Estimation of Flow Duration Curve for Ungauged Catchment

Protection Agency

Name	Owenboy (River)(19_726)
Location	168753,63259 (ING)

Segment Map

Disclaimer
The source hydrometric data used to estimate the flow duration curve ordinates for ungauged catchments was obtained from (1) water level data and (2) the rating curve(s) generated for each hydrometric station. The Environmental Protection Agency and the Office of Public Works used these data, respectively, to calculate daily mean flows. The daily mean flows were then used by the Environmental Protection Agency to prepare flow duration curves for each station. Neither body accepts any liability for the subsequent handling of the data.

Environmental Protection Agency

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It is strongly recommended that the user examine the catchment descriptors contained in the report produced and confirm that the percentages of the various constituent elements are comparable to a natural catchment.

If the flow in a catchment is not entirely natural, the estimation of flows using the model in these catchments could be affected due to:

- existence of local conduit karst within the catchment;
- the selected location itself is on local conduit karst;
- regulation of the river flow on the river channel (e.g. power station, sluice gates etc)
- impacts of abstractions upstream of the selected location or the impact of the discharge associated with the abstraction into the same/different catchment;
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- lack of similar catchments with observed flows, ie where catchment descriptors lie outside the range of available gauging station catchments (e.g. the catchment area is under 5 km²);
- any other special circumstances that may affect river flows.

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The EPA has also prepared estimates of DWF and long term 95 percentile flows which are also presented on the EPA web site. These data are presented at http://www.epa.ie/whatwedo/monitoring/water/hydrometrics/data/

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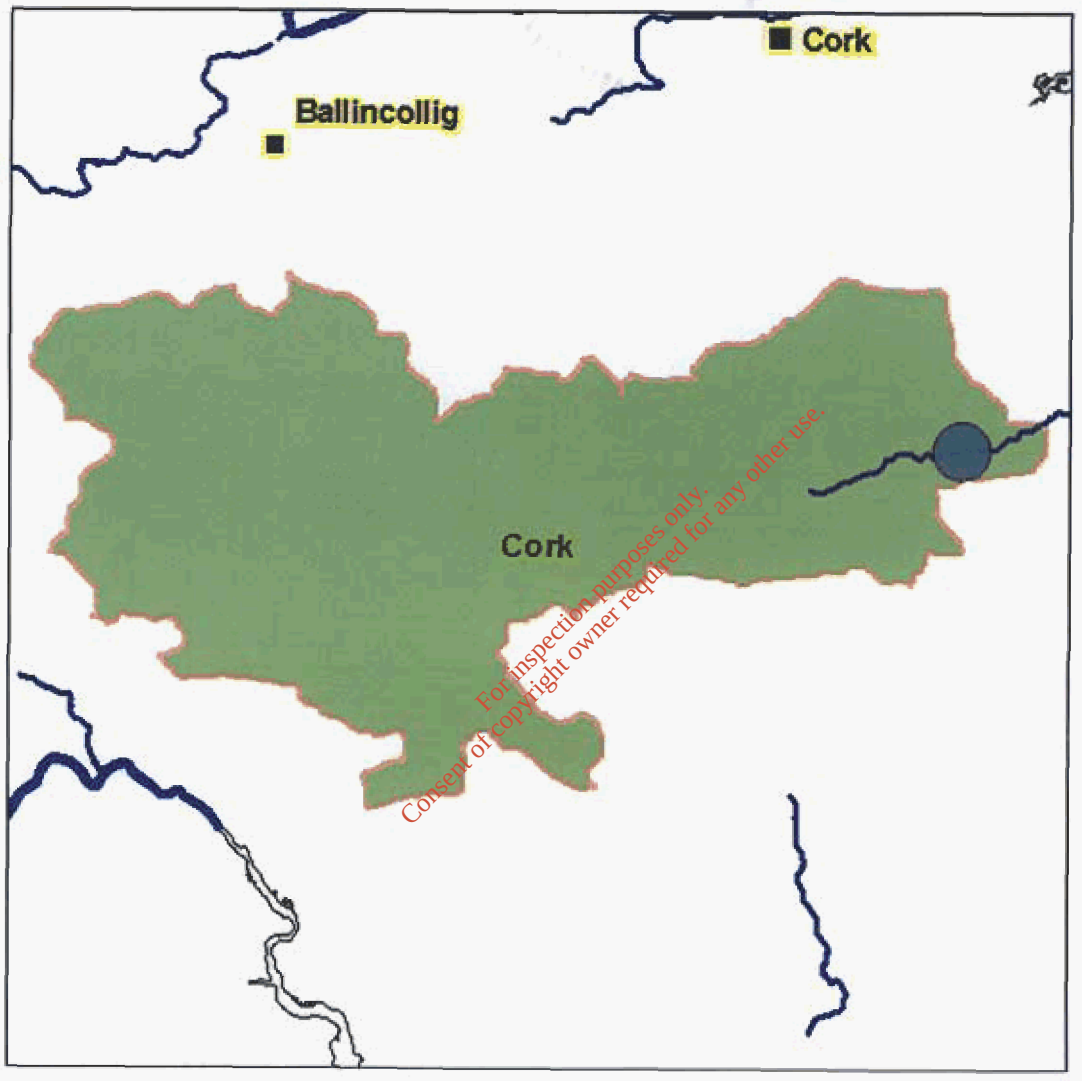
Estimation of Flow Duration Curve for Ungauged Catchment

Environmental Protection Agency

River Name	Owenboy (River)(19_726)
XY Location	168753,63259 (ING)

Nested Catchment Map



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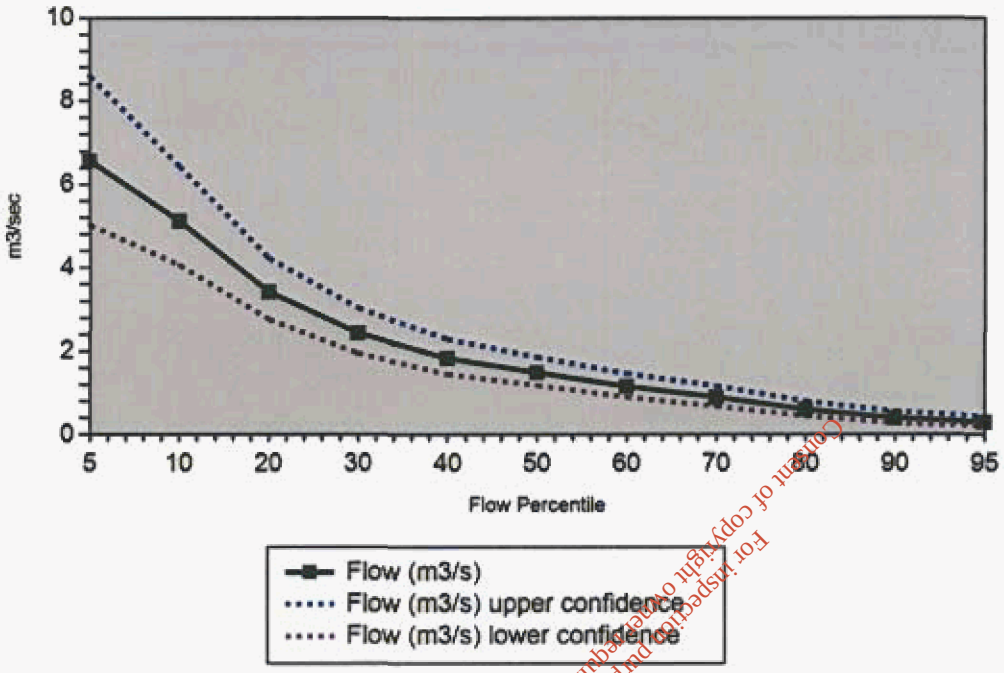
Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Flow Duration Curve (Flow in m3/sec)



Site	flow(m3/sec)	upper 95% confidence limit m3/sec	lower 95% confidence limit m3/sec
5	6.561	8.582	5.016
10	5.106	6.434	4.053
20	3.411	4.216	2.76
30	2.427	3.024	1.948
40	1.818	2.285	1.446
50	1.476	1.85	1.178
60	1.143	1.455	0.898
70	0.885	1.157	0.677
80	0.591	0.789	0.443
90	0.384	0.542	0.272
95	0.282	0.423	0.188

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Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Catchment Descriptors		
General		
Descriptor	Unit	Value
Area	sq km	94.7
Average Annual Rainfall (61-90)	mm/yr	1165
Stream Length	km	97.5
Drainage Density	Channel length (km)/catchment area (sqkm)	1
Slope	Percent Slope	7.1
FARL	Index (range 0:1)	1

Soil	
Code	% of Catchment
Poorly Drained	15.6
Well Drained	76.9
Alluvmin	6.7
Peat	0
Water	0
Made	0.9

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Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Subsoil Permeability		
Code	Explanation	% of Catchment
H	High	0.5
M	Moderate	50.8
L	Low	12.3
ML	Moderate/Low	0
NA	No Subsoil/Bare Rock	36.4

Aquifer		
Code	Explanation	% of Catchment
LG_RG	LG:Locally important sand-gravel aquifer RG: Regionally important sand-gravel aquifer	6.8
LL	Locally important aquifer which is moderately productive only in local zones	92.7
LM_RF	LM: Locally important aquifer which is generally moderately productive RF: Regionally important fissured bedrock aquifer	0
PU_PL	PU: Poor aquifer which is generally unproductive PL: Poor aquifer which is generally unproductive except for local zones	0
RKC_RK	Regionally important karstified aquifer dominated by conduit flow	0
RKD_LK	Regionally important karstified aquifer dominated by diffuse flow	0.6

Stations in Pooling group			
%ile Flow	Station 1	Station 2	Station 3
5	19001	25044	16014
10	19001	25044	25038
20	19001	25044	25038
30	19001	25044	25038
40	19001	25044	25038
50	19001	18005	19032
60	19001	18005	19032
70	19001	18005	19032
80	19001	18005	16003
90	19001	18005	16003
95	19001	18005	16003

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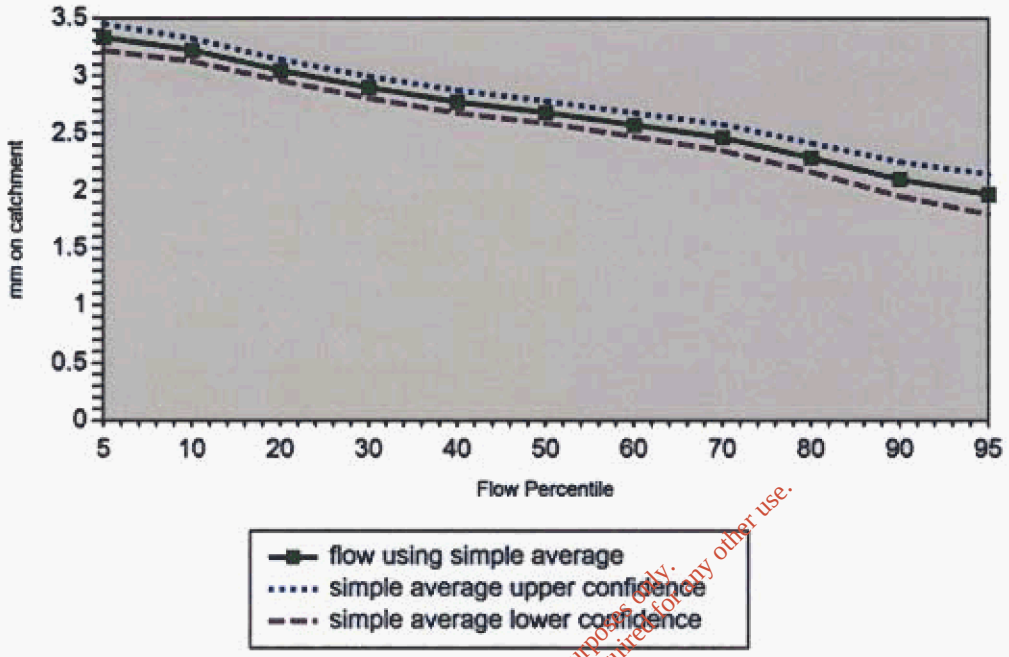
Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Flow Duration Curve (mm on catchment)



Log Flow (mm on catchment)			
%ile	mm	upper 95% confidence limit	lower 95% confidence limit
5	3.34	3.457	3.223
10	3.231	3.331	3.131
20	3.056	3.148	2.964
30	2.908	3.004	2.812
40	2.783	2.882	2.684
50	2.692	2.79	2.594
60	2.582	2.687	2.477
70	2.47	2.586	2.354
80	2.296	2.422	2.17
90	2.108	2.258	1.958
95	1.977	2.153	1.801

Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

River Name	Owenboy (River)(19_726)
XY Location	168753,63259 (ING)

River Segment Map

Disclaimer
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Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

River Name	Owenboy (River)(19_1600)
XY Location	167146,62870 (ING)

River Segment Map

Disclaimer
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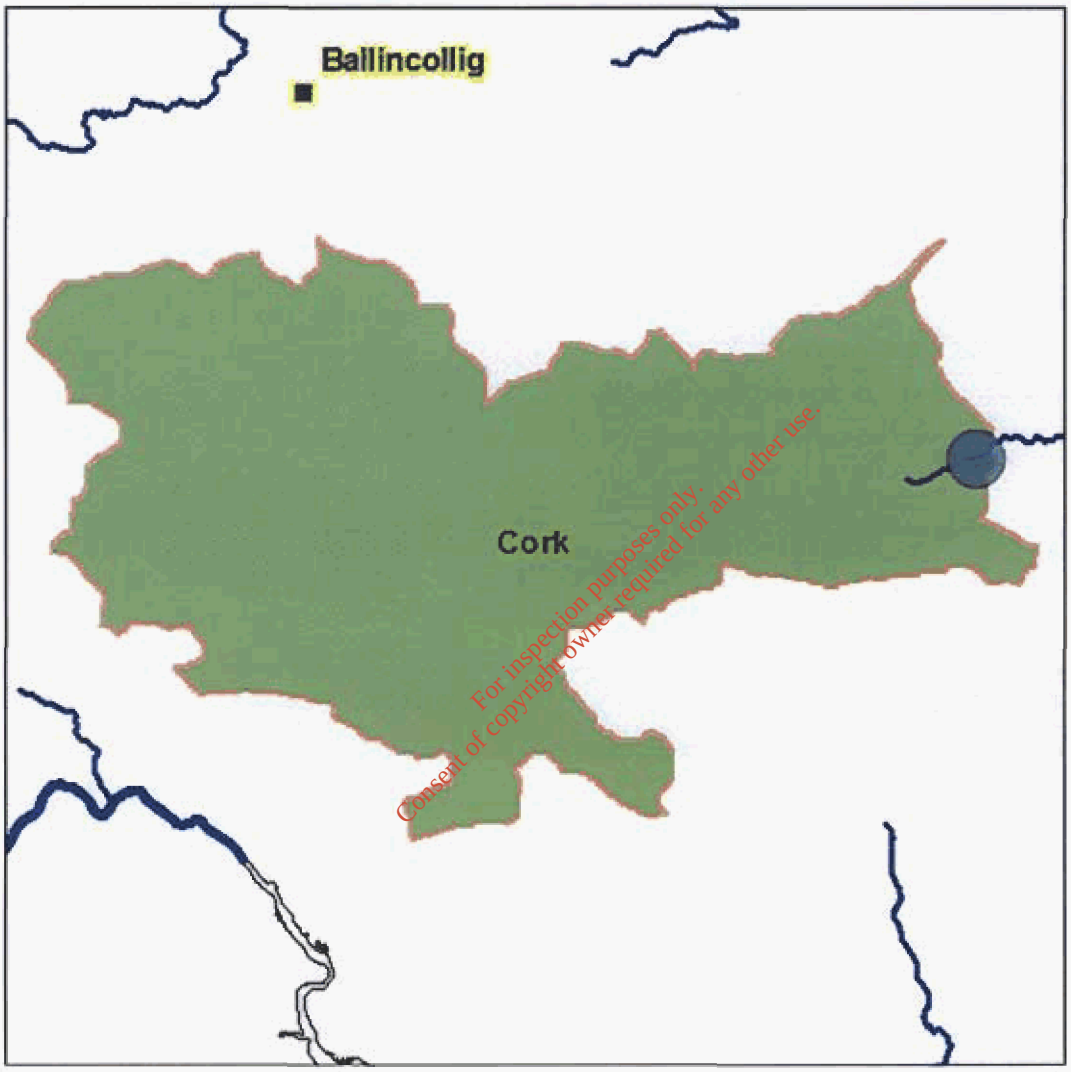
Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

River Name	Owenboy (River)(19_1600)
XY Location	167146,62870 (ING)

Nested Catchment Map



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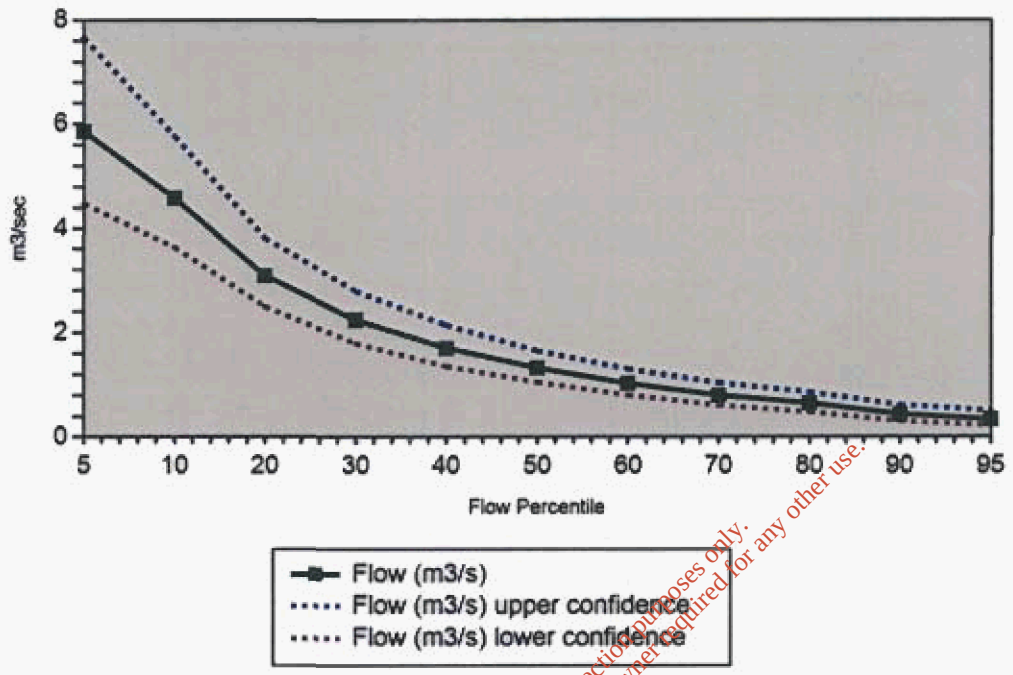
Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Flow Duration Curve (Flow in m3/sec)



%ile	flow(m3/sec)	upper 95% confidence limit m3/sec	lower 95% confidence limit m3/sec
5	5.85	7.652	4.473
10	4.574	5.764	3.63
20	3.076	3.802	2.489
30	2.234	2.783	1.793
40	1.699	2.135	1.351
50	1.316	1.649	1.05
60	1.019	1.297	0.801
70	0.789	1.031	0.604
80	0.637	0.85	0.477
90	0.425	0.601	0.301
95	0.329	0.494	0.219

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Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Catchment Descriptors		
General		
Descriptor	Unit	Value
Area	sq km	84.4
Average Annual Rainfall (61-90)	mm/yr	1166
Stream Length	km	83.9
Drainage Density	Channel length (km)/catchment area (sqkm)	1
Slope	Percent Slope	6.9
FARL	Index (range 0:1)	1

Soil	
Code	% of Catchment
Poorly Drained	16.9
Well Drained	74.9
Alluvmin	7.5
Peat	0
Water	0
Made	0.7

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Estimation of Flow Duration Curve for Ungauged Catchment

Environmental Protection Agency

Subsoil Permeability		
Code	Explanation	% of Catchment
H	High	0.3
M	Moderate	53.3
L	Low	13.5
ML	Moderate/Low	0
NA	No Subsoil/Bare Rock	32.9

Aquifer		
Code	Explanation	% of Catchment
LG_RG	LG:Locally important sand-gravel aquifer RG: Regionally important sand-gravel aquifer	7.6
LL	Locally important aquifer which is moderately productive only in local zones	92.4
LM_RF	LM: Locally important aquifer which is generally moderately productive RF: Regionally important fissured bedrock aquifer	0
PU_PL	PU: Poor aquifer which is generally unproductive PL: Poor aquifer which is generally unproductive except for local zones	0
RKC_RK	Regionally important karstified aquifer dominated by conduit flow	0
RKD_LK	Regionally important karstified aquifer dominated by diffuse flow	0.1

Stations in Pooling group			
%ile Flow	Station 1	Station 2	Station 3
5	19001	16014	25044
10	19001	25038	16014
20	19001	25038	16014
30	19001	25038	16014
40	19001	25038	16014
50	19001	18005	19032
60	19001	18005	19032
70	19001	18005	19032
80	19001	18005	12016
90	19001	18005	12016
95	19001	18005	12016

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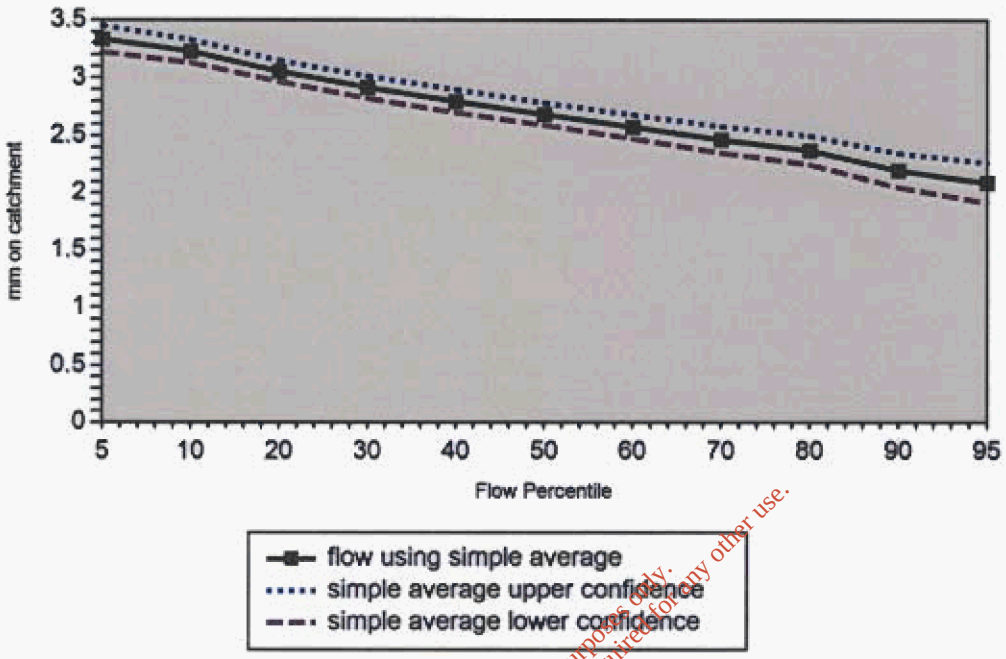
Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Flow Duration Curve (mm on catchment)



Log Flow (mm on catchment)			
%ile	mm	upper 95% confidence limit	lower 95% confidence limit
5	3.34	3.457	3.223
10	3.233	3.333	3.133
20	3.061	3.153	2.969
30	2.922	3.018	2.826
40	2.803	2.902	2.704
50	2.692	2.79	2.594
60	2.582	2.687	2.477
70	2.47	2.586	2.354
80	2.377	2.503	2.251
90	2.202	2.352	2.052
95	2.093	2.269	1.917

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Estimation of Flow Duration Curve for Ungauged Catchment

Environmental Protection Agency

River Name	Owenboy (River)(19_724)
XY Location	168394,63206 (ING)

River Segment Map

Disclaimer
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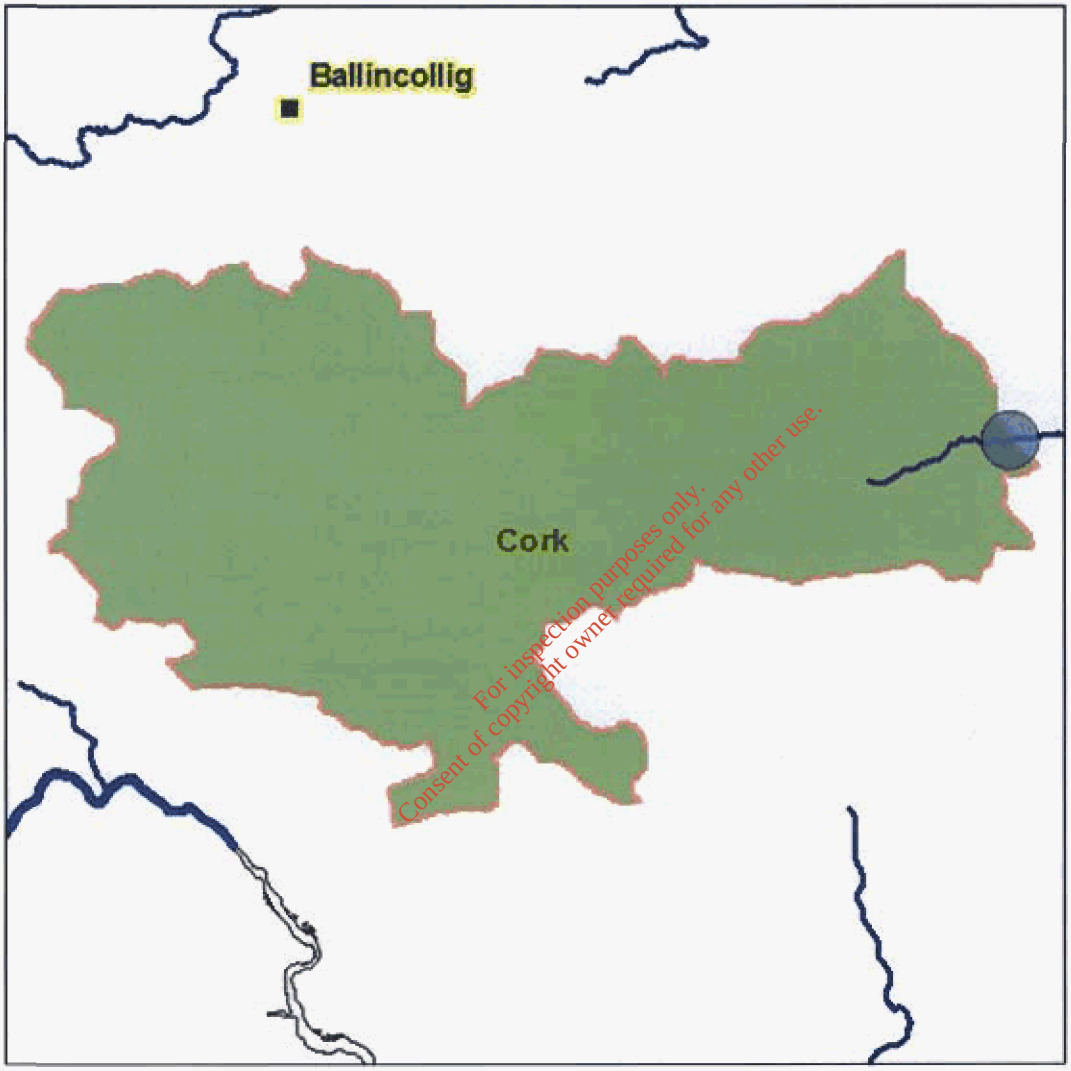
Estimation of Flow Duration Curve for Ungauged Catchment

River Name	Owenboy (River)(19_724)
XY Location	168394,63206 (ING)

Nested Catchment Map



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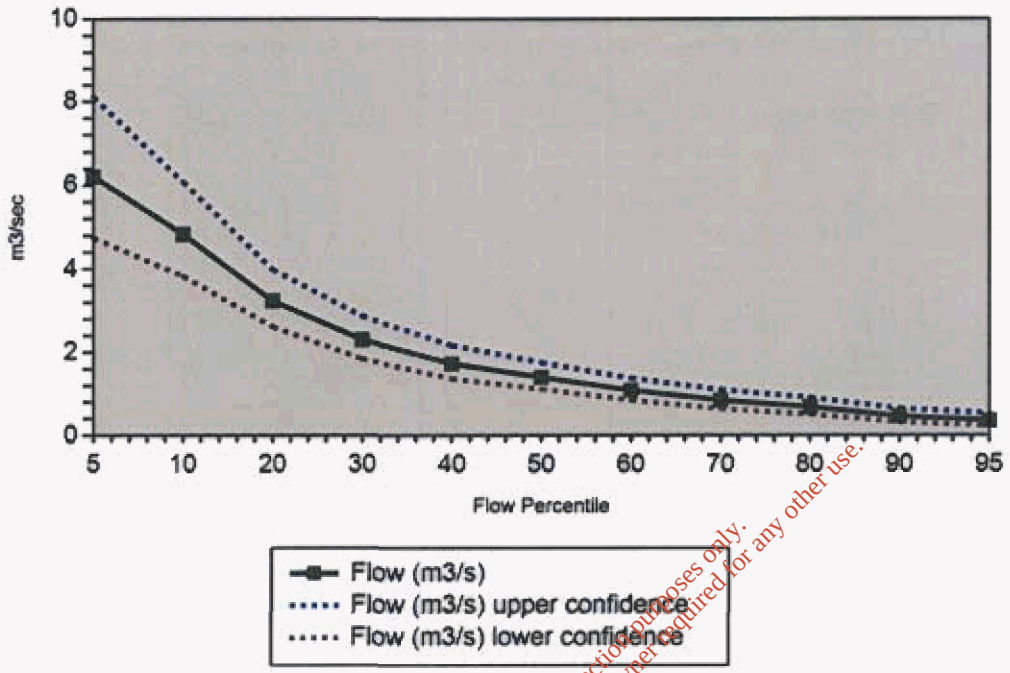
Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Flow Duration Curve (Flow in m3/sec)



%ile	flow(m3/sec)	upper 95% confidence limit m3/sec	lower 95% confidence limit m3/sec
5	6.197	8.106	4.738
10	4.823	6.077	3.828
20	3.222	3.982	2.607
30	2.292	2.856	1.84
40	1.717	2.158	1.366
50	1.394	1.747	1.113
60	1.08	1.374	0.848
70	0.836	1.093	0.64
80	0.674	0.9	0.505
90	0.451	0.636	0.319
95	0.349	0.523	0.232

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Estimation of Flow Duration Curve for Ungauged Catchment

Catchment Descriptors		
General		
Descriptor	Unit	Value
Area	sq km	89.4
Average Annual Rainfall (61-90)	mm/yr	1166
Stream Length	km	91.1
Drainage Density	Channel length (km)/catchment area (sqkm)	1
Slope	Percent Slope	7
FARL	Index (range 0:1)	1

Soil	
Code	% of Catchment
Poorly Drained	16.4
Well Drained	75.7
Alluvmin	7.1
Peat	0
Water	0
Made	0.9

Disclaimer
The source hydrometric data used to estimate the flow duration curve ordinates for ungauged catchments was obtained from (1) water level data and (2) the rating curve(s) generated for each hydrometric station. The Environmental Protection Agency and the Office of Public Works used these data, respectively, to calculate daily mean flows. The daily mean flows were then used by the Environmental Protection Agency to prepare flow duration curves for each station. Neither body accepts any liability for the subsequent handling of the data.

Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

Subsoil Permeability		
Code	Explanation	% of Catchment
H	High	0.4
M	Moderate	52.3
L	Low	13
ML	Moderate/Low	0
NA	No Subsoil/Bare Rock	34.2

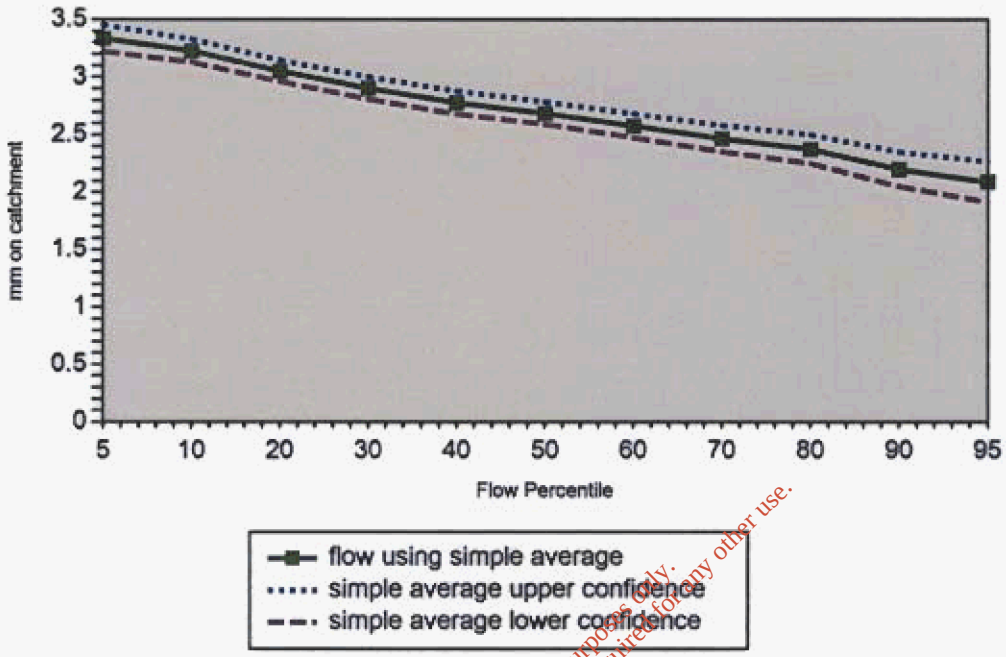
Aquifer		
Code	Explanation	% of Catchment
LG_RG	LG:Locally important sand-gravel aquifer RG: Regionally important sand-gravel aquifer	7.2
LL	Locally important aquifer which is moderately productive only in local zones	92.6
LM_RF	LM: Locally important aquifer which is generally moderately productive RF: Regionally important fissured bedrock aquifer	0
PU_PL	PU: Poor aquifer which is generally unproductive PL: Poor aquifer which is generally unproductive except for local zones	0
RKC_RK	Regionally important karstified aquifer dominated by conduit flow	0
RKD_LK	Regionally important karstified aquifer dominated by diffuse flow	0.2

Stations in Pooling group			
%ile Flow	Station 1	Station 2	Station 3
5	19001	25044	16014
10	19001	25044	25038
20	19001	25044	25038
30	19001	25044	25038
40	19001	25044	25038
50	19001	18005	19032
60	19001	18005	19032
70	19001	18005	19032
80	19001	18005	12016
90	19001	18005	12016
95	19001	18005	12016

Environmental Protection Agency

Estimation of Flow Duration Curve for Ungauged Catchment

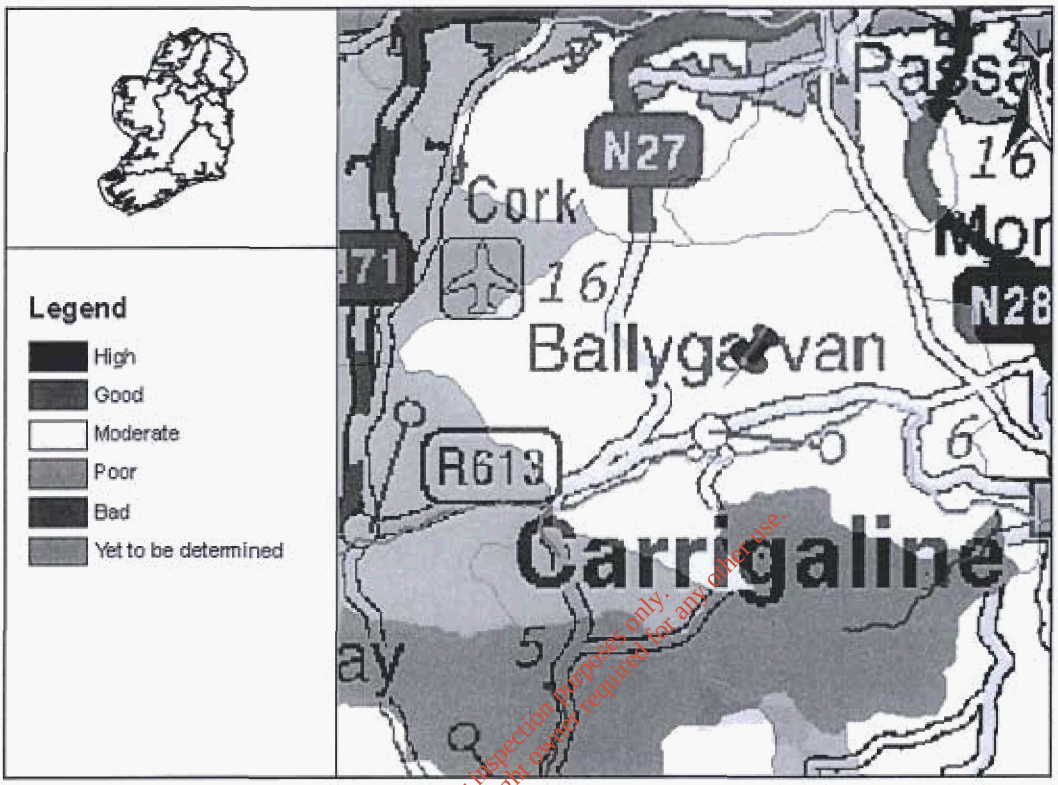
Flow Duration Curve (mm on catchment)



Log Flow (mm on catchment)			
%ile	mm	upper 95% confidence limit	lower 95% confidence limit
5	3.34	3.457	3.223
10	3.231	3.331	3.131
20	3.056	3.148	2.964
30	2.908	3.004	2.812
40	2.783	2.882	2.684
50	2.692	2.79	2.594
60	2.582	2.687	2.477
70	2.47	2.586	2.354
80	2.377	2.503	2.251
90	2.202	2.352	2.052
95	2.093	2.269	1.917

water matters
'Our Plan'

Full Report for Waterbody Owenboy



River Basin Management Plans (RBMPs) have been published for all River Basin Districts in Ireland in accordance with the requirements of the Water Framework Directive. The WaterMaps viewer is an integral part of the River Basin Management Plan and provides access to information at individual waterbody level and at Water Management Unit level for all the River Basin Districts in Ireland.

The following report provides summary plan information about the selected waterbody (indicated by the pin in the map above) relating to its status, risks, objectives, and measures proposed to retain status where this is adequate, or improve it where necessary. Waterbodies can relate to surface waters (these include rivers, lakes, estuaries [transitional waters], and coastal waters), or to groundwaters. Other relevant information not included in this report can be viewed using the WaterMaps viewer, including areas listed in the Register of Protected Areas.

You will find brief notes at the bottom of some of the individual report sheets that will help you in interpreting the information presented. More detailed information can be obtained in relation to all aspects of the RBMPs at www.wfdireland.ie.

Date Reported to Europe:July 2010

Date Report Created 17/07/2012

water matters
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Summary Information:

Water Management Unit:	IE_SW_LowerLee/Owenboy
WaterBody Category:	River Waterbody
WaterBody Name:	Owenboy
WaterBody Code:	IE_SW_19_1968
Overall Status:	Moderate
Overall Objective:	Restore_2021
Overall Risk:	1a At Risk
Heavily Modified:	No

south western river basin district

Report data based upon final RBMP, 2009-2015.

The information provided above is a summary of the principal findings related to the selected waterbody. Further details and explanation of individual elements of the report are outlined in the following pages.

Date Reported to Europe:July 2010

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water matters
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Status Report

Water Management Unit:	IE_SW_LowerLee/Owenboy
WaterBody Category:	River Waterbody
WaterBody Name:	Owenboy
WaterBody Code:	IE_SW_19_1968
Overall Status Result:	Moderate
Heavily Modified:	No

south western river basin district

	Status Element Description	Result
	Status information	
Q	Macroinvertebrate status	Moderate
PC	General physico-chemical status	High
FPQ	Freshwater Pearl Mussel / Macroinvertebrate status	N/A
DIA	Diatoms status	N/A
HYM	Hydromorphology status	N/A
FIS	Fish status	N/A
SP	Specific Pollutants status (SP)	N/A
ES	Overall ecological status	Moderate
CS	Overall chemical status (PAS)	n/a
EXT	Extrapolated status	N/A
MON	Monitored water body	YES
DON	Donor water bodies	N/A

n/a - not assessed

Status
By 'Status' we mean the condition of the water in the waterbody. It is defined by its chemical status and its ecological status, whichever is worse. Waters are ranked in one of 5 status classes: High, Good, Moderate, Poor, Bad. However, not all waterbodies have been monitored, and in such cases the status of a similar nearby waterbody has been used (extrapolated) to assign status. If this has been done the first line of the status report shows the code of the waterbody used to extrapolate.

You can read more about status and how it is measured in our RBMP Document Library at www.wfdireland.ie (Directory 15 Status).

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water matters
'our Plan'

Risk Report

Water Management Unit: IE_SW_LowerLee/Owenboy

WaterBody Category: River Waterbody

WaterBody Name: Owenboy

WaterBody Code: IE_SW_19_1968

Overall Risk Result: 1a At Risk

Heavily Modified: No

south western river basin district

	Risk Test Description		Risk
	Diffuse Risk Sources		
RD1	EPA diffuse model (2008)	1a	At Risk
RD2a	Road Wash - Soluble Copper		Not At Risk
RD2b	Road Wash - Total Zinc		Not At Risk
RD2c	Road Wash - Total Hydrocarbons		Not At Risk
RD3	Railways		Not At Risk
RD4a	Forestry - Acidification (2008)		Not At Risk
RD4b	Forestry - Suspended Solids (2008)		Not At Risk
RD4c	Forestry - Eutrophication (2008)	2a	Probably Not At Risk
RD5	Overall Unsewered (2008)		Not At Risk
RD5a	Unsewered Areas - Pathogens (2008)	2a	Probably Not At Risk
RD5b	Unsewered Phosphorus (2008)		Not At Risk
RD6a	Arable	2a	Probably Not At Risk
RD6b	Sheep Dip		Not At Risk
RD6c	Forestry - Dangerous Substances		Not At Risk
RDO	Diffuse Overall -Worst Case (2008)	1a	At Risk
	Hydrology		
RHY1	Water balance - Abstraction		Not At Risk
	Morphological Risk Sources		
RM1	Channelisation (2008)		Not At Risk
RM2	Embankments (2008)		Not At Risk
RM3	Impoundments		Not At Risk
RM4	Water Regulation		Not At Risk
RM5	Intensive Landuse		N/A
RMO	Morphology Overall - Worst Case (2008)		Not At Risk
	Overall Risk		
RA	Rivers Overall - Worst Case (2008)	1a	At Risk

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	Point Risk Sources		
RP1	WWTPs (2008)		Not At Risk
RP2	CSOs		Not At Risk
RP3	IPPCs (2008)		Not At Risk
RP4	Section 4s (2008)		Not At Risk
RP5	WTPs/Mines/Quarries/Landfills		N/A
RPO	Overall Risk from Point Sources - Worst Case (2008)		Not At Risk
	Q Value		
Q	EPA Q rating and Margaritifera Assessment		N/A
	Q/RDI or Point/Diffuse		
QPD	Q class/EPA Diffuse Model or worst case of Point and Diffuse (2008)	1a	At Risk
	Rivers Direct Impacts		
RDI1	Rivers Direct Impacts - Dangerous Substances		N/A

Risk
By 'risk' we mean the risk that a waterbody will not achieve good ecological or good chemical status/potential at least by 2015. To examine risk the various pressures acting on the waterbody were identified along with any evidence of impact on water status. Depending on the extent of the pressure and its potential for impact, and the amount of information available, the risk to the water body was placed in one of four categories: 1a at risk; 1b probably at risk; 2a probably not at risk; 2b not at risk. Note that '2008' after the risk category means that the risk assessment was revised in 2008. All other risks were determined as part of an earlier risk assessment in 2006.

You can read more about risk assessment in our 'WFD Risk Assessment Update' document in the RBMP document library, and other documents at www.wfdireland.ie (Directory 31 Risk Assessments).

Date Reported to Europe:July 2010

Date Report Created 17/07/2012

water matters
'our Plan'

Objectives Report

Water Management Unit: IE_SW_LowerLee/Owenboy

WaterBody Category: River Waterbody

WaterBody Name: Owenboy

WaterBody Code: IE_SW_19_1968

Overall Objective: [redacted]

Heavily Modified: No

south western river basin district

	Objectives Description	Result
	Extended timescale information	
E1	Extended timescales due to time requirements to upgrade WWTP discharges	No Status
E2	Extended timescales due to delayed recovery of chemical pollution and chemical status failures	No Status
E3	Extended timescales due to delayed recovery following reduction in agricultural nutrient losses	No Status
E4	Extended timescales due to delayed recovery from physical modifications and physical damage	No Status
E5	Extended timescales due to delayed recovery following implementing forestry acidification measures	No Status
E6	Extended timescales due to physical recovery timescales at mines and contaminated sites	No Status
E7	Extended timescales due to delayed recovery of highly impacted sites	No Status
E8	Extended timescales due to delayed recovery following reduction in agricultural nutrient losses	No Status
E9	Extended timescales due to delayed recovery from nitrogen losses to estuaries	2021
E10	Extended timescales due to delayed recovery following reduction in agricultural nutrient losses	No Status
E11	Extended timescales due to delayed recovery from physical modifications and physical damage (overgrazing)	No Status
E12	Extended timescales due to delayed recovery from physical modifications and physical damage (channelisation)	No Status
E13	Extended timescales from Northern Ireland Environment Agency	No Status
EOV	Overall extended timescale - combination of all extended timescales fields	2021
E14	Extended timescales due to the presence of Freshwater Pearl Mussel populations	No Status
EX15	Extended timescales due to highly impacted sites	No Status

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water matters
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	Objectives information	
OB1	Prevent deterioration objective	No Status
OB2	Restore at least good status objective	Restore_2021
OB3	Reduce chemical pollution objective	No Status
OB4	Protected areas objective	No Status
OB5	Northern Ireland Environment Agency objective	No Status
OBO	Overall objectives	Restore_2021

Extended timescales
Extended timescales have been set for certain waters due to technical, economic, environmental or recovery constraints. Extended timescales are usually of one planning cycle (6 years, to 2021) but in some cases are two planning cycles (to 2027).

Objectives
In general, we are required to ensure that our waters achieve at least good status/potential by 2015, and that their status does not deteriorate. Having identified the status of waters (this is given earlier in this report), the next stage is to set objectives for waters. Objectives consider waters that require protection from deterioration as well as waters that require restoration and the timescales needed for recovery. Four default objectives have been set initially:-

Prevent Deterioration
Restore Good Status
Reduce Chemical Pollution
Achieve Protected Areas Objectives

These objectives have been refined based on the measures available to achieve them, the latter's likely effectiveness, and consideration of cost-effective combinations of measures. Where it is considered necessary extended deadlines have been set for achieving objectives in 2021 or 2027.

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water matters
'our Plan'

Measures Report

Water Management Unit: IE_SW_LowerLee/Owenboy

WaterBody Category: River Waterbody

WaterBody Name: Owenboy

WaterBody Code: IE_SW_19_1968

Heavily Modified: No

south western river basin district

	Measures Description	Applicable
BC	Total number of basic measures which apply to this waterbody	22
BW	Directive - Bathing Waters Directive	No
BIR	Directive - Birds Directive	No
HAB	Directive - Habitats Directive	No
DW	Directive - Drinking Waters Directive	No
MAE	Directive - Major Accidents and Emergencies Directive	Yes
EIA	Directive - Environmental Impact Assessment Directive	Yes
SS	Directive - Sewage Sludge Directive	Yes
UWT	Directive - Urban Waste Water Treatment Directive	Yes
PPP	Directive - Plant Protection Products Directive	Yes
NIT	Directive - Nitrates Directive	Yes
IPC	Directive - Integrated Pollution Prevention Control Directive	Yes
CR	Other Stipulated Measure - Cost recovery for water use	Yes
SUS	Other Stipulated Measure - Promotion of efficient and sustainable water use	Yes
DWS	Other Stipulated Measure - Protection of drinking water sources	Yes
ABS	Other Stipulated Measure - Control of abstraction and impoundment	Yes
POI	Other Stipulated Measure - Control of point source discharges	Yes
DIF	Other Stipulated Measure - Control of diffuse source discharges	Yes
PS	Other Stipulated Measure - Control of priority substances	Yes
MOD	Other Stipulated Measure - Controls on physical modifications to surface waters	Yes
OA	Other Stipulated Measure - Controls on other activities impacting on water status	Yes
AP	Other Stipulated Measure - Prevention or reduction of the impact of accidental pollution incidents	Yes
TP1	WSIP - Agglomerations with treatment plants requiring capital works	Yes
TP2	WSIP - Agglomerations with treatment plants requiring further investigation prior to capital works	No
TP3	WSIP - Agglomerations requiring the implementation of actions identified in Shellfish PRPs	No
TP4	WSIP - Agglomerations with treatment plants requiring improved operational performance	No
TP5	WSIP - Agglomerations requiring investigation of CSOs	No

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TP6	WSIP - Agglomerations where exisitng treatment capacity is currently adequate but predicted loadings would result in overloading	Yes
OTS	On-site waste water treatment systems	Yes
FPM	Freshwater Pearl Mussel sub-basin plan	No
SHE	Shellfish Pollution Reduction Plan	Yes
IPR	IPPC licences requiring review	No
WPR	Water Pollution Act licences requiring review	No
FOR	Forestry guidelines and regulations	Yes
CH1	Chanelisation measures	No
CH2	Chanelisation investigations	No
OG	Overgrazing measures	No
HQW	Protect high quality waters	No

Measures

Measures are necessary to ensure that we meet the objectives set out in the previous page of this report. Many measures are already provided for in national legislation and must be implemented. Other measures have been recently introduced or are under preparation. A range of additional potential measures are also being considered but require further development. Any agreed additional measures can be introduced through the update of Water Management Unit Action Plans during the implementation process.

You can read more about Basic Measures in 'River Basin Planning Guidance' and in other documents in our RBMP Document Library at www.wfdireland.ie.

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