

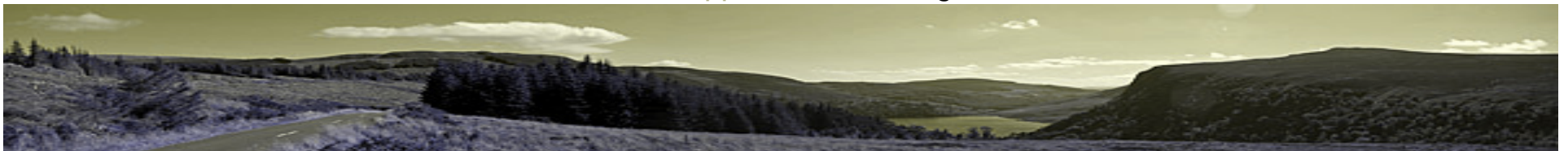
eastern  
river basin district

# Draft Programme of Measures

## *Donabate 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&2: Programme of Measures



# Document Control Sheet

|                          |  |   |                |             |
|--------------------------|--|---|----------------|-------------|
| <b>Project</b>           | Eastern River Basin District   |   |                |             |
| <b>Report</b>            | Draft - Donabate - 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

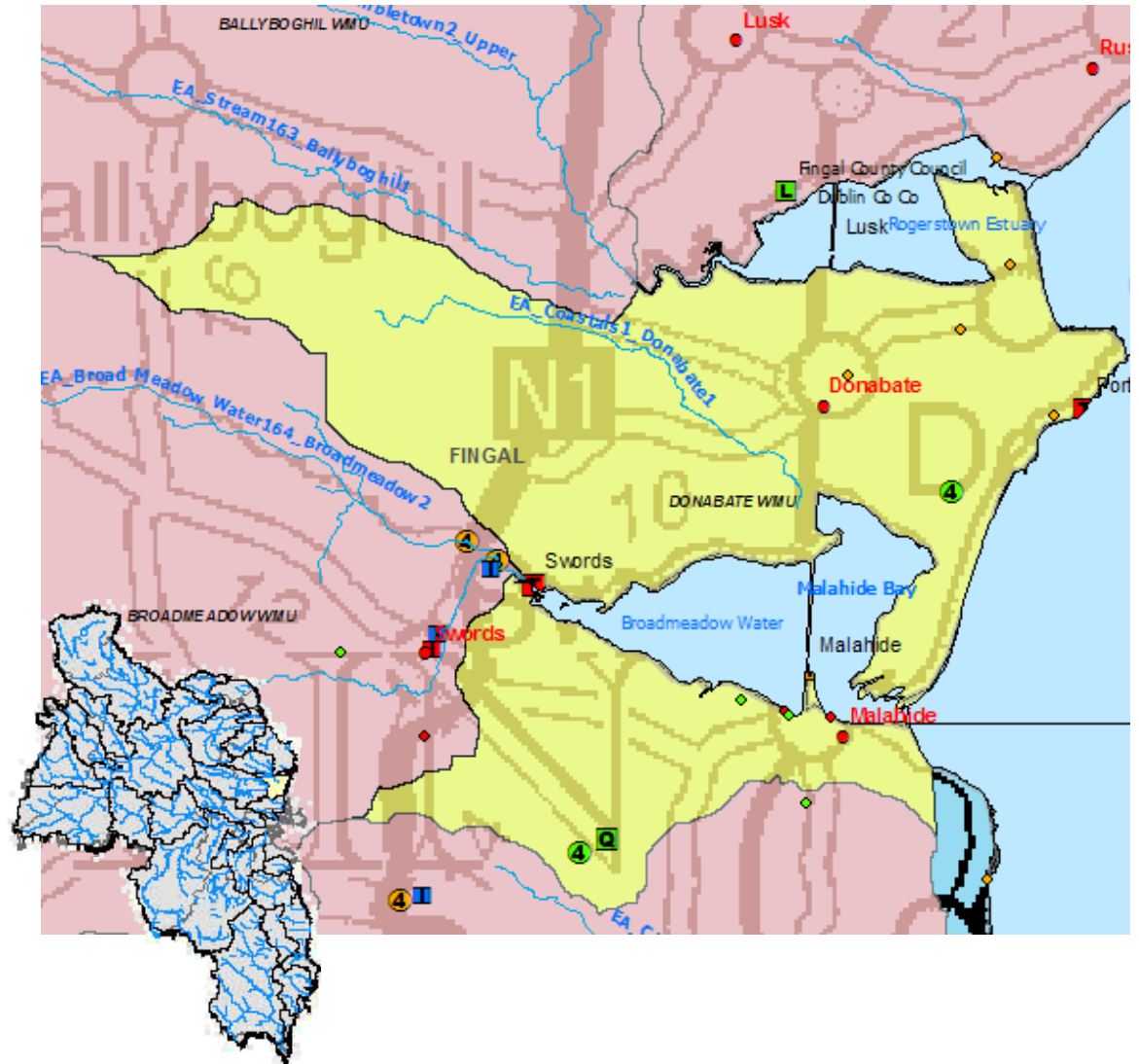
- ❑ The Draft River Basin Management Plan was published on the 22<sup>nd</sup> December 2008 for Public Consultation.
- ❑ This Programme of Measures accompanies the River Basin Management Plan created for the Eastern River Basin District.
- ❑ The River Basin Management Plan can be downloaded from the 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:  
100% Fingal
- ❑ River Length: 7 km
- ❑ Land use:  
Predominantly land-use  
is for agriculture
  - 42% Arable
  - 19% Pasture
  - urban populations  
cover 23% of the  
area for example at  
Donabate and  
Malahide.



# Risk Assessment Legend

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

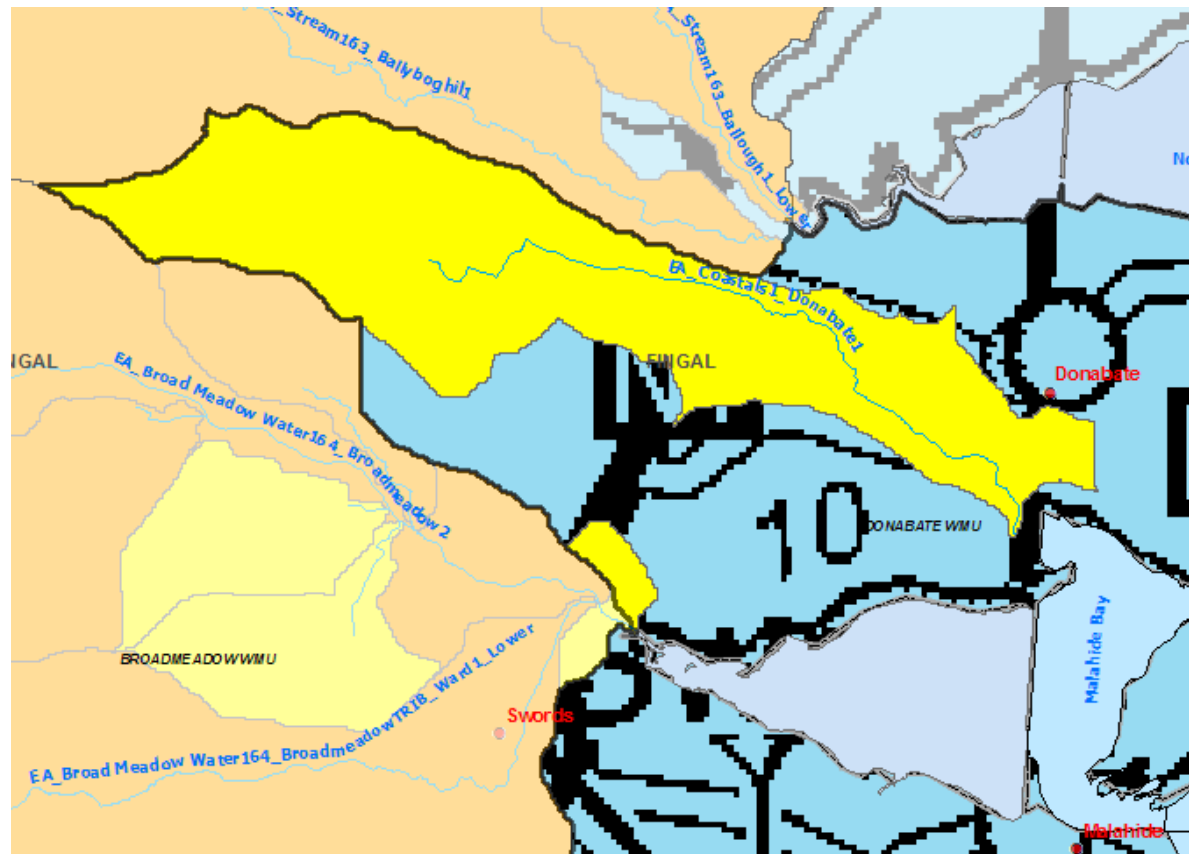
| Risk   | Symbol with Level of Risk  | Risk      | Symbol with Level of Risk  |
|--|--|-----------|--|
| Abstraction  |   |           |  |
| CSO  |  1a<br> 1b<br> 2a<br> 2b         | WWTPs     |  1a<br> 1b<br> 2a<br> 2b |
| Hydrometric Station  |  ACTIVE<br> INACTIVE<br> OBSOLETE   | WTPs      |  2a   |
| IPC Facilities   |  1a<br> 1b<br> 2a<br> 2b    | Landfills |  1b<br> 2a<br> 2b  |
| IPC Rivers   |  1a<br> 1b<br> 2a<br> 2b | Mines     |  1a<br> 1b<br> 2a   |
| Section 4  |  1a<br> 1b<br> 2a<br> 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>Moderate</b> | 100% |
|-----------------|------|

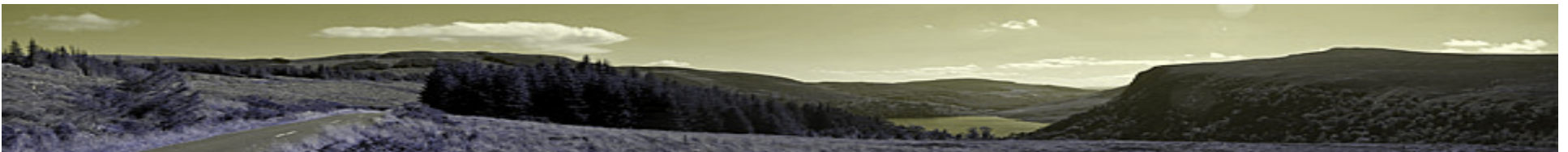


*The percentage status is determined by the number of reportable segments or sub basins. For this reason the percentage might not seem representative.*

# Objectives

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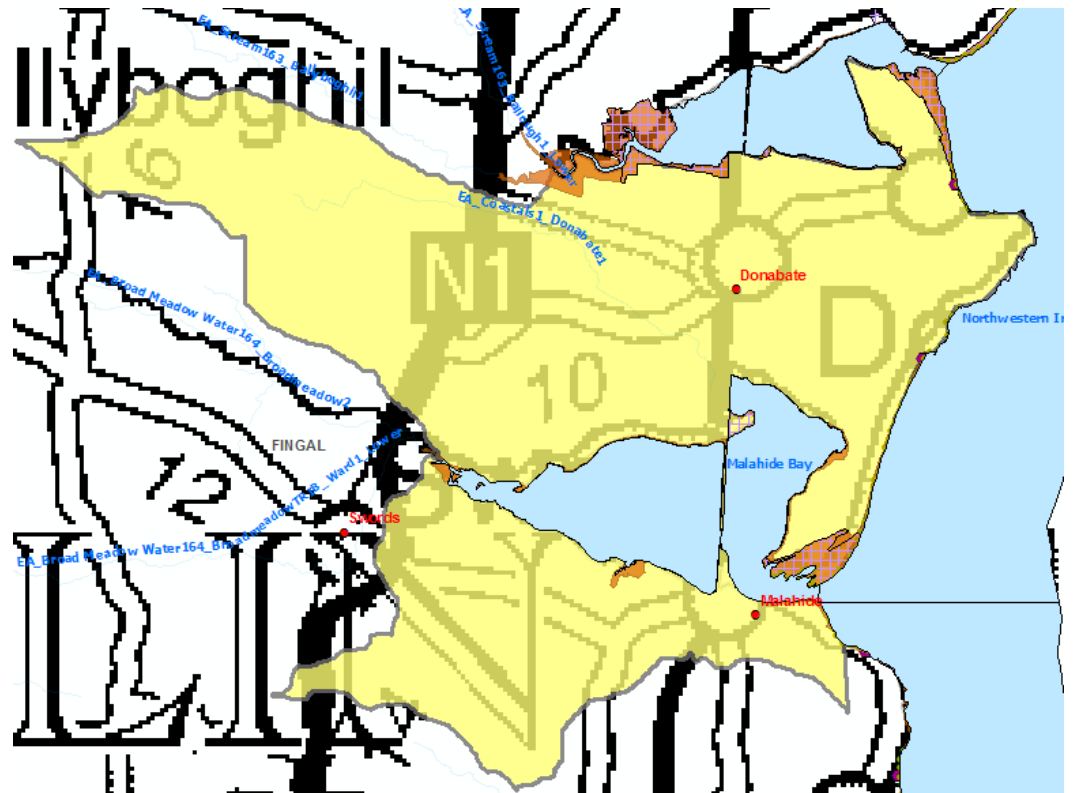
- ❑ Waters must be of satisfactory quality and sufficient quantity to protect the aquatic environment and its beneficial uses.
- ❑ We have four core objectives:
  1. Prevent deterioration and in particular maintain High or Good Status
  2. Improve waters to achieve Good Status where appropriate
  3.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

|   |   |  |
|---|---|--|
| Special Protected Areas (3)                 | ✓ | Rogerstown Estuary, Broadmeadow Estuary, Swords Estuary            |
| Special Areas of Conservation (Habitat) (2) | ✓ | Rogerstown Estuary, Malahide Estuary                               |
| Recreational Water (3)                      | ✓ | Portrane, Donabate, Malahide                                       |
| Nutrient Sensitive Area (1)                 | ✓ | Broadmeadow Estuary (Inner)  |
| National Heritage Areas (4)                 | ✓ | Rogerstown Estuary, Portrane Shore, Malahide Estuary, Feltrim Hill |



# 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') and to prevent deterioration from Good Status.

## **In Donabate the problems are:**

- High Nutrients (Phosphorus, Ammonia)
- Estimated Low Ecological Rating

# What could be causing these problems?

| Pressure  | County | % Contribution |
|---|--------|----------------|
| Agriculture                                       | Fingal | 40             |
| Landfills, Quarries, Mines and Contaminated Lands | Fingal | 1              |
| Wastewater and Industrial Discharges              | Fingal | 50             |
| Wastewater From Unsewered Properties              | Fingal | 9              |

- ❑ In Donabate the principal pressures identified are agriculture and wastewater and industrial discharges.
- ❑ The percentages are approximate estimates of relative pressures and will assist in prioritising measures.

# 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

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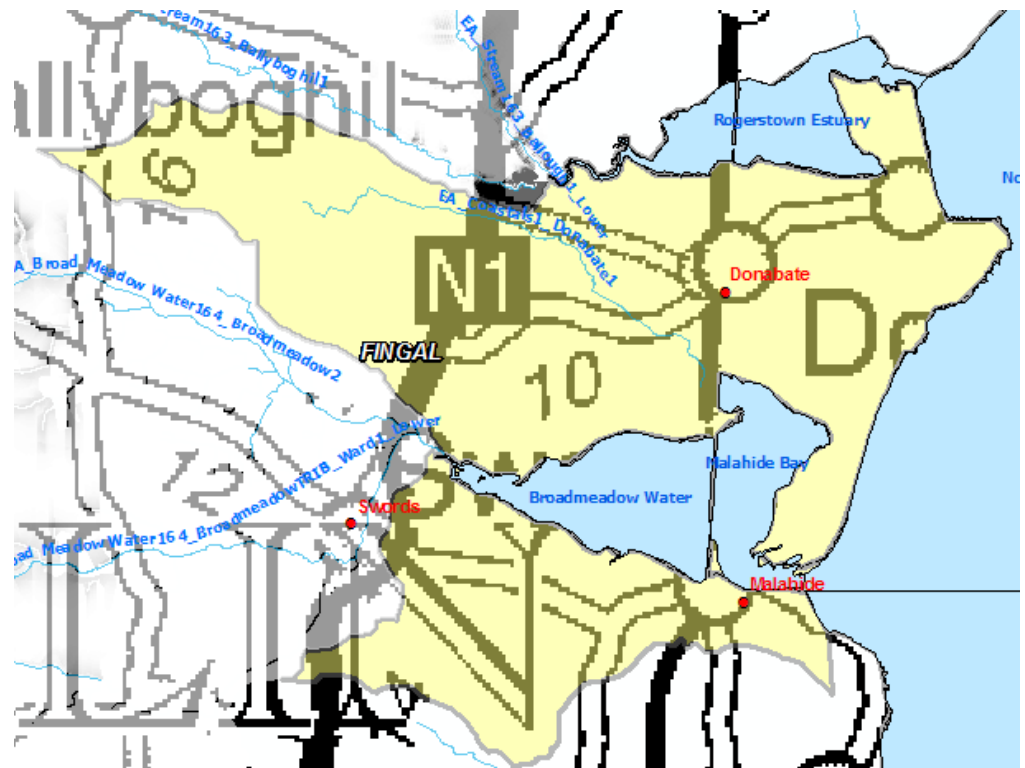
❑ **Supplementary Measures (In descending order of cost):**

| <b>Supplementary Measures - River Sub-catchment</b>   |
|---|
| Emphasise linkage between Planning, Water Services, and Environmental Sections within Local Authorities for Planning Purposes       |
| Conduct awareness campaign for sustainable domestic water use, including rainwater harvesting and domestic soakaways for stormwater |
| Modernise Abstraction Legislation, including a system for licensing surface water abstractions                                      |

# 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.

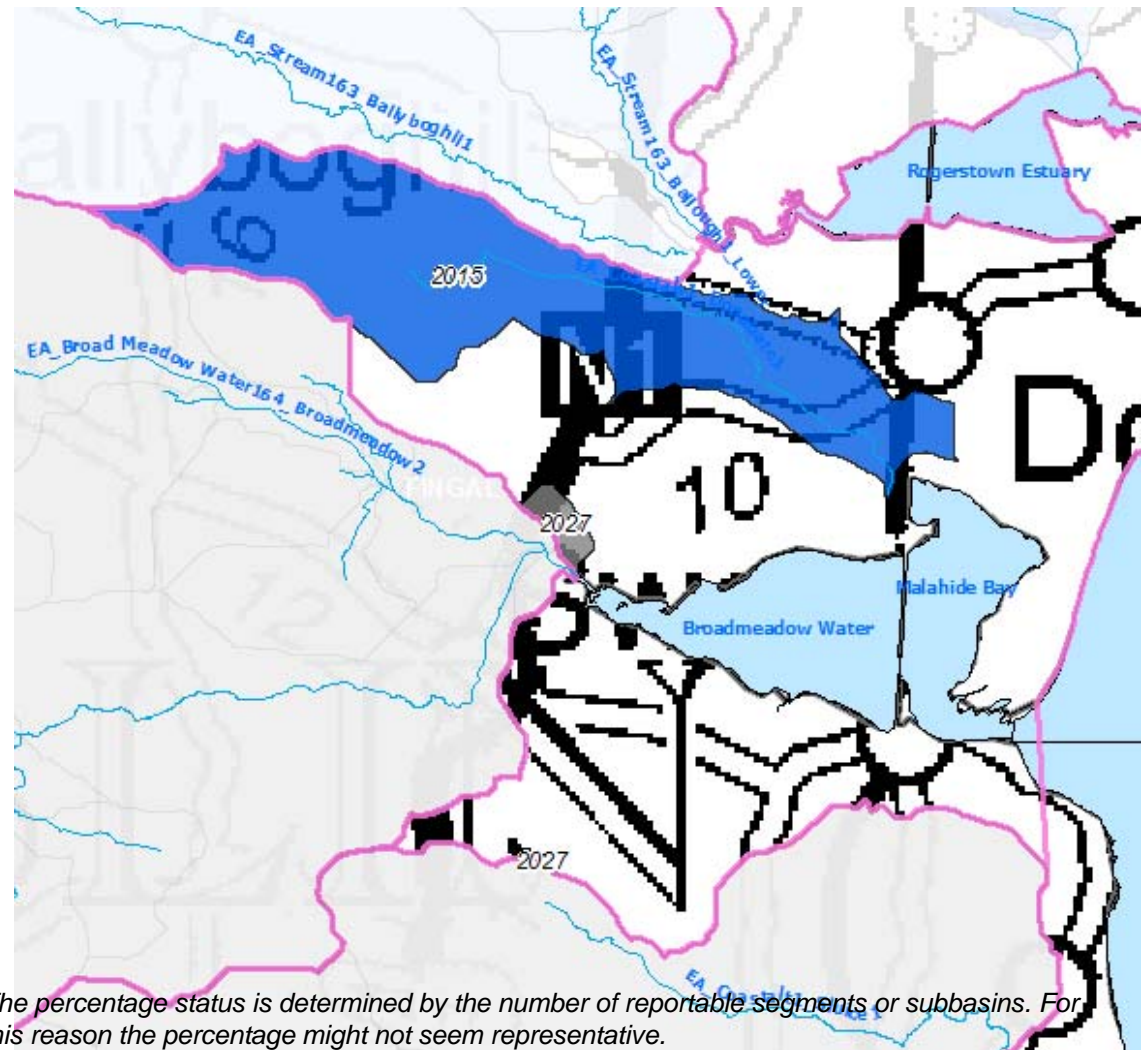


*Phosphorus modelling by the ERBD project shows that of the entire catchment no Land area are of high risk of causing direct runoff into the river.*

# 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.
- ❑ However, Donabate is expected to attain Good Status by 2015.

|      |      |
|------|------|
| 2015 | 100% |
| 2021 | 100% |
| 2027 | 100% |



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

# 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



# 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 |
|-----------------|---|---|--------|
| 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     |
| 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   | Enforce Section 4s (discharges to waterbodies)  | S4     |
| FINGAL          | Local Government (Water Pollution) Act 1 of 1977 and amendments   | Enforce Section 16s   | S4     |
| FINGAL          | Urban Waste Water Treatment Regulations, 2001 - 2004  | Urban Waste Water Treatment Regulations, 2001 - 2004  | WWTP   |
| FINGAL          | Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)  | Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)  | WWTP   |
| FINGAL          | Water Services Act 2007   | Water Services Act 2007   | WWTP   |

# Proposed Programme of Measures

## – Supplementary Measures for Rivers

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| Local Authority | Measure Name  | Measure Type | Source |
|-----------------|---|--------------|--------|
| 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    |

# Appendix 2:

## Alternative Programme of Measures



# Alternative Programme of Measures

## – Basic Measures for Rivers

| Local Authority | Measure Name   | Sub-Measure Name  | Source |
|-----------------|--|---|--------|
| FINGAL          | EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007) | Conduct Farm Surveys  | AGR    |
| FINGAL          | 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 |
| FINGAL          | 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 |
| FINGAL          | 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 |
| FINGAL          | EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007) | Nutrient management   | Manure |
| FINGAL          | EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. 378 of 2006 and S.I. 526 of 2007) | Locate Manure heaps at a specified distance from waterbodies  | Manure |
| FINGAL          | Local Government (Water Pollution) Act 1 of 1977 and amendments  | Enforce Section 4s (discharges to waterbodies)  | S4     |
| FINGAL          | Local Government (Water Pollution) Act 1 of 1977 and amendments  | Enforce Section 16s   | S4     |
| FINGAL          | Urban Waste Water Treatment Regulations, 2001 - 2004   | Collecting systems for p.e.'s >2,000 (unless negligible benefits or excessive costs)  | WWTP   |
| FINGAL          | Waste Water Discharge (Authorisation) Regulations (S.I. 684 of 2007)   | Certify all waste water discharges less than 500 PE.  | WWTP   |
| FINGAL          | 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 Rivers

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| Local Authority | Measure Name  | Measure Type  | Source |
|-----------------|---|---------------|--------|
| 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  |