude is in metres; Area is $\rm km^2$; Sil, Cal are % siliceous and calcareous bedrock; Pasture, Forestry, etc., are % of catchment area.

HYDROMETRIC AREA 06.

River and Code : **BALLYKELLY** 06/B/03

Site Altitude and Upstream Catchment Characteristics (where available):											
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other											
0500	31	16	100	0	78	0	0	0.0	16	0	6
0700	22	29	100	0	69	0	0	1.2	27	0	3

River and Code : **BALLYMASCANLAN** 06/B/02

Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	s Urban	Misc A	kg. Water	Other
0100	58	0	100	0	40	0	0	59.7	0	0	0
0300	30	2	85	15	91	5	0	3.5	0	0	0
0500	6	4	54	46	87	3	0	7.9	2	0	0

River and Code : **BIG (LOUTH)** 06/B/01

Site Altitude and Upstream Catchment Characteristics (where available):											
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other											
0100	94	11	98	2	34	3	29	0.0	0	0	33
0300	22	25	93	7	46	3	26	0.0	5	0	20

River and Code : CASTLETOWN 06/C/01

Site A	ltitud	e and U	pstrea	m Cato	hment	Charac	teristic	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Watei	Other	
0050	54	1	100	0	94	0	0	5.8	0	0	0	
0200	19	12	96	4	88	0	0	4.6	7	0	0	
0300	5	33	73	27	75	0	0	3.2	22	0	0	
0310	4	33	73	27	75	0	0	3.2	22	0	0	

River and Code : COUNTY WATER 06/C/03

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0100	105	1	100	0	100	0	0	0.0	0	0	0
0170	98	8	100	0	96	0	0	0.0	4	0	0
0200	90	9	100	0	94	0	0	0.0	6	0	0

River and Code : CULLY WATER 06/C/02

Site A	ltitud	le and U	pstrea	m Cato	chment	Charac	teristic	s (wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0100	30	0	100	0	100	0	0	0.0	0	0	0	
0200	10	6	66	34	47	0	0	0.0	53	0	0	

River and Code : **DEE 06/D/01**

Site A	Altitud	e and U	pstrea	m Cat	chment	Charac	teristic	s (wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0016	129	10	100	0	98	0	0	0.0	0	0	2	
0025	-99	14	100	0	99	0	0	0.0	0	0	1	
0035	51	31	67	33	98	0	0	0.5	1	0	1	
0200	47	6	0	100	77	0	0	2.0	21	0	0	
0360	39	110	50	50	92	0	0	0.5	6	0	0	
0450	31	170	60	40	89	0	0	0.3	10	0	0	
0600	26	176	58	42	89	0	0	0.3	10	0	0	
0680	23	286	54	46	79	0	0	0.7	18	0	1	
0710	22	287	54	46	79	0	0	0.8	19	0	1	
0800	13	305	56	44	76	0	0	1.1	22	0	1	
1000	10	376	65	35	72	1	0	1.5	25	0	1	

River and Code : DRUMSALLAGH STREAM* 06/D/07

See Glyde 06G02

River and Code : FANE 06/F/01

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	cteristics	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Ùrban	Misc A	g. Wateı	r Other
0115	-99	5	100	0	82	0	8	0.0	11	0	0
0155	112	6	100	0	82	0	5	0.0	13	0	0
0180	92	11	100	0	80	0	3	0.0	17	0	0
0200	90	43	100	0	87	0	3	1.2	8	1	0
0300	90	112	100	0	85	0	2	2.1	6	4	1
0400	-	-	-	-	-	-	-	-	-	-	-
0500	65	5	100	0	77	0	0	0.0	23	0	0
0650	47	24	95	5	76	0	0	1.5	22	0	0
0700	23	43	97	3	82	0	0	1.3	16	0	1
0900	6	102	99	1	73	0	0	0.9	24	0	2

River and Code : FLURRY 06/F/02

Site A	Altitud	e and U	pstrea	m Cat	chment	Charac	teristic	s (where	availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0100	94	0	100	0	27	0	0	68.8	4	0	0
)300	62	8	100	0	20	46	11	1.7	0	0	22
600	21	24	98	2	35	18	17	0.6	0	0	30
0700	5	25	92	8	38	17	16	0.8	0	0	28

River and Code : **GENTLE OWEN'S LAKE STREAM** 06/G/04 See Fane 06F01

River and Code : GLYDE 06/G/02

Site A	ltitude	and Ups	stream	Catchr	nent Ch	aracteristi	cs (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0100	34	63	73	27	86	3	0	3.5	6	0	2
0400	26	134	49	51	84	3	0	1.9	9	0	2
0500	24	149	47	53	84	3	0	1.8	10	0	1
0600	21	268	54	46	83	2	0	2.0	12	0	1
0700	18	276	55	45	81	2	0	2.0	14	0	1
0900	7	318	61	39	73	2	0	1.8	22	0	1
1002	5	346	64	36	69	2	0	1.8	26	0	1
1200	2	357	65	35	68	2	0	1.8	28	0	1

River and Code : KILCURRY 06/K/02

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal 1	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0200	10	2	80	20	45	0	0	0.0	55	0	0	

River and Code : KILLARY WATER 06/K/01

Site A	ltitud	le and U	pstrea	m Cate	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0100	62	25	100	0	75	0	0	0.0	25	0	0
0500	38	36	100	0	77	0	0	0.0	23	0	0

River and Code : **KILMAINHAM** 06/K/04

See Dee 06D01

River and Code : MAGHERACLOONE STREAM 06/M/01

See Glyde 06G02

River and Code : **PROULES** 06/P/01

Site A	ltitud	e and U	pstrea	m Cato	chment	Charac	teristic	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0100	44	8	52	48	85	0	0	0.0	15	0	0	
0110	44	8	52	48	85	0	0	0.0	15	0	0	
0300	26	17	25	75	75	7	0	8.5	9	0	0	
0400	30	18	24	76	75	7	0	9.3	9	0	0	
0600	28	91	52	48	87	1	0	3.1	8	0	0	

River and Code : RASKEAGH 06/R/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	Ag. Water	Other		
0200	13	3	100	0	50	0	0	9.4	41	0	0		
0600	7	7	74	26	44	0	0	6.6	50	0	0		

River and Code : **TERMONFECKIN** 06/T/01

Site Altitude and Upstream Catchment Characteristics (where available): No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other												
110.	AIt	Alta	SII	Cai	1 asture	rorest	ry Dogs	CIDAII	WHISC A	g. Water	Other	
0350	33	10	100	0	75	0	0	0.0	25	0	0	
0400	15	23	100	0	69	0	0	0.0	31	0	0	

River and Code : WHITE (LOUTH) 06/W/01

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wateı	Other
0040	98	7	100	0	67	8	0	0.0	26	0	0
0100	53	30	100	0	66	4	0	1.1	29	0	0
0200	-	-	-	-	-	-	-	-	-	-	-
0290	28	45	100	0	59	3	0	1.7	37	0	0
0500	17	55	100	0	58	2	0	2.8	37	0	0

HYDROMETRIC AREA 07

River and Code : ATHBOY 07/A/01

Site Altitude and Upstream Catchment Characteristics (where available):

No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Urban	Misc A	g. Water	r Other
0020	114	10	40	60	97	0	0	0.0	3	0	0
0050	93	34	27	73	86	0	0	0.0	14	0	0
0070	80	51	19	81	87	0	0	0.0	13	0	0
0100	72	78	21	79	84	2	1	0.0	13	0	0
0200	67	111	15	85	83	2	0	0.3	15	0	0
0300	65	116	14	86	82	1	0	0.6	16	0	0
0400	61	164	10	90	76	2	0	0.4	21	0	0
0500	54	167	10	90	75	2	0	0.4	22	0	0

River and Code : **BLACKWATER (KELLS)** 07/B/01

Site A	ltitud	e and U	pstrea	m Cat	chment	Chara	cteristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Fores	try Bogs	Ùrban	Misc A	g. Watei	• Other	
0100	150	13	100	0	62	0	3	2.2	33	0	0	
0170	136	25	100	0	74	0	2	3.2	21	0	0	
0200	133	26	100	0	75	1	1	3.1	20	0	o 0	
0280	131	40	100	0	74	3	1	2.2	14	3	2	
0420	119	49	100	0	76	3	1	1.8	14	3	3	
0500	105	83	100	0	69	2	0	1.0	24	2	2	
0600	101	110	100	0	75	1	0	0.8	18	1	3	
0800	87	125	100	0	77	1	0	1.0	16	1	3	
0900	85	246	100	0	79	2	1	0.8	11	4	3	
1000	80	282	97	3	81	2	0	0.7	10	3	2	
1100	73	312	97	3	82	2	1	0.6	9	3	3	
1200	57	335	96	4	82	2	1	0.6	10	3	2	
1300	48	347	95	5	81	2	1	1.1	10	3	2	
1400	45	547	82	18	81	1	1	1.0	12	2	2	
1500	41	620	74	26	81	1	1	0.9	13	2	2	
1790	31	712	72	28	77	1	1	1.4	16	2	2	
1800	30	713	72	28	77	1	1	1.4	16	2	2	

River and Code : **BLACKWATER (LONGWOOD)** 07/B/02

Site A	Altitud	e and U	pstrea	m Cato	chment	Charac	cteristics	(where	e availal	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Ùrban	Misc A	g. Wateı	• Other
0050	-	-	-	-	-	-	-	-	-	-	-
0060	72	51	0	100	43	4	33	0.0	11	0	9
0070	-	-	-	-	-	-	_	-	-	-	-
0100	68	125	0	100	65	4	15	1.1	11	0	4
0200	66	142	0	100	67	3	13	1.0	12	0	4
0400	63	184	0	100	69	2	11	0.9	14	0	3
0600	61	197	0	100	70	2	10	1.0	14	0	3

River and Code : **BOYCETOWN** 07/B/03

Site A	ltitud	le and U	pstrea	m Catc	hment	Charac	teristic	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0200	71	21	0	100	71	0	0	0.0	29	0	0	
0300	51	34	0	100	74	0	0	0.1	26	0	0	

River and Code : **BOYNE** 07/B/04

Site A	ltitud	le and U	pstrea	m Cato	chment	Charac	cteristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Urban	Misc A	g. Water	r Other	
0100	71	21	0	100	70	1	8	2.9	18	0	0	
				100		1					0	
0200	66	60	0	100	63	2	12	4.0	16	0	3	
0300	66	78	0	100	66	2	10	4.6	15	0	2	
0400	65	304	0	100	62	3	18	1.9	10	0	5	
0600	64	436	0	100	67	2	15	1.7	11	0	4	
0800	61	737	1	99	72	2	11	1.3	9	1	5	
0900	59	965	1	99	72	2	10	1.2	10	1	4	
1000	56	1,162	0	100	72	2	10	1.2	10	1	4	
1200	50	1,362	2	98	72	2	9	1.2	12	0	4	
1400	48	1,372	2	98	72	2	9	1.3	12	0	4	
1500	43	1,491	1	99	72	2	8	1.2	13	0	3	
1600	37	1,576	1	99	72	2	8	1.2	14	0	3	
1700	33	1,675	1	99	71	2	7	1.2	15	0	3	
1800	31	1,685	1	99	71	2	7	1.4	15	0	3	
1900	27	2,415	22	78	73	2	5	1.5	15	1	3	
2010	21	2,430	22	78	73	2	5	1.5	16	1	3	
2100	13	2,486	23	77	73	2	5	1.5	16	1	3	
2150	8	2,495	23	77	73	2	5	1.5	16	1	3	
2200	2	2,619	25	75	73	2	5	1.5	16	1	2	

River and Code : CASTLEJORDAN 07/C/04

Site A	Altitud	le and U	pstrea	ım Catc	hment	Charac	cteristics	(where	e availa	ble):	
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0060	81	25	0	100	82	0	5	1.7	8	0	4
0100	73	91	0	100	56	2	27	0.5	6	0	7
0190	69	106	0	100	59	2	24	0.6	7	0	7

River and Code : CHAPEL LAKE STREAM 07/C/05

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Watei	r Other
0400	145	3	100	0	43	0	0	0.0	57	0	0
0700	108	24	100	0	43	0	0	0.0	56	1	0

River and Code : **DEEL (RAHARNEY)** 07/D/01

Site Altitude and Upstream Catchment Characteristics (where available):

DICC 1	iiiiia	t una c	Pour cu	iii Cutt	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ciiuiu		5 (WHEI	·			
No.	Alt	Area	Sil	Cal 1	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0040	92	34	0	100	67	0	0	0.8	8	18	6	
0070	83	49	0	100	76	0	0	0.6	6	13	4	
0090	79	70	0	100	77	2	2	0.4	6	9	4	
0200	76	96	0	100	80	1	2	0.7	6	6	4	
0300	71	141	4	96	84	1	2	0.5	5	4	3	
0400	67	250	2	98	80	2	4	1.0	6	2	5	
0600	64	285	2	98	79	2	5	0.8	6	2	6	

River and Code : **DEVLIN'S** 07/D/02

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristic	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal 1	Pasture	Forest	ry Bogs	Urban	Misc A	g. Watei	Other	
0140	76	11	97	3	83	0	0	0.0	17	0	0	
0200	-	-	-	-	-	-	-	-	-	-	-	
0300	37	22	98	2	87	0	0	0.0	13	0	0	

River and Code : **DRUMKEERY LOUGH STREAM** 07/D/03

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other
0100	146	6	100	0	74	0	0	0.0	4	17	6
0400	133	10	100	0	82	0	0	0.0	2	12	4

River and Code : GLASH 07/G/02

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal I	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0400	75	15	0	100	60	0	19	2.4	18	O	0	
0600	66	31	0	100	65	1	14	1.2	19	0	0	

River and Code : **KINNEGAD** 07/K/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal 1	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wateı	r Other		
0060	76	25	0	100	73	4	3	0.0	20	0	0		
0100	70	43	0	100	75	2	7	2.0	12	0	1		
0300	67	70	0	100	78	2	6	1.8	10	0	2		

River and Code : KNIGHTSBROOK 07/K/02

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristic	s (where	e availa	ble):	
No.	Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other										
0100	_	_	_	_	_	_	_	_	_	_	_
0300	72	42	0	100	86	3	0	1.3	7	0	2
0360	64	54	0	100	81	2	0	1.2	13	0	2
0500	48	71	0	100	79	2	0	1.1	17	0	1

River and Code : LISLEA 07/L/01

Site Altitude and Upstream Catchment Characteristics (where available):

No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

0100 89 29 100 0 85 4 1 0.0 4 0 6

River and Code : MATTOCK 07/M/01

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0050	105	11	98	2	85	1	0	1.5	13	0	0
0100	85	17	99	1	87	1	0	1.6	11	0	0
0200	44	41	100	0	82	0	0	1.7	16	0	0
0300	5	81	88	12	82	1	0	1.0	16	0	0

River and Code : MILLTOWNPASS 07/M/04

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristic	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0400	84	13	0	100	93	1	2	0.0	2	0	1	

River and Code : MOYNALTY 07/M/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other		
0050	140	8	100	0	80	0	4	0.0	3	0	13		
0070	121	26	100	0	89	0	1	0.1	4	0	5		
0090	100	35	100	0	91	0	1	0.1	3	0	5		
0100	96	50	100	0	92	0	1	0.0	3	0	4		
0300	88	72	100	0	94	0	0	0.1	2	0	3		
0400	87	78	100	0	93	0	0	0.7	3	1	3		
0600	73	83	98	2	93	0	0	0.8	3	0	2		
0800	57	121	85	15	90	0	0	0.6	7	0	2		
0900	49	188	61	39	83	0	0	0.4	14	0	2		

River and Code : NADREEGEEL LOUGH STREAM 07/N/01

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0100	110	15	100	0	76	0	4	0.0	20	0	0
0200	100	23	100	0	84	0	3	0.0	13	0	0
0500	91	46	100	0	87	0	1	0.4	9	1	0

River and Code : RIVERSTOWN 07/R/01

Site A	ltitud	le and U	pstrea	m Cate	hment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal]	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0090	-99	32	0	100	67	7	3	0.7	4	0	19
0100	81	67	0	100	71	5	6	1.1	5	0	13
0200	72	76	0	100	71	5	5	1.5	7	0	11

River and Code : ROCHFORTBRIDGE STREAM 07/R/04

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other													
0300	81	15	0	100	80	0	8	0.0	10	0	2		

River and Code : **SKANE** 07/S/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Watei	· Other		
0100	_	_	_	_	_	_	_	_	_	_	_		
0150	77	16	0	100	83	0	0	4.2	12	0	0		
0200	-	-	-	-	-	-	-	-	-	-	-		
0300	67	38	0	100	64	2	0	1.8	32	0	0		
0510	54	63	0	100	66	1	0	1.1	32	0	0		
0600	43	87	0	100	64	1	0	1.7	34	0	0		

River and Code : STONYFORD 07/S/02

Site Altitude and Upstream Catchment Characteristics (where available):

No.	Alt	Area	Sil	Cal	Pasture	Fores	try Bogs	Urban	Misc A	g. Water	Other
0045	105	11	0	100	95	2	0	0.0	2	0	0
0055	89	19	0	100	97	1	0	0.0	1	0	0
0065	82	48	0	100	95	1	1	0.0	1	0	3
0070	79	57	0	100	94	0	1	0.5	2	0	2
0075	76	67	0	100	93	0	1	1.1	3	0	2
0800	72	88	0	100	90	0	1	1.2	4	0	3
0090	69	99	0	100	88	0	1	1.1	6	0	3
0300	63	149	0	100	72	1	13	0.7	9	0	5
0400	61	152	0	100	72	1	13	0.7	9	0	5

River and Code : YELLOW (BLACKWATER) 07/Y/01

Site A	Altitud	e and U	pstrea	m Catc	hment	Charac	eteristics	(where	e availa	ble):				
No.	o. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other													
1100	41	51	93	7	47	1	0	1.5	49	1	0			
1100	41	31	93	/	4/	1	U	1.3	49	1	U			

River and Code : YELLOW (CASTLEJORDAN) 07/Y/02

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0060	-	-	-	-	-	-	-	-	-	-	-	
0100	73	49	0	100	45	6	36	1.9	5	0	6	
0300	68	179	0	100	59	3	24	0.9	7	0	6	

HYDROMETRIC AREA 10

River and Code : ASKANAGAP STREAM 10/A/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other		
0400	102	12	100	0	52	7	26	0.0	0	0	15		

River and Code : AUGHRIM (WICKLOW) 10/A/02

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0200	44	188	100	0	37	18	20	0.5	8	0	16	
0400	11	224	100	0	40	17	17	0.4	11	0	14	

River and Code : AVOCA 10/A/03

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0680	29	362	100	0	17	18	40	0.4	12	1	13
0700	22	378	100	0	19	17	38	0.6	12	1	12
0900	2	615	100	0	27	17	30	0.7	12	0	13

River and Code : **AVONBEG** 10/A/04

Site A	Altitud	e and U	pstrea	m Cat	tchment	Charac	teristics	(wher	e availal	ble):	
No.	Alt	Area	Sil	Cal	Pastur	e Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0100	159	14	100	0	0	26	65	0.0	0	0	9
0400	121	48	100	0	3	26	48	0.0	1	0	23
0600	90	69	100	0	7	26	45	0.2	4	0	18
0800	31	359	100	0	17	18	40	0.3	12	1	13

River and Code : AVONMORE 10/A/05

Site A	ite Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pastur	e Foresti	ry Bogs	Urban	Misc A	g. Water	Other			
0010	217	22	100	0	0	7	83	0.0	0	2	8			
0050	166	80	100	0	7	12	65	0.0	3	2	11			
0100	119	141	100	0	13	13	56	0.0	7	1	10			
0200	96	201	100	0	11	15	55	0.0	6	1	11			
0300	77	230	100	0	14	16	49	0.1	8	1	12			
0500	40	251	100	0	17	16	45	0.3	10	1	11			

River and Code : **BALLYCREEN BROOK** 10/B/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other			
0400	133	10	100	0	3	5	52	0.0	39	0	1			
0700	71	20	100	0	23	7	29	0.0	24	0	17			

River and Code : BALLYDUFF STREAM (WICKLOW) 10/B/01

Site A	ltitud	e and U	pstrea	m Cato	hment	Charac	eteristics	(where	e availal	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wateı	• Other	
0200	19	14	100	0	75	1	0	3.6	19	0	2	

River and Code : CLOGHOGE BROOK 10/C/01

Site A	ltitud	e and U	pstream	m Cat	chment	Charac	eteristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0100	220	11	100	0	0	0	96	0.0	0	0	4	

River and Code : COOLALUG STREAM 10/C/02

Site A	ltitud	e and U	pstrea	m Cat	tchment	Charac	teristic	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other
0300	101	12	100	0	46	19	1	0.0	4	0	30
0500	82	20	100	0	49	11	1	0.0	10	0	28

River and Code : **DARGLE** 10/D/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other			
0010	89	15	100	0	9	28	59	0.0	0	0	5			
0100	21	68	100	0	15	19	42	4.2	11	0	9			
0200	16	105	100	0	19	15	37	4.6	13	0	12			
0250	6	113	100	0	21	14	34	5.2	14	0	11			

River and Code : **DERRY WATER** 10/D/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	Other			
0300	157	12	100	0	39	23	35	0.0	0	0	3			
0600	88	38	100	0	48	13	27	0.0	0	0	12			
0800	73	94	100	0	53	9	17	0.0	7	0	13			

River and Code : GLENCREE 10/G/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other			
0100	137	21	100	0	5	14	65	0.0	6	1	9			
0200	89	34	100	0	7	20	50	0.0	9	1	13			

River and Code : GLENCULLEN 10/G/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other		
0100	189	15	100	0	4	10	47	0.0	7	0	32		
0300	92	21	100	0	17	11	33	1.8	11	0	27		
0400	-	-	-	-	-	-	-	-	-	-	-		
0500	19	26	100	0	22	11	27	6.5	13	0	22		

River and Code : GLENDASAN 10/G/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other			
0.1.0.0	• • • •													
0100	280	10	100	0	0	0	94	0.0	0	O	6			
0200	130	15	100	0	0	8	85	0.0	1	0	6			

River and Code : **GLENEALO** 10/G/05

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pastur	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other			
0100	139	10	100	0	0	0	81	0.0	0	0	19			
0200	131	19	100	0	0	22	58	0.0	0	3	17			
0400	118	39	100	0	0	20	64	0.0	3	1	11			

River and Code : GLENMACNASS 10/G/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Forest	rv Bogs	Urban	Misc A	g. Water	Other			
							, ,			8				
0200	221	19	100	0	0	8	82	0.0	3	0	7			
	136	30	100	0	2	14	73	0.0	4	0	7			

River and Code : GOLD MINE 10/G/04

Site Altitude and Upstream Catchment Characteristics (where available):

No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

0500 15 17 100 0 52 16 5 0.0 21 0 6

River and Code : KILL OF THE GRANGE STREAM 10/K/02

Site Altitude and Upstream Catchment Characteristics (where available): No. Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other 0100 37 100.0

Alt is in metres Area is km² and Sil, Cal are % siliceous and calcareous bedrock and Pasture, Forestry, etc., are % of catchment area.

River and Code : KILMACANOGE 10/K/03

Site Altitude and Upstream Catchment Characteristics (where available): Area No. Cal Pasture Forestry Bogs Urban Misc Ag. Water Other Alt Sil 0300 76 2.7 0600 27

River and Code : **NEWCASTLE (WICKLOW)** 10/N/01

Site Altitude and Upstream Catchment Characteristics (where available): No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other 0.0 0.0

River and Code : **NEWTOWNMOUNTKENNEDY** 10/N/02

Site Altitude and Upstream Catchment Characteristics (where available): No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other 0100 107 0.0 0500 35 3.1 0600 16 4.2

River and Code : **OW** 10/O/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other			
0100	201	13	100	0	0	27	68	0.0	0	0	5			
0300	108	49	100	0	6	41	31	0.0	1	0	21			
0400	75	60	100	0	16	36	27	0.1	1	0	21			

River and Code : **POTTER'S** 10/P/01

Site A	ltitud	le and U	pstrea	m Cat	tchment	Characte	ristics	(where	e availabl	e):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0300	29	25	100	0	60	15	0	0.5	17	0	8
0500	14	39	100	0	61	10	0	0.3	22	0	7

River and Code : **REDCROSS** 10/R/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other			
0100	41	12	100	0	60	0	0	0.0	28	0	12			
0300	18	22	100	0	57	1	0	0.0	34	0	9			

River and Code : SHANGANAGH 10/S/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	s Urban	Misc A	g. Water	Other			
0200	-99	13	100	0	33	4	0	34.2	24	0	5			
0400	16	32	100	0	30	7	1	32.1	22	0	7			
0440	138	5	100	0	31	33	7	0.2	26	0	3			
0450	-	-	-	-	-	-	-	-	-	-	_			
0460	73	10	100	0	39	18	3	3.1	22	0	14			
0600	6	33	100	0	30	7	1	32.8	22	0	7			

River and Code : **TEMPLERAINY STREAM** 10/T/04

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other			
0300	43	8	100	0	63	1	0	0.0	23	0	13			
0500	7	14	100	0	63	1	0	0.6	28	0	8			

River and Code : THREE MILE WATER 10/T/01

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristics	(where	e availabl	e):	
No.	Alt	Area	Sil	Cal	Pasture	Foresti	ry Bogs	Urban	Misc Ag.	Water	Other
0200	45	4	100	0	72	11	0	0.0	17	0	0
0300	34	14	100	0	69	6	0	0.0	26	0	0
0500	13	27	100	0	56	4	0	0.0	38	0	2

River and Code : VARTRY 10/V/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other			
0050	230	17	100	0	56	1	29	0.0	2	0	12			
0100	165	64	100	0	56	9	9	0.5	10	5	11			
0150	35	77	100	0	52	12	8	0.5	12	4	11			
0300	7	103	100	0	51	14	7	1.2	15	3	10			

HYDROMETRIC AREA 14

River and Code : AGHALONA 14/A/02

Site A	te Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other		
0100	80	17	100	0	47	0	0	0.0	53	0	0		
0150	73	21	100	0	38	0	0	2.4	60	0	0		
0200	63	28	100	0	35	0	0	1.8	63	0	0		

River and Code : ATHY STREAM 14/A/06

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0200	71	12	32	68	37	0	0	0.0	61	0	1
0400	62	27	15	85	27	1	0	1.7	69	0	2

River and Code : AUGHAVAUD 14/A/04

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc A	g. Water	Other			
0400	45	23	100	0	62	6	21	0.0	12	0	0			
0600	7	31	100	0	62	4	16	0.0	18	0	1			

River and Code : AUGHNABRISKY 14/A/05

Site A	Site Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	Other				
												Ì			
0200	190	4	100	0	4	7	69	0.0	0	0	21	٠			
0500	84	33	100	0	24	8	42	0.0	15	0	11				

River and Code : AUGHNACREW 14/A/07

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0300	67	14	100	0	63	0	0	0.0	37	0	0			
0500	52	32	100	0	61	0	0	0.0	39	0	0			

River and Code : **BALLYNABOLEY STREAM** 14/B/08

Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other		
0700	40	25	55	45	51	0	0	0.0	49	0	0		

River and Code : **BARROW** 14/B/01

Site A	ltitude	and Ups	tream	Catchi	ment Ch	aracteristi	ics (wh	ere avai	ilable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0050	105	18	100	0	15	55	21	0.0	2	0	8	
0100	83	35	88	12	29	38	24	0.0	4	0	6	
0200	80	58	57	43	43	24	22	0.0	5	0	6	
0300	77	94	41	59	57	15	15	0.0	8	0	4	
0500	70	207	36	64	60	10	11	0.6	13	0	6	
0600	69	343	22	78	58	8	10	2.8	16	0	5	
0700	69	385	19	81	58	8	9	2.6	16	0	6	
0760	69	405	18	82	59	8	8	2.6	16	0	7	
0900	66	420	18	82	59	8	8	2.9	16	0	6	
1000	59	1,064	9	91	53	5	19	2.3	14	0	7	
1300	58	1,118	9	91	53	4	18	2.4	15	0	7	
1400	57	1,212	8	92	53	5	17	2.3	17	0	7	
1500	56	1,566	8	92	53	4	14	2.4	20	0	6	
1590	55	1,575	8	92	53	4	14	2.4	21	0	6	
1900	52	1,695	8	92	51	4	13	2.5	24	0	6	
2000	49	1,708	8	92	51	4	13	2.4	24	0	6	
2450	49	2,255	23	77	52	3	10	2.4	28	0	5	
2600	50	2,312	23	77	52	3	9	2.4	28	0	5	
2680	40	2,373	23	77	52	3	9	2.3	28	0	5	
2700	40	2,376	23	77	53	3	9	2.3	28	0	5	
2750	39	2,398	22	78	53	3	9	2.3	28	0	5 5	
2900	34	2,418	23	77	53	3	9	2.3	28	0	5	
2910	34	2,418	23	77	53	3	9	2.3	28	0	5	
3000	30	2,437	22	78	53	3	9	2.3	28	0		
3400	23	2,728	26	74	54	3	9	2.2	28	0	5 5	
3500	12	2,779	27	73	54	3	9	2.2	27	0	5	

River and Code : **BLACK (BORRIS)** 14/B/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0700	72	32	100	0	55	2	5	0.0	32	0	5			
1000	64	40	100	0	54	2	4	0.0	35	0	5			
1380	46	46	100	0	54	1	4	0.0	36	0	4			

River and Code : BLACKWATER (LAOIS) 14/B/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0400	113	2	100	0	72	0	0	0.0	28	0	0			
0800	89	6	46	54	72	0	0	0.0	27	0	1			
0800	89	6	46	54	72	0	0	0.0	27	0	1			
0900	82	32	15	85	54	3	6	0.0	27	0	9			
1000	78	39	14	86	58	3	6	0.0	25	0	9			

River and Code : **BOTHOGE** 14/B/04

Site A	Site Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other				
0100	128	0	100	0	67	4	0	0.0	29	0	0				
0100	1-0	0	100	U	07	4	U	0.0	29	U	U				
0300	91	32	100	0	76	2	0	0.0	22	0	0				

River and Code : **BURREN** 14/B/05

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Wateı	Other	
0020	164	6	100	0	41	13	47	0.0	0	0	0	
0060	108	16	100	0	55	11	19	0.0	9	0	6	
0100	86	39	100	0	51	5	8	0.0	31	0	5	
0200	81	61	100	0	49	4	5	0.0	39	0	3	
0300	65	84	100	0	48	3	4	0.0	43	0	2	
0400	58	160	100	0	44	1	2	0.3	51	0	1	
0490	50	180	91	9	46	1	2	2.5	48	0	1	

River and Code : **CLONCUMBER STREAM** 14/C/17

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0100	79	32	9	91	48	0	0	19.0	17	0	16
0200	76	44	13	87	51	2	3	14.1	18	0	12

River and Code : CROOKED (STRADBALLY) 14/C/02

Site A	ltitud	e and U	pstrea	m Cate	chment	Charact	eristics	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc A	g. Water	Other
0200	131	5	0	100	89	0	0	0.0	11	0	0
0600	91	28	0	100	73	6	0	0.0	19	0	2
0800	87	31	0	100	72	6	0	0.0	21	0	2

River and Code : CUSHINA 14/C/04

Site A	ltitud	le and U	pstrea	m Cato	chment	Charac	teristics	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other
0050	77	16	0	100	72	4	4	0.0	15	0	5
0800	69	27	0	100	75	3	2	0.0	12	0	8
0100	63	69	0	100	62	3	16	0.1	11	0	9

River and Code : **DAINGEAN** 14/D/06

Site A	ltitud	le and U	pstrea	m Cate	hment	Charac	cteristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0100	75	28	0	100	50	0	37	0.4	6	0	6	
0200	77	35	0	100	58	0	30	1.7	5	0	5	
0400	72	47	0	100	58	0	26	1.9	5	0	8	
0520	69	50	0	100	60	0	26	1.8	5	0	8	
0600	70	159	0	100	51	3	29	0.6	6	0	10	

River and Code : **DOUGLAS (LAOIS)** 14/D/03

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0080	86	16	0	100	83	0	0	0.0	16	0	1
0100	70	41	0	100	79	2	0	0.0	18	0	1
0200	58	46	0	100	80	1	0	0.0	18	0	0
0300	50	72	0	100	74	1	0	0.1	25	0	0

River and Code : **DUISKE** 14/D/04

Site Al	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0100	64	10	100	0	65	12	7	0.0	12	0	5	
0200	12	24	100	0	68	7	4	1.6	16	0	4	

River and Code : **DUNRALLY STREAM** 14/D/05

Site A	ltitude	and Ups	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0100	76	19	0	100	56	0	0	5.4	39	0	0	
0200	65	26	0	100	57	1	0	4.0	38	0	1	
0400	60	62	0	100	43	9	1	1.7	40	0	4	

River and Code : **ENAGHAN STREAM** 14/E/02

Site A	te Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other				
0100	77	2	0	100	59	0	30	3.5	3	0	3				
0300	68	30	0	100	57	4	18	0.3	14	0	6				

River and Code : ESKER STREAM 14/E/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other				
0100	75	32	0	100	66	2	19	0.4	6	0	7				
0200	70	62	0	100	63	2	18	0.2	8	0	8				

River and Code : FIGILE 14/F/01

No.	Alt	Area	Sil	Cal	Docturo	Forestry	Roge	Urban	Micc Ag	Water	Other
110.	Ait	Aita	SII	Cai	1 asture	roi esti y	Dogs	Olban	Mist Ag.	vv atei	Other
0050	80	11	0	100	47	0	35	1.1	7	0	10
0100	-999	45	0	100	25	2	57	0.3	10	0	6
0200	69	80	0	100	27	1	60	0.2	8	0	4
0300	67	247	0	100	44	2	39	0.5	7	0	8
0400	66	261	0	100	45	2	39	0.4	7	0	7
0500	60	291	0	100	46	2	36	0.5	7	0	9

River and Code : FUER 14/F/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0400	76	21	0	100	75	3	0	0.0	22	0	0	

River and Code : **FUSHOGE** 14/F/03

No. Ag.	Alt Wat	Area er	Sil Oth	Cal er	Past	ture	Fore	estry	Bogs	Urban	Misc
0050	95	8	0	100	100	0	0	0.0	0	0	0
0220	59	23	0	100	95	0	0	0.0	5	0	0
0300	49	40	0	100	89	3	0	0.0	4	0	5

River and Code : GLENLAHAN 14/G/02

Site A	Altitud	e and U	pstrea	m Cat	chment	Charac	eteristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0300	100	11	100	0	21	32	43	0.0	0	0	4	

River and Code : GOWRAN 14/G/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other			
0020	130	7	0	100	97	3	0	0.0	0	0	0			
0050	77	17	0	100	96	1	0	0.0	1	0	1			
0100	57	30	0	100	76	1	0	0.1	23	0	1			
0220	43	39	0	100	75	1	0	2.4	21	0	0			
0300	27	42	0	100	74	1	0	2.8	23	0	0			
0400	30	0	0	100	56	0	0	0.0	44	0	0			

River and Code : **GRANEY (LERR)** 14/G/07

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other			
0100	113	6	100	0	86	0	0	0.0	14	0	0			
0200	93	19	100	0	76	0	0	0.0	23	0	1			
0310	72	63	100	0	59	0	0	0.3	39	0	2			

River and Code : **GRANGECON STREAM** 14/G/06

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0100	146	8	100	0	86	3	0	0.0	11	0	0	
0400	-99	2	100	0	40	34	0	0.0	26	0	0	

River and Code : **GREESE** 14/G/04

Site A	ltitud	le and U	pstrea	m Cat	chment	Characte	ristics	(where	e available	e):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0040	-99	3	100	0	98	0	0	0.0	2	0	0
0050	136	7	100	0	91	0	0	5.1	3	0	0
0070	132	10	100	0	93	0	0	4.4	2	0	0
0100	107	35	100	0	75	3	0	5.1	18	0	0
0200	95	51	100	0	74	2	0	3.5	20	0	0
0350	79	105	98	2	73	1	0	1.7	24	0	0
0400	69	129	88	12	66	1	0	1.9	31	0	0
0500	59	134	87	13	64	1	0	1.8	32	0	0
0600	50	138	86	14	63	1	0	1.7	34	0	0

River and Code : LERR 14/L/01

No.	Alt	Area	Sil			Characte Forestry		`	Misc Ag.	,	Other
0080	73	26	100	0	51	0 ()	0	0.3	46	O	3
0150	68	70	100	0	55	0	0	0.8	42	0	2
0155	68	70	100	0	56	0	0	0.8	42	0	2
0250	56	103	98	2	50	0	0	0.6	48	0	1
0300	50	112	95	5	50	0	0	0.6	49	0	1

River and Code : LEVITSTOWN STREAM 14/L/02

Site A	ltitud	le and U	pstrea	m Catc	hment (Characte	eristics	(where	e availal	ble):		
No.	Alt	Area	Sil	Cal I	Pasture	Forestry	Bogs	Urban	Misc A	g. Watei	r Other	
0200	60	4	0	100	0	4	0	0.0	96	0	0	

River and Code : MONEFELIM 14/M/03

Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Foresti	ry Bogs	Urban	Misc A	g. Watei	· Other		
0100	145	10	0	100	73	1	0	0.0	0	0	26		
0300	80	15	0	100	76	1	0	0.0	0	0	24		
0800	41	49	0	100	75	2	0	1.2	11	0	11		
1000	29	55	0	100	73	2	0	1.0	14	0	10		

River and Code : MOUNTAIN (CARLOW) 14/M/01

Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc A	g. Water	Other		
0020	120	6	100	0	15	27	43	0.0	7	0	8		
0050	62	38	100	0	26	7	37	0.0	20	0	11		
0070	45	45	100	0	33	6	31	0.0	19	0	11		
0100	35	52	100	0	37	5	27	0.1	22	0	9		
0200	33	102	100	0	47	3	15	0.7	28	0	7		

River and Code : **OLD LEIGHLIN STREAM** 14/O/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal 1	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other			
0300	47	12	0	100	85	6	0	0.0	4	0	4			
0400	83	7	0	100	83	10	0	0.0	0	0	7			
0700	42	20	0	100	88	4	0	0.3	5	0	2			

River and Code : **OWENASS** 14/O/01

Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other		
0050	162	11	100	0	11	35	26	0.0	3	0	25		
0120	89	16	92	8	29	25	19	0.0	9	0	18		
0220	77	78	40	60	53	7	9	0.1	23	0	9		
0300	70	79	39	61	53	7	9	0.9	22	0	9		

River and Code : PALATINE STREAM 14/P/04

Site A	ltitud	le and U	pstrea	m Cato	chment	Charac	teristic	(where	e availa	ble):		
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other												
0200	60	17	100	0	39	0	0	0.0	61	0	0	

River and Code : **POLLMOUNTY** 14/P/03

Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0100	95	5	100	0	61	22	0	0.0	2	0	15
0200	47	39	100	0	62	4	0	0.0	32	0	2
0300	17	48	100	0	58	11	1	0.0	27	0	2

River and Code : **POWERSTOWN** 14/P/02

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc A	g. Water	Other	
0200	48	20	67	33	67	5	0	0.0	25	0	3	
0400	31	28	53	47	65	4	0	0.0	29	0	2	

River and Code : **ROSENALLIS STREAM** 14/R/01

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0300	83	3	78	22	72	1	15	0.0	1	0	12	
0400	78	7	37	63	73	0	6	0.0	15	0	5	

River and Code : SLATE 14/S/01

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pastur	e Forest	ry Bogs	Urban	Misc A	g. Water	Other
0020	78	19	0	100	55	0	23	4.5	12	0	6
0050	76	46	3	97	49	6	26	5.3	11	0	3
0100	70	143	10	90	49	3	21	6.6	15	0	5
0150	71	172	9	91	47	4	21	5.9	17	0	5
0210	69	172	9	91	47	4	21	6.2	17	0	5
0300	60	215	9	91	49	3	18	5.1	20	0	5

River and Code : STRADBALLY (LAOIS) 14/S/02

Site A	ltitud	le and U	pstrea	ım Cat	tchment	Characte	ristics	s (where	e availabl	e):	
No.	Alt	Area	Sil	Cal	Pastur	e Forestry	Bogs	Urban	Misc Ag.	Water	Other
0030	133	8	0	100	74	4	0	0.0	21	0	1
0100	94	37	0	100	63	5	0	0.0	32	0	0
0350	70	90	0	100	58	6	0	0.9	33	0	2
0400	60	95	0	100	58	6	0	0.8	33	0	2

River and Code : TRIOGUE 14/T/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Forestry	Bogs	Urban	Misc Ag	. Water	Other			
0100	93	29	0	100	60	10	4	2.0	18	0	6			
0200	87	46	0	100	53	9	3	14.3	18	0	4			
0300	75	85	0	100	57	7	3	9.5	21	0	4			
0400	71	99	0	100	58	6	2	8.5	21	0	3			

River and Code : TULLY STREAM 14/T/02

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0200	86	0	0	100	10	0	0	0.0	90	0	0	
0300	75	43	2	98	59	4	5	11.6	11	0	9	
0390	74	44	2	98	58	4	5	11.2	13	0	9	
0400	73	45	2	98	58	4	5	11.0	13	0	9	
0500	62	65	1	99	55	4	6	7.6	22	0	6	
0600	59	195	16	84	54	2	6	4.9	28	0	5	

HYDROMETRIC AREA 16 (Balance*)

River and Code : ARA 16/A/03

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	103	31	13	87	99	0	1	0.0	0	0	0
0200	89	42	10	90	98	0	1	0.6	0	0	0
0300	83	44	9	91	95	0	1	4.0	0	0	0
0400	-	-	-	-	-	-	-	-	-	-	-
0440	73	69	14	86	88	6	0	3.1	1	0	1
0500	61	75	19	81	87	8	0	2.9	1	0	1
0600	56	84	19	81	87	7	0	2.9	1	0	1
0700	52	87	19	81	87	7	0	2.8	2	0	1

River and Code : AUGHNAGLANNY 16/A/05

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availal	ole):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc Ag	g. Water	Other	
0100	98	13	100	0	67	23	0	0.0	10	0	0	

River and Code : **BORRISOLEIGH STREAM** 16/B/06

Site A	ltitud	le and U	pstrea	m Cat	chment	Characte	ristics	(where	e available	e):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0200	168	4	100	0	69	0	0	0.0	31	0	0
0400	110	11	100	0	74	0	0	0.0	26	0	0
0600	97	14	93	7	77	0	0	2.2	20	0	0
0700	86	25	71	29	83	0	0	1.9	15	0	0

River and Code : CLODIAGH (TIPPERARY) 16/C/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other		
0040	154	27	100	0	75	2	10	0.0	5	0	8		
0080	102	36	100	0	80	1	7	0.0	5	0	6		
0200	84	121	65	35	83	2	2	0.4	10	0	3		
0400	76	189	66	34	85	2	1	0.3	8	0	3		
0600	73	252	49	51	86	2	1	0.2	9	0	3		

River and Code : **FARNEYBRIDGE** 16/F/02

Site A	ltitud	le and U	pstrea	m Cat	chment	Characte	ristics	(where	e avail	lable):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc	Ag. Water	Other
0100	-	-	-	-	-	-	-	-	-	-	-
0200	95	9	0	100	75	0	0	0.0	25	0	0
0300	-	-	-	-	-	-	-	-	-	-	-
0500	85	23	0	100	83	2	0	0.0	13	0	2
0600	78	45	0	100	88	1	0	0.0	10	0	2
0700	75	53	0	100	86	1	0	0.0	11	0	1

River and Code : **FIDAGHTA** 16/F/01

Site A	ltitud	e and U	pstrea	m Cat	chment	Charact	eristics	(where	e availal	ole):	
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc A	g. Water	Other
0100	66	23	0	100	94	0	0	2.9	3	0	0
0200	56	46	1	99	90	0	0	1.4	8	0	0
0300	51	50	1	99	90	0	0	1.3	8	0	0

River and Code : **FISHMOYNE** 16/F/03

Site A	ltitud	le and U	pstrea	m Cat	chment	Characte	ristics	(where	e available	e):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0040	109	13	51	49	84	12	0	0.0	1	0	3
0080	-	-	-	-	-	-	-	-	-	-	-
0200	92	36	45	55	85	5	0	0.0	7	0	3
0300	85	66	51	49	83	2	0	0.7	13	0	2

River and Code : GLASHA (WATERFORD) 16/G/01

Site A	ltitud	e and U	pstrea	m Cat	chment (Characte	ristics	(where	e availabl	le):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0200	204	5	100	0	3	13	49	0.0	0	0	35
0300	-	-	-	-	-	-	-	-	-	-	-
0400	25	17	100	0	19	39	25	0.0	2	0	15

River and Code : HALFWAY HOUSE STREAM 16/H/02

Site A	ltitud	le and U	pstrea	m Cat	tchment	Charac	teristics	(wher	e availal	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Foresti	ry Bogs	Urban	Misc A	g. Water	Other
0200	22	6	100	0	69	0	0	0.0	21	0	10
0300	8	8	100	0	70	0	0	0.0	22	0	8

River and Code : MULTEEN 16/M/02

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	cteristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0030	229	6	100	0	37	0	8	0.0	38	0	17	
0100	145	22	100	0	42	8	5	0.0	36	0	9	
0300	95	34	100	0	51	6	4	0.0	33	0	6	
0400	83	67	84	16	65	11	2	0.0	18	0	4	
0500	70	84	71	29	69	11	2	0.7	15	0	3	
0540	178	18	100	0	66	7	2	0.0	5	0	21	
0600	138	26	100	0	66	9	2	0.0	7	0	16	
0780	103	46	100	0	59	14	4	0.0	14	0	9	
0900	82	60	96	4	67	12	3	0.0	12	0	7	
1000	69	76	81	19	73	10	2	0.0	10	0	5	
1100	63	162	75	25	71	10	2	0.4	12	0	4	

River and Code : **OWENBEG (TIPPERARY)** 16/O/02

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (where	availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0200	179	7	100	0	60	13	0	0.0	0	0	27
0400	139	24	100	0	84	5	0	0.0	3	0	9
0700	81	32	99	1	83	4	0	0.0	6	0	8

HYDROMETRIC AREA 18

River and Code : ALLOW 18/A/02

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	cteristics	(wher	e availab	ole):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc Ag	g. Water	Other
0020	193	14	0	100	54	29	10	0.0	0	0	7
0100	154	47	0	100	57	22	7	0.0	5	0	9
0200	137	60	0	100	63	17	6	0.0	5	0	9
0300	113	82	0	100	66	14	4	0.0	8	0	8
0400	84	123	0	100	69	9	3	0.0	13	0	6
0490	79	266	0	100	72	8	3	0.6	10	0	7
0600	69	311	0	100	73	7	3	0.7	10	0	6

River and Code : ARAGLIN (BLACKWATER) 18/A/03

Site A	ltitud	e and U	pstrea	m Cat	chment	Characte	eristics	s (where	e availal	ole):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0080	107	31	96	4	22	18	41	0.0	11	0	8
0200	71	65	90	10	44	13	23	0.0	7	0	12
0350	39	98	93	7	52	17	15	0.0	5	0	11
0400	-	-	-	-	-	-	-	-	-	-	-
0500	23	127	91	9	49	17	15	0.0	6	0	13

River and Code : AWBEG (BUTTEVANT) 18/A/05

Site A	ltitud	e and U	pstrea	ım Cat	chment	Charac	teristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0120	116	13	67	33	56	23	19	0.0	3	0	0	
0160	103	0	0	100	100	0	0	0.0	0	0	0	
0250	93	48	50	50	71	19	6	0.7	2	0	2	
0300	101	14	0	100	82	0	0	0.0	17	0	1	
0400	89	36	0	100	77	0	0	0.0	22	0	1	
0550	86	119	21	79	77	8	2	0.3	11	0	1	
0700	80	173	18	82	74	6	2	0.3	17	0	1	
0900	72	189	17	83	72	6	1	0.7	19	0	1	
1000	65	256	21	79	61	9	1	0.7	23	0	5	
1100	54	316	23	77	56	13	2	0.6	23	0	6	
1200	47	335	22	78	55	12	2	0.6	25	0	6	
1300	32	350	21	79	54	11	1	0.6	27	0	6	

River and Code : AWNASKIRTAUN 18/A/07

Site A	Altitud	le and U	pstrea	m Cat	tchment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0200	150	14	64	36	15	6	75	0.0	4	0	0
0300	124	20	46	54	30	4	62	0.0	3	0	2

River and Code : **BALLARD STREAM** 18/B/10

Site A	ltitud	e and U	pstrea	m Cato	hment	Charac	teristics	(where	availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0400	61	14	95	5	65	19	0	0.0	0	0	16	

River and Code : **BALLYCLOGH STREAM** 18/B/08

Site A	Altitud	e and U	pstrea	m Cato	chment	Charac	teristics	(wher	e availal	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0100	72	22	5	95	56	0	0	0.0	43	0	0	
0500	51	33	3	97	57	1	0	0.0	42	0	0	

River and Code : **BEHANAGH** 18/B/01

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	cteristics	(where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Urban	Misc A	g. Water	r Other
0300	217	9	100	0	10	1	44	0.0	0	0	45
0500	106	13	93	7	36	3	30	0.0	0	0	31

River and Code : **BLACKWATER (MUNSTER)** 18/B/02

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availal	ble):		
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Ùrban	Misc A	g. Wate	r Other	
0050	227	10	0	100	6	50	12	0.0	6	0	27	
0060	191	18	0	100	24	31	15	0.0	5	0	25	
0075	167	39	0	100	38	20	21	0.0	10	0	12	
0100	144	62	0	100	48	14	21	0.1	7	0	10	
0200	127	89	0	100	55	10	16	0.3	8	0	180	
0300	123	117	0	100	56	8	17	0.8	8	0	10	
0400	120	118	0	100	57	8	17	0.8	8	0	10	
0600	108	235	5	95	63	6	18	0.4	6	0	80	
0700	101	249	6	94	63	6	18	0.4	6	0	7	
0750	96	253	6	94	64	5	18	0.4	6	0	7	
0800	89	322	18	82	65	5	16	0.7	6	0	8	
0810	89	322	18	82	65	5	16	0.7	6	0	80	
0900	82	348	18	82	66	5	15	0.6	7	0	7	
1000	69	477	29	71	66	5	12	0.5	9	0	8	
1100	66	867	25	75	66	7	9	0.5	10	0	7	
1200	59	951	23	77	66	7	8	0.5	12	0	80	
1300	55	980	25	75	66	7	8	0.5	12	0	7	
1400	48	1,044	25	75	65	7	8	0.5	14	0	6	
1500	46	1,178	32	68	65	7	7	0.7	15	0	6	
1510	46	1,176	32	68	65	7	7	0.6	15	0	6	
1800	42	1,223	32	68	65	6	6	0.9	15	0	80	
1900	36	1,257	32	68	64	6	6	1.0	16	0	6	
2000	27	1,697	30	70	61	8	5	0.8	19	0	6	
2100	23	1,738	31	69	61	8	5	0.8	19	0	6	
2200	21	1,750	32	68	61	8	5	0.9	19	0	80	
2210	21	1,750	32	68	61	8	5	0.9	19	0	6	
2300	20	1,755	32	68	61	8	5	0.9	19	0	80	
2450	19	2,288	39	61	62	8	5	0.8	17	0	80	
2500	10	2,334	40	60	62	8	5	0.8	17	0	6	
2600	3	2,382	40	60	62	8	5	0.8	17	0	6	
2700	2	2,437	42	58	61	8	6	0.8	17	0	6	

River and Code : **BREGOGE** 18/B/04

Site A	ltitud	e and U	pstrea	m Cate	chment	Charac	teristic	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0100	95	7	87	13	4	51	9	0.0	7	0	30
0400	70	38	53	47	23	32	2	0.1	18	0	25

River and Code : **BRIDE (WATERFORD)** 18/B/05

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Ùrban	Misc A	g. Wate	r Other	
0050	137	17	100	0	44	21	0	0.0	10	0	25	Í
0100	101	49	100	0	44	25	0	0.0	8	0	22	ļ
0120	90	76	100	0	53	19	0	0.0	12	0	15	
0200	_	_	-	_	_	_	_	_	_	_	_	
0220	66	90	98	2	56	17	0	0.0	12	0	14	
0300	43	118	92	8	57	14	1	0.0	15	0	14	ļ
0400	34	212	88	12	63	9	0	0.3	18	0	9	
0430	33	212	88	12	63	9	0	0.3	18	0	9	
0440	33	212	88	12	63	9	0	0.3	18	0	9	
0450	-	-	-	-	-	-	-	-	-	-	-	
0500	27	227	86	14	63	9	0	0.3	19	0	9	
0600	20	293	85	15	63	8	0	0.2	22	0	7	
0700	7	334	84	16	62	7	0	0.2	23	0	7	
0800	3	370	84	16	63	8	0	0.2	23	0	6	

River and Code : **BROGEEN** 18/B/06

Site A	Altitud	le and U	pstrea	m Cat	chment	Characte	ristics	(where	e availal	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0100	167	7	0	100	83	0	15	0.0	2	0	0
0200	132	17	0	100	80	1	7	1.4	10	0	0
0300	109	24	0	100	85	1	5	1.0	7	0	0
0600	88	35	0	100	85	1	4	0.7	9	0	0
0800	79	38	0	100	84	1	3	0.7	11	0	0

River and Code : CLYDA 18/C/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available): No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other														
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	Other				
0030		_		_			_		_						
0050	177	7	100	0	84	15	0	0.0	0	0	1				
0060	_	-	-	-	-	-	-	_	-	-	_				
0070	145	24	100	0	77	11	0	0.0	7	0	6				
0080	-	-	-	-	-	-	-	-	-	-	-				
0090	111	33	100	0	70	10	0	0.0	13	0	8				
0200	58	109	100	0	69	5	0	0.0	18	0	8				
0300	48	112	99	1	68	5	0	0.3	19	0	7				

River and Code : COOM 18/C/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other			
0100	200		100	0	0	40	0	0.0	0	0	40			
0100	200	4	100	0	0	43	0	0.0	8	O	49			
0400	141	15	100	0	35	28	0	0.0	13	0	24			

River and Code : **CRINNAGHTANE** 18/C/07

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal 1	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0300	76	12	84	16	66	15	0	0.0	0	0	19	

River and Code : CULLAVAW STREAM 18/C/04

Site A	Altitud	e and U	pstrea	m Cat	chment	Characte	ristics	(where	e availab	le):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	148	7	4	96	33	0	52	0.1	6	0	9
0300	125	116	0	100	56	8	17	0.7	8	0	10

River and Code : **CURRAHEEN (CORK)**

18/C/06

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0400	7	16	99	1	62	13	0	0.0	19	0	7	

River and Code : **DALUA** 18/D/01

Site A	Altitud	e and U	pstrea	m Cato	chment	Charac	teristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0050	183	12	0	100	56	15	4	0.0	8	0	18	
0100	142	28	0	100	74	7	2	0.0	8	0	10	
0200	130	55	0	100	69	9	8	0.3	5	0	10	
0210	130	55	0	100	69	9	8	0.3	5	0	10	
0300	113	87	0	100	69	10	6	0.2	5	0	10	
0500	90	134	0	100	75	7	4	0.6	5	0	7	
0600	84	140	0	100	75	7	4	0.7	6	0	7	

River and Code : **DOUGLAS (ARAGLIN)** 18/D/03

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristics	(where	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0300	_	_	_	_	_	_	_	_	_	_	_
0400	51	17	100	0	18	27	24	0.0	0	0	31
0500	31	21	92	8	28	23	19	0.0	4	0	26

River and Code : **DOUGLAS (BRIDE)** 18/D/02

No.	Alt	Area	Sil	Cal	Pasture	Foresti	ry Bogs	Urban	Misc A	g. Water	Other
0300	67	12	100	0	64	3	0	0.0	33	0	1
0500	46	28	100	0	56	4	0	0.0	38	0	2
0800	28	43	100	0	58	5	0	0.0	35	0	2

River and Code : **FARAHY** 18/F/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Wate	r Other		
0200	121	5	100	0	4	59	6	0.0	19	0	12		
0300	88	8	79	21	13	50	4	0.0	24	0	8		
0500	70	17	55	45	27	34	2	0.0	31	0	6		

River and Code : FARNANE 18/F/06

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	teristics	(where	availa	ble):		
No.	Alt	Area	Sil	Cal I	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	,
0300	49	12	0	100	56	15	4	0.0	8	0	18	

River and Code : **FINISK** 18/F/02

Site A	Altitud	le and U	pstrea	m Ca	tchment	Charac	cteristics	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Ùrban	Misc A	g. Water	Other
0090	117	16	100	0	75	4	21	0.0	0	0	1
0190	74	32	100	0	77	4	11	0.8	6	0	2
0300	37	66	100	0	78	6	7	0.4	5	0	4
0350	18	75	99	1	78	7	6	0.4	5	0	3
0500	8	99	87	13	77	8	5	0.3	7	0	3

River and Code : FINNOW (BLACKWATER) 18/F/03

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	cteristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Urban	Misc A	g. Water	r Other
0060	140	17	100	0	51	4	25	0.0	2	0	17
0200	109	27	100	0	63	3	16	2.8	1	0	14
0400	91	318	18	82	65	5	16	0.7	5	0	8

River and Code : FLESK (BRIDE) 18/F/04

Site A	ltitud	le and U	pstrea	m Cat	tchment	Characte	ristics	(where	e availabl	e):	
No.	Alt	Area	Sil	Cal	Pasture	e Forestry	Bogs	Urban	Misc Ag.	Water	Other
0200	102	9	100	0	75	7	0	0.0	8	0	10
0500	87	16	100	0	75	4	0	0.0	16	0	5
0700	58	25	100	0	71	4	0	0.0	21	0	3
1000	42	53	100	0	71	3	0	0.0	21	0	4

River and Code : **FUNSHION** 18/F/05

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	cteristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Ùrban	Misc A	g. Wateı	Other	
0020												
0020	-	-	-	-	-	-	-	-	-	-	-	
0030	117	16	98	2	5	20	42	0.0	6	0	26	
0060	101	36	58	42	51	13	19	0.0	4	0	14	
0100	80	82	69	31	58	8	18	0.1	2	0	14	
0200	72	123	63	37	66	6	13	1.9	2	0	12	
0300	68	133	60	40	68	5	12	1.8	2	0	11	
0310	68	133	60	40	68	5	12	1.8	2	0	11	
0400	62	145	56	44	70	5	11	1.6	2	0	10	
0500	55	249	67	33	71	6	8	0.9	6	0	8	
0510	55	249	67	33	71	6	8	0.9	6	0	8	
0700	46	286	62	38	68	7	7	0.8	10	0	7	
0780	-	-	-	-	-	-	-	-	-	-	-	
0800	33	339	57	43	69	6	6	0.7	12	0	6	
0900	27	362	55	45	70	6	6	0.7	13	0	6	
1000	24	379	55	45	70	5	5	0.6	13	0	6	
1100	21	381	54	46	70	5	5	0.6	13	0	6	

River and Code : GLASHANABRACK 18/G/02

Site A	ltitud	e and U	pstream	m Cat	chment (Charac	cteristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
							•					
0400	105	19	100	0	80	9	0	0.0	9	0	2	

River and Code : GLASHAWEE (ALLOW) 18/G/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal l	Pastur	e Forest	ry Bogs	Urban	Misc A	g. Wate	r Other		
0200	234	8	0	100	3	58	23	0.0	0	0	16		
0500	188	13	0	100	25	45	15	0.0	0	0	15		

River and Code : GLEN (BANTEER) 18/G/04

Site A	ltitud	e and U	pstrea	m Cat	chment	Characte	ristics	(where	e availabl	e):	
No.	Alt	Area	Sil	Cal	Pasture	e Forestry	Bogs	Urban	Misc Ag.	Water	Other
0100	259	5	100	0	12	22	55	0.0	0	0	11
0600	160	48	100	0	23	34	22	0.0	7	0	13
0900	109	59	100	0	30	30	18	0.0	9	0	14
1100	70	75	100	0	39	26	14	0.0	10	0	12

River and Code : GLENABOY 18/G/05

No.	Alt	Area	Sil	Cal	Pasture	e Foresti	ry Bogs	Urban	Misc A	g. Watei	Other
0200	86	9	100	0	65	16	0	0.0	7	0	12
0400	-	-	-	-	-	-	-	-	-	-	-
0600	5	18	97	3	74	10	0	1.1	9	0	6

River and Code : GLENAKEEFE 18/G/06

Site A	Altitud	e and U	pstrea	m Cat	tchment	Charac	cteristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Urban	Misc A	g. Wate	r Other
0100	222	3	100	0	0	0	100	0.0	0	0	0
0400	72	14	100	0	30	4	50	0.0	9	0	7

River and Code : GLENCORRA STREAM 18/G/15

Site A	ltitud	le and U	pstrea	m Cato	hment	Charac	teristic	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0200	37	6	95	5	81	0	3	0.0	0	0	15	

River and Code : GLENDINE (BLACKWATER) 18/G/07

Site A	ltitud	le and U	pstrea	m Cato	chment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0290	50	16	100	0	34	22	4	0.0	29	0	11	

River and Code : GLENLARA 18/G/08

Site A	ltitud	e and U	pstrea	m Cato	chment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0360	216	5	0	100	35	22	18	0.0	0	0	25
0400	166	21	0	100	54	14	18	0.0	2	0	12
0500	146	25	0	100	61	12	15	0.0	2	0	10

River and Code : GLENNAFALLIA 18/G/10

Site A	Altitud	le and U	pstrea	m Cat	tchment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wateı	Other
0040	168	8	100	0	8	18	41	0.0	17	0	16
0060	57	24	100	0	34	12	22	0.0	13	0	19
0200	5	43	97	3	36	21	17	0.4	10	0	15

River and Code : **GLENSHELANE** 18/G/11

Site A	ltitud	e and U	pstrea	m Cato	chment	Charac	cteristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pastur	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other
0100	-	_	_	_	_	_	_	_	_	_	_
0300	45	38	100	0	34	21	19	0.0	8	0	18

River and Code : GOISH 18/G/12

Site A	ltitud	e and U	pstrea	m Ca	tchment	Charac	teristic	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pastur	e Foresti	ry Bogs	Urban	Misc A	g. Water	Other
0050	82	7	100	0	33	47	0	0.0	0	0	21
0200	19	22	100	0	54	23	0	0.0	5	0	18
0300	5	24	94	6	55	21	0	0.0	7	0	18

River and Code : **GRADOGE*** 18/G/13

Site A	ltitud	e and U	pstrea	m Cato	hment	Charac	eteristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0200	76	34	52	48	79	1	3	4.9	2	0	10	

River and Code : **KNOPPOGE** 18/K/02

Site A	ltitud	e and U	pstrea	m Cat	tchment	Characte	eristics	(wher	e availal	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0300	86	7	100	0	73	0	0	0.0	26	0	1
0500	59	12	100	0	73	0	0	0.0	24	0	2

River and Code : LICKY 18/L/01

Site A	Altitud	e and U	pstrea	m Cat	tchment	Characte	eristics	(where	e availab	le):	
No.	Alt	Area	Sil	Cal	Pasture	e Forestry	y Bogs	Urban	Misc Ag	. Water	Other
0050	141	4	100	0	29	56	0	0.0	0	0	15
0100	-	-	-	-	-	-	-	-	-	-	-
0120	106	25	100	0	44	23	0	0.0	0	0	33
0150	58	34	100	0	42	23	0	0.0	3	0	32
0200	10	43	99	1	45	21	0	0.0	8	0	26

River and Code : LYRE 18/L/02

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristic	s (wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0300	169	5	100	0	45	28	0	0.0	11	0	16	
0900	128	11	100	0	58	13	0	0.0	21	0	8	
1100	80	24	99	1	63	6	0	0.0	26	0	4	

River and Code : MONAVUGGA 18/M/01

Site A	ltitud	e and U	pstrea	m Cato	chment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0100	103	10	100	0	44	4	15	0.0	11	0	26	

River and Code : NAD 18/N/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wate	r Other	
0200	200	2	100	0	3	27	39	0.0	28	0	3	
0400	169	16	100	0	16	35	20	0.0	9	0	21	

River and Code : **OGEEN** 18/O/01

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	e Foresti	ry Bogs	Urban	Misc A	g. Wate	r Other
0200	114	13	100	0	8	54	11	0.0	0	0	28
0400	64	38	51	49	26	40	4	0.0	15	0	16

River and Code : **OWBEG (WATERFORD)** 18/O/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wateı	r Other		
		_											
0100	32	6	57	43	55	4	0	0.0	41	0	0		
0400	18	13	55	45	58	5	0	0.0	37	0	0		
0800	7	23	44	56	55	8	0	0.7	33	0	3		

River and Code : **OWENAGEERAGH** 18/O/03

Site A	Altitud	e and U	pstrea	m Cat	tchment	Charac	teristic	s (wher	e availal	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
							•					
0100	76	9	100	0	68	5	0	0.0	14	0	13	
0300	59	23	100	0	72	2	0	0.0	19	0	6	

River and Code : **OWENANARE** 18/O/04

Site A	Altitud	le and U	pstrea	m Cato	chment	Characte	ristic	s (where	e availab	le):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	163	13	0	100	84	2	0	0.0	4	0	11
0300	133	22	0	100	84	4	0	0.0	4	0	8
0600	90	29	0	100	86	4	0	0.0	5	0	6

River and Code : **OWENBAUN (RATHCOOL)** 18/O/05

Site A	Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0200	194	8	100	0	36	22	8	0.0	0	0	34	
0500	179	14	100	0	42	18	14	0.0	2	0	24	
0700	130	22	100	0	56	12	9	0.0	7	0	16	
0900	102	26	100	0	62	10	8	0.0	6	0	14	

River and Code : **OWENKEAL** 18/O/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	e Foresti	ry Bogs	Urban	Misc A	g. Wateı	• Other	
0500	191	9	0	100	45	27	9	0.0	11	0	9	
0600	128	25	0	100	68	12	5	0.0	7	0	7	

River and Code : **OWENNAGLOO** 18/O/07

Site A	Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0200	168	4	98	2	47	0	31	0.0	0	0	23	
0500	131	9	68	32	64	0	16	0.0	3	0	16	
0700	108	11	59	41	69	0	14	0.0	3	0	14	

River and Code : **OWENNASHAD** 18/O/08

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Water	r Other			
0060	120	18	100	0	12	17	61	0.0	0	0	10			
0140	58	45	100	0	27	11	47	0.0	6	0	9			
0200	7	53	100	0	32	12	41	0.1	7	0	8			

River and Code : **OWENTARAGLIN** 18/O/09

Site A	Altitud	le and U	pstrea	m Cate	hment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal 1	Pastur	e Forest	ry Bogs	Ùrban	Misc A	g. Water	Other
0400	205	12	0	100	55	19	9	0.0	6	0	11
0600	192	19	0	100	63	13	6	0.0	4	0	14
0900	153	45	0	100	79	8	6	0.0	2	0	6
1000	141	53	0	100	82	7	5	0.0	2	0	5
1100	118	67	0	100	82	5	5	0.0	4	0	4
1200	109	81	0	100	82	4	5	0.0	5	0	4

River and Code : RATHCOOL 18/R/01

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	r Other	
0100	100		100	0	5.1		2.5	0.0	10	0	_	
0100	183	6	100	0	51	6	25	0.0	12	0	7	
0400	134	23	100	0	52	10	18	0.0	9	0	10	
0700	94	60	100	0	61	9	10	0.0	9	0	12	

River and Code : ROSS (KILLAVULLEN) 18/R/02

Site A	ltitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	e Foresti	ry Bogs	Urban	Misc A	g. Water	Other
0200	147	14	100	0	53	21	3	0.0	5	0	18
0500	37	21	97	3	44	34	2	0.0	6	0	14

River and Code : SHEEP 18/S/03

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0200	123	19	100	0	81	8	0	0.0	8	0	3
0400	77	72	100	0	76	9	3	0.0	6	0	6
0600	59	85	94	6	77	8	3	0.0	7	0	6

River and Code : TOURIG 18/T/03

Site A	Altitud	le and U	pstrea	m Ca	tchment	Characte	eristics	(wher	e availab	le):	
No.	Alt	Area	Sil	Cal	Pastur	e Forestr	y Bogs	Urban	Misc Ag	. Water	Other
0200	77	17	100	0	61	22	1	0.0	11	0	5
0300	77	17	100	0	61	22	1	0.0	11	0	5
0500	20	31	99	1	57	16	1	0.0	23	0	3
0700	7	41	93	7	58	13	1	0.0	27	0	2

HYDROMETRIC AREA 19 (BALANCE)

River and Code : AUGHNABOY (CORK) 19/A/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc A	g. Water	Other			
0100	93	8	100	0	64	4	0	0.0	32	0	0			
0300	33	19	97	3	66	4	0	1.5	29	0	0			

River and Code : **BRIDE (LEE)** 19/B/04

Site A	Altitud	le and U	pstrea	m Cat	tchment	Charac	teristics	(wher	e availab	ole):	
No.	Alt	Area	Sil	Cal	Pastur	e Forest	ry Bogs	Ùrban	Misc Ag	g. Water	Other
0400	128	18	100	0	83	1	0	0.0	13	0	3
0600	60	47	100	0	71	3	0	0.0	21	0	5
0610	60	47	100	0	71	3	0	0.0	21	0	5
0900	44	70	96	4	70	3	0	1.0	22	0	4
1300	39	99	87	13	67	3	0	0.9	25	0	3
1400	30	113	85	15	66	3	0	0.9	27	0	3
1600	16	126	82	18	64	3	0	2.2	29	0	2

River and Code : **DUNGOURNEY** 19/D/07

Site A	Altitud	le and U	pstrea	m Cat	tchment	Characte	ristics	(where	e availal	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Ùrban	Misc A	g. Water	Other
0200	115	7	100	0	49	33	0	0.0	0	0	18
0400	64	22	100	0	59	15	0	0.0	13	0	13
0500	33	32	100	0	62	11	0	0.0	17	0	9
0600	9	37	96	4	61	10	0	0.0	21	0	8
0700	1	52	71	29	54	7	0	1.5	32	0	6

River and Code : **OWENBOY (CORK)** 19/O/01

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	teristic	s (wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Ùrban	Misc A	g. Water	Other
0200	76	8	100	0	75	6	0	0.0	19	0	0
0400	38	11	100	0	73	6	0	2.5	18	0	0
0600	25	55	89	11	66	2	0	1.0	30	0	1
0800	24	72	85	15	65	2	0	0.8	32	0	1
1000	20	90	83	17	65	2	0	2.4	31	0	1
1400	7	104	84	16	63	2	0	3.3	31	0	1

River and Code : **OWENNACURRA** 19/O/03

Site A	Altitud	le and U	pstrea	m Cat	chment	Charac	teristics	(wher	e availa	ble):	
No.	Alt	Area	Sil	Cal	Pasture	e Forest	ry Bogs	Urban	Misc A	g. Wate	r Other
0050	125	10	100	0	68	14	0	0.0	0	0	17
0100	-	-	-	-	-	-	_	-	-	-	-
0200	-	-	-	-	-	-	-	-	-	-	-
0220	52	48	100	0	67	11	0	0.0	16	0	6
0300	-	-	-	-	-	-	-	-	-	-	-
0400	21	75	100	0	64	11	0	0.0	21	0	4
0500	3	106	96	4	60	8	0	1.7	27	0	3
0600	1	106	95	5	60	8	0	1.9	27	0	3

River and Code : **TEMPLEBODAN** 19/T/01

Site A	ltitud	e and U	pstrea	m Cat	chment	Charac	teristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
0100	81	14	100	0	73	15	0	0.0	8	0	3	

HYDROMETRIC AREA 20

River and Code : **ARGIDEEN** 20/A/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0030	76	10	100	0	74	3	2	0.0	12	0	9
0050	52	28	100	0	74	4	2	0.0	13	0	7
0060	38	64	100	0	69	2	1	0.0	25	0	4
0100	25	79	100	0	67	1	1	0.0	27	0	3
0200	7	90	100	0	67	2	1	0.0	27	0	3

River and Code : **BALLINSPITTLE** 20/B/09

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc Ag	. Water	Other	
0100	15	13	100	0	64	0	0	2.7	34	0	0	

River and Code : **BALLYMAHANE** 20/B/01

		, ш с Р	3 11	~	mene em	aracterist	ies (Wi	cre u , ur			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	105	4	100	0	77	0	0	0.0	23	0	0
0700	53	14	100	0	67	0	0	0.0	33	0	0
1000	27	21	100	0	73	0	0	0.0	27	0	0

River and Code : **BANDON** 20/B/02

Site A	ltitude	and Up	stream	Catchi	ment Ch	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0050	91	17	100	0	22	25	46	0.0	0	0	7	
0100	-	-	-	-	-	-	-	-	-	-	_	
0150	74	97	100	0	39	15	27	0.0	3	0	16	
0300	51	158	100	0	49	11	21	0.5	6	0	12	
0400	44	202	100	0	55	10	17	0.4	9	0	10	
0550	32	283	100	0	61	8	12	0.4	11	0	8	
0600	29	338	100	0	65	7	10	0.4	12	0	7	
0700	21	371	100	0	65	6	9	0.3	13	0	6	
0800	10	416	100	0	65	6	8	1.0	14	0	6	
0900	5	514	100	0	66	5	7	0.8	16	0	5	

River and Code : **BAWNAKNOCKANE** 20/B/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	g. Water	Other	
0200	19	10	100	0	56	17	27	0.0	0	0	0	

River and Code : **BEALANASCARTANE** 20/B/08

Site A	ltitude	and Up	stream	Catch	ment Cha	racteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	99	5	100	0	73	9	7	0.0	11	0	0
0300	89	11	100	0	76	6	3	0.0	12	3	0
0700	53	24	100	0	81	4	2	0.0	12	1	0
0800	52	24	100	0	81	4	2	0.0	12	1	0

River and Code : **BLACKWATER (BANDON)** 20/B/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0300	103	20	100	0	74	11	0	0.0	6	0	9	
0600	64	31	100	0	74	8	0	0.0	12	0	6	
0800	41	53	100	0	77	5	0	0.0	15	0	4	

River and Code : **BRINNY** 20/B/07

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0030	108	6	100	0	74	0	0	0.0	17	0	9
0070	55	23	100	0	73	2	0	0.0	22	0	4
0100	17	81	99	1	71	2	0	0.0	25	0	2
0200	7	89	98	2	70	2	0	0.0	26	0	2

River and Code : **BURRANE** 20/B/10

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0200	23	4	100	0	69	7	0	0.0	23	0	0	

River and Code : CAHA 20/C/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag.	Water	Other
0100	162	5	100	0	1	24	75	0.0	0	0	0
0400	104	15	100	0	39	14	35	0.0	3	0	9
0700	76	39	100	0	45	15	14	0.0	3	0	23

River and Code : CARHOO 20/C/06

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0300	6	4	100	0	70	0	0	0.0	30	0	0

River and Code : CASHEL (CORK) 20/C/02

Site A	ltitude	and Up	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0600	119	4	100	0	69	0	0	0.0	21	0	10
0800	39	7	100	0	76	3	0	0.0	16	0	5
0810	39	7	100	0	76	3	0	0.0	16	0	5

River and Code : CLODAGH 20/C/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other				
0300	152	4	100	0	33	7	44	0.0	16	0	0				
0400	80	10	100	0	51	6	21	0.0	21	0	0				

River and Code : CLONAKILTY STREAM 20/C/05

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	23	4	100	0	70	0	0	0.0	30	0	0	
0300	8	17	100	0	63	0	0	0.6	37	0	0	

River and Code : CULLENAGH LAKE STREAM 20/C/04

Site A	lite Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Ot												
0100	114	7	100	0	31	12	50	0.0	1	0	5		

River and Code : **DIRTY** 20/D/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0005	110	2	100	0	37	23	32	0.0	8	0	0	
0050	61	16	100	0	64	8	14	0.0	10	0	4	
0100	57	26	100	0	61	9	15	1.3	8	0	6	

River and Code : GLASHAGLORAGH (CORK) 20/G/02

Site A	ltitude	and Up	stream	Catchi	nent Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban :	Misc Ag	g. Water	Other	
0200	139	4	100	0	64	16	11	0.0	0	0	9	
0400	77	9	100	0	68	10	5	0.0	6	0	11	

River and Code : ILEN 20/I/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	ilable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0020	133	8	100	0	16	2	59	0.0	24	0	0	
0100	67	29	100	0	43	3	32	0.0	21	0	0	
0160	22	103	100	0	63	4	18	0.4	12	0	3	
0200	-	-	-	-	-	-	-	-	-	-	-	
0240	11	139	100	0	65	5	17	0.3	10	0	3	
0300	5	224	100	0	67	4	12	0.2	12	0	5	

River and Code : **KILBRITTAIN** 20/K/01

Site A	antuae	ana Op	stream	Catch	ment Cna	racterist	ics (wn	ere avai	iadie):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	41	11	100	0	77	2	0	0.0	20	0	0
0300	12	18	100	0	72	4	0	0.0	24	0	0

River and Code : **LEAMAWADDRA** 20/L/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other				
0200	43	11	100	0	50	3	41	0.0	0	0	6				
0400	12	19	100	0	52	2	36	0.0	6	0	3				

River and Code : LEAP STREAM 20/L/04

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	15	5	100	0	80	0	0	0.0	20	0	0	

River and Code : MINANE 20/M/01

Site A	ltitude	and Up	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	7	8	100	0	44	0	0	0.0	56	0	0	
0200	4	28	100	0	47	4	0	0.0	49	0	0	

River and Code : **OWENKEAGH** 20/O/01

Site A	ltitude	and Up	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	45	11	100	0	80	0	0	0.0	21	0	0
0600	21	39	100	0	70	5	0	0.0	25	0	0

River and Code: **OWENNASHINGAUN** 20/O/02

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Aş	g. Water	Other
0200	119	7	100	0	34	16	45	0.0	0	0	5
0400	49	24	100	0	53	10	27	0.0	3	0	6
0700	37	36	100	0	61	7	22	0.0	4	0	6

River and Code : **OWNAHINCHY** 20/O/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	ıracteristi	ics (wh	ere ava	ilable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0080	80	2	100	0	49	0	0	0.0	51	0	0
0200	43	13	100	0	70	0	0	0.0	30	0	0
0400	11	17	100	0	73	0	0	0.0	27	0	0

River and Code : **RATHRUANE** 20/R/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other			
0200	68	2	100	0	70	3	26	0.0	0	0	0			
0400	18	12	100	0	56	1	33	0.0	8	0	3			

River and Code : **ROURY** 20/R/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	66	7	100	0	77	3	15	0.0	5	0	0
0400	62	15	100	0	79	3	9	0.0	9	0	0
0800	29	27	100	0	80	5	5	0.0	9	0	1
1000	6	35	100	0	79	4	4	0.0	11	0	3

River and Code : SAIVNOSE 20/S/01

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	100	7	100	0	61	5	20	0.0	0	0	14
0400	65	27	100	0	71	5	8	0.0	9	0	7
0900	13	44	100	0	78	4	5	0.0	6	0	7

River and Code : SALL 20/S/02

Site A	ite Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	Water	Other			
0200	98	6	100	0	75	0	0	0.0	13	0	12			
0500	48	17	100	0	78	7	0	0.0	11	0	4			
0700	19	51	100	0	72	3	0	0.0	24	0	1			

River and Code : STICK 20/S/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0240	26	14	70	30	59	1	0	0.0	38	0	3
0300	42	9	51	49	61	1	0	0.0	33	0	5
0600	22	26	73	27	63	2	0	0.0	32	0	2
0800	8	38	82	18	56	4	0	0.0	39	0	1

River and Code : TINNEEL STREAM 20/T/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0050	26	2	100	0	85	0	0	0.0	15	0	0	

HYDROMETRIC AREA 21

River and Code : ADRIGOLE 21/A/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	ıracterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0200	8	28	100	0	7	0	88	0.0	4	1	0	:

River and Code : ARDSHEELHANE 21/A/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0100	97	6	100	0	0	0	68	0.0	5	0	28	
0200	8	27	100	0	6	4	59	0.0	11	0	20	

River and Code : BLACKWATER (KERRY) 21/B/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0100	35	48	100	0	2	6	59	0.0	12	1	21			
0200	21	85	100	0	7	8	60	0.0	10	0	14			

River and Code : **CLEADY** 21/C/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0300	10	16	96	4	28	8	35	0.0	0	0	29	

River and Code : CLOGHANE 21/C/08

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	. Water	Other	
0300	28	6	100	0	12	4	60	0.0	20	0	3	

River and Code : CLOONEE (KERRY) 21/C/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No. Alt		Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other			
0100	40	0	100	0	0	1	93	0.0	5	0	0			
0200	39	1	100	0	0	0	97	0.0	0	0	2			
0400	28	0	100	0	41	0	31	0.0	28	0	0			

River and Code : COOMEELAN STREAM 21/C/14

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	80	25	100	0	10	0	83	0.0	0	0	7

River and Code : COOMHOLA 21/C/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	55	27	100	0	13	5	80	0.0	2	0	0
0300	-	-	-	-	-	-	-	-	-	-	-
0500	10	64	100	0	19	3	76	0.0	1	0	1

River and Code : **CROANSHAGH** 21/C/05

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0100	8	18	100	0	0	0	72	0.0	6	0	23	
0200	2	38	100	0	4	2	65	0.0	7	2	21	

River and Code : CUMMERAGH 21/C/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0200	117	16	100	0	4	0	66	0.0	5	15	10	
0400	79	20	100	0	7	3	65	0.0	4	12	8	
0600	10	48	100	0	12	1	62	0.0	2	10	13	

River and Code : **DERREENDARRAGH** 21/D/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0300	45	23	100	0	9	13	62	0.0	8	0	8	

River and Code : **DRIMMINBOY** 21/D/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0100	6	6	100	0	0	0	58	0.0	0	0	42	

River and Code : **DRUMOGHTY** 21/D/04

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0400	2	17	100	0	0	4	55	0.0	19	0	12	
0400	2	1 /	100	U	9	4	SS	0.0	19	U	13	

River and Code : **EMLAGHMORE** 21/E/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	g. Water	Other	
0400	7	18	100	0	39	1	47	0.0	2	0	11	

River and Code : **FINNIHY** 21/F/01

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0200	75	13	100	0	4	0	56	0.0	9	0	30	
0300	53	22	100	0	3	0	59	0.0	16	0	22	
0500	5	31	94	6	14	0	48	0.9	20	0	17	
0510	5	31	94	6	14	0	48	0.9	20	0	17	

River and Code : FOUR MILE WATER 21/F/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	69	8	100	0	69	5	26	0.0	0	0	0
0210	69	8	100	0	69	5	26	0.0	0	0	0
0400	39	19	100	0	68	9	18	0.0	0	0	5
0500	8	27	100	0	66	7	24	0.0	0	0	4

River and Code : GLAN STREAM 21/G/13

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0400	14	18	100	0	43	2	39	0.0	8	0	8	

River and Code : GLENGARRIFF 21/G/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0100	27	12	100	0	13	2	71	0.0	7	0	7
0300	5	9	100	0	6	16	67	0.0	8	1	2

River and Code : INNY (KERRY) 21/I/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other	
0300	64	30	100	0	5	20	60	0.0	4	0	12	
0400	28	80	100	0	6	17	51	0.0	7	0	19	
0500	18	89	100	0	7	16	52	0.0	8	0	17	
0900	4	113	100	0	11	14	51	0.0	9	0	15	

River and Code : **ISKNAGAHINY LOUGH STREAM** 21/I/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	g. Water	Other	
0100	32	9	100	0	0	13	32	0.0	0	0	55	

River and Code : **KEALDUFF** 21/K/01

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0100	57	23	100	0	4	5	56	0.0	9	1	25

River and Code : **KEALINCHA** 21/K/02

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0100	71	7	100	0	17	0	48	0.0	0	0	35
0300	23	17	100	0	21	0	39	0.0	17	0	24

River and Code : LOUGH FADDA STREAM 21/L/03

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	23	2	100	0	0	0	55	0.0	0	0	45	

River and Code : MAGANNAGAN STREAM 21/M/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0100	3	8	100	0	3	0	62	0.0	0	0	34	

River and Code : MEALAGH 21/M/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	158	6	100	0	5	27	65	0.0	0	0	3
0200	84	24	100	0	36	9	52	0.0	0	0	3
0300	35	45	100	0	45	6	38	0.0	9	0	2
0400	9	56	100	0	50	5	36	0.1	7	0	2

River and Code : **OWBEG (ROUGHTY)** 21/O/02

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	102	15	100	0	9	3	29	0.0	0	0	59
0500	19	39	99	1	14	6	44	0.0	5	0	31

River and Code : **OWENBEG (OWVANE)** 21/O/03

Site A	ltitude	and Up	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0200	132	11	100	0	11	12	64	0.0	13	0	0
0400	19	17	100	0	27	10	48	0.0	9	0	6

River and Code : **OWENSHAGH** 21/O/08

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	g. Water	Other	
0100	12	31	100	0	9	1	78	0.0	3	0	8	

River and Code : **OWNAGAPPUL** 21/O/09

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	. Water	Other	
0200	17	11	100	0	1	0	75	0.0	0	6	18	

River and Code : OWNGAR (CORK) 21/O/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0200	105	11	100	0	32	12	57	0.0	0	0	0	
0400	54	19	100	0	39	12	49	0.0	0	0	0	

River and Code : **OWREAGH** 21/O/05

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other		
0100	63	7	100	0	7	12	69	0.0	0	0	11		
0300	11	17	100	0	3	14	65	0.0	10	0	8		

River and Code : **OWROE** 21/O/06

Site A	ltitude	and Upst	ream Ca	atchme	nt Charac	eteristics (where a	vailable)):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag.	Water	Other
0100	99	8	100	0	0	4	45	0.0	4	0	48
0200	74	20	100	0	0	3	49	0.0	8	0	41

River and Code : OWVANE (CORK) 21/O/07

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0200	67	18	100	0	39	2	58	0.0	0	0	1
0300	21	44	100	0	47	7	46	0.0	0	0	0
0400	11	72	100	0	49	6	41	0.0	2	0	2
0410	11	72	100	0	49	6	41	0.0	2	0	2

River and Code : **ROUGHTY** 21/R/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0020	222	14	100	0	2	0	92	0.0	0	0	6	
0060	159	35	100	0	5	6	81	0.0	0	0	8	
0070	159	35	100	0	5	6	81	0.0	0	0	8	
0100	74	51	100	0	5	12	76	0.0	0	0	8	
0250	16	120	99	1	9	7	67	0.0	6	0	11	
0350	4	178	98	2	13	8	58	0.0	5	0	15	

River and Code : SHEEN 21/S/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	90	17	100	0	8	11	67	0.0	4	0	10	
0400	49	58	100	0	13	3	73	0.0	5	0	6	
0700	8	93	100	0	17	2	69	0.0	5	0	6	
0700	8	93	100	0	17	2	69	0.0	5	0	6	

River and Code : **SLAHENY**

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	. Water	Other		
0300	72	30	100	0	7	3	61	0.0	0	0	29		
0500	21	48	100	0	10	2	64	0.0	5	0	19		

21/S/02

River and Code : SNEEM 21/S/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0200	59	11	100	0	0	3	91	0.0	1	0	5		
0400	8	31	100	0	1	10	81	0.0	6	0	2		

River and Code : TAHILLA 21/T/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	tics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0200	6	17	100	0	20	0	52	0.0	6	0	22	

River and Code : TRAFRASK STREAM 21/T/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc Ag	. Water	Other	
0300	8	17	100	0	22	0	46	0.0	16	0	16	

HYDROMETRIC AREA 24 (BALANCE)

River and Code : **BARNAKYLE** 24/B/05

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0300	34	12	0	100	86	0	0	0.0	14	0	0
0400	20	1	0	100	61	0	0	0.0	39	0	0
0600	7	43	0	100	85	0	0	5.2	9	0	1

River and Code : **CAMOGE** 24/C/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	73	158	8	92	98	0	0	0.8	1	0	1	
0200	70	202	6	94	97	0	0	0.7	2	0	0	
0250	57	236	5	95	96	0	0	0.7	3	0	0	
0400	49	244	5	95	96	0	0	0.7	3	0	0	
0400	49	244	5	95	96	0	0	0.7	3	0	0	
0500	33	261	5	95	96	0	0	0.7	3	0	0	
0600	24	265	5	95	96	0	0	0.7	3	0	0	

River and Code : CHARLEVILLE STREAM 24/C/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other
0200	109	6	0	100	83	0	0	17.2	0	0	0
0500	66	12	0	100	81	0	0	18.6	0	0	0
0800	56	105	5	94	92	0	0	2.7	4	0	1

River and Code : MAHORE 24/M/04

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0500	91	34	21	79	100	0	0	0.0	0	0	0
0700	85	41	17	83	100	0	0	0.3	0	0	0
0900	78	44	16	84	99	0	0	0.3	1	0	0

HYDROMETRIC AREA 25 (PART)

River and Code : **AYLE** 25/A/07

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0300	56	8	98	2	61	5	16	0.0	16	0	2	
0400	45	1	0	100	76	0	24	0.0	0	0	0	

River and Code : **BALLINLOUGH STREAM** 25/B/15

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0050	119	4	72	28	30	8	43	0.0	0	0	18	
0200	81	12	52	48	47	6	22	0.0	5	Ö	20	
0300	-	-	-	-	-	-	-	-	-	-	-	
0400	-	-	-	-	-	-	-	-	-	-	-	
0500	36	27	42	58	60	7	11	0.0	6	0	16	

River and Code : BARNACULLIA STREAM* 25/B/14

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	g. Water	Other	
0100	56	2	16	84	57	0	0	42.7	1	0	0	

River and Code : **BLACK (BALLYBOY)** 25/B/04

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0200	80	35	53	47	46	10	27	0.0	13	0	5	

River and Code : **BLEACH** 25/B/07

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other		
0100	93	46	100	0	2	32	23	0.0	0	2	40		
0200	54	61	98	2	5	33	26	0.0	0	2	34		

River and Code : CAPPAGH (GALWAY) 25/C/03

Site A	ltitude	and Ups	stream	Catch	ment Ch	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0100	50	13	67	33	30	30	6	0.0	0	0	33
0200	41	62	23	77	76	8	1	0.5	7	0	8
0300	36	127	32	68	64	12	9	0.5	5	0	9
0400	-	-	-	-	-	-	-	-	-	-	-
0500	32	165	32	68	65	11	9	0.4	5	0	10

River and Code : CLOGHAUN 25/C/07

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	47	10	86	14	51	20	13	0.0	0	0	16
0400	39	33	55	45	65	8	11	0.1	10	1	5
0500	40	1	0	100	70	0	19	0.0	11	0	0
0600	39	28	51	49	75	1	11	0.5	13	0	0

River and Code : COOS 25/C/08

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0010	147	8	100	0	0	12	59	0.0	0	0	29	
0180	41	15	100	0	11	7	67	0.0	0	0	15	
0200	36	15	100	0	12	6	67	0.0	0	0	15	

River and Code : CORRA 25/C/09

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other		
0100	145	11	100	0	8	34	37	0.0	0	0	21		
0400	49	19	100	0	33	23	33	0.0	0	0	12		

River and Code : **DRUMANDOORA** 25/D/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other		
0200	92	5	100	0	32	8	47	0.0	0	0	13		
0500	49	16	100	0	37	8	19	0.0	0	0	36		
0600	49	16	100	0	37	8	19	0.0	0	0	36		

River and Code : **DRUMKEARY STREAM** 25/D/11

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0300	81	10	83	17	8	16	56	0.0	3	0	17
0350	59	18	60	40	28	14	42	0.0	2	0	14
0500	52	16	95	5	3	51	13	0.0	7	0	25

River and Code : **DUNIRY** 25/D/07

Site A	ltitude	and Ups	stream	Catch	ment Ch	aracteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	153	8	100	0	0	41	22	0.0	10	0	27	
0200	56	16	95	5	3	51	13	0.0	7	0	25	
0300	-999	-	-	-	-	-	-	-	-	-	-	
0400	40	102	40	60	56	15	11	0.4	5	0	12	

River and Code : **EYRECOURT STREAM** 25/E/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0050	56	5	0	100	89	0	4	0.0	4	0	2	
0100	41	14	0	100	89	0	1	2.4	6	0	1	
0200	36	17	0	100	88	0	1	2.0	8	0	1	

River and Code : **GRANEY (SHANNON)** 25/G/04

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0010	185	3	100	0	3	35	44	0.0	0	0	19		
0025	58	12	100	0	30	22	27	0.0	6	0	15		
0100	46	131	99	1	29	21	20	0.0	2	4	25		
0200	39	171	99	1	33	19	19	0.0	2	3	24		
0300	35	229	87	13	42	14	17	0.2	5	2	19		
0400	32	239	86	14	43	14	17	0.4	5	2	19		

River and Code : KILCROW 25/K/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0009	62	1	0	100	100	0	0	0.0	0	0	0
0020	80	11	0	100	91	0	0	0.0	6	0	3
0100	57	74	0	100	88	0	2	0.3	3	0	7
0200	53	97	0	100	84	0	3	0.3	5	0	7
0300	50	124	0	100	82	0	4	0.6	7	0	6
0360	43	173	1	99	84	0	3	1.2	7	0	4
0400	40	177	1	99	84	0	3	1.2	7	0	4
0500	39	184	1	99	84	0	3	1.2	7	0	4
0600	35	206	1	99	85	0	3	1.0	7	0	4
0700	33	210	1	99	85	0	3	1.0	7	0	4

River and Code : LISDUFF (KILCROW) 25/L/06

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0060	67	9	3	97	96	0	0	0.0	1	0	3
0100	53	31	1	99	95	0	0	0.0	4	0	1
0200	53	31	1	99	95	0	0	0.0	4	0	1
0300	-	-	-	-	-	-	-	-	-	-	-
0400	48	42	3	97	92	0	0	3.0	5	0	1
0500	-	-	-	-	-	-	-	-	-	-	_

River and Code : LISDUFF STREAM *

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	g. Water	Other		
0050	63	1	63	37	66	0	0	33.8	0	0	0		
0100	-	-	-	-	-	-	-	-	-	-	-		
0200	50	1	44	56	71	0	0	29.3	0	0	0		

25/L/07

River and Code : SCARRIFF STREAM 25/S/08

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0400	36	8	59	41	66	0	2	1.7	1	0	31	

River and Code : WOODFORD (GALWAY) 25/W/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0040	129	9	100	0	0	47	16	0.0	0	0	37	
0050	125	9	100	0	0	48	15	0.0	0	0	36	
0060	102	15	100	0	0	52	20	0.0	1	0	28	
0100	-	-	-	-	-	-	-	-	-	-	-	
0200	49	31	100	0	8	32	23	1.0	9	0	27	
0300	35	48	82	18	15	24	19	0.7	14	0	28	

HYDROMETRIC AREA 28

River and Code : AILLE (CLARE) 28/A/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other		
0100	234	0	0	100	0	28	66	0.0	0	0	6		
0200	74	36	0	100	39	8	7	1.5	7	0	38		
0300	64	39	0	100	39	8	8	1.4	6	0	37		
0400	22	53	0	100	45	6	7	1.0	10	0	32		

River and Code : ANNAGEERAGH 28/A/02

Site A	ltitude	and Up	stream	Catchi	ment Ch	aracteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc Ag	g. Water	Other	
0010	103	5	0	100	4	19	13	0.0	0	0	63	
0050	65	28	0	100	23	6	18	0.0	7	6	40	
0100	54	33	0	100	27	5	16	0.0	12	5	35	
0200	40	45	0	100	29	5	18	0.0	10	4	34	
0300	14	52	0	100	34	4	15	0.0	14	3	30	
0400	9	60	0	100	38	5	14	0.0	14	3	27	

River and Code : ANNAGH (CLARE) 28/A/03

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0200	119	4	0	100	15	15	37	0.0	0	0	33	
0400	59	13	0	100	48	4	26	0.0	8	0	14	
0900	3	45	0	100	52	1	14	0.1	24	0	9	

River and Code : AUGHAGLANNA 28/A/06

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	117	4	0	100	24	26	9	0.0	13	0	28
0700	59	11	0	100	31	13	7	0.0	28	0	21

River and Code : AUGHAVEEMA 28/A/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0300	41	7	0	100	67	0	3	0.0	30	0	0
0600	12	14	0	100	73	0	2	0.0	25	0	0

River and Code : **BALLINPHONTA** 28/B/03

Site A	ltitude	and Up	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0300	47	7	0	100	47	0	4	0.0	37	0	13
0500	7	12	0	100	62	0	2	0.5	28	0	7

River and Code : **BALLYMACRAVAN** 28/B/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	70	9	0	100	36	0	11	0.0	17	10	26
0300	54	13	0	100	47	0	11	0.0	15	7	21
0400	43	14	0	100	48	0	11	0.0	14	6	20

River and Code : CAHER (CLARE) 28/C/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	118	11	0	100	10	3	7	0.0	0	0	79
0200	92	15	0	100	12	2	5	0.0	2	0	78
0300	21	19	0	100	11	2	4	0.0	2	0	81

River and Code : CASTLEPARK STREAM 28/C/09

Site A	ltitud	e and U	pstrea	m Catc	hment	Charac	cteristics	s (where	e availa	ble):		
No.	Alt	Area	Sil	Cal l	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	· Other	
							·					
0400	63	9	0	100	27	3	32	0.0	8	0	29	

River and Code : CLOONEENAGH STREAM 28/C/08

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
1100	39	6	0	100	47	13	13	0.0	0	0	27	

River and Code : **COOLEEN** 28/C/05

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0300	61	9	0	100	31	3	25	1.0	1	0	38
0400	29	13	0	100	37	4	24	0.7	2	0	31
0500	23	14	0	100	41	4	23	0.6	2	0	29

River and Code : **CREEGH** 28/C/02

Site A	ltitude	and Ups	stream	Catch	ment Ch	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0100	113	13	0	100	4	25	21	0.0	1	2	47	
0200	72	20	0	100	12	20	23	0.0	5	1	39	
0800	48	36	0	100	26	11	24	0.0	14	1	25	
1300	34	54	0	100	33	8	22	0.0	13	0	24	
1400	22	71	0	100	43	7	18	0.0	10	0	22	
1700	4	83	0	100	47	6	16	0.0	11	0	20	

River and Code : **DEALAGH** 28/D/01

Site A	ltitude	and Ups	stream	Catchi	ment Ch	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0040	97	3	0	100	38	37	24	0.0	0	0	0	
0200	47	7	0	100	39	24	13	0.0	0	0	24	
0350	14	47	0	100	55	6	13	0.2	6	0	20	

River and Code : **DOONBEG** 28/D/02

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
						•	J		J		
0300	52	18	0	100	38	1	31	0.0	6	0	24
0400	40	30	0	100	40	1	29	0.0	9	1	20
0500	29	32	0	100	41	1	27	0.0	12	1	19
0550	26	35	0	100	39	1	26	0.0	15	1	18
0600	20	47	0	100	45	1	23	0.7	16	1	14
0650	15	70	0	100	56	1	16	1.0	14	1	12
0700	11	75	0	100	56	1	15	1.5	15	0	11
0725	5	90	0	100	58	0	14	1.3	14	0	12
0770	2	103	0	100	54	0	20	1.1	13	0	11

River and Code : FREAGH 28/F/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0200	25	2	0	100	66	0	0	0.0	34	0	0	

River and Code : GLENDINE (CLARE) 28/G/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0800	79	5	0	100	44	0	24	0.0	28	0	3	
0200	25	12	0	100	59	0	12	0.0	28	0	1	

River and Code : INAGH (ENNISTYMON) 28/I/01

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0100	68	21	0	100	10	23	32	0.0	13	0	22
0200	46	65	0	100	36	11	13	0.0	21	0	18
0300	30	141	0	100	31	7	18	0.0	25	1	18
0300	30	141	0	100	31	7	18	0.0	25	1	18
0400	20	169	0	100	37	6	16	0.1	24	0	17
0450	14	170	0	100	37	6	16	0.1	24	0	17

River and Code : **KILDEEMA** 28/K/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other													
0500	89	6	0	100	15	0	20	0.0	38	0	26		
0800	25	14	0	100	40	0	10	0.0	35	0	14		

River and Code : SRUHAUNAKIT STREAM 28/S/04

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0500	67	3	0	100	41	0	18	0.0	41	0	0	

HYDROMETRIC AREA 29

River and Code : **BALLYMABILLA** 29/B/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	90	10	0	100	56	0	15	0.0	7	0	22
0300	75	16	0	100	55	0	9	0.1	15	0	21

River and Code : **BEAGH** 29/B/02

Site A	ltitude	and Ups	tream	Catch	ment Char	acteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture I	Forestry	Bogs	Urban :	Misc Ag	g. Water	Other	
0100	37	129	78	22	18	23	29	0.0	7	3	21	

River and Code : **BOLEYNEENDORRISH** 29/B/04

Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other		
0100	129	21	98	2	0	54	32	0.0	0	0	14		
0300	49	33	95	5	6	44	33	0.0	0	0	17		
0400	35	48	80	20	24	35	27	0.0	0	0	14		

River and Code : CANNAHOWNA 29/C/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	22	135	75	25	20	22	28	0.3	7	3	20	

River and Code : CARRA STREAM 29/C/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0900	92	6	0	100	73	3	0	0.0	10	0	14	
1000	81	15	0	100	75	1	5	0.0	9	0	10	
1700	45	67	0	100	78	2	2	0.2	8	0	10	
2000	33	70	0	100	77	2	2	0.2	7	0	11	

River and Code : **CLARINBRIDGE** 29/C/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0030	65	9	0	100	63	0	18	0.0	0	0	19
0040	60	13	0	100	56	0	20	0.0	0	0	24
0050	40	34	0	100	67	0	21	0.0	0	0	12
0200	27	39	0	100	65	0	19	2.5	0	0	13
0300	20	48	0	100	69	0	15	2.9	2	0	11
0400	12	88	0	100	72	2	9	1.9	6	0	10
0450	10	110	0	100	71	1	7	1.5	10	0	9
0500	1	115	0	100	71	2	7	1.4	11	0	9

River and Code : KILCOLGAN 29/K/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc A	g. Water	Other
0100	75	17	0	100	65	0	0	13.0	4	18	0
0200	49	29	0	100	71	0	0	10.3	8	11	0
0300	23	148	0	100	76	1	2	2.1	9	2	8
0400	19	271	0	100	71	2	5	1.5	7	1	13
0500	12	332	0	100	72	2	4	1.3	9	1	12
0600	10	336	0	100	72	2	4	1.3	9	1	12

River and Code : **KNOCKNAREBANA** 29/K/04

Site A	ltitude	and Ups	stream	Catchi	ment Char	acteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture F	orestry	Bogs	Urban	Misc Ag	g. Water	Other	
						-	_					Ì
0100	143	5	100	0	0	57	36	0.0	4	0	3	

River and Code : LECARROW STREAM 29/L/01

Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal I	Pasture	Forest	ry Bogs	Urban	Misc A	g. Wateı	Other	
0400	67	28	0	100	81	3	0	0.2	9	0	7	
0600	62	34	0	100	77	3	0	0.3	11	0	8	

River and Code : **OWENDALULLEEGH** 29/O/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0500	102	39	86	14	6	35	40	0.0	0	0	19
0700	73	57	88	12	11	30	44	0.0	0	0	15
0800	62	69	89	11	9	31	42	0.0	0	0	17
0900	49	80	88	12	9	30	41	0.0	2	0	19
1000	36	90	89	11	10	28	39	0.0	3	0	20

River and Code : **RAFORD** 29/R/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	74	28	0	100	53	9	10	0.0	1	0	26	
0150	63	66	0	100	57	4	11	1.0	4	0	22	
0200	46	76	0	100	59	4	11	1.0	4	0	21	
0300	36	83	0	100	60	4	10	0.9	4	0	21	
0400	28	113	0	100	64	3	9	0.7	4	0	20	
0500	21	122	0	100	66	3	8	0.6	4	0	18	

River and Code : **TOBERDONEY** 29/T/01

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0300	49	14	0	100	80	0	8	0.1	0	0	12
0500	32	22	0	100	76	4	5	0.1	5	0	10
0700	27	98	0	100	78	2	3	0.1	7	0	10

HYDROMETRIC AREA 30

River and Code : **ABBERT** 30/A/01

						racteristi			,	XX/242**	Other
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Orban	Misc Ag.	water	Other
0028	78	10	0	100	46	3	42	0.0	2	0	7
0070	61	30	0	100	52	3	31	0.0	3	0	12
0100	55	53	0	100	55	3	27	0.0	3	0	12
0200	48	100	0	100	57	3	23	0.0	8	0	9
0300	39	165	0	100	63	2	17	0.0	12	0	6
0400	32	190	0	100	64	2	17	0.0	12	0	6
0500	28	212	0	100	65	2	15	0.0	13	0	5

River and Code : AGHINISH 30/A/03

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteris	tics (wh	ere avai	lable):						
No.	No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other														
0100	15	109	0	100	45	3	9	0.0	21	15	7				

River and Code : AILLE (MAYO) 30/A/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0010	97	8	100	0	1	0	89	0.0	10	0	0	
0050	61	27	88	12	2	3	80	0.0	12	0	3	
0060	60	34	86	14	1	2	77	0.0	17	0	3	
0100	25	73	55	45	1	3	60	0.0	26	0	10	
0110	22	79	52	48	1	3	60	0.0	27	1	9	
0250	18	124	33	67	8	2	52	0.0	31	0	6	
0300	20	129	32	68	8	2	52	0.0	31	1	6	
0400	20	145	34	66	8	2	54	0.0	30	1	6	

River and Code : **BALLINDINE** 30/B/03

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	52	4	0	100	24	11	17	0.0	48	0	0	
0200	47	9	0	100	37	10	9	0.0	45	0	0	

River and Code : **BALLYCUIRKE*** 30/B/14

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	-	0	0	100	66	0	34	0.0	0	0	0

River and Code : **BEALANABRACK** 30/B/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0050	29	0	0	0	0	0	0	0.0	0	0	0
0100	18	21	76	24	0	2	8	0.0	0	0	90
0200	7	55	87	13	0	3	30	0.0	16	0	52

River and Code : BLACK (SHRULE) 30/B/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	30	3	0	100	92	0	0	0.0	8	0	0
0200	22	173	0	100	54	1	17	0.0	25	0	4
0300	16	186	0	100	53	1	15	0.0	27	0	3
0300	16	186	0	100	53	1	15	0.0	27	0	3
0400	9	194	0	100	53	1	15	0.0	28	0	3
0600	7	203	0	100	54	1	14	0.0	28	0	3

River and Code : **BUNOWEN (OUGHTERARD)** 30/B/08

Site A	ltitude	and Ups	stream	Catch	ment Ch	aracteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc Ag	g. Water	Other	
0100	38	5	85	15	6	5	81	0.0	0	0	8	

River and Code : CAMMANAGH 30/C/04

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	28	8	100	0	0	0	42	0.0	14	0	43	

River and Code : CLARE (GALWAY) 30/C/01

Site A	ltitude	and Ups	tream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0100	42	335	0	100	58	1	21	0.5	14	0	5	
0200	39	393	0	100	60	1	20	0.5	14	0	4	}
0300	37	424	0	100	60	1	19	0.5	15	Ö	4	
0400	35	436	0	100	60	1	19	0.5	15	0	4	
0500	31	453	0	100	61	1	18	0.5	15	0	4	İ
0600	29	496	0	100	61	1	18	1.1	15	0	3	
0650	29	496	0	100	61	1	18	1.1	15	0	3	
0700	27	514	0	100	61	1	18	1.1	15	0	3	
0700	27	514	0	100	61	1	18	1.1	15	0	3	
0800	24	683	0	100	61	1	19	1.0	14	0	3	
0900	22	909	0	100	62	1	18	0.8	14	0	4	
1000	20	931	0	100	62	1	17	0.8	14	0	4	
1100	10	976	0	100	63	1	17	0.8	15	0	4	
1200	8	1,056	0	100	65	1	15	0.7	15	0	3	
1300	6	1,075	0	100	65	1	15	0.7	15	0	3	

River and Code : CLAUREEN (MAYO) 30/C/12

Site A	Site Altitude and Upstream Catchment Characteristics (where available):										
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0400	27	26	0	100	21	0	29	0.0	49	0	2
0700	22	37	1	99	20	1	31	0.0	46	0	2

River and Code : CLOONDAVER STREAM (NORTH) 30/C/09

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	30	12	0	100	60	0	8	0.0	32	0	0	
0200	20	0	0	100	40	0	10	0.0	42	0	8	

River and Code : **CLOONFAD** 30/C/11

Site A	ltitude	and Ups	stream	Catchi	ment Cha	ıracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0110	68	20	0	100	61	6	6	0.0	24	0	3	
0300	59	29	0	100	44	6	18	0.0	27	0	5	

River and Code : CONG CANAL 30/C/06

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0250	10	891	29	71	29	3	26	0.6	22	12	7	

River and Code : **CREGG** 30/C/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0050	13	2	0	100	88	0	0	0.0	12	0	0
0100	10	8	0	100	83	0	0	4.3	13	0	0
0200	7	50	0	100	58	1	20	1.6	19	0	1

River and Code : **DALGAN** 30/D/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	75	21	0	100	66	0	26	0.9	2	0	5	
0200	72	25	0	100	68	0	22	4.1	3	0	4	
0300	59	42	0	100	70	0	19	2.5	5	0	3	
0400	57	102	0	100	61	2	15	1.0	14	0	7	
0500	53	146	0	100	56	2	19	0.7	17	0	6	
0600	48	168	0	100	56	2	19	0.6	18	0	5	

River and Code : **DOOGHTA** 30/D/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	19	12	100	0	0	0	68	0.0	32	0	0	
0200	9	24	100	0	0	0	57	0.0	39	0	3	

River and Code : **DRIMNEEN** 30/D/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available): No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water O											
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	. Water	Other	
0600	9	26	68	32	3	11	49	0.3	20	1	16	

River and Code : **FAILMORE** 30/F/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	7	26	77	23	1	0	85	0.0	5	0	8	

River and Code : FINNY 30/F/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	19	39	94	6	1	0	58	0.0	5	7	28	

River and Code : FOOEY 30/F/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	g. Water	Other	
0100	22	10	100	0	0	0	25	0.0	0	0	75	

River and Code : GLENNAMUCKA STREAM 30/G/04

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	g. Water	Other	
0015	76	8	0	100	44	4	22	0.0	8	0	21	

River and Code : GLENSAUL 30/G/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0010	101	5	91	9	0	0	67	0.0	33	0	0	
0100	34	24	96	4	5	5	67	0.0	12	0	11	
0200	30	24	96	4	7	6	65	0.0	12	0	10	

River and Code : GORTGARROW STREAM 30/G/05

Site A	ltitude	and Up	stream	Catchi	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0010	74	5	0	100	90	1	9	0.0	0	0	0	
0025	67	31	0	100	74	0	15	1.1	3	3	3	

River and Code : GRANGE (GALWAY) 30/G/02

No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0120	70	4	0	100	22	17	37	0.0	18	0	7
0200	62	23	0	100	47	3	39	0.0	5	2	4
0300	52	74	0	100	58	2	29	0.0	3	1	8
0400	41	93	0	100	60	2	27	0.0	4	0	7
0500	28	105	0	100	61	1	25	0.0	7	0	6
0600	28	125	0	100	60	1	25	0.4	8	0	5

River and Code : **JOYCE'S** 30/J/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0075	30	7	100	0	0	0	42	0.0	39	0	19	
0100	18	12	100	0	0	2	30	0.0	31	0	38	
0200	10	21	100	0	0	5	33	0.0	27	0	35	

River and Code : **KNOCKAUNRANNY STREAM** 30/K/02

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0100	17	11	99	1	10	0	70	0.0	8	0	11	
0200	10	11	96	4	13	0	68	0.0	8	0	11	

River and Code : LEVALLY STREAM 30/L/07

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	re Forestry Bogs Urban Misc Ag. Water								
0100	61	40	0	100	66	1	18	0.0	2	0	13			

River and Code : LOUGHKIP 30/L/01

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0100	72	11	100	0	5	3	71	0.0	7	0	14	
0200	18	28	100	0	12	1	73	0.0	6	0	8	

River and Code : LOUGH NACORRALEA STREAM 30/L/03

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0400	25	13	62	38	7	0	67	0.0	19	4	3	

River and Code : NANNY (TUAM) 30/N/01

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	44	27	0	100	73	0	15	3.3	7	0	2
0200	33	35	0	100	73	0	12	5.2	8	0	1
0300	30	37	0	100	72	0	12	7.5	7	0	1

River and Code : **OWENBRIN** 30/O/01

Site A	ltitud	e and U	pstrea	m Cat	tchment	Charac	teristics	s (wher	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	ry Bogs	Urban	Misc A	g. Water	Other	
										0		
0050	71	19	100	0	7	7	77	0.0	2	2	5	
0200	20	26	100	0	7	5	70	0.0	11	1	6	

River and Code: **OWENRIFF (CORRIB)** 30/O/02

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0070	33	44	76	24	0	12	62	0.0	5	6	14
0100	22	63	74	26	1	12	66	0.0	5	4	11
0190	10	66	72	28	2	12	65	0.6	5	4	12

River and Code : **OWENWEE (CORRIB)** 30/O/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0180	19	9	81	19	0	13	58	0.0	4	3	23

River and Code : **ROBE** 30/R/01

Site A	ltitude	and Ups	stream	Catchi	nent Ch	aracteristi	cs (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0015	71	9	0	100	29	0	4	0.0	40	3	24	
0030	57	47	0	100	46	1	24	0.0	22	1	6	
0100	52	92	0	100	49	2	18	0.2	29	0	3	
0110	51	94	0	100	49	2	18	0.2	28	0	3	
0200	44	128	0	100	47	3	15	2.3	25	0	7	
0300	36	173	0	100	46	3	15	1.7	27	1	8	
0310	35	174	0	100	46	3	15	1.7	26	1	8	
0400	32	193	0	100	46	2	16	1.5	25	1	7	
0500	30	238	0	100	51	2	14	1.4	25	1	6	
0510	30	243	0	100	50	2	14	1.4	26	1	6	
0600	24	265	0	100	51	2	13	1.4	27	1	5	
0700	20	294	0	100	53	2	12	1.5	25	1	5	
0800	20	294	0	100	53	2	12	1.6	25	1	5	
0900	20	298	0	100	53	2	12	1.6	25	1	5	
0950	20	300	0	100	54	2	12	1.6	25	1	5	
1000	20	304	0	100	54	2	11	1.6	25	1	5	

River and Code : SCARDAUN 30/S/04

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	47	6	0	100	47	5	18	0.0	30	0	0	
0500	40	13	0	100	42	2	20	0.0	35	0	0	

River and Code : SINKING 30/S/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0800	57	84	0	100	58	0	29	0.4	9	1	2
0100	56	86	0	100	58	0	30	0.4	9	1	2
0200	52	108	0	100	59	0	28	0.5	8	1	3
0300	50	132	0	100	61	0	24	0.5	8	1	6
0300	50	132	0	100	61	0	24	0.5	8	1	6
0320	49	143	0	100	60	1	24	0.5	9	1	6
0400	45	155	0	100	60	0	23	0.4	10	1	5

River and Code : SRAH STREAM* 30/S/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban !	Misc Ag	g. Water	Other	
0400	21	14	87	13	33	0	62	0.0	5	0	0	

River and Code : SRAHNALONG 30/S/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	ıracterist	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	33	9	99	1	0	0	97	0.0	3	0	0	

River and Code : **TERRYLAND** 30/T/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	g. Water	Other	
0500	8	5	0	100	50	0	0	24.6	0	0	25	

River and Code : TULLAGHAUN 30/T/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	y Bogs	Urban	Misc Ag	g. Water	Other			
0300	60	17	0	100	67	0	6	0.0	1	0	27			

River and Code : YELLOW (SINKING) 30/Y/01

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	ilable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0045	81	20	0	100	23	0	56	0.0	20	0	0
0055	68	33	0	100	45	0	40	0.0	14	0	1

HYDROMETRIC AREA 31 (Balance)

River and Code : CASHLA 31/C/01

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Ag	g. Water	Other	
0100	3	73	100	0	1	4	81	0.0	0	7	7	

River and Code : GLENCOAGHAN 31/G/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	22	11	98	2	0	0	67	0.0	6	0	27

River and Code : **GOWLABEG** 31/G/03

Site A	ltitude	and Ups	stream	Catchi	ment Chai	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture 1	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0100	3	9	100	0	0	0	86	0.0	0	0	14	

River and Code : INVERMORE 31/I/01

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	tics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	e Forestry	Bogs	Urban	Misc A	g. Water	Other
0080	18	11	100	0	0	26	63	0.0	0	10	1
0500	0	37	100	0	0	32	58	0.0	2	7	22

River and Code : KNOCKADOAGH 31/K/02

ite Altitude and Upstream Catchment Characteristics (where available):													
Other	Water	Misc Ag.	Urban l	Bogs	Forestry	Pasture	Cal	Sil	Area	Alt	No.		
0	5	0	0.0	93	0	3	0	100	10	30	0100		
0	5	0	0.0	93	0	3	0	100	10	30	0100		

River and Code : LOUGH NABROCKY STREAM 31/N/10

Site Altitude and Upstream Catchment Characteristics (where available):

No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

NO INFORMATION

River and Code: **OWENBOLISKA** 31/O/01

Site A	ite Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	e Forestry	Bogs	Urban	Misc A	g. Water	Other		
0100	59	74	100	0	0	35	44	0.0	1	2	18		
0200	9	90	100	0	1	29	49	0.0	4	3	15		

River and Code : **OWENGOWLA** 31/O/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	g. Water	Other	
0300	5	34	100	0	0	0	96	0.0	1	2	1	

River and Code : **OWENTOOEY** 31/O/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteris	tics (wh	ere avai	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	29	21	88	12	0	3	88	0.0	3	1	4	

River and Code : **RECESS** 31/R/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	ilable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	48	2	100	0	0	7	93	0.0	0	0	0
0200	45	15	81	19	0	3	80	0.0	6	9	2
0300	22	45	82	18	0	8	77	0.0	5	4	6
0400	19	52	82	18	0	7	75	0.0	7	5	6
0700	7	157	79	21	0	9	64	0.0	5	6	15

River and Code : SCREEB 31/S/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Ag	. Water	Other
0100	41	4	97	3	0	7	93	0.0	0	0	0
0200	40	21	61	39	0	8	77	0.0	0	8	8
0570	2	41	79	21	0	8	76	0.0	0	7	9

River and Code : TOOREENACOONA 31/T/01

Site A	ltitude	and Ups	tream	Catchi	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture 1	Forestry	Bogs	Urban 1	Misc Ag	g. Water	Other	
0200	22	14	56	44	0	16	74	0.0	0	0	9	

HYDROMETRIC AREA 32

River and Code : ALTACONEY 32/A/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban I	Misc Ag	. Water	Other	
0300	46	23	94	6	0	25	60	0.0	1	2	11	

River and Code : **BALLINABOY** 32/B/07

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0100	16	22	99	1	0	0	69	0.0	0	31	0		
0300	12	24	99	1	0	0	71	0.0	1	29	0		

River and Code : **BUNDORRAGHA** 32/B/01

Site A	ltitude	and Up	stream	Catch	ment Char	acteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture F	orestry	Bogs	Urban	Misc Ag	. Water	Other
0100	30	28	100	0	0	4	50	0.0	0	7	39
0200	3	48	100	0	0	3	55	0.0	0	4	39

River and Code : **BUNNAHOWNA** 32/B/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	23	9	66	34	0	0	100	0.0	0	0	0	

River and Code : **BUNOWEN (LOUISBURGH)** 32/B/03

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	21	33	100	0	0	11	82	0.0	6	0	2
0150	5	70	100	0	8	6	68	0.3	13	0	4
0200	4	71	100	0	8	6	68	0.4	14	0	4

River and Code : CARROWBEG (WESTPORT) 32/C/05

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other		
0050	30	15	86	14	0	0	49	0.0	27	0	24		
0100	24	36	50	50	4	1	30	0.2	33	1	31		
0300	8	43	53	47	3	2	25	3.2	40	1	26		

River and Code : CARROWNISKY 32/C/01

Site A	ltitude	and Up	stream	Catch	ment Char	acteristi	ics (wh	ere ava	ilable):		
No.	Alt	Area	Sil	Cal	Pasture F	orestry	Bogs	Urban	Misc Ag.	Water	Other
0020	63	6	100	0	0	0	90	0.0	3	0	6
0100	48	21	100	0	0	2	87	0.0	9	0	2
0200	13	34	100	0	0	4	79	0.0	12	0	5

River and Code : CLOGHER (MOYOUR)* 32/C/07

Site Altitude and Upstream Catchment Characteristics (where available):

No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

NO INFORMATION

River and Code : CROSS (MAYO)* 32/C/02

Site Altitude and Upstream Catchment Characteristics (where available):

No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

No Information

River and Code : CRUMPAUN 32/C/03

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0050	45	12	92	8	0	13	50	0.0	26	0	11
0150	30	58	70	30	0	12	62	0.0	16	0	10

River and Code : CULFIN 32/C/04

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0020	52	6	100	0	0	18	55	0.0	0	0	27
0040	47	16	100	0	0	7	65	0.0	0	11	17
0200	2	21	100	0	1	5	69	0.0	0	9	16

River and Code : **DAWROS** 32/D/01

Site A	ltitude	and Ups	stream	Catch	ment Ch	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0020	39	9	68	32	0	10	54	0.0	0	0	37	
0100	20	40	72	28	0	10	68	0.0	2	4	17	
0200	4	53	76	24	0	7	72	0.0	3	3	15	

River and Code : **DERRYCRAFF** 32/D/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0100	47	9	63	37	4	8	86	0.0	2	0	1	
0150	34	48	86	14	1	6	78	0.0	8	1	5	

River and Code : **DERRYEHORRAUN** 32/D/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	12	12	54	46	0	3	76	0.0	16	5	0

River and Code : **ERRIFF** 32/E/01

Site A	ltitud	le and U	pstrea	m Cat	chment	Characte	ristics	(where	e availabl	e):	
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0030	78	15	100	0	2	4	67	0.0	0	2	24
0100	36	56	100	0	1	2	74	0.0	14	1	9
0200	29	116	94	6	1	5	76	0.0	11	1	7
0300	8	166	95	5	1	6	75	0.0	9	1	9

River and Code : GLAISHWY* 32/G/12

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	31	5	83	17	0	11	41	0.0	0	0	49	

River and Code : GLENDAVOCK 32/G/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	68	7	100	0	0	12	33	0.0	0	0	54	

River and Code : GLENISLAND 32/G/07

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteris	stics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc Ag	. Water	Other	
0300	20	14	100	0	0	31	47	0.0	15	0	6	

River and Code : GLENLAUR 32/G/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	cs (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture 1	Forestry	Bogs	Urban l	Misc Ag	. Water	Other	
0200	90	6	100	0	0	0	94	0.0	3	0	3	

River and Code : GLENNAMONG 32/G/03

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	24	14	100	0	0	32	63	0.0	0	0	5	

River and Code : GLENUMMERA 32/G/05

Site Altitude and Upstream Catchment Characteristics (where available):
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

No Information

River and Code : GOULAUN 32/G/06

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Ag	. Water	Other	
0100	96	8	94	6	0	5	70	0.0	4	6	14	

River and Code : MOYOUR 32/M/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	21	4	36	64	4	0	40	0.0	42	0	14	
0400	16	30	35	65	9	0	7	0.6	46	2	36	
0700	5	43	25	75	12	0	5	0.4	36	2	44	

River and Code : **NEWPORT (MAYO)** 32/N/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0050	11	141	63	37	0	12	55	0.0	17	3	13
0100	9	146	61	39	0	12	55	0.0	17	3	13
0190	2	147	61	39	0	11	55	0.0	17	3	13

River and Code : **OWENDUFF (ERRIFF)** 32/O/08

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other		
0100	65	12	100	0	0	15	35	0.0	6	7	38		

River and Code : **OWENGARVE (MAYO)** 32/O/02

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0100	48	12	90	10	0	16	73	0.0	0	0	10		
0200	7	29	67	33	0	7	82	0.0	2	0	9		

River and Code : **OWENGLIN** 32/O/03

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other			
0100	92	15	91	9	0	6	72	0.0	0	0	22			
0200	18	32	92	8	0	7	74	0.0	3	1	15			
0300	10	37	91	9	0	6	71	1.7	6	1	14			

River and Code : **OWENNABROCKAGH** 32/O/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0250	58	8	100	0	0	5	51	0.0	31	0	12
0380	20	17	80	20	3	6	43	0.0	20	0	28
0500	2	20	69	31	6	5	37	0.0	19	0	32

River and Code : **OWENNADORNAUN** 32/O/07

tuae a	ına Opsi	tream (Jatchr	nent Char	'acteristi	cs (wh	ere avan	iabie):			
Alt	Area	Sil	Cal	Pasture I	orestry	Bogs	Urban	Misc Ag	g. Water	Other	
39	8	100	0	0	17	65	0.0	10	0	7	
١	Alt	Alt Area	Alt Area Sil	Alt Area Sil Cal	Alt Area Sil Cal Pasture F	Alt Area Sil Cal Pasture Forestry	Alt Area Sil Cal Pasture Forestry Bogs	Alt Area Sil Cal Pasture Forestry Bogs Urban		Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water	Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

River and Code : **OWENWEE (MAYO)** 32/O/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	Water	Other		
0200	80	19	100	0	2	7	67	0.0	9	2	12		
0600	10	46	100	0	4	9	51	0.0	24	2	10		

River and Code : SKERDAGH 32/S/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0300	30	20	74	26	0	17	51	0.0	7	0	25	

River and Code : STREAMSTOWN (CLIFDEN) 32/S/04

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	. Water	Other	
0200	13	14	98	2	9	8	71	0.0	0	2	9	

River and Code : **TRAHEEN** 32/T/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	3	6	79	21	0	16	63	0.0	8	0	13	

HYDROMETRIC AREA 33 (BALANCE)

River and Code : **BUNANIOO** 33/B/09

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture !	Forestry	Bogs	Urban l	Misc Ag	. Water	Other	
0100	33	4	85	15	0	0	100	0.0	0	0	0	

River and Code : **DOOEGA** 33/D/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	7	10	100	0	3	0	86	0.0	11	0	0

River and Code : **DOOLOUGH STREAM** 33/D/02

Site A	ite Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other		
0100	6	15	100	0	2	0	83	0.0	3	0	12		

HYDROMETRIC AREA 35

River and Code : **BALLYMOTE STREAM** 35/B/04

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other			
0040	65	11	0	100	95	0	0	0.2	5	0	0			
0100	60	15	0	100	87	0	2	4.0	8	0	0			

River and Code : **BALLYSODARE** 35/B/05

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):				
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other													
0100	12	640	14	86	54	6	12	0.2	17	3	8		

River and Code : **BONET** 35/B/06

Site A	ltitude	and Up	stream	Catch	ment Cha	ıracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0010	94	5	0	100	0	0	91	0.0	2	0	8	
0050	61	20	0	100	15	2	55	0.0	7	4	18	
0100	45	47	5	95	18	2	56	0.0	11	2	11	
0200	38	106	13	87	26	6	37	0.4	17	1	12	
0400	30	165	18	82	25	6	36	0.3	20	1	12	
0500	22	219	17	83	24	7	30	0.2	29	1	10	
0600	9	265	14	86	22	8	26	0.2	34	1	10	

River and Code : **BRACKARY** 35/B/10

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0200	108	5	64	36	27	0	18	0.0	41	0	14		
0500	41	51	9	91	26	11	24	0.9	24	1	13		

River and Code : **BRADOGE** 35/B/07

Site Altitude and Upstream Catchment Characteristics (where available):

No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other

No Information

River and Code : **BUNCROWEY** 35/B/09

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	190	6	100	0	0	0	78	0.0	0	0	22
0500	76	19	48	52	9	0	68	0.0	0	0	24

River and Code : **BUNNANADDAN STREAM** 35/B/08

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other			
0100	60	7	0	100	90	0	1	0.0	5	0	4			
0200	60	8	0	100	89	0	1	0.0	6	0	4			

River and Code : CASHEL STREAM (BONET) 35/C/03

Site A	ltitude	and Up	stream	Catch	ment Ch	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	76	4	0	100	0	26	3	0.0	70	0	2
0700	61	12	0	100	9	14	2	0.0	75	0	1
1200	25	18	0	100	15	9	5	0.0	70	0	0

River and Code : CLOONEEN (SLIGO) 35/C/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	75	10	0	100	23	6	58	0.0	4	0	10
0500	60	36	0	100	60	2	26	0.0	4	0	8
0600	57	48	0	100	64	1	22	0.0	6	0	6

River and Code : **DIFFREEN** 35/D/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	42	18	0	100	8	0	24	0.0	46	0	23

River and Code : **DOONBEAKIN** 35/D/09

Site A	ite Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0200	105	2	39	61	45	0	38	0.0	0	0	18		
0400	23	8	9	91	74	0	19	0.0	0	0	7		

River and Code : **DOONFLIN** 35/D/10

Site A	Site Altitude and Upstream Catchment Characteristics (where available):														
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other				
0400	56	6	66	34	54	0	40	0.0	6	0	0				
0600	7	11	35	65	69	0	21	0.0	10	0	0				

River and Code : **DOONOWNEY** 35/D/12

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracterist	tics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0800	6	6	0	100	53	20	0	0.0	28	0	0

River and Code : **DOUGLAS (SLIGO)** 35/D/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	ıracteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
1400	47	31	0	100	17	11	8	0.0	63	0	0	

River and Code : **DROWES** 35/D/03

Site A	ite Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other		
0100	7	106	0	100	14	3	32	0.3	19	17	16		
0200	3	117	0	100	16	2	29	0.5	20	15	16		

River and Code : **DRUMCLIFF** 35/D/04

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0200	29	41	0	100	11	2	38	0.0	29	3	17	
0250	13	50	0	100	16	2	37	0.0	25	2	18	
0300	10	57	0	100	23	2	34	0.0	23	2	16	
0400	8	61	0	100	26	1	32	0.0	23	2	16	

River and Code : **DRUMFIN** 35/D/11

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0500	52	20	0	100	65	0	19	0.0	9	0	7
0800	45	23	0	100	67	2	17	0.0	7	0	6

River and Code : **DUFF** 35/D/05

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0020	102	4	0	100	0	9	62	0.0	0	0	29
0100	48	19	0	100	0	2	28	0.0	28	0	43
0250	33	48	0	100	16	1	40	0.0	19	0	25
0400	20	85	0	100	17	4	43	0.0	15	0	20

River and Code : **DUNMORAN** 35/D/16

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
1000	30	7	63	37	20	0	54	0.0	13	0	14	
1400	10	29	34	66	45	7	28	0.0	17	0	4	

River and Code : **DUNNEILL** 35/D/06

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0050	133	10	89	11	6	0	83	0.0	0	0	12
0100	68	12	73	27	14	0	71	0.0	5	0	10
0200	16	24	40	60	46	0	43	0.0	4	0	7

River and Code : **EASKY** 35/E/01

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0010	172	12	100	0	0	0	87	0.0	0	10	3	
0020	93	34	81	19	1	0	75	0.0	0	3	20	
0100	50	89	51	49	7	1	72	0.0	1	1	17	
0200	10	99	46	54	13	2	66	0.0	2	1	16	
0300	9	99	46	54	14	2	65	0.0	2	1	16	

River and Code : **FINNED** 35/F/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	72	7	0	100	14	0	86	0.0	0	0	0
0200	45	12	0	100	30	1	66	0.0	3	0	0
0300	17	16	0	100	43	1	48	0.0	7	0	0

River and Code : GARAVOGUE 35/G/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):												
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other		
0100	8	365	20	80	24	8	24	0.3	27	5	12		
0200	8	369	19	81	24	8	24	0.8	27	5	12		

River and Code : GLENANIFF 35/G/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Ag	g. Water	Other	
0200	25	27	0	100	19	1	72	0.0	3	0	5	

River and Code : GOWLAN (SLIGO) 35/G/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture 1	Forestry	Bogs	Urban 1	Misc Ag	g. Water	Other	
0100	101	18	46	54	1	4	90	0.0	0	0	4	

River and Code : GRANGE (SLIGO) 35/G/04

Site A	ltitude	and Ups	stream	Catchi	ment Ch	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0080	172	3	0	100	0	0	65	0.0	0	0	35	
0200	8	33	0	100	31	3	35	0.9	15	0	16	

River and Code : **GURTEEN STREAM*** 35/G/05

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0150	68	2	0	100	73	0	0	6.2	21	0	0
0200	67	2	0	100	75	0	0	7.0	18	0	0

River and Code : KILLANUMMERY 35/K/03

No.	Alt	-				aracteristi Forestry			,	Water	Other
110.	7 410	7 11 00		Cui	1 ustui c	1 orestry	Dogs	CIDUII	wiise rig	· vvacci	other
0400	161	4	0	100	0	33	7	0.0	13	0	47
0600	36	25	0	100	4	16	17	0.0	44	0	20
0900	20	44	0	100	12	9	10	0.0	57	0	11

River and Code : KILLORAN LOUGH STREAM 35/K/02

Site A	ltitud	le and U	pstrea	m Cate	hment	Charac	teristic	s (where	e availa	ble):	
No.	Alt	Area	Sil	Cal 1	Pasture	Forest	ry Bogs	Urban	Misc A	g. Watei	r Other
0500	80	2	0	100	99	0	0	0.0	1	0	0
1000	51	10	0	100	76	4	0	0.0	15	0	4

River and Code : LISKEAGH 35/L/02

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteris	stics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	e Forestr	y Bogs	Urban	Misc Ag	. Water	Other	
0200	103	4	82	18	0	45	1	0.0	37	0	16	
0900	86	5	68	32	0	39	1	0.0	46	0	13	
1100	69	10	48	52	4	24	1	0.0	64	0	7	

River and Code : LUGDOON STREAM 35/L/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0400	10	11	48	52	56	0	37	0.0	6	0	0	

River and Code : **NEWTOWN MANOR STREAM** 35/N/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0400	97	8	0	100	35	0	12	0.0	24	0	30	
0500	17	8	0	100	34	0	11	0.0	22	0	33	

River and Code : **OWENBEG (COOLANEY)** 35/O/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0030	117	24	100	0	0	36	57	0.0	0	0	7
0070	84	41	85	15	5	28	48	0.0	7	0	11
0100	72	53	75	25	16	25	40	0.0	10	0	9
0200	58	70	64	36	29	23	31	0.0	10	0	8
0400	43	87	63	37	35	20	26	0.0	9	0	10

River and Code : **OWENMORE (MANORHAMILTON)** 35/O/08

Site A	ltitude	and Up	stream	Catchi	ment Ch	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other
0220	85	26	-	100	21	12	34	0.0	21	1	11
0400	39	52	10	90	27	11	23	0.9	24	1	13

River and Code : **OWENMORE (SLIGO)** 35/O/06

Site A	ltitude	and Ups	stream	Catchi	ment Cha	aracteristi	cs (wh	ere avai	ilable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other	
0020	79	9	30	70	27	1	30	0.0	40	0	2	
0025	67	16	17	83	38	1	33	0.0	23	0	5	
0050	65	46	25	75	37	6	16	0.7	36	0	4	
0100	62	63	18	82	46	4	17	0.5	27	0	4	
0200	58	106	12	88	44	3	15	0.3	33	0	6	
0250	58	147	8	92	54	2	12	0.6	26	0	5	
0300	57	199	6	94	57	2	14	0.5	21	0	5	
0400	57	205	6	94	58	2	14	0.5	20	0	5	
0500	57	274	5	95	59	2	14	0.4	17	1	7	
0600	51	299	4	96	61	2	13	0.3	17	1	6	
0610	49	312	4	96	61	2	13	0.3	17	1	6	
0700	40	407	17	83	56	6	15	0.2	15	1	7	
0900	25	411	17	83	56	6	15	0.3	15	1	7	

River and Code : SHANVAUS 35/S/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0400	61	20	0	100	16	1	41	0.0	33	0	8	
1100	36	34	14	86	24	1	38	0.0	28	0	9	

River and Code : TULLINWILLIN STREAM 35/T/03

Site A	ltitude	and Up	stream	Catch	ment Ch	aracteris	tics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0200	68	4	0	100	14	32	31	0.0	1	0	21

River and Code : TULLYNASCREEN 35/T/06

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	123	4	0	100	0	35	42	0.0	11	0	12	

River and Code : UNSHIN 35/U/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	58	66	8	92	36	5	6	0.0	17	21	15	
0200	48	78	7	93	41	4	5	0.0	17	18	14	
0300	42	123	4	96	39	5	6	0.0	29	11	9	
0400	30	168	3	97	48	4	7	0.0	24	8	9	
0500	25	202	2	98	51	4	6	0.0	24	7	8	
0600	21	221	6	94	51	5	6	0.0	22	7	8	

River and Code : WILLSBOROUGH STREAM 35/W/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0060	120	5	0	100	0	0	66	0.0	6	0	28	
0100	59	10	0	100	15	5	42	0.0	6	0	32	
0300	8	17	0	100	45	3	23	0.8	11	0	18	

HYDROMETRIC AREA 38

River and Code : ABBERACHRIN 38/A/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture !	Forestry	Bogs	Urban :	Misc Ag	g. Water	Other	
0200	10	9	100	0	1	0	86	0.0	5	7	0	

River and Code : AIGHE 38/A/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0140	34	6	100	0	16	0	84	0.0	0	0	0
0150	33	6	100	0	17	0	82	0.0	0	0	0
0200	24	16	100	0	16	2	59	0.0	0	0	23

River and Code : **ASPICK** 38/A/02

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag.	Water	Other	
0300	132	1	100	0	0	0	74	0.0	0	0	26	

River and Code : **BIG BURN** 38/B/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0500	7	13	100	0	13	0	76	0.0	11	0	0	

River and Code : **BRACKY** 38/B/02

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteri	stics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Foresti	y Bogs	Urban	Misc Ag	g. Water	Other	
0100	16	16	100	0	17	2	59	0.0	0	0	23	

River and Code : **BUNLIN** 38/B/04

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	95	4	98	2	0	0	74	0.0	26	0	0	

River and Code : **BURNSIDE** 38/B/05

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0400	7	12	100	0	31	0	62	0.0	4	0	3	

River and Code : CALABBER 38/C/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	g. Water	Other	
0100	1.40	4	100	0	0	0	70	0.0	0	0	20	
0100	142	4	100	0	0	0	72	0.0	0	0	28	
0300	67	2	100	0	0	0	49	0.0	0	0	51	

River and Code : **CARROWNAMADDY** 38/C/02

Site A	ltitud	le and U	pstrea	m Cato	chment	Chara	cteristics	(where	e availa	ble):		
No.	Alt	Area	Sil	Cal	Pasture	Forest	try Bogs	Urban	Misc A	g. Water	r Other	
0300	13	15	100	0	21	0	66	1.7	4	0	7	

River and Code : CLADY (DONEGAL) 38/C/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0150	52	79	100	0	3	4	81	0.0	0	5	8	
0300	19	88	100	0	5	3	80	0.0	0	4	7	

River and Code : **CLOGHERNAGORE** 38/C/07

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avail	able):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0100	77	6	100	0	0	0	100	0.0	0	0	0

River and Code : **CORVEEN** 38/C/05

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0200	43	10	100	0	2	0	92	0.0	6	0	0

River and Code : CRONANIV BURN 38/C/06

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	. Water	Other	
0100	70	7	100	0	0	0	91	0.0	0	0	9	

River and Code : **DEVLIN (DONEGAL)** 38/D/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban :	Misc Ag	g. Water	Other	
0080	78	11	100	0	0	0	88	0.0	0	0	12	

River and Code : **DUNGLOE** 38/D/02

Site A	ltitude	and Up	stream	Catchi	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0020	29	13	100	0	0	0	94	0.0	0	2	4
0100	20	25	100	0	0	0	89	0.0	2	5	4
0150	22	7	100	0	0	0	92	0.0	6	0	3
0250	4	40	100	0	0	0	86	0.6	5	5	3

River and Code : **DUNTALLY** 38/D/03

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0200	53	1	100	0	0	0	100	0.0	0	0	0
0500	8	8	89	11	5	0	54	1.2	39	0	0

River and Code : **DUVOGE** 38/D/05

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	tics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0300	9	7	100	0	63	0	31	0.0	1	4	2	

River and Code : **DUVOWEN (RAY)** 38/D/04

Site A	ltitude	and Ups	stream	Catch	ment Cha	racterist	tics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	g. Water	Other	
0100	115	7	100	0	0	0	95	0.0	0	0	5	

River and Code : **FAYMORE** 38/F/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0050	68	5	100	0	0	0	48	0.0	4	0	48	
0200	6	17	96	4	2	0	39	0.0	33	0	26	

River and Code : GLEN (LACKAGH) 38/G/04

Site A	ltitude	and Ups	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0400	149	6	82	18	0	0	89	0.0	5	5	0	
0900	29	11	90	10	8	0	80	0.0	7	3	2	

River and Code : GLEN (MEENACLADY) 38/G/05

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0200	21	8	100	0	0	0	97	0.0	3	0	0

River and Code : **GLENLEHEEN STREAM** 38/G/07

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0300	88	9	100	0	1	0	94	0.0	0	0	5	

River and Code : GLENNA 38/G/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0100	42	11	100	0	17	0	74	0.0	9	0	0			
0200	4	22	93	7	27	0	64	0.6	7	0	2			

River and Code : GLENTORNAN 38/G/06

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0100	73	6	100	0	0	4	91	0.0	0	4	1			

River and Code : **GWEEBARRA** 38/G/02

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	172	6	100	0	0	0	69	0.0	0	0	31	
0200	27	39	100	0	0	0	81	0.0	0	2	18	
0300	0	94	100	0	2	1	82	0.0	1	1	13	

River and Code : **GWEEDORE** 38/G/03

Site A	Mutuue	anu op	su cam	Catcin	шені Спа	aracterist	ics (wii	ere avan	abiej.		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc A	g. Water	Other
0100	31	38	100	0	9	0	79	0.0	1	4	8
0300	4	50	100	0	8	0	82	0.0	1	3	6

River and Code : **KEEL LOUGH STREAM** 38/K/01

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteristi	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture !	Forestry	Bogs	Urban 1	Misc Ag.	Water	Other	
0200	66	7	100	0	0	0	100	0.0	0	0	0	

River and Code : LACKAGH 38/L/01

Site A	ltitude	and Ups	tream	Catchi	ment Cha	racterist	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	g. Water	Other	
0100	000	106	0.0		0		65	0.0	2	_	1.0	
0100	-999	126	99	1	2	6	67	0.0	3	5	18	

River and Code : LOUGH AGHER STREAM 38/L/02

No. Alt. Avec. St. Col. Dostava Foundam, Dogs. Hubon Miss As. Weter. Oth	
No. Alt Area Sil Cal Pasture Forestry Bogs Urban Misc Ag. Water Other	r
0200 52 12 96 4 7 0 87 0.0 2 2 2	

River and Code : LOUGHKEEL BURN 38/L/03

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0400	12	6	100	0	21	2	40	0.0	17	11	8	

River and Code : MURLIN 38/M/03

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	tics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other
0400	7	15	97	3	12	0	75	0.0	10	0	3

River and Code : **OWENATOR** 38/O/01

Site A	ltitude	and Ups	stream	Catchi	ment Cha	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban 1	Misc Ag	. Water	Other	
0100	82	20	100	0	4	0	81	0.0	0	0	15	

River and Code : **OWENAWILLIN** 38/O/10

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other			
0200	20	5	100	0	4	0	7.4	0.0	22	0	0			
0200	28	5	100	0	4	0	74	0.0	22	Ü	0			

River and Code : **OWENCARROW** 38/O/03

Site A			C:I	C-1	D	E 4	D	TT1.	N # : A	XX7 - 4	041
No.	Alt	Area	Sil	Cai	Pasture 1	Forestry	Bogs	Urban .	wiisc Ag	. water	Other
0100	45	37	100	0	0	7	53	0.0	0	8	32
0150	37	37	100	0	0	7	54	0.0	0	8	32
0200	28	84	100	0	0	9	62	0.0	0	4	24
0300	28	93	100	0	1	8	64	0.0	1	4	22

River and Code : **OWENCRONAHULLA** 38/O/09

Site Altit	Site Altitude and Upstream Catchment Characteristics (where available):													
No. A	Alt .	Area	Sil	Cal	Pasture Fo	orestry	Bogs	Urban	Misc Ag	. Water	Other			
										,		•		
0300 2	28	18	100	0	7	0	86	0.0	3	0	3			

River and Code : **OWENEA** 38/O/04

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Ag.	Water	Other
0040	100	8	100	0	11	0	77	0.0	0	3	8
0100	50	35	99	1	11	0	69	0.0	3	3	14
0200	41	-999	100	0	10	5	62	0.2	2	1	19
0300	37	100	100	0	12	6	61	0.3	2	1	18
0400	24	-999	100	0	13	7	60	0.3	2	1	16
0500	3	126	100	0	13	9	60	0.3	2	1	14

River and Code : **OWENNAMARVE** 38/O/05

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	49	15	100	0	0	0	92	0.0	0	6	3
0300	4	26	100	0	0	0	89	0.0	2	5	4

River and Code : **OWENTOCKER** 38/O/06

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Ag	g. Water	Other
0010	165	8	100	0	0	0	94	0.0	0	0	6
0050	70	31	100	0	4	4	85	0.0	2	0	4
0200	20	42	99	1	12	3	77	0.0	2	0	7
0300	10	43	99	1	13	3	75	0.5	2	0	7

River and Code : **OWENVEAGH** 38/O/14

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban :	Misc Ag	. Water	Other			
0080	50	11	100	0	0	8	69	0.0	0	0	23			

River and Code : **OWENWEE (DOOCHARRY)** 38/O/07

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Aş	g. Water	Other
0100	53	5	100	0	0	0	69	0.0	0	0	31
)250	5	21	100	0	4	0	79	0.0	0	0	16

River and Code : **OWENWEE (DUNLEWY)** 38/O/12

Site A	ltitude	and Up	stream	Catch	ment Cha	racterist	ics (wh	ere avail	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban !	Misc Aş	g. Water	Other
0200	71	8	100	0	0	0	83	0.0	0	0	17

River and Code : **OWENWEE (GLEN LOUGH)** 38/O/13

Site A	ltitude	and Ups	stream	Catch	ment Cha	racteris	tics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	. Water	Other	
0100	28	4	93	7	0	0	89	0.0	0	8	3	

River and Code : **OWENWEE (LOUGHROS)** 38/O/08

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestr	y Bogs	Urban	Misc Ag	g. Water	Other			
0050	5	6	100	0	0	0	71	0.0	1	0	28			

River and Code : **PORT STREAM** 38/P/01

Site A	Site Altitude and Upstream Catchment Characteristics (where available):													
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban l	Misc Ag	g. Water	Other			
											_			
0100	14	8	98	2	0	0	100	0.0	0	0	0			

River and Code : RAY 38/R/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	ics (wh	ere avai	lable):		
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other
0100	85	16	97	3	0	0	93	0.0	3	0	4
0200	9	33	94	6	10	0	82	0.0	5	1	2

River and Code : SHALLOGAN 38/S/03

Site A	ltitude	and Ups	stream	Catch	ment Chai	racteristi	ics (wh	ere avail	able):			
No.	Alt	Area	Sil	Cal	Pasture 1	Forestry	Bogs	Urban :	Misc Ag	g. Water	Other	
0300	76	14	100	0	4	2	70	0.0	4	0	20	

River and Code : SRUHANNAMEEL 38/S/02

Site A	ltitude	and Up	stream	Catchi	ment Cha	racterist	ics (wh	ere avail	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0100	70	2	100	0	0	0	96	0.0	0	0	1.4	
0100	70	3	100	U	0	U	86	0.0	U	U	14	

River and Code : STRACASHEL 38/S/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracterist	tics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc A	g. Water	Other	
0050	73	34	100	0	4	5	56	0.0	3	0	33	
0200	46	42	100	0	6	4	59	0.4	3	0	27	

River and Code : TULLAGHOBEGLY 38/T/01

Site A	ltitude	and Up	stream	Catch	ment Cha	aracteristi	ics (wh	ere avai	lable):			
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag	g. Water	Other	
0090	128	17	96	4	0	1	62	0.0	2	8	27	
0100	125	18	96	4	0	1	62	0.0	4	8	25	
0400	13	30	86	14	13	1	53	1.1	11	5	16	