

# Revised / Updated Maharees Pollution Reduction Programme



Name	Maharees Shellfish Area
Map number	XII
Year of designation	1994
Area	7.97 km <sup>2</sup>
River Basin District	Shannon IRBD
County	Kerry
Location of sampling point	52 deg 16 23 min North (Long) 10 deg 00 43.9 min West (Lat)
Catchment area	289.71 km <sup>2</sup>
Adjacent PRP	Tralee Bay

## **1.0 INTRODUCTION**

### **1.1 Programme Objective**

Compliance with the standards and objectives established by the Quality of Shellfish Waters Regulations 2006 (S.I. No. 268 of 2006) (as amended) for the designated shellfish growing waters at Maharees and with Article 5 of Directive 2006/113/EC of the European parliament and of the Council on the quality required for shellfish waters.

### **1.2 Pollution Reduction Programme**

This pollution reduction programme for the shellfish growing waters at Maharees has been established by the Minister for the Environment, Community and Local Government in order to protect and improve water quality in the designated shellfish growing areas in Maharees and in particular, to ensure compliance with the standards and objectives for these waters established by the 2006 Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) and with Article 5 of Directive 2006/113/EC of the European parliament and of the Council on the quality required for shellfish waters.

### **1.3 Supporting Characterisation Report and Toolkit of Measures**

The Pollution Reduction Programme stems from the work undertaken in the characterisation report for Maharees. The characterisation is designed to achieve the following:

- establish the catchment that influences the water quality of the designated area;
- identify the different types of pressures or impacts prevalent in the catchment;
- establish an initial assessment of the water quality within the catchment and within the designated shellfish area using all water quality data available;
- from the above three elements identify the pressures that are active in the catchment and subsequently impacting the water quality in the designated shellfish area;
- having identified the pressures impacting on the water quality the characterisation report prioritises them in relation to their impact.

The characterisation report thus provides a prioritised list of pressures/impacts/effects on water quality. The pollution reduction programme or action plan takes this prioritised list and addresses each issue with actions to help ensure that compliance with the relevant water quality standards is achieved or ensured.

The measures/actions included in this PRP to address the identified pressures on shellfish water quality in this catchment are based on a National Toolkit of Measures. The National Toolkit has been derived from earlier work carried out on the River Basin Management Plans under the Water Framework Directive (WFD), reflecting the common objective to improve water quality in the two Directives. In addition, designated shellfish waters are part of the WFD Register of Protected Areas, providing a further link between the Pollution Reduction Programmes and River Basin Management Planning.

Within each individual PRP specific measures from the National Toolkit are applied, where required, to address the key and secondary pressures identified in each of the designated shellfish waters.

#### **1.4 Strategic Environmental Assessment and Habitats Directive Assessment**

The Strategic Environmental Assessment (SEA) and Habitats Directive Assessment (HDA) processes were carried out in tandem with the PRP compilation process. These assessments both informed the development of alternatives considered for the PRP and included detailed high-level assessments highlighting the potential positive and negative impacts (including cumulative impacts) associated with application of the measures contained in the National Toolkit. In addition, a more focussed assessment was also carried out which considered the individual and cumulative impacts associated with implementation of the measures brought forward into this individual PRP.

As a result of the SEA and HDA assessments mitigation measures were identified in order to reduce potential negative impacts associated with implementation of the PRP. The relevant mitigation measures are included in Annex 1 of the PRP. The mitigation measures arising from the SEA are noted in black, while the mitigation measures arising from the HDA noted in blue.

#### **1.5 Monitoring of Water Quality**

The Marine Institute is carrying out a monitoring programme to monitor the condition of waters in the shellfish growing area and to verify compliance, or otherwise with the water quality standards outlined in Schedules 2 and 4 of the Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) and summarised in Table 1 of the Characterisation Report (Chapter 1 of the Characterisation Report refers).. The Marine Institute will submit a report on water quality in respect of the designated area to the Minister each year, and will immediately bring to the attention of the Department of the Environment, Community and Local Government any non-compliance with a water quality standard to enable investigation to be undertaken.

#### **1.6 Review/monitoring of Pollution Reduction Programme**

This pollution reduction programme will be kept under review by the Minister and will be updated and amended as needed from time to time, having regard to water quality conditions within the shellfish growing area including changes in water quality in response to the implementation of measures and other factors arising in the catchment that may affect water quality in the designated area.

The pollution reduction programme will be reviewed at intervals not exceeding three years and, where necessary, at lesser intervals if the monitoring data indicates a deterioration in water quality status or a risk that the objectives or standards laid down in the Regulations will not be achieved.

When the Pollution Reduction Programme is being reviewed the most current baseline data will be consulted.

Prior to the incorporation of the PRP into the second cycle of the River Basin Management Plans a review of the Strategic Environmental Objectives for Water will be carried out as against those drawn up for assessment of the first cycle River Basin Management Plans to ensure that the Shellfish PRP help to meet the wider Water Framework Directive water quality objectives.

## 1.7 Monitoring of Environmental Impacts

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to implementation of the PRP, with the view to taking remedial action where adverse effects are identified through monitoring. An Environmental Monitoring Programme has been developed which focuses on aspects of the environment that are likely to be impacted by the PRPs. The Environmental Monitoring Programme is included in Table 5 of the National Toolkit of Measures. The Department of the Environment, Community and Local Government will be the authority responsible for collecting and collating data under the Environmental Monitoring Programme. The data will be collected at the same time the pollution reduction programme is reviewed.

## 1.8 Monitoring Implementation of Pollution Reduction Programme

This PRP is effectively a sub-basin plan of the River Basin Management Plan for the catchment and will be implemented during the first implementation cycle under the Water Framework Directive (i.e up to 2015).

Implementation of the pollution reduction programme will be monitored by Water Quality Section of the Department of the Environment, Community and Local Government.

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## 2.0 STATUS/IMPACTS

Overall status

The results of monitoring (2009) undertaken for the purposes of the Shellfish Waters Directive (2006/113/EC) and Schedules 2 and 4 of the Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) did not indicate any shellfish water quality issues within / in the vicinity of this shellfish area. There are no current results for the designated area due primarily to a lack of commercial harvesting in this area and a lack of availability of samples.

The results of previous Shellfish Water monitoring indicated that there were water quality issues with the levels of lead, zinc and nickel within / in the vicinity of this shellfish area. The most up to date results of monitoring (2010) do not indicate any water quality issues within / in the vicinity of this shellfish area with the levels of lead, zinc or nickel. However due to the

	<p>previous indications it is prudent to continue with the actions outlined in this Pollution Reduction Programme.</p> <p>The bivalve mollusc production areas in Maharees are classified as 'Class B' for the purposes of EC Regulation 854/2004.</p> <p>Chapter 3 of the Characterisation Report refers.</p>
Other issues	None
<b>3.0 PRESSURES/RISKS</b>	
<b>3.1 Key Pressures</b>	<p>Analysis of the Characterisation Report for this designated shellfish water suggests that there are no key pressures currently impacting shellfish water quality. However, lead, zinc and nickel levels must be kept under review</p> <p>Chapter 5 (summary at 5.3) of the Characterisation Report refers.</p>
<b>3.2 Potential Secondary Pressures</b>	<p>Analysis of the Characterisation Report for this designated shellfish water suggests that there are no secondary pressures potentially impacting shellfish water quality.</p> <p>Chapter 5 (summary at 5.3) of the Characterisation Report refers.</p>
<b>4.0 PROTECTED AREAS</b>	
Designated Shellfish Areas	<p>Maharees designated Shellfish Waters</p> <p>Adjacent Area - Tralee Bay designated Shellfish Waters</p>

<b>5.0 ACTION PROGRAMME – MEASURES</b>	
<b>5.1 Key Pressures</b>	
Other (specific pollutants – zinc)	<p>Results from the continued monitoring of metals should be kept under review, to ensure compliance with relevant standards for Parameter 9.</p> <p>Kerry County Council and the Marine Institute were to establish whether the elevated levels of zinc in the shellfish area are the result of chance, a natural phenomenon or pollution in the catchment and, if required, Kerry County Council to introduce appropriate measures by December 2010.</p> <p>No report received from Kerry County Council or the Marine institute. Metal levels in compliance.</p>
Other (priority substances – lead and nickel, priority hazardous substances, and other pollutants)	<p>Results from the continued monitoring of metals should be kept under review, to ensure compliance with relevant standards for Parameter 9.</p> <p>Kerry County Council and the Marine Institute were to establish whether the elevated levels of lead and nickel in the shellfish area are the result of chance, a natural phenomenon or pollution in the catchment and, if required, Kerry County Council to introduce appropriate measures by December 2010.</p> <p>No report received from Kerry County Council or the Marine Institute. Metal levels in compliance.</p> <p>Under the Environmental Objectives (Surface Water) Regulations, the EPA must establish an inventory of emissions, discharges and losses of priority substances, priority hazardous substances and other pollutants for each river basin district.</p> <p>Limerick County Council, as the lead Local Authority in the Shannon International River Basin District, must (not later than June 2014) prepare a plan for the progressive reduction of pollution by priority substances and other pollutants and the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances. The plan must be updated and included as part of future river basin management plans.</p>
Future Development	<p>Under Article 4 of the European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. No. 286 of 2006) (as amended), every public authority that has functions the performance of which may affect shellfish waters shall perform those functions in a manner that will promote compliance with the objectives of this pollution reduction programme and with the objectives of the Shellfish Waters Directive.</p> <p>The functions of particular importance – in light of the objectives of Directive 2006/113/EC and of this PRP – include waste water treatment (licensing and operations), implementation of the GAP Regulations, waste management (licensing and operations), effluent discharge licences, planning and development and</p>

	<p>building control.</p> <p>Continued monitoring will be carried out during the lifetime of the PRP. Should this monitoring identify pressures that are impacting on shellfish water quality in the designated area, the PRP will be appropriately amended.</p>
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**Compliance with the Parameters set out in the Directive<sup>1</sup>**

The Directive prescribes the minimum ((Mandatory (I)) quality criteria which must be met by shellfish waters and guideline values (G) which Member States must endeavour to observe. Not all of the Parameters have both Guide and Mandatory values.

		<b>Compliance with Mandatory Values (Y/N)</b>	<b>Compliance with Guide Values (Y/N)</b>
Parameter 1	PH (I)	Y	
Parameter 2	Temperature (G)		Y
Parameter 3	Coloration (after filtration) (I)	Y	
Parameter 4	Suspended Solids (I)	Y	
Parameter 5	Salinity (I & G)	Y	Y
Parameter 6	Dissolved Oxygen (I & G)	Y	Y
Parameter 7	Petroleum Hydrocarbons (I)	Y	
Parameter 8	Organohalogenes (I & G)	Y	Y
Parameter 9	Trace Metals (I & G)	Y	Y
Parameter 10	Faecal Coliforms (G)		X <sup>2</sup>

<sup>1</sup>Compliance for Parameters 1 to 7 - taken from 2011 monitoring results

Compliance for Parameters 8 & 9 - taken from 2010 monitoring results

<sup>2</sup> Insufficient samples to make assessment



## **Annex 1 - Mitigation Recommendations from the SEA process**

The Strategic Environmental Assessment carried out for the Shellfish PRPs has highlighted potential positive and negative environmental impacts (including cumulative impacts) associated with implementation of the range of measures outlined in the National Toolkit of Measures, all of which are aimed at controlling pressures which impact on shellfish water quality.

In most cases, the PRPs identify the need for further investigation to supplement existing information on the types and extent of the pressures which are currently affecting shellfish water quality. Following this, the next step in the protection of shellfish waters will be the introduction of measures from the National Toolkit to address the identified pressures. It should be noted that this PRP is a dynamic document and will be updated regularly in order to outline if, and where, measures are required following the completion of the investigations.

The table below outlines the mitigation measures required to reduce potential impacts from measures in the National Toolkit associated with the key and potential secondary pressures currently identified for this catchment. When considering implementation of specific measures from the National Toolkit, it is required that the relevant mitigation measures below be considered to reduce any potential negative impacts (mitigation measures arising from the Habitats Directive Article 6 Assessment are noted in blue).

Should further key and secondary pressures be identified in this catchment in future, then the full list of mitigation measures, which is included in Table 4 of the National Toolkit, should be consulted to determine if any of those apply. In addition, the authority/organisation/individual responsible for implementing each of the mitigation measures below is listed in Table 4 of the National Toolkit.

	NATIONAL TOOLKIT MEASURE	ASSOCIATED MITIGATION MEASURE
WFD4	<p><b>POINT SOURCE &amp; DIFFUSE SOURCE DISCHARGES</b></p> <p>Actions: Water Pollution Acts and regulations:</p> <ul style="list-style-type: none"> <li>• License discharges to surface waters and sewers from small scale industrial and commercial sources. Review licenses at intervals of not less than 3 years. Keep registers of discharge licenses and make them available to the public.</li> <li>• Serve notices or directions on persons requiring measures to be taken in order to prevent or control pollution of waters, where necessary.</li> <li>• Notify Local Authorities of accidental discharges and spillages of polluting materials which enter, or are likely to enter, waters.</li> </ul>	<p>Detailed assessment of higher risk works will be required to include environmental considerations (based on EIA guidance). It is recommended that lower risk work should be compelled to consider environmental issues as part of the registration process.</p>

*\*Note: It should be noted that in this case the term Habitats Directive Assessment refers to the assessment process as specified in Article 6 of the Habitats Directive. This starts with screening to determine whether a likely significant impact from the plan/programme is expected to occur to a Natura 2000/Ramsar site as a result of activities in/adjacent to/in the catchment of a Natura 2000/Ramsar site. If, in accordance with Habitats Directive Assessment guidance (guidance produced by the EU and DoEHLG in Ireland), it can be shown that there is no potential for impact at the screening stage, no further assessment may be required. However when the plan/programme being screened lies within or adjacent to a Natura 2000/Ramsar site then such a determination must be made in consultation with NPWS. If the plan/programme is within the catchment (surface and groundwater) of a Natura 2000/Ramsar site, such consultation with NPWS is only necessary for those water dependent Natura 2000 sites which are listed in the WFD Register of Protected Areas.*