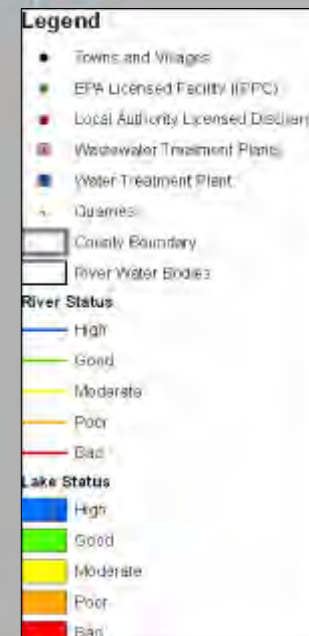
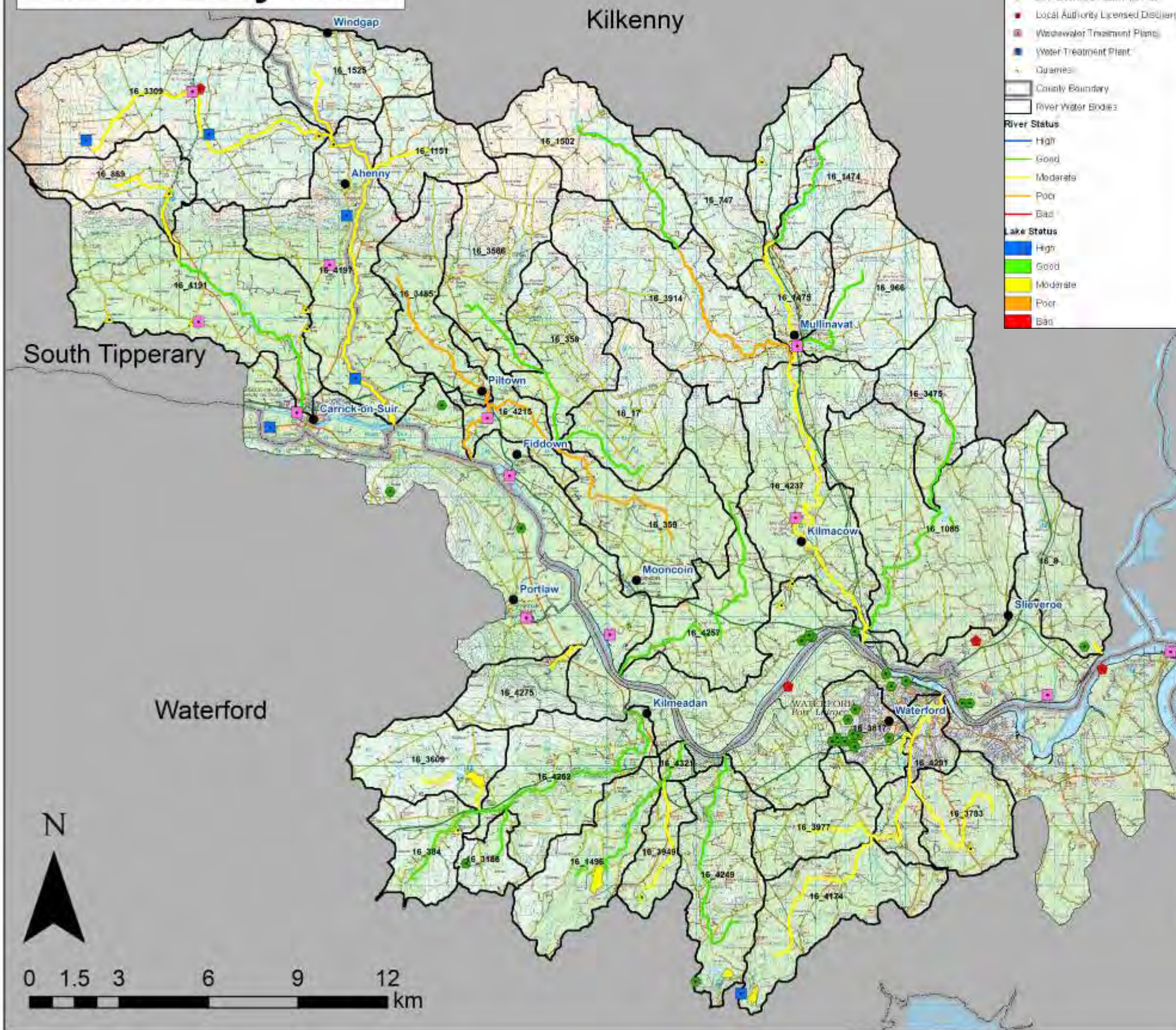
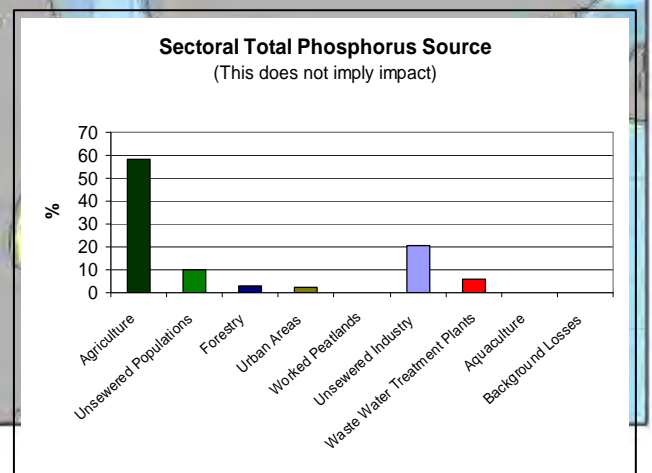


APPENDIX G
SUIR WATER MANAGEMENT UNITS

Suir Estuary WMU



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

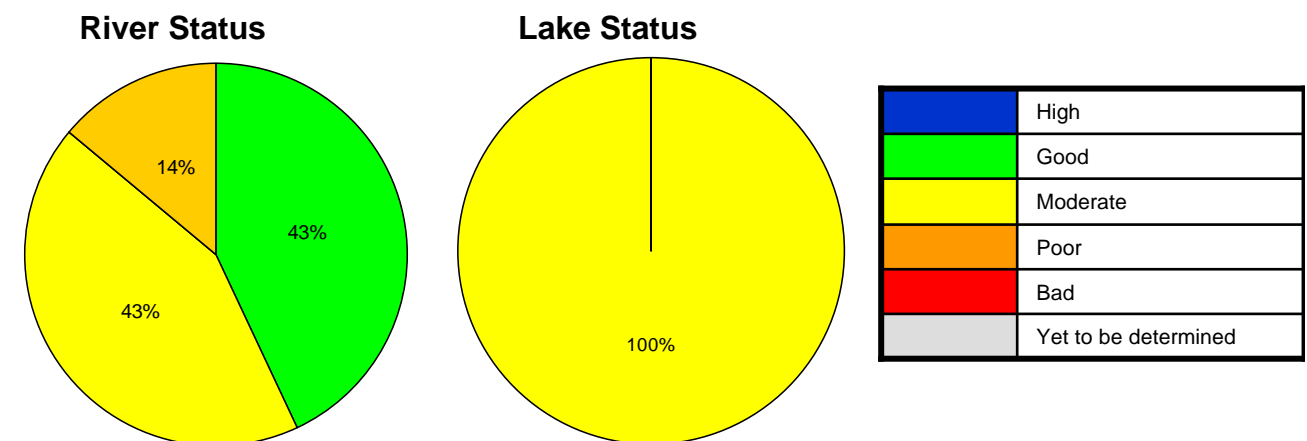


Suir Estuary Water Management Unit Action Plan

| 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 | |
|------------------|--|
| 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 |

| 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. |



Suir Estuary Water Management Unit Action Plan

| SELECTED ACTION PROGRAMME | |
|---|---|
| <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 |

| OBJECTIVES | |
|------------------------|--|
| 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) |

| 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. |

| 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

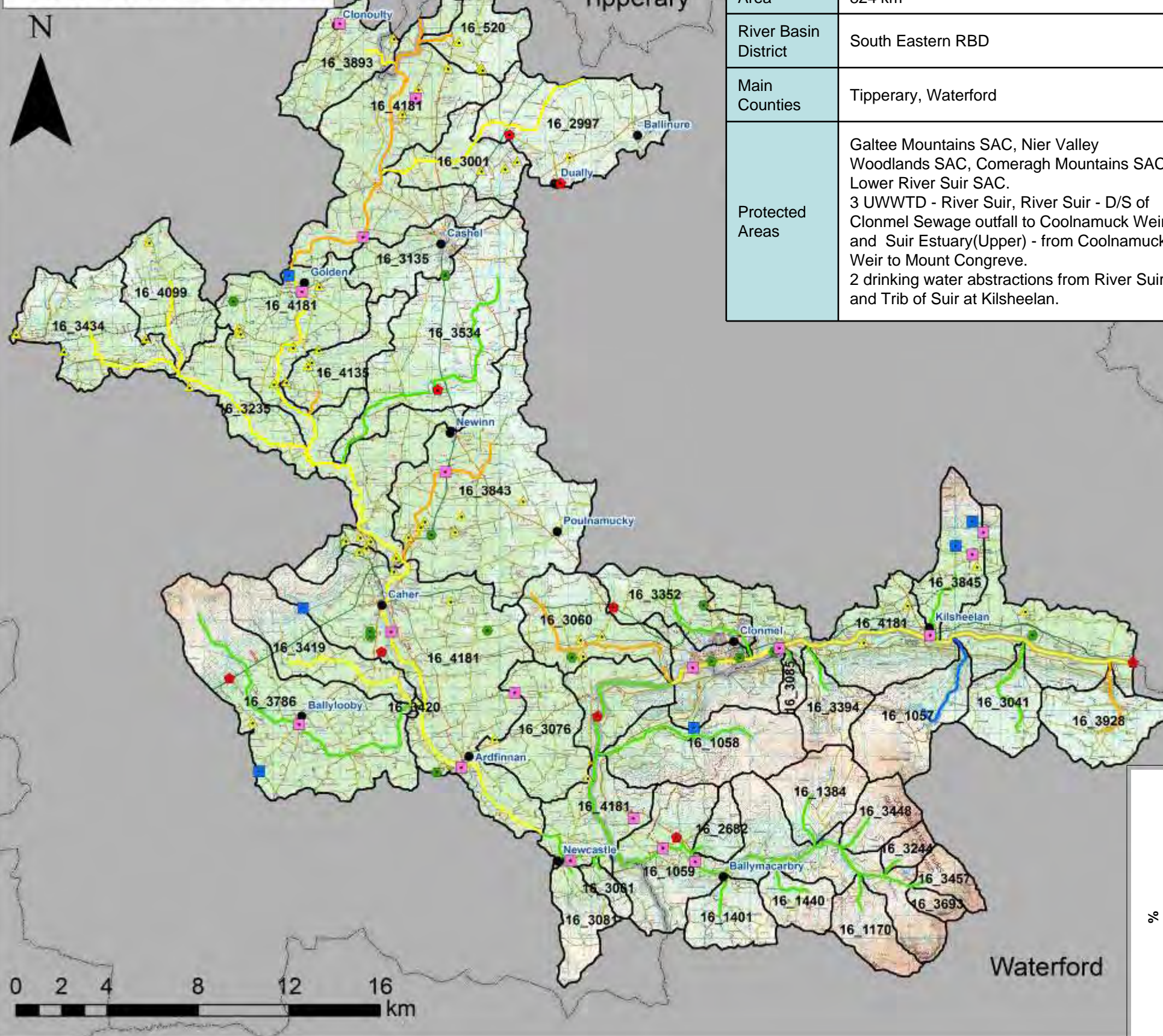
| IE_SE_SuirEstuary | | | | | | | | | | | | | | | | | |
|-------------------|-------------------------|------------------------------|---------------------|-------------|------|---------------------|---------------------|------------------|-------------------|-----------------|------------------------------|-------------------------|---------------------------|---------------|----------------|-----------|-------------------------------|
| 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

| | |
|-----------------------------|--|
| Name | Suir Main Water Management Unit |
| Area | 824 km ² |
| River Basin District | South Eastern RBD |
| Main Counties | Tipperary, Waterford |
| Protected Areas | 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

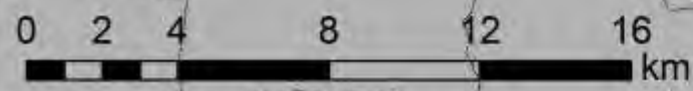
- Towns and Villages
- EPA Licensed Facility (PPC)
- Local Authority Licensed Discharge
- Wastewater Treatment Plants
- Water Treatment Plant
- Gauging Stations
- ▭ County Boundary
- ▭ River Water Bodies

River Status

- High (Blue line)
- Good (Green line)
- Moderate (Yellow line)
- Poor (Orange line)
- Bad (Red line)

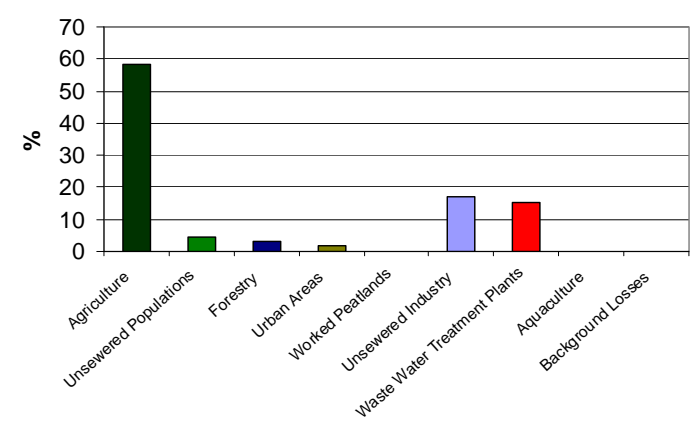
Lake Status

- High (Blue square)
- Good (Green square)
- Moderate (Yellow square)
- Poor (Orange square)
- Bad (Red square)



Waterford

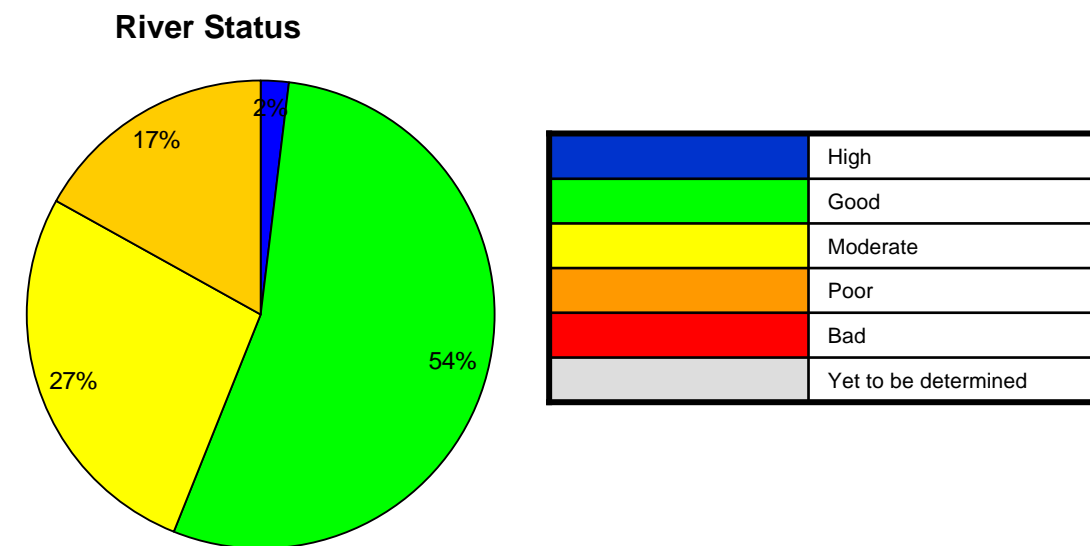
Sectoral Total Phosphorus Source
(This does not imply impact)



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:: Ardfinnan Grange Cashel Cahir Ballylooby Golden Boherlahan Ballypatrick Clonmel Newcastle New Inn Ballymacarbry - An increase in treatment capacity to 600 pe is estimated to be required for future populations</p> <p>Section 4s: 2 at risk 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 |

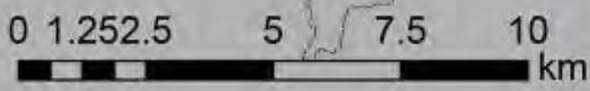
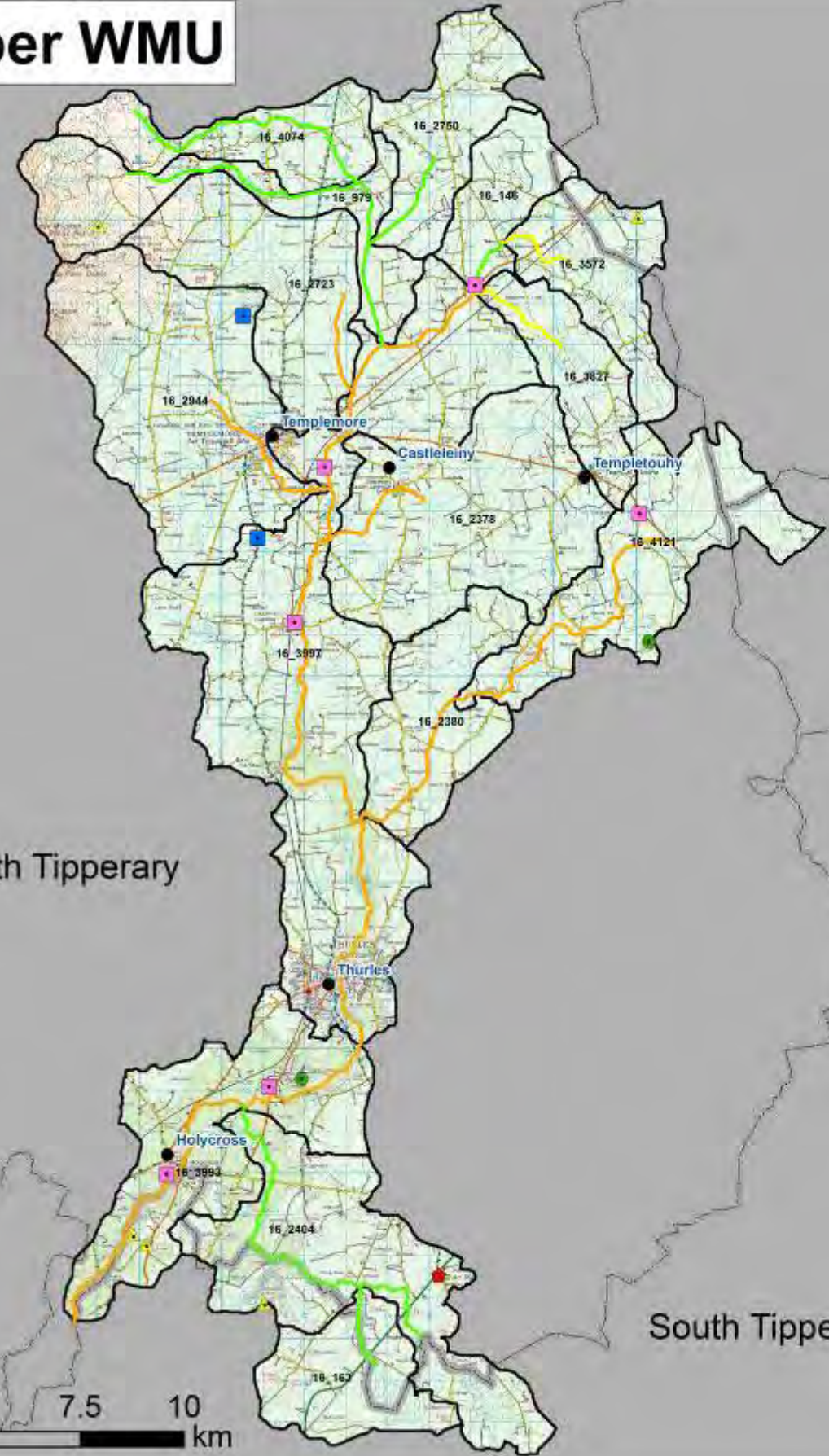
Suir Main Water Management Unit Action Plan

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



Legend

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

River Status

- High
- Good
- Moderate
- Poor
- Bad

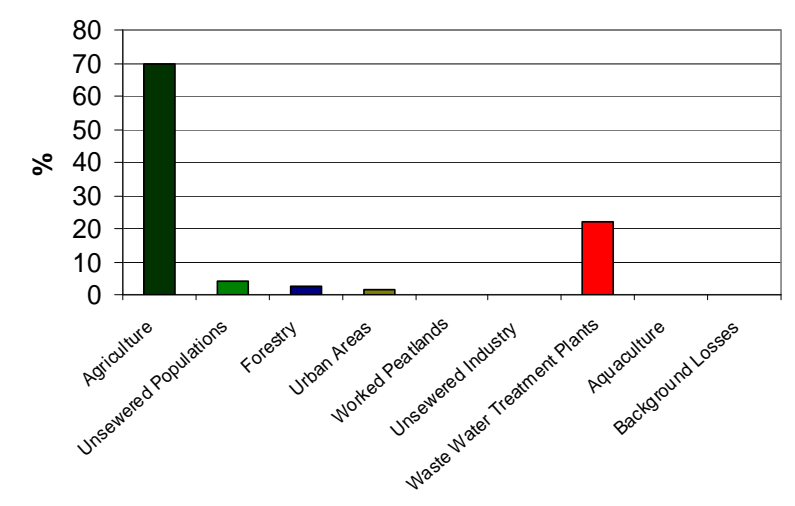
Lake Status

- High
- Good
- Moderate
- Poor
- Bad



| Name | Suir Upper Water Management Unit |
|----------------------|--|
| Area | 293 km ² |
| 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. |

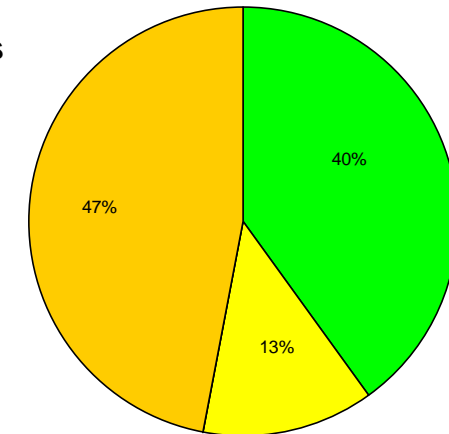
Sectoral Total Phosphorus Source
(This does not imply impact)



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

| SELECTED ACTION PROGRAMME | |
|---|---|
| <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 |

| 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. |

| OBJECTIVES | |
|------------------------|---|
| 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 | |