



# Draft Programme of Measures

## *Liffey WMU*

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1. Water Framework Directive
  2. Overview of Water Management Unit
  3. Status of Water
  4. Objectives
  5. Protected Areas
  6. What are the Problems to address?
  7. Programme of Measures
  8. Alternative Objectives
  9. What happens next?
  10. What can you do?

Appendix 1-4: Programme of Measures



# Document Control Sheet

<b>Project</b>	Eastern River Basin District			
<b>Report</b>	Draft - Liffey - River and Lake Programme of Measures - for download			
<b>Date</b>	December 2008			
<b>Project No:</b> 39325		<b>Document Reference:</b> 39325/ERBD40/DG134 - S		
<b>Version</b>	<b>Author</b>	<b>Reviewed</b>	<b>Checked</b>	<b>Date</b>
Draft 1	AOC/AC	AGH	AOC	DEC 2008



# Water Framework Directive

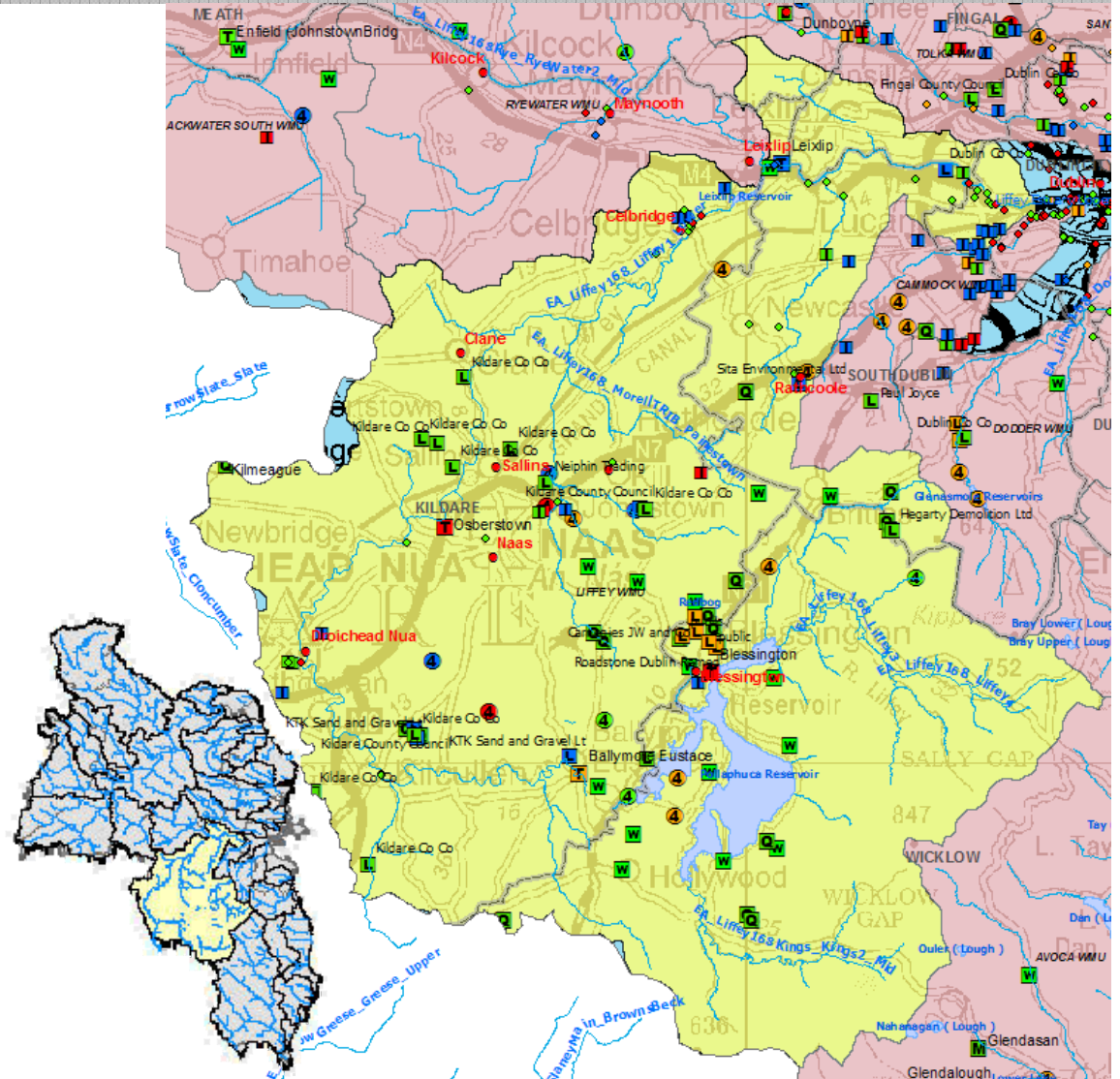
- ❑ The Draft River Basin Management Plan was published on the 22<sup>nd</sup> December 2008 for Public Consultation.
- ❑ This Programme of Measures accompanies the River Basin Management Plan created for the Eastern River Basin District.
- ❑ The River Basin Management Plan can be downloaded from the website, whilst more detail of the Programme of Measures is contained in the River Basin Management System which can be accessed through your Local Authority.
- ❑ The River Basin Management System is a web-based tool that assists Local Authorities to store information about the condition of their waters and the Programme of Measures for their improvement.
- ❑ For more information please visit [www.erbd.ie](http://www.erbd.ie)



# Overview of Water Management Unit

































## Geography

- ❑ Local Authorities: 51% Kildare, 34% Wicklow, 10% South Dublin, 2% Fingal, 1% Dublin City and Meath
- ❑ River Length: 292 km
- ❑ Lakes: Pollaphuca Reservoir, Red Bog, Golden Falls, Leixlip Reservoir
- ❑ Total Lake Size: 40 km<sup>2</sup>
- ❑ HMWB and AWB: River Liffey, Golden Falls, Pollaphuca Reservoir, Grand Canal Naas and Corbally Branch, Royal Canal Main Line, Grand Canal Main Line E of Lowton
- ❑ Land use: Predominantly land-use is for agriculture
  - 50% pasture use
  - 11% arable
  - 15% bogs
  - urban populations cover 9% of the area for example at Celbridge, Clane and Naas.



# Risk Assessment Legend

See [www.erbd.ie](http://www.erbd.ie) for more information on Article 5 Risk Assessment

Risk	Symbol with Level of Risk	Risk	Symbol with Level of Risk
Abstraction			
CSO	 1a  1b  2a  2b	WWTPs	 1a  1b  2a  2b
Hydrometric Station	 ACTIVE  INACTIVE  OBSOLETE	WTPs	 2a
IPC Facilities	 1a  1b  2a  2b	Landfills	 1b  2a  2b
IPC Rivers	 1a  1b  2a  2b	Mines	 1a  1b  2a
Section 4	 1a  1b  2a  2b	Quarries	 2a
Based on Article 5 Risk Assessment: <b>1a</b> : At risk, <b>1b</b> : Probably at risk, <b>2a</b> : Probably not at risk, <b>2b</b> : Not at risk			

# Status of Water

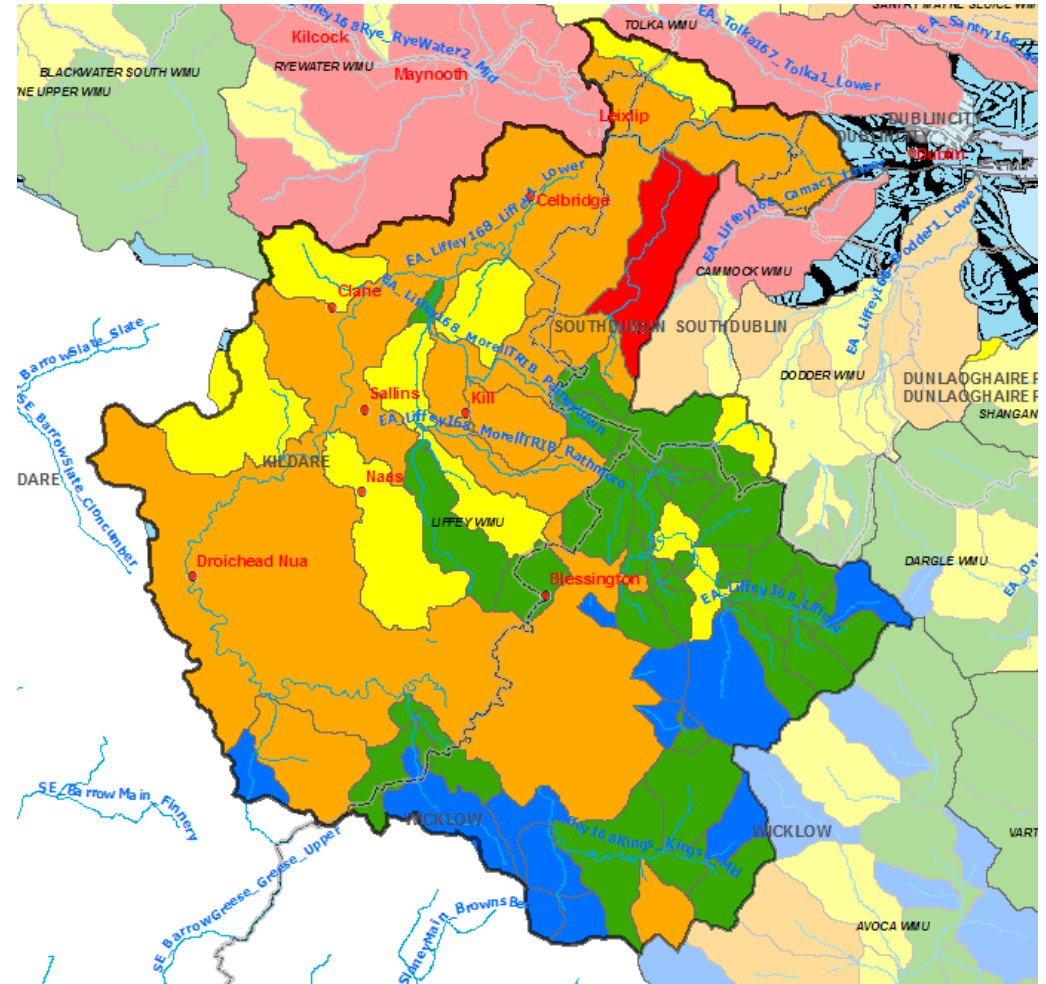
The existing condition of our waters was determined by the Environmental Protection Agency using water quality, ecology and morphology monitoring data.

## River Status:

<b>High</b>	18%
<b>Good</b>	55%
<b>Moderate</b>	13%
<b>Poor</b>	12%
<b>Bad</b>	1%

## Lake Status:

<b>Good</b>	40%
<b>Moderate</b>	60%



*The percentage status is determined by the number of reportable segments or sub basins. For this reason the percentage might not seem representative.*

# Objectives

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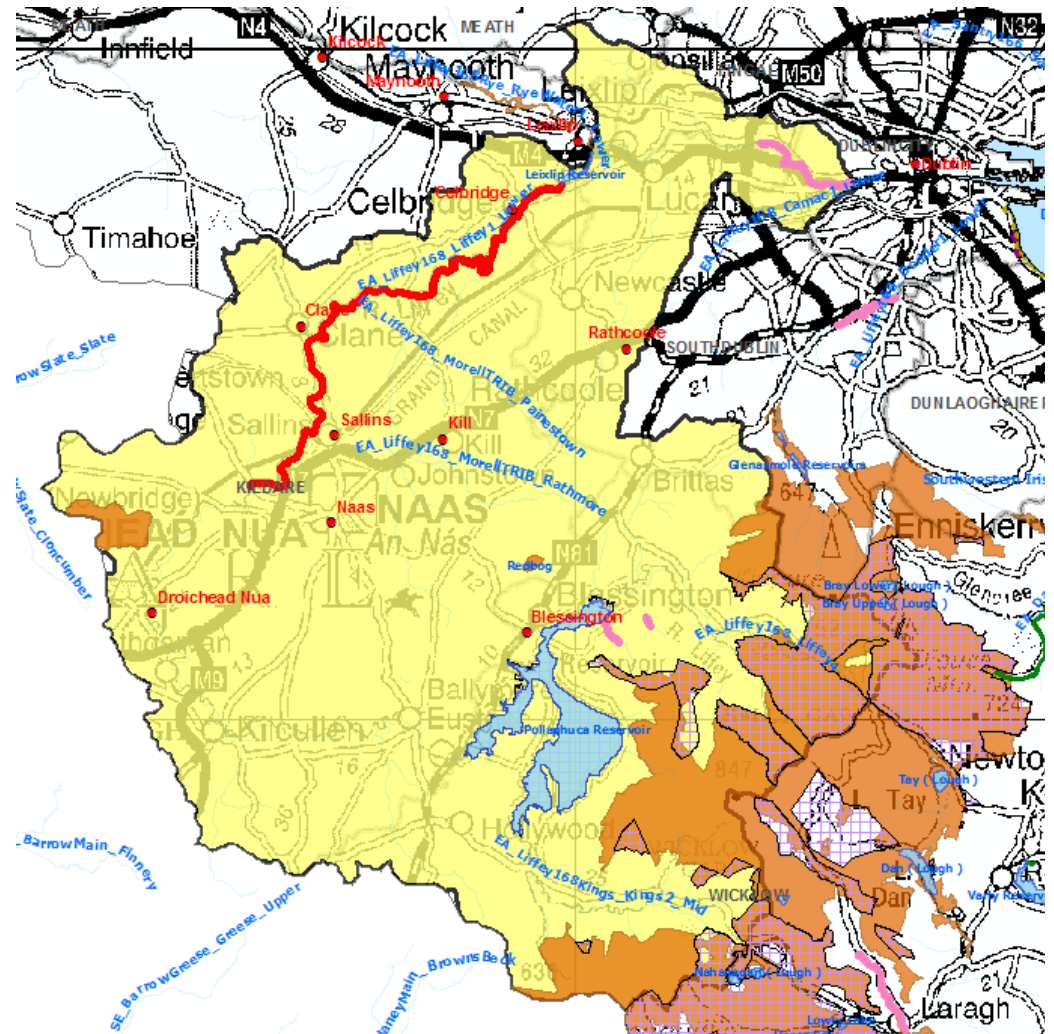
- ❑ Waters must be of satisfactory quality and sufficient quantity to protect the aquatic environment and its beneficial uses.
- ❑ We have four core objectives:
  1. Prevent deterioration and in particular maintain High or Good Status
  2. Improve waters to achieve Good Status where appropriate
  3. Progressively reduce chemical pollution
  4. Achieve our protected area objectives










# Protected Areas








- Some areas require greater protection because they contain rare and vulnerable habitats or wildlife. Other protected areas are sensitive because of their beneficial use for humans, such as drinking water sources or shellfish areas.

Drinking Water (3)	✓	River Liffey, Ballyward (Brook), Woodend (Brook)
Special Protected Areas (2)	✓	Poulaphouca Reservoir SPA, Wicklow Mountains
Special Areas of Conservation (Habitat) (2)	✓	Rye Water Valley/Carton, Mouds Bog, Red Bog, Kildare, Wicklow Mountains
Nutrient Sensitive River (1)	✓	River Liffey
Nutrient Sensitive Area (1)	✓	Liffey Estuary
National Heritage Area	✓	Liffey Valley, Grand Canal, Royal Canal, Curragh (Kildare), Liffey At Osberstown, Liffey Bank Above Athgarvan, Liffey Valley Meander Belt, Mouds Bog, Newtown Marshes, Poulaphouca Reservoir, Red Bog, Rye Water Valley/Carton, Kiltel Wood, Slade Of Saggart, Crooksling Glen, Ballinagee Wood, Hollywood Glen



# Protected Areas Legend

Type of Protected area	Symbol
Drinking water – Monitoring point	
Drinking Water – Rivers	
Drinking Water - Groundwater	
Drinking Water – Surface water	
Nutrient Sensitive rivers	
Nutrient Sensitive Areas	
National Heritage Areas	

Type of Protected area	Symbol
Special Protected Areas	
Special Areas of Conservation	
Beaches	
Recreational lakes	
Salmonid Waters	
Register protected Areas – Water Dependant Habitats	
Shellfish	

# What are the problems to address?

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In the Eastern River Basin District an online management system allows local authorities to store, assess and make Programmes of Measures on all the information emerging relating to the Water Framework Directive.

The first step is to identify any issues that might prevent us from reaching the ultimate target of 'Good Status' (please see plan for a full definition of 'Good Status').

## **In Liffey the problems are:**

- High Nutrients (Phosphorus)
- Oxygen Demand
- Low Ecological Rating
- Risk of over abstraction
- Inferior Habitats/Heavily Modified

# What could be causing these problems?

Pressure	County	% Contribution
Agriculture	Kildare	20
	South Dublin	20
	Wicklow	30
	Fingal	10
Usage and Discharge of Dangerous Substances	Kildare	1
	South Dublin	5
	Fingal	5
Forestry	Wicklow	40
	Fingal	10
Landfills, Quarries, Mines, Contaminated Lands	Kildare	5
	Wicklow	10
Wastewater And Industrial Discharges	Kildare	69
	South Dublin	60
	Wicklow	15
	Fingal	75
	Dublin City	100

- The Liffey is one of the largest sub catchments in the ERBD. The river stretches from the very rural and high status areas in the Wicklow Mountains to Poor Status in the City Centre.
- Many different pressures affect the Liffey with Forestry being a more important factor at the top of the catchment and Osberstown WWTP further down.
- The Liffey River and Pollaphuca are Heavily Modified addressed in later slides.

Pressure	County	Risk
Abstraction	Kildare, Wicklow, Dublin City, South Dublin	At Risk
Morphology	South Dublin, Dublin City	At Risk

All percentages are estimated based on available data, analysis and expert judgement.

# Programme of Measures

- Having assessed the current condition of our waters, the extent of areas to protect, and the risks and pressures affecting our waters, we can now determine the measures needed to bring them all back to good status.
- We must aim to achieve full implementation of all basic measures before 2015. If the implementation of all Basic Measures before 2015 will not get us to Good Status then we must select necessary Supplementary Measures.

<i>Basic Measures</i>	Measures required by law
<i>Supplementary Measures</i>	Non-statutory measures deemed necessary

- The following pages detail the proposed Programme of Measures. We have also proposed an Alternative Programme of Measures that, in light of the large number of measures to be taken, prioritises certain measures for the first cycle of the plan (2010 – 2015).
- ***Please see the Appendix for the full list of basic and supplementary measures selected in both the Proposed and Alternative Programme of Measures.***

# Proposed Programme of Measures

*This proposed Programme of Measures aims to achieve the 4 core objectives as described earlier by fully implementing all basic measures and also implementing supplementary measures where deemed necessary.*

## **Basic Measures:**

A full list of basic measures is listed in the Draft River Basin Management Plan. It includes the regulations enacted from the following 11 European Directives and also requires member states to create measures for 11 other issues:

### **11 European Directives**

1. Bathing Water Directive
2. Habitats Directive
3. Birds Directive
4. Drinking Water Directive
5. Major Accidents (Seveso) Directive
6. Environmental Impact Assessment Directive
7. Sewage Sludge Directive
8. Urban Waste Water Treatment Directive
9. Plant Protection Products Directive
10. Nitrates Directive
11. Integrated Pollution Prevention Control Directive

### **11 Other Basic Measures**

1. Cost recovery for water use
2. Measures to promote efficient and sustainable use
3. Protection of drinking water sources
4. Control of abstraction and impoundment
5. Authorisation of discharges to groundwater
6. Control of point source discharges
7. Control of diffuse source pollution
8. Control of priority substances
9. Control of physical modifications of surface waters
10. Controls on other activities impacting water status
11. Prevention or reduction of the impact of accidental pollution incidents

# Proposed Programme of Measures - Rivers

## □ Supplementary Measures (In descending order of cost):

Top Ten Supplementary Measures - Liffey River Sub-catchment
CSO - Upgrades and Rehabilitation
Diffuse Runoff (Urban) - Storm Sewers Separation (Screening & Treatment)
Diffuse Runoff (Urban) - Street Cleaning Programme
Improve Removal of certain parameters at WWTP
Enforce Regulations on Septic Systems
Implement Community Digestors for Alternative Energy
Investigate and eliminate misconnections
Further Investigate cause of failure
Alter the availability of supply through conjunctive use or integrated water resources management, water reuse, implementing S.U.D schemes in developed areas, implementation of abstraction controls, use of additional storage or alternative water source
CSO - Network Management & Operations Programme

# Proposed Programme of Measures - Lakes

- ❑ Pollaphuca Reservoir
- ❑ Basic Measures – Full Implementation of all Basic Measures (2010-2015)
- ❑ Supplementary Measures

<b>Supplementary Measures - Pollaphuca Reservoir</b>
For sites not at Favourable conservation Status Set targets and timeframe for achieving status
Survey Banks/Coast
Develop Guidance on suite of measures for different habitats
Collect daily abstraction rates and compensation flow releases
Modernise Abstraction Legislation, including a system for licensing surface water abstractions
Apply Heavily Modified Waterbody Measures (See Later Section)

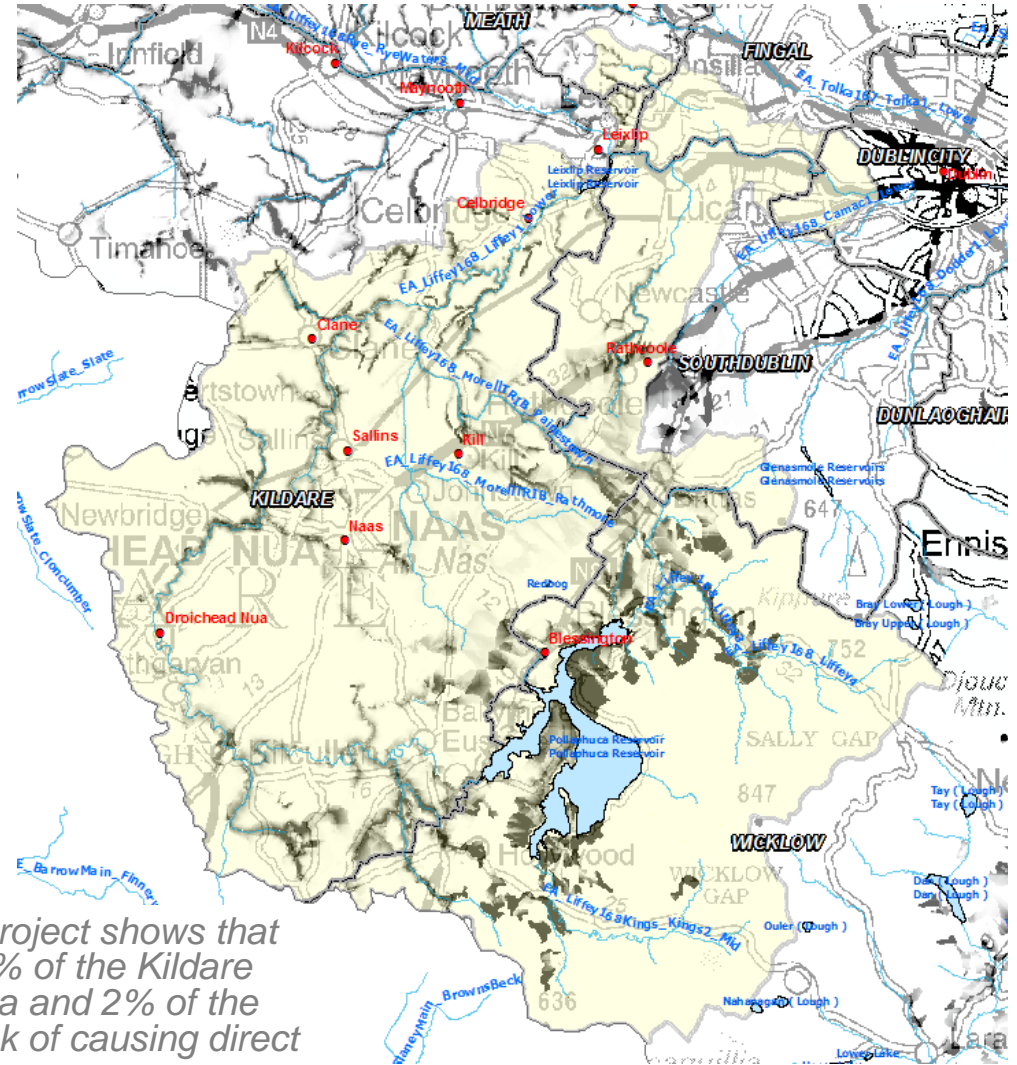
# Alternative Programme of Measures – Basic Measures

*We have prepared an Alternative Programme of Measures for comparison. This Programme of Measures selects the measures to prioritise for implementation during the first 6 year plan that are thought to be most effective, but still aims to achieve Good Status as early as possible*

By prioritising the measures to be implemented in the first cycle, the Alternative Scenario aims to save time and money by focussing on the most effective measures first.

The Programme of Measures can be seen in more detail in the Appendix.

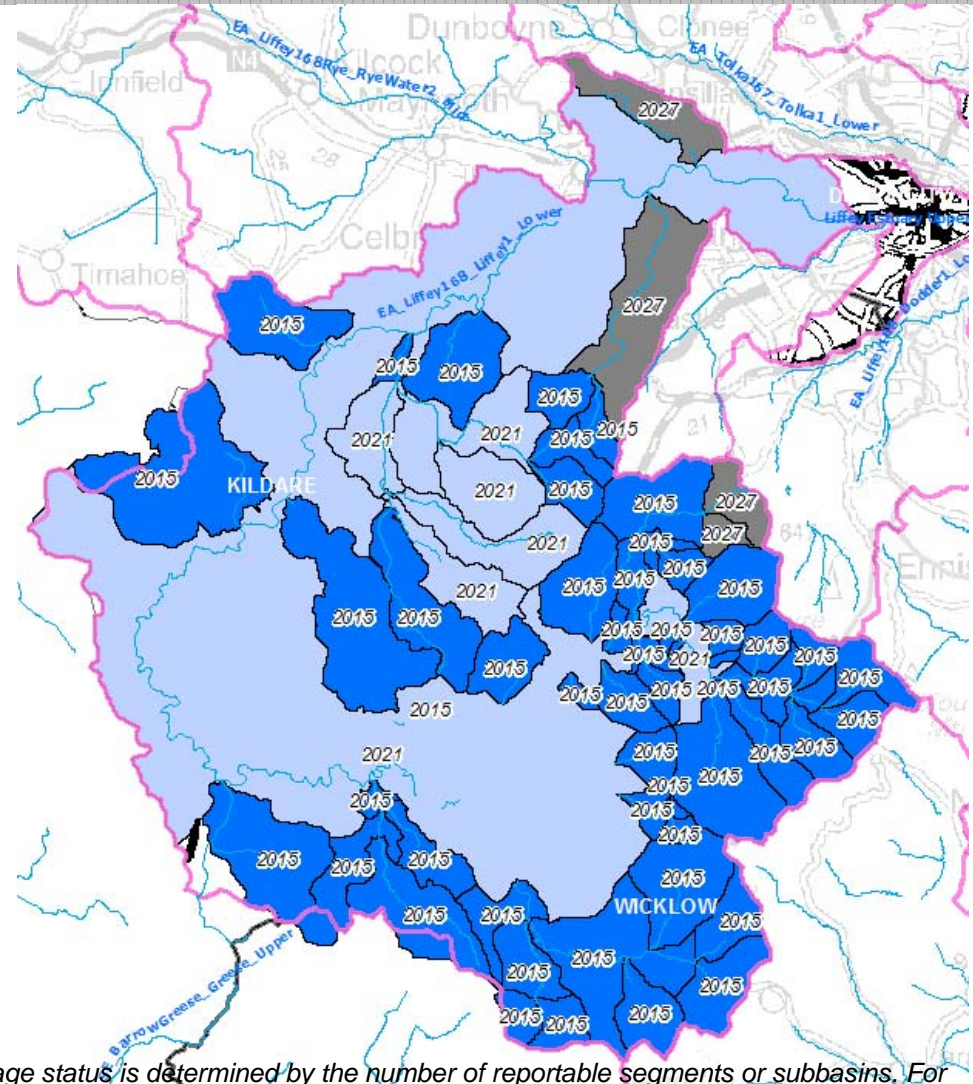
*Phosphorus modelling by the ERBD project shows that of the entire Liffey Catchment only 12% of the Kildare land area, 6% of the Wicklow land area and 2% of the South Dublin Land area are of high risk of causing direct runoff into the river.*



# Alternative Objectives – Extended Timescale

- ❑ In some cases due to technical infeasibility, disproportionate cost, the natural condition of the waterbody or new physical modifications it may not be possible to achieve all core objectives by 2015.
- ❑ There are main pressures affecting the Liffey. The Liffey river is a segment from the Wicklow mountains to the city centre, so whilst the upper catchment could be improved, our timescale must consider the entire length of the river.
- ❑ The main pressure preventing achievement of Good Status is thought to be upstream diffuse agricultural and septic tank pollution, pollution, point sources and urban diffuse pollution.

2015	84%
2021	96%
2027	100%



*The percentage status is determined by the number of reportable segments or subbasins. For this reason the percentage might not seem representative.*

# Alternative Objectives - Heavily Modified and Artificial Waterbodies

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- ❑ Some surface waters have been substantially changed in character to allow uses such as:
  - Water storage
  - Public supply
  - Flood defences
  - Land drainage.
- ❑ These waterbodies are called *Heavily Modified*. This designation recognises that the waterbody cannot be returned to its natural condition and therefore sets an alternative objective of Good Ecological Potential.
- ❑ Some waterbodies are entirely *Artificial* for example canals and for the same reasoning are set the alternative objective of Good Ecological Potential.
- ❑ We must still achieve good chemical condition, prevention of deterioration and achieve our protected area objectives.

# Heavily Modified Waterbodies Status and Measures

## *Heavily Modified Water Bodies*

### River Liffey

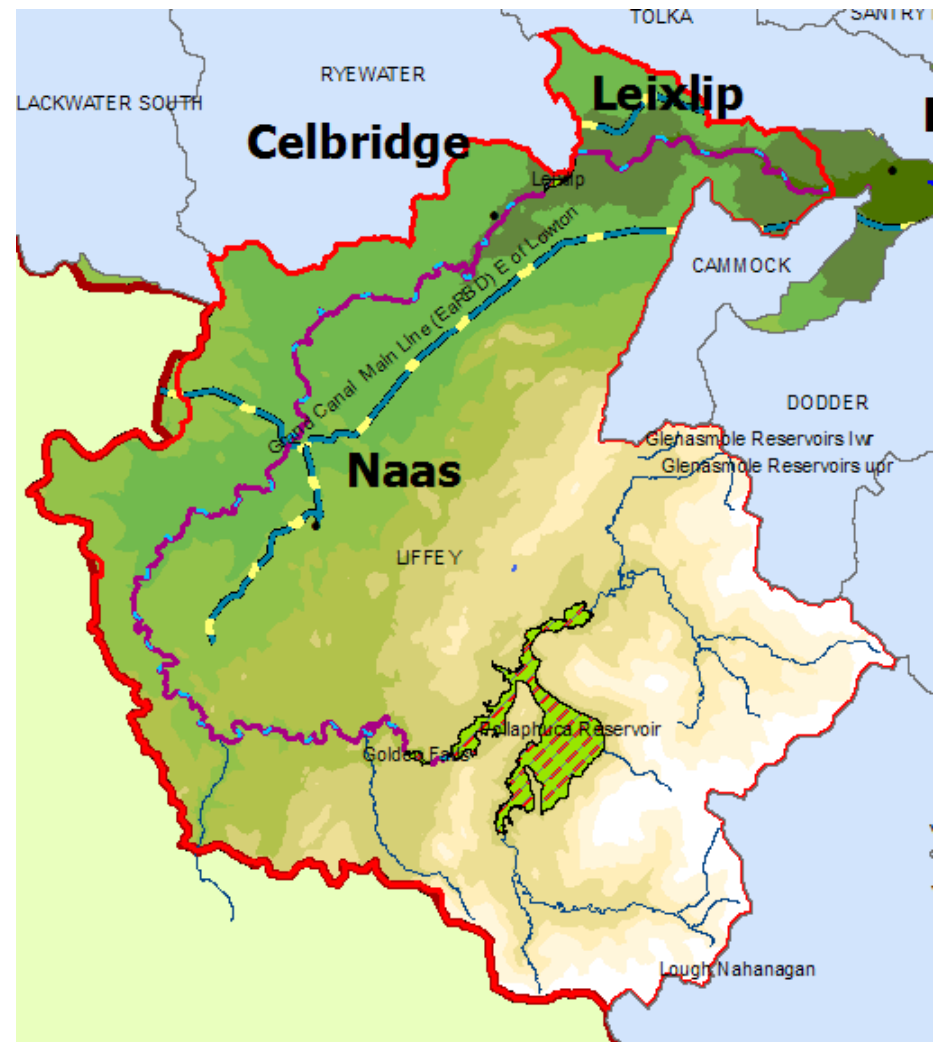
- Reason for designation:** Flood Defences
- Status:** Good Ecological Potential
- Measures for Rivers downstream of Reservoirs:** Re-examine compensation flow from ecological perspective, Implement a gravel loosening or gravel transportation from behind the dam to the river (in consultation with Regional Fisheries Board and National Parks and Wildlife Service, as appropriate)

### Golden Falls

- Reason for designation:** Impoundment for drinking water supply
- Status:** Less than Good
- Measures:** None identified

### Pollaphuca Reservoir

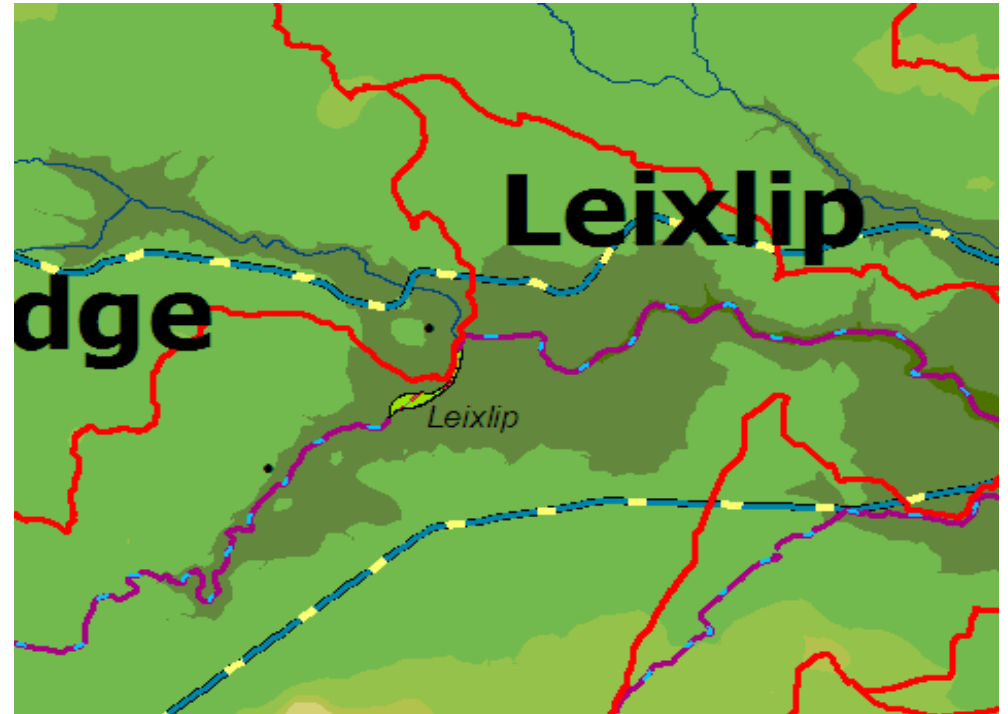
- Reason for designation:** Impoundment for drinking water supply
- Status:** Less than Good
- Measures:** None identified



# Heavily Modified Waterbodies Status and Measures

## Leixlip Reservoir

- ❑ Reason for designation:  
Impoundment for drinking water supply
- ❑ Status: Less than Good
- ❑ Measures: Ecological Potential Study



*Figure 1:* Leixlip Reservoir



# Artificial Waterbodies Status and Measures

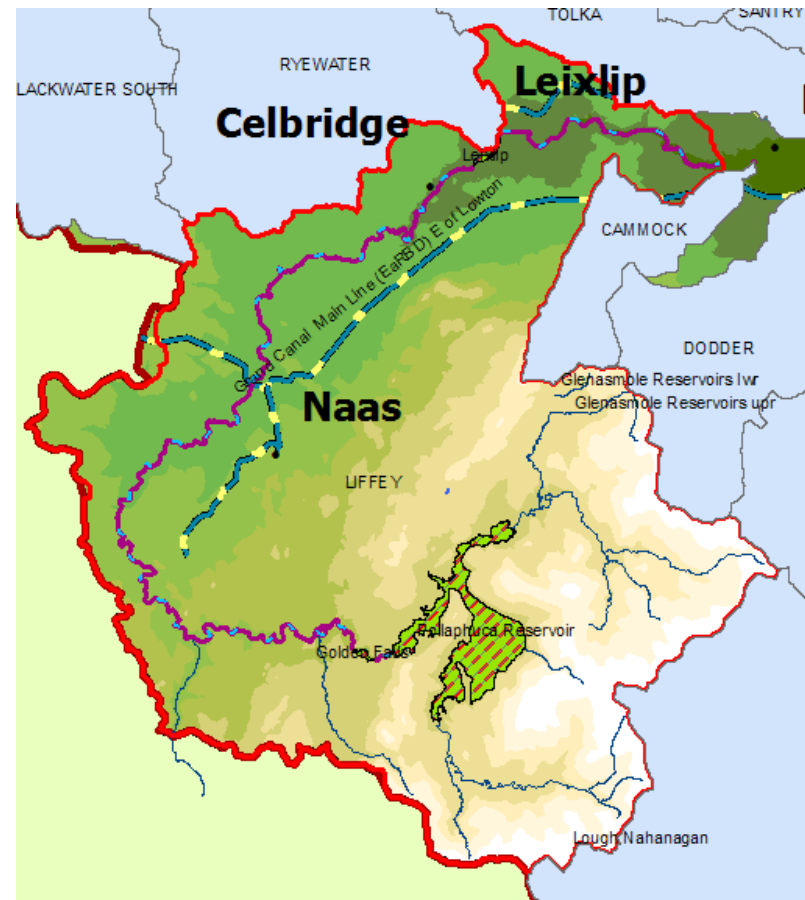
## *Artificial Water Bodies*

### Grand Canal Main Line E of Lowton

- Reason for designation: Man-made canal
- Status: Good Ecological Potential
- Measures: None identified






### Grand Canal Naas and Corbally Branch

- Reason for designation: Man-made canal
- Status: Good Ecological Potential
- Measures: None identified



# Heavily Modified and Artificial Water Bodies Legend

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Heavily Modified (HM) or Artificial Water Bodies (AWB)	Symbol
HM - Rivers	
HM - Marine	
HM - Lakes	
AWB - Canal	
AWB - Reservoirs	

# What can you do?

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## ***You have your say!***

- Now is your chance to have a say on the Programme of Measures:
  - Have all issues been addressed?
  - Do you have any measures to add to the proposed Programme of Measures?
  - What do you think about the Alternative Programme of Measures?
  - Would you spend more to achieve our goals faster?
  
- We can all help to implement this important legislation by thinking about our impact on the water environment in our everyday lives.



# How to comment

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Please ***have your say*** in any of the following ways:

1. Email your comments to [comments@erbd.ie](mailto:comments@erbd.ie) and include River Basin Management Plan Comments in the subject line
2. Write to:  
River Basin Management Plan Comments  
Project Co-ordinator  
Eastern River Basin District Project Office  
Dublin City Council  
68-70 Marrowbone Lane, 4<sup>th</sup> Floor  
Dublin 8



# Appendix 1:

## Proposed Programme of Measures Rivers



# Programme of Measures Key

<b>ABS</b>	Abstractions
<b>AGR</b>	Agricultural Point and Diffuse Sources
<b>AGR-PS</b>	Unlicensed Agricultural Point Sources
<b>Chem</b>	Chemical Fertiliser
<b>CROSS</b>	Planning, Development and other sources
<b>DLRCC</b>	Dun Laoghaire Rathdown County Council
<b>DS</b>	Dangerous Substances
<b>ECO</b>	Poor Ecology
<b>FOR</b>	Forestry
<b>IPPC</b>	Industrial Sources
<b>Manure</b>	Manure Fertilisers
<b>MORP</b>	Intensive Land use
<b>S4</b>	Local Authority Licensed Discharges
<b>WWTP</b>	Wastewater Treatment Plants
<b>DATA+</b>	An Absence of sufficient data
<b>HS</b>	To Protect High Status Waters
<b>Septic</b>	Onsite Wastewater Treatment Systems
<b>U-DIFF</b>	Urban Diffuse Pollution

# Proposed Programme of Measures

## – Basic Measures for Rivers

Local Authority	Parent ID Name	MeasureName	Source
DUBLINCITY	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS
DUBLINCITY	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
DUBLINCITY	Water Supplies Act 1942	Water Supplies Act 1942	ABS
DUBLINCITY	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
DUBLINCITY	Bathing Water Quality Regulations (S.I. 79 of 2008)	Bathing Water Quality Regulations (S.I. 79 of 2008)	CROSS
DUBLINCITY	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
DUBLINCITY	EC (Environmental Impact Assessment) Regulations and amendments (S.I. 349 of 1989 onwards)	EC (Environmental Impact Assessment) Regulations and amendments (S.I. 349 of 1989 onwards)	CROSS
DUBLINCITY	EC (Quality of Salmonid Water) Regulations (S.I. 293 of 1988)	EC (Quality of Salmonid Water) Regulations (S.I. 293 of 1988)	CROSS
DUBLINCITY	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
DUBLINCITY	Planning and Development Regulations 2001 - 2007	Planning and Development Regulations 2001 - 2007	CROSS
DUBLINCITY	EC (Control of Major Accident Hazards Involving Dangerous Substances) Regulations (S.I. 74 of 2006)	EC (Control of Major Accident Hazards Involving Dangerous Substances) Regulations (S.I. 74 of 2006)	DS
DUBLINCITY	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	DS
DUBLINCITY	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	DS
DUBLINCITY	EC (Prohibition of certain active substances in plant protection products) Regulations, 1981 and amendments	EC (Prohibition of certain active substances in plant protection products) Regulations, 1981 and amendments	DS
DUBLINCITY	Water Quality Dangerous Substances Regulations, 2001	Water Quality Dangerous Substances Regulations, 2001	DS
DUBLINCITY	Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations, 1998 (S.I. 258 of 1998)	Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations, 1998 (S.I. 258 of 1998)	DS
DUBLINCITY	EU Regulations Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) (1907/2006/EC)	EU Regulations Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) (1907/2006/EC)	DS

# Proposed Programme of Measures – Basic Measures for Rivers (cont.)

Local Authority	Parent ID Name	MeasureName	Source
DUBLINCITY	Framework for Major Emergency Management, Office of Emergency Planning, 2006	Framework for Major Emergency Management, Office of Emergency Planning, 2006	DS
DUBLINCITY	EC (Aerial Fertilisation) (Forestry) Regulations 2006 and amendment 2007	EC (Aerial Fertilisation) (Forestry) Regulations 2006 and amendment 2007	FOR
DUBLINCITY	EPA (Licensing) Regulations, 1994 & 2004	EPA (Licensing) Regulations, 1994 & 2004	IPPC
DUBLINCITY	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Manure
DUBLINCITY	Forestry Act 1946 and 1988	Forestry Act 1946 and 1988	Manure
DUBLINCITY	Local Government (Water Pollution) Act 1 of 1977 and amendments	Local Government (Water Pollution) Act 1 of 1977 and amendments	S4
DUBLINCITY	Urban Waste Water Treatment Regulations, 2001 - 2004	Urban Waste Water Treatment Regulations, 2001 - 2004	WWTP
DUBLINCITY	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	WWTP
DUBLINCITY	Water Services Act 2007	Water Services Act 2007	WWTP
FINGAL	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS
FINGAL	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
FINGAL	Water Supplies Act 1942	Water Supplies Act 1942	ABS
FINGAL	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
FINGAL	EC (Environmental Impact Assessment) Regulations and amendments (S.I. 349 of 1989 onwards)	EC (Environmental Impact Assessment) Regulations and amendments (S.I. 349 of 1989 onwards)	CROSS
FINGAL	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
FINGAL	Planning and Development Regulations 2001 - 2007	Planning and Development Regulations 2001 - 2007	CROSS
FINGAL	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	DS
FINGAL	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	DS

# Proposed Programme of Measures

## – Basic Measures for Rivers (cont.)

Local Authority	Parent ID Name	MeasureName	Source
FINGAL	EPA (Licensing) Regulations, 1994 & 2004	EPA (Licensing) Regulations, 1994 & 2004	IPPC
FINGAL	Forestry Act 1946 and 1988	Forestry Act 1946 and 1988	Manure
FINGAL	Local Government (Water Pollution) Act 1 of 1977 and amendments	Local Government (Water Pollution) Act 1 of 1977 and amendments	S4
FINGAL	Urban Waste Water Treatment Regulations, 2001 - 2004	Urban Waste Water Treatment Regulations, 2001 - 2004	WWTP
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FINGAL	Water Services Act 2007	Water Services Act 2007	WWTP
KILDARE	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS
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KILDARE	Water Services Act 2007	Water Services Act 2007	WWTP
SOUTH DUBLIN	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS
SOUTH DUBLIN	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
SOUTH DUBLIN	Water Supplies Act 1942	Water Supplies Act 1942	ABS
SOUTH DUBLIN	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
SOUTH DUBLIN	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
SOUTH DUBLIN	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
SOUTH DUBLIN	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	DS
SOUTH DUBLIN	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	DS
SOUTH DUBLIN	EPA (Licensing) Regulations, 1994 & 2004	EPA (Licensing) Regulations, 1994 & 2004	IPPC
SOUTH DUBLIN	Forestry Act 1946 and 1988	Forestry Act 1946 and 1988	Manure
SOUTH DUBLIN	Local Government (Water Pollution) Act 1 of 1977 and amendments	Local Government (Water Pollution) Act 1 of 1977 and amendments	S4
SOUTH DUBLIN	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	WWTP
SOUTH DUBLIN	Water Services Act 2007	Water Services Act 2007	WWTP
WICKLOW	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS

# Proposed Programme of Measures – Basic Measures for Rivers (cont.)

Local Authority	Parent ID Name	MeasureName	Source
WICKLOW	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
WICKLOW	Water Supplies Act 1942	Water Supplies Act 1942	ABS
WICKLOW	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
WICKLOW	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
WICKLOW	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
WICKLOW	Planning and Development Regulations 2001 - 2007	Planning and Development Regulations 2001 - 2007	CROSS
WICKLOW	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	DS
WICKLOW	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	DS
WICKLOW	EPA (Licensing) Regulations, 1994 & 2004	EPA (Licensing) Regulations, 1994 & 2004	IPPC
WICKLOW	Forestry Act 1946 and 1988	Forestry Act 1946 and 1988	Manure
WICKLOW	Local Government (Water Pollution) Act 1 of 1977 and amendments	Local Government (Water Pollution) Act 1 of 1977 and amendments	S4
WICKLOW	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to secondary treatment for p.e's >2,000 discharging to rivers, lakes, & estuaries	WWTP
WICKLOW	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	WWTP
WICKLOW	Water Services Act 2007	Water Services Act 2007	WWTP

# Proposed Programme of Measures – Supplementary for Rivers

Local Authority	Measure Name	Measure Type	Source
DUBLINCITY	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Proposed	CROSS
DUBLINCITY	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
DUBLINCITY	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
DUBLINCITY	Implement Upstream Programmes of Measures	Proposed	CROSS
DUBLINCITY	Apply Heavily Modified Waterbody Measures (See External Document)	Proposed	MORP
DUBLINCITY	Further Investigate cause of failure	Supplementary	DATA+
DUBLINCITY	CSO - Network Management & Operations Programme	Supplementary	WWTP
DUBLINCITY	Investigate Fats, Oils and Grease Issues	Supplementary	WWTP
DUBLINCITY	Investigate and eliminate misconnections	Supplementary	WWTP
DUBLINCITY	Further Investigate cause of failure	Supplementary	DATA+
DUBLINCITY	Survey Banks/Coast	Supplementary	DATA+
FINGAL	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Proposed	CROSS
FINGAL	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
FINGAL	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
FINGAL	Apply Heavily Modified Waterbody Measures (See External Document)	Proposed	MORP
KILDARE	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Proposed	CROSS
KILDARE	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
KILDARE	Develop Habitat Suitability Curves for coarse fish and other important aquatic organisms	Proposed	ABS
KILDARE	Develop Habitat Suitability Curves for salmonids in Irish Rivers	Proposed	ABS
KILDARE	In flow regulated rivers, establish guidance on flow variations to support ecology	Proposed	ABS
KILDARE	Investigate implementing smaller water schemes to reduce demand on other resources	Proposed	ABS
KILDARE	Record daily abstraction rates	Proposed	ABS
KILDARE	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
KILDARE	Mitigate impact of quarry activities	Proposed	DS
KILDARE	Implement Upstream Programmes of Measures	Proposed	CROSS
KILDARE	Apply Heavily Modified Waterbody Measures (See External Document)	Proposed	MORP
KILDARE	Develop Guidance on suite of measures for different habitats	Proposed	HS
KILDARE	CSO - Upgrades and Rehabilitation	Supplementary	WWTP
KILDARE	Diffuse Runoff (Urban) - Storm Sewers Separation (Screening & Treatment)	Supplementary	U-DIFF
KILDARE	Improve Removal of certain parameters at WWTP	Supplementary	WWTP
KILDARE	Enforce Regulations on Septic Systems	Supplementary	Septic
KILDARE	Implement Community Digestors for Alternative Energy	Supplementary	WWTP
KILDARE	Restrict Cattle Access to rivers - Create Cattle Drinking points	Supplementary	AGR-PS
KILDARE	Public awareness	Supplementary	Septic
KILDARE	Alter the availability of supply through conjunctive use or integrated water resources management, water reuse, implementing S.U.D schemes in developed areas, implementation of abstraction controls, use of additional storage or alternative water source	Supplementary	ABS
KILDARE	Investigate and eliminate misconnections	Supplementary	WWTP

# Proposed Programme of Measures

## – Supplementary Measures for Rivers (cont.)

KILDARE	Investigate Fats, Oils and Grease Issues	Supplementary	WWTP
KILDARE	Reduce water demand through improved conservation, plumbing code changes, reduce unaccounted for water, rainwater harvesting, domestic water metering, universal water charging, or restricting development where water resources are over-subscribed	Supplementary	ABS
KILDARE	Diffuse Runoff (Urban) - Implement SUDS	Supplementary	U-DIFF
KILDARE	Diffuse Runoff (Urban) - Gullies Management	Supplementary	U-DIFF
KILDARE	Diffuse Runoff (Urban) - Street Cleaning Programme	Supplementary	U-DIFF
KILDARE	Further Investigate cause of failure	Supplementary	DATA+
KILDARE	Further Investigate cause of failure	Supplementary	DATA+
KILDARE	Assess CSO and Water Quality Impact from Urban Pressures	Supplementary	WWTP
SOUTH DUBLIN	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Proposed	CROSS
SOUTH DUBLIN	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
SOUTH DUBLIN	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
SOUTH DUBLIN	Apply Heavily Modified Waterbody Measures (See External Document)	Proposed	MORP
SOUTH DUBLIN	Diffuse Runoff (Urban) - Street Cleaning Programme	Supplementary	U-DIFF
SOUTH DUBLIN	CSO - Upgrades and Rehabilitation	Supplementary	WWTP
SOUTH DUBLIN	Investigate and eliminate misconnections	Supplementary	WWTP
SOUTH DUBLIN	Further Investigate cause of failure	Supplementary	DATA+
WICKLOW	Further Investigate cause of failure	Guidance	DATA+
WICKLOW	Further Investigate cause of failure	Guidance	DATA+
WICKLOW	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Proposed	CROSS
WICKLOW	Investigate implementing smaller water schemes to reduce demand on other resources	Proposed	ABS
WICKLOW	Develop Habitat Suitability Curves for coarse fish and other important aquatic organisms	Proposed	ABS
WICKLOW	Develop Habitat Suitability Curves for salmonids in Irish Rivers	Proposed	ABS
WICKLOW	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
WICKLOW	Record daily abstraction rates	Proposed	ABS
WICKLOW	In flow regulated rivers, establish guidance on flow variations to support ecology	Proposed	ABS
WICKLOW	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
WICKLOW	Further Investigate cause of failure	Proposed	DATA+
WICKLOW	Facilitate Fish Migration	Supplementary	MORP
WICKLOW	Implement Community Digestors for Alternative Energy	Supplementary	WWTP
WICKLOW	Alter the availability of supply through conjunctive use or integrated water resources management, water reuse, implementing S.U.D schemes in developed areas, implementation of abstraction controls, use of additional storage or alternative water source	Supplementary	ABS
WICKLOW	Reduce water demand through improved conservation, plumbing code changes, reduce unaccounted for water, rainwater harvesting, domestic water metering, universal water charging, or restricting development where water resources are over-subscribed	Supplementary	ABS
WICKLOW	Forest Service - Forestry and Water Quality Guidelines	Supplementary	FOR
WICKLOW	Restrict Cattle Access to rivers - Create Cattle Drinking points	Supplementary	AGR-PS
WICKLOW	Diffuse Runoff (Urban) - Implement SUDS	Supplementary	U-DIFF
WICKLOW	Mitigate impact of quarry activities	Supplementary	DS

# Appendix 2:

## Alternative Programme of Measures Rivers



# Alternative Programme of Measures

## - Basic Measures for Rivers

Local Authority	Measure Name	Sub-Measure Name	Source
SOUTH DUBLIN	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Conduct Farm Surveys	AGR
SOUTH DUBLIN	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Improve farmyard structure/operations to divert rainwater runoff	AGR-PS
SOUTH DUBLIN	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Fertiliser/manure/soiled water/effluent/slurry/silage storage facilities to prevent seepage to ground or surface water	AGR-PS
SOUTH DUBLIN	EC (Control of Major Accident Hazards Involving Dangerous Substances) Regulations (S.I. 74 of 2006)	After an accident, operator should take all necessary measures to clear up any pollution caused.	DS
SOUTH DUBLIN	EPA (Licensing) Regulations, 1994 & 2004	Upgrade IPPC licensed facilities waste management structures and practices to best available technology	IPPC
SOUTH DUBLIN	EPA (Licensing) Regulations, 1994 & 2004	Grant and refuse IPPC licences subject to set-limits to reduce pollution effects	IPPC
SOUTH DUBLIN	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 12s	S4
SOUTH DUBLIN	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 4s (discharges to waterbodies)	S4
SOUTH DUBLIN	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 16s	S4
WICKLOW	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Conduct Farm Surveys	AGR
WICKLOW	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Improve farmyard structure/operations to divert rainwater runoff	AGR-PS
WICKLOW	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Soiled water generation minimisation practises	AGR-PS
WICKLOW	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Fertiliser/manure/soiled water/effluent/slurry/silage storage facilities to prevent seepage to ground or surface water	AGR-PS

# Alternative Programme of Measures -- Basic Measures for Rivers (cont.)

Local Authority	Measure Name	Sub-Measure Name	Source
WICKLOW	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Nutrient management	Manure
WICKLOW	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 4s (discharges to waterbodies)	S4
WICKLOW	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to secondary treatment for p.e's >2,000 discharging to rivers, lakes, & estuaries	WWTP

# Alternative Programme of Measures -- Supplementary Measures for Rivers

Local Authority	Measure Name	Measure Type	Source
DUBLINCITY	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
DUBLINCITY	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
DUBLINCITY	Implement Upstream Programmes of Measures	Supplementary	CROSS
DUBLINCITY	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Supplementary	CROSS
DUBLINCITY	Further Investigate cause of failure	Supplementary	DATA+
DUBLINCITY	Further Investigate cause of failure	Supplementary	DATA+
DUBLINCITY	Survey Banks/Coast	Supplementary	DATA+
DUBLINCITY	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
DUBLINCITY	Investigate and eliminate misconnections	Supplementary	WWTP
DUBLINCITY	Investigate Fats, Oils and Grease Issues	Supplementary	WWTP
DUBLINCITY	CSO - Upgrades and Rehabilitation	Supplementary	WWTP
DUBLINCITY	CSO - Network Management & Operations Programme	Supplementary	WWTP
FINGAL	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
FINGAL	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
FINGAL	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Supplementary	CROSS
FINGAL	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
KILDARE	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
KILDARE	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
KILDARE	Reduce water demand through improved conservation, plumbing code changes, reduce unaccounted for water, rainwater harvesting, domestic water metering, universal water charging, or restricting development where water resources are over-subscribed	Proposed	ABS

# Alternative Programme of Measures – Supplementary Measures for Rivers (cont.)

Local Authority	Measure Name	Measure Type	Source
KILDARE	Alter the availability of supply through conjunctive use or integrated water resources management, water reuse, implementing S.U.D schemes in developed areas, implementation of abstraction controls, use of additional storage or alternative water source	Proposed	ABS
KILDARE	Record daily abstraction rates	Proposed	ABS
KILDARE	Investigate implementing smaller water schemes to reduce demand on other resources	Proposed	ABS
KILDARE	In flow regulated rivers, establish guidance on flow variations to support ecology	Proposed	ABS
KILDARE	Develop Habitat Suitability Curves for coarse fish and other important aquatic organisms	Proposed	ABS
KILDARE	Develop Habitat Suitability Curves for salmonids in Irish Rivers	Proposed	ABS
KILDARE	Restrict Cattle Access to rivers - Create Cattle Drinking points	Supplementary	AGR-PS
KILDARE	Implement Upstream Programmes of Measures	Supplementary	CROSS
KILDARE	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Supplementary	CROSS
KILDARE	Further Investigate cause of failure	Supplementary	DATA+
KILDARE	Further Investigate cause of failure	Supplementary	DATA+
KILDARE	Mitigate impact of quarry activities	Supplementary	DS
KILDARE	Develop Guidance on suite of measures for different habitats	Proposed	HS
KILDARE	Public awareness	Proposed	Septic
KILDARE	Enforce Regulations on Septic Systems	Supplementary	Septic
KILDARE	Investigate and eliminate misconnections	Supplementary	WWTP
KILDARE	Investigate Fats, Oils and Grease Issues	Supplementary	WWTP
SOUTH DUBLIN	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
SOUTH DUBLIN	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
SOUTH DUBLIN	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Supplementary	CROSS
SOUTH DUBLIN	Further Investigate cause of failure	Supplementary	DATA+
SOUTH DUBLIN	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
SOUTH DUBLIN	Diffuse Runoff (Urban) - Street Cleaning Programme	Supplementary	U-DIFF

# Alternative Programme of Measures – Supplementary Measures for Rivers (cont.)

Local Authority	Measure Name	Measure Type	Source
SOUTH DUBLIN	Investigate and eliminate misconnections	Supplementary	WWTP
SOUTH DUBLIN	CSO - Upgrades and Rehabilitation	Supplementary	WWTP
WICKLOW	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
WICKLOW	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
WICKLOW	Reduce water demand through improved conservation, plumbing code changes, reduce unaccounted for water, rainwater harvesting, domestic water metering, universal water charging, or restricting development where water resources are over-subscribed	Proposed	ABS
WICKLOW	Alter the availability of supply through conjunctive use or integrated water resources management, water reuse, implementing S.U.D schemes in developed areas, implementation of abstraction controls, use of additional storage or alternative water source	Proposed	ABS
WICKLOW	Record daily abstraction rates	Proposed	ABS
WICKLOW	Investigate implementing smaller water schemes to reduce demand on other resources	Proposed	ABS
WICKLOW	In flow regulated rivers, establish guidance on flow variations to support ecology	Proposed	ABS
WICKLOW	Develop Habitat Suitability Curves for coarse fish and other important aquatic organisms	Proposed	ABS
WICKLOW	Develop Habitat Suitability Curves for salmonids in Irish Rivers	Proposed	ABS
WICKLOW	Restrict Cattle Access to rivers - Create Cattle Drinking points	Supplementary	AGR-PS
WICKLOW	Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes	Supplementary	CROSS
WICKLOW	Further Investigate cause of failure	Supplementary	DATA+
WICKLOW	Further Investigate cause of failure	Supplementary	DATA+
WICKLOW	Mitigate impact of quarry activities	Supplementary	DS
WICKLOW	Forest Service - Forestry and Water Quality Guidelines	Guidance	FOR
WICKLOW	Facilitate Fish Migration	Supplementary	MORP
WICKLOW	Diffuse Runoff (Urban) - Implement SUDS	Supplementary	U-DIFF
WICKLOW	Implement Community Digestors for Alternative Energy	Supplementary	WWTP

# Appendix 3:

## Proposed Programme of Measures Lakes



# Proposed Programme of Measures

## – Basic Measures for Lakes

Local Authority	WMU	Parent ID Name	MeasureName	Source
KILDARE	Leixlip Liffey Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
KILDARE	Leixlip Liffey Reservoir	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
KILDARE	Leixlip Liffey Reservoir	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
KILDARE	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
KILDARE	Leixlip Liffey Reservoir	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Manure
KILDARE	Leixlip Liffey Reservoir	Water Services Act 2007	Water Services Act 2007	WWTP
KILDARE	Pollaphuca Reservoir	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
KILDARE	Pollaphuca Reservoir	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
KILDARE	Pollaphuca Reservoir	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	DS
KILDARE	Pollaphuca Reservoir	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	DS
KILDARE	Pollaphuca Reservoir	EC (Prohibition of certain active substances in plant protection products) Regulations, 1981 and amendments	EC (Prohibition of certain active substances in plant protection products) Regulations, 1981 and amendments	DS

# Proposed Programme of Measures – Basic Measures for Lakes (cont.)

Local Authority	WMU	Parent ID Name	MeasureName	Source
KILDARE	Pollaphuca Reservoir	EU Regulations Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) (1907/2006/EC)	EU Regulations Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) (1907/2006/EC)	DS
KILDARE	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
KILDARE	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
KILDARE	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
KILDARE	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
KILDARE	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
KILDARE	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
KILDARE	Pollaphuca Reservoir	EPA (Licensing) Regulations, 1994 & 2004	Upgrade IPPC licensed facilities waste management structures and practices to best available technology	IPPC
KILDARE	Pollaphuca Reservoir	EPA (Licensing) Regulations, 1994 & 2004	Grant and refuse IPPC licences subject to set-limits to reduce pollution effects	IPPC
KILDARE	Pollaphuca Reservoir	EPA (Licensing) Regulations, 1994 & 2004	Review IPPC licences	IPPC
KILDARE	Pollaphuca Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Nutrient management	Manure
KILDARE	Pollaphuca Reservoir	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Manure
KILDARE	Pollaphuca Reservoir	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 4s (discharges to waterbodies)	S4
KILDARE	Redbog	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
KILDARE	Redbog	Water Supplies Act 1942	Water Supplies Act 1942	ABS
KILDARE	Redbog	EC (Environmental Impact Assessment) Regulations and amendments (S.I. 349 of 1989 onwards)	EC (Environmental Impact Assessment) Regulations and amendments (S.I. 349 of 1989 onwards)	CROSS

# Proposed Programme of Measures – Basic Measures for Lakes (cont.)

Local Authority	WMU	Parent ID Name	MeasureName	Source
KILDARE	Redbog	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
KILDARE	Redbog	Planning and Development Regulations 2001 - 2007	Planning and Development Regulations 2001 - 2007	CROSS
KILDARE	Redbog	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
KILDARE	Redbog	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
KILDARE	Redbog	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
KILDARE	Redbog	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
KILDARE	Redbog	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
KILDARE	Redbog	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
KILDARE	Redbog	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Nutrient management	Manure
KILDARE	Redbog	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Manure
SOUTH DUBLIN	Leixlip Liffey Reservoir	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Water Supplies Act 1942	Water Supplies Act 1942	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO

# Proposed Programme of Measures

## – Basic Measures for Lakes (cont.)

Local Authority	WMU	Parent ID Name	MeasureName	Source
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Manure
SOUTH DUBLIN	Leixlip Liffey Reservoir	Water Services Act 2007	Water Services Act 2007	WWTP
WICKLOW	Pollaphuca Reservoir	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	Quality of Surface Water intended for the Abstraction of Drinking Water (S.I. 294 of 1989)	ABS
WICKLOW	Pollaphuca Reservoir	National Water Pricing Policy Framework (1998)	National Water Pricing Policy Framework (1998)	ABS
WICKLOW	Pollaphuca Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	AGR
WICKLOW	Pollaphuca Reservoir	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	EC (Drinking Water) (No 2) Regulations (S.I. 278 of 2007)	CROSS
WICKLOW	Pollaphuca Reservoir	Planning Development Acts 2000 - 2006	Planning Development Acts 2000 - 2006	CROSS
WICKLOW	Pollaphuca Reservoir	Planning and Development Regulations 2001 - 2007	Planning and Development Regulations 2001 - 2007	CROSS
WICKLOW	Pollaphuca Reservoir	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	EC (Authorisation, Placing on the Market, Use and Control of Plant Protection Products), 2003 and amendments	DS
WICKLOW	Pollaphuca Reservoir	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	EC (Classification Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations, 2001	DS
WICKLOW	Pollaphuca Reservoir	EC (Prohibition of certain active substances in plant protection products) Regulations, 1981 and amendments	EC (Prohibition of certain active substances in plant protection products) Regulations, 1981 and amendments	DS

# Proposed Programme of Measures – Basic Measures for Lakes (cont.)

Local Authority	WMU	Parent ID Name	MeasureName	Source
WICKLOW	Pollaphuca Reservoir	Water Quality Dangerous Substances Regulations, 2001	Water Quality Dangerous Substances Regulations, 2001	DS
WICKLOW	Pollaphuca Reservoir	EU Regulations Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) (1907/2006/EC)	EU Regulations Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) (1907/2006/EC)	DS
WICKLOW	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	ECO
WICKLOW	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	EC (Natural Habitats) Regulations 1997- 2005	ECO
WICKLOW	Pollaphuca Reservoir	EC (Aerial Fertilisation) (Forestry) Regulations 2006 and amendment 2007	EC (Aerial Fertilisation) (Forestry) Regulations 2006 and amendment 2007	FOR
WICKLOW	Pollaphuca Reservoir	EPA Waste (Licensing) Regulations, 2004	EPA Waste (Licensing) Regulations, 2004	IPPC
WICKLOW	Pollaphuca Reservoir	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 - 2001	Manure
WICKLOW	Pollaphuca Reservoir	Forestry Act 1946 and 1988	Forestry Act 1946 and 1988	Manure
WICKLOW	Pollaphuca Reservoir	Local Government (Water Pollution) Act 1 of 1977 and amendments	Local Government (Water Pollution) Act 1 of 1977 and amendments	S4
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to secondary treatment for p.e's >2,000 discharging to rivers, lakes, & estuaries	WWTP
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to 2 mg/l or ≥ 80% TP reduction for p.e's >10,000 discharging to sensitive waters (unless no eutrophication potential)	WWTP
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to 1 mg/l or ≥ 80% TN reduction for p.e's >100,000 discharging to sensitive waters (unless no eutrophication potential)	WWTP
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Monitor the discharge from the Urban Waste water treatment plants and the water subject to a discharge from the UWW treatment check the quality compliance with this legislation	WWTP
WICKLOW	Pollaphuca Reservoir	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)	WWTP
WICKLOW	Pollaphuca Reservoir	Water Services Act 2007	Water Services Act 2007	WWTP

# Proposed Programme of Measures

## – Basic Measures for Lakes (cont.)

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Local Authority	WMU	Parent ID Name	MeasureName	Source
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Ensure that a treatment plant provided in compliance with the requirements of these regulations is designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions	WWTP

# Proposed Programme of Measures – Supplementary for Lakes

Local Authority	WMU Name	Measure Name	Measure Type	Source
KILDARE	Leixlip Liffey Reservoir	Develop Guidance on suite of measures for different habitats	Supplementary	HS
KILDARE	Pollaphuca Reservoir	Develop Guidance on suite of measures for different habitats	Proposed	HS
KILDARE	Leixlip Liffey Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Proposed	MORP
KILDARE	Pollaphuca Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Proposed	MORP
KILDARE	Leixlip Liffey Reservoir	Survey Banks/Coast	Supplementary	DATA+
KILDARE	Pollaphuca Reservoir	Survey Banks/Coast	Guidance	DATA+
KILDARE	Leixlip Liffey Reservoir	For sites not at Favourable conservation Status Set targets and timeframe for achieving status	Proposed	HS
KILDARE	Pollaphuca Reservoir	For sites not at Favourable conservation Status Set targets and timeframe for achieving status	Supplementary	HS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Develop Guidance on suite of measures for different habitats	Proposed	HS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Supplementary	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Supplementary	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
SOUTH DUBLIN	Leixlip Liffey Reservoir	Survey Banks/Coast	Supplementary	DATA+

# Appendix 4:

## Alternative Programme of Measures Lakes



# Alternative Programme of Measures - Basic Measures for Lakes

Local Authority	WMU	Measure Name	Sub-Measure Name	Source
KILDARE	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
KILDARE	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
KILDARE	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
KILDARE	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
KILDARE	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
KILDARE	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
KILDARE	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
KILDARE	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
KILDARE	Pollaphuca Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Nutrient management	Manure
KILDARE	Pollaphuca Reservoir	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 4s (discharges to waterbodies)	S4
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
SOUTH DUBLIN	Leixlip Liffey Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
WICKLOW	Pollaphuca Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Conduct Farm Surveys	AGR

# Alternative Programme of Measures

## - Basic Measures for Lakes (cont.)

Local Authority	WMU	Measure Name	Sub-Measure Name	Source
WICKLOW	Pollaphuca Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Fertiliser/manure/soiled water/effluent/slurry/silage storage facilities to prevent seepage to ground or surface water	AGR-PS
WICKLOW	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Manage, conserve, restore or protect sites	ECO
WICKLOW	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Select sites for identification as sites of community importance	ECO
WICKLOW	Pollaphuca Reservoir	EC (Natural Habitats) Regulations 1997- 2005	Survey conservation status of the natural habitats and species	ECO
WICKLOW	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Designate protected areas	ECO
WICKLOW	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Preserve protected areas against pollution deterioration and disturbance	ECO
WICKLOW	Pollaphuca Reservoir	EC (Conservation of Wild Birds) Regulations and amendments (S.I. 291 of 1985 onwards )	Prosecute those who do not protect wild birds, their nests or eggs	ECO
WICKLOW	Pollaphuca Reservoir	EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007)	Nutrient management	Manure
WICKLOW	Pollaphuca Reservoir	Local Government (Water Pollution) Act 1 of 1977 and amendments	Enforce Section 4s (discharges to waterbodies)	S4
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to secondary treatment for p.e.'s >10,000 discharging to coastal waters	WWTP
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to 2 mg/l or ≥ 80% TP reduction for p.e.'s >10,000 discharging to sensitive waters (unless no eutrophication potential)	WWTP
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Upgrade domestic WWTWs to 1 mg/l or ≥ 80% TN reduction for p.e.'s >100,000 discharging to sensitive waters (unless no eutrophication potential)	WWTP
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Monitor the discharge from the Urban Waste water treatment plants and the water subject to a discharge from the UWW treatment check the quality compliance with this legislation	WWTP

# Alternative Programme of Measures

## - Basic Measures for Lakes (cont.)

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Local Authority	WMU	Measure Name	Sub-Measure Name	Source
WICKLOW	Pollaphuca Reservoir	Urban Waste Water Treatment Regulations, 2001 - 2004	Ensure that a treatment plant provided in compliance with the requirements of these regulations is designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions	WWTP

# Alternative Programme of Measures – Supplementary Measures for Lakes

Local Authority	WMU	Measure Name	Measure Type	Source
KILDARE	Leixlip Liffey Reservoir	Survey Banks/Coast	Supplementary	DATA+
KILDARE	Pollaphuca Reservoir	Survey Banks/Coast	Supplementary	DATA+
KILDARE	Leixlip Liffey Reservoir	For sites not at Favourable conservation Status Set targets and timeframe for achieving status	Proposed	HS
KILDARE	Pollaphuca Reservoir	For sites not at Favourable conservation Status Set targets and timeframe for achieving status	Proposed	HS
KILDARE	Leixlip Liffey Reservoir	Develop Guidance on suite of measures for different habitats	Proposed	HS
KILDARE	Pollaphuca Reservoir	Develop Guidance on suite of measures for different habitats	Proposed	HS
KILDARE	Leixlip Liffey Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
KILDARE	Pollaphuca Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
SOUTH DUBLIN	Leixlip Liffey Reservoir	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater	Proposed	ABS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Survey Banks/Coast	Supplementary	DATA+
SOUTH DUBLIN	Leixlip Liffey Reservoir	For sites not at Favourable conservation Status Set targets and timeframe for achieving status	Proposed	HS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Develop Guidance on suite of measures for different habitats	Proposed	HS
SOUTH DUBLIN	Leixlip Liffey Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP
WICKLOW	Pollaphuca Reservoir	Modernise Abstraction Legislation, including a system for licensing surface water abstractions	Proposed	ABS
WICKLOW	Pollaphuca Reservoir	Collect daily abstraction rates and compensation flow releases	Proposed	ABS
WICKLOW	Pollaphuca Reservoir	For sites not at Favourable conservation Status Set targets and timeframe for achieving status	Proposed	HS

# Alternative Programme of Measures – Supplementary Measures for Lakes (cont.)

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Local Authority	WMU	Measure Name	Measure Type	Source
WICKLOW	Pollaphuca Reservoir	Develop Guidance on suite of measures for different habitats	Proposed	HS
WICKLOW	Pollaphuca Reservoir	Apply Heavily Modified Waterbody Measures (See External Document)	Supplementary	MORP