NRA

National Rivers Authority

South West Region

ENVIRONMENTAL PROTECTION

River Teign Catchment

River Water Quality

Classification 1990

NOVEMBER 1991
WQP/91/006
B L MILFORD

GORDON H BIELBY BSc
Regional General Manager

C V M Davies
Environmental Protection
Manager

ACKNOWLEDGEMENTS

The Water Quality Planner acknowledges the substantial contributions made by the following staff:

R. Broome - Co-ordinator and Editor
A. Burrows - Production of Maps and editorial support
P. Grigorey - Production of Maps and editorial support
B. Steele - Production of Forepage
C. McCarthy - Administration and report compilation

Special thanks are extended to A. Burghes of Moonsoft, Exeter for computer support and the production of statistical schedules.

The following NRA sections also made valuable contributions:

Pollution Control
Field Control and Wardens
Water Resources

Thanks also to R. Hamilton and J. Murray-Bligh for their contributions.

Suggestions for improvements that could be incorporated in the production of the next Classification report would be welcomed.

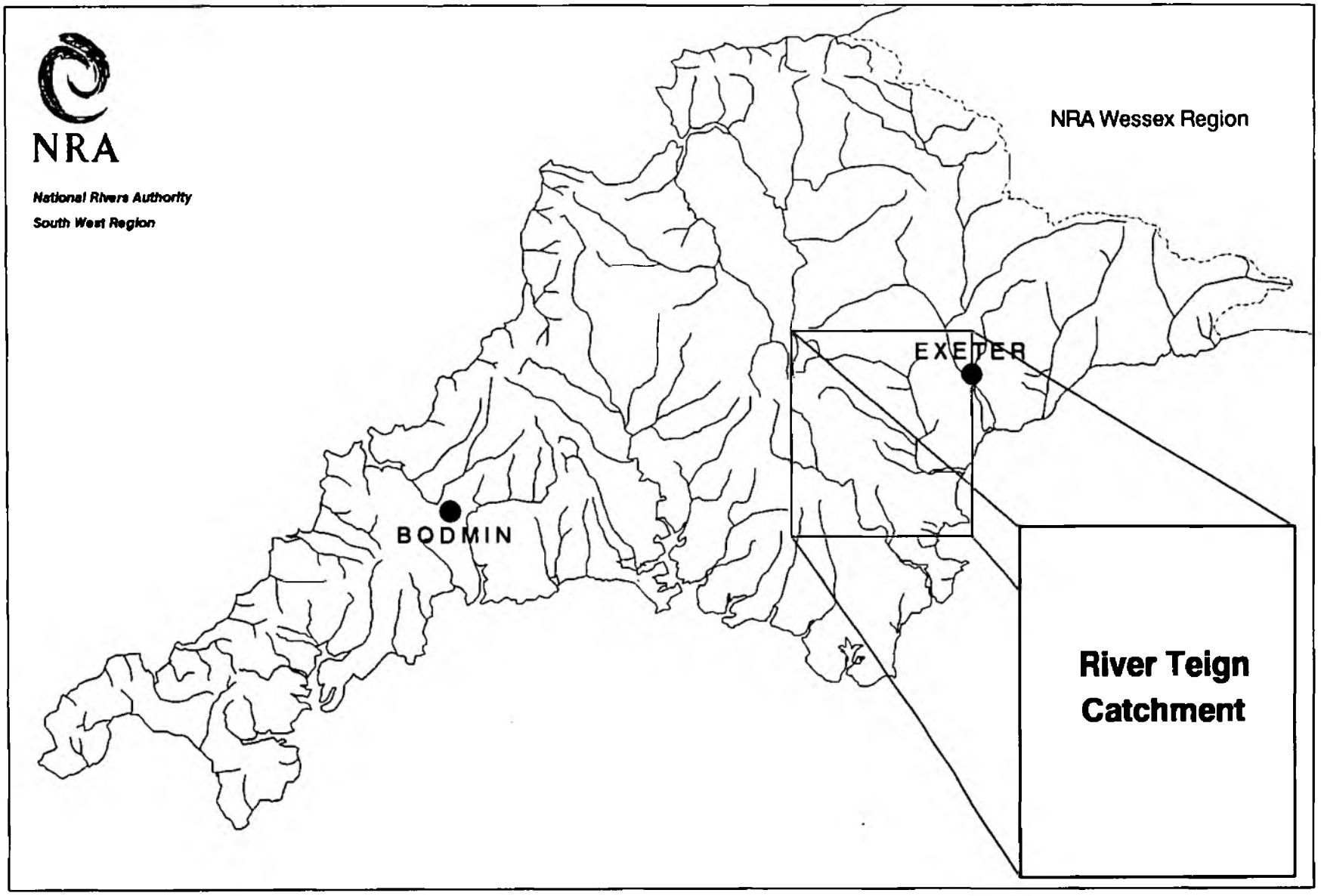
Further enquiries regarding the content of these reports should be addressed to:

Freshwater Scientist,
National Rivers Authority,
Manley House,
Kestrel Way,
EXETER,
Devon EX2 7LQ

RIVER WATER QUALITY IN THE RIVER TEIGN CATCHMENT

LIST OF CONTENTS

National Rivers Authority
South West Region



River Teign 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 Teign catchment.

2. RIVER TEIGN CATCHMENT

The River Teign flows over a distance of 50.8 km from its source to the tidal limit, (Appendix 10.1). Water quality was monitored at eight locations on the main river; seven sites were sampled at approximately monthly intervals and the site at Preston, which is a National Water Quality monitoring site, was sampled fortnightly.

Blatchford Stream flows over a distance of 4.3 km from its source to the tidal limit, (Appendix 10.1) and was monitored at two locations at approximately monthly intervals.

The River Lemon flows over a distance of 15.3 km from its source to the tidal limit, (Appendix 10.1) and was monitored at three locations at approximately monthly intervals.

The Aller Brook flows over a distance of 7.9 km from its source to the tidal limit, (Appendix 10.1) and was monitored at four locations at approximatley monthly intervals.

Throughout the Teign catchment twelve secondary tributaries and four tertiary tributaries of the River Teign were monitored. In addition Trenchford Reservoir was monitored at one location at approximately monthly intervals.

2.1 SECONDARY TRIBUTARIES

The South Teign River, including Fernworthy Reservoir, flows over a distance of 6.3 km from its source to the confluence with the River Teign, (Appendix 10.1). Both the South Teign River and Fernworthy Reservoir were monitored at one location each at approximately monthly intervals.

Fingle Brook (7 km), Sowton Brook (6.4 km), Bramble Brook (6.5 km), Reedy Brook (5.2 km), Scotley Brook (5.3 km), Kate Brook (3.8 km) and Liverton Brook (9.1 km) were all monitored at approximately monthly intervals at one location between their source and confluence with the River Teign, (Appendix 10.1).

Rookery Brook (4.9 km) and Ugbrooke Stream (8.4 km) were both monitored at approximately monthly intervals at three locations between their source and confluence with the River Teign, (Appendix 10.1).

Beadon Brook flows over a distance of 8.3 km from its source to the confluence with the River Teign, (Appendix 10.1) and was monitored at three locations at approximately monthly intervals.

The River Bovey flows over a distance of 26.7 km from its source to the confluence with the River Teign, (Appendix 10.1) and was monitored at four locations at approximately monthly intervals.

2.2 TERTIARY TRIBUTARIES

Blackaton Brook flows over a distance of 9 km from its source to the confluence with the North Teign River, (Appendix 10.1) and was monitored at one site at approximately monthly intervals.

Becka Brook flows over a distance of 6.3 km from its source to the confluence with the River Bovey, (Appendix 10.1) and was sampled at one location on twenty occasions during 1990 because of no recent water quality data.

Wray Brook flows over a distance of 10.6 km from its source to the confluence with the River Bovey, (Appendix 10.1) and was sampled at two locations at approximately monthly intervals.

Sandygate Stream flows over a distance of 7.6 km from its source to the confluence with the Ugbrooke Stream, (Appendix 10.1) and was monitored at three locations at approximately monthly intervals.

Kennick and Tottiford Reservoirs were both monitored at one location at approximately monthly intervals.

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, certain 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 Teign 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 Aller Brook at Aller Orchard and Penninn, Newton Abbott.

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

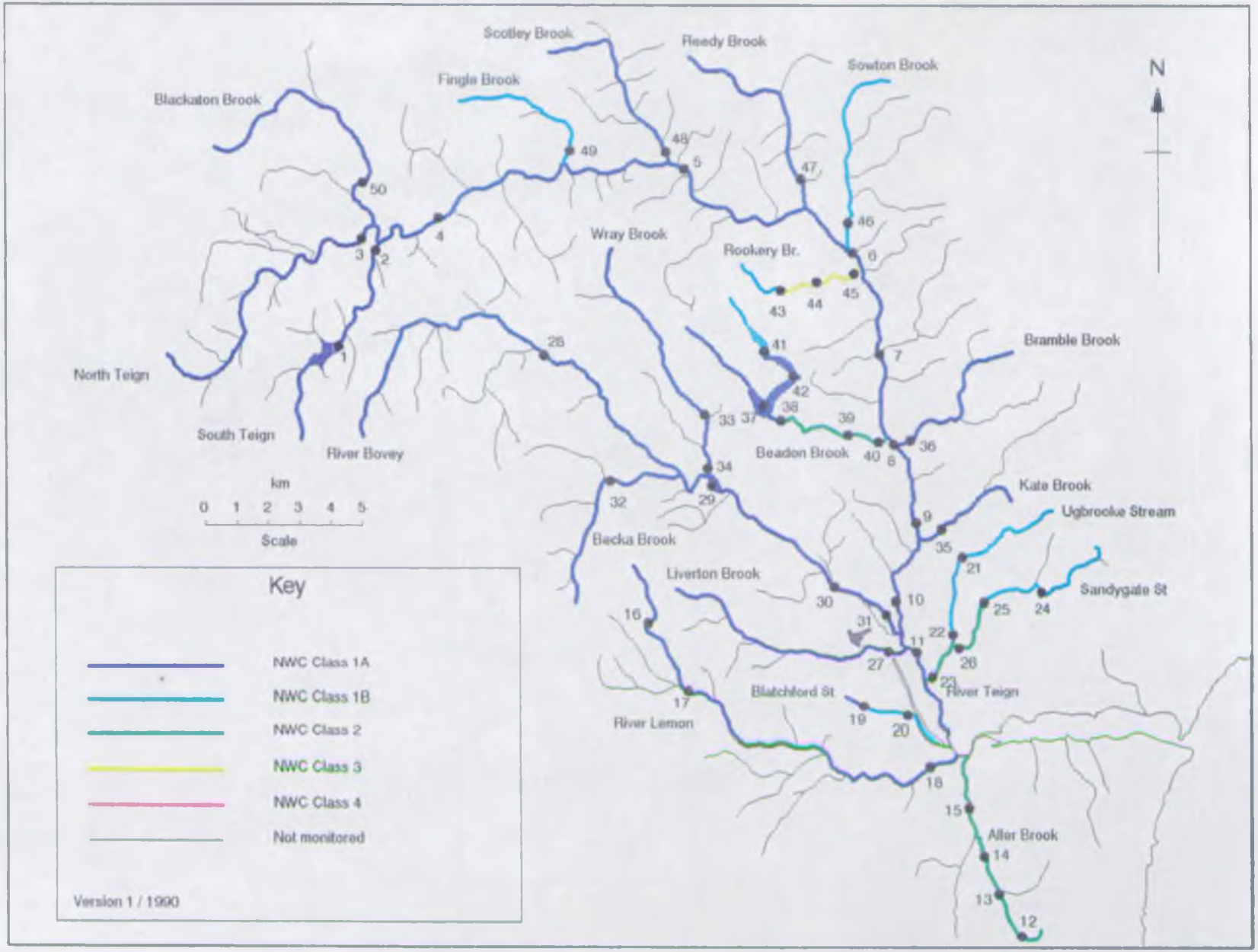
Reference

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.

Teign Catchment
River Quality Objectives



APPENDIX 10.1

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

3 Poor Quality	(i) (ii) (iii)	DO greater than 10% saturation Not likely to be anaerobic 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
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
		DO greater than 10% saturation		Insignificant watercourses and ditches not usable, where the objective is simply to prevent nuisance developing

Notes (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 : TEIGN (06)

1990 Map Position Number	River	Reach upstream of	User Reference Number	National Grid Reference
	SOUTH TEIGN RIVER	INFLOW, FERNWORTHY RES. (UNMON. REACH)		
1	SOUTH TEIGN RIVER	FERNWORTHY RESERVOIR	R06C051	SX 6670 8415
2	SOUTH TEIGN RIVER	LEIGH BRIDGE	R06C001	SX 6831 8763
3	NORTH TEIGN RIVER	GIDLEIGH PARK HOTEL	R06C002	SX 6775 8791
4	TEIGN	RUSHFORD	R06C003	SX 7048 8823
5	TEIGN	CLIFFORD BRIDGE	R06C004	SX 7809 8979
6	TEIGN	BRIDFORD BRIDGE	R06C005	SX 8343 8723
7	TEIGN	SPARA BRIDGE	R06C037	SX 8435 8408
8	TEIGN	CROCOMBE BRIDGE	R06C006	SX 8485 8115
9	TEIGN	CHUDLEIGH BRIDGE	R06C007	SX 8575 7847
10	TEIGN	NEW BRIDGE	R06C008	SX 8490 7652
11	TEIGN	PRESTON	R06B001	SX 8550 7452
	TEIGN	NORMAL TIDAL LIMIT (INFERRED STRETCH)		
12	ALLER BROOK	EDGINSWELL PUMPING STATION	R06A001	SX 8932 6625
13	ALLER BROOK	MANOR DRIVE KINGSKERSWELL	R06A002	SX 8801 6735
14	ALLER BROOK	ALLER ORCHARD	R06A003	SX 8755 6900
15	ALLER BROOK	PENNINN NEWTON ABBOT	R06A004	SX 8705 7060
	ALLER BROOK	NORMAL TIDAL LIMIT (INFERRED STRETCH)		
16	LEMON	BAGATOR MILL	R06B003	SX 7690 7556
17	LEMON	BELOW CONFLUENCE WITH RIVER SIG	R06B004	SX 7790 7355
18	LEMON	BRADLEY PLAYING FIELDS NEWTON ABBOT	R06B005	SX 8532 7099
	LEMON	NORMAL TIDAL LIMIT (INFERRED STRETCH)		
19	BLATCHFORD STREAM	PERRY FARM	R06B006	SX 8360 7287
20	BLATCHFORD STREAM	BLATCHFORD	R06B007	SX 8550 7301
	BLATCHFORD STREAM	NORMAL TIDAL LIMIT (INFERRED STRETCH)		
21	UGBROOKE STREAM	GAPPAH	R06B011	SX 8661 7729
22	UGBROOKE STREAM	HIGHER SANDYGATE	R06B012	SX 8672 7513
23	UGBROOKE STREAM	PRIOR TO RIVER TEIGN	R06B013	SX 8575 7375
	UGBROOKE STREAM	TEIGN CONFLUENCE (INFERRED STRETCH)		
24	SANDYGATE STREAM	PRIOR TO COLLEY BROOK	R06B008	SX 8917 7665
25	SANDYGATE STREAM	COOMBE HOLDRIDGE	R06B009	SX 8732 7580
26	SANDYGATE STREAM	NEW CROSS KINGSTEIGNTON	R06B010	SX 8679 7483
	SANDYGATE STREAM	UGBROOKE CONFLUENCE (INFERRED STRETCH)		
27	LIVERTON BROOK	VENTIFORD BRIDGE	R06B050	SX 8475 7475
	LIVERTON BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
28	BOVEY	BLACKALLER NORTH BOVEY	R06D001	SX 7376 8375
29	BOVEY	DRAKEFORD BRIDGE	R06D002	SX 7893 8015
30	BOVEY	LITTLE BOVEY	R06D003	SX 8320 7672

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
1.5	1.5	1A	1A	2	1A	1A	1A	
0.6	2.1	1A	1A	2	1A	1A	1A	1A
4.2	6.3	1A	1A	2	1A	1A	1A	1A
10.7	10.7	1A	1A	2	1A	1A	2	2
4.1	14.8	1A	1A	2	1A	1A	1A	2
9.7	24.5	1A	1A	2	1A	1A	1A	1A
7.7	32.2	1A	1B	1B	1B	1B	1A	1A
3.8	36.0	1A	1B	2	2	1A	1A	1B
3.5	39.5	1A	1B	2	2	1A	1A	1A
3.4	42.9	1A	1A	1B	1A	1A	1B	1B
2.7	45.6	1A	1A	1B	1A	1A	1B	2
2.5	48.1	1A	1A	1A	1A	1A	1B	1B
2.7	50.8	1A	1A	1A	1A	1A	1B	1B
1.2	1.2	2	3	3	2	3	3	3
1.9	3.1	2	2	3	1B	1B	1B	1B
1.9	5.0	2	2	4	3	3	3	3
1.8	6.8	2	2	2	3	3	3	3
1.1	7.9	2	2	2	3	3	3	3
2.4	2.4	1A	1A	1A	2	2	2	3
2.4	4.8	1A	1A	1A	2	2	2	1B
9.4	14.2	1A	1A	1A	1B	1B	1B	2
1.1	15.3	1A	1A	1A	1B	1B	1B	2
0.9	0.9	1A						1B
2.3	3.2	1B						3
1.1	4.3	1B						3
4.2	4.2	1B	3					2
2.3	6.5	1B	3					2
1.8	8.3	2	3					3
0.1	8.4	2	3					3
3.4	3.4	1B						1B
2.6	6.0	1B						1B
1.4	7.4	2						2
0.2	7.6	2						2
8.8	8.8	1A						1B
0.3	9.1	1A						1B
9.6	9.6	1A	1A	1A	1A	1A	1A	1B
8.1	17.7	1A	1A	1A	1A	1A	1A	1A
6.5	24.2	1A	1A	1B	1B	1B	1B	1B

Appendix 10.5

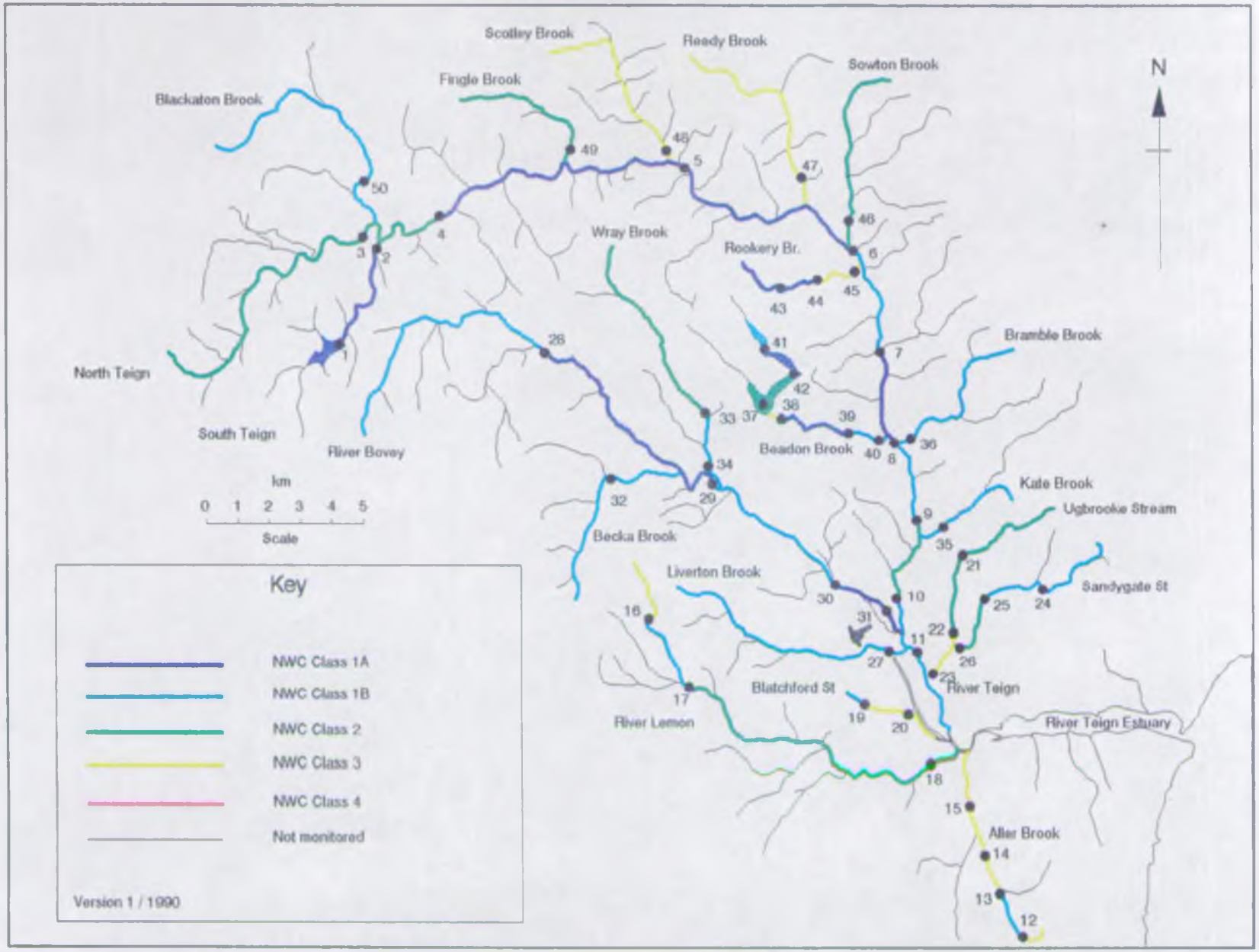
NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CATCHMENT : TEIGN (06)

1990 Map Position Number	River	Reach upstream of	User Reference Number	National Grid Reference
31	BOVEY	TWINYEO FARM	R06D004	SX 8447 7605
	BOVEY	TEIGN CONFLUENCE (INFERRED STRETCH)		
32	BECKA BROOK	NEW BRIDGE	R06D010	SX 7580 8006
	BECKA BROOK	BOVEY CONFLUENCE (INFERRED STRETCH)		
33	WRAY BROOK	CASELY COURT	R06D008	SX 7858 8225
34	WRAY BROOK	KNOWLE	R06D011	SX 7888 8024
	WRAY BROOK	BOVEY CONFLUENCE (INFERRED STRETCH)		
35	KATE BROOK	CHUDLEIGH	R06C055	SX 8595 7853
	KATE BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
36	BRAMBLE BROOK	PRIOR TO RIVER TEIGN	R06C011	SX 8491 8124
	BRAMBLE BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
	BEADON BROOK	INFLOW, TRENCHFORD RES. (UNMON. REACH)		
37	BEADON BROOK	TRENCHFORD RESERVOIR	R06C050	SX 8084 8288
38	BEADON BROOK	TOTTIFORD HOUSE	R06C009	SX 8084 8228
39	BEADON BROOK	HYNER BRIDGE	R06C010	SX 8368 8170
40	BEADON BROOK	PRIOR TO RIVER TEIGN	R06C040	SX 8428 8170
	BEADON BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
	KENNICK STREAM	INFLOW, KENNICK RES. (UNMON. STRETCH)		
41	KENNICK STREAM	KENNICK RESERVOIR	R06C048	SX 8068 8388
	KENNICK STREAM	INFLOW, TOTTIFORD RES. (UNMON. STRETCH)		
42	KENNICK STREAM	TOTTIFORD RESERVOIR	R06C049	SX 8106 8271
43	ROOKERY BROOK	POOLE	R06C012	SX 8173 8610
44	ROOKERY BROOK	ABOVE BARYTES MINE	R06C013	SX 8300 8632
45	ROOKERY BROOK	PRIOR TO RIVER TEIGN	R06C014	SX 8376 8671
	ROOKERY BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
46	SOWTON BROOK	SOWTON BRIDGE	R06C015	SX 8338 8745
	SOWTON BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
47	REEDY BROOK	REEDY BRIDGE	R06C054	SX 8199 8930
	REEDY BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
48	SCOTLEY BROOK	CLIFFORD BARTON	R06C057	SX 7772 9008
49	FINGLE BROOK	FINGLE BRIDGE	R06C053	SX 7433 9000
	FINGLE BROOK	TEIGN CONFLUENCE (INFERRED STRETCH)		
50	BLACKATON BROOK	CHAPPLE	R06C052	SX 6782 8900
	BLACKATON BROOK	NORTH TEIGN CONFL. (INFERRED STRETCH)		

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
1.6	25.8	1A	1A	1B	1B	1B	1B	1A
0.9	26.7	1A	1A	1B	1B	1B	1B	1A
3.9	3.9	1A	1A					1B
2.4	6.3	1A	1A					1B
7.5	7.5	1A	1A					2
2.7	10.2	1A	1A					1B
0.4	10.6	1A	1A					1B
3.6	3.6	1A						1B
0.2	3.8	1A						1B
6.4	6.4	1A	1A	1A	1A	1A	1A	1B
0.1	6.5	1A	1A	1A	1A	1A	1A	1B
3.0	3.0	1A	1B	3	3	3	3	
0.8	3.8	1A	1B	3	3	3	3	2
0.2	4.0	1A	1B	3	3	3	3	3
3.4	7.4	2	3	3	3	3	3	1A
0.8	8.2	2	3	3	3	3	3	1B
0.1	8.3	2	3	3	3	3	3	1B
1.5	1.5	1B						
1.3	2.8	1B						1B
0.1	2.9	1B						
1.1	4.0	1B						1A
2.4	2.4	1B	3	3	2	1B	1A	1A
1.5	3.9	3	3	1B	1B	1A	1A	1A
0.9	4.8	3	4	3	3	3	3	3
0.1	4.9	3	4	33	3	3	3	3
6.1	6.1	1B	1B	1B	1B	1B	2	2
0.3	6.4	1B	1B	1B	1B	1B	2	2
4.7	4.7	1A						3
0.5	5.2	1A						3
5.3	5.3	1A						3
7.0	7.0	1B						2
0.0	7.0	1B						2
7.5	7.5	1A						1B
1.5	9.0	1A						1B

Appendix 10.5

Teign Catchment
Water Quality - 1990



Appendix 10.6

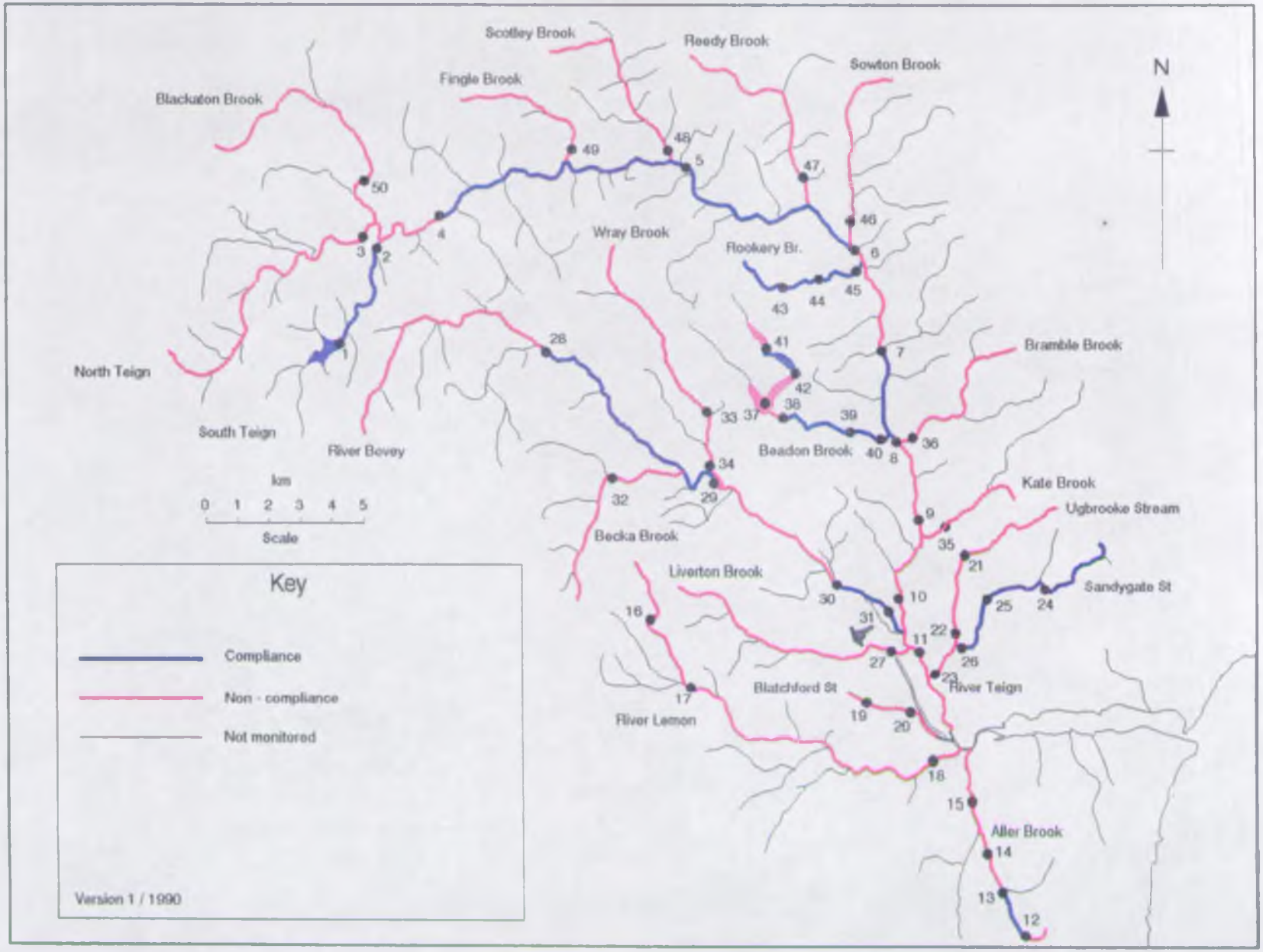
NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CALCULATED DETERMINAND STATISTICS USED FOR QUALITY ASSESSMENT
CATCHMENT : TEIGN (06)

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
SOUTH TEIGN RIVER	FERNWORTHY RESERVOIR	R06C051	1A	1A	5.3	1A	6.9	1A	19.0	1A	86.0	1A	2.0	1A	0.080	–	–	1A	22.3	–	–	–	–
SOUTH TEIGN RIVER	LEIGH BRIDGE	R06C001	1A	1A	6.0	1A	7.1	1A	16.8	1A	82.0	1A	2.1	1A	0.029	1A	0.010	1A	3.2	1A	10.4	1A	67.2
NORTH TEIGN RIVER	GIDLEIGH PARK HOTEL	R06C002	2	1A	5.6	1A	6.8	1A	17.5	1A	88.6	1A	2.1	1A	0.039	1A	0.010	1A	1.5	2	10.6	1A	27.6
TEIGN	RUSHFORD	R06C003	2	1A	5.9	1A	7.0	1A	16.5	1A	83.2	2	7.7	1A	0.100	1A	0.010	1A	2.4	1A	5.0	1A	12.0
TEIGN	CLIFFORD BRIDGE	R06C004	1A	1A	6.6	1A	7.4	1A	18.1	1A	82.3	1A	2.6	1A	0.067	1A	0.010	1A	3.0	–	–	–	–
TEIGN	BRIDFORD BRIDGE	R06C005	1A	1A	6.6	1A	7.4	1A	18.3	1A	86.6	1A	3.0	1A	0.052	1A	0.010	1A	3.4	1A	7.8	1A	20.0
TEIGN	SEMPA BRIDGE	R06C037	1B	1A	6.7	1A	7.4	1A	17.2	1B	74.6	1A	2.6	1A	0.061	1A	0.010	1A	4.3	1A	9.4	1A	91.0
TEIGN	CROCOMBE BRIDGE	R06C006	1A	1A	6.8	1A	7.4	1A	16.6	1A	85.2	1A	2.6	1A	0.051	1A	0.010	1A	4.0	1A	6.1	1A	95.1
TEIGN	CHUDLEIGH BRIDGE	R06C007	1B	1A	6.6	1A	8.0	1A	18.3	1B	75.3	1A	2.5	1A	0.070	1A	0.010	1A	6.4	1A	8.6	1A	106.6
TEIGN	NEW BRIDGE	R06C008	2	1A	7.0	1A	7.8	1A	17.9	2	56.8	1A	2.2	1A	0.080	1A	0.010	1A	5.8	1A	11.4	1A	111.0
TEIGN	PRESTON	R06B001	1B	1A	6.9	1A	7.7	1A	17.0	1A	80.4	1B	3.2	1A	0.107	1A	0.010	1A	19.0	1A	14.0	1A	78.9
ALLER BROOK	EDGINSWELL PUMPING STATION	R06A001	3	1A	7.6	1A	8.1	1A	17.0	2	48.5	3	13.9	3	1.700	3	0.029	1A	8.9	–	–	–	–
ALLER BROOK	MANOR DRIVE KINGSKERSWELL	R06A002	1B	1A	7.6	1A	8.3	1A	16.5	1A	81.0	1B	3.3	1B	0.550	1A	0.010	1A	16.9	1A	7.0	1A	25.0
ALLER BROOK	ALLER ORCHARD	R06A003	3	1A	7.7	1A	8.2	1A	17.0	1B	66.0	3	14.0	3	2.981	3	0.060	3	30.9	–	–	–	–
ALLER BROOK	PENNINN NEWTON ABBOT	R06A004	3	1A	7.8	1A	8.2	1A	17.1	1B	76.0	2	7.3	2	1.221	3	0.030	3	41.8	–	–	–	–
LEMON	BAGTOR MILL	R06B003	3	1A	6.5	1A	7.0	1A	14.5	3	30.9	1A	1.7	1A	0.059	1A	0.010	1A	3.0	1A	8.8	1A	12.8
LEMON	BELOW CONFLUENCE WITH RIVER SIG	R06B004	1B	1A	6.6	1A	7.4	1A	15.0	1B	79.9	1A	2.0	1A	0.060	1A	0.010	1A	3.7	1A	11.1	1A	46.3
LEMON	BRADLEY PLAYING FIELDS NEWTON ABBOT	R06B005	2	1A	7.3	1A	8.3	1A	17.0	2	55.5	1A	2.6	1A	0.160	1A	0.010	1A	7.0	1A	12.6	1A	18.5
BLATCHFORD STREAM	PERRY FARM	R06B006	1B	1A	7.2	1A	8.2	1A	15.0	1B	79.5	1A	2.4	1A	0.146	1A	0.010	1A	22.8	1A	6.9	1A	19.4
BLATCHFORD STREAM	BLATCHFORD	R06B007	3	1A	7.6	1A	8.3	1A	15.5	1B	67.0	1A	2.8	1A	0.110	1A	0.010	3	35.8	1A	50.0	1A	50.0
UGBROOKE STREAM	GAPPAH	R06B011	2	1A	7.5	1A	8.4	1A	18.4	1B	67.5	2	7.5	1B	0.460	1A	0.019	1A	14.6	1A	5.0	1A	13.1
UGBROOKE STREAM	HIGHER SANDYGATE	R06B012	2	1A	7.6	1A	8.2	1A	16.9	1B	77.8	2	5.5	2	0.838	1A	0.010	1A	18.5	1A	10.3	1A	32.3
UGBROOKE STREAM	PRIOR TO RIVER TEIGN	R06B013	3	1A	7.3	1A	8.0	1A	17.3	1A	88.5	1A	2.5	1A	0.215	1A	0.010	3	122.5	2	50.0	1A	107.6
SANDYGATE STREAM	PRIOR TO COLLEY BROOK	R06B008	1B	1A	7.6	1A	8.2	1A	15.9	1B	67.0	1A	2.6	1A	0.162	1A	0.010	1A	6.2	1A	12.2	1A	13.2
SANDYGATE STREAM	COOMBE HOLDRIDGE	R06B009	1B	1A	7.8	1A	8.5	1A	15.4	1B	79.1	1A	2.3	1A	0.096	1A	0.010	1A	7.7	1A	5.0	1A	13.0
SANDYGATE STREAM	NEW CROSS KINGSTEIGNTON	R06B010	2	1A	7.7	1A	8.2	1A	16.4	2	44.6	2	5.1	1A	0.119	1A	0.010	1A	8.5	1A	5.0	1A	21.9
LIVERTON BROOK	VENTIFORD BRIDGE	R06B050	1B	1A	7.5	1A	7.8	1A	17.0	1B	73.2	1A	2.4	1A	0.127	1A	0.010	1A	7.1	1A	6.9	1A	75.6
BOVEY	BLACKALLER NORTH BOVEY	R06D001	1B	1A	6.6	1A	7.3	1A	15.4	1B	75.8	1A	2.3	1A	0.040	1A	0.010	1A	4.8	–	–	–	–
BOVEY	DRAKEFORD BRIDGE	R06D002	1A	1A	6.7	1A	7.2	1A	15.9	1A	89.3	1A	2.8	1A	0.065	1A	0.010	1A	5.1	–	–	–	–
BOVEY	LITTLE BOVEY	R06D003	1B	1A	6.7	1A	7.4	1A	17.2	1A	86.4	1B	3.4	1A	0.061	1A	0.010	1A	7.4	1A	7.0	1A	21.2
BOVEY	TWINNED FARM	R06D004	1A	1A	6.8	1A	7.4	1A	18.1	1A	81.7	1A	2.6	1A	0.120	1A	0.010	1A	12.9	1A	7.3	1A	20.0
BECKA BROOK	NEW BRIDGE	R06D010	1B	1A	6.3	1A	7.1	1A	16.0	1B	65.1	1A	2.5	1A	0.185	1A	0.010	1A	5.2	1A	6.9	1A	11.0
WRAY BROOK	CASELY COURT	R06D008	2	1A	7.0	1A	7.4	1A	16.9	1B	79.2	1B	4.4	2	0.743	1A	0.010	1A	10.0	1A	6.9	1A	13.7
WRAY BROOK	KNOWLE	R06D011	1B	1A	7.0	1A	7.4	1A	16.9	1A	80.3	1B	3.9	1B	0.319	1A	0.010	1A	8.9	1A	8.8	1A	19.0

NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
CALCULATED DETERMINAND STATISTICS USED FOR QUALITY ASSESSMENT
CATCHMENT : TEIGN (06)

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
KATE BROOK	CHUDLEIGH	R06C055	1B	1A	7.8	1A	8.5	1A	17.9	1B	79.2	1B	3.1	1A	0.280	1A	0.010	1A	6.3	1A	5.0	1A	19.1
BRAMBLE BROOK	PRIOR TO RIVER TEIGN	R06C011	1B	1A	7.5	1A	8.1	1A	15.4	1A	82.5	1B	3.4	1A	0.037	1A	0.010	1A	7.7	1A	5.0	1A	16.7
BEADON BROOK	TRENCHFORD RESERVOIR	R06C050	2	1A	6.2	1A	6.7	1A	19.0	2	54.0	1A	2.1	1A	0.120	1A	0.010	1A	2.7	–	–	–	–
BEADON BROOK	TOTTIFORD HOUSE	R06C009	3	3	4.7	1A	8.0	1A	18.0	1B	79.0	1A	2.6	1A	0.212	3	0.028	1A	12.1	–	–	–	–
BEADON BROOK	HYNER BRIDGE	R06C010	1A	1A	6.5	1A	7.1	1A	15.7	1A	86.6	1A	2.1	1A	0.034	1A	0.010	1A	3.8	–	–	–	–
BEADON BROOK	PRIOR TO RIVER TEIGN	R06C040	1B	1A	6.8	1A	7.8	1A	16.2	1B	77.3	1A	2.3	1A	0.032	1A	0.010	1A	4.1	–	–	–	–
KENNICK STREAM	KENNICK RESERVOIR	R06C048	1B	1A	6.4	1A	7.2	1A	20.0	1B	64.0	1B	3.1	1A	0.050	1A	0.010	1A	2.7	–	–	–	–
KENNICK STREAM	TOTTIFORD RESERVOIR	R06C049	1A	1A	6.4	1A	7.0	1A	20.0	1A	81.0	1A	2.1	1A	0.140	1A	0.010	1A	1.9	–	–	–	–
ROOKERY BROOK	POOLE	R06C012	1A	1A	6.7	1A	7.1	1A	14.5	1A	84.9	1A	2.0	1A	0.151	1A	0.010	1A	4.9	1A	5.0	1A	15.7
ROOKERY BROOK	ABOVE ENGLISH MINE	R06C013	1A	1A	6.9	1A	7.4	1A	15.6	1A	82.0	1A	2.2	1A	0.141	1A	0.010	1A	5.7	1A	11.0	1A	144.5
ROOKERY BROOK	PRIOR TO RIVER TEIGN	R06C014	3	1A	6.5	1A	7.0	1A	15.1	1A	83.7	1B	3.1	1A	0.130	1A	0.010	1A	6.3	1A	33.2	3	4020.0
SOMON BROOK	SOMON BRIDGE	R06C015	2	1A	7.0	1A	7.8	1A	18.3	2	44.6	1A	2.1	1A	0.165	1A	0.010	1A	5.3	1A	5.0	1A	21.2
REEDY BROOK	REEDY BRIDGE	R06C054	3	1A	6.9	1A	7.8	1A	15.0	3	19.0	2	5.4	1A	0.170	1A	0.010	1A	9.5	–	–	–	–
SCOTLEY BROOK	CLIFFORD BARTON	R06C057	3	1A	6.9	1A	7.7	1A	15.0	3	32.0	1B	3.3	1A	0.230	1A	0.010	1A	9.2	–	–	–	–
FINGLE BROOK	FINGLE BRIDGE	R06C053	2	1A	6.9	1A	7.8	1A	15.4	1A	81.0	2	8.7	1B	0.396	1A	0.010	1A	7.4	–	–	–	–
BLACKPOOL BROOK	CHAPPLE	R06C052	1B	1A	6.6	1A	7.0	1A	15.5	1B	75.1	1A	2.9	1B	0.537	1A	0.010	1A	3.9	1A	6.9	1A	18.8

Teign Catchment
Compliance - 1990



Appendix 10.8

NATIONAL RIVERS AUTHORITY – SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
NUMBER OF SAMPLES (N) AND NUMBER OF SAMPLES EXCEEDING QUALITY STANDARD (F)
CATCHMENT : TEIGN (06)

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
SOUTH TEIGN RIVER	FERNWORTHY RESERVOIR	R06C051	11	–	11	–	12	–	11	–	11	–	11	–	8	–	11	1	12	–	12	–
SOUTH TEIGN RIVER	LEIGH BRIDGE	R06C001	30	–	30	–	31	–	30	1	30	–	30	–	20	–	30	1	31	–	31	–
NORTH TEIGN RIVER	GIDLEIGH PARK HOTEL	R06C002	30	–	30	–	31	–	30	–	30	–	30	–	22	–	30	–	31	1	31	–
TEIGN	RUSHFORD	R06C003	20	–	20	–	20	–	20	–	20	1	20	–	20	–	20	–	20	–	20	–
TEIGN	CLIFFORD BRIDGE	R06C004	25	–	25	–	25	–	25	–	25	–	25	–	23	–	25	–	0	–	0	–
TEIGN	BRIDFORD BRIDGE	R06C005	36	–	36	–	36	–	36	–	36	1	36	–	30	–	36	–	36	–	36	–
TEIGN	SPARA BRIDGE	R06C037	38	–	38	–	38	–	38	2	37	1	37	–	32	–	38	–	38	1	38	–
TEIGN	CHUDLEIGH BRIDGE	R06C006	38	–	38	–	38	–	38	1	38	–	38	–	31	–	38	–	38	–	38	–
TEIGN	CHUDLEIGH BRIDGE	R06C007	23	–	23	–	21	–	21	2	21	–	21	–	21	–	23	1	21	–	21	–
TEIGN	NEW BRIDGE	R06C008	23	–	23	–	21	–	21	1	21	–	21	–	21	–	23	1	21	–	21	–
TEIGN	PRESTON	R06B001	68	–	68	–	67	–	66	2	66	3	66	–	65	–	68	13	68	1	68	–
ALLER BROOK	EGGINSWELL PUMPING STATION	R06A001	39	–	39	–	38	–	38	1	39	2	39	2	30	1	39	3	0	–	0	–
ALLER BROOK	MANOR DRIVE KINGSKERSWELL	R06A002	39	–	39	–	39	–	39	–	39	–	39	–	37	–	39	7	39	–	39	–
ALLER BROOK	ALLER ORCHARD	R06A003	39	–	39	–	39	–	39	–	39	5	38	8	39	12	39	14	0	–	0	–
ALLER BROOK	PERTON NEWTON ABBOT	R06A004	38	–	38	–	38	–	38	–	38	1	38	1	38	2	38	14	0	–	0	–
LEMON	BIGNOR MILL	R06B003	20	–	20	–	20	–	20	1	20	–	20	–	16	–	20	–	20	–	20	–
LEMON	BELOW CONFLUENCE WITH RIVER SIG	R06B004	26	–	26	–	26	–	26	1	26	–	26	–	26	–	26	–	25	–	25	–
LEMON	BRADLEY PLAYING FIELDS NEWTON ABBOT	R06B005	34	–	34	–	34	–	34	2	34	1	34	–	32	–	34	1	33	–	33	–
BLATCHFORD STREAM	PERRY FARM	R06B006	20	–	20	–	20	–	20	1	19	–	20	–	20	–	20	4	20	–	20	–
BLATCHFORD STREAM	BLATCHFORD	R06B007	20	–	20	–	19	–	19	–	19	–	19	–	19	–	20	10	19	–	19	–
UGBROOKE STREAM	GAPPAH	R06B011	22	–	22	–	22	–	22	–	22	2	22	–	21	–	22	2	22	–	22	–
UGBROOKE STREAM	HIGHER SANDIGATE	R06B012	22	–	22	–	22	–	22	–	22	1	22	2	22	–	22	3	22	–	22	–
UGBROOKE STREAM	PRIOR TO RIVER TEIGN	R06B013	24	–	24	–	24	–	24	–	24	–	24	–	24	–	24	21	22	–	22	–
SANDIGATE STREAM	PRIOR TO COLLEY BROOK	R06B008	23	–	23	–	22	–	21	–	23	–	23	–	22	–	23	1	23	–	23	–
SANDIGATE STREAM	COOMBE HOLDRIDGE	R06B009	23	–	23	–	23	–	22	–	23	–	23	–	23	–	23	1	23	–	23	–
SANDIGATE STREAM	NEW CROSS KINGSTEIGNTON	R06B010	22	–	22	–	22	–	22	1	22	–	22	–	22	–	22	1	22	–	22	–
LIVERTON BROOK	VENTIFORD BRIDGE	R06B050	21	–	21	–	20	–	20	2	21	–	21	–	20	–	21	1	21	–	21	–
BOVEY	BLACKALLER NORTH BOVEY	R06C001	24	–	24	–	24	–	24	1	24	–	24	–	23	–	24	1	0	–	0	–
BOVEY	DUNSFORD BRIDGE	R06C002	24	–	24	–	24	–	24	–	24	1	24	–	19	–	24	1	0	–	0	–
BOVEY	LITTLE BOVEY	R06C003	38	–	38	–	37	–	37	–	37	3	37	–	35	–	38	3	37	–	37	–
BOVEY	TEMPLER FARM	R06C004	39	–	39	–	38	–	37	1	37	1	37	–	36	–	39	5	37	–	37	–
HEDDA BROOK	NEW BRIDGE	R06B010	22	–	22	–	22	–	22	2	22	–	22	–	21	–	22	1	22	–	22	–
[illegible]	CASELY COURT	R06C008	21	–	21	–	21	–	20	1	21	2	21	1	21	–	21	1	21	–	21	–
[illegible]	[illegible]	[illegible]	21	–	21	–	21	–	21	–	21	1	21	1	21	–	21	1	21	–	21	–

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 : TEIGN (06)

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
WIDE BROOK	CHUDLEIGH	R06C055	21	-	21	-	20	-	20	1	21	1	21	-	19	-	21	1	21	-	21	-
BUMBLE BROOK	PRIOR TO RIVER TEIGN	R06C011	25	-	25	-	25	-	25	-	25	1	25	-	15	-	25	2	25	-	25	-
BENCON BROOK	TRENCHFORD RESERVOIR	R06C050	12	-	12	-	12	-	11	1	12	-	12	-	11	-	12	-	12	-	12	-
BENCON BROOK	TOTTIFORD HOUSE	R06C009	37	3	37	1	37	-	37	3	37	-	37	-	35	1	37	2	37	-	37	-
BENCON BROOK	MEWER BRIDGE	R06C010	37	-	37	-	37	-	37	-	37	-	37	-	30	-	37	1	36	-	36	-
BENCON BROOK	PRIOR TO RIVER TEIGN	R06C040	36	-	36	1	36	-	36	1	36	-	36	-	28	-	36	1	36	-	36	-
KENNICK STREAM	KENNICK RESERVOIR	R06C048	12	-	12	-	11	-	11	-	12	-	12	-	10	-	12	-	12	-	12	-
KENNICK STREAM	TOTTIFORD RESERVOIR	R06C049	12	-	12	-	12	-	12	-	12	-	12	-	11	-	12	-	12	-	12	-
ROOKERY BROOK	POOLE	R06C012	37	-	37	-	37	-	37	1	37	-	37	-	28	-	37	1	37	-	37	-
ROOKERY BROOK	ABOVE SMARTIES MINE	R06C013	37	-	37	-	37	-	37	-	37	-	37	-	33	-	37	-	37	-	37	-
ROOKERY BROOK	PRIOR TO RIVER TEIGN	R06C014	37	-	37	-	37	-	37	-	37	-	37	-	36	-	37	-	37	-	37	-
SOMON BROOK	SOMON BRIDGE	R06C015	25	-	25	-	25	-	25	5	25	-	25	-	19	-	25	-	25	-	25	-
BEDDY BROOK	BEDDY BRIDGE	R06C054	17	-	17	-	17	-	17	6	17	1	17	-	17	-	17	2	17	-	17	-
SCOBLEY BROOK	CLIFFORD BARTON	R06C057	13	-	13	-	13	-	13	6	13	2	13	-	13	-	13	2	13	-	13	-
FINGLE BROOK	FINGLE BRIDGE	R06C053	20	-	20	-	20	-	20	-	20	1	20	-	19	-	20	-	20	-	20	-
BLACKHORN BROOK	CHAPPLE	R06C052	20	-	20	-	20	-	20	2	20	-	20	1	20	-	20	-	20	-	20	-

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
PERCENTAGE EXCEEDENCE OF DETERMINAND STATISTICS FROM QUALITY STANDARDS
CATCHMENT : TEIGN (06)

River	Reach upstream of	User Ref. Number	pH Lower
SOUTH TEIGN RIVER	FERNWORTHY RESERVOIR	R06C051	-
SOUTH TEIGN RIVER	LEIGH BRIDGE	R06C001	-
NORTH TEIGN RIVER	GIDLEIGH PARK HOTEL	R06C002	-
TEIGN	RUSHFORD	R06C003	-
TEIGN	CLIFFORD BRIDGE	R06C004	-
TEIGN	BRIDFORD BRIDGE	R06C005	-
TEIGN	SPARA BRIDGE	R06C037	-
TEIGN	CROCOMBE BRIDGE	R06C006	-
TEIGN	CHUDLEIGH BRIDGE	R06C007	-
TEIGN	NEW BRIDGE	R06C008	-
TEIGN	PRESTON	R06B001	-
ALLER BROOK	EDGINSWELL PUMPING STATION	R06A001	-
ALLER BROOK	MANOR DRIVE KINGSKERSWELL	R06A002	-
ALLER BROOK	ALLER ORCHARD	R06A003	-
ALLER BROOK	PENNINN NEWTON ABBOT	R06A004	-
LEMON	BAGATOR MILL	R06B003	-
LEMON	BELOW CONFLUENCE WITH RIVER SIG	R06B004	-
LEMON	BRADLEY PLAYING FIELDS NEWTON ABB	R06B005	-
BLATCHFORD STREAM	PERRY FARM	R06B006	-
BLATCHFORD STREAM	BLATCHFORD	R06B007	-
UGBROOKE STREAM	GAPPAH	R06B011	-
UGBROOKE STREAM	HIGHER SANDYGATE	R06B012	-
UGBROOKE STREAM	PRIOR TO RIVER TEIGN	R06B013	-
SANDYGATE STREAM	PRIOR TO COLLEY BROOK	R06B008	-
SANDYGATE STREAM	COOMBE HOLDRIDGE	R06B009	-
SANDYGATE STREAM	NEW CROSS KINGSTEIGNTON	R06B010	-
LIVERTON BROOK	VENTIFORD BRIDGE	R06B050	-
BOVEY	BLACKALLER NORTH BOVEY	R06D001	-
BOVEY	DRAKEFORD BRIDGE	R06D002	-
BOVEY	LITTLE BOVEY	R06D003	-
BOVEY	TWINYEO FARM	R06D004	-
BECKA BROOK	NEW BRIDGE	R06D010	-
WRAY BROOK	CASELY COURT	R06D008	-
WRAY BROOK	KNOWLE	R06D011	-

PERCENTAGE EXCEEDENCE OF STATISTIC FROM QUALITY STANDARD

pH Upper	Temperature	DO (%)	BOD (ATU)	Total Ammonia	Un-ionised Ammonia	Suspended Solids	Total Copper	Total Zinc
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	112	-
-	-	-	158	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	7	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	6	-	-	-	-	-	-
-	-	29	-	-	-	-	-	-
-	-	-	6	-	-	-	-	-
-	-	-	54	9	38	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	56	91	186	23	-	-
-	-	-	-	-	45	67	-	-
-	-	61	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	31	-	-	-	-	-	-
-	-	1	-	-	-	-	-	-
-	-	-	-	-	-	43	-	-
-	-	-	50	-	-	-	-	-
-	-	-	10	20	-	-	-	-
-	-	-	-	-	-	390	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	9	-	-	-	-	-	-
-	-	5	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	13	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	19	-	-	-	-	-	-
-	-	1	47	140	-	-	-	-
-	-	-	29	3	-	-	-	-

Appendix 10.10

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
1990 RIVER WATER QUALITY CLASSIFICATION
PERCENTAGE EXCEEDENCE OF DETERMINAND STATISTICS FROM QUALITY STANDARDS
CATCHMENT : TEIGN (06)

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
KATE BROOK	CHUDLEIGH	R06C055	-	-	-	1	4	-	-	-	-	-
BRAMBLE BROOK	PRIOR TO RIVER TEIGN	R06C011	-	-	-	-	14	-	-	-	-	-
BEADON BROOK	TRENCHFORD RESERVOIR	R06C050	-	-	-	32	-	-	-	-	-	-
BEADON BROOK	TOTTIFORD HOUSE	R06C009	6	-	-	1	-	-	33	-	-	-
BEADON BROOK	HYNER BRIDGE	R06C010	-	-	-	-	-	-	-	-	-	-
BEADON BROOK	PRIOR TO RIVER TEIGN	R06C040	-	-	-	-	-	-	-	-	-	-
KENNICK STREAM	KENNICK RESERVOIR	R06C048	-	-	-	-	-	-	-	-	-	-
KENNICK STREAM	TOTTIFORD RESERVOIR	R06C049	-	-	-	-	-	-	-	-	-	-
ROOKERY BROOK	POOLE	R06C012	-	-	-	-	-	-	-	-	-	-
ROOKERY BROOK	ABOVE BARYTES MINE	R06C013	-	-	-	-	-	-	-	-	-	-
ROOKERY BROOK	PRIOR TO RIVER TEIGN	R06C014	-	-	-	-	-	-	-	-	-	-
SOWTON BROOK	SOWTON BRIDGE	R06C015	-	-	-	26	-	-	-	-	-	-
REEDY BROOK	REEDY BRIDGE	R06C054	-	-	-	76	80	-	-	-	-	-
SCOTLEY BROOK	CLIFFORD BARTON	R06C057	-	-	-	60	10	-	-	-	-	-
FINGLE BROOK	FINGLE BRIDGE	R06C053	-	-	-	-	74	-	-	-	-	-
BLACKATON BROOK	CHAPPLE	R06C052	-	-	-	6	-	73	-	-	-	-

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
IDENTIFICATION OF POSSIBLE CAUSES OF NON-COMPLIANCE WITH RQO
CATCHMENT : TEIGN (06)

* = WORK ALREADY IN HAND

1990 Map Position Number	River	Reach upstream of	User Reference Number	Reach Length (km)	Possible causes of non-compliance
3	NORTH TEIGN RIVER	GIDLEIGH PARK HOTEL	R06C002	10.7	CATCHMENT GEOLOGY, UP-STREAMS ABSTRACTIONS, MOORLAND
4	TEIGN	RUSHFORD	R06C003	4.1	SEWAGE TREATMENT WORKS, UP-STREAM ABSTRACTIONS
7	TEIGN	SPARA BRIDGE	R06C037	3.8	DROUGHT
9	TEIGN	CHUDLEIGH BRIDGE	R06C007	3.4	
10	TEIGN	NEW BRIDGE	R06C008	2.7	SEWAGE TREATMENT WORKS, LOW VELOCITY
11	TEIGN	PRESTON	R06B001	2.5	INDUSTRIAL DISCHARGE
12	ALLER BROOK	EDGINSWELL PUMPING STATION	R06A001	1.2	URBANISATION, CULVERTING, SEWAGE TREATMENT WORKS, LOW FLOWS
14	ALLER BROOK	ALLER ORCHARD	R06A003	1.9	URBANISATION, SEWAGE TREATEMENT WORKS, DEVELOPMENT AT BARTON
15	ALLER BROOK	PENNINN NEWTON ABBOT	R06A004	1.8	URBANISATION, CULVERTING
16	LEMON	BAGATOR MILL	R06B003	2.4	DROUGHT
17	LEMON	BELOW CONFLUENCE WITH RIVER SI	R06B004	2.4	DROUGHT
18	LEMON	BRADLEY PLAYING FIELDS NEWTON	R06B005	9.4	URBANISATION, CULVERTING
19	BLATCHFORD STREAM	PERRY FARM	R06B006	0.9	
20	BLATCHFORD STREAM	BLATCHFORD	R06B007	2.3	CHINA CLAY DISCHARGE
21	UGBROOKE STREAM	GAPPAH	R06B011	4.2	
22	UGBROOKE STREAM	HIGHER SANDYGATE	R06B012	2.3	CHINA CLAY DISCHARGE
23	UGBROOKE STREAM	* PRIOR TO RIVER TEIGN	R06B013	1.8	CHINA CLAY DISCHARGE
27	LIVERTON BROOK	VENTIFORD BRIDGE	R06B050	8.8	FISH FARM EFFLUENT
28	BOVEY	BLACKALLER NORTH BOVEY	R06D001	9.6	SEWAGE TREATMENT WORKS
30	BOVEY	LITTLE BOVEY	R06D003	6.5	
32	BECKA BROOK	NEW BRIDGE	R06D010	3.9	ROAD RUN-OFF, DROUGHT
33	WRAY BROOK	CASELY COURT	R06D008	7.5	SEPTIC TANKS, DROUGHT
34	WRAY BROOK	KNOWLE	R06D011	2.7	SEWAGE TREATEMENT WORKS
35	KATE BROOK	CHUDLEIGH	R06C055	3.6	FISH FARM DISCHARGE
36	BRAMBLE BROOK	PRIOR TO RIVER TEIGN	R06C011	6.4	DROUGHT
37	BEADON BROOK	TRENCHFORD RESERVOIR	R06C050	0.8	
38	BEADON BROOK	TOTTIFORD HOUSE	R06C009	0.2	IMPOUNDMENT, UP-STREAM ABSTRACTIONS
46	SOWTON BROOK	SOWTON BRIDGE	R06C015	6.1	DROUGHT, UP-STREAM ABSTRACTIONS
47	REEDY BROOK	REEDY BRIDGE	R06C054	4.7	DROUGHT

NATIONAL RIVERS AUTHORITY - SOUTH WEST REGION
IDENTIFICATION OF POSSIBLE CAUSES OF NON-COMPLIANCE WITH RQO
CATCHMENT : TEIGN (06)

* = WORK ALREADY IN HAND

1990 Map Position Number	River	Reach upstream of	User Reference Number	Reach Length (km)	Possible causes of non-compliance
48	SCOTLEY BROOK	CLIFFORD BARTON	R06C057	5.3	DROUGHT, ENGINEERING WORKS, CATCHMENT GEOLOGY
49	FINGLE BROOK	FINGLE BRIDGE	R06C053	7.0	SEWAGE TREATMENT WORKS, ENGINEERING WORKS, CATCHMENT GEOLOGY
50	BLACKATON BROOK	CHAPPLE	R06C052	7.5	PRIVATE DISCHARGES