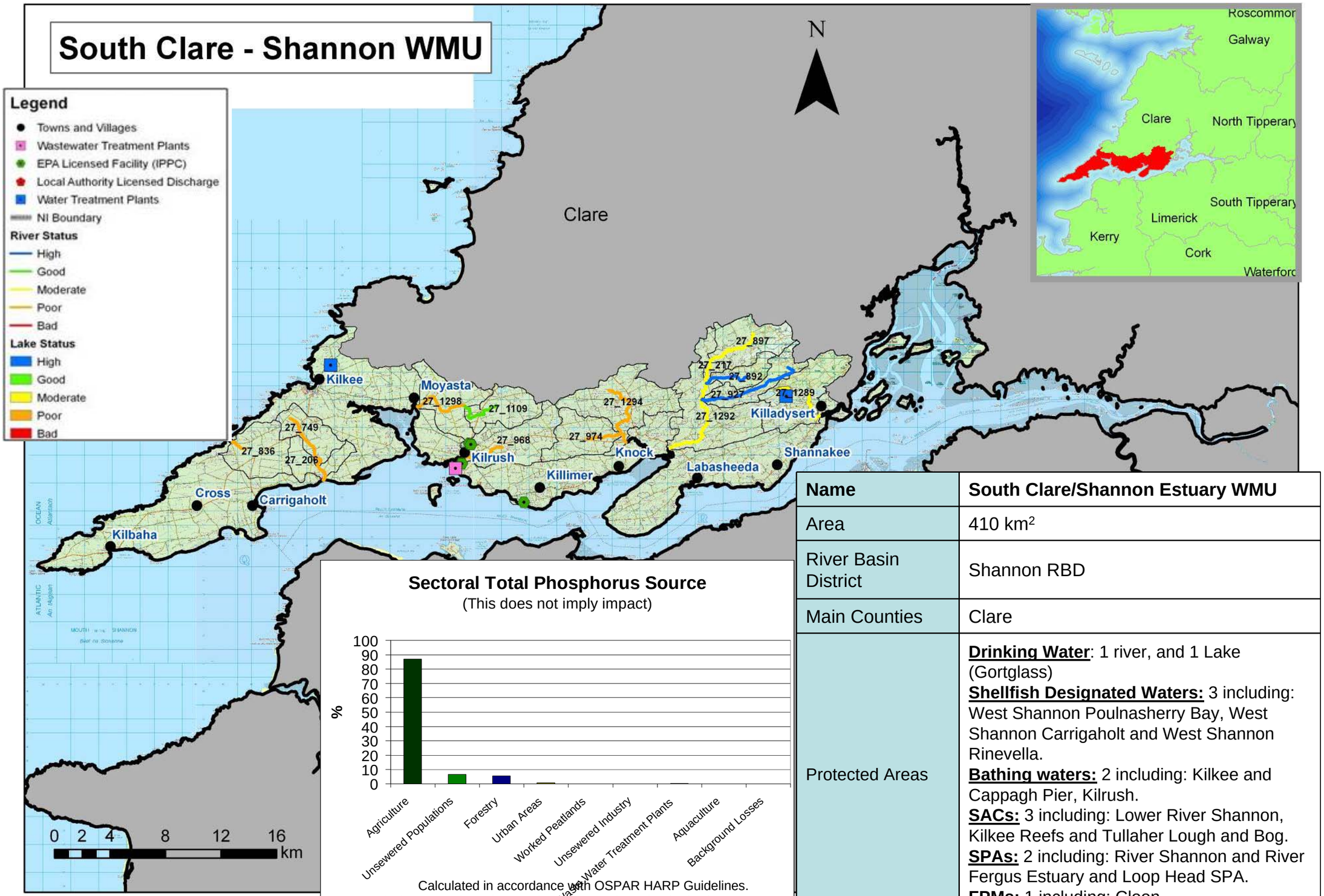
South Clare/Shannon Estuary Water Management Unit Action Plan



Name	South Clare/Shannon Estuary WMU
Area	410 km^2
River Basin District	Shannon RBD
Main Counties	Clare
Protected Areas	**Drinking Water**: 1 river, and 1 Lake (Gortglass) **Shellfish Designated Waters:** 3 including: West Shannon Poulnasherry Bay, West Shannon Carrigaholt and West Shannon Rinevella. **Bathing waters:** 2 including: Kilkee and Cappagh Pier, Kilrush. **SACs:** 3 including: Lower River Shannon, Kilkee Reefs and Tullaher Lough and Bog. **SPAs:** 2 including: River Shannon and River Fergus Estuary and Loop Head SPA. **FPMs:** 1 including: Cloon.

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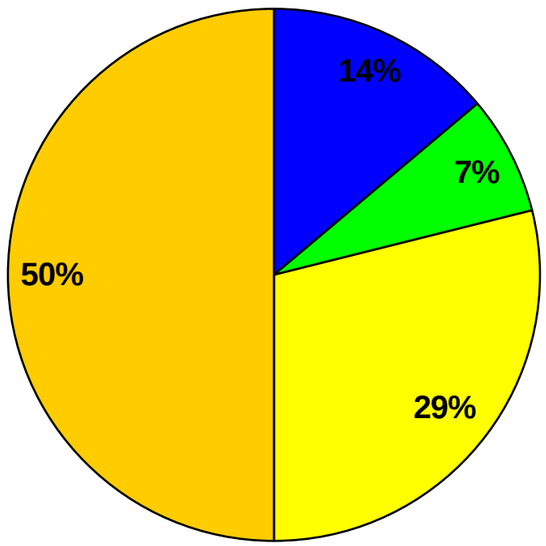
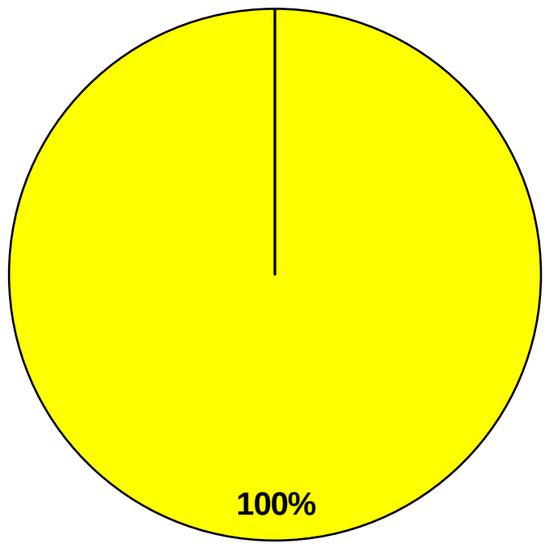
STATUS/IMPACTS	
Overall status	14 River Water Bodies: 2 high, 1 good, 4 moderate and 7 poor. 1 lake water body: moderate status.
Status elements	Fish dictates overall status for 1 moderate water body, Freshwater Pearl Mussels dictates status for 2 moderate water bodies, the remainder are dictated by Q score (macroinvertebrates). Chemical status is not monitored. Gortglass Lough driven by Chlorophyll, Nutrients - Ammonium, Total Phosphorus.
Possible Impacts - EPA Water Quality 2004	Cloon (Clare) – (SH_27_897, 116550 162240 SH_27_217 and SH_27_1292) The current Q status is good, however overall status is moderate. This is a FWPM catchment so likely to be demoted to moderate for this reason. The Cloon River was in satisfactory condition overall with a definite improvement in the middle section (0200) in comparison with 2001. Crompaun (West) (SH_27_1294) This waterbody is currently of poor Q status, and poor overall status. 3 sites sampled along length of watercourse. Worst Q applied to overall length and overall status. Doonaha (SH_27_749 and SH_27_206) The Doonaha was moderately polluted in October 2005. This waterbody is now currently of poor Q status, and poor overall status. Failed physchem. Some improvement was noted at the upper site where improved control of cattle was apparent at the sample point. Kilcarrol Stream (SH_27_968). This tributary of the Wood River (qv) was moderately polluted where sampled in October 2005. Tarmon Lough Stream (SH_27_974) Deteriorated form a Q status of good in 2005 to poor in 2009. Wood (SH_27_968) Poor based on Q status. 3 sites sampled along length of watercourse. Worst Q applied to overall length and overall status.

PRESSURES/RISKS	
Nutrient sources	All phosphorus load is diffuse (100%) main sources are agriculture (87%), with remaining from forestry and unsewered properties.
Point pressures	2 WWTPs: Kilkee and Kilrush. 2 WTPs: Kilkee and Kildysart. 3 IPPC Facilities: Electricity Provider; Surface Coating Industry and Timber Treatment Facility. 4 LA licensed industrial discharges: Fish Processing, Caravan Park, Holiday Homes and Docks&Harbour Services Company.
Wastewater Treatment Plants (WWTP) and Industrial Discharges	The following WWTPs are at risk: Kilkee Kilrush There are no industries at risk.
Quarries, Mines & Landfills	5 Registered Quarries:SH_27_1289, SH_27_968, SH_27_1109, SH_27_836, SH_27_749. None At Risk. 3 landfills (Lisdeen Landfill (closed), Kilrush Landfill (closed) and Moneypoint Landfill. None at risk. 1 Waste Site: Recycling & Transfer Station
Agriculture	9 river waterbodies at risk - SH_27_836, SH_27_749, SH_27_968 and SH_27_1109, SH_27_1289, SH_27_206, SH_27_1298, SH_27_974, SH_27_1294.
On-site systems	There are 3417 septic tanks within this WMU, 667 of these are located in areas of very high or extreme risk.
Forestry	5 river waterbodies at risk - SH_27_1292, SH_27_217, SH_27_897, SH_27_892 and SH_27_927.
Dangerous substances	None at risk
Morphology	None at risk
Abstractions	1 river waterbody at risk - SH_27_1289, Kildysart WTP. 1 Lake: Gortglass Lough (IE_SH_27_122)
Other	N/A



River



Lake Status

	High
	Good
	Moderate
	Poor
	Bad
	Yet to be determined

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SELECTED ACTION PROGRAMME *NB All relevant basic measures, general supplementary measures and SEA mitigation measures apply*	
Point Sources	Wastewater Treatment Plants – refer to table below. All IPPC & Section 4s - 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	Good Agricultural Practice regulations inspections/enforcement. Septic Tanks: At Risk septic tanks are to be prioritised for inspections. Subsequent upgrade or connection to municipal systems depends on inspection and economic tests. Other diffuse sources may need recommandations.
Other	Morphology - Channelisation survey required to investigate morphology pressures and determine impact in any At-Risk water bodies identified in future. Abstractions - Future abstractions licensing programme (Cloon Catchment) - Freshwater Pearl Mussel Sub-Basin Plans – measures to protect FPM including fencing to restrict cattle access. The Shellfish Pollution Reduction Programmes for shellfish growing areas will apply to the WMU as it flows into Shellfish Designated Waters: 3 including: West Shannon Poulnasherry Bay, West Shannon Carrigaholt and West Shannon Rinevella. West-Shannon Ballylongford Shellfish Waters.
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	
Restore 2015 Protect	4 river water bodies. 1 lake. 3 water bodies.
Alternative Objectives	Extended deadlines – 7 River Waterbody Extensions with 2021 deadlines. No Heavily Modified or Artificial Waterbodies No New modifications (Cloon Catchment) - Freshwater Pearl Mussel Sub Basin Plans – measures to protect FPM including fencing to restrict cattle access. **Shellfish Pollution Reduction Plan for**: - West Shannon Poulnasherry Bay, - West Shannon Carrigaholt and - West Shannon Rinevella

Point Source Discharge	County	Priority	Measure (Investigation before Capital Works)
Kilkee	Clare	2	Investigate the need for increase in capacity of treatment plant.
Kilrush	Clare	2	Investigate the need for increase in capacity of treatment plant.

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River Data

IE_SH_SouthClare/ShannonEstuary																			
				Biological Elements				Supporting Elements					Protected Areas						
County	Member State Code	Monitored Y (Extrapolated N)	Donor Waterbody	Macroinvertebrates (Q)	FreshWater Pearl Mussel	Fish	Phytobenthos (Diatoms)	Morphology	Specific Polutants	Physio-chemical	Ecological Status	Chemical Status	Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters	Drinking Water	Objective	Date objective to be achieved
Clare	SH_27_1109	N	SH_28_706								G						GES	2009
Clare	SH_27_1289	N	SH_27_927								M						GES	2015
Clare	SH_27_1292	Y		G	M						M		Y	Y			GES	2015
Clare	SH_27_1294	Y		P							P						GES	2021
Clare	SH_27_1298	N	SH_27_206								P			Y			GES	2021
Clare	SH_27_206	Y		P						H	P						GES	2021
Clare	SH_27_217	Y		G	M						M		Y				GES	2015
Clare	SH_27_749	Y		P							P						GES	2021
Clare	SH_27_836	N	SH_27_749								P						GES	2021
Clare	SH_27_892	N	TBC								H						HES	2009
Clare	SH_27_897	Y		G		M					M						GES	2015
Clare	SH_27_927	N	TBC								H						HES	2009
Clare	SH_27_968	Y		P						H	P						GES	2021
Clare	SH_27_974	Y		P							P						GES	2021

Lake Data

IE_SH_SouthClare/ShannonEstuary																		
				Biological Elements			Supporting Elements						Protected Areas						
County	Member State Code	Name	Monitored Y (Extrapolated N)	Macrophytes	Chlorophyll	Fish	Morphology	Nutrient Enrichment	Physico Chemical	Ecological Status	Chemical Status	Special Area of Conservation	Special Protection Area	Nutrient Sensitive Waters	Bathing Water	Drinking Water	Objective	Date objective to be achieved
Clare	SH_27_122	Gortglass Lough	Y		M			M	M	M						Y	GES	2015