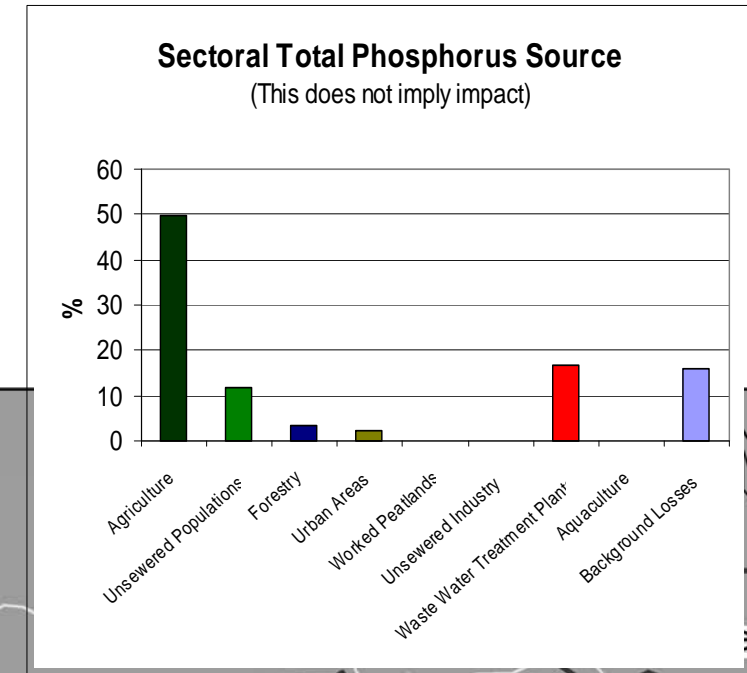


# Barrow Owenass Triogue Water Management Unit Action Plan

Name	Barrow Owenass Triogue Water Management Unit
Area	328 km <sup>2</sup>
River Basin District	South Eastern RBD
Main Counties	Laois
Protected Areas	River Barrow & River Nore SAC Slieve Bloom Mountains SAC River Triogue UWWTD



## Barrow/Owenass/Triogue Water Management Unit



### Legend

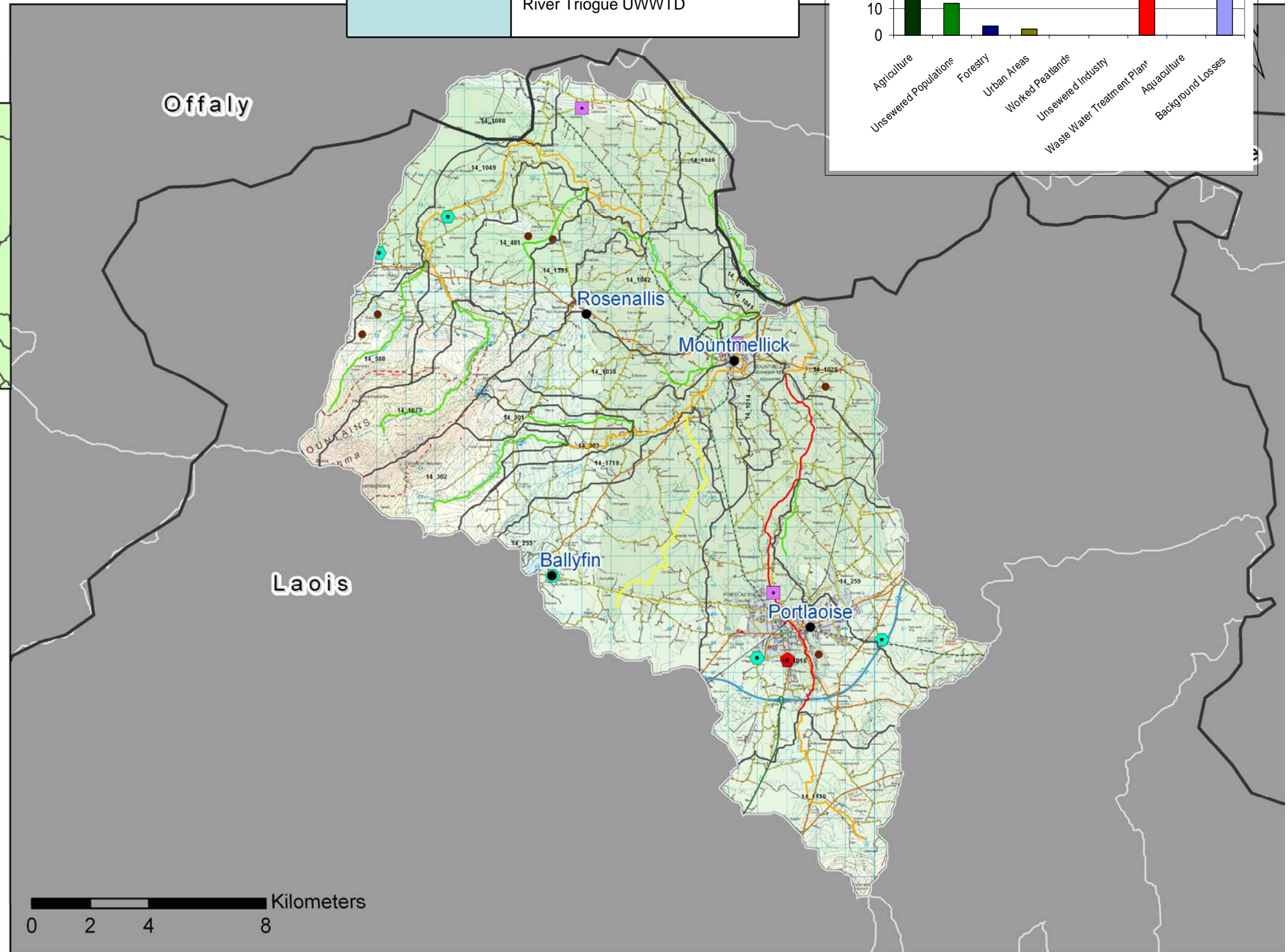
- WMU Boundary
- County Boundary
- Quarries
- Waste Water Treatment Plants
- Local Authority Licensed Discharge
- EPA Licensed Facility (IPPC)

### River Status

- High
- Good
- Moderate
- Poor
- Bad

### Lake Status

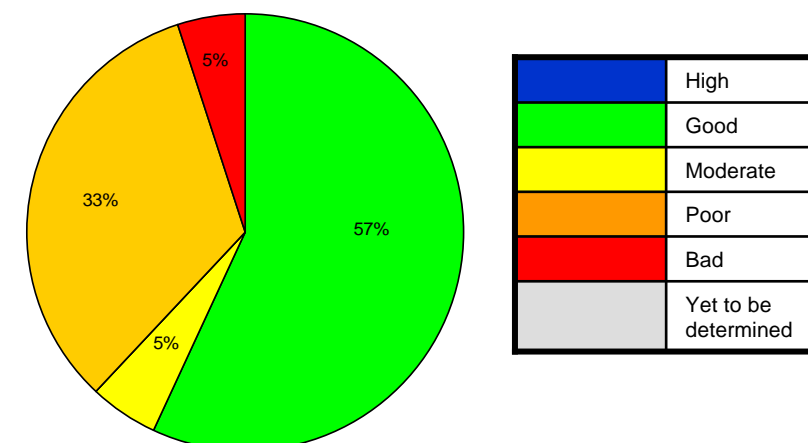
- High
- Good
- Moderate
- Poor
- Bad



# Barrow/Owenass/Triogue Water Management Unit Action Plan

STATUS/IMPACTS	
Overall status	21 River Water Bodies - 12 Good, 1 Moderate, 7 Poor, 1 Bad.
Status elements	Q score generally dictates overall status including the bad water body, 4 good WBs are dictated by Phys Chemical status. Phys Chemical status ranges between moderate and high where monitored. Status for 7 WBs is extrapolated. Chemical status not monitored.
Possible Impacts - EPA Water Quality 2004	<p>BARROW - (SW_14_1016 -Status 10 - Bad based on Q Score) Eutrophication continues to be widespread due to suspected agriculture in the upper river (0100, 0200) and to suspected sewage and other discharges from Portlaoise</p> <p>BLACKWATER (LAOIS)- Continuing as before i.e., satisfactory at Clontyglass (0800) but slightly below par in the lower reaches. Waterbody Code: SE_14_253 / WB status 2009: Moderate (Based on Q value 3-4) SE_14_303- 2009 Status: Poor (Based on Q value 3.)</p> <p>OWENASS - The appearance of slime growths below the water treatment plant at Cathole Bridge (0050) was recorded but because biological diversity was not significantly affected, conditions were assessed as satisfactory there in July 2003. The lower reaches (0220, 0300) were again slightly polluted by suspected sewage. Waterbody Code; SE_14_303-Status 09: Poor, based on Q score.</p> <p>TRIOGUE - Unsatisfactory due to widespread moderate pollution. Has further deteriorated upstream of Portlaoise (0060, 0100). Waterbody Code: SE_14_1430 / 2009 status: Poor (Based on Q value 3 and fail on phys chem.)</p>

River status



PRESSURES/RISKS	
Nutrient sources	83% of TP is Diffuse, 50% of which is from Agriculture. 17% of TP comes from WWTP.
Point pressures	<p>2 WWTP: Mountmellick, Portlaoise.</p> <p>1 WTP: Kilminchy - Groundwater which is Portlaoise's water supply is treated at this plant.</p> <p>Surface Water Abstraction at the Carholes..</p> <p>3 EPA Licensed Waste Facilities</p> <p>3 Section 4s: Housing Development, Hospital, Private Company.</p> <p>8 IPPC: 2 Manufacturers, 2 Sawmills, 2 Meat Processors, Sportswear Wholesaler, Oil/Petroleum Company.</p>
Wastewater Treatment Plants (WWTP) and Industrial Discharges	<p>Mountmellick WWTP at risk</p> <p>Portlaoise WWTP at risk - WWTP upgrade complete. Improvements to surface water quality.</p>
Quarries, Mines & Landfills	There are 6 Quarries.
Agriculture	The majority of the area of the WMU is at risk from Agriculture
On-site systems	There are 3524 septic tanks in this WMU, 1039 septic tanks in 1 river water body are posing a risk to water quality due to their density, location and unsuitable hydrogeological conditions
Forestry	1 waterbody at risk from forestry practices - SE_14_1073
Dangerous substances	No waterbodies at risk from Dangerous Substances.
Morphology	2 waterbodies at risk - SE_14_1028 and SE_14_1049 - Barrow Drainage District (Pre 1945 Drainage Works)
Abstractions	9 abstractions - 2 waterbodies at risk - SE_14_302 and SE_14_303. Additional groundwater abstractions as advised by Local Authorities include Derrguile Borehole, Eyne Borehole, Resenallis Borehole.
Other	

## SELECTED ACTION PROGRAMME

*NB All relevant basic measures, general supplementary measures and SEA mitigation measures apply*

Point Sources	<p>WWTP – See Action Table below</p> <p>INDUSTRY- Examine the terms of discharge authorisations to determine whether they require review for the purpose of compliance with water body objectives including protected area objectives and environmental quality standards.</p>
Diffuse Sources	<p>AGRICULTURE - Good Agricultural Practice Regulations and Enforcement.</p> <p>ON-SITE SYSTEMS – Inspection of on-site systems in at-risk areas to ensure that treatment systems are adequate and maintained to prevent pollution of waters. Consider connection to municipal sewerage systems based on inspections and economic tests.</p>
Other	<p>MORPHOLOGY - 7 waterbodies within the WMU require Channelisation Investigation for Morphology.</p> <p>FORESTRY - Measures to address acidification and sedimentation apply to the forested areas in the Bloom Mountains.</p> <p>OTHER</p> <p>Protection of drinking water, abstraction control and future licensing.</p>

Point Source Discharge	County	Priority	Measure (Capital Works)
Mountmellick WWTP	Laois	1	Provide tertiary treatment or relocate outfall.
Mountmellick WWTP	Laois	1	Provide nutrient removal or relocate outfall.
Point Source Discharge	County	Priority	Measure (Investigation before Capital Works)
Portlaoise WWTP	Laois	2	Investigate the need for tertiary treatment or for the relocation of the outfall.
Point Source Discharge	County	Priority	Measure
Mountmellick WWTP	Laois	1	Implement an appropriate performance management system
Portlaoise WWTP	Laois	1	Implement an appropriate performance management system
Point Source Discharge	County	Priority	Measure
Mountmellick WWTP	Laois	2	Investigation of CSO's

# Barrow/Owenass/Triogue Water Management Unit Action Plan

OBJECTIVES	
Restore/Protect 2015	12 water bodies
Alternative Objectives	<p>Extended Deadlines – 9 water bodies with 2021 deadline</p> <p>New Modifications or Development – none requiring alternative objectives at present.</p> <p>HMWB/AWB - none</p>

FUTURE DEVELOPMENT	
Future Pressures and Developments	Throughout the river basin management cycle future pressures and developments will need to be managed to ensure compliance with the objectives of the Water Framework Directive and the Programme of Measures will need to be developed to ensure issues associated with these new pressures are addressed.

## River Data

This table outlines water body information including status and a breakdown of its elements, protected areas, objectives and timescales.

IE_SE_Barrow/Owenass/Triogue																	
Member State Code	Monitored Y (Extrapolated N)	Donor Waterbody	Biological Elements				Supporting Elements				Protected Areas					Objective	Date objective to be achieved
			s (O)	Macroinvertebrate	Fresh Water Pearl Mussel	Fish	Phytobenthos (Diatoms)	Morphology	Specific Pollutants	Physio-chemical	Ecological Status	Chemical Status	Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters		
SE_14_1014	N	SE_14_1028								P						GES	2021
SE_14_1016	Y		B						M	B				Y		GES	2021
SE_14_1024	N	SE_14_1042								G						GES	2009
SE_14_1028	Y		P						M	P		Y		Y		GES	2021
SE_14_1038	Y		G						G	G			Y			GES	2009
SE_14_1041	N	SE_14_1042								G						GES	2009
SE_14_1042	Y		G						H	G		Y				GES	2009
SE_14_1049	Y		P						G	P		Y	Y			GES	2021
SE_14_1073	N	SE_15_1005								G		Y	Y			GES	2009
SE_14_1088	N	SE_14_1049								P		Y	Y			GES	2021
SE_14_1393	Y								G	G			Y			GES	2009
SE_14_1430	Y		P						M	P						GES	2021
SE_14_1718	Y		P						M	P		Y	Y			GES	2021
SE_14_1840	N	SE_14_1042								G						GES	2009
SE_14_253	Y		M						M	M			Y			GES	2021
SE_14_259	Y								G	G						GES	2009
SE_14_301	Y								G	G		Y	Y			GES	2009
SE_14_302	Y								G	G		Y	Y	Y		GES	2009
SE_14_303	Y		P						H	P		Y	Y			GES	2021
SE_14_481	N	SE_14_1393								G			Y			GES	2009
SE_14_588	Y		G							G		Y	Y			GES	2009