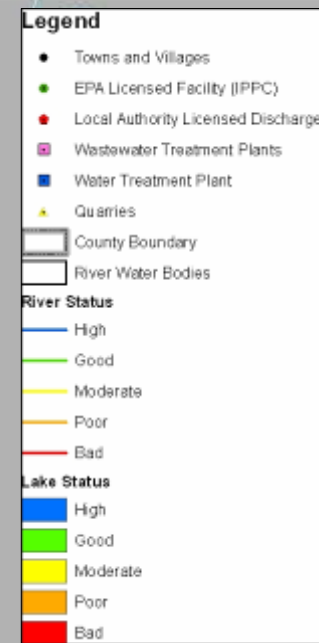
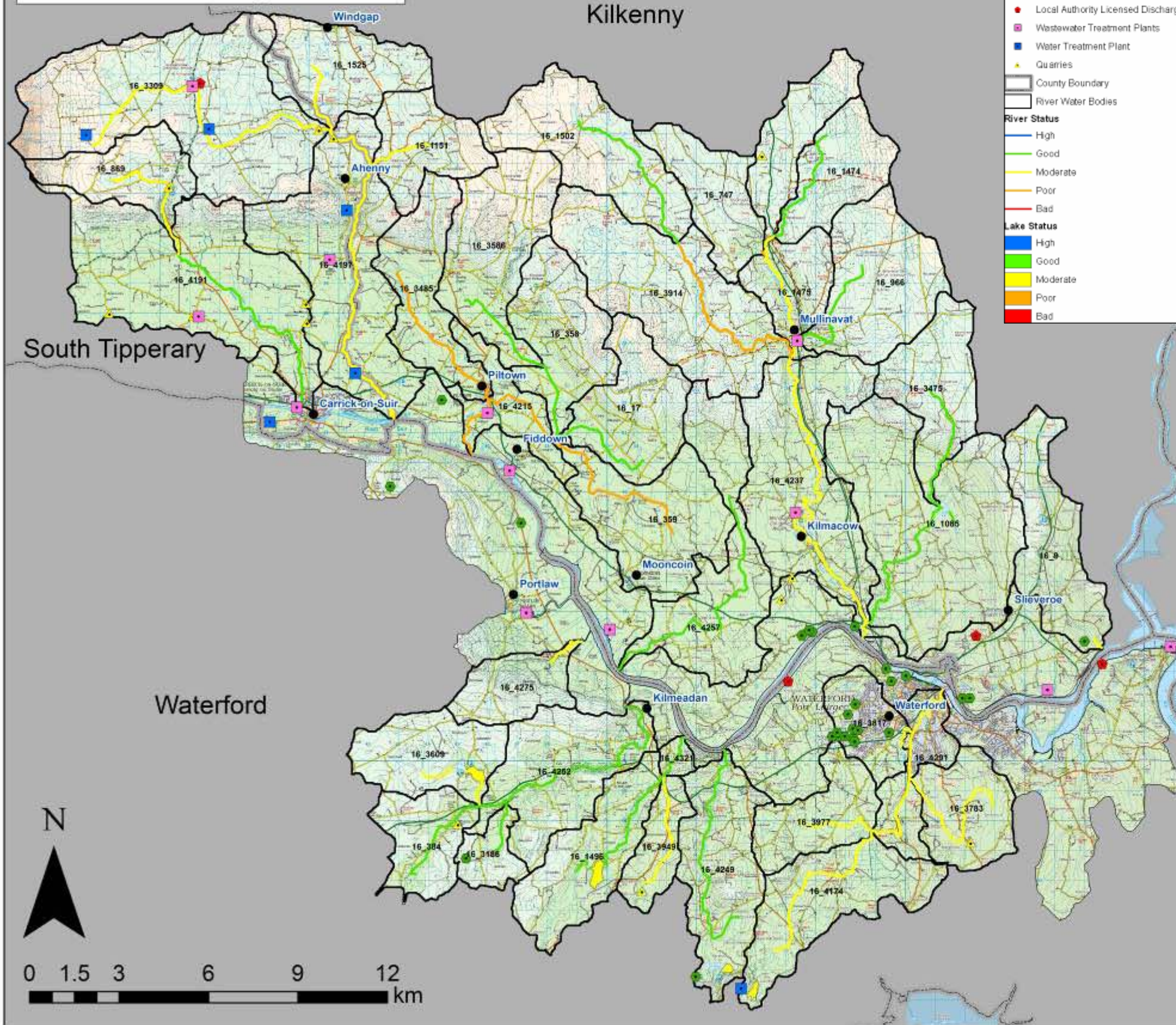
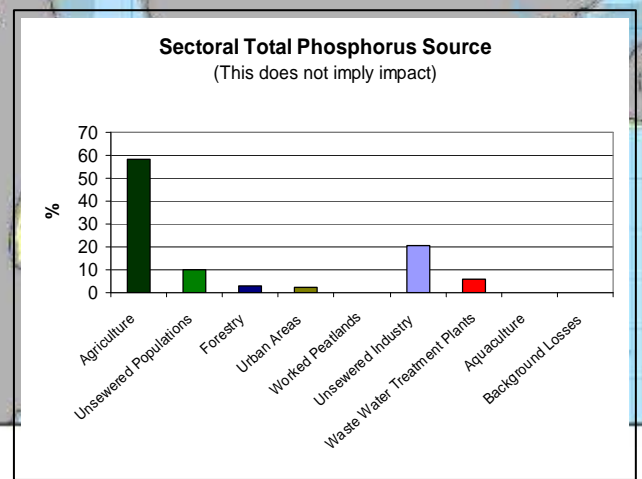


**APPENDIX G**  
**SUIR WATER MANAGEMENT UNITS**

# Suir Estuary WMU



<b>Name</b>	<b>Suir Estuary Water Management Unit</b>
<b>Area</b>	699 km <sup>2</sup>
<b>River Basin District</b>	South Eastern RBD
<b>Main Counties</b>	Kilkenny, Waterford
<b>Protected Areas</b>	Lower River Suir SAC Hugginstown Fe11n SAC Suir Estuary (Upper) UWWTD 10 drinking water abstractions from Knockaderry Reservoir, Ballyshunnock, Clodiagh, Carrigantry Reservoir, Ballyscanlon Reservoir, 2 from Lingaun River, Pollanassa River, stream between Towagare and Duagh, and Blackwater. Waterford Harbour Shellfish water.

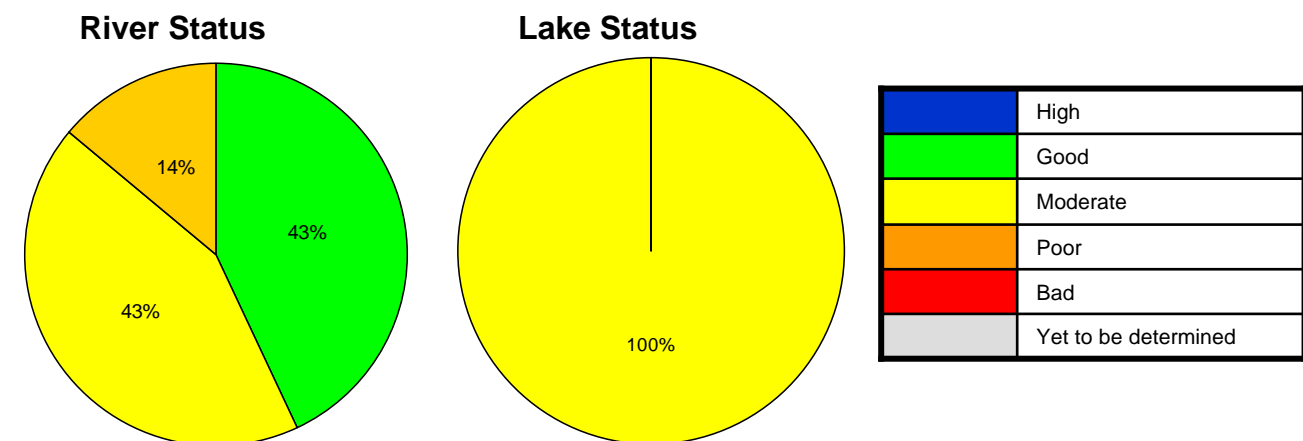


# Suir Estuary Water Management Unit Action Plan

STATUS/IMPACTS	
Overall status	37 RWB - 16 good, 16 moderate, 5 poor. 4 lakes in this WMU, all are moderate status and monitored (Knockaderry Reservoir, Ballyscanlan Lough, Ballyshunnock, Carrigavantry Reservoir). 4 transitional WBs; Lower Suir Estuary, Upper Suir, Mid Suir, and Barrow/Suir/Nore Estuarie – refer to <i>Transitional and Coastal Action Plan for SERBD</i>
Status elements	Phys Chemical dictates 8 moderate RWBs (5 good, 3 moderate). The remaining RWBs are dictated by Q score. Status was extrapolated for 21 RWBs. Chemical Status not monitored. Knockaderry Reservoir, status driven by Chlorophyll, Nutrients - Ammonium, Total Phosphorus Ballyscanlan Lough, status driven by Chlorophyll, Nutrients - Total Phosphorus Ballyshunnock, status driven by Chlorophyll, Nutrients - Ammonium, Total Phosphorus Carrigavantry Reservoir, status driven by Chlorophyll, Nutrients - Total Phosphorus
Possible Impacts - EPA Water Quality 2004	BLACKWATER (KILMACOW) - (SE_16_4237, Status 2009 -Moderate) Satisfactory except for downstream of Kilmacow (0450) where again only moderate status. (Q score 3-4) LINGAUN - (SE_16_3309 and SE_16_4197, Status 2009 - both Good) Satisfactory with good quality recorded at all locations. (Based on Q score 4) POLLANASSA - (SE_16_1502 and SE_16_3914, Status 2009 - Good and Moderate respectively) Satisfactory apart from at final location at Walsh's Bridge. (Q scores of 4 and 3-4) SMARTCASTLE STREAM - (SE_16_3475, Status 2009 - Good) Continuing satisfactory at the two locations examined with good status again recorded. (Based on Q score 4) SUIR - (Lowest monitoring point along Suir is the only one which falls within Suir Estuary WMU. However, it is within the Transitional waters of the Upper Suir Estuary, rather than a River WB, which is graded as Moderate Status. This monitoring point received a Q-score 3) Mostly satisfactory following improvement at eight locations. Ecological quality was good at 15 locations, moderate at two and poor at five. Continuing polluted downstream of Templemore, in and downstream of Thurles as far as Holycross, and also just upstream of Carrick-on-Suir. The crayfish, a protected species, was recorded at 15 of the 22 sites examined. These successfully reproducing populations could be threatened if reports of the introduction of an alien crayfish to the Suir turn out to be correct. (Based on Q scores from 3 to 4)

PRESSURES/RISKS	
Wastewater Treatment Plants (WWTP) and Industrial Discharges	At risk: Fiddown Mooncoin Mullinavat Piltown Sewerage Scheme Grangemockler Portlaw WWTP - Proposed upgrade to 5250 pe. Cheekpoint Faugheen  No Section 4 risks 3 IPPCs - at risk
Quarries, Mines & Landfills	There are 13 Quarry within the WMU. There are 2 landfills within the WMU: Kilbarry Landfill Site and Hardbog Landfill. There are no mines within the WMU.
Agriculture	There are 31 waterbodies at risk from agriculture within the WMU: SE_16_9, SE_16_3485, SE_16_3783, SE_16_384, SE_16_359, SE_16_4215, SE_16_3817, SE_16_4291, SE_16_3609, SE_16_1496, SE_16_4191, SE_16_3977, SE_16_869, SE_16_747, SE_16_3309, SE_16_17, SE_16_4252, SE_16_1525, SE_16_1151, SE_16_3186, SE_16_4249, SE_16_3914, SE_16_1502, SE_16_4197, SE_16_4257, SE_16_358, SE_16_1085, SE_16_4174, SE_16_4237, SE_16_3586, SE_16_4321
On-site systems	There are 9323 septic tanks in this WMU, none of them are posing a risk to water quality due to their density, location and unsuitable hydrogeological conditions.
Forestry	There are no waterbodies within the WMU at risk from Forestry.
Dangerous substances	There are no waterbodies at risk from dangerous substances within the WMU.
Morphology	There are no waterbodies at risk
Abstractions	There are 9 waterbodies at risk from abstraction within the WMU: SE_16_3609, SE_16_1496, SE_16_4252, SE_16_3914, SE_16_4174, SE_16_4321, SE_16_4249, SE_16_4237, SE_16_4291.
Other	Lower Suir Estuary transitional WB has been heavily modified.

PRESSURES/RISKS	
Nutrient sources	Most TP is diffuse (94%) mainly from agriculture (59%), unsewered properties (10%), unsewered industry (21%) and WWTP (6%).
Point pressures	11 WWTP - Fiddown, Mooncoin, Mullinavat, Piltown, Carrick-on-Suir, Faugheen, Grangemockler, Portlaw, Ballyneil, Waterford, Cheekpoint. 7 Section 4 – 3 private companies, Concrete and Mortar Company, Building Product Producer, Quarries, Retail Centre. 15 IPPCs – Animal Health Products Company, Tape Manufacturers, Pharmaceuticals Company, 2 Plating Companies, 2 Farms, 2 Transportation Companies, Lens Production Company, Carpet Company, Crystal Manufacturers, Research and Development Company, Technology Manufacturing Company, Manufacturing Timber Company. 8 WTP - Lingaun WTP, Ahenny Treatment House, Carrickavantry WW, East Waterford, Coolnamuck Road Treatment, Ballinvir TH, Tulllohea TH, Clonamy WTP. 9 EPA Licensed Waste Facilities



# Suir Estuary Water Management Unit Action Plan

<b>SELECTED ACTION PROGRAMME</b>	
<i>NB All relevant basic measures, general supplementary measures and SEA mitigation measures apply</i>	
Point Sources	See Point Source Discharge Table for WWTP at risk below.  INDUSTRY – Investigate IPPC's at risk 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.
Diffuse Sources	AGRICULTURE – Good Agricultural Practice Regulations and Enforcement.
Other	Protection of drinking water, abstraction control and future licensing. Shellfish pollution reduction programmes under the shellfish directive

<b>OBJECTIVES</b>	
Restore/Protect 2015	20 river water bodies and 4 lake water bodies
Alternative Objectives	Extended Deadlines – 17 river water bodies with 2021 deadline  New Modifications or Development – Piltown flood alleviation pre-feasibility study completed and Waterford City Council undertaking 1st Phase of flood alleviation scheme with OPW funding.  HMWB/AWB – 1 HMWB - Lower Suir Estuary (Little Island-Cheek Point)

<b>FUTURE DEVELOPMENT</b>	
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.

Point Source Discharge	County	Priority	Measure (Capital Works)
Grangemockler WWTP	South Tipp	1	Increase capacity of treatment plant.
Grangemockler WWTP	South Tipp	1	Provide tertiary treatment or relocate outfall.
Portlaw WWTP	Waterford County	1	Increase capacity of treatment plant.
Point Source Discharge	County	Priority	Measure (Investigation before Capital Works)
Carrick-on-Suir	South Tipp	3	Investigate the need for tertiary treatment or for the relocation of the outfall.
Fiddown	Kilkenny	2	Investigate the need for increase in capacity of treatment plant.
Mullinavat	Kilkenny	3	Investigate the need for increase in capacity of treatment plant.
Mullinavat	Kilkenny	3	Investigate the need for tertiary treatment or for the relocation of the outfall.
Piltown Sewerage Scheme WWTP	Kilkenny	2	Investigate the need for increase in capacity of treatment plant.
Point Source Discharge	County	Priority	Measure
Waterford WWTP	Waterford City	1	Commence implementation of the Pollution Reduction Programme for Shellfish waters
Cheekpoint WWTP	Waterford County	1	Commence implementation of the Pollution Reduction Programme for Shellfish waters
Point Source Discharge	County	Priority	Measure
Carrick-on-Suir	South Tipp	1	Implement an appropriate performance management system
Mooncoin Sewerage Scheme WWTP	Kilkenny	1	Implement an appropriate performance management system
Portlaw WWTP	Waterford County	1	Implement an appropriate performance management system
Point Source Discharge	County	Priority	Measure
Faugheen WWTP	South Tipp	3	Investigation of CSO's
Point Source Discharge	County	Priority	Measure
Cheekpoint WWTP	Waterford County	2	Ensure capacity of treatment plant is not exceeded

# Suir Estuary Water Management Unit Action Plan

These tables outline water body information including status and a breakdown of its elements, protected areas, objectives and timescales.

## River Data

IE_SE_SuirEstuary																	
Member State Code	Monitored Y (Extrapolated N)	Donor Waterbody	Biological Elements				Supporting Elements				Chemical Status	Protected Areas				Objective	Date objective to be achieved
			Macroinvertebrates (O)	Freshwater Mussel	Fish	Phytoplankton (Diatoms)	Morphology	Specific Pollutants	Physio-chemical	Ecological Status		Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters	Drinking Water		
SE_16_1085	Y		G							H	G					GES	2009
SE_16_1151	N	SE_16_3681									M					GES	2015
SE_16_1474	N	SE_17_458									G					GES	2009
SE_16_1475	Y		M							G	M					GES	2015
SE_16_1496	Y									G	G				Y	GES	2009
SE_16_1502	Y		G							H	G					GES	2009
SE_16_1525	N	SE_16_3681									M					GES	2021
SE_16_17	N	SE_16_4191									G					GES	2009
SE_16_3186	N	SE_16_384									G					GES	2009
SE_16_3309	Y		M		G					G	M		Y			GES	2021
SE_16_3475	Y		G								G					GES	2009
SE_16_3485	N	SE_15_1137									P					GES	2021
SE_16_358	N	SE_16_4191									G					GES	2009
SE_16_3586	N	SE_16_4191									G					GES	2009
SE_16_359	N	SE_15_1137									P					GES	2021
SE_16_3609	Y									M	M					GES	2021
SE_16_3783	N	SE_16_4291									M					GES	2021
SE_16_3817	Y									M	M					GES	2021
SE_16_384	Y									G	G					GES	2009
SE_16_3914	Y		P							G	P				Y	GES	2021
SE_16_3949	N	SE_16_3									M					GES	2021
SE_16_3977	N	SE_16_4291									M					GES	2021
SE_16_4174	N	SE_16_4291									M					GES	2021
SE_16_4191	Y									G	G					GES	2009
SE_16_4197	Y		M							G	M		Y			GES	2021
SE_16_4215	N	SE_15_1137									P		Y			GES	2021
SE_16_4237	Y		M							H	M					GES	2021
SE_16_4249	N	SE_16_1496									G					GES	2009
SE_16_4252	Y									G	G					GES	2009
SE_16_4257	N	SE_16_4191									G					GES	2009
SE_16_4275	N	SE_16_326									M					GES	2021
SE_16_4291	Y									M	M					GES	2021
SE_16_4321	Y									G	G		Y			GES	2009
SE_16_747	N	SE_15_364									P		Y			GES	2021
SE_16_869	N	SE_16_4197									M					GES	2015
SE_16_9	N	SE_16_3817									M					GES	2015
SE_16_966	N	SE_17_458									G					GES	2009

# Suir Estuary Water Management Unit Action Plan

## Lake Data

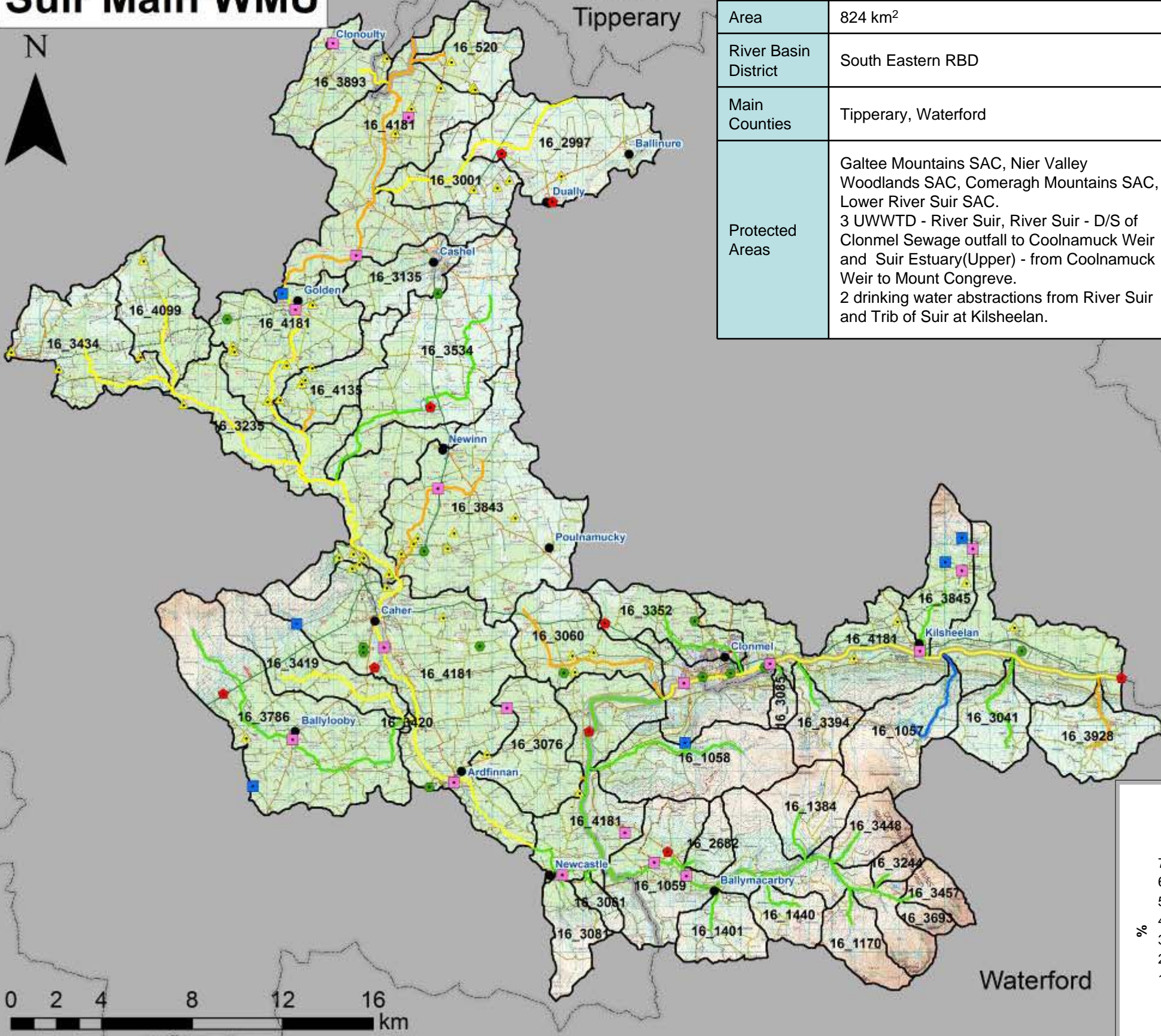
IE_SE_SuirEstuary																	
Member State Code	Name	Monitored Y (Extrapolated N)	Biological Elements			Supporting Elements			Ecological Status	Chemical Status	Protected Areas					Objective	Date objective to be achieved
			Macrophytes	Chlorophyll	Fish	Morphology	Nutrient Enrichment	Physico Chemical			Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters	Bathing Water	Drinking Water		
SE_16_294	Knockaderry Reservoir	Y		M			M	M	M							GES	2015
SE_16_460	Ballyscanlan Lough	Y		M			M	M	M							GES	2015
SE_16_463	Ballyshunnock	Y		M			M	M	M							GES	2015
SE_17_8	Carrigavantry Reservoir	Y		M			M	M	M							GES	2015

# Suir Main WMU



North  
Tipperary

<b>Name</b>	<b>Suir Main Water Management Unit</b>
<b>Area</b>	824 km <sup>2</sup>
<b>River Basin District</b>	South Eastern RBD
<b>Main Counties</b>	Tipperary, Waterford
<b>Protected Areas</b>	Galtee Mountains SAC, Nier Valley Woodlands SAC, Comeragh Mountains SAC, Lower River Suir SAC. 3 UWWTD - River Suir, River Suir - D/S of Clonmel Sewage outfall to Coolnamuck Weir and Suir Estuary(Upper) - from Coolnamuck Weir to Mount Congreve. 2 drinking water abstractions from River Suir and Trib of Suir at Kilsheelan.



**Legend**

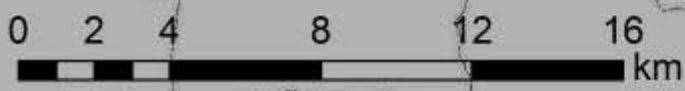
- Towns and Villages
- EPA Licensed Facility (IPPC)
- Local Authority Licensed Discharge
- Wastewater Treatment Plants
- Water Treatment Plant
- ▲ Closures
- ▭ County Boundary
- ▭ River Water Bodies

**River Status**

- Blue: High
- Green: Good
- Yellow: Moderate
- Orange: Poor
- Red: Bad

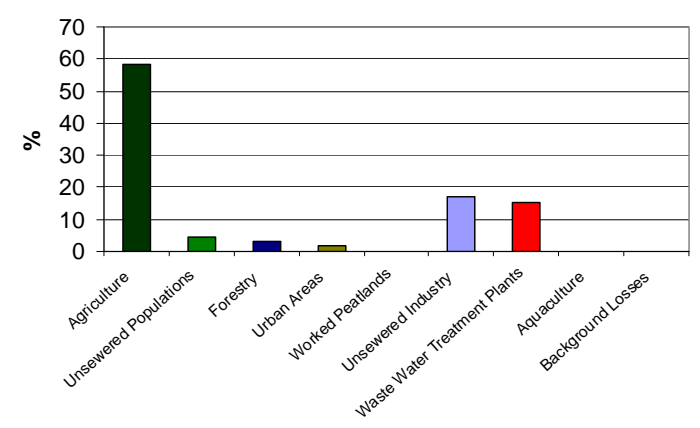
**Lake Status**

- Blue: High
- Green: Good
- Yellow: Moderate
- Orange: Poor
- Red: Bad



Waterford

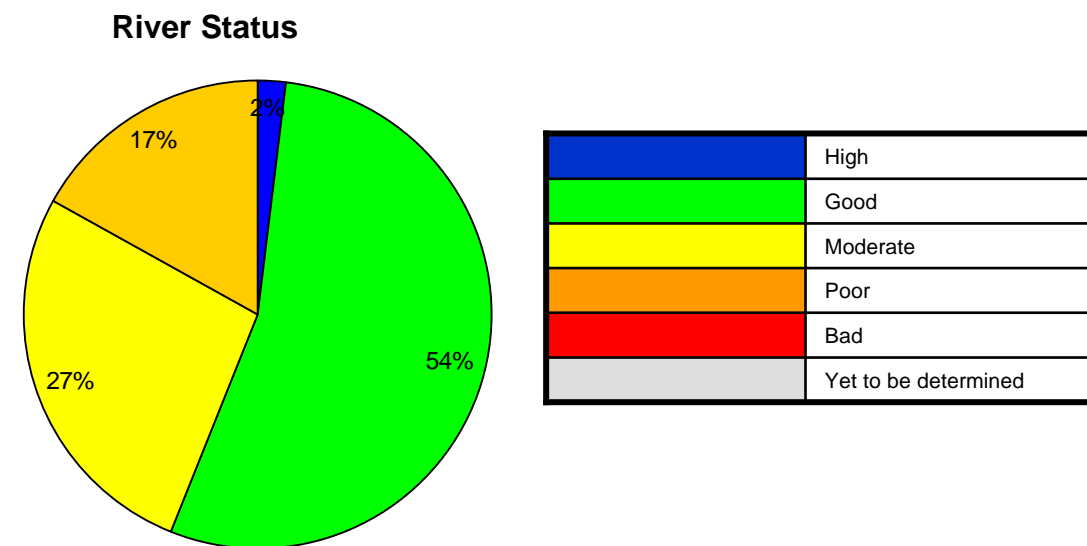
**Sectoral Total Phosphorus Source**  
(This does not imply impact)



# Suir Main Water Management Unit Action Plan

STATUS/IMPACTS	
Overall status	41 RWB - 1 high, 22 good, 11 moderate, 7 poor. 0 lakes.
Status elements	Q score dictates overall status in the majority of WBs. Phys Chemical is high or good where monitored and the driver for 4 good WBs. Status was extrapolated for 24 WBs. Chemical Status not monitored.
Possible Impacts - EPA Water Quality 2004	<p>ARGLO - (SE_16_2997 and SE_16_3001, Status 2009 - both Moderate) No change. Continuing with only moderate ecological quality at both locations. (Q scores 3-4)</p> <p>BLACK STREAM (CASHEL) - (SE_16_4181_1, Status 2009 - Poor) Continuing moderately polluted with poor ecological status again recorded. (Based on Q score 3)</p> <p>FIDAGHTA - (SE_16_3434 and SE_16_3235, Status 2009 - both Moderate) Continuing unsatisfactory with only moderate ecological status at both locations. (Q scores 3-4)</p> <p>GLASHA (WATERFORD) - (SE_16_1057, Status 2009 - High) Continuing satisfactory with high ecological status again recorded. (Based on Q score 4-5)</p> <p>NIER- (SE_16_1059, Status 2009 - Good) Satisfactory at all three locations with high status at two. (Based on Q score 4)</p> <p>OUTERAGH STREAM - (SE_16_3843, Status 2009 - Poor) Only moderate ecological quality in this spring-influenced stream. (Based on Q score 3-4)</p> <p>SUIR - (SE_16_4181_1, Status 2009 - Poor, SE_16_4181_2, Status 2009 - Good, SE_16_4181_3, Status 2009 - Moderate, SE_16_4181_4, Status 2009 - Good, SE_16_4181_5, Status 2009 - Moderate) Mostly satisfactory following improvement at eight locations. Ecological quality was good at 15 locations, moderate at two and poor at five. Continuing polluted d/s of Templemore, in and downstream of Thurles as far as Holycross, and also just upstream of Carrick-on-Suir. The crayfish, a protected species, was recorded at 15 of the 22 sites examined. These successfully reproducing populations could be threatened if reports of the introduction of an alien crayfish to the Suir turn out to be correct. (Based on Q score from 3 to 4)</p> <p>THONOGE - (SE_16_3786, Status 2009 - Good) Continuing satisfactory with good ecological quality at both locations. (Based on Q score 4)</p>

PRESSURES/RISKS	
Nutrient sources	Most TP is diffuse (85%) mainly from agriculture (58%), unsewered industry (17%). 15% is comes from WWTP.
Point pressures	<p>17 WWTP - Ardfinnan, Boherlahan, Cahir, Cashel, Clonmel, Golden, New Inn, Newcastle South, Ballymacarbry, Bawnfune, Fourmile Water, Kimacomma, Ballylooby, Clonoulty, Kilcash, Ballypatrick, Grange</p> <p>11 Section 4s:: 3 Hotels, Woollen Mill, Dairy Factory, 2 Private Companies, College, Cottage, Inn, School.</p> <p>13 IPPC – 2 Pharmaceutical Production Companies, Installation Manufacturers, Meat Plant, Retail shop, Meat Plant, Quarry, 4 Private Companies, Protein Production Company, Research Center.</p> <p>7 WTPs - Cahir Resovir, Springmount, Glenary WTP, Poulavanogue, Kilcash WTP, Graigue WTP, and Kilroe WTP.</p> <p>1 EPA Licensed Waste Facility</p>
Wastewater Treatment Plants (WWTP) and Industrial Discharges	<p>WWTP at risk::</p> <p>Ardfinnan</p> <p>Grange</p> <p>Cashel</p> <p>Cahir</p> <p>Ballylooby</p> <p>Golden</p> <p>Boherlahan</p> <p>Ballypatrick</p> <p>Clonmel</p> <p>Newcastle</p> <p>New Inn</p> <p>Ballymacarbry - An increase in treatment capacity to 600 pe is estimated to be required for future populations</p> <p>Section 4s: 2 at risk</p> <p>IPPCs: 2 at risk</p>



# Suir Main Water Management Unit Action Plan

PRESSURES/RISKS	
Quarries, Mines & Landfills	There are 51 quarry within the WMU. There are no landfills or mines within the WMU.
Agriculture	There are 22 waterbodies at risk from Agriculture within the wMU: SE_16_3843, SE_16_520, SE_16_3534, SE_16_3060, SE_16_3076, , E_16_3135, SE_16_3394, SE_16_3434, SE_16_3352, SE_16_4135, SE_16_3419, SE_16_4099, SE_16_3041, SE_16_3001, SE_16_3786, SE_16_3928, SE_16_2997, SE_16_3420, SE_16_3235, SE_16_3845, SE_16_3893, SE_16_4181
On-site systems	There are 6327 septic tanks in this WMU, none of them are posing a risk to water quality due to their density, location and unsuitable hydrogeological conditions.
Forestry	There are no waterbodies within the WMU at risk from Forestry.
Dangerous substances	There are no waterbodies at risk from dangerous substances within the WMU.
Morphology	There are no waterbodies at risk
Abstractions	There is one waterbody at risk from abstraction within the WMU: SE_16_3845
Other	

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.

SELECTED ACTION PROGRAMME	
<i>NB All relevant basic measures, general supplementary measures and SEA mitigation measures apply</i>	
Point Sources	See Action Table for WWTP at risk below. Ballymacarbry - An increase in treatment capacity to 600 pe is estimated to be required for future populations. INDUSTRY – Investigate risk 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.
Diffuse Sources	AGRICULTURE – Good Agricultural Practice Regulations and Enforcement.
Other	Protection of drinking water, abstraction control and future licensing.
OBJECTIVES	
Restore/Protect 2015	25 water bodies
Alternative Objectives	Extended Deadlines – 16 water bodies with 2021 deadline  New Modifications or Development – Clonmel West flood alleviation Scheme underway with works to be completed by end of 2009. Tender process for contractor for next phase underway.  HMWB/AWB - none

Point Source Discharge	County	Priority	Measure (Investigation before Capital Works)
Ballylooby	South Tipp	2	Investigate the need for increase in capacity of treatment plant.
Grange	South Tipp	3	Investigate the need for increase in capacity of treatment plant.
Point Source Discharge	County	Priority	Measure
Ardfinnan WWTP	South Tipp	1	Plant requiring the implementation of an appropriate performance management system
Cahir WWTP	South Tipp	1	Plant requiring the implementation of an appropriate performance management system
Cashel WWTP	South Tipp	1	Plant requiring the implementation of an appropriate performance management system
Clonmel WWTP	South Tipp	1	Plant requiring the implementation of an appropriate performance management system
Point Source Discharge	County	Priority	Measure
Boherlahan WWTP	South Tipp	2	Plant requiring the investigation of CSO's
Cashel WWTP	South Tipp	2	Plant requiring the investigation of CSO's
Clonmel WWTP	South Tipp	2	Plant requiring the investigation of CSO's
Ballypatrick	South Tipp	3	Plant requiring the investigation of CSO's
Golden WWTP	South Tipp	3	Plant requiring the investigation of CSO's
New Inn WWTP	South Tipp	3	Plant requiring the investigation of CSO's
Newcastle, South Tipp.	South Tipp	3	Plant requiring the investigation of CSO's
Point Source Discharge	County	Priority	Measure
Ardfinnan WWTP	South Tipp	2	Plant requiring the increase of capacity or ensure capacity of treatment plant is not exceeded
Cahir WWTP	South Tipp	2	Plant requiring the increase of capacity or ensure capacity of treatment plant is not exceeded
Golden WWTP	South Tipp	2	Plant requiring the increase of capacity or ensure capacity of treatment plant is not exceeded

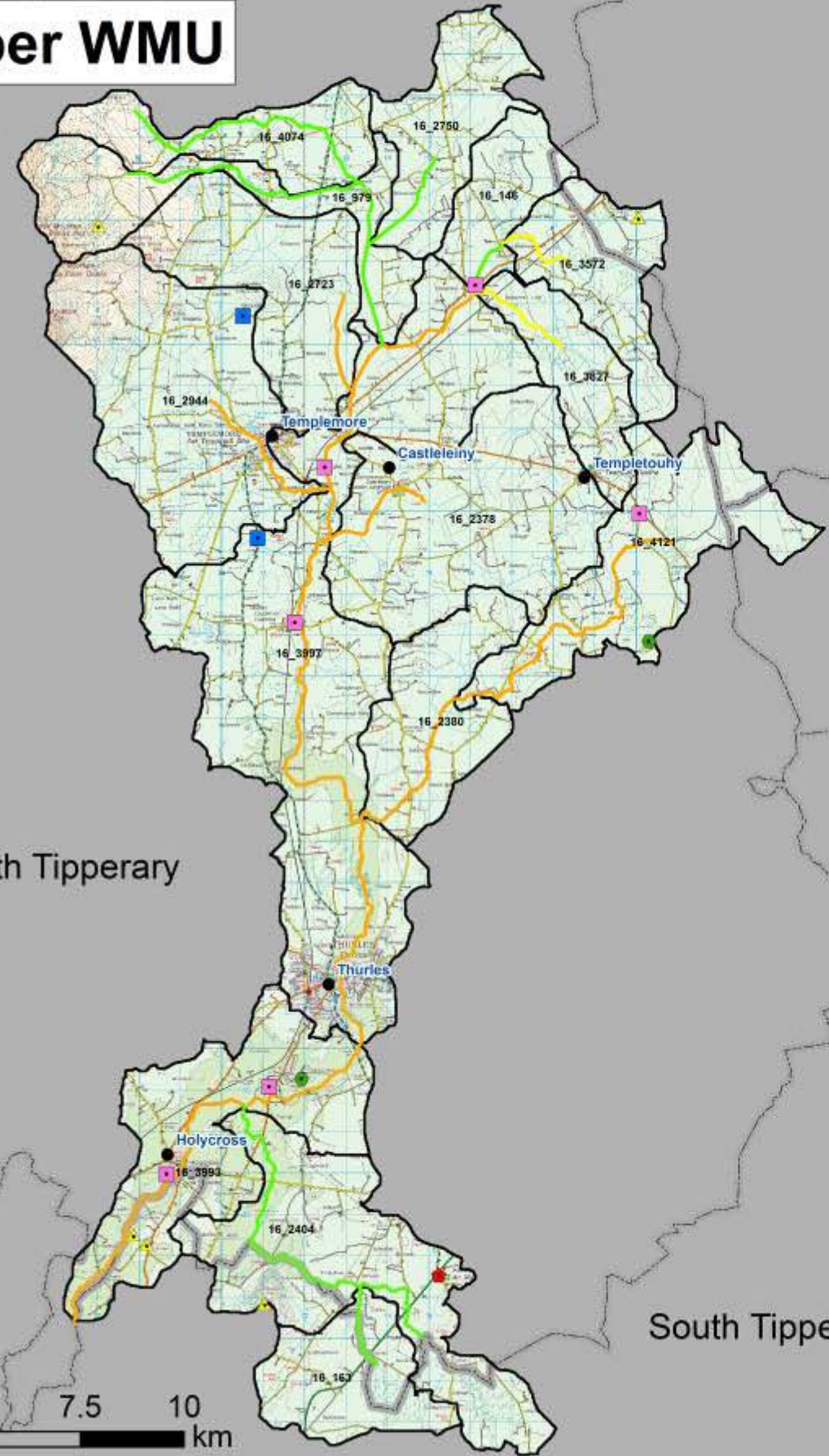
# Suir Main Water Management Unit Action Plan

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

## River Data

IE_SE_SuirMain																		
Member State Code	Monitored Y (Extrapolated N)	Donor Waterbody	Biological Elements					Supporting Elements			Ecological Status	Chemical Status	Protected Areas				Objective	Date objective to be achieved
			Macrobenthos (Q)	Freshwater Mussel	Fish	Phytoplankton (Diatoms)	Morphology	Specific Pollutants	Physio-chemical	Special Area of Conservation			Special Protection Area	Nutrient Sensitive Waters	Drinking Water			
SE_16_1057	Y		H							H						HES	2009	
SE_16_1058	Y									G	G					GES	2009	
SE_16_1059	Y		G							H	G					GES	2009	
SE_16_1170	N	SE_17_479									G			Y		GES	2009	
SE_16_1384	N	SE_17_479									G					GES	2009	
SE_16_1401	N	SE_17_479									G					GES	2009	
SE_16_1440	N	SE_17_479									G					GES	2009	
SE_16_2682	N	SE_17_479									G					GES	2009	
SE_16_2997	Y		M							H	M					GES	2021	
SE_16_3001	Y		M							H	M					GES	2021	
SE_16_3041	N	SE_16_3394									G					GES	2009	
SE_16_3060	N	SE_16_3843									P					GES	2021	
SE_16_3061	N	SE_16_2794									G					GES	2009	
SE_16_3076	N	SE_16_3843									P					GES	2021	
SE_16_3081	N	SE_16_2794									G					GES	2009	
SE_16_3085	N	SE_16_1058									G					GES	2009	
SE_16_3135	N	SE_16_3534									G					GES	2009	
SE_16_3235	Y		M							H	M		Y			GES	2015	
SE_16_3244	N	SE_17_479									G		Y			GES	2009	
SE_16_3352	N	SE_16_3845									G					GES	2009	
SE_16_3394	Y										G	G		Y		GES	2009	
SE_16_3419	N	SE_16_3235									M					GES	2021	
SE_16_3420	N	SE_16_3235									M					GES	2021	
SE_16_3434	Y		M							H	M					GES	2021	
SE_16_3448	N	SE_17_479									G		Y			GES	2009	
SE_16_3457	N	SE_17_808									G		Y			GES	2009	
SE_16_3534	Y										G	G				GES	2009	
SE_16_3693	N	SE_17_479									G		Y			GES	2009	
SE_16_3786	Y		G							H	G		Y			GES	2009	
SE_16_3843	Y		P							H	P					GES	2021	
SE_16_3845	Y										G	G				GES	2009	
SE_16_3893	N	SE_16_3001									M					GES	2015	
SE_16_3928	N	SE_16_3698									P		Y			GES	2021	
SE_16_4099	N	SE_16_3235									M					GES	2021	
SE_16_4135	N	SE_16_3843									P					GES	2021	
SE_16_4181_1	Y		P								G	P		Y	Y	GES	2021	
SE_16_4181_2	Y		M								G	M		Y		GES	2021	
SE_16_4181_3	Y		M								H	M		Y		GES	2021	
SE_16_4181_4	Y		G								H	G		Y		GES	2009	
SE_16_4181_5	Y		M								H	M		Y	Y	GES	2021	
SE_16_520	N	SE_16_3843									P					GES	2021	

# Suir Upper WMU

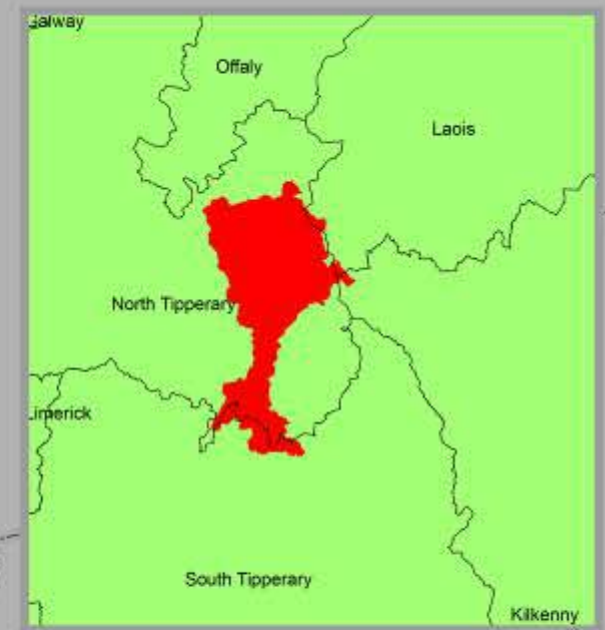
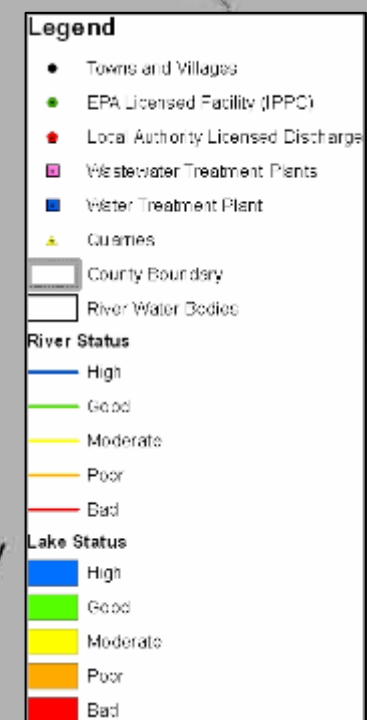


Laois

Kilkenny

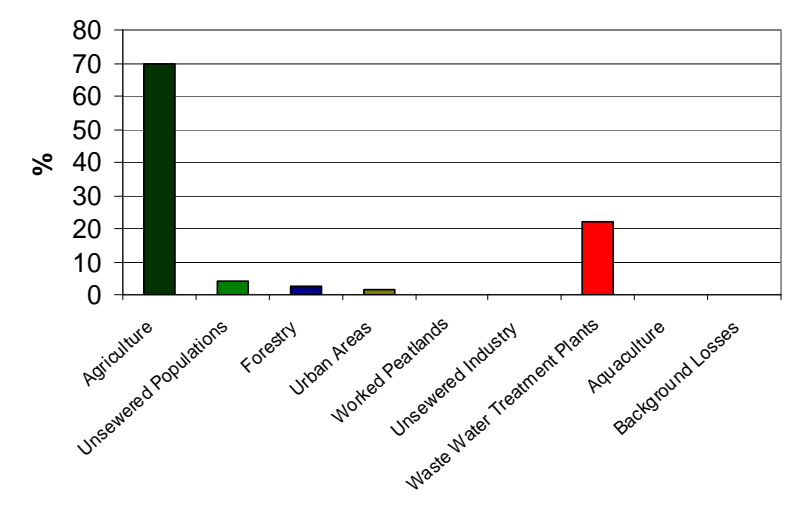
North Tipperary

South Tipperary



Name	Suir Upper Water Management Unit
Area	293 km <sup>2</sup>
River Basin District	South Eastern RBD
Main Counties	Tipperary
Protected Areas	Kilduff, Devilsbit mountain SAC Lower River Suir SAC 2 UWWTD - River Suir – down stream of Thurles sewage outfall to Twoford Bridge, and River Suir running through Holycross.

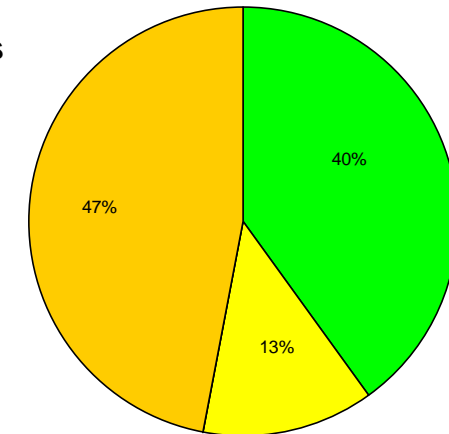
**Sectoral Total Phosphorus Source**  
(This does not imply impact)



# Suir Upper Water Management Unit Action Plan

STATUS/IMPACTS	
Overall status	15 RWB - 6 good, 2 moderate, 7 poor. 0 lakes.
Status elements	Q score dictates overall status in all water bodies. Phys Chemical fails in 3 poor WBs. Status was extrapolated for 10 wbs. Chemical Status is not monitored.
Possible Impacts - EPA Water Quality 2004	ROSSESTOWN - (SE_16_4121 and SE_16_3511, Status 2009 - both Poor) Unsatisfactory throughout with poor ecological quality at all locations. (Q score 3) SUIR UPPER - (SE_16_979 and SE_16_3993, Status 2009 - both Poor) Unsatisfactory throughout with poor ecological quality at all locations. (Q score 3)

River Status



PRESSURES/RISKS	
Nutrient sources	Most TP is diffuse (78%) mainly from agriculture (70%). 22% comes from WWTP.
Point pressures	6 WWTP - Holycross, Templemore, Templeouhy, Thurles, Loughmore and Clonmore WWTPs. 1 Section 4 - Inn. 4 IPPCs – 2 Mining Companies, Peat Producer and Timber Producer. 1 WTPs - Templemore Regional Waterworks. There is no discharge from the WTP at College Hill.
Wastewater Treatment Plants (WWTP) and Industrial Discharges	At risk: Holycross WWTP Templemore WWTP Templeouhy WWTP Thurles WWTP-  1 IPPC
Quarries, Mines & Landfills	There are 5 quarries within the WMU. There are no landfills or mines within the WMU. There are no waterbodies at risk
Agriculture	There are 12 waterbodies at risk from agriculture within the WMU: SE_16_3997, SE_16_146, SE_16_3993, SE_16_2378, SE_16_2944, SE_16_2404, SE_16_2750, SE_16_4074, SE_16_3572, SE_16_3827, SE_16_163, SE_16_2723
On-site systems	There are 2554 septic tanks in this WMU, none of them are posing a risk to water quality due to their density, location and unsuitable hydrogeological conditions.
Forestry	There are no waterbodies within the WMU at risk from Forestry.
Dangerous substances	There are no waterbodies at risk from dangerous substances within the WMU.
Morphology	There are no waterbodies at risk form morphology within the WMU.
Abstractions	There are no waterbodies at risk from abstraction within the WMU.
Other	There are no HMWB or AWB within the WMU.

# Suir Upper Water Management Unit Action Plan

<b>SELECTED ACTION PROGRAMME</b>	
<i>NB All relevant basic measures, general supplementary measures and SEA mitigation measures apply</i>	
Point Sources	POINT SOURCE – WWTP – Refer to Table below 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. IPPC – Investigate risk
Diffuse Sources	AGRICULTURE – Good Agricultural Practice Regulations and Enforcement.
Other	Sewerage Schemes proposed for Templemore, Thurles, and Kiltillane Road, Water Supply Schemes proposed for Templemore and Thurles regions and Thurles WWTP upgrade all identified in Local Authority Needs Assessment.

Point Source Discharge	County	Priority	Measure (Capital Works)
Templemore WWTP	North Tipp	1	Increase capacity of treatment plant.
Templetouhy	North Tipp	2	Provide tertiary treatment or relocate outfall.
Templetouhy	North Tipp	2	Provide nutrient removal or relocate outfall.
Point Source Discharge	County	Priority	Measure (Investigation before Capital Works)
Holycross WWTP	North Tipp	2	Investigate the need for increase in capacity of treatment plant.
Point Source Discharge	County	Priority	Measure
Thurles WWTP	North Tipp	3	Plant requiring the investigation of CSO's
Point Source Discharge	County	Priority	Measure
Holycross WWTP	North Tipp	2	Plant requiring to increase capacity or ensure capacity of treatment plant is not exceeded

<b>FUTURE DEVELOPMENT</b>	
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.

<b>OBJECTIVES</b>	
Good status 2015	2 water bodies
Protect	6 water bodies
Alternative Objectives	Extended Deadlines – 7 water bodies, 2021 deadline  3 New Modifications or Developments – Thurles flood alleviation scheme under consideration, Proposed wind farm at Templetouhy and Templemore flood alleviation scheme.  HMWB/AWB - none

# Suir Upper Water Management Unit Action Plan

## River Data

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

IE_SE_SuirUpper																		
Member State Code	Monitored Y (Extrapolated N)	Donor Waterbody	Biological Elements				Supporting Elements				Ecological Status	Chemical Status	Protected Areas				Objective	Date objective to be achieved
			Macrobenthos (O)	Freshwater Mussel	Fish	Phytobenthos (Diatoms)	Morphology	Specific Pollutants	Physio-chemical	Special Area of Conservation			Special Protection Area	Nutrient Sensitive Waters	Drinking Water			
SE_16_146	N	SE_15_1050									G					GES	2009	
SE_16_163	N	SE_16_2745									G					GES	2009	
SE_16_2378	N	SE_16_2390									P					GES	2021	
SE_16_2380	Y		P						H		P					GES	2021	
SE_16_2404	N	SE_16_750									G		Y			GES	2009	
SE_16_2723	N	SE_16_2390									P					GES	2021	
SE_16_2750	N	SE_15_1050									G					GES	2009	
SE_16_2944	N	SE_16_3997									P		Y			GES	2021	
SE_16_3572	N	SE_15_1425									M					GES	2015	
SE_16_3827	N	SE_15_371									M					GES	2015	
SE_16_3993	Y		P							M	P		Y		Y	GES	2021	
SE_16_3997	Y		P							M	P					GES	2021	
SE_16_4074	N	SE_15_1050									G					GES	2009	
SE_16_4121	Y		P							M	P					GES	2021	
SE_16_979	Y		G							G	G					GES	2009	