

Appendix B - Figure 6: River Dee Water Quality

Site details	
River name	Dee
River stretch	Conf. R. Clwedog - Conf.Overton Drain
Upstream grid ref.	X:338500, Y:342100
Downstream grid ref.	X:340900, Y:347300
Stretch length	16.8 Km
Reporting year	2009

Chemistry:

The results for each site are averaged and percentiles are calculated. We then assign an overall grade according to the lowest grade achieved in any of the three tests.

Grade A (very good) - These rivers have natural ecosystems and make very good salmonid and cyprinid fisheries. They may be used for any type of water abstraction including potable supply.

Grade F (bad) - These rivers have severely restricted ecosystems and are very polluted.

	Average	Standard deviation	Percentile 90	Percentile 10	Number of samples	Grade
Biochemical oxygen demand (mg/l)	.85	.57	1.54		36	A
Ammonia (mgN/l)	.017	.007	.007		36	A
Dissolved oxygen (percentage saturation)	102.77	8.54		91.82	36	A

Biology:

We test the samples by comparing the macro-invertebrates (small animals that can be seen with the naked eye) with the range of species we would expect to find in the river if it was not polluted and assign a grade. We take into account natural changes that happen such as geology and flow.

Grade A (very good) - The biology is similar to that expected for an unpolluted river

Grade F (bad) - The biology is limited to a small number of species very tolerant of pollution.

	Observed	Expected	Observed/expected	Probability grade %	Season code	Grade
NTAXA	30	31.1	.97	99		a
ASPT	6.47	6.1	1.06	97		a
Overall					5	a

Nitrates:

	Average	Standard deviation	Number of samples	Grade
Nitrates (mg/l)	5.14		36	2

Phosphates:

	Average	Standard deviation	Number of samples	Grade
Phosphates (mg/l)	.02		36	1

View map of this location 