NRA

National Rivers Authority
South West Region

ENVIRONMENTAL PROTECTION

River Torridge Catchment
River Water Quality
Classification 1990

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RIVER WATER QUALITY IN THE RIVER TORRIDGE CATCHMENT

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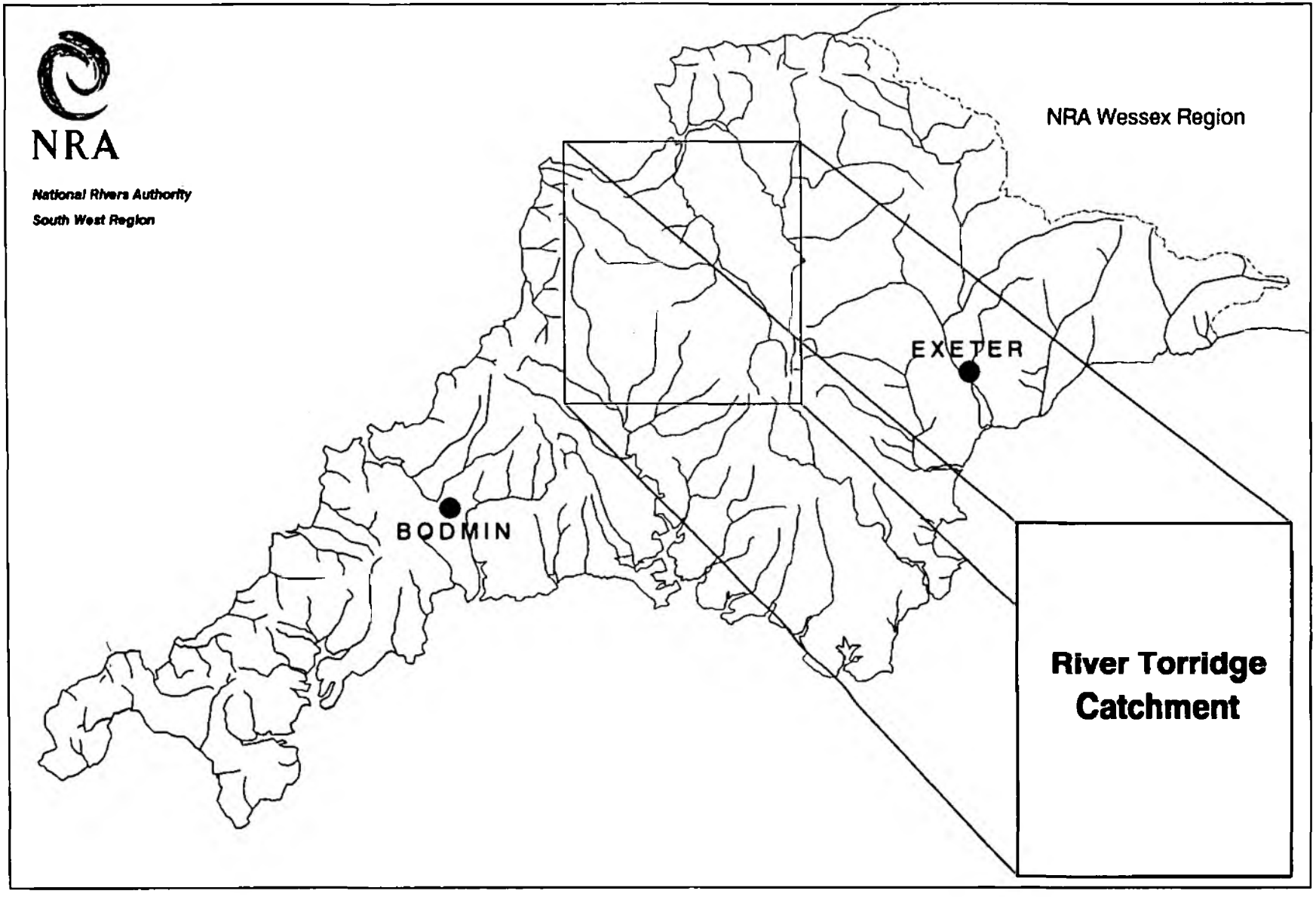


River Torridge Catchment

1. INTRODUCTION

Monitoring to assess the quality of river waters is undertaken in thirty-two catchments within the region. As part of this monitoring programme samples are collected routinely from selected monitoring points at a pre-determined frequency per year, usually twelve spaced at monthly intervals. Each monitoring point provides data for the water quality of a river reach (in kilometres) upstream of the monitoring point.

River lengths have been re-measured and variations exist over those recorded previously.

Each water sample collected from each monitoring point is analysed for a range of chemical and physical constituents or properties known as determinands. The analytical results for each sample are entered into a computer database called the Water Quality Archive.

Selected data are accessed from the Archive so that the quality of each river reach can be determined based on a River Classification System developed by the National Water Council (NWC), (9.1).

This report presents the river water quality classification for 1990 for monitored river reaches in the River Torridge catchment.

2. RIVER TORRIDGE CATCHMENT

The River Torridge flows over a distance of 75.8 km from its source to the tidal limit, (Appendix 10.1). Water quality was monitored at thirteen locations on the main river; nine of these sites were sampled at approximately monthly intervals. The site at Beam Bridge, which is a National Water Quality monitoring point, was sampled fortnightly. Sites at Pulford, Giddcott and Undercleave were sampled on twenty occasions each during 1990 because of no recent water quality data.

The River Yeo (Bideford) flows over a distance of 12.7 km from its source to the tidal limit in the Torridge Estuary, (Appendix 10.1) and was monitored at three locations.

Throughout the Torridge catchment thirteen secondary, fifteen tertiary and one quarternary tributaries of the River Torridge were monitored.

The following nineteen tributaries were sampled on twenty occasions during 1990 because of no recent water quality data: River Yeo (R29A001, R29Axxx), River Duntz, Mussel Brook, River Langtree, Whitleigh Water, Clifford Water, Seckington Water, Little Mere Water, Woolleigh Brook, Common Lake Stream, Pulworthy Brook, Medland Brook, Hookmoor Brook, Wagaford Water, North Lew Stream, Stoney Strem, River Waldon (R29C010, R29C042, R29C043), River Cookbury and Beckamoor Brook.

In addition Melbury, Gammaton, Jennetts, Darracott and Meldon Reservoirs were all monitored at approximately monthly intervals at one location.

2.1 SECONDARY TRIBUTARIES

The River Okement flows over a distance of 33.0 km from its source to the confluence with the River Torridge, (Appendix 10.1) and was monitored at ten locations.

The River Waldon (20.5 km) and the River Lew (17.8 km) were monitored at five locations between their source and confluence with the River Torridge, (Appendix 10.1).

The River Mere flows over a distance of 13.3 km from its source to the confluence with the River Torridge, (Appendix 10.1) and was monitored at three locations.

Cranford Water and the River Duntz flow over a distance of 5.5 km and 8.7 km respectively from their source to the confluence with the River Torridge, (Appendix 10.1) and were both monitored at two locations.

Clifford Water (6.0 km), Whiteleigh Water (7.6 km), Mussel Brook (8.1 km), Woolleigh Brook (8.8 km), Common Lake Stream (5.2 km), Huntshaw Water (8.1 km) and Langtree Stream (7.4 km) were all monitored at one location. Monitoring points are all located in the lower reaches of these streams.

2.2 TERTIARY STREAMS

The North Lew Stream flows over a distance of 7.3 km before joining the River Lew, (Appendix 10.1) and was monitored at three locations.

The East Okement (9.6 km) and Little Mere River (4.8 km) were both monitored at two locations between their source and the confluence with the Rivers Okement and Mere respectively.

Seckington Water (4.1 km), Dipple Water (5.3 km), Cookbury Stream (6.5 km), Pulworthy Brook (9.3 km), Wagaford Water (8.7 km), Beckamoor Brook (6.5 km), Hookmoor Brook (10.5 km), Hole Brook (10.5 km) and Medland Brook (9.1 km) were all monitored at one location. Monitoring points are all located in the lower reaches of these streams.

Brightley Stream (2.4 km), Red-a-Ven (4.3 km) and Lydeland Water (6.2 km) were all monitored at one location. Monitoring points were all located in the lower reaches of these streams.

2.3 QUARTERNARY TRIBUTARY

The Stoney Stream flows over a distance of 1.1 km from its source to the confluence with the North Lew Stream, (Appendix 10.1) and was monitored at one location.

Each sample was analysed for a minimum number of determinands (Appendix 10.2) plus additional determinands based on local knowledge of the catchment. In addition, at selected sites, metal analyses were carried out.

The analytical results from all of these samples have been entered into the Water Quality Archive and can be accessed through the Water Act Register, (9.2).

3. NATIONAL WATER COUNCIL'S RIVER CLASSIFICATION SYSTEM

3.1 River Quality Objectives

In 1978 river quality objectives (RQOs) were assigned to all river lengths that were part of the routine monitoring network and to those additional watercourses, which were not part of the routine network, but which received discharges of effluents.

For the majority of watercourses long term objectives were identified based on existing and assumed adequate quality for the long term protection of the watercourse. In a few instances short term objectives were identified but no timetable for the achievement of the associated long term objective was set.

The RQOs currently in use in the River Torridge catchment are identified in Appendix 10.1.

3.2 River Quality Classification

River water quality is classified using the National Water Council's (NWC) River Classification System (see Appendix 10.3), which identifies river water quality as being one of five quality classes as shown in Table 1 below:

Table 1 - National Water Council - River Classification System

Class	Description
1A	Good quality
1B	Lesser good quality
2	Fair quality
3	Poor quality
4	Bad quality

Using the NWC system, the classification of river water quality is based on the values of certain determinands as arithmetic means or as 95 percentiles (5 percentiles are used for pH and dissolved oxygen) as indicated in Appendices 10.4.1 and 10.4.2.

The quality classification system incorporates some of the European Inland Fisheries Advisory Commission (EIFAC) criteria (Appendix 10.3) recommended for use by the NWC system.

4. 1990 RIVER WATER QUALITY SURVEY

The 1990 regional classification of river water quality also includes the requirements of the Department of the Environment quinquennial national river quality survey. The objectives for the Department of the Environment 1990 River Quality Survey are given below:

1) To carry out a National Classification Survey based on procedures used in the 1985 National Classification Survey, including all regional differences.

2) To classify all rivers and canals included in the 1985 National Classification Survey.

3) To compare the 1990 Classification with those obtained in 1985.

In addition, those watercourses, which were not part of the 1985 Survey and have been monitored since that date, are included in the 1990 regional classification of river water quality.

5. 1990 RIVER WATER QUALITY CLASSIFICATION

Analytical data collected from monitoring during 1988, 1989 and 1990 were processed through a computerised river water quality classification programme. This resulted in a quality class being assigned to each monitored river reach as indicated in Appendix 10.5.

The quality class for 1990 can be compared against the appropriate River Quality Objective and previous annual quality classes (1985-1989) also based on three years combined data, for each river reach in Appendix 10.5.

The river water classification system used to classify each river length is identical to the system used in 1985 for the Department of the Environment's 1985 River Quality Survey. The determinand classification criteria used to determine the annual quality classes in 1985, subsequent years and for 1990 are indicated in Appendices 10.4 and 10.4.1.

Improvements to this classification system could have been made, particularly in the use of a different suspended solids standard for Class 2 waters. As the National Rivers Authority will be proposing new classification systems to the Secretary of State in the near future, it was decided to classify river lengths in 1990 with the classification used for the 1985–1989 classification period.

The adoption of the revised criteria for suspended solids in Class 2 waters would have affected the classification of the River Mere at the A386 Bridge at Merton and the Little Mere at Woodladon Moor.

The river quality classes for 1990 of monitored river reaches in the catchment are shown in map form in Appendix 10.6.

The calculated determinand statistics for pH, temperature, dissolved oxygen, biochemical oxygen demand (BOD), total ammonia, un-ionised ammonia, suspended solids, copper and zinc from which the quality class was determined for each river reach, are indicated in Appendix 10.7.

6. NON-COMPLIANCE WITH QUALITY OBJECTIVES

Those monitored river reaches within the catchment, which do not comply with their assigned (RQO), are shown in map form in Appendix 10.8.

Appendix 10.9 indicates the number of samples analysed for each determinand over the period 1988 to 1990 and the number of sample results per determinand, which exceed the determinand quality standard.

For those non-compliant river reaches in the catchment, the extent of exceedance of the calculated determinand statistic with relevant quality standard (represented as a percentage), is indicated in Appendix 10.10.

7. CAUSES OF NON-COMPLIANCE

For those river reaches, which did not comply with their assigned RQOs, the cause of non-compliance (where possible to identify) is indicated in Appendix 10.11.

8. GLOSSARY OF TERMS

RIVER REACH	A segment of water, upstream from sampling point to the next sampling point.
RIVER LENGTH	River distance in kilometres.
RIVER QUALITY OBJECTIVE	That NWC class,which protects the most sensitive use of the water.
95 percentiles	Maximum limits, which must be met for at least 95% of the time.
5 percentiles	Minimum limits, which must be met for at least 95% of the time.
BIOLOGICAL OXYGEN DEMAND (5 day carbonaceous ATU)	A standard test measuring the microbial uptake of oxygen - an estimate of organic pollution.
pH	A scale of acid to alkali.
UN-IONISED AMMONIA	Fraction of ammonia poisonous to fish, NH^3.
SUSPENDED SOLIDS	Solids removed by filtration or centrifuge under specific conditions.
USER REFERENCE NUMBER	Reference number allocated to a sampling point.
INFERRED STRETCH	Segment of water, which is not monitored and whose water quality classification is assigned from the monitored reach upstream.

9. REFERENCES

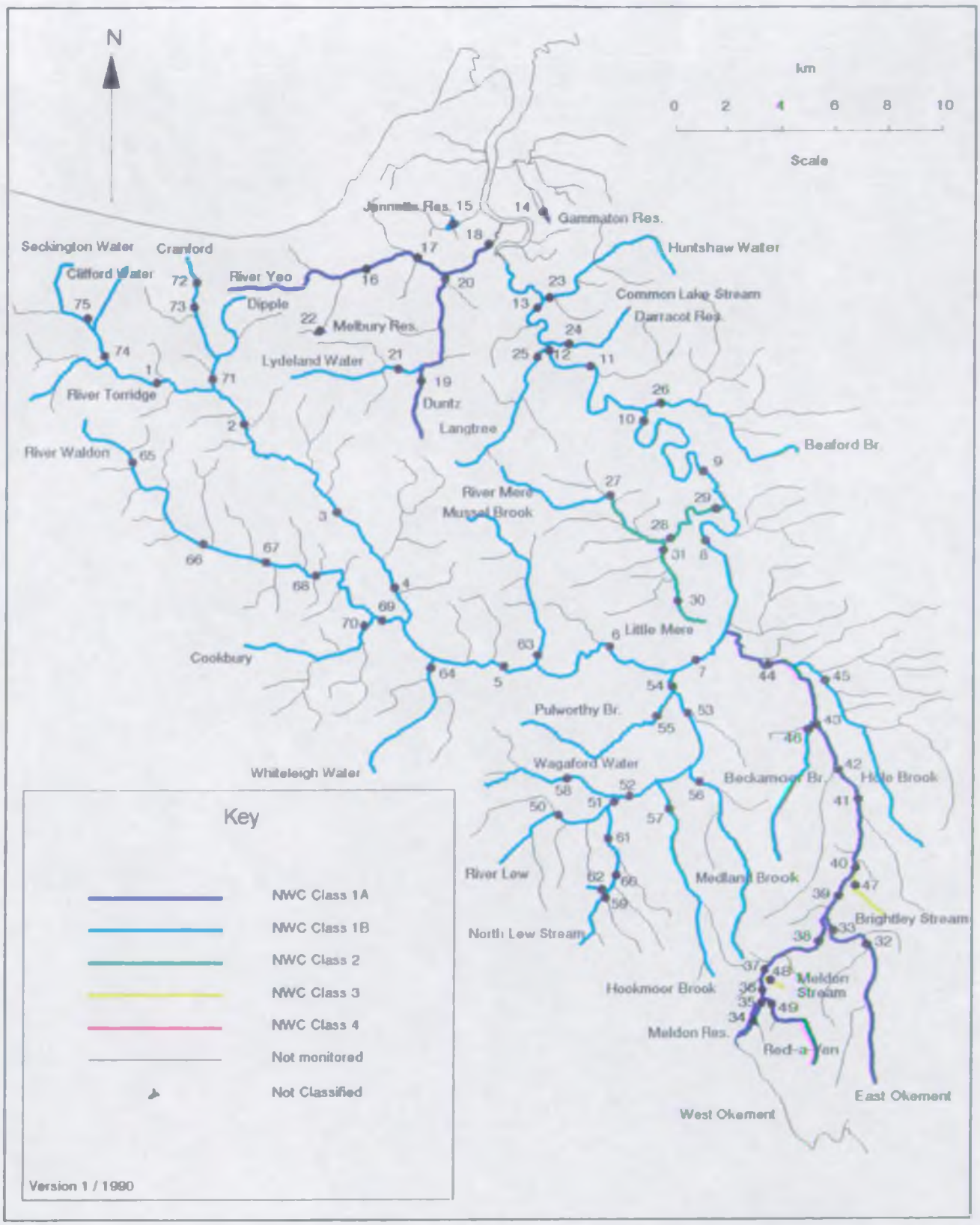
Reference

9.1 National Water Council (1977). River Water Quality: The Next Stage. Review of Discharge Consent Conditions. London.

9.2 Water Act 1989 Section 117

9.3 Alabaster J. S. and Lloyd R. Water Quality Criteria for Freshwater Fish, 2nd edition, 1982. Butterworths.

Torridge Catchment
River Quality Objectives



BASIC DETERMINAND ANALYTICAL SUITE FOR ALL CLASSIFIED RIVER SITES

pH as pH Units

Conductivity at 20 C as uS/cm

Water temperature (Cel)

Oxygen dissolved % saturation

Oxygen dissolved as mg/l O

Biochemical oxygen demand (5 day total ATU) as mg/l O

Total organic carbon as mg/l C

Nitrogen ammoniacal as mg/l N

Ammonia un-ionised as mg/l N

Nitrate as mg/l N

Nitrite as mg/l N

Suspended solids at 105 C as mg/l

Total hardness as mg/l CaCO3

Chloride as mg/l Cl

Orthophosphate (total) as mg/l P

Silicate reactive dissolved as mg/l SiO2

Sulphate (dissolved) as mg/l SO4

Sodium (total) as mg/l Na

Potassium (total) as mg/l K

Magnesium (total) as mg/l Mg

Calcium (total) as mg/l Ca

Alkalinity as pH 4.5 as mg/l CaCO3

NWC RIVER QUALITY CLASSIFICATION SYSTEM

River Class	Quality criteria	Remarks	Current potential uses
	Class limiting criteria (95 percentile)		
1A Good Quality	(i) Dissolved oxygen saturation greater than 80% (ii) Biochemical oxygen demand not greater than 3 mg/l (iii) Ammonia not greater than 0.4 mg/l (iv) Where the water is abstracted for drinking water, it complies with requirements for A2* water (v) Non-toxic to fish in EIFAC terms (or best estimates if EIFAC figures not available)	(i) Average BOD probably not greater than 1.5 mg/l (ii) Visible evidence of pollution should be absent	(i) Water of high quality suitable for potable supply abstractions and for all abstractions (ii) Game or other high class fisheries (iii) High amenity value
1B Good Quality	(i) DO greater than 60% saturation (ii) BOD not greater than 5 mg/l (iii) Ammonia not greater than 0.9 mg/l (iv) Where water is abstracted for drinking water, it complies with the requirements for A2* water (v) Non-toxic to fish in EIFAC terms (or best estimates if EIFAC figures not available)	(i) Average BOD probably not greater than 2 mg/l (ii) Average ammonia probably not greater than 0.5 mg/l (iii) Visible evidence of pollution should be absent (iv) Waters of high quality which cannot be placed in Class 1A because of the high proportion of high quality effluent present or because of the effect of physical factors such as canalisation, low gradient or eutrophication (v) Class 1A and Class 1B together are essentially the Class 1 of the River Pollution Survey (RPS)	Water of less high quality than Class 1A but usable for substantially the same purposes
2 Fair Quality	(i) DO greater than 40% saturation (ii) BOD not greater than 9 mg/l (iii) Where water is abstracted for drinking water it complies with the requirements for A3* water (iv) Non-toxic to fish in EIFAC terms (or best estimates if EIFAC figures not available)	(i) Average BOD probably not greater than 5 mg/l (ii) Similar to Class 2 of RPS (iii) Water not showing physical signs of pollution other than humic colouration and a little foaming below weirs	(i) Waters suitable for potable supply after advanced treatment (ii) Supporting reasonably good coarse fisheries (iii) Moderate amenity value

Poor quality	(i) DO greater than 10% saturation (ii) Not likely to be anaerobic (iii) BOD not greater than 17 mg/l. This may not apply if there is a high degree of re-aeration		Similar to Class 3 of RPS	Waters which are polluted to an extent that fish are absent only sporadically present. May be used for low grade industrial abstraction purposes. Considerable potential for further use if cleaned up
4 Bad quality	Waters which are inferior to Class 3 in terms of dissolved oxygen and likely to be anaerobic at times		Similar to Class 4 of RPS	Waters which are grossly polluted and are likely to cause nuisance
X	DO greater than 10% saturation			Insignificant watercourses and ditches not usable, where the objective is simply to prevent nuisance developing

tes (a) Under extreme weather conditions (eg flood, drought, freeze-up), or when dominated by plant growth, or by aquatic plant decay, rivers usually in Class 1, 2, and 3 may have BODs and dissolved oxygen levels, or ammonia content outside the stated levels for those Classes. When this occurs the cause should be stated along with analytical results.

(b) The BOD determinations refer to 5 day carbonaceous BOD (ATU). Ammonia figures are expressed as NH_4. **

(c) In most instances the chemical classification given above will be suitable. However, the basis of the classification is restricted to a finite number of chemical determinands and there may be a few cases where the presence of a chemical substance other than those used in the classification markedly reduces the quality of the water. In such cases, the quality classification of the water should be down-graded on the basis of biota actually present, and the reasons stated.

(d) EIFAC (European Inland Fisheries Advisory Commission) limits should be expressed as 95 percentile limits.

EEC category A2 and A3 requirements are those specified in the EEC Council directive of 16 June 1975 concerning the Quality of Surface Water intended for Abstraction of Drinking Water in the Member State.

** Ammonia Conversion Factors

($mg\ NH_4/l$ to $mg\ N/l$)

Class 1A 0.4 $mg\ NH_4/l$ = 0.31 $mg\ N/l$
Class 1B 0.9 $mg\ NH_4/l$ = 0.70 $mg\ N/l$
0.5 $mg\ NH_4/l$ = 0.39 $mg\ N/l$

NWC RIVER CLASSIFICATION SYSTEM

CRITERIA USED BY NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION FOR NON-METALLIC DETERMINANDS

River Class	Quality Criteria
1A	Dissolved oxygen % saturation greater than 80% BOD (ATU) not greater than 3 mg/l O Total ammonia not greater than 0.31 mg/l N Non-ionised ammonia not greater than 0.021 mg/l N Temperature not greater than 21.5 C pH greater than 5.0 and less than 9.0 Suspended solids not greater than 25 mg/l
1B	Dissolved oxygen % saturation greater than 60% BOD (ATU) not greater than 5 mg/l O Total ammonia not greater than 0.70 mg/l N Non-ionised ammonia not greater than 0.021 mg/l N Temperature not greater than 21.5 C pH greater than 5.0 and less than 9.0 Suspended solids not greater than 25 mg/l
2	Dissolved oxygen & saturation greater than 40% BOD (ATU) not greater than 9 mg/l O Total ammonia not greater than 1.56 mg/l N Non-ionised ammonia not greater than 0.021 mg/l N Temperature not greater than 28 C pH greater than 5.0 and less than 9.0 Suspended solids not greater than 25 mg/l
3	Dissolved oxygen % saturation greater than 10% BOD (ATU) not greater than 17 mg/l O
4	Dissolved oxygen % saturation not greater than 10% BOD (ATU) greater than 17 mg/l O

STATISTICS USED BY NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION

Determinand	Statistic
Dissolved oxygen	5 percentile
BOD (ATU)	95 percentile
Total ammonia	95 percentile
Non-ionised ammonia	95 percentile
Temperature	95 percentile
pH	5 percentile
	95 percentile
Suspended solids	arithmetic mean

NWC RIVER CLASSIFICATION SYSTEM

CRITERIA USED BY NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION FOR METALLIC DETERMINANDS

SOLUBLE COPPER

Total Hardness (mean) mg/l CaCO3	Statistic	Soluble Copper* ug/l Cu Class 1	Class 2
0 - 10	95 percentile	< = 5	> 5
10 - 50	95 percentile	< = 22	> 22
50 - 100	95 percentile	< = 40	> 40
100 - 300	95 percentile	< = 112	> 112

* Total copper is used for classification until sufficient data on soluble copper can be obtained.

TOTAL ZINC

Total Hardness (mean) mg/l CaCO3	Statistic	Total Zinc ug/l Zn Class 1	Class 2	Class 3
0 - 10	95 percentile	< = 30	< = 300	> 300
10 - 50	95 percentile	< = 200	< = 700	> 700
50 - 100	95 percentile	< = 300	< = 1000	> 1000
100 - 300	95 percentile	< = 500	< = 2000	> 2000

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CATCHMENT: TORRIDGE (32)

1990 Map Position Number	River	Reach upstream of	User Reference Number	National Grid Reference	Reach Length (km)	Distance from source (km)	River Quality Objective	85 NWC Class	86 NWC Class	87 NWC Class	88 NWC Class	89 NWC Class	90 NWC Class
1	TORRIDGE	FORDMILL FARM	R29C001	SS 3251 1776	6.9	6.9	1B	1B	1B	1B	1B	1A	1B
2	TORRIDGE	PUTFORD BRIDGE	R29C032	SS 3639 1592	5.6	12.5	1B	1B	1B	1B	1B	1A	1B
3	TORRIDGE	WOODFORD BRIDGE	R29C002	SS 3987 1253	5.9	18.4	1B	1B	1B	1B	1B	1A	1A
4	TORRIDGE	GIDCOTT	R29C033	SS 4222 0942	4.8	23.2	1B	1B	2	2	2	2	1B
5	TORRIDGE	KINGSLEY MILL	R29C003	SS 4696 0608	8.8	32.0	1B	1B	2	2	2	2	2
6	TORRIDGE	ROCKHAY BRIDGE	R29C004	SS 5064 0699	6.1	38.1	1B	2	2	2	2	1B	1B
7	TORRIDGE	HELE BRIDGE	R29C005	SS 5401 0632	4.2	42.3	1B	2	2	2	2	1B	1B
8	TORRIDGE	NEWBRIDGE	R29B001	SS 5484 1121	6.5	48.8	1B	2	2	1B	1B	1B	1B
9	TORRIDGE	BEAFORD BRIDGE	R29B002	SS 5426 1429	5.8	54.6	1B	2	2	1B	1B	1B	1B
10	TORRIDGE	UNDERCLEAVE	R29B038	SS 5179 1655	9.9	64.5	1B	2	2	1B	1B	1B	3
11	TORRIDGE	TOWN MILLS TORRINGTON	R29B003	SS 4998 1838	4.7	69.2	1B	2	2	1B	1B	1B	1B
12	TORRIDGE	ROTHERN BRIDGE	R29B004	SS 4791 1974	2.9	72.1	1B	2	2	2	1B	1B	1B
13	TORRIDGE	BEAM BRIDGE	R29B034	SS 4737 2092	2.4	74.5	1B	2	2	2	2	1B	1B
	TORRIDGE	NORMAL TIDAL LIMIT (INFERRED STRETCH)			1.3	75.8	1B	2	2	2	2	1B	1B
	GAMMATON STREAM	INFLOW, GAMMATON RES. (UNMON. STRETCH)			0.2	0.2	1B						
14	GAMMATON STREAM	GAMMATON RESERVOIR	R29B013	SS 4847 2505	0.3	0.5	1B						1A
	GAMMATON STREAM	HORWOOD STREAM CONFL. (UNMON. STRETCH)			0.3	0.7	1B						
	JENNETT'S STREAM	INFLOW, JENNETT'S RES. (UNMON. STRETCH)			2.7	2.7	1B						
15	JENNETT'S STREAM	JENNETS RESERVOIR	R29A014	SS 4441 2471	0.5	3.2	1B						2
	JENNETT'S STREAM	NORMAL TIDAL LIMIT (UNMON. STRETCH)			1.1	4.3	1B						
16	YEO(BIDEFORD)	TUCKINGMILL	R29A002	SS 4018 2248	5.8	5.8	1A	2	2	2	2	2	1B
17	YEO(BIDEFORD)	HOOPERS	R29A015	SS 4276 2313	3.1	8.9	1A	2	2	2	2	2	1B
18	YEO(BIDEFORD)	HEALE HOUSE	R29A003	SS 4537 2350	3.7	12.6	1A	2	2	2	2	2	1B
	YEO(BIDEFORD)	NORMAL TIDAL LIMIT (INFERRED STRETCH)			0.1	12.7	1A	2	2	2	2	2	1B
19	DUNTZ	HEMBURY	R29A004	SS 4294 1782	2.9	2.9	1A	2	2	2	2	2	2
20	DUNTZ	ORLEIGH MILLS	R29A005	SS 4392 2241	5.7	8.6	1A	2	2	2	2	2	2
	DUNTZ	YEO(BIDEFORD) CONFL. (INFERRED STRETCH)			0.1	8.7	1A	2	2	2	2	2	2
21	LYDELAND WATER	WATER BRIDGE	R29A006	SS 4193 1838	4.9	4.9	1B	1A	2	2	2	2	1B
	LYDELAND WATER	DUNTZ CONFLUENCE (INFERRED STRETCH)			1.3	6.2	1B	1A	2	2	2	2	1B
	MELBURY STREAM	INFLOW, MELBURY RES. (UNMON. STRETCH)			0.6	0.6	1B						
22	MELBURY STREAM	MELBURY RESERVOIR	R29A012	SS 3861 2010	0.4	1.0	1B						1B
	MELBURY STREAM	YEO(BIDEFORD) CONFL. (UNMON. STRETCH)			2.6	3.6	1B						
23	HUNTSHAW WATER	BRIDGE AT VAN'S WOOD	R29B032	SS 4791 2147	8.0	8.0	1B						
	HUNTSHAW WATER	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.1	8.1	1B						
	COMMON LAKE	OUTFLOW, BLACKATON RES. (UNMON. STRETCH)			0.6	0.6	1B						
24	COMMON LAKE	TANTONS PLAIN	R29B039	SS 4931 1984	2.9	3.5	1B						3
	COMMON LAKE	TORRIDGE CONFLUENCE (INFERRED STRETCH)			1.7	5.2	1B						3

Appendix 10.5

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CATCHMENT: TORRIDGE (32)

1990 Map Position Number	River	Reach upstream of	User Reference Number	National Grid Reference	Reach Length (km)	Distance from source (km)	River Quality Objective	85 NWC Class	86 NWC Class	87 NWC Class	88 NWC Class	89 NWC Class	90 NWC Class
25	LANGTREE LAKE	SERVICE FARM	R29A016	SS 4776 1922	6.9	6.9	1B						2
	LANGTREE LAKE	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.5	7.4	1B						2
26	WOOLLEIGH BROOK	CASTLE HILL	R29B037	SS 5222 1714	8.1	8.1	1B						2
	WOOLLEIGH BROOK	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.7	8.8	1B						2
27	MERE	COLEFORD BRIDGE	R29B007	SS 5023 1326	5.4	5.4	1B	2	3	3	3	2	2
28	MERE	A386 BRIDGE AT MERTON	R29B008	SS 5265 1129	3.9	9.3	2	1B	2	2	2	2	3
29	MERE	GREATWOOD	R29B009	SS 5498 1287	3.8	13.1	2	1B	3	3	3	2	1B
	MERE	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.2	13.3	2	1B	3	3	3	2	1B
30	LITTLE MERE RIVER	WOOLADON MOOR	R29B005	SS 5336 0841	1.5	1.5	2	1B	2	2	2	1B	3
31	LITTLE MERE RIVER	BURYMOOR BRIDGE	R29B006	SS 5257 1108	2.9	4.4	2	1B	2	2	2	1B	1B
	LITTLE MERE RIVER	MERE CONFLUENCE (INFERRED STRETCH)			0.4	4.8	2	1B	2	2	2	1B	1B
32	EAST OKEMENT RIVER	200M ABOVE FATHERFORD RAIL	R29D031	SX 6046 9461	6.9	6.9	1A	1A	1A	1A	1A	1A	
33	EAST OKEMENT RIVER	A30 BRIDGE AT OKEHAMPTON	R29D001	SX 5887 9522	2.4	9.3	1A	1A	1A	1A	1A	1A	1A
	EAST OKEMENT RIVER	OKEMENT CONFLUENCE (INFERRED STRETCH)			0.3	9.6	1A	1A	1A	1A	1A	1A	1A
	WEST OKEMENT RIVER	INFLOW, MELDON RES. (UNMON. STRETCH)			9.1	9.1	1A	1A	1A	1A	1A	1A	
34	WEST OKEMENT RIVER	MELDON RESERVOIR	R29D053	SX 5615 9144	1.3	10.4	1A	1A	1A	1A	1A	1A	3
35	WEST OKEMENT RIVER	BELOW MELDON DAM	R29D027	SX 5643 9184	0.3	10.7	1A	1A	1A	1A	1A	1A	2
36	WEST OKEMENT RIVER	MELDON VIADUCT	R29D032	SX 5647 9233	0.5	11.2	1A	1A	1A	1A	1A	1A	2
37	WEST OKEMENT RIVER	200M BELOW OF MELDON QUARRY BRIDGE	R29D030	SX 5667 9335	1.3	12.5	1A	1A	1A	1A	1A	1A	2
38	WEST OKEMENT RIVER	OKEHAMPTON HOSPITAL	R29D002	SX 5865 9470	2.5	15.0	1A	1A	1A	1A	1A	1A	1A
39	OKEMENT	KNOWLE BRIDGE	R29D026	SX 5930 9630	2.0	17.0	1A	1A	1B	1B	1B	1A	1A
40	OKEMENT	BRIGHTLEY BRIDGE	R29D003	SX 5987 9745	1.4	18.4	1A	1A	1B	1B	1B	1A	1A
41	OKEMENT	SOUTH DORNAFORD	R29D004	SS 5995 0013	3.3	21.7	1A	1B	1B	1B	1B	1B	1B
42	OKEMENT	JACOBSTOWE	R29D008	SS 5925 0172	2.3	24.0	1A	1B	1B	1B	1A	1B	1A
43	OKEMENT	WOODHALL BRIDGE	R29D005	SS 5847 0340	3.6	27.6	1A	1B	1B	1B	1A	1B	1B
44	OKEMENT	IDDESLEIGH BRIDGE	R29D006	SS 5679 0585	2.7	30.3	1A	2	1B	1B	1B	1B	1B
	OKEMENT	TORRIDGE CONFLUENCE (INFERRED STRETCH)			2.7	33.0	1A	2	1B	1B	1B	1B	1B
45	HOLE BROOK	MONKOKEHAMPTON	R29D007	SS 583 056	9.4	9.4	1B	2	1B	1B	2	2	2
	HOLE BROOK	OKEMENT CONFLUENCE (INFERRED STRETCH)			1.1	10.5	1B	2	1B	1B	2	2	2
46	BECKAMOOR BROOK	TERRIS BRIDGE	R29D052	SS 5820 0330	6.1	6.1	1B	1B					2
	BECKAMOOR BROOK	OKEMENT CONFLUENCE (INFERRED STRETCH)			0.4	6.5	1B	1B					2
47	BRIGHTLEY STREAM	BRIGHTLEY MILL	R29D025	SX 5970 9709	2.3	2.3	3	3	3	3	1B	3	3
	BRIGHTLEY STREAM	OKEMENT CONFLUENCE (INFERRED STRETCH)			0.1	2.4	3	3	3	3	1B	3	3
48	MELDON STREAM	BRIDGE BELOW OF MELDON QUARRY	R29D029	SX 5665 9305	1.4	1.4	3				3	3	3
	MELDON STREAM	WEST OKEMENT CONFL. (INFERRED STRETCH)			0.1	1.5	3				3	3	3

Appendix 10.5

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CATCHMENT: TORRIDGE (32)

1990 Map Position Number	River	Reach upstream of	User Reference Number	National Grid Reference	Reach Length (km)	Distance from source (km)	River Quality Objective	85 NWC Class	86 NWC Class	87 NWC Class	88 NWC Class	89 NWC Class	90 NWC Class
49	RED-A-VEN BROOK	PRIOR TO WEST OKEMENT RIVER	R29D028	SX 5641 9199	4.3	4.3	1A		3	2	2	2	1A
50	LEW	HOLE STOCK BRIDGE	R29C006	SS 4887 0003	4.3	4.3	1B	1B	2	2	2	2	2
51	LEW	BLOOMAFORD	R29C025	SS 5078 0064	3.0	7.3	1B	2	3	3	1B	1B	1B
52	LEW	GREAT RUTLEIGH	R29C007	SS 5140 0079	0.9	8.2	1B	2	2	1B	1B	2	2
53	LEW	HATHERLEIGH BRIDGE	R29C008	SS 5406 0416	6.9	15.1	1B	1B	1B	1B	1B	1B	1B
54	LEW	LEWER BRIDGE	R29C009	SS 5313 0525	1.8	16.9	1B	2	3	1B	1B	2	1B
	LEW	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.9	17.8	1B	2	3	1B	1B	2	1B
55	PULWORTHY BROOK	FURZEHILL	R29C021	SS 5268 0432	8.1	8.1	1B						3
	PULWORTHY BROOK	LEW CONFLUENCE (INFERRED STRETCH)			1.2	9.3	1B						3
56	MEDLAND BROOK	WATERHOUSE	R29C022	SS 5481 0133	7.4	7.4	1B						1B
	MEDLAND BROOK	LEW CONFLUENCE (INFERRED STRETCH)			1.7	9.1	1B						1B
57	HOOKMOOR BROOK	NARRACOTT FORD	R29C023	SS 5307 0072	9.6	9.6	1B						2
	HOOKMOOR BROOK	LEW CONFLUENCE (INFERRED STRETCH)			0.9	10.5	1B						2
58	WAGAFORD WATER	WAGAFORD BRIDGE	R29C024	SS 4882 0168	5.7	5.7	1B						2
	WAGAFORD WATER	LEW CONFLUENCE (INFERRED STRETCH)			3.0	8.7	1B						2
59	NORTH LEW STREAM	WIGDON MILL	R29C028	SX 5059 9692	3.0	3.0	1B		3	3	1B	1B	1B
60	NORTH LEW STREAM	KENNEL BRIDGE	R29C027	SX 5094 9765	0.9	3.9	1B		3	3	1B	1B	2
61	NORTH LEW STREAM	NORTH LEW	R29C026	SX 5075 9765	1.8	5.7	1B		3	3	1B	1B	2
	NORTH LEW STREAM	LEW CONFLUENCE (INFERRED STRETCH)			1.6	7.3	1B		3	3	1B	1B	2
62	STONEY STREAM	COOMBE	R29C029	SX 5045 9700	0.9	0.9	1B						1B
	STONEY STREAM	NORTH LEW STREAM CONFL. (INF. STRETCH)			0.2	1.1	1B						1B
63	MUSSEL BROOK	WESTOVER	R29C038	SS 4777 0645	7.8	7.8	1B						1B
	MUSSEL BROOK	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.3	8.1	1B						1B
64	WHITELEIGH WATER	DIPPERMILL	R29C039	SS 4389 0638	7.4	7.4	1B						1B
	WHITELEIGH WATER	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.2	7.6	1B						1B
65	WALDON	BERRIDON COTTAGE	R29C010	SS 3184 1408	3.5	3.5	1B	2	2	1B	1B	1B	2
66	WALDON	SUTCOMBE	R29C030	SS 3468 1096	5.4	8.9	1B	2	2	1B	1B	1B	1B
67	WALDON	WALDON BRIDGE	R29C011	SS 3684 1041	2.7	11.6	1B	2	2	1B	1B	1B	1B
68	WALDON	BERRY FARM	R29C042	SS 3922 0986	3.1	14.7	1B	1B	1A	1A	1A	2	2
69	WALDON	HENSCOTT BRIDGE	R29C012	SS 4151 0804	4.4	19.1	1B	1B	1A	1A	1A	2	2
	WALDON	TORRIDGE CONFLUENCE (INFERRED STRETCH)			1.4	20.5	1B	1B	1A	1A	1A	2	2
70	COOKBURY STREAM	BASON CROSS	R29C043	SS 4122 0801	6.2	6.2	1B						1B
	COOKBURY STREAM	WALDON CONFLUENCE (INFERRED STRETCH)			0.3	6.5	1B						1B

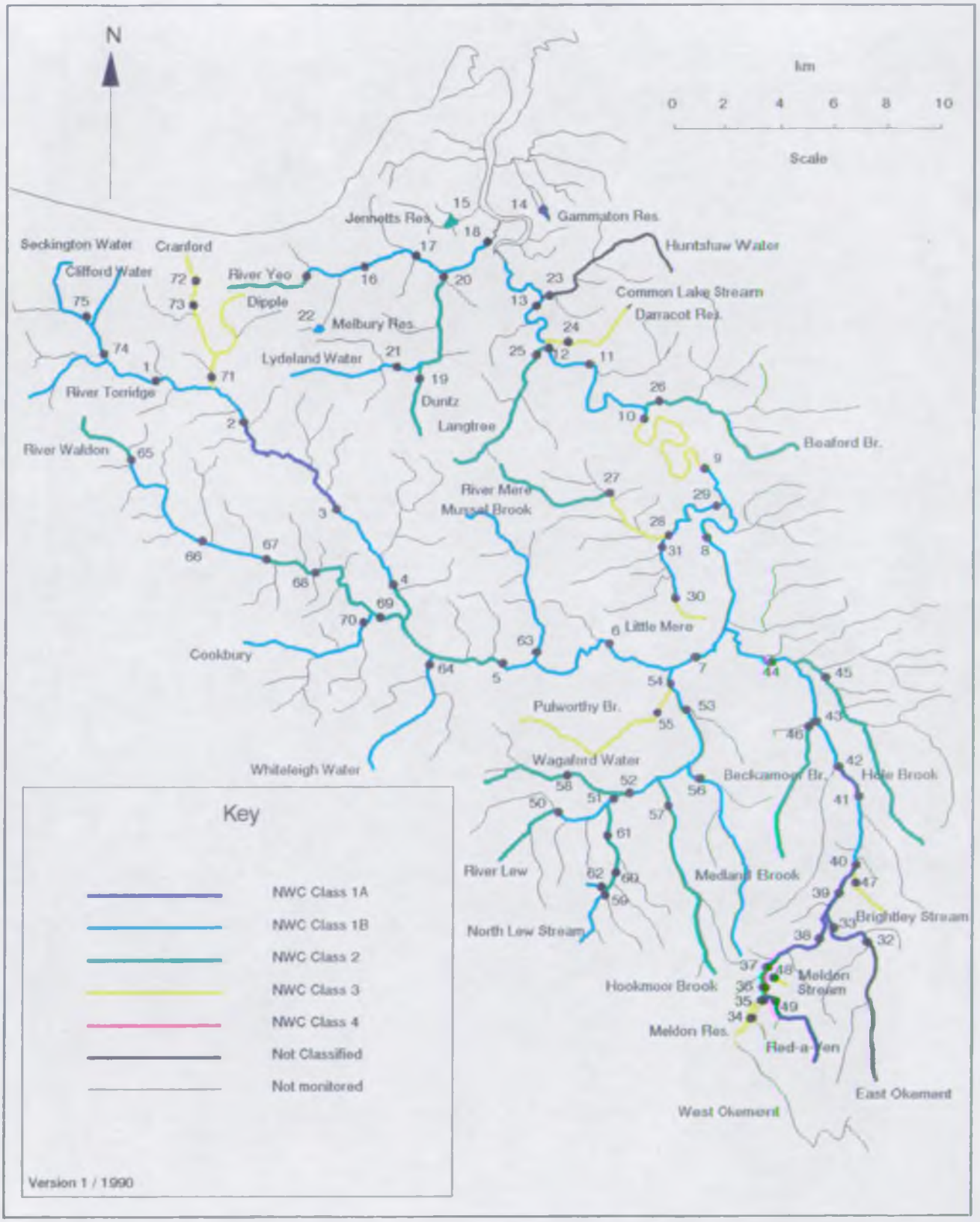
Appendix 10.5

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CATCHMENT: TORRIDGE (32)

1990 Map Position Number	River	Reach upstream of	User Reference Number	National Grid Reference	Reach Length (km)	Distance from source (km)	River Quality Objective	85 NWC Class	86 NWC Class	87 NWC Class	88 NWC Class	89 NWC Class	90 NWC Class
71	DIPPLE WATER	DIPPLE BRIDGE	R29C013	SS 3495 1776	4.8	4.8	1B	3	3	2	2	2	3
	DIPPLE WATER	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.5	5.3	1B	3	3	2	2	2	3
72	CRANFORD WATER	LANEMILL BRIDGE	R29C044	SS 3415 2053	2.2	2.2	1B						3
73	CRANFORD WATER	CRANFORD WATER	R29C046	SS 3413 2134	1.0	3.2	1B						3
	CRANFORD WATER	DIPPLE WATER CONFL. (INFERRED STRETCH)			2.3	5.5	1B						3
74	CLIFFORD WATER	BITEFORD	R29C040	SS 3021 1893	5.3	5.3	1B						1B
	CLIFFORD WATER	TORRIDGE CONFLUENCE (INFERRED STRETCH)			0.7	6.0	1B						1B
75	SECKINGTON WATER	GORVIN	R29C041	SS 2980 2001	3.9	3.9	1B						1B
	SECKINGTON WATER	CLIFFORD WATER CONFL. (INFERRED STRETCH)			0.2	4.1	1B						1B

Appendix 10.5

Torridge Catchment
Water Quality - 1990



NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CALCULATED DETERMINAND STATISTICS USED FOR QUALITY ASSESSMENT
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	90 NWC Class	Calculated Determinand Statistics used for Quality Assessment																			
				pH Lower		pH Upper		Temperature		DO (%)		BOD (ATU)		Total Ammonia		Union. Ammonia		S.Solids		Total Copper		Total Zinc	
				Class	5%ile	Class	95%ile	Class	95%ile	Class	5%ile	Class	95%ile	Class	95%ile	Class	95%ile	Class	Mean	Class	95%ile	Class	95%ile
TORRIDGE	FORDMILL FARM	R29C001	1B	1A	6.6	1A	7.8	1A	17.7	1A	81.1	1B	3.5	1A	0.270	1A	0.010	1A	7.1	–	–	–	–
TORRIDGE	PUTFORD BRIDGE	R29C032	1B	1A	6.9	1A	7.7	1A	18.0	1B	74.4	1B	3.6	1B	0.330	1A	0.010	1A	7.5	1A	5.0	1A	15.9
TORRIDGE	WOOLFORD BRIDGE	R29C002	1A	1A	6.7	1A	7.7	1A	17.2	1A	85.0	1A	3.0	1A	0.202	1A	0.010	1A	8.0	–	–	–	–
TORRIDGE	GUIDCOTT	R29C033	1B	1A	6.9	1A	7.7	1A	18.0	1A	81.0	1B	3.2	1B	0.393	1A	0.010	1A	8.9	–	–	–	–
TORRIDGE	KINGSLEY MILL	R29C003	2	1A	6.8	1A	7.8	1A	18.5	1A	83.0	2	6.4	2	0.702	1A	0.010	1A	18.1	1A	6.0	1A	21.3
TORRIDGE	ROCKHAY BRIDGE	R29C004	1B	1A	6.8	1A	7.9	1A	21.0	1A	82.2	1B	3.5	1A	0.159	1A	0.010	1A	7.8	–	–	–	–
TORRIDGE	HELE BRIDGE	R29C005	1B	1A	6.8	1A	7.8	1A	21.0	1B	74.3	1B	3.3	1A	0.134	1A	0.010	1A	8.4	1A	8.5	1A	58.8
TORRIDGE	NEWBRIDGE	R29B001	1B	1A	6.8	1A	7.7	1A	18.8	1A	84.2	1B	4.4	1B	0.332	1A	0.010	1A	13.0	1A	6.6	1A	34.0
TORRIDGE	BEAFORD BRIDGE	R29B002	1B	1A	6.8	1A	7.8	1A	18.7	1A	84.9	1B	4.4	1B	0.400	1A	0.010	1A	15.6	1A	7.4	1A	29.8
TORRIDGE	UNDERCLEAVE	R29B038	3	1A	7.1	3	9.3	1A	18.5	1A	83.0	1B	3.7	1A	0.170	1A	0.010	1A	19.2	–	–	–	–
TORRIDGE	TOWN MILLS TORRINGTON	R29B003	1B	1A	6.9	1A	7.8	1A	17.6	1A	84.4	1B	4.0	1A	0.229	1A	0.010	1A	9.8	1A	13.1	1A	25.7
TORRIDGE	ROTHERN BRIDGE	R29B004	1B	1A	7.0	1A	7.8	1A	18.0	1B	78.1	1B	3.6	1A	0.233	1A	0.010	1A	11.3	1A	5.4	1A	17.1
TORRIDGE	BEAM BRIDGE	R29B034	1B	1A	6.8	1A	7.9	1A	18.6	1A	83.8	1B	3.7	1A	0.246	1A	0.010	1A	11.5	1A	5.6	1A	22.8
GAMMON STREAM	GAMMON RESERVOIR	R29B013	1A	1A	6.7	1A	7.7	–	–	–	–	–	–	–	–	–	–	1A	22.8	–	–	–	–
JENNETT'S STREAM	JENNETS RESERVOIR	R29A014	2	1A	7.1	1A	8.3	2	23.0	2	53.0	2	5.5	1A	0.280	1A	0.010	1A	13.6	–	–	–	–
YEO(BIDEFORD)	FORDINN	R29A001	2	1A	7.2	1A	7.9	1A	16.5	1A	87.0	1A	2.4	1A	0.160	1A	0.010	1A	9.8	2	50.0	1A	50.0
YEO(BIDEFORD)	TUCKINGMILL	R29A002	1B	1A	7.3	1A	7.8	1A	16.7	1B	78.6	1B	5.0	1B	0.385	1A	0.010	1A	16.3	–	–	–	–
YEO(BIDEFORD)	HOOPERS	R29A015	1B	1A	7.3	1A	7.8	1A	17.5	1A	85.0	1B	4.7	1A	0.230	1A	0.010	1A	7.3	1A	7.0	1A	7.0
YEO(BIDEFORD)	HEALE HOUSE	R29A003	1B	1A	7.2	1A	7.8	1A	17.0	1B	61.0	1B	4.8	1B	0.312	1A	0.010	1A	17.5	1A	7.4	1A	20.4
DUNTZ	HEMBURY	R29A004	2	1A	7.1	1A	7.8	1A	16.4	1A	85.3	1A	2.9	2	0.943	1A	0.010	1A	10.2	1A	6.0	1A	16.8
DUNTZ	CHELEIGH MILLS	R29A005	2	1A	7.2	1A	7.7	1A	17.0	1B	80.0	2	5.1	1B	0.498	1A	0.010	1A	16.7	1A	5.4	1A	17.4
LYDELAND WATER	WATER BRIDGE	R29A006	1B	1A	7.0	1A	7.6	1A	16.4	1A	82.6	1B	4.5	1B	0.570	1A	0.010	1A	10.9	1A	6.6	1A	14.4
MELBURY STREAM	MELBURY RESERVOIR	R29A012	1B	1A	6.2	1A	7.4	1A	20.0	1B	75.0	1A	3.0	1A	0.060	1A	0.010	1A	4.2	–	–	–	–
COMMON LAKE	TINNINGS PLAIN	R29B039	3	1A	7.0	3	9.6	1A	17.0	1B	77.0	2	6.2	3	15.600	3	0.070	1A	17.9	1A	8.0	1A	49.0
LANGTREE LAKE	SERVICE FARM	R29A016	2	1A	7.3	1A	7.9	1A	17.5	1B	78.0	2	8.3	1B	0.530	1A	0.010	1A	11.2	–	–	–	–
MOLLEIGH BROOK	CASTLE HILL	R29B037	2	1A	7.2	1A	7.8	1A	17.0	1B	79.0	2	6.7	1A	0.240	1A	0.010	1A	11.3	–	–	–	–
MERE	COLEFORD BRIDGE	R29B007	2	1A	7.0	1A	7.5	1A	17.6	1B	67.2	2	6.2	2	1.023	1A	0.010	1A	9.5	–	–	–	–
MERE	A386 BRIDGE AT MERTON	R29B008	3	1A	7.0	1A	7.6	1A	17.7	1B	64.9	1B	3.5	1B	0.575	1A	0.010	3	30.1	–	–	–	–
MERE	GREENWOOD	R29B009	1B	1A	6.9	1A	8.0	1A	19.4	1B	73.9	1B	3.3	1A	0.220	1A	0.010	1A	23.5	1A	5.9	1A	10.9
LITTLE MERE RIVER	WOOLADON MOOR	R29B005	3	1A	6.3	1A	7.8	1A	17.5	1B	63.0	2	8.4	1B	0.500	1A	0.010	3	58.0	2	213.0	2	496.0
LITTLE MERE RIVER	BURMOOR BRIDGE	R29B006	1B	1A	6.8	1A	7.7	1A	19.0	1B	74.0	1B	3.3	1A	0.178	1A	0.010	1A	21.0	1A	6.7	1A	11.7
EAST OKEMENT RIVER	A30 BRIDGE AT OKEHAMPTON	R29C001	1A	1A	6.3	1A	7.2	1A	18.0	1A	89.8	1A	2.0	1A	0.060	1A	0.010	1A	5.0	1A	5.1	1A	15.5

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1990 RIVER WATER QUALITY CLASSIFICATION
CALCULATED DETERMINAND STATISTICS USED FOR QUALITY ASSESSMENT
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	90 NWC Class	Calculated Determinand Statistics used for Quality Assessment																			
				pH Lower		pH Upper		Temperature		DO (%)		BOD (ATU)		Total Ammonia		Union. Ammonia		S.Solids		Total Copper		Total Zinc	
				Class	5%ile	Class	95%ile	Class	95%ile	Class	5%ile	Class	95%ile	Class	95%ile	Class	95%ile	Class	Mean	Class	95%ile	Class	95%ile
WEST OKEMENT RIVER	MELDON RESERVOIR	R29D053	3	3	4.8	1A	6.4	1A	20.5	1B	80.0	1A	1.8	1A	0.040	1A	0.010	1A	2.2	2	20.0	1A	20.0
WEST OKEMENT RIVER	BELOW MELDON DAM	R29D027	2	1A	5.1	1A	6.8	1A	17.0	1A	80.7	1A	1.8	1A	0.175	1A	0.010	1A	2.2	2	6.3	1A	25.7
WEST OKEMENT RIVER	MELDON VIADUCT	R29D032	2	1A	5.6	1A	6.9	1A	14.0	1A	89.0	1A	1.9	1A	0.110	1A	0.010	1A	1.3	2	25.0	1A	40.0
WEST OKEMENT RIVER	200M BELOW OF MELDON QUARRY BRIDGE	R29D030	2	1A	5.2	1A	7.5	1A	14.6	1A	88.0	1A	2.1	1A	0.096	1A	0.010	1A	17.7	2	29.5	2	302.5
WEST OKEMENT RIVER	OKEHAMPTON HOSPITAL	R29D002	1A	1A	5.7	1A	7.2	1A	17.0	1A	90.9	1A	1.8	1A	0.062	1A	0.010	1A	5.4	1A	17.1	1A	131.2
OKEMENT	FROWLE BRIDGE	R29D026	1A	1A	6.2	1A	7.2	1A	17.1	1A	93.0	1A	2.4	1A	0.071	1A	0.010	1A	6.4	1A	7.1	1A	72.0
OKEMENT	BRIGHTLEY BRIDGE	R29D003	1A	1A	6.0	1A	7.2	1A	16.9	1A	90.2	1A	1.9	1A	0.185	1A	0.010	1A	5.0	1A	7.9	1A	97.4
OKEMENT	SOUTH DORNAFORD	R29D004	1B	1A	6.4	1A	7.3	1A	17.5	1A	86.0	1B	3.4	1B	0.330	1A	0.010	1A	4.9	1A	8.0	1A	83.0
OKEMENT	JACKSTONE	R29D008	1A	1A	6.5	1A	7.4	1A	18.1	1A	88.7	1A	3.0	1A	0.273	1A	0.010	1A	6.3	1A	9.4	1A	74.2
OKEMENT	WOODHALL BRIDGE	R29D005	1B	1A	6.5	1A	7.4	1A	17.1	1A	87.7	1B	4.7	1A	0.143	1A	0.010	1A	6.5	1A	13.1	1A	79.4
OKEMENT	IDDESLEIGH BRIDGE	R29D006	1B	1A	6.7	1A	7.8	1A	18.0	1A	88.0	1B	4.0	1A	0.220	1A	0.010	1A	7.0	1A	6.0	1A	64.0
HOLE BROOK	HONKOKEHAMPTON	R29D007	2	1A	7.0	1A	8.1	1A	17.0	1B	72.9	2	5.9	1A	0.286	1A	0.010	1A	12.9	1A	7.8	1A	11.0
BECKAMOOR BROOK	HERRIS BRIDGE	R29D052	2	1A	6.8	1A	7.6	1A	15.0	2	43.0	1A	2.8	1A	0.200	1A	0.010	1A	6.3	1A	6.0	1A	11.0
BRIGHTLEY STREAM	BRIGHTLEY MILL	R29D025	3	3	3.6	1A	7.3	1A	19.0	1B	69.0	2	7.2	2	1.440	1A	0.010	1A	11.8	2	51.1	3	1981.0
MELDON STREAM	BRIDGE BELOW OF MELDON QUARRY	R29D029	3	3	3.8	1A	4.8	1A	17.1	1A	82.4	1B	3.4	3	2.578	1A	0.010	3	93.4	2	965.6	3	5460.0
RED-A-VEN BROOK	PRIOR TO WEST OKEMENT RIVER	R29D028	1A	1A	5.4	1A	6.7	1A	21.0	1A	87.9	1A	1.9	1A	0.020	1A	0.010	1A	1.4	1A	6.0	1A	52.1
LEW	HOLE STOCK BRIDGE	R29C006	2	1A	6.8	1A	7.6	1A	16.1	1B	71.7	2	5.9	1B	0.373	1A	0.010	1A	13.2	–	–	–	–
LEW	BLOCKAFORD	R29C025	1B	1A	6.8	1A	7.5	1A	17.1	1B	73.8	1B	3.9	1A	0.305	1A	0.010	1A	10.4	–	–	–	–
LEW	GREAT RUTLEIGH	R29C007	2	1A	6.8	1A	7.6	1A	18.0	1B	75.0	2	5.4	1A	0.230	1A	0.010	1A	10.7	1A	10.9	1A	17.2
LEW	HATHERLEIGH BRIDGE	R29C008	1B	1A	6.8	1A	7.7	1A	16.5	1B	67.0	1A	2.9	1A	0.130	1A	0.010	1A	6.6	–	–	–	–
LEW	LEWER BRIDGE	R29C009	1B	1A	6.8	1A	7.8	1A	17.0	1B	66.0	1B	4.8	1A	0.219	1A	0.010	1A	10.6	1A	6.0	1A	12.6
PUDCROSSY BROOK	FURZEHILL	R29C021	3	1A	6.8	1A	7.7	1A	17.0	3	28.0	1B	4.9	1B	0.340	1A	0.010	1A	24.3	–	–	–	–
MEDLAND BROOK	WATERHOUSE	R29C022	1B	1A	6.9	1A	7.6	1A	18.0	1B	66.2	1A	2.7	1A	0.168	1A	0.010	1A	5.8	–	–	–	–
HOORMOOR BROOK	NARRACOTT FORD	R29C023	2	1A	6.7	1A	7.4	1A	17.0	1B	76.2	2	5.7	1A	0.160	1A	0.010	1A	6.9	–	–	–	–
NAGAFORD WATER	NAGAFORD BRIDGE	R29C024	2	1A	6.9	1A	7.7	1A	18.0	1B	66.1	2	7.6	1A	0.177	1A	0.010	1A	23.2	–	–	–	–
NORTH LEW STREAM	WIGDON MILL	R29C028	1B	1A	6.5	1A	7.5	1A	18.0	1A	82.2	1B	3.1	1A	0.179	1A	0.010	1A	4.8	–	–	–	–
NORTH LEW STREAM	KENNEL BRIDGE	R29C027	2	1A	6.5	1A	7.5	1A	17.0	1A	81.0	2	5.8	1B	0.326	1A	0.010	1A	6.8	–	–	–	–
NORTH LEW STREAM	NORTH LEW	R29C026	2	1A	6.6	1A	7.4	1A	18.0	1B	71.5	2	7.8	1B	0.375	1A	0.010	1A	6.5	–	–	–	–
TRIB NORTH LEW STREAM	COOMBE	R29C029	1B	1A	6.6	1A	7.6	1A	17.0	1A	88.1	1B	3.9	1B	0.696	1A	0.010	1A	5.7	–	–	–	–
MUSSEL BROOK	WESTOVER	R29C038	1B	1A	6.9	1A	7.7	1A	18.0	1A	81.0	1B	3.5	1A	0.160	1A	0.010	1A	8.6	–	–	–	–

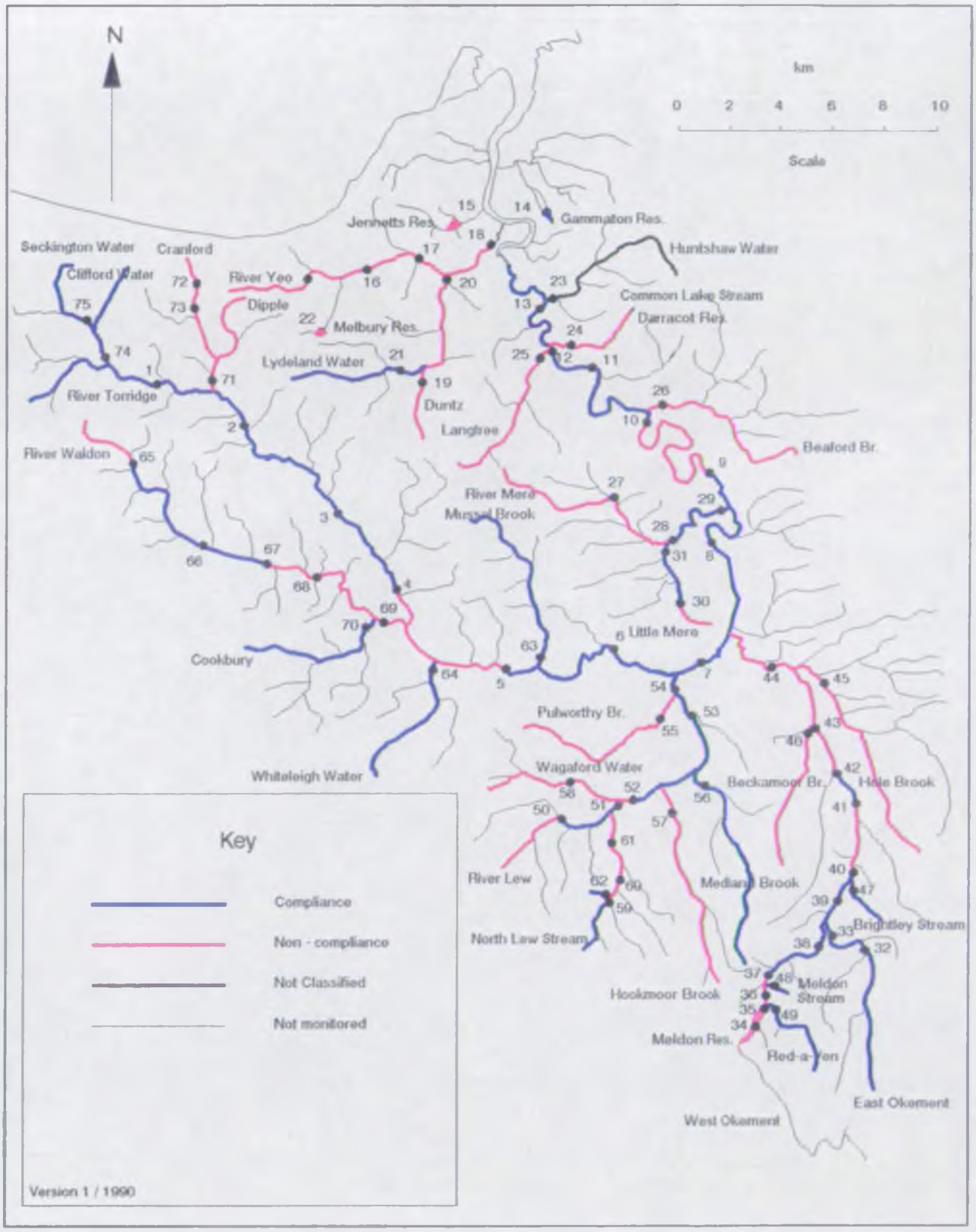
Appendix 10.7

NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CALCULATED DETERMINAND STATISTICS USED FOR QUALITY ASSESSMENT
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	90 %ile NWC Class	Calculated Determinand Statistics used for Quality Assessment																			
				pH Lower		pH Upper		Temperature		DO (%)		BOD (ATU)		Total Ammonia		Union. Ammonia		S.Solids		Total Copper		Total Zinc	
				Class	5%ile	Class	95%ile	Class	95%ile	Class	5%ile	Class	95%ile	Class	95%ile	Class	95%ile	Class	Mean	Class	95%ile	Class	95%ile
WHITELEIGH WATER	DIPPERMILL	R29C039	1B	1A	6.9	1A	7.9	1A	18.0	1B	74.2	1A	2.8	1A	0.238	1A	0.010	1A	8.9	-	-	-	-
WALDON	HERRIDON COTTAGE	R29C010	2	1A	6.7	1A	7.4	1A	18.0	1B	78.2	2	6.9	2	1.296	1A	0.010	1A	6.9	1A	9.8	1A	15.0
WALDON	SUTCOMBE	R29C030	1B	1A	6.9	1A	7.6	1A	18.0	1A	84.1	1B	3.4	1B	0.338	1A	0.010	1A	17.2	1A	10.8	1A	15.0
WALDON	WALDON BRIDGE	R29C011	1B	1A	6.8	1A	7.6	1A	17.7	1B	69.7	1B	3.6	1A	0.277	1A	0.010	1A	9.9	-	-	-	-
WALDON	BERRY FARM	R29C042	2	1A	7.0	1A	7.6	1A	18.0	1B	71.0	2	5.6	1A	0.300	1A	0.010	1A	13.4	1A	10.0	1A	14.0
WALDON	HENSCOTT BRIDGE	R29C012	2	1A	6.8	1A	7.6	1A	17.4	1B	80.0	2	6.5	1B	0.392	1A	0.010	1A	16.3	1A	8.4	1A	18.9
COCKBURY STREAM	BASON CROSS	R29C043	1B	1A	6.9	1A	7.6	1A	18.0	1B	61.6	1A	3.0	1A	0.140	1A	0.010	1A	17.5	1A	7.0	1A	78.8
DIPPLE WATER	DIPPLE BRIDGE	R29C013	3	1A	6.8	1A	7.8	1A	18.0	1B	64.5	2	5.8	3	1.698	1A	0.010	1A	10.9	1A	6.9	1A	30.8
CRANFORD WATER	LANEMILL BRIDGE	R29C044	3	1A	7.1	1A	7.6	1A	18.0	1B	80.0	2	5.7	3	3.110	1A	0.020	1A	8.5	-	-	-	-
CRANFORD WATER	CRANFORD WATER	R29C046	3	1A	7.1	1A	7.8	1A	18.0	1B	77.0	1B	3.3	3	3.830	3	0.030	1A	6.0	-	-	-	-
CLIFFORD WATER	BIDEFORD	R29C040	1B	1A	6.6	1A	7.4	1A	17.9	1A	82.0	1A	2.5	1B	0.380	1A	0.010	1A	8.5	-	-	-	-
SECKINGTON WATER	GORVIN	R29C041	1B	1A	6.5	1A	7.4	1A	17.9	1A	81.1	1A	2.1	1B	0.617	1A	0.010	1A	5.3	-	-	-	-

Appendix 10.7

Torridge Catchment
Compliance - 1990



NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
NUMBER OF SAMPLES (N) AND NUMBER OF SAMPLES EXCEEDING QUALITY STANDARD (F)
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	pH Lower		pH Upper		Temperature		DO (%)		BOD (ATU)		Total Ammonia		Union. Ammonia		S.Solids		Total Copper		Total Zinc	
			N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F
TORRIDGE	FORDMILL FARM	R29C001	26	–	26	–	26	–	26	–	26	–	26	–	26	–	26	–	0	–	0	–
TORRIDGE	PUTFORD BRIDGE	R29C032	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–
TORRIDGE	WOOLFORD BRIDGE	R29C002	27	–	27	–	27	–	27	–	27	–	27	–	27	–	27	–	0	–	0	–
TORRIDGE	GILCOTT	R29C033	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–
TORRIDGE	KINGSLEY MILL	R29C003	34	–	34	–	34	–	34	–	34	3	34	1	34	–	34	5	34	–	34	–
TORRIDGE	ROCKHAY BRIDGE	R29C004	40	–	40	–	40	–	40	–	40	–	40	–	39	–	40	2	27	–	27	–
TORRIDGE	HELE BRIDGE	R29C005	36	–	36	–	36	–	36	–	36	–	36	–	35	–	36	2	34	–	34	–
TORRIDGE	NEWBRIDGE	R29B001	43	–	43	–	43	–	43	–	43	1	43	–	41	–	43	6	43	–	43	–
TORRIDGE	BEAFORD BRIDGE	R29B002	37	–	37	–	37	–	36	–	37	1	37	–	34	–	37	5	37	–	37	–
TORRIDGE	UNDERCLEAVE	R29B038	19	–	19	1	19	–	19	–	19	–	19	–	16	–	19	2	1	–	1	–
TORRIDGE	TOWN MILLS TORRINGTON	R29B003	37	–	37	–	37	–	37	–	37	–	37	–	31	–	37	2	37	1	37	–
TORRIDGE	ROTHERN BRIDGE	R29B004	52	–	52	–	50	–	50	–	52	–	52	–	43	–	52	4	52	–	52	–
TORRIDGE	BEAM BRIDGE	R29B034	53	–	53	–	54	–	54	–	53	–	53	–	52	–	53	5	53	–	53	1
GAMMAON STREAM	GAMMAON RESERVOIR	R29B013	17	–	17	–	1	–	0	–	1	–	1	–	1	–	17	4	0	–	0	–
JENNETT'S STREAM	JENNETS RESERVOIR	R29A014	12	–	12	–	12	1	12	2	12	1	12	–	11	–	12	1	12	–	12	–
YEO(BIDEFORD)	FORDOWN	R29A001	13	–	13	–	13	–	13	–	13	–	13	–	12	–	13	1	13	1	13	–
YEO(BIDEFORD)	TUCKINGMILL	R29A002	24	–	24	–	25	–	25	1	24	4	24	2	24	–	25	4	0	–	0	–
YEO(BIDEFORD)	HOOPERS	R29A015	19	–	19	–	19	–	19	–	19	2	19	–	17	–	19	1	19	–	19	–
YEO(BIDEFORD)	HEALE HOUSE	R29A003	32	–	32	–	32	–	32	3	32	3	32	1	32	–	32	3	32	–	32	–
OUNZ	HEMBURY	R29A004	20	–	20	–	20	–	20	–	20	–	20	2	18	–	20	1	20	–	20	–
OUNZ	OAKLEIGH MILLS	R29A005	31	–	31	–	31	–	31	–	31	4	31	2	31	–	31	4	31	–	31	–
LYDELAND WATER	WATER BRIDGE	R29A006	31	–	31	–	31	–	31	–	31	1	31	1	30	–	31	4	31	–	31	–
MELBURY STREAM	MELBURY RESERVOIR	R29A012	12	–	12	–	12	–	12	–	12	–	12	–	12	–	12	–	12	–	12	–
COMMON LANE	TINNINS PLAIN	R29B039	19	–	19	1	19	–	19	–	19	1	19	6	18	3	18	1	19	–	19	–
LANGTREE LAKE	SERVICE FARM	R29A016	19	–	19	–	19	–	19	–	19	1	19	–	16	–	19	1	0	–	0	–
WOOLLEIGH BROOK	CASTLE HILL	R29B037	19	–	19	–	19	–	19	–	19	2	19	–	18	–	19	3	0	–	0	–
MERE	COLEFORD BRIDGE	R29B007	27	–	27	–	23	–	23	–	24	2	24	1	23	–	24	2	8	–	8	–
MERE	A386 BRIDGE AT MERTON	R29B008	46	–	46	–	26	–	25	–	26	–	26	–	24	–	43	9	8	–	8	–
MERE	GREENWOOD	R29B009	52	–	52	–	23	–	22	–	23	–	23	–	20	–	40	6	22	–	22	–
LITTLE MERE RIVER	WOOLADON MOOR	R29B005	22	–	22	–	18	–	18	–	18	–	18	–	17	–	22	10	18	–	18	–
LITTLE MERE RIVER	BURYMOOR BRIDGE	R29B006	28	–	28	–	25	–	25	–	25	–	25	–	25	–	25	4	25	–	25	–
EAST OKEMENT RIVER	A30 BRIDGE AT OKEHAMPTON	R29D001	37	–	37	–	37	–	37	–	37	–	37	–	31	–	37	1	37	–	37	–

Appendix 10.9

NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
NUMBER OF SAMPLES (N) AND NUMBER OF SAMPLES EXCEEDING QUALITY STANDARD (F)
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	pH Lower		pH Upper		Temperature		DO (%)		BOD (ATU)		Total Ammonia		Union. Ammonia		S.Solids		Total Copper		Total Zinc	
			N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F
WEST OKEMENT RIVER	MELDON RESERVOIR	R290053	12	1	12	–	10	–	10	–	12	–	12	–	10	–	12	–	12	2	12	–
WEST OKEMENT RIVER	BELOW MELDON DAM	R290027	37	–	37	–	37	–	37	1	37	–	37	–	37	–	37	–	37	2	37	1
WEST OKEMENT RIVER	MELDON VIADUCT	R290032	18	–	18	–	13	–	13	–	13	–	13	–	12	–	18	–	14	1	14	–
WEST OKEMENT RIVER	200M BELOW OF MELDON QUARRY BRIDGE	R290030	49	–	49	–	38	–	38	–	43	1	43	–	38	–	47	4	49	6	49	6
WEST OKEMENT RIVER	OKEHAMPTON HOSPITAL	R290002	37	–	37	–	37	–	37	–	37	–	37	–	35	–	37	1	37	1	37	–
OKEMENT	KNOWLE BRIDGE	R290026	37	–	37	–	37	–	37	–	37	–	37	–	36	–	37	1	37	–	37	–
OKEMENT	BRIGHTLEY BRIDGE	R290003	42	–	42	–	42	–	42	–	42	–	42	–	42	–	42	1	42	–	42	–
OKEMENT	SOUTH DORNAFORD	R290004	39	–	39	–	39	–	39	–	39	2	39	2	39	–	39	3	39	–	39	–
OKEMENT	JACOBSTOWE	R290008	37	–	37	–	37	–	37	–	37	1	37	1	36	–	37	2	37	–	37	–
OKEMENT	WOODHALL BRIDGE	R290005	37	–	37	–	36	–	36	–	37	3	37	–	35	–	37	2	37	–	37	–
OKEMENT	IDDESLEIGH BRIDGE	R290006	39	–	39	–	39	–	39	–	39	4	39	–	38	–	39	2	39	–	39	–
HOLE BROOK	MONKOKEHAMPTON	R290007	36	–	36	–	36	–	36	–	36	2	36	–	35	–	36	4	34	–	34	–
BECKAMOOR BROOK	TERRIS BRIDGE	R290052	19	–	19	–	19	–	19	1	19	–	19	–	18	–	19	–	19	–	19	–
BRIGHTLEY STREAM	BRIGHTLEY MILL	R290025	37	–	37	–	37	–	37	–	37	1	37	–	34	–	37	–	37	–	37	–
MELDON STREAM	BRIDGE BELOW OF MELDON QUARRY	R290029	40	–	40	–	36	–	35	–	36	–	36	–	26	–	40	–	37	–	37	–
RED-A-VEN BROOK	PRIOR TO WEST OKEMENT RIVER	R290028	37	–	37	–	37	–	37	–	37	–	37	–	26	–	37	–	37	–	37	1
LEW	HOLE SIDCK BRIDGE	R29C006	39	–	39	–	38	–	38	–	38	2	38	–	36	–	38	3	0	–	0	–
LEW	BLOOMFORD	R29C025	38	–	38	–	37	–	37	–	37	1	37	–	36	–	37	2	0	–	0	–
LEW	GREAT RUTLEIGH	R29C007	39	–	39	–	39	–	39	–	39	2	39	–	38	–	39	4	38	1	38	–
LEW	HATHERLEIGH BRIDGE	R29C008	41	–	41	–	39	–	39	–	38	–	39	–	38	–	39	2	8	–	8	–
LEW	LENER BRIDGE	R29C009	41	–	41	–	41	–	41	–	41	1	41	–	41	–	41	3	41	–	41	–
PUDCRTHY BROOK	FURZEHILL	R29C021	18	–	18	–	18	–	18	6	18	–	18	–	17	–	18	3	1	–	1	–
MEDLAND BROOK	WATERHOUSE	R29C022	20	–	20	–	20	–	20	–	20	–	20	–	19	–	20	–	1	–	1	–
HOORMOOR BROOK	NARRACOTT FORD	R29C023	20	–	20	–	20	–	20	–	20	1	20	–	18	–	20	–	1	–	1	–
WAGAFORD WATER	WAGAFORD BRIDGE	R29C024	20	–	20	–	20	–	20	–	20	1	20	–	19	–	20	3	1	–	1	–
NORTH LEW STREAM	WIDDON MILL	R29C028	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	0	–	0	–
NORTH LEW STREAM	KENNEL BRIDGE	R29C027	20	–	20	–	19	–	19	–	20	1	20	–	19	–	20	1	1	–	1	–
NORTH LEW STREAM	NORTH LEW	R29C026	20	–	20	–	20	–	20	–	20	1	20	–	20	–	20	1	1	–	1	–
TRIB NORTH LEW STREAM	COOMBE	R29C029	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	1	1	–	1	–
MUSSEL BROOK	WESTOVER	R29C038	19	–	19	–	19	–	19	–	19	–	19	–	19	–	19	–	0	–	0	–

Appendix 10.9

NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
NUMBER OF SAMPLES (N) AND NUMBER OF SAMPLES EXCEEDING QUALITY STANDARD (F)
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	pH Lower		pH Upper		Temperature		DO (%)		BOD (ATU)		Total Ammonia		Union. Ammonia		S.Solids		Total Copper		Total Zinc	
			N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F
WHITELEIGH WATER	DEPPENMILL	R29C039	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	0	–	0	–
WALDON	BERRIDON COTTAGE	R29C010	20	–	20	–	20	–	20	–	20	1	20	3	19	–	20	–	20	–	20	–
WALDON	SUTCOMBE	R29C030	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	4	20	–	20	–
WALDON	WALDON BRIDGE	R29C011	25	–	25	–	25	–	25	–	25	–	25	–	25	–	25	2	0	–	0	–
WALDON	BERRY FARM	R29C042	19	–	19	–	19	–	19	–	19	1	19	–	19	–	19	2	19	–	19	–
WALDON	HENSCOTT BRIDGE	R29C012	32	–	32	–	32	–	32	–	32	2	32	–	31	–	32	5	32	–	32	–
COOKBURY STREAM	BASON CROSS	R29C043	20	–	20	–	20	–	20	–	20	–	20	–	19	–	20	3	20	–	20	–
DIPPLE WATER	DIPPLE BRIDGE	R29C013	31	–	31	–	29	–	28	1	31	2	31	2	29	–	31	3	30	–	30	–
CRANFORD WATER	LANEMILL BRIDGE	R29C044	11	–	11	–	11	–	11	–	11	1	11	1	11	–	11	–	1	–	1	–
CRANFORD WATER	CRANFORD WATER	R29C046	12	–	12	–	12	–	12	–	12	–	12	2	12	1	12	–	0	–	0	–
CLIFFORD WATER	BIDEFORD	R29C040	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	0	–	0	–
SECKINGTON WATER	GORVIN	R29C041	20	–	20	–	20	–	20	–	20	–	20	–	20	–	20	–	0	–	0	–

Appendix 10.9

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
PERCENTAGE EXCEEDENCE OF DETERMINAND STATISTICS FROM QUALITY STANDARDS
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	PERCENTAGE EXCEEDENCE OF STATISTIC FROM QUALITY STANDARD									
			pH Lower	pH Upper	Temperature	DO (%)	BOD (ATU)	Total Ammonia	Un-ionised Ammonia	Suspended Solids	Total Copper	Total Zinc
TORRIDGE	FORDMILL FARM	R29C001	-	-	-	-	-	-	-	-	-	-
TORRIDGE	PUTFORD BRIDGE	R29C032	-	-	-	-	-	-	-	-	-	-
TORRIDGE	WOODFORD BRIDGE	R29C002	-	-	-	-	-	-	-	-	-	-
TORRIDGE	GIDCOTT	R29C033	-	-	-	-	-	-	-	-	-	-
TORRIDGE	KINGSLEY MILL	R29C003	-	-	-	-	28	-	-	-	-	-
TORRIDGE	ROCKHAY BRIDGE	R29C004	-	-	-	-	-	-	-	-	-	-
TORRIDGE	HELE BRIDGE	R29C005	-	-	-	-	-	-	-	-	-	-
TORRIDGE	NEWBRIDGE	R29B001	-	-	-	-	-	-	-	-	-	-
TORRIDGE	BEAFORD BRIDGE	R29B002	-	-	-	-	-	-	-	-	-	-
TORRIDGE	UNDERCLEAVE	R29B038	-	3	-	-	-	-	-	-	-	-
TORRIDGE	TOWN MILLS TORRINGTON	R29B003	-	-	-	-	-	-	-	-	-	-
TORRIDGE	ROTHERN BRIDGE	R29B004	-	-	-	-	-	-	-	-	-	-
TORRIDGE	BEAM BRIDGE	R29B034	-	-	-	-	-	-	-	-	-	-
GAMMATON STREAM	GAMMATON RESERVOIR	R29B013	-	-	-	-	-	-	-	-	-	-
JENNETT'S STREAM	JENNETS RESERVOIR	R29A014	-	-	7	12	10	-	-	-	-	-
YEO(BIDEFORD)	FOXDOWN	R29A001	-	-	-	-	-	-	-	-	25	-
YEO(BIDEFORD)	TUCKINGMILL	R29A002	-	-	-	2	66	24	-	-	-	-
YEO(BIDEFORD)	HOOPERS	R29A015	-	-	-	-	57	-	-	-	-	-
YEO(BIDEFORD)	HEALE HOUSE	R29A003	-	-	-	24	60	1	-	-	-	-
DUNTZ	HEMBURY	R29A004	-	-	-	-	-	204	-	-	-	-
DUNTZ	ORLEIGH MILLS	R29A005	-	-	-	-	71	61	-	-	-	-
LYDELAND WATER	WATER BRIDGE	R29A006	-	-	-	-	-	-	-	-	-	-
MELBURY STREAM	MELBURY RESERVOIR	R29A012	-	-	-	-	-	-	-	-	-	-
COMMON LAKE	TANTONS PLAIN	R29B039	-	7	-	-	24	2129	233	-	-	-
LANGTREE LAKE	SERVICE FARM	R29A016	-	-	-	-	66	-	-	-	-	-
WOOLLEIGH BROOK	CASTLE HILL	R29B037	-	-	-	-	34	-	-	-	-	-
MERE	COLEFORD BRIDGE	R29B007	-	-	-	-	24	46	-	-	-	-
MERE	A386 BRIDGE AT MERTON	R29B008	-	-	-	-	-	-	-	20	-	-
MERE	GREATWOOD	R29B009	-	-	-	-	-	-	-	-	-	-
LITTLE MERE RIVER	WOOLADON MOOR	R29B005	-	-	-	-	-	-	-	132	-	-
LITTLE MERE RIVER	BURYMOOR BRIDGE	R29B006	-	-	-	-	-	-	-	-	-	-
EAST OKEMENT RIVER	A30 BRIDGE AT OKEHAMPTON	R29D001	-	-	-	-	-	-	-	-	-	-

Appendix 10.10

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
PERCENTAGE EXCEEDENCE OF DETERMINAND STATISTICS FROM QUALITY STANDARDS
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	PERCENTAGE EXCEEDENCE OF STATISTIC FROM QUALITY STANDARD									
			pH Lower	pH Upper	Temperature	DO (%)	BOD (ATU)	Total Ammonia	Un-ionised Ammonia	Suspended Solids	Total Copper	Total Zinc
WEST OKEMENT RIVER	MELDON RESERVOIR	R29D053	4	-	-	-	-	-	-	-	300	-
WEST OKEMENT RIVER	BELOW MELDON DAM	R29D027	-	-	-	-	-	-	-	-	26	-
WEST OKEMENT RIVER	MELDON VIADUCT	R29D032	-	-	-	-	-	-	-	-	14	-
WEST OKEMENT RIVER	200M BELOW OF MELDON QUARRY BRIDG	R29D030	-	-	-	-	-	-	-	-	34	51
WEST OKEMENT RIVER	OKEHAMPTON HOSPITAL	R29D002	-	-	-	-	-	-	-	-	-	-
OKEMENT	KNOWLE BRIDGE	R29D026	-	-	-	-	-	-	-	-	-	-
OKEMENT	BRIGHTLEY BRIDGE	R29D003	-	-	-	-	-	-	-	-	-	-
OKEMENT	SOUTH DORNAFORD	R29D004	-	-	-	-	13	6	-	-	-	-
OKEMENT	JACOBSTOWE	R29D008	-	-	-	-	-	-	-	-	-	-
OKEMENT	WOODHALL BRIDGE	R29D005	-	-	-	-	57	-	-	-	-	-
OKEMENT	IDDESLEIGH BRIDGE	R29D006	-	-	-	-	33	-	-	-	-	-
HOLE BROOK	MONKOKEHAMPTON	R29D007	-	-	-	-	18	-	-	-	-	-
BECKAMOOR BROOK	TERRIS BRIDGE	R29D052	-	-	-	28	-	-	-	-	-	-
BRIGHTLEY STREAM	BRIGHTLEY MILL	R29D025	-	-	-	-	-	-	-	-	-	-
MELDON STREAM	BRIDGE BELOW OF MELDON QUARRY	R29D029	-	-	-	-	-	-	-	-	-	-
RED-A-VEN BROOK	PRIOR TO WEST OKEMENT RIVER	R29D028	-	-	-	-	-	-	-	-	-	-
LEW	HOLE STOCK BRIDGE	R29C006	-	-	-	-	17	-	-	-	-	-
LEW	BLOOMAFORD	R29C025	-	-	-	-	-	-	-	-	-	-
LEW	GREAT RUTLEIGH	R29C007	-	-	-	-	8	-	-	-	-	-
LEW	HATHERLEIGH BRIDGE	R29C008	-	-	-	-	-	-	-	-	-	-
LEW	LEWER BRIDGE	R29C009	-	-	-	-	-	-	-	-	-	-
PULWORTHY BROOK	FURZEHILL	R29C021	-	-	-	53	-	-	-	-	-	-
MEDLAND BROOK	WATERHOUSE	R29C022	-	-	-	-	-	-	-	-	-	-
HOOKMOOR BROOK	NARRACOTT FORD	R29C023	-	-	-	-	15	-	-	-	-	-
WAGAFORD WATER	WAGAFORD BRIDGE	R29C024	-	-	-	-	51	-	-	-	-	-
NORTH LEW STREAM	WIGDON MILL	R29C028	-	-	-	-	-	-	-	-	-	-
NORTH LEW STREAM	KENNEL BRIDGE	R29C027	-	-	-	-	17	-	-	-	-	-
NORTH LEW STREAM	NORTH LEW	R29C026	-	-	-	-	57	-	-	-	-	-
TRIB NORTH LEW STREAM	COOMBE	R29C029	-	-	-	-	-	-	-	-	-	-
MUSSEL BROOK	WESTOVER	R29C038	-	-	-	-	-	-	-	-	-	-

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
PERCENTAGE EXCEEDENCE OF DETERMINAND STATISTICS FROM QUALITY STANDARDS
CATCHMENT: TORRIDGE (32)

River	Reach upstream of	User Ref. Number	PERCENTAGE EXCEEDENCE OF STATISTIC FROM QUALITY STANDARD									
			pH Lower	pH Upper	Temperature	DO (%)	BOD (ATU)	Total Ammonia	Un-ionised Ammonia	Suspended Solids	Total Copper	Total Zinc
WHITELEIGH WATER	DIPPERMILL	R29C039	-	-	-	-	-	-	-	-	-	-
WALDON	BERRIDON COTTAGE	R29C010	-	-	-	-	37	85	-	-	-	-
WALDON	SUTCOMBE	R29C030	-	-	-	-	-	-	-	-	-	-
WALDON	WALDON BRIDGE	R29C011	-	-	-	-	-	-	-	-	-	-
WALDON	BERRY FARM	R29C042	-	-	-	-	12	-	-	-	-	-
WALDON	HENSCOTT BRIDGE	R29C012	-	-	-	-	30	-	-	-	-	-
COOKBURY STREAM	BASON CROSS	R29C043	-	-	-	-	-	-	-	-	-	-
DIPPLE WATER	DIPPLE BRIDGE	R29C013	-	-	-	-	16	143	-	-	-	-
CRANFORD WATER	LANEMILL BRIDGE	R29C044	-	-	-	-	14	344	-	-	-	-
CRANFORD WATER	CRANFORD WATER	R29C046	-	-	-	-	-	447	43	-	-	-
CLIFFORD WATER	BITEFORD	R29C040	-	-	-	-	-	-	-	-	-	-
SECKINGTON WATER	GORVIN	R29C041	-	-	-	-	-	-	-	-	-	-

Appendix 10.10

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
IDENTIFICATION OF POSSIBLE CAUSES OF NON-COMPLIANCE WITH RQO
CATCHMENT: TORRIDGE (32)

* = WORK ALREADY IN HAND

1990 Map Position Number	River	Reach upstream of	User Reference Number	Reach Length (km)	Possible causes of non-compliance
5	TORRIDGE	KINGSLEY MILL	R29C003	8.8	UP-STREAM ABSTRACTIONS, DROUGHT
10	TORRIDGE	UNDERCLEAVE	R29B038	9.9	AFORESTATION, FERTILISER RUN-OFF
15	JENNETT'S STREAM	JENNETS RESERVOIR	R29A014	0.5	WATER TREATMENT WORKS, IMPOUNDMENT, FARMING ACTIVITIES
16	YEO(BIDEFORD)	TUCKINGMILL	R29A002	5.8	DROUGHT, POLLUTION (ON-GOING), FARMING ACTIVITIES
17	YEO(BIDEFORD)	HOOPERS	R29A015	3.1	DROUGHT, FARMING ACTIVITIES, POLLUTION, SEWAGE TREATMENT WORKS, UP-STREAM ABSTRACTIONS
18	YEO(BIDEFORD)	HEALE HOUSE	R29A003	3.7	DROUGHT, UP-STREAM ABSTRACTIONS, FARMING ACTIVITIES
19	DUNTZ	HEMBURY	R29A004	2.9	DROUGHT, FARMING ACTIVITIES, POLLUTION (ON-GOING)
20	DUNTZ	ORLEIGH MILLS	R29A005	5.7	DROUGHT, FARMING ACTIVITIES, UP-STREAM ACTIVITIES, POLLUTION (ON-GOING)
24	COMMON LAKE	TANTONS PLAIN	R29B039	2.9	DROUGHT, INDUSTRIAL DISCHARGE, FARMING ACTIVITIES
25	LANGTREE LAKE	SERVICE FARM	R29A016	6.9	DROUGHT, FARMING ACTIVITIES
26	WOOLLEIGH BROOK	CASTLE HILL	R29B037	8.1	DROUGHT
27	MERE	* COLEFORD BRIDGE	R29B007	5.4	DROUGHT, POLLUTION (ON-GOING), INDUSTRIAL DISCHARGE
28	MERE	* A386 BRIDGE AT MERTON	R29B008	3.9	DROUGHT, BALL CLAY DISCHARGE
30	LITTLE MERE RIVER	* WOOLADON MOOR	R29B005	1.5	DROUGHT
34	WEST OKEMENT RIVER	MELDON RESERVOIR	R29D053	1.3	IMPOUNDMENT, CATCHMENT GEOLOGY, MOORLAND ORIGINS
35	WEST OKEMENT RIVER	BELOW MELDON DAM	R29D027	0.3	IMPOUNDMENT, UP-STREAM ABSTRACTIONS
36	WEST OKEMENT RIVER	MELDON VIADUCT	R29D032	0.5	IMPOUNDMENT, MINING
37	WEST OKEMENT RIVER	* 200M BELOW OF MELDON QUARRY BR	R29D030	1.3	IMPOUNDMENT, DROUGHT
41	OKEMENT	* SOUTH DORNAFORD	R29D004	3.3	SEWAGE TREATMENT WORKS, MINING, POLLUTION (ONE OFF), FARMING ACTIVITIES
43	OKEMENT	* WOODHALL BRIDGE	R29D005	3.6	FARMING ACTIVITIES, POLLUTION (ONE OFF)
44	OKEMENT	* IDDESLEIGH BRIDGE	R29D006	2.7	POLLUTION (ONE OFF), SEWAGE TREATMENT WORKS
45	HOLE BROOK	MONKOKEHAMPTON	R29D007	9.4	SEWAGE TREATMENT WORKS, FARMING ACTIVITIES
46	BECKAMOOR BROOK	TERRIS BRIDGE	R29D052	6.1	FARMING ACTIVITIES, DROUGHT, LOW FLOWS
50	LEW	HOLE STOCK BRIDGE	R29C006	4.3	ENGINEERING WORKS (MAIN TRUNK ROAD)
52	LEW	GREAT RUTLEIGH	R29C007	0.9	FARMING ACTIVITIES
55	PULWORTHY BROOK	FURZEHILL	R29C021	8.1	DROUGHT, FARMING ACTIVITIES
57	HOOKMOOR BROOK	NARRACOTT FORD	R29C023	9.6	DROUGHT, FARMING ACTIVITIES

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
IDENTIFICATION OF POSSIBLE CAUSES OF NON-COMPLIANCE WITH RQO
CATCHMENT: TORRIDGE (32)

* = WORK ALREADY IN HAND

1990 Map Position Number	River	Reach upstream of	User Reference Number	Reach Length (km)	Possible causes of non-compliance
58	WAGAFORD WATER	WAGAFORD BRIDGE	R29C024	5.7	DROUGHT, FISH FARM EFFLUENT, ENGINEERING WORKS (MAIN TRUNK ROAD), SEPTIC TANK
60	NORTH LEW STREAM	KENNEL BRIDGE	R29C027	0.9	FARMING ACTIVITIES
61	NORTH LEW STREAM	NORTH LEW	R29C026	1.8	SEWAGE TREATMENT WORKS, FARMING ACTIVITIES
65	WALDON	BERRIDON COTTAGE	R29C010	3.5	DROUGHT, SEWAGE TREATMENT WORKS, FARMING ACTIVITIES
68	WALDON	BERRY FARM	R29C042	3.1	DROUGHT, LAND RUN-OFF, FARMING ACTIVITIES
69	WALDON	HENSCOTT BRIDGE	R29C012	4.4	DROUGHT, UP-STREAM ABSTRACTIONS, FARMING ACTIVITIES
71	DIPPLE WATER	* DIPPLE BRIDGE	R29C013	4.8	FARMING ACTIVITIES, LAND RUN-OFF
72	CRANFORD WATER	* LANEMILL BRIDGE	R29C044	2.2	FARMING ACTIVITIES, POLLUTION (ON-GOING)
73	CRANFORD WATER	* CRANFORD WATER	R29C046	1.0	FARMING ACTIVITIES, POLLUTION (ON-GOING)

Appendix 10.11