



Kerry County Council

Waste Water Discharge Licence Application

for

Rathmore Agglomeration

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment G.2

Attachment G.2 Compliance with Water Quality Standards for Phosphorus Regulations (S.I. No. 258 of 1998).

The existing treatment plant at Rathmore discharges to the River Blackwater. The following legislation was considered in establishing the proposed discharge standards for the future WwTP and the suitability of the existing discharge location:-

- The River Blackwater is not designated "sensitive" under the Third Schedule to the Urban Waste Water Treatment Regulations 2001(SI No 254 of 2001). The Regulations specify that discharges from agglomerations with a population equivalent of between 2,000 and 10,000 to freshwater and estuaries shall be subject to secondary treatment.
- The Local Government (Water Pollution) Act, 1977 (Water Quality Standards For Phosphorus) Regulations, 1998 (SI No. 258 of 1998) oblige local authorities to maintain or improve the water quality of rivers by 2007 by reference to the Q-Rating (biotic index) or the concentration of molybdate reactive phosphate (MRP). These Regulations apply to the River Blackwater

In order to determine the suitability of the River Blackwater for discharges from the future WwTP it will be necessary to complete a waste assimilative capacity assessment at the proposed point of discharge. This requires water quality data, which is currently unavailable. Consequently we will complete an assessment based on available dilution at the 95-percentile flow.

G.3 Impact Mitigation

Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution.

Attachment G.3 should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
	√	

For inspection purposes only.
 Consent of copyright owner required for any other use.



Kerry County Council
Comhairle Chontae Chiarraí

Environment Protection Section

Local Government (Water Pollution) Act, 1977 (Water
Quality Standards for Phosphorus) Regulations, 1998.

Implementation Report

July 2004 – July 2006

For inspection purposes only.
Consent & copyright clearance required for any other use.

This report has been prepared in accordance with the requirements of the Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations, 1998.

INTRODUCTION

The Local Government (Water Pollution) Act, 1977 (Water Quality Standards For Phosphorus) Regulations, 1998 set interim phosphorus related targets for river and lake water quality which must be met by 2007. In addition to this, the regulations also placed a requirement on all Local Authorities to draw up a Measures Report outlining the status of river and lake water quality within their functional areas and detailing the measures necessary to ensure compliance with the terms of the regulations. Local Authorities are also required to submit an implementation report on a biannual basis detailing progress on the implementation of each county's Measures Report.

The Kerry County Measures Report was produced by Kerry County Council in 1999. This report contained a comprehensive assessment of the status of river and lake water quality in the county, as established through baseline monitoring carried out over the period 1995-1997 by the EPA and the County Council. It also outlined the measures which were considered necessary to ensure compliance with the requirements of the Phosphorus Regulations.

This is the fourth implementation report to be prepared and submitted by Kerry County Council and covers the period July 2004 to July 2006.

For inspection purposes only.
Consent of copyright owner required for any other use.

SECTION 1 – WATER QUALITY IN THE FUNCTIONAL AREA

Please refer to tables 1.1 and 1.2 in the attached appendices.

River Quality

The number of rivers analysed for the purposes of this report was 88, involving sampling at 213 stations. Q status was assessed in the vast majority of cases by the EPA. Those stations highlighted in red in Table 1 were assessed for Q status by laboratory staff in Kerry County Council as follow up. These additional stations are being analysed as part of the follow up to Lough Leane Catchment Monitoring & Management Study.

Key to table 1.1

Some columns have been added to the table in question in addition to those supplied by the EPA :

- 3 columns show progression in Q values from 1996 through to 1998 through to the latest assessment i.e. 2004/06 .
- most of the Q-values shown in normal type are from the EPA. Those in red bold italics were analysed by KCC staff as follow up.
- An extra column is shown which indicates change in Q status between 1998 and 2006

DET = deterioration in status
IMP = improvement in status
No change = no change in status

- In the case of MRP analysis, separate columns are included for results taken pre 1997, 2001/02, 2003/04 and 2005/06. Columns indicating the number of samples per station for mrp analysis in both times during survey are also included .
- In the column headed “ Has either standard been achieved” the following notation is used :

Yes = both mrp and Q standards have been achieved.
Yes(Q) = only Q standard has been achieved
Yes(P) = only P standard has been achieved
No = neither standard has been achieved

Q status of rivers in Co Kerry ; Please refer to earlier measures report and table 1.1

Fig 1 : Kerry river Stations: Biological status 1987-2006

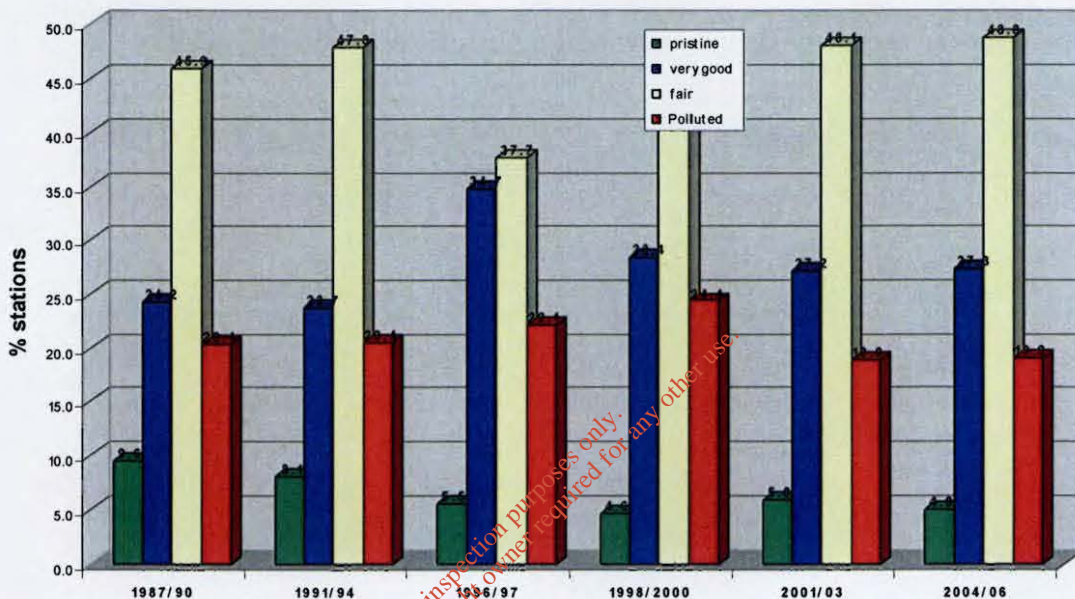


Table a

Q analysis period	1987/1990	1991/1994	1996/1997	1998/2000	2001/03	2004/06
No of stations analysed	157	187	199	197	199	205
No of pristine stations (Q 5)	15	15	11	9	12	10
No of very good stations (Q4- 5))	38	44	69	56	53	56
No of fair Stations (Q4)	72	89	75	84	89	100
No of Polluted stations (Q <= 3.5)	32	39	44	48	45	39

Breakdown of Polluted stations

No of slightly Polluted stations (Q = 3.5)	13	19	25	26	24	26
No of moderately Polluted stations (Q = 3)	16	18	15	18	14	9
No of seriously Polluted stations (Q < 3)	3	2	4	3	5	4

Fig 1 graphically illustrates the change in Q status in the period 1987 to 2006. Table a puts some flesh in this by categorizing stations over the same time period into different Q categories. For the purposes of the above graph, polluted stations are regarded as any one having a Q value of equal or less than 3-4

This report is based largely on Q results taken 2004- 2006. We still have not got back some of Q values from EPA for 2006. Where these values do not exist results from 2002-2004 are used.

The last period (2004-2006) continues the pollution trend in a positive direction. **19.0%** of stations had Q values of less than or equal to 3-4, compared with **24.4 %** in 2000.

The biggest deterioration since 1996 would appear to be in the pristine/very good status to fair, i.e. Q 5/4-5 - Q 4. **40.2 to 32.2 %** . A reversal of this trend should therefore perhaps be one of the key objectives of any strategy in improvement of water quality in the county for the coming years.

Overall improvement in Q status was noted in 54 stations since 2000, while deterioration was noted in 33 stations. Q status targets have been met in 130 stations out of 206 i.e. 63 % . For more detailed interpretation of Q status please refer to Table 1.1.

Molybdate reactive Phosphorous status.

In this reporting period, 50 stations were analysed for MRP – a total of 1118 results. This compared with 2600 results for 201 stations in 2002.

This was because:

- There has been a continuing shortfall in resources and funding for the laboratory in last few years. Prioritization of monitoring therefore led to shortfalls in many areas. Increasing demands in areas such as drinking water monitoring (impact from 2000 drinking water regs) also contributed to shortfall.
- The lab has also reached its Physical and safety capacity to take any additional samples with present instrumentation resources

Focus of monitoring has been geared to:

1. Designated Salmonid river stations
2. river stations within L Lein catchment as a follow up to study
3. increased monitoring as a result of problems encountered in L Currane catchment
4. follow up to farm surveys as a result of earlier measures report.

The most recent results broadly back trend from earlier results. To date during course of Phosphorous program 164 out of 204 stations have reached their respective median mrp targets i.e. **80.4 %** .The strategy for the future will of course focus on increasing this figure towards 100 % as much as possible.

For further details on specific stations refer to earlier measures report and Table 1.2

Lake Monitoring (Table 1.2)

58 lakes have been identified for monitoring by the EPA (J Bowman Proposed Lake Monitoring program). Of these 12 have been identified as needing to be analysed at least three times a year :

Lough Lein, Currane, Guitane, Caragh, Clonlaghlin, Iskanamacteery, Glanmore, Gill, Derriana, Iskgahiny, Barfinnihy, Capall,

The remainder only needs to be analysed once per four years:

<i>Callee</i>	<i>Looscaunagh</i>	<i>Clonee</i>	<i>Acoose</i>
<i>Dromtine</i>	<i>Eagher</i>	<i>Inchiquin</i>	<i>Reagh</i>
<i>Cummerna muck</i>	<i>Cushvally</i>	<i>Cumeenadillure</i>	<i>Coomaglaslaw</i>
<i>Cummer lough</i>	<i>Cappanalea</i>	<i>Adoon</i>	<i>Kells</i>
<i>Glannafreaghaun</i>	<i>Nambrackdarrig</i>	<i>Lackagh</i>	<i>Namona</i>
<i>Blarnageeha</i>	<i>Cloon</i>	<i>Upper Lake</i>	<i>Fadda</i>
<i>Mount Eagle</i>	<i>Coomnacronia</i>	<i>Reagh</i>	<i>Crohane</i>
<i>Gill</i>	<i>Cooasaharn</i>	<i>Coomoughra</i>	<i>Cummer</i>
<i>Anascaul</i>	<i>Glan</i>	<i>Black</i>	<i>Uragh</i>
<i>Kilbrean</i>	<i>Brin</i>	<i>Augher</i>	<i>Cummeenaloughlan</i>
<i>Muckross</i>	<i>Doo</i>	<i>Garagarry</i>	<i>Napeasta</i>
<i>Cummeenduff</i>	<i>Dromoghty</i>	<i>Nakirka</i>	

Unfortunately because of a shortfall in resources we were unable to undertake this sampling program. Monitoring has been largely confined to **L Lein catchment lakes, Caragh Lake, L Gill and L Currane and Lough Acoose**. Any other monitoring has been of a reactive nature i.e. reports of Algal blooms etc. We would hope that resources would be forthcoming in the future to satisfy requirements for a proper Lake monitoring program for the county.

The roll out of RBD surveillance and operational monitoring will mean that at least 13 lakes will be covered i.e. **Lein, Upper lake, Muckross, Guitane Caragh, Currane, Gill, Acoose, Brin, Cam, Inchiquin, Lough Na Mona, Clonlaghlin**

In 2005/2006 7 lakes were measured more than 6 times I.e. **Currane, Lein, Caragh, Guitane, Acoose, L na mona, Upper lake, Muckross** . Results of less frequency were taken from up to 16 others

A total of 791 samples were taken

Phosphorous levels quoted are based on mean of results for 2006

Analysis in recent years has noted improvements in trophic status of **Lough leane and Caragh Lake**

However in the case of L Lein it is still vulnerable to potentially cyanobacterial blooms.

In the case of *Lough Guitane* some slurry spreading and a rise in housing close to shoreline has contributed to gradual rise in productivity of lake with corresponding rise in transient algal blooms.

Lough Gill is a 1000-acres shallow limestone lake and drains a moderately intensive agricultural catchment. A weir manages the outlet to sea. This weir did not function properly in 2001 thus allowing nutrients to be concentrated in lake. Results to date from 2002 to present indicates an improvement following repair of weir and also positing of Barley straw throughout lake.

An intensive monitoring program is in place for *Lough Currane* - between 2004 and 2006 at least 100 samples have been taken at various points throughout this lake. This arises because of perceived drop in angling returns and increased evidence of enrichment. Samples have been taken monthly for a period of at least 20 months. There is evidence of increasing enrichment and presence of significant numbers of cyanobacteria, particularly *Oscillittoria*. In September of this year there was also a significant bloom of *Anabeana* noted. The status of lake seems to have moved from Oligotrophic to Mesotrophic status. Curiously the main peaks of productivity are in Springtime March – May. The study, involving monitoring, farm surveys, septic tank audits and review of any industries in area is still ongoing. There is also an ongoing consultative process with stakeholders in catchment.

Though not manifesting itself yet in increased chlorophyll or biomass there has been a notable increase of total Phosphorous in *Upper lake* and *Muckross*. These lakes are normally in pristine condition – anything that threatens its status is therefore very worrying. The cause may be adduced to significant amounts of sediment been washed in from upland areas during winter months. This is been closely monitored at present.

For inspection purposes only.
Consent of copy holders required for any other use.

SECTION 2 – IMPLEMENTATION OF MEASURES

Progress on implementation of the various measures recommended in the County Kerry Measures Report is detailed in the attached tables (Tables 2.1, 2.2, 2.3). These are categorised on the basis of :

- (a) Measures to be implemented in the county as a whole,
- (b) Measures to be implemented within each river catchment,
- (c) Measures to be implemented within each lake catchment.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

SECTION 3 - PROGRESS TO DATE

3.1 Planning Control and Enforcement Measures

a) PROGRESS DURING REPORTING PERIOD :

For Point Sources Discharges -

- On-going issuing, enforcement and review of licences under Sections 4 and 16 of the Water Pollution Acts –
 - 54 licenses currently in force under Section 4,
 - 28 licenses currently in force under Section 16.
- Continued implementation of the management proposals recommended in the Lough Leane Monitoring and Management Project Reports (both interim and final reports).
- Continued assessment of planning applications in terms of their potential impact on water quality.
- Preparation of plans for the provision of nutrient reduction at Listowel and Tralee wastewater treatment plants.
- Proceeded to tender for the construction of a number of new wastewater treatment plants (Barraduff, Waterville, Fries and Milltown).
- Progressed the preparation of preliminary reports for the provision of public wastewater collection and treatment systems for the following villages : Scartaglin, Finuge, Currow, Brandon, Boolteens, Beaufort, Asdee, Aughacarla, The Glen, Caherdaniel, Glenflesk, Cromane, Chapelstown and The Cashen.
- Progressed the preparation of preliminary reports for the up-grade or provision of wastewater treatment plants for the following villages : Tarbert, Ballylongford, Ballyduff, Lixnaw, Ardfert, Fenit, Abbeydorney, Kilflynn, Castlegregory, Annascaul, The Spa, Castlemiane, Glenbeigh, Sneem, Kilgarvan.
- Inclusion of Castleisland Sewerage Scheme Stage 2 in the Water Services Investment Programme 2004-2006.
- Progression of preparation of preliminary report for the up-grade of Kenmare Main Drainage Scheme.
- Progression to consultant appointment for the preparation of a Strategic Wastewater & Sludge Study for the whole county. This study is to provide a road map for the sustainable provision and operation of wastewater facilities for the county into the future.
- Adoption of a new Water Services “Assessment of Needs” List, 2006 by Kerry County Council which has re-prioritised wastewater treatment plant construction and up-grades throughout the county.
- Farm surveys carried out in the following river catchments : Feale, Flesk (Lower Catchment), Shanowen, Glashoreag.

- Total number of farm surveys undertaken during reporting period : 350;
- Closure plans finalised for a number of discontinued landfill sites, including Coolcaslagh (Killarney) and Milltown.
- Closure plans implemented for a number of discontinued landfill sites, namely Kenmare and Caherciveen.
- Continued operation of the North Kerry Engineered Landfill Facility at Muingnamine in accordance with its EPA Waste Licence;
- Registration and control of existing quarries under Section 261 of the Planning & Development Act.

For Non Point-Source Discharges -

- Use of Section 21A of the Water Pollution Acts – 2 notices issued under Section 21A.
- Farm Surveys completed as above;
- Continued liaison with the Forest Service of the Department of Agriculture & Food in the area of forestry development, harvesting and management to ensure compliance with the various Forest Service Guidelines (particularly regarding new plantation development and aerial fertilisation).

General Enforcement Measures –

- Total number of reported water pollution incidents investigated : 341;
- Total number of notices issued under Section 12 of the Act : 142 (includes notices issued on foot of farm inspections carried out).
- On-going and regular monitoring/sampling of licences issued under Sections 4 and 16 of the Water Pollution Acts.

b) PROBLEMS ENCOUNTERED :

- Lack of resources, both staff and financial, to enable full implementation of the action programme outlined in the County Kerry Measures Report.
- Uncertainty and confusion generated by the protracted introduction of the EU Nitrates Directive Action Plan.

c) FUTURE PLANS/NEW DIRECTIONS :

- Extend the Farm Survey Programme to further catchments within County Kerry.
- Continued enforcement of a variety of sections under the Act (ie. Sections 3, 10,12,13,14, 23).
- Issue additional discharge licences under Sections 4 and 16 of the Act.
- Continued enforcement of all existing discharge licences issued under Sections 4 and 16 of the Act.
- Secure additional resources to enable greater enforcement of the Water Pollution Act.
- Instigate prosecutions under the Act as required.

- Continued implementation of the various catchment management proposals identified during the course of the Lough Leane Catchment Management and Monitoring Project.

3.2 Consultative and Co-operative Measures

a) PROGRESS DURING REPORTING PERIOD :

- Active participation in the new River Basin District structures – South Western RBD and Shannon RBD.
- Continued involvement of the Lough Leane Working Group (Drawn from a range of different stakeholder groups) in overseeing progress on the Lough Leane Monitoring and Management Project.
- Continued involvement with stakeholders in the Lough Currane Catchment Group : regular meetings with the group on a range of water quality management issues relevant to the catchment.

b) PROBLEMS ENCOUNTERED :

- Overlapping roles between local consultation groupings and the larger RBD group structures.

c) FUTURE PLANS/NEW DIRECTIONS :

- Continue developing the liaison structures which have been established with other local Authorities under the River Basin District structure required by the Water Framework Directive;
- Continue the good working structures established through the Lough Leane Working Group.
- Continued co-ordination and co-operation on activities which are common to both Local Authorities and the Fisheries Boards. (eg. farm surveying)

3.3 Monitoring Measures

a) PROGRESS DURING REPORTING PERIOD :

- Continued monitoring by Kerry County Council of various EPA river and lake stations to assess progress in achieving necessary water quality targets.
- Implementation of a revised monitoring programme for the Lough Leane Catchment : covering lake, river and groundwater quality. This was essentially a scaled-down version of the previous monitoring programme for the Lough Leane Project.

- Continued monitoring of effluent quality from municipal wastewater treatment plants and licenced trade discharges throughout the county.
- Implementation of an intensive water quality monitoring programme for the Lough Currane catchment in South County Kerry.
- Biological monitoring (Small Streams Risk Assessment) completed in three river catchments : Cumeragh, Quagmire and Lee.

b) PROBLEMS ENCOUNTERED :

- Analysis capacity restrictions on account of the limited laboratory space available;
- Increasing demands on the laboratory to provide monitoring/analysis services in a number of areas such as drinking water quality, bathing water/"Blue Flag" etc.
- Uncertainty engendered by the late finalization of the River Basin District monitoring programmes.

c) FUTURE PLANS/NEW DIRECTIONS :

- Expand the laboratory facilities to cater for increasing work load – detailed proposals for a new laboratory have been advanced.
- Secure additional funding to increase laboratory and monitoring staff resources.
- Continue development of the in-house computer based laboratory data storage and handling system - ensure that it is coordinated satisfactorily with EPA and RBD (River based districts) databases.
- Ensure, as resources allow, that monitoring plans for rivers as envisaged in original measures report will be adhered to as much as possible.
- Ensure, as resources allow, that ancillary monitoring be undertaken to support any farm survey work which is being carried out.
- Expand the Small Streams Risk Assessment programme to cover remaining vulnerable catchments. Use the results obtained from this process as an aid to focus additional survey work.

3.4 Public Education and Advisory Measures

a) PROGRESS DURING REPORTING PERIOD :

- Kerry County Council's Environmental Awareness Officer has contributed numerous newspaper articles and has participated in various radio programmes on a range of environmental issues, including water quality.
- Kerry County Council's Environmental Awareness Officer has continued to work with the school sector in the promotion of good environmental practices, particularly through development of the "Green Schools" programme etc.

- Kerry County Council personnel have given lectures on water quality and good farming practice at a large number of REPS courses and to a variety of organisations throughout the county.
- An awareness of the importance of good farm management/practice has been raised by Kerry County Council personnel through the operation of the farm survey programme.
- Kerry County Council personnel have been available at all times to members of the public, local representatives and the media to provide information and deal with queries in relation to water quality in the county.

b) PROBLEMS ENCOUNTERED :

- The work load undertaken by the Environment Protection Section in the areas of environmental regulation and enforcement work has stretched resources at times.

c) FUTURE PLANS/NEW DIRECTIONS :

- Development of a code of best practice for farming activities based on the new European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2006.
- Continued expansion of the water quality public education programme to a county-wide level.
- Increased co-operation between various state agencies active in the water quality management area to improve and coordinate the dissemination of information on water quality issues.

3.5 Other National Agri-environmental and Miscellaneous Measures

a) PROGRESS DURING REPORTING PERIOD :

- Active participation in the new River Basin District management structures – South Western RBD and Shannon RBD.
- Continued implementation of the various Forest Service Guidelines for forestry development and management within County Kerry.
- Continued take-up on the REPS scheme in County Kerry.
- Introduction of the new European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2006.

b) PROBLEMS ENCOUNTERED :

- Ever increasing workload in the environmental area putting strains on resources;

- Uncertainty and confusion generated by the protracted introduction of the EU Nitrates Directive Action Plan.

c) **FUTURE PLANS/NEW DIRECTIONS :**

- Investigate all possible funding options at local, national and european level to increase the resources available for implementation of the Phosphorous Regulations Measures Report for County Kerry.
- Continue progress on the implementation of the EU Water Framework Directive in conjunction with other local authorities and stakeholders.
- Continue the progress made to date on implementation of the Kerry County Measures Report.

3.6 Summary and Conclusions

a) **PROGRESS DURING REPORTING PERIOD :**

Kerry County Council has continued to implement the provisions of the County Kerry Measures Report over the course of the 2004-2006 reporting period. The pollution response team has been re-organised and now operates on a revised geographical area basis. Farm survey work has been carried out in a number of additional river catchments and the outputs from this process are being followed up. Efforts have also been re-focused on implementation of the management proposals coming from the Lough Leane Catchment Monitoring and Management Project over the period in question.

b) **PROBLEMS ENCOUNTERED :**

As in previous periods, while increased resources were targeted at the area, particularly for the farm survey element, these continued to fall short of the levels recommended in the Measures Report for the county. Capacity constraints within the laboratory have also limited the volume of monitoring work which can be undertaken and this has been compounded by the lack of space available. In addition to the above, in common with all local authorities, the volume of work being carried out by the Environmental Services Department has considerably expanded over the reporting period, particularly in the area of waste management, which has correspondingly increased the pressure on already strained resources.

The protracted introduction of the Nitrates Directive action plan also created some difficulty. In particular, uncertainties with regard to the content of the proposed Nitrates Regulations resulted in the stalling and suspension of the Lough Leane Agricultural Bye-Laws adoption process. Uncertainty has also arisen over the status of the Phosphorous Regulations themselves, particularly in light of the specific targets and deadlines set out in the Water Framework Directive.

c) FUTURE PLANS/NEW DIRECTIONS :

The recent introduction of the new European Communities (Good Agricultural Practice for the Protection of Waters) Regulations will present new challenges to local authorities. It is our intention to adapt our current phosphorus regulations work programme in light of this development to ensure the optimum use of resources.

The existing water quality monitoring network, as operated by Kerry County Council, will be amended to take account of the new River Basin District monitoring requirements.

In the area of water quality monitoring, capacity constraints in the laboratory will have to be addressed and, in this regard, it is hoped that development of new or additional laboratory facilities will be progressed in the near future. In the interim, temporary space will be found for laboratory storage in the form of portakabins.

**Environment Department,
Kerry County Council,
December, 2006.**

*For inspection purposes only.
Consent of copyright owner required for any other use.*

TABLE 1.1 : RIVER WATER QUALITY STANDARDS TO BE ACHIEVED BY 2007																										
Local Authority Name		Kerry	Implementation Report Year	2006																						
River Name	River Code	Biological Monitoring Station	Station Location Name	Easting	Northing	Baseline Q-value (1996)	1998/2000 Q-values	2001/03 Q-values	2005/06 values	Q	Change in Q status since 1998/2000 (06)	Standard to be Achieved by 2007 Q Value	MRP Value ug/l P (pre 2001)	Mrp value (2001/02)	No of samples (MRP) (2001/2)	Mrp value (2003/04)	No of samples (MRP) (2003/4)	Mrp value (2005/06)	No of samples (MRP) (2005/06)	Standard to be Achieved by 2007 MRP Value	Has Either Standard Been Achieved? (06)	Does an Article 3(9) Extension Apply?	If Yes, What is the revised compliance date	River Name	Where Quality is Unsatisfactory What is the Principal Source of Pollution	If there is an identifiable source, please enter details
CULLAVAV STREAM	18C04	0100	Cullavav Br(Upr)	113963.3	92161.6	3-4	4	4	4		no change	4		39	7					30	yes(Q)			CULLAVAV STREAM	agricultural runoff	
CULLAVAV STREAM	18C04	0300	Just u/s Blackwater R confl	117033.5	93391.2	4	4	4	4		no change	4		37	6					30	yes(Q)			CULLAVAV STREAM	agricultural runoff	
ARDSHEELHANE	21A02	0100	Coomyanna Br	71702.5	72942.7	4-5	4-5	4-5	4-5		no change	4-5		<5	6					20	Yes			ARDSHEELHANE	afforestation, septic tanks	
ARDSHEELHANE	21A02	0200	Just u/s Sneem River confl	68994.5	67714.3	4-5	4-5	3-5	3-5		DET	4-5		<5	6					20	yes(P)			ARDSHEELHANE	afforestation, septic tanks	
BLACKWATER (KERRY)	21B03	0100	Gearha Bridge	78219	72158.7	4-5	5	5	5		no change	5		2	6					20	Yes			BLACKWATER (KERRY)		
BLACKWATER (KERRY)	21B03	0200	SW of Old Dromore House	79132.7	70123.4	4-5	4-5	5	5		IMP	5		2	6					20	Yes			BLACKWATER (KERRY)		
CLEADY	21C02	0300	Cleady Bridge	94328.3	72218.5	4	4	4	4		no change	4		8	12					20	Yes			CLEADY		
CUMMERAGH	21C04	0200	Just d/s Demiana Lough	60008	72666.7	4	4	4	4		no change	4		2	6					20	Yes			CUMMERAGH		
CUMMERAGH	21C04	0400	Fords d/s Cumberagh Bridge	58553	71878	4	4	4	4		no change	4		2	11					20	Yes			CUMMERAGH		
CUMMERAGH	21C04	0600	Dromkeare Bridge	54522.6	68515.1	4	4	4-5	4-5		IMP	4-5		2	11	8	251	14	100	20	Yes			CUMMERAGH		
CROANSHAGH	21C05	0100	Glanmore Bridge	77220.8	55754.5	4-5	4-5	4-5	4-5		no change	4-5		6	5					20	Yes			CROANSHAGH		
CROANSHAGH	21C05	0200	Croanshagh Bridge	77115.8	57279	4	4	4	4		no change	4		8	6					20	Yes			CROANSHAGH		
CLOONEE (KERRY)	21C06	0100	Just u/s Inchiquin Lough	85359.4	62277.4	4	4-5	4	4		DET	4-5		8	12					20	yes(P)			CLOONEE (KERRY)		
CLOONEE (KERRY)	21C06	0200	Just d/s Inchiquin Lough	83529.1	63552.2	3-4	4	3-5	3-5		DET	4		6	12					20	yes(P)			CLOONEE (KERRY)	afforestation	
CLOONEE (KERRY)	21C06	0400	Casha Bridge	79347.4	63498.8	3-4	3-4	3-4	3-4		no change	4		7	13					20	yes(P)			CLOONEE (KERRY)	afforestation	
COOMEELAN STREAM	21C14	0200	Br u/s Sheen R confl	95784.4	63894.7	4-5	4-5	4-5	4-5		no change	4-5		14	6					20	Yes			COOMEELAN STREAM		
DRIMMINBOY	21D01	0100	Br SE of Shroneberrane	76093.4	55869.5	4-5	4	4	4		no change	4-5		4	6					20	yes(P)			DRIMMINBOY	afforestation	
DERREENDARRAGH	21D03	0300	Br near Derreendarragh	79531	72584.2	4-5	4-5	4-5	4-5		no change	4-5		6	6					20	Yes			DERREENDARRAGH		
DRUMOGHTY	21D04	0400	Dawos Br	87697.2	67760.3	4	4	4	4		no change	4		10	12					20	Yes			DRUMOGHTY		
EMLAGHMORE	21E01	0400	Emlaghmore Br	44582.7	68780.2	3	3	3-4	3-4		IMP	4		9	12	3	5	7	7	20	yes(P)			EMLAGHMORE	agricultural runoff	Farm been investigated u/s of this point
FINNIHY	21F01	0200	Br u/s Sahaleen Bridge	86169	75524	4	4	4	4		no change	4		5	12					20	Yes			FINNIHY		
FINNIHY	21F01	0300	Sahaleen Bridge	89991.9	73355.4	4	4	4	4		no change	4		9	12					20	Yes			FINNIHY		
FINNIHY	21F01	0500	Kenmare: Finnihy Br (RHS)	90919.4	71117.3	4	4	3-4	3-4		DET	4		7	11					20	Yes			FINNIHY		
FINNIHY	21F01	0510	Kenmare: Finnihy Br (LHS)	90957	71129.8	3-4	3-4	3-4	3-4		no change	4		10	8					20	yes(P)			FINNIHY	stormwater runoff	run off from domestic dwellings/guest houses in town
INNY (KERRY)	21I01	0300	Ballynakilly Bridge	61532	77146	4	4	4	4		no change	4		2	12					20	Yes			INNY (KERRY)		
INNY (KERRY)	21I01	0400	Killeenagh Bridge	57905	74577	4	4	4	4		no change	4		2	12					20	Yes			INNY (KERRY)		
INNY (KERRY)	21I01	0500	Foidrenagh Bridge	55743	72856	3-4	3-4	4	4		IMP	4			11					20	yes(P)			INNY (KERRY)	agricultural Runoff/afforestation	
INNY (KERRY)	21I01	0900	2km u/s Inny Bridge	51802	70296	4	3-4	4	4		IMP	4		4	13					20	yes(P)			INNY (KERRY)	agricultural Runoff/afforestation	
ISKNAGAHINY LOUGH STREAM	21I03	0100	Br NW of Caunteens	59731.7	65627	4-5	4	4	4		no change	4-5		4	6					20	yes(P)			ISKNAGAHINY LOUGH STREAM	afforestation	
KEALDUFF	21K01	0100	Br near Gearha	78194.1	72146.9	4-5	4-5	4	4		DET	4-5		5	6					20	Yes			KEALDUFF		
OWBEG (ROUGHTY)	21O02	0200	Mangerton Bridge	99487.5	76168.5	4-5	4-5	4-5	4-5		no change	4-5		10	12					20	Yes			OWBEG (ROUGHTY)		
OWBEG (ROUGHTY)	21O02	0500	Ardtully Bridge	98741.6	73313	4-5	4	4-5	4-5		IMP	4-5		26	12					20	yes(Q)			OWBEG (ROUGHTY)	afforestation	
OWREAGH	21O05	0100	Br S of Coomnahorna	64850.9	66119.4	5	4-5	4	4		DET	5		7	6					15	yes(P)			OWREAGH	afforestation	
OWREAGH	21O05	0300	Br W of Sneem	68036.9	66699.4	4-5	4-5	4	4		DET	4-5		4	6					20	yes(P)			OWREAGH	afforestation	
OWROE	21O06	0100	Third Br u/s Owroe Bridge	61673.3	79263.3	4-5	4-5	4-5	4-5		no change	4-5		2	5					20	Yes			OWROE		
OWROE	21O06	0200	Owroe Bridge	61197.7	77399.7	4	4	4	4		no change	4		2	5					20	Yes			OWROE		
OWENSHAGH	21O08	0100	Lauragh Bridge	77845.4	58530.6	4	4	4	4		no change	4		10	6					20	Yes			OWENSHAGH		
ROUGHTY	21R01	0020	Br near Knockanruddig	108766.9	70908.8	4-5	4-5	4-5	4-5		no change	4-5		10	6					20	Yes			ROUGHTY		
ROUGHTY	21R01	0060	Inchee Bridge (RHS)	107756.8	73875.8	4-5	4-5	4-5	4-5		no change	4-5		7	9					20	Yes			ROUGHTY		
ROUGHTY	21R01	0070	Inchee Bridge (LHS)	107709.2	73915.4	4-5	4-5	4-5	4-5		no change	4-5		4	10					20	Yes			ROUGHTY		
ROUGHTY	21R01	0100	Morley's Bridge	104819.8	75374.6	4-5	4-5	4-5	4-5		no change	4-5		7	7					20	Yes			ROUGHTY		
ROUGHTY	21R01	0250	Br (Ford) d/s Slaheny R	100069.9	72955.5	4	4	4	4		no change	4		8	6					20	Yes			ROUGHTY		
ROUGHTY	21R01	0350	Ford NW of Kilgortaree Ho	96031.6	72122.4	4	4	4	4		no change	4		12	10					20	Yes			ROUGHTY		
SHEEN	21S01	0100	Releagh Bridge	92334.1	62925.3	4-5	4-5	5	5		IMP	5		8	12					20	Yes			SHEEN		
SHEEN	21S01	0400	Ford d/s Dromagorteen Bridge	95182.2	65064	4-5	4-5	4-5	4-5		no change	4-5		8	12					20	Yes			SHEEN		
SHEEN	21S01	0600	Dromanassig Bridge	95281.7	67975.9	4	-	4-5	4-5		IMP	4-5								20	Yes			SHEEN		
SHEEN	21S01	0700	1.1km u/s Sheen Br	93034.7	69710.7	4	4	4	4		no change	4		10	12					20	Yes			SHEEN		
SLAHENY	21S02	0300	Ford NE of Shandrum	101675.4	70012.5	4-5	4-5	4-5	4-5		no change	4-5		8	6					20	Yes			SLAHENY		
SLAHENY	21S02	0500	Coolyard Bridge	100380.8	72726.6	4-5	4	4-5	4-5		IMP	4-5		10	12					20	Yes			SLAHENY		
SNEEM	21S03	0200	Br E of Dromtine Lough	67042.3	69856.1	4-5	4-5	4-5	4-5		no change	4-5		5	6					20	Yes			SNEEM		
SNEEM	21S03	0400	Br u/s Ardsheelhane River	68922.8	67524	4-5	4-5	4-5	4-5		no change	4-5		6	6					20	Yes			SNEEM		
TAHILLA	21T01	0200	Tahilla Br	74403	65745.7	4-5	3	3	4		IMP	4-5		6	6					20	yes(P)			TAHILLA	afforestation	
BEHEENAGH	22B01	0400	Br N of Gortderrig	112038	87559	4-5	4	3-5	4		no change	4-5		5	5					20	yes(P)			BEHEENAGH	agricultural runoff	Farm surveys been conducted in area
BEHEENAGH	22B01	0600	Br u/s Ownykeagh River	109712	90939	4	4	4	4-5		IMP	4	16	15	23					20	Yes			BEHEENAGH		
BEHY (KERRY)	22B02	0300	Br W of Ballynakilly Br	63960	87834	4	4	4	4-5		IMP	4		<5	8					20	Yes			BEHY (KERRY)		
BEHY (K																										

CARAGH	22C02	0600	Blackstones Bridge	70960.2	86371.7	5	5	5	5	no change	5	10	2	22					15	Yes		CARAGH		
CARAGH	22C02	0680	1.2km u/s Caragh Br	71368.2	92400.6	3-4	3-4	3-4	3-4	DET	4	5	2	26					20	yes(P)		CARAGH	agricultural Runoff/Septic tanks	septic tanks from houses/premises at perimeter of lake
CARHAN	22C03	0090	Br u/s Br N of Canburrin	50519.9	75553	4	-	-	3-4	no change	4								20	no		CARHAN	afforestation	
CARHAN	22C03	0100	Br N of Canburrin	51044.2	77152.3	3-4	3-4	3-4	3-4	no change	4		7	8					20	yes(P)		CARHAN	afforestation	extensive forestry development u/s of this point
CARHAN	22C03	0200	Foot-bridge S of Bahagh	51259.1	79052.8	4	4	3-4	4	no change	4		2	7					20	Yes		CARHAN	afforestation	extensive forestry development u/s of this point
COTTONER'S (LAUNE)	22C05	0100	Br W of Breanlee	76790	86769	4-5	4-5	4-5	4-5	no change	4-5		2	7					20	Yes		COTTONER'S (LAUNE)		
COTTONER'S (LAUNE)	22C05	0400	Br N of Glancuttaun Lower	77804	91580	4-5	4-5	4-5	4-5	no change	4-5		7	7					20	Yes		COTTONER'S (LAUNE)		
COTTONER'S (LAUNE)	22C05	0600	Br u/s Laune R confl	78559	95477	3-4	3-4	3-4	4	IMP	4		6	19	4	12	9	10	20	Yes		COTTONER'S (LAUNE)	agricultural runoff	
COOMNACARRIG	22C06	0300	Dromalohurt Bridge	69736.5	81726	4-5	4-5	4-5	4-5	no change	4-5		8	6					20	Yes		COOMNACARRIG		
CRINNAGH	22C07	0200	Cromaglan Bridge	92840.4	82619.8	5	5	5	5	no change	5		6	2					15	Yes		CRINNAGH		
CROAGHANE	22C09	0100	Sheheree Bridge	106359.5	109813.3	4	4	4	4	no change	4		9	7					20	Yes		CROAGHANE		
DEENAGH	22D01	0045	Br NE of Tulloram	100946	93764	3	3	3	3	no change	3-4				13	13	14	13	50	yes(P)		DEENAGH	agricultural runoff	
DEENAGH	22D01	0100	Br near Woodpark	98800	93400	4-5	4	4	4	no change	4-5	16	20	20					20	yes(P)		DEENAGH	agricultural runoff	
DEENAGH	22D01	0200	Deenagh Bridge	95959.9	91932.7	4	4	4	4	no change	4	19	16	22	15	13	11	13	20	Yes		DEENAGH		
DEENAGH	22D01	0600	Br just u/s L Leane	94729	90167	4	4	4	4-5	IMP	4	12	26	16	12	66	14	116	20	Yes		DEENAGH	agricultural runoff	
DERREEN (KERRY)	22D02	0100	Derreen Br	46487	72492	4	4	4	4	no change	4		9	6					20	Yes		DERREEN (KERRY)		
DOGUE	22D03	0300	Ford d/s Carker Branch confl	104081.8	101360.4	4	4	4	4	no change	4		22	6					30	Yes		DOGUE		
DOGUE	22D03	0400	Br u/s Brown Fleck confl	102082.6	102312.2	4	4	4	4	no change	4		14	6					20	Yes		DOGUE		
EMLAGH	22E01	0200	Br W of Emlagh	64829.6	103278.5	4-5	4-5	4-5	4-5	no change	4-5		14	6					20	Yes		EMLAGH		
EMLAGH	22E01	0400	Br S of Ballycullane	65676.3	101291.8	4-5	4-5	4-5	4-5	no change	4-5		22	7					20	Yes		EMLAGH		
FERTA	22F01	0100	Br WSW of Coulagh	57024.2	83299.7	4-5	4-5	4-5	4-5	no change	4-5		2	11					20	Yes		FERTA		
FERTA	22F01	0500	Br at Toon	56270	82176.1	4	4-5	4-5	4-5	no change	4-5		2	12					20	Yes		FERTA		
FERTA	22F01	0700	Br ENE of Derreenmoira	54888.5	82225.9	4	4	4	4	no change	4		5	7					20	Yes		FERTA		
FERTA	22F01	1000	Deelis Bridge	50811.7	81601.6	3-4	3-4	3	3	DET	4		10	12					20	yes(P)		FERTA	other	possible gravel abstraction
FLESK (KERRY)	22F02	0010	km d/s Fords NW of Cummeenabudd	119122	83666	5	3-4	4	4	IMP	5		2	52					15	yes(P)		FLESK (KERRY)	afforestation	
FLESK (KERRY)	22F02	0040	Br near Clydagh Lodge	111246.8	82684.8	4-5	4-5	4	4-5	no change	4-5		2	89	5	72	8	21	20	Yes		FLESK (KERRY)	afforestation	
FLESK (KERRY)	22F02	0060	Poulogorm Bridge	109778.9	81882	5	5	5	5	no change	5	5	2	20	2	8	<5	13	15	Yes		FLESK (KERRY)		
FLESK (KERRY)	22F02	0100	Br near Glenflesk	106600	85400	5	5	5	5	no change	5	5	4	20					15	Yes		FLESK (KERRY)		
FLESK (KERRY)	22F02	0200	Flesk Bridge - Gortahoosh	103619	87869	4	4	4	4	no change	4	10	9	29					20	Yes		FLESK (KERRY)		
FLESK (KERRY)	22F02	0250	Ford NE of Faghcuillia	100224.7	87987.8	4-5	4-5	4	4-5	no change	4-5								20	Yes		FLESK (KERRY)		
FLESK (KERRY)	22F02	0300	Flesk Br - S of Killarney LHS	96662.2	89408.6	4-5	4	3-4	4	no change	4-5	10	9		7	9			20	yes(P)		FLESK (KERRY)	agricultural runoff/storm water runoff	
FLESK (KERRY)	22F02	0310	Flesk Br - S of Killarney RHS	96670.7	89484.3	4-5	3-4	3-4	4	IMP	4-5	10	9	21	6	9	8	96	20	yes(P)		FLESK (KERRY)	agricultural runoff/storm water runoff	
FINGLAS (LAUNE)	22F03	0400	Cappagh Bridge	81059	91376.3	4-5	4	4	4-5	IMP	4-5		7						20	Yes		FINGLAS (LAUNE)	septic tanks	
FINGLAS (LAUNE)	22F03	0700	Meanus Bridge	80386	93931.4	4-5	4	4	4-5	IMP	4-5		6	7					20	yes(Q)		FINGLAS (LAUNE)	agricultural runoff	
FINOW	22F04	0100	Br 0.3km u/s L Guitane	103129	82220	5	5	5	5	no change	5		2	74					15	Yes		FINOW		
FINOW	22F04	0300	Br (Ford) u/s Flesk River	100856.2	87369.6	4-5	4-5	4-5	4-5	no change	4-5		6	16					20	Yes		FINOW		
FAHADUFF	22F09	0200	Br NE of Portduff	100756.4	113462.1	4	4	4	4	no change	4-5		58	13					30	no		FAHADUFF	agricultural runoff	
FAHADUFF	22F09	0400	Br u/s Maine R confl	98790.9	110261.9	3-4	4	4	4	no change	4		67	13					30	yes(Q)		FAHADUFF	agricultural runoff	
GADDAGH	22G01	0300	Ford SW of Gortboy	83096.7	89145.7	4-5	5	4-5	4-5	DET	4-5		2	7					20	Yes		GADDAGH		
GADDAGH	22G01	0400	Gaddagh Bridge	83818	91590	4-5	4-5	4	4	DET	4-5		6	8					20	yes(P)		GADDAGH		
GADDAGH	22G01	0500	Gortnaskarry Br	83729	93361	4	3-4	3-4	3-4	no change	4		6	20	8	15	11	12	20	yes(P)		GADDAGH	agricultural runoff	
GEARHAMEEN	22G03	0100	Br N of Cockow	82429.7	80968.7	4	4-5	4-5	4-5	no change	4-5		2	5					20	Yes		GEARHAMEEN		
GEARHAMEEN	22G03	0300	Br u/s Owenreagh R confl	87494.7	82177.1	4-5	4-5	4-5	4-5	no change	4-5		4	6					20	Yes		GEARHAMEEN		
GWEESTIN	22G06	0300	Dooneen Br	96952	97725	4	4-5	4	4	no change	4-5		9	14					20	Yes(P)		GWEESTIN	agricultural runoff	
GWEESTIN	22G06	0600	Gweestin Bridge	92380	98208	3-4	3-4	4	4	IMP	4		32	17					30	yes(Q)		GWEESTIN	agricultural runoff	
GWEESTIN	22G06	0900	Br u/s Listry Br	87641	97729	4	4	4	4	no change	4		30	14					30	Yes		GWEESTIN		
GWEESTIN	22G06	1200	Gweestin Bridge	83829	94973	2-3	3	3	3	no change	3-5	37	27	24	25	13	20	11	50	Yes(P)		GWEESTIN	agricultural runoff	
GLANTANE	22G07	0200	Leaha Bridge	107164.5	104757.9	4	4	4-5	4	IMP	4-5		15	5					20	Yes(P)		GLANTANE		
GROIN	22G08	0300	Br E of White Gate Cross Rds	78924.5	103879.9	4-5	4	4-5	4	no change	4-5		5	7					20	yes(P)		GROIN	agricultural runoff/septic tanks	
LAUNE	22L01	0100	Laune Br	89206.8	91114.9	3-4	3-4	4	4	IMP	4		5	79	2	136	7	106	20	Yes		LAUNE		
LAUNE	22L01	0200	Beaufort Bridge	88143.1	92625.7	4	4	4	4	no change	4		6	14	6	15	12	12	20	Yes		LAUNE		
LAUNE	22L01	0300	Ballymalis Castle	83907.4	93823.4	4	4	4	4	no change	4		6	14	6	15	12	12	20	Yes		LAUNE		
LAUNE	22L01	0400	1.5km d/s Gweestin R confl	82238	95740.7	3-4	3-4	3-4	4	IMP	4		8	8	18	15	16	10	20	Yes		LAUNE	agricultural runoff	
LITTLE MAINE	22L02	0500	Br near Fairy Gate			4-5	4	4	3-5	DET	4-5								20	no		LITTLE MAINE	agricultural runoff	
LITTLE MAINE	22L02	1000	0.1km d/s Br u/s Maine R confl	93241	109515.3	4	3-4	4	4	IMP	4		15	12	18	14	19	17	20	Yes		LITTLE MAINE		
LOE	22L03	0100	Br just d/s Black Lake	87690.6	87797.3	4-5	4-5	5	4-5	no change	5								20	Yes (P)		LOE		
LOE	22L03	0400	Br u/s Laune R confl	87976.6	90810.5	4	4	4	4-5	IMP	4		2	13	10	13	9	12	20	Yes		LOE		
LOO	22L04	0100	Agnanus Br	104520	78867	4	4	4	4	no change	4		2	9					20	Yes		LOO		
LOO	22L04	0400	Loo Bridge	108601	81343	4	3-4	4	4	IMP	4	5	2	23	2	12	<5	12	20	Yes		LOO		
MAINE	22M01	0200	(E) Br S of Castleisland	99665	109477	3-4	3	4	3-4	no change	4	41	28	14	34	15	30	20	30	no		MAINE	urban stormwater overflows	Castleisland urban area
MAINE	22M01	0400	Br 2km d/s Castleisland	97900	109300	3	3	3-5	3-5	IMP	3-4	61	50	14	64	15	57	20	50	yes(Q)		MAINE	agricultural runoff	
MAINE	22M01	0500	Br NW of Currans	92589.3	106135.1	3-4	3-4	4	4	IMP	4	47	34	14	58	15	35	19	30	yes(Q)		MAINE	agricultural runoff	
MAINE	22M01	0600	Maine Br - Currans	93837.7	106385.5	3-4	-	-	3-5	no change	4	32	19	14	31	15	28	21	30	yes(P)		MAINE	agricultural runoff	
MAINE	22M01	0700	Maine Br - Lower	89100	104800	3-4	4	4	3-5	DET	4		23	14	26	15	24	21	30	Yes(P)		MAINE		

For inspection purposes only.
 Consent of copyright owner required for any other use.

GLENNAHOO	23G05	0200	Br u/s Scorid R conff	53816.9	111285.4	4-5	4-5	4-5	3-5	DET	4-5	5	7	20	Yes(P)		GLENNAHOO	agricultural runoff	currently been investigated	
LEE (TRALEE)	23L01	0030	Ahnabraher Bridge (Rhs)	89721.1	114361.8	2	3	2	3-5	IMP	3-5	97	13	50	yes(Q)		LEE (TRALEE)	Farmyard discharge	one farm just u/s of this point been currently investigated	
LEE (TRALEE)	23L01	0035	Ahnabraher Bridge (LHS)	89737	114480.8	4	3	3-5	3-5	IMP	4	72	7	30	no		LEE (TRALEE)	Farmyard discharge	one farm just u/s of this point been currently investigated	
LEE (TRALEE)	23L01	0050	Bridge S.E. of Caherbreagh	88156.3	112905.7	4	3-4	3-4	4	IMP	4	88	13	30	yes(Q)		LEE (TRALEE)	agricultural runoff		
LEE (TRALEE)	23L01	0100	2nd Br d/s Ballymullen Mills	81548.9	113092.5	3	3	2-3	3	no change	3-4	64	15	50	no		LEE (TRALEE)	urban stormwater overflows	Tralee urban area	
LYRACRUMPANE	23L02	0100	Bridge u/s Smearlagh River	98077.9	123157.7	4	4	4	4-5	IMP	4	6	7	20	Yes		LYRACRUMPANE			
MILLTOWN HOUSE STREAM	23M04	0100	Br E of Milltown Ho	84347.5	122537.4	3	4	3	4	no change	4	49	17	50	Yes		MILLTOWN HOUSE STREAM	agricultural runoff		
OWENCASHLA	23O02	0300	First Bridge u/s Sea	64708.3	111356.5	4-5	4-5	4	4	DET	4-5	13	6	20	yes(P)		OWENCASHLA	afforestation	a lot of new afforestation schemes u/s of this point	
OWENMORE (KERRY)	23O03	0100	Bridge d/s Lough Cruttia	49114.8	108405.6	5	4-5	5	4-5	no change	5	9	7	15	Yes(P)		OWENMORE (KERRY)			
OWENMORE (KERRY)	23O03	0300	Bridge at Boherboy	51269.9	110721.9	5	5	5	5	no change	5	7	7	15	Yes		OWENMORE (KERRY)			
OWENNAFEANA	23O04	0100	Teer Bridge	51731.4	113919.1	4-5	4-5	4-5	4	DET	4-5	7	7	20	Yes(P)		OWENNAFEANA			
OWVEG (KERRY)	23O05	0200	Owveg Bridge	107184.4	119499	4	4	4	4	no change	4	12	7	20	Yes		OWVEG (KERRY)			
OWVEG (KERRY)	23O05	0350	Ford just d/s Tullaleague R	107136.4	120483.1	4	4	4	4	no change	4	19	7	20	Yes		OWVEG (KERRY)			
OWVEG (KERRY)	23O05	0500	Bateman's Bridge	108637	123325	4	4	4	4	no change	4	22	7	30	Yes		OWVEG (KERRY)			
SCORID	23S01	0200	Ford d/s Kilmore Br	53434.8	110808.8	4-5	4-5	4-5	4-5	no change	4-5	2	7	20	Yes		SCORID			
SMEARLAGH	23S02	0300	Br SE of Reanagowan Crossroads	97581	118942	4-5	4	4	4-5	IMP	4-5	14	7	20	Yes		SMEARLAGH	agricultural runoff		
SMEARLAGH	23S02	0400	Br u/s Lyracrumpane River	98368	123223	4-5	4-5	4-5	4-5	no change	4-5	11	7	20	Yes		SMEARLAGH			
SMEARLAGH	23S02	0500	Bridge N.E. of Gortacloaghane	101350	126622	4	4	4	4	no change	4	12	8	20	Yes		SMEARLAGH			
SMEARLAGH	23S02	0700	Ford u/s Feale River conff (LHS)	102500	132391	4	4	4	4	no change	4	23	26	17	11	9	30	Yes		
SMEARLAGH	23S02	0710	Ford u/s Feale River conff (RHS)	102512	132391	4	4	4	4	no change	4	28	11	18	10	27	17	30	Yes	
TULLALEAGUE	23T01	0100	Talbot's Bridge	105846.9	119464.1	3-4	3-4	3-4	3-5	no change	4	28	13	30	yes(P)		TULLALEAGUE	agricultural runoff	piggery u/s of this point	
TYSHE	23T02	0100	Monoona Bridge	78769.7	121221.2	3	-	-		no change	3-4	274	13	50	no		TYSHE	agricultural runoff/farmyard discharge		
TYSHE	23T02	0400	West Bridge. Ardferf	78402	121219	3	3	3	3	no change	3-4	179	13	50	no		TYSHE	agricultural runoff		
TYSHE	23T02	0500	Bridge near Banna House	76281.8	123108.6	3	-	-		no change	3-4	151	13	50	no		TYSHE	agricultural runoff/small scale sewage treatment plant	ardferf STP	
TARMON STREAM	23T03	0500	Gabbel's Br	101836	140132	3	3	3	3	no change	3-4	126	10	113	10	50	no	TARMON STREAM	agricultural runoff	
BALLYLONGFORD	24B03	0300	Br N of Kilgarvan	96002.7	141854.6	3-4	4	4	4	no change	4	26	16	22	5	32	10	30	Yes	
BALLYLONGFORD	24B03	0400	Br SW of Shrone	98248.4	141886.4	1-2	2-3	2-3	2-3	no change	3	88	16	90	5	106	10	70	no	
BALLYLONGFORD	24B03	0700	Gortanacooka Bridge	99293.2	143399.9	3	3	3-4	3-4	IMP	3-4	94	16	134	5	96	10	50	yes(Q)	
TARBERT	24T01	0100	(West) Br in Tarbert	106485.6	147768	3	3	3	3	no change	3-4	134	12	114	11	50	no	TARBERT	agricultural runoff	

For inspection purposes only. Consent of copyright owner required for any other use.

TABLE 2.1 IMPLEMENTATION PROGRAMME SUMMARY TABLE FOR LOCAL AUTHORITY AREA									
Local Authority Name	Kerry	Reporting Year	2006						
Standard	Measures	Targets	Actions	Timeframe	Responsible for Implementation	Progress to Date	Corrective Actions	Action Completed Within Timeframe Yes/No	If No, State Revised Timeframe
To improve unsatisfactory water quality and to maintain satisfactory water quality in County Kerry : Examine all Point Sources.	Review and enforcement of existing section 4 licences in light of the requirements of the Phosphorous Regulations.	Reduce phosphorous inputs from licenced premises.	Determine phosphorous loads from licenced premises, assimilative capacity of receiving waters and whether changes are required to the licence.	31/07/2002	Senior Executive Engineer Environment Protection Section.	All significant licences reviewed. Review process on-going for remaining licences.		No	31/12/2007
			Set-up regular monitoring/sampling procedures, site inspections and audits of discharges.	31/07/2002	Senior Executive Engineer, Senior Executive Chemist - Environment Protection Section.	Monitoring/sampling programme in place and operating for all licences. Site inspections and audits of discharges are carried out as required.		Yes	
			Prosecution for non-compliance with licences.	On-going	Senior Executive Engineer Environment Protection Section.				
	Review and enforcement of existing section 16 licences in light of the requirements of the Phosphorous Regulations.	Reduce phosphorous inputs from licenced premises.	Determine phosphorous loads from licenced premises, assimilative capacity of receiving waters and whether changes are required to the licence.	31/07/2002	Senior Executive Engineer Environment Protection Section.	All significant licences reviewed. Review process on-going for remaining licences.		No	31/12/2007
			Set-up regular monitoring/sampling procedures, site inspections and audits of discharges.	31/07/2002	Senior Executive Engineer, Senior Executive Chemist - Environment Protection Section.	Monitoring/sampling programme in place and operating for all significant licences. Site inspections and audits of discharges are carried out as required.		Yes	
			Prosecution for non-compliance with licences.	On-going	Senior Executive Engineer Environmental Services Department.				
	Wastewater Treatment Plants	Reduce phosphorous inputs from wastewater treatment plants.	Establish which wastewater treatment plants are discharging to rivers listed in table 2.1.	31/07/2002	Senior Executive Engineer, Senior Executive Chemist - Environment Protection Section.	Completed.		Yes	
			Monitor discharges and establish phosphorous loads from wastewater treatment plants.	31/07/2002	Senior Executive Engineer, Senior Executive Chemist - Environment Protection Section.	Comprehensive monitoring programme in place.		Yes	
			Establish a priority list and cost of up-grading wastewater treatment plants.	31/07/2002	Senior Engineer, Senior Executive Engineer - Water Services Departments.	Completed.		Yes	

Standard	Measures	Targets	Actions	Timeframe	Responsible for Implementation	Progress to Date	Corrective Actions	Action Completed Within Timeframe Yes/No	If No, State Revised Timeframe
			Seek funding and carry out works.	31/07/2002	County Manager, Director of Service (Environment), Senior Engineer (Water Services Departments), DoELG.	This is an on-going process involving discussions with relevant Government Departments.			On-going
To improve unsatisfactory water quality and to maintain satisfactory water quality in County Kerry : Examine all Non-Point Sources.	Enforcement of section 3 of the Act.	Reduce phosphorous inputs to watercourses.	Review existing water quality for all catchments and investigate areas where high P is found.	31/07/2002	Senior Executive Engineer, Senior Executive Chemist - Environment Protection Section.	Review of water quality has been completed - detailed investigations of areas with high P is on-going. Small Streams Risk Assessment (biological) of vulnerable catchments also in progress.		No	31/12/2007
			Issue and enforcement of section 12 notices.	On-going	Senior Executive Engineer Environment Protection Section.	Total number of Section 12 notices issued since submission of previous implementation report : 142		On-going	
	Regulation and control of certain agricultural activities under section 21 of the Act.	Reduce phosphorous inputs to watercourses.	Examine the requirement for the making of Bye-Laws under the Act with regard to prohibiting or regulating specified activities in the the whole or part of the Local Authority's functional area.	31/07/2002	County Manager, Director of Service (Environment), Senior Engineer/Senior Executive Engineer (Environment Protection Section).	Draft Bye-Laws prepared for the Lough Leane Catchment. Adoption process has not been completed on account of recent introduction of Nitrates Regulations. Unlikely that L. Leane Bye-Laws will now be introduced in light of this, however, consideration still being given to L.Guitane Bye-Laws.		No	Uncertain
	Farm surveys	Assess farm management requirements on farms to reduce phosphorous inputs to watercourses.	Review existing water quality for feeder streams in agricultural areas.	31/07/2002	Senior Executive Engineer Environment Protection Section.	Reviews have been completed in the following river catchments since submission of the previous Implementation Report : Feale, Flesk (Lower Catchment), Shanowen, Glashoreag.		No	31/12/2007
			Designate areas where farm surveys are required.	31/07/2002	Senior Executive Engineer Environment Protection Section.	Designation of catchments completed.		Yes	

Standard	Measures	Targets	Actions	Timeframe	Responsible for Implementation	Progress to Date	Corrective Actions	Action Completed Within Timeframe Yes/No	If No, State Revised Timeframe
		Increase awareness of pollution of watercourses amongst the farming community.	While carrying out farm surveys, create awareness of pollution of watercourses due to farming activities, encourage farmers to part-take in REPS, Control of Farm Pollution Schemes etc.	On-going	Senior Executive Engineer Environment Protection Section.	Farm surveys completed to date in following river catchments : Ballylongford, Brick, Emlaghmore, Gale, Lee (tralee), Milltown House Stream, Tarmon Stream, Tarbert, Tyshe, Feale, Flesk (Lower Catchment, Shanowen, Glashoreag.			
	Assess nutrient management planning under section 21A of the Act for non-point sources within the County.	Assess need for the application of nutrient management planning in specific catchments.	Review existing water quality data.	31/07/2002	Senior Executive Engineer Environment Protection Section.	Completed.		Yes	
			Review feeder streams where high P is found.	31/07/2002	Senior Executive Engineer Environment Protection Section.	On-going.			31/12/2007
			Designate areas where nutrient management planning is required.	31/07/2002	Senior Executive Engineer Environment Protection Section.	On-going.			31/12/2007
	Establish Multi-Sectoral Catchment Management Group.	Co-operative approach across all sectors that contribute to phosphorous losses in the catchment.	Gather all relevant information on all issues that affect the quality of water in the county. Gather all this information on GIS and assess the combined impact of all these facts.	31/07/2001	Senior Executive Engineer Environment Protection Section.	All relevant information gathered, GIS system will be established in line with EPA requirements/recommendations for River Basin District Monitoring and Management Systems.	Install appropriate Catchment Monitoring and Management GIS system.	No.	31/12/2007
			Present the above findings to this group. Discuss all the issues and formulate measures to tackle the issues.		Senior Executive Engineer Environment Protection Section.	Kerry County Council is in regular contact with a range of sectoral groups and state organisation involved in the area of water quality management through both the L.Leane Working Group and the River Basin District committees.		On-going	
			Implement the above measures.	31/07/2003	Senior Executive Engineer Environment Protection Section.	on-going		On-going	
	Publicity and public awareness campaign.	Create awareness of water quality issues, provide information on means of reducing pollution occurring, provide assistance and advice to interested organisations.	Establish schools education programme. Promotion of project awareness.	On-going	Senior Executive Engineer Environment Protection Section.			On-going	
Monitoring programme of the rivers and lakes in the county.	Integration of local authority monitoring activities with EPA river and lake monitoring activities to avoid unnecessary duplication of effort.		Integrate local authority and EPA monitoring programme.	ongoing	Senior Executive Chemist - Environment Protection Section.	On-going. Integration of P-Regs and Salmonid Regs monitoring with revised RBD Monitoring Networks also at an advances stage			

Standard	Measures	Targets	Actions	Timeframe	Responsible for Implementation	Progress to Date	Corrective Actions	Action Completed Within Timeframe Yes/No	If No, State Revised Timeframe
	Implement proposed monitoring programme for the county.		Set-up and implement testing programme.	ongoing	Senior Executive Chemist - Environment Protection Section.	unable to monitor all stations for mmp during reporting period due to lack of resources	1) Integrate P monitoring as part of operational monitoring programme for the RBDs; 2) Seek more funding for laboratory resources as part of RBD programme; 3) Ensure that instrumentation in the laboratory is up-graded as part of the RBD modernisation process; 4) Endeavour to repeat monitoring of all river stations; 5) Provide monitoring backup for farm survey work.	No	31/12/2007
	Identify catchments/sub-catchments with specific problems.		Draw up particular measures to address these specific catchment problems.	31/07/2002	Senior Executive Engineer Environment Protection Section.	A programme of measures has been drawn up and is being implemented for a range of river and lake catchments in the county.		Yes	
	Review the overall implementation programme in light of the findings of the Lough Leane Catchment Project and other catchment projects		Study project's findings and implement appropriate measures.	31/07/2002	Senior Executive Engineer Environment Protection Section.	Completed.		Yes.	

For inspection purposes only.
Consent of copyright owner required for any other use.

TABLE 2.2 IMPLEMENTATION PROGRAMME SUMMARY TABLE FOR RIVERS IN LOCAL AUTHORITY AREA											
Local Authority Name	Kerry County Council	Reporting Year	2006								
River	Reach of River	Standard	Measures	Targets	Actions	Timeframe	Responsible for Implementation	Progress to Date	Corrective Actions	Action Completed Within Timeframe Yes/No	If No, State Revised Timeframe
Ballylongford	Entire river.	To improve and maintain water quality at various stations on Ballylongford River.	Refer to report for 2000-2002	Various : refer to report for 2000-2002	Various : refer to report for 2000-2002	31/07/2002	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.	
Brick	Entire river.	To improve and maintain water quality at various stations on River Brick.	Refer to report for 2002-2004	Various : refer to report for 2002-2004	Various : refer to report for 2002-2004	31/07/2004	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.	
Emlaghmore	Entire river.	To improve and maintain water quality at various stations on River Brick.	Refer to report for 2002-2004	Various : refer to report for 2002-2004	Various : refer to report for 2002-2004	31/07/2004	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.	
Feale	Entire river.	To improve and maintain water quality at various stations on the River Feale.	Farm surveys	Assess farm management requirement on farms to reduce P inputs to river.	Review water quality data to determine where farm surveys are required.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Water quality data reviewed and areas identified for farm surveys.		Yes.	
					Carry out farm surveys in catchment hot-spots.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Farm surveys carried out in catchment hot-spots. Total no. farms surveyed : 174		Yes.	
			Enforce Water Pollution Act.	Reduce P inputs to river.	Issue and enforce section 3, 10, 12 and 13 notices.	31/07/2006	Senior Executive Engineer - Environment Protection Section.			Yes.	
					Issue and enforce section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	No licence requirements identified.		Yes.	
					Review section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	N/A		Yes.	
			Promote REPS and Farm Pollution Scheme.	Improve farm management.	Promotion/Education.	On-going	Senior Executive Engineer - Environment Protection Section.	Improved farm management promotion carried out as part of farm survey process.			
Fleask (Lower Catchment)	Lower Catchment	To improve and maintain water quality at various stations on the River Fleask.	Farm surveys	Assess farm management requirement on farms to reduce P inputs to river.	Review water quality data to determine where farm surveys are required.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Water quality data reviewed and areas identified for farm surveys.		Yes.	
					Carry out farm surveys in catchment hot-spots.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Farm surveys carried out in catchment hot-spots. Total no. farms surveyed : 30		Yes.	
			Enforce Water Pollution Act.	Reduce P inputs to river.	Issue and enforce section 3, 10, 12 and 13 notices.	31/07/2006	Senior Executive Engineer - Environment Protection Section.			Yes.	
					Issue and enforce section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	No licence requirements identified.		Yes.	
					Review section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	N/A		Yes.	
			Promote REPS and Farm Pollution Scheme.	Improve farm management.	Promotion/Education.	On-going	Senior Executive Engineer - Environment Protection Section.	Improved farm management promotion carried out as part of farm survey process.			

River	Reach of River	Standard	Measures	Targets	Actions	Timeframe	Responsible for Implementation	Progress to Date	Corrective Actions	Action Completed Within Timeframe Yes/No	If No, State Revised Timeframe	
Glashoreag	Entire river.	To improve and maintain water quality at various stations on the Glashoreag River.	Farm surveys	Assess farm management requirement on farms to reduce P inputs to river.	Review water quality data to determine where farm surveys are required.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Water quality data reviewed and areas identified for farm surveys.		Yes.		
					Carry out farm surveys in catchment hot-spots.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Farm surveys carried out in catchment hot-spots. Total no. farms surveyed : 5		Yes.		
					Enforce Water Pollution Act.	Reduce P inputs to river.	Issue and enforce section 3, 10, 12 and 13 notices.	31/07/2006	Senior Executive Engineer - Environment Protection Section.		Yes.	
							Issue and enforce section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	No licence requirements identified.	Yes.	
							Review section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	N/A	Yes.	
					Promote REPS and Farm Pollution Scheme.	Improve farm management.	Promotion/Education.	On-going	Senior Executive Engineer - Environment Protection Section.	Improved farm management promotion carried out as part of farm survey process.		
Galey	Entire river.	To improve and maintain water quality at various stations on River Brick.	Refer to report for 2002-2004	Various : refer to report for 2002-2004	Various : refer to report for 2002-2004	31/07/2004	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.		
Lee (Tralee)	Entire river.	To improve and maintain water quality at various stations on River Brick.	Refer to report for 2002-2004	Various : refer to report for 2002-2004	Various : refer to report for 2002-2004	31/07/2004	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.		
Milltown House Stream	Entire river.	To improve and maintain water quality at various stations on River Brick.	Refer to report for 2002-2004	Various : refer to report for 2002-2004	Various : refer to report for 2002-2004	31/07/2004	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.		
Tarbert	Entire river.	To improve and maintain water quality at various stations on Tarbert River.	Refer to report for 2000-2002	Various : refer to report for 2000-2002	Various : refer to report for 2000-2002	31/07/2002	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.		
Shanowen	Entire river.	To improve and maintain water quality at various stations on the Shanowen River.	Farm surveys	Assess farm management requirement on farms to reduce P inputs to river.	Review water quality data to determine where farm surveys are required.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Water quality data reviewed and areas identified for farm surveys.		Yes.		
					Carry out farm surveys in catchment hot-spots.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	Farm surveys carried out in catchment hot-spots. Total no. farms surveyed : 20		Yes.		
					Enforce Water Pollution Act.	Reduce P inputs to river.	Issue and enforce section 3, 10, 12 and 13 notices.	31/07/2006	Senior Executive Engineer - Environment Protection Section.		Yes.	
							Issue and enforce section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	No licence requirements identified.	Yes.	
							Review section 4 and 16 licences.	31/07/2006	Senior Executive Engineer - Environment Protection Section.	N/A	Yes.	
					Promote REPS and Farm Pollution Scheme.	Improve farm management.	Promotion/Education.	On-going	Senior Executive Engineer - Environment Protection Section.	Improved farm management promotion carried out as part of farm survey process.		
Tarmon Stream (tributary of Galey)	Entire river.	To improve and maintain water quality at various stations on River Brick.	Refer to report for 2002-2004	Various : refer to report for 2002-2004	Various : refer to report for 2002-2004	31/07/2004	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.		
Tyshe	Entire river.	To improve and maintain water quality at various stations on River Tyshe.	Refer to report for 2000-2002	Various : refer to report for 2000-2002	Various : refer to report for 2000-2002	31/07/2002	Senior Executive Engineer - Environment Protection Section.	Actions Completed		Yes.		