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234



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*National Rivers Authority
Anglian Region*

47

**NATIONAL RIVERS AUTHORITY
ANGLIAN REGION**

**ASSESSMENT OF THE PERFORMANCE OF THE BMWP SCORING SYSTEM AGAINST
BIOLOGICAL TARGETS AND THE
DETERMINATION OF SIGNIFICANT CHANGE**

Introduction

Biological data is now playing an important role in improving the precision with which the water quality of a stretch of river is determined. It is important that subjective interpretation of the data is reduced so that an assessment of the performance against biological targets and determination of change over time can be carried out with confidence.

In an attempt to investigate the most efficient and informative method of interpreting and assessing the data a series of **illustrative** experiments involving data manipulation were carried out. Ideally the procedure should make full use of all the data available and incorporate a low level of statistical uncertainty. This then sensitises the procedure so smaller changes in the biological quality of sites may be identified.

The BMWP Score is a system used for summarising qualitative data and is considered a reliable method of assessing the biological quality of rivers. Armitage et al (1983). It is therefore used widely by the NRA on a national scale together with the ASPT.

Data from 140 National reporting sites in the Anglian Region has been used in this report. Each of these sites has been sampled over a ten year period and the BMWP and ASPT values calculated. In this report data from 1988, 1989 and 1990 will be used for the analyses.

Summary of Experimental Design

Assessment of Performance against Biological Targets.

Experiment I

Observed raw data compared with predicted Rivpacs Targets.

Experiment II

Discrepancies detected by AQC quantified and accounted for in the data used in the comparison with the predicted data.

Experiment III

Areas of uncertainty in Rivpacs are quantified and together with AQC error value the data was then compared with the predicted data.

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Experiment IV

Total BMWP values compared with Rivpacs predictions

Determination of Change

Experiment V

Significant Changes between 1989 and 1990 data was assessed.

Experiment VI

The performance of the observed data against NWC classes.

Rivpacs

The Rivpacs version used in this report is last years version, consequently the data will have to be reworked with the new version.

It is also important to note that a single set of variables averaged for the year has been used for Rivpacs prediction.

Assessment of Performance against Biological Targets

Experiment I

Rivpacs was used to calculate the BMWP values for the missing seasons for each site. This was calculated using the ratios of the Rivpacs BMWP Target Score for each season.

The mean BMWP value for each site was determined and the compliance of this value was then compared with the predicted Rivpacs Target. These results were ranked in order of confidence that the targets were met. The T-test was then used to assess whether the sites are significantly outside its target. (See Appendix 1)

The predicted Rivpacs Target scores were calculated by adding the mean BMWP score and the standard error. This then ensures that the most optimistic target BMWP score is determined and compared with the observed value. Therefore increasing the confidence in the results where the observed values reached or exceeded the predicted data.

The deficit value indicates the amount by which the observed values fell short of the most optimistic predicted values.

Results

Year	% failure
1988	44
1989	45
1990	49

The results indicate that a high percentage of sites have failed to meet the predicted targets set by Rivpacs.

Discussion

The high percentage of sites which are significantly below target may not appear a realistic figure from which to work from. Why?

Considering the data used to compile the reference data incorporated into Rivpacs was taken from sites specifically chosen for their 'purity' is this result expected? Is it realistic to expect a high percentage of the rivers in the Region to reach this level of 'perfection'!

Is Rivpacs a viable method from which to assess performance against biological data. In what way can the compatibility of the observed and predicted data be increased?

By taking into account the short coming identified by AQC (Experiment 1) and the levels of uncertainty in Rivpacs (Experiment 2) the data may be examined with greater confidence.

Experiment II

Aim: To take into account the discrepancies detected by the AQC results for the Anglian Region.

Methodology

The AQC results for the EMWP values suggest a 29% variation for the mean and a standard error of 16%. Each EMWP value was therefore multiplied by 1.29 to compensate for the underestimation of these values. The experimental procedure in the Experiment 1 was then repeated and the results displayed in the same format, and are displayed in Appendix 2. (Appendix 2 also contains the details of the programme used.)

Results

Year	% failed
1988	20
1989	36
1990	28

The results indicate an approximately 50% reduction in the failure rate of the number of sites.

Discussion

The samples taken from the reference sites used to construct the classification and prediction system were analysed by the IFE and the same biologist are carrying on the AQC on our samples. Therefore the observed EMWP values and ASPT have been increased in accordance with this variation accounting for the apparent deficiency in the Anglian Region. This then increases the compatibility of the observed and predicted values.

What other areas of uncertainty in our assessment of the data should be addressed?

Experiment III

Aim: To remove possible areas of uncertainty within Rivpacs.

Methodology

The level of uncertainty in Rivpacs has been quantified as 16% of the estimate. This was calculated using the Monte-Carlo Simulation in Rivpacs, where the mean target and corresponding STD was determined.

Therefore, including this value the same procedure for experiment 2 was carried out and the results shown in the same format in Appendix 3.

Results

Year	%significant sites
1988	9
1989	16
1990	15

Conclusion

Once these areas of subjectivity have been quantified and dismissed (that is from AQC and Rivpacs) the data can then be manipulated and assessed with greater confidence.

The reliability of the data is imperative for the determination of quality standards that are or will be?? statutory enforced.

However, in what other way may the raw data be quantified prior to statistical analysis. Experiment IV illustrates the use of the total BMWP.

Experiment IV

Methodology

The procedure in Experiment 1 has been repeated using total BMWP's calculated for sites from 1989 where 3 samples were taken. Consequently only 49 sites of the 140 samples could be used in this experiment

However it is important to note that the degree of error detected by AQC cannot be included in this experiment. This is due to the fact that AQC has not been carried out on three samples from one site in one year. The results are displayed in the same format as in Experiment 3.

Results

Year	% sites failed
1988	
1989	4
1990	

These results show a low level of sites that have failed to reach the predicted target.

Discussion

The low level of sites that fail to reach the predicted target represent a realistic figure when compared to the 1% of river stretches that deteriorated in water quality in 1989.

Conclusion of the assessment of performance against Biological Targets.

The total BMWP score represents the highest biological quality of a site and for this reason it is frequently made use of by Biologist.

However statistically the arithmetic mean is preferred because,

- It allows an assessment of the performance when a site had fewer than 3 or more samples in a reporting period.
- sites which score highly may be distinguished between those which score highly in one or two out of 3 samples.
- the arithmetic mean is then also better at detecting occasional bad scores in an otherwise good quality site.
- Rivpacs suggests that the arithmetic mean of the samples is more precise than the total BMWP. Therefore smaller changes in quality may be detected.

- The degree of error detected by AQC cannot be included in this experiment. This is due to the fact that AQC has not been carried out on three samples from one site in one year. The results are displayed in the same format as in Experiment 3

Assessment of Significant Change

Experiment V

Aim To assess the significant changes between 1989 and 1990 BMWP scores.

Methodology

Rivpacs is not used in this experiment. The mean and STD of both year was calculated and a T-test then noted whether the difference between the means was statistically significant. The same assumption regarding AQC was used as in experiment II.

The sites were ranked according to the confidence levels that the scores had improved from 1989 to 1989. Therefore a value of 1.32% indicates 98.68% confidence that the quality has deteriorated.

The data is displayed in Appendix 5.

Results

10% of the 124 sites show significant deteriorations which are significant at the 5% level of confidence of improvement.

9% of the sites show significant improvements at the 95% level.

Consequently 19% (or 21 sites) show a significant change in score from 1989 to 1990.

Discussion

19% of the sites (21 in total) show a significant change in their biological quality, suggesting a review of the quality status assigned to them.

Data from chemical data is very variable and therefore methods have been developed to determine significant changes in water quality. This then increases the confidence with which the data may be assessed.

Currently there are no similar methods for removing subjectivity in assessing change in biological quality.

This uncertainty originates from a variety of sources.

- natural variation of biological systems
- local variations at each site.
- the element of chance of capturing a species.
- chance of being detected by the sorter in the time allowed.

- clerical error in recording this data.

These area of uncertainty are included in AQC. The error in Rivpacs include all the factors listed above and

- the degree to which physical variables are an incomplete basis for predicting biological scores.

It is only once this data is considered reliable by the removal of all possible areas of subjectivity, that comparisons and determination of change can be made with confidence.

Experiment VI

Aim: To assess the performance of the observed biological data against NWC Classes.

Methodology

The data used in this experiment has been treated in the same way as in Experiment II. That is, the discrepancies detected by AQC have been taken into consideration.

For the purpose of illustration lower limits of the BMWP scores of the NWC classes have been set. (shown in Fig. 1)

Fig 1

NWC Class	BMWP Score
1a	100
1b	80
2	60
3	30

The sites are then ranked in accordance with the percentage confidence of compliance with the NWC classes and the results displayed in Appendix VI.

Results

23% of the sites exceeded their class limits and are candidates for upgrading.

Whereas 9% of the sites fail to reach their class limits and are therefore candidates for downgrading.

Discussion

The NWC classes are determined mainly by the concentration of dissolved oxygen, biochemical oxygen demand and ammonia levels. In 1989 92% of rivers fell into the classes 1a, 1b and 2 and since 1988 1% of river lengths have deteriorated and 1% improved.

All improvements have occurred between classes 2 and 1b and deteriorations between 3 and 2.

If each class in this experiment is considered the result of an preliminary chemical classification, then this is the way in which the biological override may work.

However the results in this experiment appear quite high. This may be due to:-

- the illustrative assignment of the classes.
- the methodology may need adjustment.
- the fundamental differences between biology and chemistry.
- all or some of these.

Summary

Performance of Against Biological Targets

Experiment I to III illustrated the comparison of observed biological data with Rivpacs predicted targets for each site. Experiment II and III quantify areas of uncertainty and removes them before analysis the data.

Experiment IV illustrates the use of the total BMWP compared to the predicted values in Rivpacs. The results showed a similar number of sites significantly failed to reach the predicted value when compared to chemical data. However, the subjectivity of the data was not accounted for this experiment and therefore requires further development.

Assessment of Change

Experiment V demonstrates the way in which the change in biological quality may be assessed over time. However the results suggest a large number of sites significantly changes quality. Modifications may be necessary.

For purposes of illustration BMWP scores were set for NWC classes in this experiment and the performance was then assessed against these class limits. It may be seen as an example of how the biological override will work.

Conclusion

The importance of biological data in improving the precision with which water quality may be determined has now been recognised. The observed data of the 1990 Biological Survey will be used as a basis for the Environmental Quality Objectives to be formulated by the NRA. Therefore confidence in the data, and in assessing the results is of paramount importance. By removing all areas of uncertainty smaller changes in the biological quality may be recognised as significant. Consequently an assessment of sites against biological targets (such as Rivpacs) may be examined and a determination of change over time.

The aim of these illustrative experiments is to identify and fine tune a method (statistical or otherwise) which enables these sites that deteriorate in quality to be identified and the statutory requirements met.

Three season sampling is essential for maximum confidence in the data. The error margin surrounding one sample is large and are significantly reduced with increasing sample number.

The large variation in results when areas of subjectivity are removed (Expt. II and III) illustrate the effects these error margins have on the data. Although the total BMWP shows the highest diversity of a site and the number of sites that deteriorate represent a realistic figure compared to the chemical data, there are many advantages to the use of the mean and STD of the scores.

AQC has shown itself to be a valuable exercise and so the discrepancies must be taken into consideration. Ideally the AQC values for 3 seasons should be determined at the same site to obtain the discrepancy between the two BMWP scores.

The main advantages of using the mean and STD are that changes throughout the year may be identified and that the subjectivity of the data may be quantified and reduced.

It is as a result of this that Anglian Region intend to pursue the development of the experimental design in experiment III V and VI for assessing compliance and change in biological quality.

Recommendations

1. Three samples per year are necessary so as to reduce the associated errors and therefore increase the confidence in the data observed. With the subjectivity reduced, changes in biological quality may be analysed with confidence.
 2. The mean and STD of the BMWP score provide an effective means of assessing change and compliance with Rirvacs targets.
 3. Further investigation is required using ASPT, as the ASPT is least effort dependent than BMWP (Armitage 1983).
 4. Further investigation is required to investigate the most effective use of Rirvacs variables.
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Appendix 1:

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

No allowance for bias shown by AQC. No allowance for error of estimation for RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BNP Score	Confidence of Compliance	Deficit	MNC Class
1	OLD RIVER ANCHOLME WRAMBY	R038FANCO050W	5.7	.6	2	92	.00 %	85	2
2	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	12.0	1.4	2	95	.00 %	81	2
3	WILLOW BK.SOUTH PRIORS HALL	R058FWILS080P	20.0	2.3	2	100	.00 %	76	3
4	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R018FRHO202	20.3	2.3	2	98	.00 %	74	2
5	PIX BK.CHURCH END ARLESEY	R02BF14M07	23.3	2.2	3	97	.00 %	70	3
6	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R058FBRAM160W	38.7	6.3	1	117	.00 %	68	1b
7	OLD RIVER SLEA EVEDON	R038FOLDS040E	22.7	2.6	2	94	.00 %	67	3
8	ASHELDHAM BK.BROOK FARM COTTAGES	R018FDT0310	21.0	2.4	2	91	.00 %	66	-
9	R.CROUCH MEMORIAL PARK WICKFORD	R018FOR01	30.3	3.5	2	102	.00 %	66	3
10	WATTON BK.LT.CRESSINGHAM RD.BR.PILGRIMS	R02BF48M15	28.0	3.2	2	95	.00 %	62	2
11	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	37.3	3.5	3	103	.00 %	60	2
12	R.RASE WEST RASEN	R038FRASE170W	34.7	4.0	2	98	.00 %	57	1b
13	R.WANG HILL FH.BR.	R048FRINGO40	35.0	3.3	3	93	.00 %	53	3
14	R.WID WRITTLE BRIDGE	R018FIDOO40	43.0	4.0	3	102	.00 %	52	2
15	R.HIZ CADWELL ARCH	R02BF13M04	40.0	3.7	3	98	.00 %	52	2
16	SKITTER BECK BROOKELSBY STATION	R038FSKIT050B	27.3	3.1	2	84	.00 %	52	1b
17	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF35M16	37.7	3.5	3	93	.00 %	50	3
18	R.SMALL RIVER LANE FORCHAM	R02BF36M10	35.0	4.1	2	82	.00 %	49	3
19	R.ISE BRITISH LEYLANDS B571 RD.BR.	R058FRISE310B	44.7	5.1	2	100	.00 %	47	2
20	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R038FOLD090U	35.3	4.2	2	89	.00 %	46	2
21	LACEBY BECK LACEBY 87	R038FLACED40L	42.7	4.9	2	95	.00 %	44	1b
22	LOUTH CANAL ALVINGHAM	R038FLOUT040A	44.0	5.0	2	96	.00 %	44	3
23	ROMAN RIVER BOUNSTEAD BRIDGE	R018FRRO108	48.3	4.5	3	99	.00 %	43	1b
24	EASTON BROAD RIVER POTTERS RD.BR.81127	R048FEST060	41.7	3.9	3	90	.00 %	42	2
25	R.BLYTH BLYFORD BRIDGE	R048FBLYD40	53.3	5.0	3	99	.00 %	37	2
26	R.CAM LAYBY LITTLE CHESTERFORD	R02BF27M22	58.0	5.4	3	104	.00 %	37	1b
27	NEW RIVER ANCHOLME BRIGG	R038FANON150B	49.0	5.6	2	95	.00 %	37	2
28	R.WELLAND D/S MKT.HARBOROUGH STW	R058FWELLO90M	54.3	6.2	2	99	.00 %	34	2
29	R.NENE DENFORD	R058FRNEE360D	68.7	7.9	2	116	.00 %	34	3
30	R.SLEA BONEHILL BRIDGE	R038FSLEA090B	53.0	6.1	2	97	.00 %	34	1b
31	OLD RIVER ANCHOLME WRAMBY	R038FANCO050W	49.0	5.6	2	92	.00 %	34	2
32	R.TOVE CAPPENHAM BRIDGE	R02BF04M04	56.0	5.2	3	98	.00 %	33	1b
33	R.CAM DIMMOCKS COTE RD.BR.	R02BF34M02	59.7	6.8	2	104	.00 %	33	2
34	R.IVEL ASTWICK BRIDGE	R02BF14M02	52.0	4.9	3	92	.00 %	32	1b
35	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	56.0	5.2	3	96	.00 %	31	1b
36	HOBHOLE HALTOFT END	R038FHOEB130H	49.7	5.7	2	89	.00 %	30	2
37	R.CAM BOTTISHAM LOCK	R02BF33M09	64.0	7.3	2	106	.00 %	30	2
38	R.MARDIYKE CAUSEWAY BRIDGE	R018FRDO135	55.0	5.1	3	90	.00 %	27	3
39	WILLOW BK.BLATHERWYCKE LAKE OUTLET	R058FWILLO80B	60.3	9.8	1	102	.00 %	26	2
40	LONG EAU THREE BRIDGES	R038FLEAU090T	56.0	6.4	2	92	.00 %	25	1b

Appendix 1 (cont):

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

No allowance for bias shown by AQC. No allowance for error of estimation for RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	NMC Class
41	KYME EAU SOUTH KYME	R038FKYME080S	56.0	6.4	2	92	.00 %	25	2
42	MELBOURN BK.RD.CULVERT MELDRETH	R028F30M21	60.3	5.6	3	94	.00 %	24	1b
43	SOHAM LODGE BARNAY RD.BR.	R028F36M10	57.0	6.5	2	92	.00 %	24	3
44	UPPER WITHAM LONG BENINGTON 87	R038FWITH330H	68.3	7.8	2	104	.00 %	23	2
45	R.WELLAND CROWLAND BR.	R058FWELL420C	58.3	6.7	2	92	.00 %	23	2
46	UPPER WITHAM LONG BENINGTON 87	R038FWITH370L	68.7	7.9	2	104	.00 %	22	2
47	R.PANT WETHERSFIELD MILL B1053 RD.BR.	R018FBL0949	64.0	6.0	3	96	.00 %	22	1b
48	R.TOVE ASTHORPE RD.BR.	R028F04M02	63.3	5.9	3	95	.00 %	22	1b
49	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R028F35M03	65.7	6.1	3	97	.00 %	21	2
50	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	R028F32M02	57.3	6.6	2	89	.00 %	21	1b
51	OLD WEST R. HERMITAGE LOCK EARLTH	R028F35M01	58.3	6.7	2	89	.00 %	20	1b
52	R.WID LAWNESS BRIDGE	R018FWD05	69.7	6.5	3	100	.00 %	20	3
53	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R018FD0030	63.0	5.9	3	90	.00 %	17	2
54	WHADDON BK.RD.BR.WHADDON	R028F30M19	63.0	5.9	3	90	.00 %	17	3
55	R.STOUR FLATFORD MILL FOOTERIDGE	R018FST0120	68.7	6.4	3	96	.00 %	17	2
56	THORPENESS HUNDRED R. THORPENESS RAIL BR	R048FTHF010	66.7	6.2	3	91	.00 %	14	2
57	R.LARK FORNHAM ALL SAINTS RD.BR.	R028F37M08	65.0	7.5	2	94	.00 %	17	2
58	R.WAVENEY BILLINGFORD BRIDGE	R048FWAV040	67.3	7.7	2	97	.01 %	17	1b
59	R.KYM MEAGRE FARM GAUGE	R028F21M04	69.3	6.5	3	94	.01 %	14	1b
60	R.IVEL A600 RD.BR.LANGFORD	R028F15M01	69.7	6.5	3	94	.01 %	14	2
61	R.NENE NORTH BANK	R058FNENE630N	82.7	9.5	2	118	.01 %	20	2
62	ELSTON BK.TRIB.OUSE OCTAGON FARM	R028F12M24	65.3	7.5	2	93	.01 %	15	1b
63	R.RICE WENDY RD.BR.	R028F30M24	69.0	6.5	3	92	.02 %	12	1b
64	R.NENE DUSTON MILL	R058FNENE080D	69.7	8.0	2	98	.02 %	15	1b
65	R.SLEA ANWICK	R038FSLA140A	59.7	9.7	1	93	.03 %	17	2
66	LOWER WITHAM TATTERSHALL BRIDGE	R038FWITH740T	91.3	10.5	2	127	.03 %	18	2
67	R.WISSEY A10 RD.BR.HILGAY	R028F50M02	74.7	8.6	2	103	.05 %	14	1b
68	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	R018FBRO150	74.7	7.0	3	97	.07 %	11	2
69	GREAT EAU WITHERN	R038FGEAU100W	70.7	8.1	2	96	.09 %	12	1b
70	LOUTH CANAL AUSTEN FEN	R038FLOUT060A	69.7	8.0	2	93	.17 %	10	2
71	R.CHELMER N END ROAD BRIDGE	R018FCHO780	79.3	7.4	3	101	.18 %	9	1b
72	WILTON BRANCH OF NENE WEEDON A45 RD.BR.	R058FWHIL100W	66.7	10.8	1	98	.19 %	14	2
73	R.STOUR COTTON HALL KEDINGTON	R018FST1403	70.7	8.1	2	94	.20 %	10	2
74	R.HIZ A507 RD.BR.ARLSEY	R028F13M06	77.3	7.2	3	98	.22 %	9	1b
75	NEW RIVER ANCHOLME BRANDY WHARF	R038FANCO0908	75.0	8.6	2	99	.26 %	10	1b
76	R.BAIN DALDERBY	R038FBAIN280D	68.7	7.9	2	90	.34 %	8	1b
77	R.BRANT BLACKMOOR BRIDGE	R038FBRAN1508	69.7	8.0	2	89	.77 %	6	2
78	MINSHERE RIVER EAST BRIDGE	R048FMIND020	74.7	7.0	3	91	.97 %	5	1b
79	R.TIFFEY CARLTON FORESHOE BRIDGE	R048FTIF100	76.3	7.1	3	93	.98 %	5	2
80	R.GLEN SURFLEET	R058FGLEN590S	70.7	8.1	2	89	1.18 %	5	2

Appendix 1 (cont):

Performance of Rivers against Biological Targets

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No allowance for bias shown by AQC. No allowance for error of estimation for RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	M/C Class
81	R.CAN WARREN BRIDGE	R01BFCA03	83.0	7.8	3	100	1.43 %	4	2
82	R.IVEL TEMPSFORD DEPOT FT.BR.	R02BF19M07	83.3	9.6	2	104	1.53 %	5	1b
83	BRAMPTON BRANCH R.NENE BRIDWORTH-CREATON	R05BFBRAM0708	80.0	13.0	1	106	2.25 %	5	1b
84	R.CHELMER FT.BR.D/S SANDFORD MILL	R01BFCH0390	87.7	8.2	3	104	2.33 %	3	1b
85	R.TAS FORNCETT BRIDGE	R04BFTAS040	80.3	7.5	3	95	2.56 %	2	1b
86	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANON0908	77.3	8.9	2	94	3.01 %	2	1b
87	R.KENNETT BECK BR.	R02BF38M07	78.3	9.0	2	95	3.17 %	2	1a
88	R.TOVE RD.BR.CASTLETHORPE	R02BF04M07	86.0	9.9	2	104	3.39 %	2	1b
89	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R04BFLTH020	78.0	7.3	3	91	3.75 %	1	2
90	R.STOUR STOKES COLLEGE FLOODGATES	R01BFST1002	87.3	10.0	2	103	5.88 %	0	3
91	R.STIFFKEY WIGHTON BRIDGE	R04BFSTF040	85.3	8.0	3	97	7.20 %	0	1b
92	UPPER WITHAM AUBOURN	R03BFWITH510A	91.0	10.4	2	104	10.63 %	-3	1b
93	R.OUSE A422 RD.BR.NEMPORT PAGNELL	R02BF05M03	93.7	8.8	3	104	11.93 %	-3	1b
94	R.RHEE HASLINGFIELD RD.BR.	R02BF30M07	92.0	8.6	3	102	12.27 %	-3	1b
95	BARLINGS EAU LANGMORTH	R03BFBARL110L	80.3	9.2	2	90	14.69 %	-4	1b
96	R.LARK JUDES FERRY	R02BF37M14	90.3	10.4	2	101	15.14 %	-5	1b
97	R.COULNE CHAPPEL ROAD	R01BFCL0357	94.0	8.8	3	102	18.16 %	-5	2
98	R.WELLAND WELHAM RD.BR.	R05BFMELL100W	88.3	14.3	1	101	18.82 %	-10	2
99	R.COULNE DOES CORNER	R01BFCL07	93.0	8.7	3	100	21.06 %	-6	2
100	R.BLACKWATER CHINA BRIDGE	R01BFBL0560	93.3	8.7	3	100	22.27 %	-7	2
101	HARRERS BK.COMTHICK GAUGING SITE	R05BFHARP125C	80.7	13.1	1	90	23.77 %	-11	2
102	R.OUSE BROMSHILL STAUNCH	R02BF26M06	118.0	13.5	2	126	27.71 %	-13	1b
103	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	R02BF02M13	98.3	9.2	3	103	30.61 %	-9	1b
104	R.CHELMER RICKETTS LOCK	R01BFCH0129	100.3	9.4	3	105	30.96 %	-10	1b
105	R.LUD LOUTH TROUT FARM 87	R03BFRLUD030L	100.7	11.5	2	106	32.20 %	-13	1b
106	R.NENE ORTON STAUNCH	R05BFNENE6050	109.3	12.5	2	112	41.57 %	-17	2
107	R.STOUR LISTON WEIR	R01BFST08	102.3	11.7	2	104	44.35 %	-17	1b
108	R.NENE WOLLASTON MILL	R05BFNENE230W	107.7	12.3	2	109	45.70 %	-18	2
109	R.OUSE A5 RD.BR.OLD STRATFORD	R02BF03M04	103.3	9.7	3	104	47.25 %	-14	1b
110	R.WELLAND ROCKINGHAM A6003 RD.BR.	R05BFMELL150R	101.3	11.6	2	102	47.71 %	-17	1b
111	R.ISE RUSHTON RD.BR.	R05BFRISE130R	95.3	10.9	2	94	54.86 %	-18	1b
112	UPPER WITHAM LITTLE PONTON	R03BFWITH170L	107.7	12.3	2	105	58.55 %	-22	1b
113	STRINGSIDE STR.WHITE BR.OXBOROUGH	R02BF49M03	99.7	16.2	1	96	58.98 %	-29	1a
114	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R05BFGLN200L	121.3	13.9	2	118	59.47 %	-25	1b
115	R.CHATER STATION RD.BR.KETTON	R05BFCHAT140S	117.3	19.0	1	112	61.04 %	-36	1b
116	R.WELLAND D/S DEEPING STW	R05BFMELL390D	98.7	11.3	2	95	62.71 %	-21	1b
117	R.BLACKWATER WICKHAM HILL BRIDGE	R01BFBL0160	109.7	10.3	3	103	74.20 %	-23	2
118	R.OUSE BRAMPTON MILL	R02BF22M04	131.7	15.1	2	121	76.01 %	-34	1b
119	R.BLACKWATER GREYS MILL	R01BFBL0350	112.0	10.5	3	104	77.73 %	-24	1b
120	HARRERS BK.A6116 RD.BR.	R05BFHARP200A	103.7	11.9	2	94	79.20 %	-28	1b

Appendix 1 (cont):

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

No allowance for bias shown by AQC. No allowance for error of estimation for RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	MNC Class
121	R.NENE WARMINGTON	R058RNENE495W	140.7	22.8	1	121	80.58 %	-56	2
122	R.BRETT B1115 BRIDGE SEMER	R018FBT0164	106.7	12.2	2	96	80.85 %	-30	1b
123	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	R048FMIL020	105.0	9.8	3	96	82.01 %	-24	1a
124	R.NENE COGENHOE	R058RNENE180C	126.0	14.7	2	114	83.00 %	-37	3
125	R.STOUR HORSESHOE WEIR NAYLAND	R018FST0402	116.3	13.3	2	103	84.13 %	-34	2
126	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHMOL	R028F48M09	129.3	21.0	1	106	86.71 %	-57	1a
127	R.TER BUMFORDS BRIDGE	R018FTE01	111.7	10.5	3	100	86.79 %	-28	1b
128	R.OUSE A422 RD.BR.BRACKLEY	R028F01M04	107.3	10.0	3	96	87.04 %	-27	1b
129	R.YARE BICKERSTONE BRIDGE	R048FYAR060	106.3	10.0	3	95	87.26 %	-27	1b
130	R.WELLAND TINMELL MILL	R058RWELL275T	124.0	11.6	3	106	93.95 %	-36	1b
131	R.COLINE LEXDEN BRIDGE	R018FCL0185	121.0	11.3	3	103	94.40 %	-36	2
132	R.BOX THORINGTON STREET B1068 RD.BR.	R018FBX01	115.3	10.8	3	96	96.33 %	-36	2
133	R.LYNN/STEEPING PARTNEY	R038FLYNN120P	127.7	14.6	2	101	96.58 %	-50	1b
134	R.WARING LOW TOYNTON BRIDGE	R038FWARI090L	107.7	12.3	2	85	96.69 %	-42	1a
135	WILLOW BK.FOTHERINGHAY RD.BR.	R058FWILL170F	145.0	23.5	1	101	96.94 %	-82	2
136	R.STOUR PITHERE RAILWAY BRIDGE	R018FST0604	133.7	15.3	2	104	97.36 %	-54	2
137	R.BAIN HEMINGBY	R038FBAIN190H	130.7	15.0	2	98	98.54 %	-56	1b
138	R.GLEN (WEST) BANTHORPE LODGE	R058FGLEN280B	141.7	16.2	2	106	98.60 %	-61	1a
139	R.OUSE RADCLIVE BRIDGE	R028F01M06	125.3	11.7	3	99	98.76 %	-45	1b
140	CRINGLE BROOK THUNDER BRIDGE	R038FCRIN100T	174.0	19.9	2	121	99.61 %	-85	1b

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	NWC Class
1	R.CROUCH MEMORIAL PARK WICKFORD	R01BFORD1	15.0	2.4	1	102	.00 %	83	03
2	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	16.0	2.6	1	103	.00 %	83	02
3	PIX BK.CHURCH END ARLESEY	R02BF14M07	11.3	1.8	1	97	.00 %	83	03
4	ASHELDHAM BK.BROOK FARM COTTAGES	R01BFOT0310	16.7	2.7	1	91	.00 %	70	UC
5	WILLOW BK.SOUTH FRIORS HALL	R05BFWILSD60P	26.3	4.3	1	100	.00 %	67	03
6	SKITTER BECK BROCKELSBY STATION	R03BFSKIT0508	15.0	2.4	1	84	.00 %	65	1B
7	EASTMOOD BK.D/S NOBLESGREEN DITCH CON	R01BFRH0202	26.7	4.3	1	98	.00 %	64	02
8	R.BLYTH BLYFORD BRIDGE	R04BFELY040	33.0	5.3	1	99	.00 %	57	02
9	R.SNAIL RIVER LANE FORDHAM	R02BF36M19	29.7	3.4	2	92	.00 %	57	03
10	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	31.0	5.0	1	95	.00 %	56	02
11	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFST0120	37.0	6.0	1	96	.00 %	49	02
12	OLD RIVER SLEA EVEDON	R03BFOLD040E	36.3	5.9	1	94	.00 %	48	03
13	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF35M16	38.0	4.4	2	93	.00 %	48	03
14	R.CAM BOTTISHAM LOCK	R02BF33M09	49.3	5.7	2	106	.00 %	47	02
15	R.HIZ CADWELL ARCH	R02BF13M04	40.3	6.5	1	98	.00 %	47	02
16	R.WID LAWNESS BRIDGE	R01BFWD05	42.3	6.9	1	100	.00 %	46	03
17	R.WID WRITTLE BRIDGE	R01BFWD0040	44.0	7.1	1	102	.00 %	46	02
18	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	64.7	10.5	1	127	.00 %	45	02
19	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	41.3	6.7	1	96	.00 %	44	03
20	BRAMPTON BRANCH R.NENE BRIDNORTH-CREATON	R05BFBRAM070B	49.7	8.1	1	106	.00 %	43	1B
21	R.RASE WEST RASEN	R03BFRASE170W	45.3	7.3	1	98	.00 %	41	1B
22	WHILTON BRANCH OF NENE WEDDON A45 RD.BR.	R05BFWHIL100W	45.3	7.3	1	98	.00 %	41	02
23	R.TOVE CAPPENHAM BRIDGE	R02BF04M04	51.0	5.8	2	98	.00 %	37	1B
24	EASTON BROAD RIVER POTTERS RD.BR.B1127	R04BFEST060	43.3	7.0	1	90	.00 %	35	02
25	NEW RIVER AND-OLME BRIDGE	R03BFANON150B	47.7	7.7	1	95	.00 %	35	02
26	R.TOVE ABTHORPE RD.BR.	R02BF04M02	51.3	5.9	2	95	.00 %	34	1B
27	R.TIFFEY CARLTON FOREHOE BRIDGE	R04BFTIF100	49.7	5.7	2	93	.00 %	34	02
28	R.WANG HILL FM.BR.	R04BFWANG040	47.7	7.7	1	93	.00 %	33	03
29	MELBOURN BK.RD.CULVERT MELDRETH	R02BF30M21	48.7	7.9	1	94	.00 %	32	1B
30	R.TER BUMFORDS BRIDGE	R01BFTE01	54.3	8.8	1	100	.00 %	31	1B
31	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFH00030	46.7	7.6	1	90	.00 %	31	02
32	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	55.0	6.3	2	96	.00 %	31	1B
33	SOHAM LODGE BARMAY RD.BR.	R02BF36M10	51.7	5.9	2	92	.00 %	31	03
34	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	57.0	6.5	2	97	.00 %	29	02
35	STRINGSIDE STR.WHITE BR.OXBOROUGH	R02BF49M03	53.7	8.7	1	96	.00 %	28	1A
36	R.CAM DIMMOCKS COTE RD.BR.	R02BF34M02	64.7	7.4	2	104	.00 %	27	02
37	MOLDGRIFT DRAIN U/S MABLETHORPE STM	R03BFMOLD060U	49.7	8.1	1	89	.00 %	26	02
38	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	54.0	8.8	1	94	.00 %	26	02
39	BOURN BK.TRIB.CAM CANTELLIFE FM.BR.	R02BF32M02	53.7	8.7	1	89	.00 %	21	1B
40	R.SLEA ANWICK	R03BFSLEA140A	56.7	9.2	1	93	.00 %	21	02
41	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R05BFBRAM160W	72.7	11.8	1	117	.01 %	25	1B
42	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	64.7	10.5	1	104	.01 %	22	02

43	R.OUSE BRAMPTON MILL	RO2BF22M04	65.7	9.8	2	121	.02 %	19	1B
44	R.STIFFKEY WIGHTON BRIDGE	RO4BFSTF040	61.3	9.9	1	97	.02 %	19	1B
45	ROMAN RIVER BOUNSTEAD BRIDGE	RO1BFRF0108	63.3	10.3	1	99	.03 %	19	1B
46	R.KYM MEAGRE FARM GAUGE	RO2BF21M04	68.0	7.8	2	94	.04 %	13	1B
47	R.OUSE A422 RD.BR.BRACKLEY	RO2BRF01M04	69.7	8.0	2	98	.05 %	13	1B
48	R.WELLAND CROWLAND BR.	RO5BFWELL420C	60.3	9.8	1	92	.06 %	16	02
49	R.ISE BRITISH LEYLANDS B571 RD.	RO5BFRUSE310B	65.7	10.6	1	100	.06 %	17	02
50	R.NENE DUSTON MILL	RO5BPNENE080D	65.0	10.5	1	98	.09 %	16	1B
51	GREAT EAU WITHERN	RO3BFGEAU100W	64.0	10.4	1	96	.10 %	15	1B
52	NEW RIVER ANCHOLME BRANDY WHARF	RO3BFANON090B	66.7	10.8	1	99	.14 %	15	1B
53	R.HARDYKE CAUSEWAY BRIDGE	RO1BFM00135	60.7	9.8	1	90	.14 %	13	03
54	UPPER WITHAM LONG BENINGTON 87	RO3BFWITH370L	71.7	11.6	1	104	.27 %	13	02
55	R.SLEA BONEMILL BRIDGE	RO3BFSLEA090B	67.0	10.9	1	97	.29 %	12	1B
56	LACEBY BECK LACEBY 87	RO3BFLACE040L	66.7	10.8	1	95	.44 %	11	1B
57	BARLINGS EAU LANGMORTH	RO3BFBARL110L	63.7	10.3	1	90	.54 %	9	1B
58	R.NENE NORTH BANK	RO5BPNENE630N	83.7	13.6	1	118	.57 %	12	02
59	R.STOUR HORSESHOE WEIR NAYLAND	RO1BFST0402	73.3	11.9	1	103	.63 %	10	02
60	HOBHOLE HALLTOFT END	RO3BFBHOBH130H	63.7	10.3	1	89	.71 %	8	02
61	NEW RIVER ANCHOLME BRANDY WHARF	RO3BFANON090B	67.7	11.0	1	94	.82 %	8	1B
62	LOUTH CANAL AUSTEN FEN	RO3BFLOUT060A	67.3	10.9	1	93	.94 %	8	02
63	WHADDON BK.RD.BR.WHADDON	RO2BF30M19	65.7	10.6	1	90	1.11 %	7	03
64	R.CAM LAYBY LITTLE CHESTERFORD	RO2BF27M22	83.3	9.6	2	104	1.53 %	5	1B
65	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	RO2BR02M13	83.7	9.6	2	103	2.19 %	4	1B
66	THORPENESS HUNDRED R. THORPENESS RAIL BR	RO4BFTHP010	69.3	11.2	1	91	2.69 %	3	02
67	R.BRETT B1115 BRIDGE SEMER	RO1BFBT0164	74.0	12.0	1	96	3.33 %	2	1B
68	R.STOUR COTTON HALL KEDINGTON	RO1BFST1403	73.7	11.9	1	94	4.43 %	1	02
69	R.CHELMER RICKETTS LOCK	RO1BFCH0129	82.7	13.4	1	105	4.78 %	0	1B
70	R.CAN WARREN BRIDGE	RO1BFCA03	79.0	12.8	1	100	5.05 %	0	02
71	LONG EAU THREE BRIDGES	RO3BFLEAU090T	73.7	11.9	1	92	6.24 %	0	1B
72	R.CHELMER N END ROAD BRIDGE	RO1BFCH0780	81.3	13.2	1	101	6.79 %	-1	1B
73	R.TOVE RD.BR.CASTLETHORPE	RO2BF04M07	89.3	10.2	2	104	7.60 %	-1	1B
74	R.OUSE BROMSHILL STAUNCH	RO2BF26M06	102.3	16.6	1	126	7.68 %	-3	1B
75	R.ISE RUSHTON RD.BR.	RO5BFRISE130R	77.0	12.5	1	94	8.66 %	-3	1B
76	R.LARK FORNHAM ALL SAINTS RD.BR.	RO2BF37M08	82.3	9.4	2	94	10.82 %	-3	02
77	R.CHELMER FT.BR.D/S SANDFORD MILL	RO1BFCH0380	87.0	14.1	1	104	11.40 %	-5	1B
78	R.HIZ A507 RD.BR.ARLSEY	RO2BF13M06	82.0	13.3	1	98	11.43 %	-5	1B
79	MINSMERE RIVER EAST BRIDGE	RO4BPMIN020	76.3	12.4	1	91	11.80 %	-5	1B
80	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	RO4BPMIL020	81.3	13.2	1	96	13.30 %	-6	1A
81	R.BLACKWATER CHINA BRIDGE	RO1BFBLO560	85.3	13.8	1	100	14.45 %	-7	02
82	R.NENE WOLLASTON MILL	RO5BPNENE230W	93.7	15.2	1	109	15.63 %	-9	02
83	R.COULNE DOES CORNER	RO1BFCL07	86.0	13.9	1	100	15.77 %	-8	02
84	R.STOUR STONE COLLEGE FLOODGATES	RO1BFST1002	89.0	14.4	1	103	16.59 %	-9	03
85	R.COULNE CHAPPEL ROAD	RO1BFCL0357	88.3	14.3	1	102	16.99 %	-9	02
86	R.STOUR LISTON WEIR	RO1BFST08	91.0	14.8	1	104	18.91 %	-10	1B
87	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	RO1BFBRD150	85.3	13.8	1	97	19.95 %	-10	02
88	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RO1BFBLO949	85.7	13.9	1	96	22.84 %	-12	1B
89	R.NENE ORTON STAUNCH	RO5BPNENE6050	102.0	16.5	1	112	27.27 %	-16	02
90	R.NENE COGENHOE	RO5BPNENE180C	104.0	16.9	1	114	27.65 %	-17	03
91	R.WELLAND D/S MKT.HARBOROUGH STW	RO5BFWELL090M	90.3	14.6	1	99	27.70 %	-14	02
92	R.BOX THORINGTON STREET B1068 RD.BR.	RO1BFBK01	88.7	14.4	1	96	30.50 %	-15	02
93	R.WELLAND TINWELL MILL	RO5BFWELL275T	98.7	16.0	1	106	32.33 %	-18	1B
94	KYME EAU SOUTH KYME	RO3BPKYMED80S	85.7	13.9	1	92	32.42 %	-16	02

95	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R058FGLN200L	110.0	17.8	1	118	32.68 %	-20	1B
96	R.WAVENEY BILLINGFORD BRIDGE	R048FWAV040	91.3	14.8	1	97	35.10 %	-18	1B
97	HARPERS BK.A6116 RD.BR.	R058FHARP200A	89.7	14.5	1	94	38.28 %	-19	1B
98	R.OUSE A5 RD.BR.OLD STRATFORD	R028F03M04	99.3	16.1	1	104	38.60 %	-21	1B
99	R.BRANT BLACKMOOR BRIDGE	R038FBRAN150B	85.3	13.8	1	89	39.55 %	-18	02
100	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHWOL	R028F48M09	102.0	16.5	1	106	40.44 %	-22	1A
101	R.TAS FORNCETT BRIDGE	R048FTASD40	92.0	14.9	1	95	42.03 %	-21	1B
102	R.LARK JUDES FERRY	R028F37M14	99.7	11.4	2	101	45.35 %	-16	1B
103	R.COUNE LEXDEN BRIDGE	R018FCL0185	102.7	16.6	1	103	49.20 %	-26	02
104	R.IVEL TEMPSFORD DEPOT FT.BR.	R028F19M07	104.3	16.9	1	104	50.79 %	-27	1B
105	R.LUD LOUTH TROUT FARM 87	R038FRLUD030L	106.7	17.3	1	106	51.54 %	-28	1B
106	R.BLACKWATER WICKHAM MILL BRIDGE	R018FBLO160	104.3	16.9	1	103	53.14 %	-28	02
107	R.WELLAND ROCKINGHAM A6003 RD.BR.	R058FWELL150R	103.7	16.8	1	102	53.95 %	-28	1B
108	R.KENNETT BECK BR.	R028F38M07	96.3	11.0	2	95	54.81 %	-18	1A
109	R.OUSE A422 RD.BR.NEWPORT PAGNELL	R028F05M03	106.7	12.2	2	104	58.63 %	-22	1B
110	R.STOUR PITMERE RAILWAY BRIDGE	R018FST0604	108.3	17.6	1	104	59.75 %	-32	02
111	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R048FLTH020	96.3	15.6	1	91	63.36 %	-30	02
112	R.OUSE RADCLIVE BRIDGE	R028F01M06	104.7	12.0	2	99	68.17 %	-24	1B
113	R.GLEN SURFLEET	R058FGLN590S	97.7	15.8	1	89	70.79 %	-34	02
114	UPPER WITHAM AUBOURN	R038FWITH510A	115.0	18.6	1	104	72.24 %	-41	1B
115	R.LYMN/STEEPING PARTNEY	R038FLYMN120P	113.0	18.3	1	101	74.38 %	-41	1B
116	OLD WEST R. HERMITAGE LOCK EARITH	R028F35M01	96.7	11.1	2	89	75.55 %	-25	1B
117	R.BLACKWATER GREYS MILL	R018FBLO350	119.7	19.4	1	104	79.03 %	-47	1B
118	R.WELLAND D/S DEEPING STW	R058FWELL390D	113.7	18.4	1	95	84.45 %	-48	1B
119	UPPER WITHAM LITTLE PONTON	R038FWITH170L	132.7	21.5	1	105	90.09 %	-62	1B
120	R.GWASH FT.BR.U/S BELMESTHORPE	R058FGWASH300B	137.0	22.2	1	103	93.71 %	-70	1A
121	R.YARE BIGGERSTONE BRIDGE	R048FYAR060	121.7	13.9	2	95	97.21 %	-49	1B
122	R.RHEE HASLINGFIELD RD.BR.	R028F30M07	155.0	25.1	1	102	98.25 %	-93	1B
123	R.CHATER STATION RD.BR.KETTON	R058FCHAT140S	173.3	28.1	1	112	98.55 %	-107	1B

Performance of Rivers against Biological Targets

1988

App 1

Ranking of Sites in order of Degree of Significant Shortfall

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMAP Score	Confidence of Compliance	Deficit	NWC Class
1	R. LUD LOUTH TROUT FARM	87 R03BFRLLD030L	17.3	2.0	2	106	.00 %	85	1B
2	OLD RIVER ANCHOLME WRABY	R03BFANCO050W	10.3	1.2	2	92	.00 %	80	02
3	OLD RIVER ANCHOLME WRABY	R03BFANCO050W	10.3	1.2	2	92	.00 %	80	02
4	WILLOW BK. SOUTH PRIORS HALL	R05BFWILS060P	18.7	3.0	1	100	.00 %	76	03
5	EASTWOOD BK. D/S NOBLESGREEN DITCH CON	R01BFRH0202	24.7	2.8	2	98	.00 %	69	02
6	PIX BK. CHURCH END ARLESEY	R02BF14M07	25.3	4.1	1	97	.00 %	65	03
7	R. CROUCH MEMORIAL PARK WICKFORD	R01BFCRD1	30.3	4.9	1	102	.00 %	64	03
8	OLD RIVER SLEA EVEDON	R03BFOLDS040E	30.0	3.4	2	94	.00 %	58	03
9	WATTON BK. LT. CRESSINGHAM RD. BR. PILGRIMS	R02BF48M15	33.0	5.3	1	95	.00 %	53	02
10	R. FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	40.0	6.5	1	103	.00 %	52	02
11	BRAMPTON BRANCH R. NENE DIS WEST BRIDGE	R05BFBRAM160W	55.7	9.0	1	117	.00 %	46	1B
12	CAMPTON BK. SOUTH BRIDGE SHEFFORD	R02BF17M02	39.7	6.4	1	95	.00 %	45	02
13	ASHELDHAM BK. BROOK FARM COTTAGES	R01BFDTO310	37.7	6.1	1	91	.00 %	43	UC
14	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	72.7	6.8	3	127	.00 %	43	02
15	R. WID WRITTLE BRIDGE	R01BFWO0040	47.3	7.7	1	102	.00 %	42	02
16	R. HIZ CADWELL ARCH	R02BF13M04	44.3	7.2	1	98	.00 %	42	02
17	R. WANG HILL FM. BR.	R04BFWNG040	43.7	5.0	2	93	.00 %	41	03
18	SKITTER BECK BROCKELSBY STATION	R03BFSKIT050B	36.3	4.2	2	84	.00 %	41	1B
19	R. ISE BRITISH LEYLANDS B571 RD. BR.	R05BFRISE310B	49.0	7.9	1	100	.00 %	38	02
20	R. WID LAMNESS BRIDGE	R01BFWO05	51.0	8.3	1	100	.00 %	35	03
21	R. LARK FORNHAM ALL SAINTS RD. BR.	R02BF37M08	46.3	7.5	1	94	.00 %	35	02
22	R. LARK JUDES FERRY	R02BF37M14	54.0	8.8	1	101	.00 %	33	1B
23	EASTON BROAD RIVER POTTERS RD. BR. B1127	R04BFEST060	45.3	7.3	1	90	.00 %	33	02
24	NEW RIVER ANCHOLME BRIGG	R03BFANCN150B	56.7	6.5	2	95	.00 %	28	02
25	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R03BFWOLD090U	51.7	5.9	2	89	.00 %	28	02
26	LOUTH CANAL ALVINGHAM	R03BFLDUTO40A	61.0	5.7	3	96	.00 %	26	03
27	UPPER WITHAM LONG BENINGTON 87	R03BFWITH370L	67.3	7.7	2	104	.00 %	24	02
28	R. RASE WEST RASEN	R03BFRASE170W	63.7	7.3	2	98	.00 %	22	1B
29	R. BAIN DALDERBY	R03BFBAIN280D	60.7	5.7	3	90	.00 %	20	1B
30	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	73.0	6.8	3	104	.00 %	20	02
31	ALCONBURY BK. GRINDLEYS BR.	R02BF23M04	58.7	9.5	1	96	.00 %	22	1B
32	LONG EAU THREE BRIDGES	R03BFLEAU090T	68.0	6.4	3	92	.01 %	14	1B
33	R. WARDING LOW TOYNTON BRIDGE	R03BFWARD1090L	63.3	5.9	3	85	.01 %	12	1A
34	OLD WEST R. TWENTYPENCE RD. BR. WILBURTON	R02BF35M03	69.0	7.9	2	97	.02 %	15	02
35	R. CAM DIMHOOKS COTE RD. BR.	R02BF34M02	66.7	10.8	1	104	.03 %	20	02
36	R. SLEA ANWICK	R03BFSLEA140A	70.3	6.6	3	93	.03 %	12	02
37	GREAT EAU WITHERN	R03BFGEAU100W	72.7	6.8	3	96	.03 %	12	1B
38	R. SNAIL RIVER LAKE FORDHAM	R02BF36M19	59.3	9.6	1	92	.03 %	17	03
39	R. MELLAND D/S MKT. HARBOROUGH STW	R05BFRWELL090M	64.7	10.5	1	99	.05 %	17	02

40	ROMAN RIVER BOUNSTEAD BRIDGE	R01BFRD108	66.7	10.8	1	99	.14 %	15	18
41	LACEBY BECK LACEBY 87	R03BFLACED40L	74.3	7.0	3	95	.15 %	9	18
42	WHILTON BRANCH OF NENE WEEDON A45 RD. BR.	R05BFWHIL100W	66.7	10.8	1	98	.19 %	14	02

43	R.TIFFEY CARLTON FOREHOE BRIDGE	R048FTIF100	64.3	10.4	1	93	.30
44	WILLOW BK.BLATHERWYCKE LAKE OUTLET	R058FWILL080B	70.7	11.5	1	102	.31
45	HOBHOLE HALTOFT END	R038FHOBH130H	61.7	10.0	1	89	.31
46	R.SLEA BONEHILL BRIDGE	R038FSLEA090B	78.0	7.3	3	97	.46
47	HARPERS BK.COWTHICK GAUGING SITE	R058FHARP125C	63.3	10.3	1	90	.47
48	R.STOUR COTTON HALL KEDINGTON	R018FST1403	67.0	10.9	1	94	.65
49	R.NENE COGENHOE	R058FNENE180C	82.7	13.4	1	114	.97
50	UPPER WITHAM AUBOURN	R038FWITH510A	85.7	8.0	3	104	1.11
51	R.ISE D/S WICKSTEED PARK	R058FRISE225W	70.7	11.5	1	96	1.35
52	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON090B	79.0	9.1	2	99	1.36
53	CRINGLE BROOK THUNDER BRIDGE	R038FCRIN100T	97.3	11.2	2	121	1.70
54	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R028F35M16	69.3	11.2	1	93	1.76
55	BRAMPTON BRANCH R.NENE BRIXWORTH-CREATON	R058FBRAM070B	79.3	12.9	1	106	1.91
56	SOHAM LODGE BARWAY RD.BR.	R028F36M10	69.0	11.2	1	92	1.99
57	THORPENESS HUNDRED R. THORPENESS RAIL BR	R048FTHP010	68.7	11.1	1	91	2.24
58	R.NENE NORTH BANK	R058FNENE630N	89.3	14.5	1	118	2.39
59	R.WELLAND WELHAM RD.BR.	R058FWELL100W	77.7	12.6	1	101	3.19
60	R.RHEE WENDY RD.BR.	R028F30M24	72.0	11.7	1	92	4.33
61	R.OLISE BROWNSHILL STAUNCH	R028F26M06	98.7	16.0	1	126	4.37
62	R.HIZ A507 RD.BR.ARLSEY	R028F13M06	77.0	12.5	1	98	4.63
63	R.GLEN TONGUE END D/S PS	R058FGLEN525T	73.7	11.9	1	91	7.33
64	HARPERS BK.A5116 RD.BR.	R058FHARP200A	76.3	12.4	1	94	7.67
65	R.MARDYKE CAUSEWAY BRIDGE	R018FM00135	73.3	11.9	1	90	8.05
66	KYME EAU SOUTH KYME	R038FKYME080S	79.7	9.1	2	92	8.84
67	MELBOURN BK.RD.CULVERT MELDRETH	R028F30M21	77.3	12.5	1	94	9.19
68	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON090B	81.7	9.4	2	94	9.38
69	R.NENE ORTON STAUNCH	R058FNENE605O	92.7	15.0	1	112	9.91
70	MINSHERE RIVER EAST BRIDGE	R048FMIND020	75.7	12.3	1	91	10.56
71	R.GLEN THURLBY FEN	R058FGLEN510T	80.7	13.1	1	97	10.58
72	R.GLEN SURFLEET	R058FGLEN590S	78.0	8.9	2	89	10.93
73	R.NENE DENFORD	R058FNENE360D	98.0	15.9	1	116	12.86
74	R.WELLAND D/S DEEPING STW	R058FWELL390D	80.3	13.0	1	95	13.01
75	R.CHELMER FT.BR.D/S SANDFORD HILL	R018FCH0390	88.3	14.3	1	104	13.70
76	R.TOVE ABTHORPE RD.BR.	R028F04M02	81.0	13.1	1	95	14.32
77	R.NENE WOLLASTON MILL	R058FNENE230W	94.0	15.2	1	109	16.25
78	OLD WEST R. HERMITAGE LOCK EARLTH	R028F35M01	77.3	12.5	1	89	17.60
79	R.STOUR FLATFORD MILL FOOTBRIDGE	R018FST0120	83.7	13.6	1	96	18.16
80	R.STOUR LISTON WEIR	R018FST08	92.3	15.0	1	104	21.79
81	R.BRANT BLACKMOOR BRIDGE	R038FBRAN150B	83.0	7.8	3	89	21.99
82	R.LYNN/STEEPING PARTNEY	R038FLYNN120P	93.0	10.7	2	101	22.65
83	R.TAS FORNCETT BRIDGE	R048FTAS040	85.3	13.8	1	95	24.23
84	BARLINGS EAU LANGWORTH	R038FBARL110L	84.7	7.9	3	90	25.05
85	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	R048FBMIL020	87.7	14.2	1	96	27.88
86	R.CAM WARREN BRIDGE	R018FCA03	91.3	14.8	1	100	27.92
87	R.KENNETT BEDK BR.	R028F38M07	87.7	14.2	1	95	30.29
88	R.WELLAND CROWLAND BR.	R058FWELL420C	85.3	13.8	1	92	31.49
89	R.BAIN HEMINGBY	R038FBAIN190H	94.7	8.9	3	98	35.34
90	R.CAM BOTTISHAM LOCK	R028F33M09	100.0	16.2	1	106	35.56
91	WHADDON BK.RD.BR.WHADDON	R028F30M19	86.7	14.0	1	90	40.62

92	R.NENE BARNWELL PIONIC PARK	R058RNENE4408	123.3	20.0	1	128	40.77 %	-27	02
93	R.BRAIN FT.BR.U/S FAULKEBOURNE HALL	R018FBRO150	94.0	15.2	1	97	42.20 %	-21	02
94	R.COOLNE DOES CORNER	R018FCL07	98.3	15.9	1	100	45.84 %	-24	02

95	R.COUNE CHAPPEL ROAD	RD1BFCL0357	100.7	16.3	1	102	46.74 %	-25	02
96	WILLOW BK.FOTHERINGHAY RD.BR.	RD58FWILL170F	101.7	16.5	1	101	51.61 %	-27	02
97	R.OUSE A422 RD.BR.BRACKLEY	RD2BF01M04	97.0	11.1	2	96	53.58 %	-18	1B
98	R.TOVE CAPPENHAM BRIDGE	RD2BF04M04	100.7	16.3	1	98	56.49 %	-29	1B
99	R.CHELMER N END ROAD BRIDGE	RD1BFCH0780	105.0	17.0	1	101	59.29 %	-31	1B
100	R.BLACKWATER CHINA BRIDGE	RD1BFBL0560	104.0	16.9	1	100	59.38 %	-31	02
101	R.CAM LAYBY LITTLE CHESTERFORD	RD2BF27M22	110.0	17.8	1	104	63.17 %	-34	1B
102	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	RD58FGLEN200L	125.0	20.3	1	118	63.51 %	-39	1B
103	R.NENE ELTON LOCK	RD58FNENE500E	121.3	19.7	1	114	64.54 %	-39	02
104	R.WELLAND TINMELL MILL	RD58FWELL275T	113.0	18.3	1	106	64.88 %	-36	1B
105	R.STOUR STOKE COLLEGE FLOODGATES	RD1BFST1002	111.7	18.1	1	103	68.40 %	-37	03
106	ELSTON BK.TRIB.OUSE OCTAGON FARM	RD2BF12M24	101.3	16.4	1	93	69.40 %	-34	1B
107	R.BLACKWATER GREYS MILL	RD1BFBL0350	114.3	18.5	1	104	71.14 %	-40	1B
108	R.OUSE BRAMPTON MILL	RD2BF22M04	134.7	21.8	1	121	73.44 %	-49	1B
109	R.COUNE LEXDEN BRIDGE	RD1BFCL0185	114.7	18.6	1	103	73.49 %	-41	02
110	R.TER BUMFORDS BRIDGE	RD1BFTE01	111.3	18.0	1	100	73.50 %	-40	1B
111	R.NENE WARMINGTON	RD58FNENE495W	135.3	21.9	1	121	74.32 %	-49	02
112	R.ISE RUSHTON RD.BR.	RD58FRISE130R	105.3	17.1	1	94	74.66 %	-38	1B
113	R.WELLAND ROCKINGHAM A6003 RD.BR.	RD58FWELL150R	115.0	18.6	1	102	75.72 %	-43	1B
114	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	RD48FLTH020	103.7	16.8	1	91	77.45 %	-39	02
115	R.OUSE A5 RD.BR.OLD STRATFORD	RD2BF03M04	119.0	19.3	1	104	78.16 %	-46	1B
116	R.STOUR HORSESHOE WEIR NAYLAND	RD1BFST0402	118.0	19.1	1	103	78.35 %	-45	02
117	R.IVEL TEMPSFORD DEPOT FT.BR.	RD2BF19M07	119.7	19.4	1	104	79.03 %	-47	1B
118	R.YARE BICKERSTONE BRIDGE	RD48FYARD60	109.7	17.8	1	95	79.53 %	-43	1B
119	R.GLEN (WEST) BANTHORPE LODGE	RD58FGLEN280B	123.3	20.0	1	106	80.70 %	-49	1A
120	R.BLACKWATER WICKHAM MILL BRIDGE	RD1BFBL0160	121.7	19.7	1	103	82.80 %	-50	02
121	R.IVEL ASTWICK BRIDGE	RD2BF14M02	109.0	17.7	1	92	83.20 %	-45	1B
122	R.BRETT B1115 BRIDGE SEMER	RD1BFBT0164	116.0	18.8	1	96	85.63 %	-50	1B
123	R.IVEL A600 RD.BR.LANGFORD	RD2BF15M01	114.3	18.5	1	94	86.37 %	-50	01
124	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	RD2BF02M13	127.0	20.6	1	103	87.81 %	-57	1B
125	R.CHATER STATION RD.BR.KETTON	RD58FCHAT140S	139.3	22.6	1	112	88.69 %	-63	1B
126	R.CHELMER RICKETTS LOCK	RD1BFCH0129	131.3	21.3	1	105	89.19 %	-60	1B
127	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RD1BFBL0949	123.0	19.9	1	96	91.21 %	-59	1B
128	R.WISSEY A10 RD.BR.HILGAY	RD2BF50M02	132.0	21.4	1	103	91.23 %	-63	1B
129	R.KYM MEAGRE FARM GAUGE	RD2BF21M04	121.3	19.7	1	94	91.77 %	-59	1B
130	R.NENE CUSTON MILL	RD58FNENE0800	128.7	20.9	1	98	92.92 %	-64	1E
131	UPPER WITHAM LITTLE FONTON	RD38FWITH170L	127.0	14.6	2	105	93.46 %	-45	1I
132	R.BOX THORINGTON STREET B1068 RD.BR.	RD1BFBX01	128.0	20.7	1	96	93.85 %	-65	1C
133	R.TOVE RD.BR.CASTLETHORPE	RD2BF04M07	139.3	22.6	1	104	94.11 %	-71	
134	R.WELLAND UFFINGTON BARNACK RD.BR.	RD58FWELL330U	148.3	24.0	1	108	95.33 %	-79	
135	HOLLAND BK.HOLLAND MAIN RD BRIDGE	RD1BRH00030	124.0	20.1	1	90	95.46 %	-66	
136	R.OUSE A422 RD.BR.NEWPORT PAGNELL	RD2BF05M03	144.7	23.5	1	104	95.85 %	-78	
137	R.RHEE HASLINGFIELD RD.BR.	RD2BF30M07	147.3	23.9	1	102	97.11 %	-84	
138	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	RD2BF32M02	129.0	20.9	1	89	97.21 %	-73	
139	R.STOUR PITHERE RAILWAY BRIDGE	RD1BFST0604	151.7	24.6	1	104	97.37 %	-87	
140	R.GWASH FT.BR.U/S BELMESTHORPE	RD58FGWASH300B	152.3	24.7	1	103	97.71 %	-88	
141	STRINGSIDE STR.WHITE BR.OXBOROUGH	RD2BF49M03	145.7	23.6	1	96	98.23 %	-88	
	FR.NORTHWOL	RD2BF48M09	175.0	28.4	1	106	99.25 %	-115	

Appendix II 1987

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BBNP Score	Confidence of Compliance	Deficit	NWC Class
1	OLD RIVER ANCHOLME WRANBY	R03BFANCO050W	7.3	.8	2	92	.00 %	83	02
2	CAMPTON BK. SOUTH BRIDGE SHEFFORD	R02BF17M02	15.5	1.8	2	95	.00 %	77	02
3	WILLOW BK. SOUTH PRIORS HALL	R05BFWILS060P	25.8	3.0	2	100	.00 %	69	03
4	EASTWOOD BK. D/S NOBLESGREEN DITCHE CON	R01BFRR0202	26.2	3.0	2	98	.00 %	67	02
5	PIX BK. CHURCH END ARLESEY	R02BF14M07	30.1	2.8	3	97	.00 %	62	03
6	OLD RIVER SLEA EVEDON	R03BFOLDS040E	29.2	3.3	2	94	.00 %	59	03
7	ASHELDHAM BK. BROOK FARM COTTAGES	R01BFDT0310	27.1	3.1	2	91	.00 %	59	0C
8	R. CROUCH MEMORIAL PARK WICKFORD	R01BFRC01	39.1	4.5	2	102	.00 %	56	03
9	BRAMPTON BRANCH R. NENE DIS WEST BRIDGE	R05BFBRAN160W	49.8	8.1	1	117	.00 %	54	1B
10	WATTON BK. LT. CRESSINGHAM RD. BR. PILGHIMS	R02BF48M15	36.1	4.1	2	95	.00 %	52	02
11	R. FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	48.1	4.5	3	103	.00 %	47	02
12	R. BASE WEST RASEN	R03BFBASE170W	44.7	5.1	2	98	.00 %	45	1B
13	SKITTER BECK BROCKELSBY STATION	R03BFKIT050B	35.2	4.0	2	84	.00 %	42	1B
14	R. WANG HILL FM. BR.	R04BFWNG040	45.1	4.2	3	93	.00 %	41	03
15	R. BIZ CADWELL ARCH	R02BF13M04	51.5	4.8	3	98	.00 %	39	02
16	R. WID WRITTLE BRIDGE	R01BFWD0040	55.4	5.2	3	102	.00 %	38	02
17	COTTENHAM LODGE SMITHY FEN RD. BR. COTTENHAM	R02BF35M16	48.5	4.5	3	93	.00 %	37	03
18	R. SRAIL RIVER LANE FORDHAM	R02BF36M19	46.4	5.3	2	92	.00 %	37	03
19	WOLDGRIFT DRAIN O/S MABLETHORPE STW	R03BFWOLD090D	46.8	5.4	2	89	.00 %	33	02
20	R. ISE BRITISH LEYLANDS B571 RD. BR.	R05BFBRIS0310B	57.5	6.6	2	100	.00 %	32	02
21	LACEBY BECK LACEBY 87	R03BFLACE040L	55.0	6.3	2	95	.00 %	30	1B
22	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	56.7	6.5	2	96	.00 %	29	03
23	EASTON BROAD RIVER POTTERS RD. BR. B1127	R04BFEST060	53.7	5.0	3	90	.00 %	28	02
24	ROMAN RIVER BOONSTEAD BRIDGE	R01BFRR0108	62.3	5.8	3	99	.00 %	27	1B
25	NEW RIVER ANCHOLME BRIGG	R03BFANCN150B	63.1	7.2	2	95	.00 %	20	02
26	R. BLYTH BLYFORD BRIDGE	R04BFBLY040	68.7	6.4	3	99	.00 %	20	02
27	R. CAM LAYBY LITTLE CHESTERFORD	R02BF27M22	74.7	7.0	3	104	.00 %	18	1B
28	OLD RIVER ANCHOLME WRANBY	R03BFANCO050W	63.1	7.2	2	92	.00 %	17	02
29	R. IVEL ASTWICK BRIDGE	R02BF14M02	67.0	6.3	3	92	.00 %	15	1B
30	R. TOVE CAPPENHAM BRIDGE	R02BF04M04	72.2	6.8	3	98	.01 %	15	1B
31	R. SLEA BONEMILL BRIDGE	R03BFSLA090B	68.3	7.8	2	97	.01 %	16	1B
32	R. WELLDAN D/S MKT. HARBOROUGH STW	R05BFWELL090H	70.0	8.0	2	99	.02 %	16	02
33	ALCONBURY BK. GRINDLEYS BR.	R02BF23M04	72.2	6.8	3	96	.02 %	13	1B
34	HOBHOLE HALTOFT END	R03BFHOBH130E	64.0	7.3	2	89	.03 %	13	02
35	R. CAM DIMMOCKS COVE RD. BR.	R02BF34M02	76.9	8.8	2	104	.10 %	13	02
36	R. WARDYKE CAUSEWAY BRIDGE	R01BFWD0135	70.9	6.6	3	90	.20 %	8	03
37	R. NENE DENFORD	R05BFNENE360D	88.5	10.1	2	116	.33 %	11	03
38	R. CAM BOTTISHAM LOCK	R02BF33M09	82.5	9.5	2	106	.64 %	8	02
39	LONG KAU THREE BRIDGES	R03BFLEA0090T	72.2	8.3	2	92	.82 %	6	1B
40	KYNE KAU SOUTH KYNE	R03BFKYNE080S	72.2	8.3	2	92	.82 %	6	02
41	MELBOURN BK. RD. CULVERT MELDRETH	R02BF30M21	77.7	7.3	3	94	1.27 %	4	1B
42	SOHAM LODGE BARWAY RD. BR.	R02BF36M10	73.4	8.4	2	92	1.37 %	5	03

43	R. WELLAND CROWLAND BR.	R05BFWELL420C	75.2	8.6	2	92	2.53 x	3	02
44	WILLOW BK. BLATHERWYCKE LAKE OUTLET	R05BFWILL080B	77.7	12.6	1	102	2.71 x	4	02
45	BOURN BK. TRIB. CAM CAPELOUPE FM. BR.	R02BF32M02	73.9	8.5	2	89	3.70 x	1	1B
46	R. TOVE ABTHORPE RD. BR.	R02BF04M02	81.6	7.6	3	95	3.97 x	1	1B
47	R. PANT WETHERSFIELD HILL B1053 RD. BR.	R01BFBL0949	82.5	7.7	3	96	3.97 x	1	1B
48	OLD WEST R. HERMITAGE LOCK EARITH	R02BF35M01	75.2	8.6	2	89	5.40 x	0	1B
49	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	88.0	10.1	2	104	5.69 x	0	02
50	OLD WEST R. TWENTYPENCE RD. BR. WILBURTON	R02BF35M03	84.6	7.9	3	97	5.87 x	0	02
51	UPPER WITHAM LONG BENINGTON 87	R03BFWITH370L	88.5	10.1	2	104	6.28 x	0	02
52	R. SLEA ANWICK	R03BFSLEA140A	76.9	12.5	1	93	9.79 x	-3	02
53	R. WID LAWNESS BRIDGE	R01BFWD05	89.8	8.4	3	100	11.14 x	-3	03
54	HOLLAND BK. HOLLAND MAIN RD BRIDGE	R01BFHD0030	81.2	7.6	3	90	12.25 x	-3	02
55	WHADDON BK. RD. BR. WHADDON	R02BF30H19	81.2	7.6	3	90	12.25 x	-3	03
56	R. LARK FORNHAM ALL SAINTS RD. BR.	R02BF37M08	83.7	9.6	2	94	14.28 x	-5	02
57	R. WAVENEY BILLINGFORD BRIDGE	R04BFWAV040	86.8	9.9	2	97	15.14 x	-5	1B
58	R. NENE NORTH BANK	R05BFNENE630N	106.5	12.2	2	118	17.33 x	-8	02
59	EISTON BK. TRIB. OUSE OCTAGON FARM	R02BF12M24	84.2	9.6	2	93	18.02 x	-6	1B
60	R. STOUR PLATFORD MILL FOOTBRIDGE	R01BFST0120	88.5	8.3	3	96	18.16 x	-5	02
61	WHILTON BRANCH OF NENE WEEDON A45 RD. BR.	R05BFWHIL100W	85.9	13.9	1	98	19.23 x	-10	02
62	R. NENE DUSTON MILL	R05BFNENE080D	89.8	10.3	2	98	21.16 x	-8	1B
63	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	117.7	13.5	2	127	24.47 x	-12	02
64	THORPENESS HUNDRED R. THORPENESS RAIL BR	R04BFTHP010	85.9	8.0	3	91	26.26 x	-7	02
65	R. WISSEY A10 RD. BR. HILGAY	R02BF50M02	96.2	11.0	2	103	26.87 x	-10	1B
66	R. KYM MEAGRE FARM GAUGE	R02BF21M04	89.3	8.4	3	94	28.82 x	-8	1B
67	R. IVEL A600 RD. BR. LANGFORD	R02BF15M01	89.8	8.4	3	94	30.68 x	-9	02
68	GREAT EAU WITHERN	R03BFGEAU100W	91.0	10.4	2	96	31.75 x	-11	1B
69	R. RHEE WENDY RD. BR.	R02BF30M24	88.9	8.3	3	92	35.47 x	-10	1B
70	LOUTH CANAL AUSTEN FEN	R03BFLOUT060A	89.8	10.3	2	93	37.64 x	-13	02
71	R. STOUR COTTON HALL KEDINGTON	R01BFST1403	91.0	10.4	2	94	38.86 x	-13	02
72	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANCN090B	96.6	11.1	2	99	41.53 x	-15	1B
73	BRAMPTON BRANCH R. NENE BRIXWORTH-CREATON	R05BFBRAN070B	103.1	16.7	1	106	43.04 x	-24	1B
74	R. BAIN DALDERBY	R03BFBAIN280D	88.5	10.1	2	90	44.00 x	-14	1B
75	R. BRAIN FT. BR. U/S FAULDEBOURNE HALL	R01BFBR0150	96.2	9.0	3	97	46.46 x	-13	02
76	R. BRANT BLACKMOOR BRIDGE	R03BFBRAN150B	89.8	10.3	2	89	52.94 x	-17	02
77	R. CHELMER N END ROAD BRIDGE	R01BFCH0700	102.2	9.6	3	101	55.05 x	-16	1B
78	R. HIZ A507 RD. BR. ARLSEY	R02BF13M06	99.6	9.3	3	98	56.96 x	-16	1B
79	R. GLEN SURPLEET	R05BFGLN590S	91.0	10.4	2	89	57.77 x	-18	02
80	R. IVEL TEMPSFORD DEPOT FT. BR.	R02BF19M07	107.4	12.3	2	104	60.78 x	-23	1B
81	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANCN090B	99.6	11.4	2	94	68.92 x	-23	1B
82	R. KENNETT BECK BR.	R02BF38M07	100.9	11.6	2	95	69.57 x	-24	1A
83	R. TOVE RD. BR. CASTLETHORPE	R02BF04M07	110.8	12.7	2	104	70.39 x	-27	1B
84	MINSHERE RIVER EAST BRIDGE	R04BFMIN020	96.2	9.0	3	91	71.02 x	-19	1B
85	R. TIFFEY CARLTON FOREHOE BRIDGE	R04BFTIF100	98.3	9.2	3	93	71.94 x	-19	02
86	R. CAN WARREN BRIDGE	R01BFCA03	106.9	10.0	3	100	75.59 x	-22	02
87	R. WELLAND WELHAM RD. BR.	R05BFWELL100W	113.8	18.4	1	101	75.62 x	-42	02
88	R. STOUR STOKES COLLEGE FLOODGATES	R01BFST1002	112.5	12.9	2	103	76.98 x	-30	03
89	HARPERS BK. COWTHICK GAUGING SITE	R05BFHARP125C	103.9	16.8	1	90	79.58 x	-41	02
90	R. CHELMER FT. BR. D/S SANDFORD MILL	R01BFCH0390	112.9	10.6	3	104	80.14 x	-25	1B
91	R. TAS FORNCTT BRIDGE	R04BFTAS040	103.5	9.7	3	95	80.99 x	-23	1B
92	UPPER WITHAM AUBOURN	R03BFWITH510A	117.2	13.4	2	104	83.78 x	-34	1B
93	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R04BFLT0020	100.5	9.4	3	91	84.36 x	-24	02
94	BARLINGS EAG LANGWORTE	R03BFBARL110L	103.5	11.9	2	90	87.24 x	-32	1B

95	R. LARK JUDES FERRY	R02BF37M14	116.4	13.3	2	101	87.56 %	-36	1B
96	R. STIFFKEY WIGHTON BRIDGE	R04BFSTF040	109.9	10.3	3	97	89.58 %	-29	1B
97	R. OUSE A422 RD. BR. NEWPORT PAGNELL	R02BF05M03	120.7	11.3	3	104	93.01 %	-34	1B
98	R. REE HASLINGFIELD RD. BR.	R02BF30M07	118.5	11.1	3	102	93.19 %	-34	1B
99	R. OUSE BROWNSHILL STAUNCH	R02BF26M06	152.0	17.4	2	126	93.24 %	-54	1B
100	STRINGSIDE STB. WHITE BR. OXBOROUGH	R02BF49M03	128.4	20.8	1	96	94.02 %	-66	1A
101	R. LOD LOUPE TROUT FARM 87	R03BFRL0030L	129.7	14.9	2	106	94.45 %	-47	1B
102	R. CHAYER STATION RD. BR. KETTON	R05BFCHAT140S	151.2	24.5	1	112	94.50 %	-78	1B
103	R. COLNE CHAPPEL ROAD	R01BFCL0357	121.1	11.3	3	102	95.41 %	-37	02
104	R. COLNE DOGS CORNER	R01BFCL07	119.8	11.2	3	100	96.14 %	-37	02
105	R. NENE ORTON STAUNCH	R05BFNENE6050	140.9	16.1	2	112	96.31 %	-54	02
106	R. BLACKWATER CHINA BRIDGE	R01BFBL0560	120.3	11.3	3	100	96.40 %	-38	02
107	R. STOUR LISTON WEIR	R01BFST08	131.8	15.1	2	104	96.73 %	-52	1B
108	R. NENE WOLLASTON MILL	R05BFNENE230W	138.7	15.9	2	109	96.92 %	-55	02
109	R. WELAND ROCKINGHAM A6003 RD. BR.	R05BFWELL150R	130.6	15.0	2	102	97.18 %	-52	1B
110	PADHURY BK. TRIB. OUSE B4034 RD. BR. THORNB	R02BF02M13	126.7	11.9	3	103	97.71 %	-42	1B
111	R. CHELMER RICKETTS LOCK	R01BFCH0129	129.3	12.1	3	105	97.76 %	-43	1B
112	R. ISE RUSHTON RD. BR.	R05BFRISE130R	122.8	14.1	2	94	97.97 %	-51	1B
113	R. NENE WARMINGTON	R05BFNENE495W	181.2	29.4	1	121	97.98 %	-108	02
114	UPPER WITHAM LITTLE PONTON	R03BFWITH170L	138.7	15.9	2	105	98.30 %	-59	1B
115	R. GLEN (WEST) LITTLE BYTHAM BRIDGE	R05BFGLN200L	156.3	17.9	2	118	98.38 %	-67	1B
116	R. WELAND D/S DEEPIG STW	R05BFWELL390D	127.1	14.6	2	95	98.62 %	-55	1B
117	R. WISKEY DIDLINGTON LODGE RD. BR. NORTHWOL	R02BF48M09	166.6	27.0	1	106	98.76 %	-104	1A
118	R. OUSE A5 RD. BR. OLD STRATFORD	R02BF03M04	133.1	12.5	3	104	99.03 %	-49	1B
119	R. OUSE BRAMPTON MILL	R02BF22M04	169.6	19.4	2	121	99.38 %	-80	1B
120	HARPERS BK. A6116 RD. BR.	R05BFHARP200A	133.6	15.3	2	94	99.51 %	-64	1B
121	R. BRETT B1115 BRIDGE SEMER	R01BFBT0164	137.4	15.8	2	96	99.57 %	-66	1B
122	R. NENE COGENHOE	R05BFNENE100C	164.9	18.9	2	114	99.65 %	-91	03
123	R. STOUR HORSESHOE WEIR MAYLAND	R01BFST0402	149.9	17.2	2	103	99.68 %	-74	02
124	WILLOW BK. FOTHERINGHAY RD. BR.	R05BFWILL170F	186.8	30.3	1	101	99.77 %	-135	02
125	R. BLACKWATER WICKHAM MILL BRIDGE	R01BFBL0160	141.3	13.2	3	103	99.81 %	-59	02
126	R. BLACKWATER GREYS MILL	R01BFBL0350	144.3	13.5	3	104	99.86 %	-62	1B
127	BOCKLESHAM MILL R. A1093 BRIGHTWELL RD. BR.	R04BFMIL020	135.3	12.7	3	96	99.90 %	-59	1A
128	R. TER BUNFORDS BRIDGE	R01BFTE01	143.9	13.5	3	100	99.94 %	-65	1B
129	R. OUSE A422 RD. BR. BRACKLEY	R02BF01M04	138.3	12.9	3	96	99.95 %	-63	1B
130	R. YARE BICKERSTONE BRIDGE	R04BFYAR060	137.0	12.8	3	95	99.95 %	-62	1B
131	R. LYNN/STEEPING PARTNEY	R03BFLYNN120P	164.5	18.9	2	101	99.96 %	-93	1B
132	R. WARING LOW TOYNTON BRIDGE	R03BFWAR1090L	138.7	15.9	2	85	99.96 %	-79	1A
133	R. STOUR PITHEERE RAILWAY BRIDGE	R01BFST0604	172.2	19.7	2	104	99.97 %	-100	02
134	R. WELAND TINWELL MILL	R05BFWELL275T	159.8	15.0	3	106	99.98 %	-77	1B
135	R. COLNE LEXDEN BRIDGE	R01BFCL0185	155.9	14.6	3	103	99.99 %	-76	02
136	R. BAIN HEMINGBY	R03BFBAIN190H	168.4	19.3	2	98	99.99 %	-101	1B
137	R. GLEN (WEST) BANTHORPE LODGE	R05BFGLN280B	182.5	20.9	2	106	99.99 %	-110	1A
138	R. BOX THORINGTON STREET B1068 RD. BR.	R01BFBX01	148.6	13.9	3	96	99.99 %	-74	02
139	CRINGLE BROOK THUNDER BRIDGE	R03BFCRIN100T	224.2	25.7	2	121	100.00 %	-144	1B
140	R. OUSE RADCLIVE BRIDGE	R02BF01M06	161.5	15.1	3	99	100.00 %	-86	1B

Performance of Rivers against Biological Targets

1990

Ranking of Sites in order of Degree of Significant Shortfall

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	N/C Class
1	PIX BK.CHURCH END ARLESEY	R02BF14M07	14.6	2.4	1	97	.00 %	79	03
2	R.CROUCH MEMORIAL PARK WICKFORD	R01BFCR01	19.3	3.1	1	102	.00 %	78	03
3	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	20.6	3.3	1	103	.00 %	77	02
4	ASHIELDHAM BK.BROOK FARM COTTAGES	R01BFD0310	21.5	3.5	1	91	.00 %	64	0C
5	SKITTER BECK BROCKELSBY STATION	R03BFSKIT0508	19.3	3.1	1	84	.00 %	60	1B
6	WILLOW BK.SOUTH PRIORS HALL	R05BFWILS060P	33.9	5.5	1	100	.00 %	57	03
7	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R01BFRH0202	34.4	5.6	1	98	.00 %	54	02
8	R.SNAIL RIVER LANE FORDHAM	R02BF35M19	38.2	4.4	2	92	.00 %	47	03
9	R.BLYTH BLYFORD BRIDGE	R04BFBL040	42.5	6.9	1	99	.00 %	45	02
10	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	39.9	6.5	1	95	.00 %	44	02
11	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFS0120	47.7	7.7	1	96	.00 %	36	02
12	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHM	R02BF35M16	49.0	5.6	2	93	.00 %	35	03
13	OLD RIVER SLEA EVEDON	R03BFOLDS040E	46.8	7.8	1	94	.00 %	35	03
14	R.HIZ CADWELL ARCH	R02BF13M04	52.0	8.4	1	98	.00 %	32	02
15	R.WID LAWNESS BRIDGE	R01BFW005	54.5	8.8	1	100	.00 %	31	03
16	R.CAM BOTTISHAM LOCK	R02BF33M09	63.6	7.3	2	106	.00 %	30	02
17	R.WID WRITTLE BRIDGE	R01BFW00040	56.7	9.2	1	102	.00 %	30	02
18	LOUTH CANAL ALVINGHAM	R03BFL00T040A	53.3	8.6	1	96	.00 %	29	03
19	BRAMPTON BRANCH R.NENE BRIXNORTH-CREATON	R05BFBRAM070B	64.0	10.4	1	106	.00 %	25	1B
20	R.RASE WEST RASEN	R03BFRASE170W	58.4	9.5	1	98	.00 %	24	1B
21	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFWHL100W	58.4	9.5	1	98	.00 %	24	02
22	R.TOVE CAPPENHAM BRIDGE	R02BF04M04	65.7	7.5	2	98	.00 %	20	1B
23	R.TIFFEY CARLTON FOREHDE BRIDGE	R04BFTIF100	64.0	7.3	2	93	.00 %	17	02
24	R.TOVE ABTHORPE RD.BR.	R02BF04M02	66.1	7.6	2	95	.01 %	16	1B
25	EASTON BROAD RIVER POTTERS RD.BR.B1127	R04BFEST060	55.8	9.1	1	90	.01 %	19	02
26	NEW RIVER ANCHOLME BRIGG	R03BFANC0150B	61.4	10.0	1	95	.04 %	17	02
27	SCHAM LODGE BARWAY RD.BR.	R02BF36M10	66.6	7.6	2	92	.04 %	13	03
28	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	83.3	13.5	1	127	.06 %	21	02
29	R.WANG HILL FM.BR.	R04BFWNG040	61.4	10.0	1	93	.08 %	15	03
30	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	70.9	8.1	2	96	.10 %	12	1B
31	MELBOURN BK.RD.CULVERT MELDRETH	R02BF30M21	62.7	10.2	1	94	.10 %	15	1B
32	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFD0030	60.1	9.7	1	90	.11 %	14	02
33	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	73.4	8.4	2	97	.26 %	10	02
34	R.TER BUMFORDS BRIDGE	R01BFT01	70.0	11.3	1	100	.41 %	11	1B
35	WOLDGRIFT DRAIN U/S MABLETHORPE STM	R03BFWOLD090U	64.0	10.4	1	89	.80 %	8	02
36	STRINGSIDE STR.WHITE BR.OXBOROUGH	R02BF49M03	69.1	11.2	1	96	.83 %	8	1A
37	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	69.6	11.3	1	94	1.52 %	6	02
38	R.CAM DDMOCKS COTE RD.BR.	R02BF34M02	83.3	9.5	2	104	1.52 %	5	02
39	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	R02BF32M02	69.1	11.2	1	89	3.83 %	1	1B
40	R.SLEA ANWICK	R03BFSLEA140A	73.0	11.8	1	93	4.56 %	1	02
41	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R05BFBRAM160W	93.6	15.2	1	117	6.18 %	-1	1B
42	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	83.3	13.5	1	104	6.28 %	-1	02

43	R.STIFFKEY WIGHTON BRIDGE	RD48FSTF040	79.0	12.8	1	97	8.02 %	-2	18
44	ROMAN RIVER BOUNSTEAD BRIDGE	RD1BFRRD108	81.6	13.2	1	99	9.42 %	-3	18
45	R.WELLAND CROMLAND BR.	RD58FWELL420C	77.7	12.6	1	92	12.88 %	-5	02
46	R.ISE BRITISH LEYLANDS B571 RD.BR.	RD58FRRISE310B	84.6	13.7	1	100	13.08 %	-6	02
47	R.NENE DUSTON MILL	RD58FNENE080D	83.7	13.6	1	98	14.69 %	-7	18
48	GREAT EAU WITHERN	RD38FGEAU100W	82.5	13.4	1	96	15.55 %	-7	18
49	NEW RIVER ANCHOLME BRANDY WHARF	RD38FANCH090B	85.9	13.9	1	99	17.33 %	-9	18
50	R.MARDYKE CAUSEWAY BRIDGE	RD1BFMD0135	78.2	12.7	1	90	17.51 %	-8	03
51	R.OUSE BRAMPTON MILL	RD28FZ2H04	110.4	12.7	2	121	20.05 %	-9	18
52	UPPER WITHAM LONG BENINGTON B7	RD38FWITH370L	92.3	15.0	1	104	21.79 %	-12	02
53	R.SLEA BONEMILL BRIDGE	RD38FSLA090B	86.3	14.0	1	97	22.27 %	-11	18
54	LACEBY BECK LACEBY B7	RD38FLACED40L	85.9	13.9	1	95	25.65 %	-13	18
55	R.KYM MEAGRE FARM GAUGE	RD28F21H04	87.6	10.0	2	94	26.23 %	-9	18
56	R.OUSE A422 RD.BR.BRACKLEY	RD28FO1H04	89.8	10.3	2	96	27.20 %	-10	18
57	BARLDINGS EAU LANGMORTH	RD38FBARL110L	82.0	13.3	1	90	27.44 %	-13	18
58	R.NENE NORTH BANK	RD58FNENE630N	107.8	17.5	1	118	27.96 %	-18	02
59	R.STOUR HORSESHOE WEIR NAYLAND	RD1BFST0402	94.5	15.3	1	103	28.91 %	-16	02
60	HOBHOLE HALTOFT END	RD38FHOBH130H	82.0	13.3	1	89	30.00 %	-14	02
61	NEW RIVER ANCHOLME BRANDY WHARF	RD38FANCH090B	87.2	14.1	1	94	31.47 %	-15	18
62	LOUTH CANAL AUSTEN FEN	RD38FLOUT060A	86.8	14.1	1	93	32.84 %	-16	02
63	WHADDON BK.RD.BR.WHADDON	RD28F30M19	84.6	13.7	1	90	34.70 %	-16	03
64	THORPENESS HUNDRED R. THORPENESS RAIL BR	RD48FTHP010	89.3	14.5	1	91	45.41 %	-21	02
65	R.BRETT B1115 BRIDGE SEMER	RD1BFBT0164	95.3	15.5	1	96	48.30 %	-24	18
66	R.STOUR COTTON HALL KEDJINGTON	RD1BFST1403	94.9	15.4	1	94	52.36 %	-25	02
67	R.CHELMER RICKETTS LOCK	RD1BFCH0129	106.5	17.3	1	105	53.48 %	-29	18
68	R.CAN WARREN BRIDGE	RD1BFCA03	101.8	16.5	1	100	54.30 %	-28	02
69	LONG EAU THREE BRIDGES	RD38FLEAU090T	94.9	15.4	1	92	57.51 %	-27	18
70	R.CHELMER N END ROAD BRIDGE	RD1BFCH0780	104.8	17.0	1	101	58.83 %	-31	18
71	R.OUSE BROWNSHILL STALNCH	RD28F28H06	131.8	21.4	1	126	60.78 %	-40	18
72	R.CAN LAYBY LITTLE CHESTERFORD	RD28F27H22	107.4	12.3	2	104	60.78 %	-23	18
73	R.ISE RUSHTON RD.BR.	RD58FRRISE130R	99.2	16.1	1	94	62.69 %	-31	18
74	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	RD28FO2M13	107.8	12.4	2	103	65.11 %	-24	18
75	R.CHELMER FT.BR.D/S SANDFORD MILL	RD1BFCH0390	112.1	18.2	1	104	67.19 %	-37	18
76	R.HIZ A507 RD.BR.ARLSEY	RD28F13H06	105.6	17.1	1	98	67.24 %	-35	18
77	MINSHERE RIVER EAST BRIDGE	RD48FMIND020	98.3	15.9	1	91	67.76 %	-33	18
78	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	RD48FMILL020	104.8	17.0	1	96	69.76 %	-36	1A
79	R.BLACKWATER CHINA BRIDGE	RD1BFBL0560	109.9	17.8	1	100	71.16 %	-38	02
80	R.NENE MOLLASTON MILL	RD58FNENE230W	120.7	19.6	1	109	72.48 %	-43	02
81	R.COULNE DOES CORNER	RD1BFCL07	110.8	18.0	1	100	72.62 %	-39	02
82	R.STOUR STOKE COLLEGE FLOODGATES	RD1BFST1002	114.7	18.6	1	103	73.49 %	-41	03
83	R.COULNE CHAPPEL ROAD	RD1BFCL0357	113.8	18.4	1	102	73.89 %	-41	02
84	R.STOUR LISTON WEIR	RD1BFST08	117.2	19.0	1	104	75.71 %	-44	18
85	R.BRAIN FT.BR.U/S FAULKBORNE HALL	RD1BFBR0150	109.9	17.8	1	97	76.62 %	-41	02
86	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RD1BFBL0949	110.4	17.9	1	96	78.91 %	-43	18
87	R.TOVE RD.BR.CASTLETHORPE	RD28FO4H07	115.1	13.2	2	104	79.99 %	-32	18
88	R.NENE ORTON STALNCH	RD58FNENE6050	131.4	21.3	1	112	81.90 %	-53	02
89	R.NENE COGHNOE	RD58FNENE180C	134.0	21.7	1	114	82.13 %	-55	03
90	R.WELLAND D/S MKT.HAREBOROUGH STW	RD58FWELL090M	116.4	18.9	1	99	82.16 %	-47	02
91	R.BOX THORINGTON STREET B1068 RD.BR.	RD1BFBX01	114.2	18.5	1	96	83.76 %	-48	02
92	R.LARK FORNHAM ALL SAINTS RD.BR.	RD28F37H08	106.1	12.2	2	94	83.97 %	-31	02
93	R.WELLAND TINMELL MILL	RD58FWELL275T	127.1	20.6	1	106	84.74 %	-54	18
94	KYME EAU SOUTH KYME	RD38FRKYMED80S	110.4	17.9	1	92	84.77 %	-47	02

95	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R058FGLEN200L	141.7	23.0	1	118	84.91 %	-61	1B
96	R.WAVENEY BILLINGFORD BRIDGE	R048FWAV040	117.7	19.1	1	97	86.08 %	-51	1B
97	HARRERS BK.A6116 RD.BR.	R058FHARP200A	115.5	18.7	1	94	87.48 %	-51	1B
98	R.OUSE A5 RD.BR.OLD STRATFORD	R028F03M04	128.0	20.7	1	104	87.62 %	-57	1B
99	R.BRANT BLACKMOOR BRIDGE	R038FBRAW150B	109.9	17.8	1	89	88.00 %	-49	02
100	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHWOL	R028F48M09	131.4	21.3	1	106	88.36 %	-59	1A
101	R.TAS FORNCETT BRIDGE	R048FTAS040	118.5	19.2	1	95	88.97 %	-54	1B
102	R.COUNE LEXDEN BRIDGE	R018FCL0185	132.3	21.4	1	103	91.39 %	-64	02
103	R.IVEL TEMPSFORD DEPOT FT.BR.	R028F19M07	134.4	21.8	1	104	91.86 %	-65	1B
104	R.LUD LOUTH TROUT FARM 87	R038FRLL0030L	137.4	22.3	1	106	92.08 %	-67	1B
105	R.BLACKWATER WICKHAM MILL BRIDGE	R018FBLO160	134.4	21.8	1	103	92.54 %	-66	02
106	R.WELLAND ROCKINGHAM A6003 RD.BR.	R058FWELL150R	133.6	21.7	1	102	92.75 %	-66	1B
107	R.STOUR PITMERE RAILWAY BRIDGE	R018FST0604	139.6	22.6	1	104	94.21 %	-72	02
108	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R048FLTH020	124.1	20.1	1	91	95.01 %	-65	02
109	R.GLEN SURFLEET	R058FGLEN590S	125.8	20.4	1	89	96.45 %	-69	02
110	UPPER WITHAM ALBOURN	R038FWITH510A	148.2	24.0	1	104	96.70 %	-83	1B
111	R.LARK JUDES FERRY	R028F37M14	128.4	14.7	2	101	96.87 %	-51	1B
112	R.LYNN/STEEPING PARTNEY	R038FLYNN120P	145.6	23.6	1	101	97.06 %	-82	1B
113	R.BLACKWATER GREYS MILL	R018FBLO350	154.2	25.0	1	104	97.77 %	-90	1B
114	R.KENNETT BECK BR.	R028F38M07	124.1	14.2	2	95	97.96 %	-52	1A
115	R.OUSE A422 RD.BR.NEWPORT PAGNELL	R028F05M03	137.4	15.8	2	104	98.31 %	-58	1B
116	R.WELLAND O/S DEEPING STW	R058FWELL390D	146.4	23.7	1	95	98.49 %	-89	1B
117	R.OUSE RADCLIVE BRIDGE	R028F01M06	134.9	15.5	2	99	98.98 %	-60	1B
118	UPPER WITHAM LITTLE PONTON	R038FWITH170L	170.9	27.7	1	105	99.13 %	-111	1B
119	OLD WEST R. HERMITAGE LOCK EARITH	R028F35M01	124.5	14.3	2	89	99.36 %	-58	1B
120	R.GWASH FT.BR.U/S BELMESTHORPE	R058FGWSH300B	176.5	28.6	1	103	99.49 %	-120	1A
121	R.RHEE HASLINGFIELD RD.BR.	R028F30M07	199.7	32.4	1	102	99.87 %	-150	1B
122	R.CHATER STATION RD.BR.KETTON	R058FCHAT140S	223.3	36.2	1	112	99.89 %	-170	1B
123	R.GLEN (WEST) BANTHORPE LODGE	R058FGLEN280B	222.5	36.1	1	106	99.94 %	-175	1A

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall | 1988

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	NMC Class
1	R. LUD LOUTH TROUT FARM 87	R038FRLLD030L	22.3	2.6	2	106	.00 %	79	1B
2	OLD RIVER ANCHOLME WRANBY	R038FANCO050W	13.3	1.5	2	92	.00 %	76	02
3	OLD RIVER ANCHOLME WRANBY	R038FANCO050W	13.3	1.5	2	92	.00 %	76	02
4	WILLOW BK. SOUTH PRIORS HALL	R058FWILSO60P	24.1	3.9	1	100	.00 %	70	03
5	EASTWOOD BK. D/S NOBLES GREEN DITCH CON	R018FRH0202	31.8	3.6	2	98	.00 %	60	02
6	PDX BK. CHURCH END ARLESEY	R028F14H07	32.6	5.3	1	97	.00 %	56	03
7	R. CROUCH MEMORIAL PARK WICKFORD	R018FRD01	39.1	6.3	1	102	.00 %	52	03
8	OLD RIVER SLEA EVEDON	R038FOLD0040E	38.7	4.4	2	94	.00 %	48	03
9	WATTON BK. LT. CRESSINGHAM RD. BR. PILGRIMS	R028F48M15	42.5	6.9	1	95	.00 %	41	02
10	R. FLIT SHEFFORD NORTH BRIDGE	R028F16H04	51.5	8.4	1	103	.00 %	38	02
11	CAMPTON BK. SOUTH BRIDGE SHEFFORD	R028F17H02	51.1	8.3	1	95	.00 %	30	02
12	ASHELDHAM BK. BROOK FARM COTTAGES	R018FDT0310	48.5	7.9	1	91	.00 %	30	UC
13	SKITTER BECK BROCKELSBY STATION	R038FSCIT050B	46.8	5.4	2	84	.00 %	28	1B
14	R. WANG HILL FM. BR.	R048FWNG040	56.3	6.4	2	93	.00 %	26	03
15	R. HIZ CADWELL ARCH	R028F13H04	57.1	9.3	1	98	.00 %	26	02
16	R. WID WRITTLE BRIDGE	R018FMD0040	61.0	9.9	1	102	.00 %	25	02
17	BRAMPTON BRANCH R. NENE DIS WEST BRIDGE	R058FBRAM160W	71.7	11.6	1	117	.00 %	26	1B
18	LOWER WITHAM TATTERSHALL BRIDGE	R038FWITH740T	93.6	8.8	3	127	.01 %	19	02
19	R. ISE BRITISH LEYLANDS B571 RD. BR.	R058FRISE310B	63.1	10.2	1	100	.02 %	20	02
20	R. LARK FORNHAM ALL SAINTS RD. BR.	R028F37H08	59.7	9.7	1	94	.02 %	18	02
21	EASTON BRIDAO RIVER POTTERS RD. BR. B1127	R048FEST060	58.4	9.5	1	90	.04 %	16	02
22	R. WID LAMNESS BRIDGE	R018FMD05	65.7	10.7	1	100	.06 %	17	03
23	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R038FWOLD090U	66.6	7.6	2	89	.16 %	10	02
24	R. LARK JUDES FERRY	R028F37H14	69.6	11.3	1	101	.27 %	13	1B
25	NEW RIVER ANCHOLME BRIGG	R038FANON150B	73.0	8.4	2	95	.43 %	8	02
26	LOUTH CANAL ALVINGHAM	R038FLOUT040A	78.8	7.4	3	98	.90 %	5	03
27	UPPER WITHAM LONG BENINGTON 87	R038FWITH370L	86.8	9.9	2	104	4.14 %	1	02
28	R. RASE WEST RASE	R038FRASE170W	82.0	9.4	2	98	4.47 %	1	1B
29	ALCONBURY BK. GRIDNLEYS BR.	R028F23H04	75.6	12.3	1	98	4.79 %	0	1B
30	R. BAIN DALDERBY	R038FBAIN280D	78.2	7.3	3	90	5.28 %	0	1B
31	R. CAM DIMMOCKS COTE RD. BR.	R028F34H02	85.9	13.9	1	104	9.68 %	-4	02
32	R. SNAIL RIVER LANE FORDHAM	R028F36H19	76.4	12.4	1	92	10.47 %	-4	03
33	R. WELAND D/S MKT. HARBROUGH STW	R058FWELL090H	83.3	13.5	1	99	12.28 %	-6	02
34	UPPER WITHAM LONG BENINGTON 87	R038FWITH330H	94.1	8.8	3	104	12.92 %	-4	02
35	ROMAN RIVER BOUNSTEAD BRIDGE	R018FRF0108	86.9	13.9	1	99	17.33 %	-9	1B
36	WHILTON BRANCH OF NENE WEEDON A45 RD. BR.	R058FWHIL100W	85.9	13.9	1	98	19.23 %	-10	02
37	OLD WEST R. TWENTYPENCE RD. BR. WILBURTON	R028F35H03	88.9	10.2	2	97	21.33 %	-8	02
38	R. TIFFEY CARLTON FOREHDE BRIDGE	R048FTIF100	82.9	13.4	1	93	22.58 %	-11	02
39	WILLOW BK. BLATHERWYOKE LAKE OUTLET	R058FWILL080B	91.0	14.8	1	102	22.90 %	-12	02
40	HOBHOLE HALTOFT END	R038FHOEH130H	79.5	12.9	1	89	22.92 %	-11	02
41	HARPERS BK. COWTHICK GAUGING SITE	R058FHARP125C	81.6	13.2	1	90	26.27 %	-12	02
42	R. STOUR COTTON HALL KEDINGTON	R018FST1403	86.3	14.0	1	94	29.18 %	-14	02
43	LONG EAU THREE BRIDGES	R038FLEAU090T	87.6	8.2	3	92	29.62 %	-8	1B
44	R. WARING LOW TOYNTON BRIDGE	R038FWARI090L	81.6	7.6	3	85	32.80 %	-8	1A
45	R. NENE COGENHOE	R058FNENE180C	106.5	17.3	1	114	33.22 %	-20	03
46	R. ISE D/S WICKSTEED PARK	R058FRISE225W	91.0	14.8	1	96	36.86 %	-18	1B

47	R.SLEA ANWICK	R038FSLEA140A	90.6	8.5	3	93	38.94 %	-11	02
48	GREAT EAU WITHERN	R038FGEAU100W	93.6	8.8	3	96	39.31 %	-11	18
49	COTTENHAM LODGE SKITHY FEN RD.BR.COTTENHM	R028F35M16	89.3	14.5	1	93	39.99 %	-19	03
50	BRAMPTON BRANCH R.NENE BRDMORTH-CREATON	R058FBRAMD708	102.2	16.6	1	106	40.96 %	-22	18
51	SOHAM LODGE BARWAY RD.BR.	R028F36M10	88.9	14.4	1	92	41.48 %	-20	03
52	THORPENESS HUNDRED R. THORPENESS RAIL BR	R048FTHP010	88.5	14.3	1	91	43.00 %	-20	02
53	R.NENE NORTH BANK	R058FNENE630N	115.1	18.7	1	118	43.82 %	-27	02
54	R.WELLAND WELHAM RD.BR.	R058FWELL100W	100.1	16.2	1	101	47.70 %	-25	02
55	R.RHEE WENDY RD.BR.	R028F30M24	92.8	15.0	1	92	52.03 %	-24	18
56	R.OUSE BROWNSHILL STAUNCH	R028F26M06	127.1	20.6	1	126	52.17 %	-34	18
57	R.HIZ A507 RD.BR.ARLSEY	R028F13M06	99.2	16.1	1	98	52.99 %	-27	18
58	LACEBY BECK LACEBY 87	R038FLACED40L	95.8	9.0	3	95	53.43 %	-15	18
59	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON908	101.8	11.7	2	99	59.43 %	-21	18
60	R.GLEN TONGUE END D/S PS	R058FGLEN525T	94.9	15.4	1	91	60.04 %	-28	1A
61	HARRPERS BK.A6116 RD.BR.	R058FHARP200A	98.3	15.9	1	94	60.75 %	-30	18
62	R.HARDYKE CAUSEWAY BRIDGE	R018FHD0135	94.5	15.3	1	90	61.51 %	-29	03
63	ORINGLE BROOK THUNDER BRIDGE	R038FCRIN100T	125.4	14.4	2	121	62.03 %	-27	18
64	MELBOURN BK.RD.CULVERT MELDRETH	R028F30M21	99.6	16.2	1	94	63.64 %	-31	18
65	R.SLEA BONEMILL BRIDGE	R038FSLEA0908	100.5	9.4	3	97	64.49 %	-18	18
66	R.NENE ORTON STAUNCH	R058FNENE6050	119.4	19.4	1	112	64.87 %	-38	02
67	MINSHERE RIVER EAST BRIDGE	R048FMIND020	97.5	15.8	1	91	65.93 %	-31	18
68	R.GLEN THURLEY FEN	R058FGLEN510T	103.9	16.8	1	97	65.96 %	-34	1A
69	R.NENE DENFORD	R058FNENE360D	126.3	20.5	1	116	69.20 %	-43	03
70	R.WELLAND D/S DEEPIING STW	R058FWELL390D	103.5	16.8	1	95	69.38 %	-35	18
71	R.CHELMER FT.BR.D/S SANDFORD MILL	R018FCH0390	113.8	18.4	1	104	70.25 %	-39	18
72	R.TOVE ABTHORPE RD.BR.	R028F04M02	104.4	16.9	1	95	71.00 %	-36	18
73	R.NENE MOLLASTON MILL	R058FNENE230W	121.1	19.6	1	109	73.13 %	-43	02
74	UPPER WITHAM AUBOURN	R038FWITH510A	110.4	10.3	3	104	73.14 %	-22	18
75	OLD WEST R. HERMITAGE LOCK EARITH	R028F35M01	99.6	16.2	1	89	74.49 %	-36	18
76	R.STOUR FLATFORD MILL FOOTBRIDGE	R018FST0120	107.8	17.5	1	96	75.02 %	-40	02
77	R.STOUR LISTON WEIR	R018FST08	119.0	19.3	1	104	78.11 %	-46	18
78	R.TAS FORNCETT BRIDGE	R048FTAS040	109.9	17.8	1	95	79.91 %	-43	18
79	KYME EAU SOUTH KYME	R038FKYMED080S	102.6	11.8	2	92	81.71 %	-29	02
80	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	R048FKIL020	112.9	18.3	1	96	82.27 %	-46	1A
81	R.CAM WARREN BRIDGE	R018FCA03	117.7	19.1	1	100	82.29 %	-48	02
82	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON908	105.2	12.1	2	94	82.39 %	-30	18
83	R.KENNETT BECK BR.	R028F38M07	112.9	18.3	1	95	83.65 %	-47	1A
84	R.GLEN SURFLEET	R058FGLEN590S	100.5	11.5	2	89	84.08 %	-29	02
85	R.WELLAND CROWLAND BR.	R058FWELL420C	109.9	17.8	1	92	84.30 %	-46	02
86	R.CAM BOTTISHAM LOCK	R028F33M09	128.8	20.9	1	106	86.29 %	-56	02
87	WHADDON BK.RD.BR.WHADDON	R028F30M19	111.7	18.1	1	90	88.43 %	-50	03
88	R.NENE BARNWELL PICNIC PARK	R058FNENE4408	158.9	25.8	1	128	88.49 %	-72	02
89	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	R018FBR0150	121.1	19.6	1	97	89.03 %	-55	02
90	R.COULNE DOES CORNER	R018FCLO7	126.7	20.5	1	100	90.31 %	-59	02
91	R.COULNE CHAPPEL ROAD	R018FCLO367	129.7	21.0	1	102	90.62 %	-61	02
92	R.LYMN/STEEPING PARTNEY	R038FLYMN120P	119.8	13.7	2	101	91.47 %	-40	18
93	WILLOW BK.ROTHERINGHAY RD.BR.	R058FWILL170F	131.0	21.2	1	101	92.10 %	-64	02
94	R.TOVE CAPPENHAM BRIDGE	R028F04M04	129.7	21.0	1	98	93.42 %	-65	18
95	R.CHELMER N END ROAD BRIDGE	R018FCH0780	135.3	21.9	1	101	94.10 %	-68	18
96	R.BLACKWATER CHINA BRIDGE	R018FBLO560	134.0	21.7	1	100	94.12 %	-69	02
97	R.CAM LAYBY LITTLE CHESTERFORD	R028F27M22	141.7	23.0	1	104	94.97 %	-75	18
98	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R058FGLEN200L	161.1	26.1	1	118	95.04 %	-85	18
99	R.NENE ELTON LOCK	R058FNENE500E	156.3	25.3	1	114	95.26 %	-83	02
100	R.WELLAND TINMELL MILL	R058FWELL275T	145.6	23.6	1	106	95.33 %	-77	18
101	R.STOUR STOKE COLLEGE FLOODGATES	R018FST1002	143.9	23.3	1	103	96.01 %	-78	03
102	ELSTON BK.TRIB.OUSE OCTAGON FARM	R028F12M24	130.6	21.2	1	93	96.20 %	-71	18

103	R. BRANT BLACKOOR BRIDGE	RD38FRAN150B	106.9	10.0	3	89	96.34 %	-33	O2
104	R. BLACKWATER GREYS MILL	RD18FBL0350	147.3	23.9	1	104	96.51 %	-82	1B
105	R. OLSE BRAMPTON MILL	RD28F22M04	173.5	28.1	1	121	96.90 %	-98	1B
108	R. COLNE LEXDEN BRIDGE	RD18FCL0185	147.7	23.9	1	103	96.91 %	-83	O2
107	R. TER BLUMFORDS BRIDGE	RD18FTED1	143.4	23.3	1	100	96.91 %	-81	1B
108	BARLINGS EAU LANGMORTH	RD38FBARL110L	109.1	10.2	3	90	96.92 %	-35	1B
109	R. NENE WARMINGTON	RD58FENE495W	174.4	28.3	1	121	97.05 %	-99	O2
110	R. ISE RUSHTON RD. BR.	RD58FRISE130R	135.7	22.0	1	94	97.10 %	-77	1B
111	R. WELAND ROOKINGHAM A6003 RD. BR.	RD58FMELL150R	148.2	24.0	1	102	97.27 %	-85	1B
112	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	RD48FLTH020	133.6	21.7	1	91	97.53 %	-77	O2
113	R. OLSE A5 RD. BR. OLD STRATFORD	RD28F03M04	153.3	24.9	1	104	97.64 %	-89	1B
114	R. STOUR HORSESHOE WEIR MAYLAND	RD18FST0402	152.0	24.6	1	103	97.67 %	-89	O2
115	R. IVEL TEMPSFORD DEPOT FT. BR.	RD28F19M07	154.2	25.0	1	104	97.77 %	-90	1B
116	R. YARE BICKERSTONE BRIDGE	RD48FYAR060	141.3	22.9	1	95	97.84 %	-83	1B
117	R. OLSE A422 RD. BR. BRACKLEY	RD28F01M04	125.0	14.3	2	96	97.84 %	-52	1B
118	R. GLEN (WEST) BANTHORPE LODGE	RD58FGLN280B	158.9	25.8	1	106	98.00 %	-94	1A
119	R. BAIN HEMINGBY	RD38FBAIN180H	122.0	11.4	3	98	98.21 %	-42	1B
120	R. BLACKWATER WICKHAM MILL BRIDGE	RD18FBL0160	156.8	25.4	1	103	98.28 %	-95	O2
121	R. IVEL ASTWICK BRIDGE	RD28F14M02	140.4	22.8	1	92	98.33 %	-85	1B
122	R. BRETT B1115 BRIDGE SEMER	RD18FBT0164	149.5	24.2	1	96	98.63 %	-92	1B
123	R. IVEL A600 RD. BR. LANGFORD	RD28F15M01	147.3	23.9	1	94	98.72 %	-92	O2
124	PADBURY BK. TRIB. OLSE 84034 RD. BR. THORNB	RD28F02M13	163.6	26.5	1	103	98.89 %	-103	1B
125	R. CHATER STATION RD. BR. KETTON	RD58FCHAT140S	179.5	29.1	1	112	98.96 %	-114	1B
126	R. CHELNER RICKETTS LOCK	RD18FCH0129	169.2	27.4	1	105	99.04 %	-108	1B
127	R. PANT WETHERSFIELD MILL B1053 RD. BR.	RD18FBL0949	158.5	25.7	1	96	99.25 %	-104	1B
128	R. WISSEY A10 RD. BR. HILGAY	RD28F50M02	170.1	27.6	1	103	99.25 %	-111	1B
129	R. KYM MEAGRE FARM GAUGE	RD28F21M04	156.3	25.3	1	94	99.30 %	-103	1B
130	R. NENE DUSTON MILL	RD58FENE080D	165.8	26.9	1	98	99.42 %	-111	1B
131	R. BOX THORINGTON STREET B1068 RD. BR.	RD18FBX01	164.9	26.7	1	96	99.50 %	-112	O2
132	R. TOVE RD. BR. CASTLETHORPE	RD28F04M07	179.5	29.1	1	104	99.53 %	-122	1B
133	R. WELAND UFFINGTON BARNACK RD. BR.	RD58FMELL330U	191.1	31.0	1	108	99.63 %	-133	1B
134	HOLLAND BK. HOLLAND MAIN RD BRIDGE	RD18FH00030	159.8	25.9	1	90	99.65 %	-111	O2
135	R. OLSE A422 RD. BR. NEWFORT PAGNELL	RD28F05M03	188.4	30.2	1	104	99.68 %	-131	1B
136	R. RHEE HASLINGFIELD RD. BR.	RD28F30M07	189.8	30.8	1	102	99.78 %	-137	1B
137	BOURN BK. TRIB. CAM CANTELUPE FM. BR.	RD28F32M02	166.2	26.9	1	89	99.79 %	-121	1B
138	R. STOUR PITHERE RAILWAY BRIDGE	RD18FST0604	195.4	31.7	1	104	99.80 %	-143	O2
139	R. GNASH FT. BR. U/S BELMESTHORPE	RD58FGNSH300B	196.3	31.8	1	103	99.83 %	-145	1A
140	STRINGSIDE STR. WHITE BR. GABBOURGH	RD28F48M05	167.7	30.4	1	96	99.87 %	-141	1A
141	UPPER WITHAM LITTLE RYTON	RD38FWITH170L	163.6	18.8	2	105	99.91 %	-88	1B
142	R. WISSEY DIDDLINGTON LODGE RD. BR. NORTHMOL	RD28F48M09	225.5	36.5	1	106	99.95 %	-179	1A

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall 1988

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BHP Score	Confidence of Compliance	Deficit	NMC Class
1	R.LUD LOUTH TROUT FARM 87	R03BFRLLD030L	22.3	2.6	2	106	.00 %	79	1B
2	OLD RIVER ANCHOLME WRAMBY	R03BFANCO050W	13.3	1.5	2	92	.00 %	76	02
3	OLD RIVER ANCHOLME WRAMBY	R03BFANCO050W	13.3	1.5	2	92	.00 %	76	02
4	WILLOW BK.SOUTH FRIORS HALL	R05BFWILSO60P	24.1	3.9	1	100	.00 %	70	03
5	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R01BFRH0202	31.8	3.6	2	98	.00 %	60	02
6	PDX BK.CHURCH END ARLESEY	R02BF14M07	32.6	5.3	1	97	.00 %	56	03
7	R.CROUCH MEMORIAL PARK WICKFORD	R01BFORD1	39.1	6.3	1	102	.00 %	52	03
8	OLD RIVER SLEA EVEDON	R03BFOLD040E	38.7	4.4	2	94	.00 %	48	03
9	WATTON BK.LT.CRESSINGHAM RD.BR.PILGRIMS	R02BF48M15	42.5	6.9	1	95	.00 %	41	02
10	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	51.5	8.4	1	103	.00 %	38	02
11	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	51.1	8.3	1	95	.00 %	30	02
12	ASHELDHAM BK.BROOK FARM COTTAGES	R01BFDT0310	48.5	7.9	1	91	.00 %	30	UC
13	SKITTER BECK BROCKELSBY STATION	R03BFSKIT050B	46.8	5.4	2	84	.00 %	28	1B
14	R.WANG HILL FM.BR.	R04BFWNG040	56.3	6.4	2	93	.00 %	26	03
15	R.HIZ CADMELL ARCH	R02BF13M04	57.1	9.3	1	98	.00 %	26	02
16	R.WID WRITTLE BRIDGE	R01BFWDD040	61.0	9.9	1	102	.00 %	25	02
17	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R05BFBRAM160W	71.7	11.6	1	117	.00 %	26	1B
18	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	93.6	8.8	3	127	.01 %	19	02
19	R.ISE BRITISH LEYLANDS B571 RD.BR.	R05BFRISE310B	63.1	10.2	1	100	.02 %	20	02
20	R.LARK FORNHAM ALL SAINTS RD.BR.	R02BF37M08	59.7	9.7	1	94	.02 %	18	02
21	EASTON BROAD RIVER FOTTERS RD.BR.81127	R04BFEST060	58.4	9.5	1	90	.04 %	16	02
22	R.WID LAWNES BRIDGE	R01BFW005	65.7	10.7	1	100	.06 %	17	03
23	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R03BFWOLD090U	66.6	7.6	2	89	.16 %	10	02
24	R.LARK JUDES FERRY	R02BF37M14	69.6	11.3	1	101	.27 %	13	1B
25	NEW RIVER ANCHOLME BRIGG	R03BFANCN150B	73.0	8.4	2	95	.43 %	8	02
26	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	78.6	7.4	3	96	.90 %	5	03
27	UPPER WITHAM LONG BENINGTON 87	R03BFWITH370L	86.8	9.9	2	104	4.14 %	1	02
28	R.RASE WEST RASEN	R03BFRASE170W	82.0	9.4	2	98	4.47 %	1	1B
29	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	75.6	12.3	1	96	4.79 %	0	1B
30	R.BAIN DALDERBY	R03BFBAIN280D	78.2	7.3	3	90	5.28 %	0	1B
31	R.CAM DIMMOCKS COTE RD.BR.	R02BF34M02	85.9	13.9	1	104	9.68 %	-4	02
32	R.SNAIL RIVER LANE FORDHAM	R02BF36M19	76.4	12.4	1	92	10.47 %	-4	03
33	R.MELLAND D/S MKT.HARBOROUGH STW	R05BFWELLO90M	83.3	13.5	1	99	12.28 %	-6	02
34	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	94.1	8.8	3	104	12.92 %	-4	02
35	ROMAN RIVER BOUNSTEAD BRIDGE	R01BFRD108	85.9	13.9	1	99	17.33 %	-9	1B
36	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFWHIL100W	85.9	13.9	1	98	19.23 %	-10	02
37	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	86.9	10.2	2	97	21.33 %	-8	02
38	R.TIFFEY CARLTON FOREHOE BRIDGE	R04BFTIF100	82.9	13.4	1	93	22.58 %	-11	02
39	WILLOW BK.BLATHERWYCKE LAKE OUTLET	R05BFWILL080B	91.0	14.8	1	102	22.90 %	-12	02
40	HOBHOLE HALTOFT END	R03BFWOBH130H	79.5	12.9	1	89	22.92 %	-11	02
41	HARPERS BK.COMTHICK GAUGING SITE	R05BFWHAR125C	81.6	13.2	1	90	26.27 %	-12	02
42	R.STOUR COTTON HALL KEDINGTON	R01BFWST1403	86.3	14.0	1	94	29.16 %	-14	02
43	LONG EAU THREE BRIDGES	R03BFWEAU090T	87.6	8.2	3	92	29.62 %	-8	1B
44	R.WARING LOW TONTON BRIDGE	R03BFWARI090L	81.6	7.6	3	85	32.80 %	-8	1A
45	R.NENE COGENHOE	R05BFWENE180C	106.5	17.3	1	114	33.22 %	-20	03
46	R.ISE D/S WICKSTEED PARK	R05BFRISE225W	91.0	14.8	1	96	36.86 %	-18	1B

47	R.SLEA ANWICK	R03BFSLEA140A	90.6	8.5	3	93	38.94 %	-11	02
48	GREAT EAU WITHERN	R03BFGEAU100W	93.6	8.8	3	96	39.31 %	-11	1B
49	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF35H16	89.3	14.5	1	93	39.99 %	-19	03
50	BRAMPTON BRANCH R.NENE BRIDGEMOUTH-CREATON	R05BFBRAM070B	102.2	16.6	1	106	40.96 %	-22	1B
51	SOHAM LODGE BARWAY RD.BR.	R02BF36H10	88.9	14.4	1	92	41.48 %	-20	03
52	THORPENESS HUNDRED R. THORPENESS RAIL BR	R04BFTHF010	88.5	14.3	1	91	43.00 %	-20	02
53	R.NENE NORTH BANK	R05BFNENE30N	115.1	18.7	1	118	43.82 %	-27	02
54	R.WELLAND MELHAM RD.BR.	R05BFMELL100W	100.1	16.2	1	101	47.70 %	-25	02
55	R.RHEE WENDY RD.BR.	R02BF30H24	92.8	15.0	1	92	52.03 %	-24	1B
56	R.OLISE BROWNSHILL STAUNCH	R02BF26H06	127.1	20.6	1	126	52.17 %	-34	1B
57	R.HIZ A507 RD.BR.ARLSEY	R02BF13H06	99.2	16.1	1	98	52.99 %	-27	1B
58	LACEBY BECK LACEBY 87	R03BFPLACE40L	95.8	9.0	3	95	53.43 %	-15	1B
59	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANON090B	101.8	11.7	2	99	59.43 %	-21	1B
60	R.GLEN TONGUE END D/S PS	R05BFGLEN525T	94.9	15.4	1	91	60.04 %	-28	1A
61	HARRERS BK.A6116 RD.BR.	R05BFHARP200A	98.3	15.9	1	94	60.75 %	-30	1B
62	R.MARDYKE CAUSEWAY BRIDGE	R01BFD0135	94.5	15.3	1	90	61.51 %	-29	03
63	CRINGLE BROOK THUNDER BRIDGE	R03BFORDN100T	125.4	14.4	2	121	62.03 %	-27	1B
64	MELBOURN BK.RD.CULVERT MELDRETH	R02BF30H21	99.8	16.2	1	94	63.64 %	-31	1B
65	R.SLEA BONEHILL BRIDGE	R03BFSLEA090B	100.5	9.4	3	97	64.48 %	-18	1B
66	R.NENE ORTON STAUNCH	R05BFNENE6050	119.4	19.4	1	112	64.87 %	-38	02
67	KONSHERE RIVER EAST BRIDGE	R04BFDND20	97.5	15.8	1	91	65.93 %	-31	1B
68	R.GLEN THURLEY FEN	R05BFGLEN510T	103.9	16.8	1	97	65.96 %	-34	1A
69	R.NENE DENFORD	R05BFNENE3600	126.3	20.5	1	118	69.20 %	-43	03
70	R.WELLAND D/S DEEPIING STM	R05BFMELL390D	103.5	16.8	1	95	69.38 %	-35	1B
71	R.CHELMER FT.BR.D/S SANDFORD HILL	R01BFD0390	113.8	18.4	1	104	70.25 %	-39	1B
72	R.TOVE ABTHORPE RD.BR.	R02BF04H02	104.4	16.9	1	95	71.00 %	-36	1B
73	R.NENE MOLLASTON MILL	R05BFNENE230W	121.1	19.6	1	109	73.13 %	-43	02
74	UPPER WITHAM ALBOURN	R03BFWITH510A	110.4	10.3	3	104	73.14 %	-22	1B
75	OLD WEST R. HERMITAGE LOCK EARITH	R02BF35H01	99.6	16.2	1	89	74.49 %	-36	1B
76	R.STOUR FLATFORD HILL FOOTBRIDGE	R01BFS10120	107.8	17.5	1	96	75.02 %	-40	02
77	R.STOUR LISTON WEIR	R01BFS108	119.0	19.3	1	104	78.11 %	-46	1B
78	R.TAS FORNCEFT BRIDGE	R04BFTAS040	109.9	17.8	1	95	79.91 %	-43	1B
79	KYME EAU SOUTH KYME	R03BFKYME080S	102.6	11.8	2	92	81.71 %	-29	02
80	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	R04BFDML020	112.9	18.3	1	96	82.27 %	-46	1A
81	R.CAN WARREN BRIDGE	R01BFCAD3	117.7	19.1	1	100	82.29 %	-48	02
82	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANON090B	105.2	12.1	2	94	82.39 %	-30	1B
83	R.KENNETT BECK BR.	R02BF36H07	112.9	18.3	1	95	83.65 %	-47	1A
84	R.GLEN SURFLEET	R05BFGLEN500S	100.5	11.5	2	89	84.08 %	-29	02
85	R.WELLAND CROWLAND BR.	R05BFMELL420C	109.9	17.8	1	92	84.30 %	-48	02
86	R.CAN BOTTISHAM LOCK	R02BF33H09	128.8	20.9	1	106	86.29 %	-56	02
87	WHADDON BK.RD.BR.WHADDON	R02BF30H19	111.7	16.1	1	90	86.43 %	-50	03
88	R.NENE BARNMELL PIONIC PARK	R05BFNENE440B	158.9	25.8	1	128	88.49 %	-72	02
89	R.BRAIN FT.BR.U/S FAULKEBOURNE HALL	R01BFBRO150	121.1	19.6	1	97	89.03 %	-55	02
90	R.ODINE DOES CORNER	R01BFDL07	126.7	20.5	1	100	90.31 %	-59	02
91	R.ODINE CHAPPEL ROAD	R01BFDL0357	129.7	21.0	1	102	90.62 %	-61	02
92	R.LYNN/STEEPING PARTNEY	R03BFLYNN120P	119.8	13.7	2	101	91.47 %	-40	1B
93	WILLOW BK.FOTHERINGHAY RD.BR.	R05BFWILL170F	131.0	21.2	1	101	92.10 %	-64	02
94	R.TOVE CAPPENHAM BRIDGE	R02BF04H04	129.7	21.0	1	98	93.42 %	-65	1B
95	R.CHELMER N END ROAD BRIDGE	R01BFD0780	136.3	21.9	1	101	94.10 %	-69	1B
96	R.BLACKWATER CHINA BRIDGE	R01BFDL0580	134.0	21.7	1	100	94.12 %	-69	02
97	R.CAN LAYBY LITTLE CHESTERFORD	R02BF27H22	141.7	23.0	1	104	94.97 %	-75	1B
98	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R05BFGLEN200L	161.1	26.1	1	118	95.04 %	-65	1B
99	R.NENE ELTON LOCK	R05BFNENE500E	156.3	25.3	1	114	95.26 %	-63	02
100	R.WELLAND TINMELL MILL	R05BFMELL275T	145.6	23.6	1	106	95.33 %	-77	1B
101	R.STOUR STONE COLLEGE FLOODGATES	R01BFS11002	143.9	23.3	1	103	96.01 %	-78	03
102	ELSTON BK.TROB.OLISE OCTAGON FARM	R02BF12H24	130.6	21.2	1	93	96.20 %	-71	1B

103	R.BRANT BLACKMOOR BRIDGE	R03BFBRAN1508	106.9	10.0	3	89	96.34 %	-33	O2
104	R.BLACKWATER GREYS MILL	R01BFBL0360	147.3	23.9	1	104	96.51 %	-82	1B
105	R.OUSE BRAMPTON MILL	R02BF22M04	173.5	28.1	1	121	96.90 %	-98	1B
106	R.COULNE LEXDEN BRIDGE	R01BFCL0185	147.7	23.9	1	103	96.91 %	-63	O2
107	R.TER BUMFORDS BRIDGE	R01BFTE01	143.4	23.3	1	100	96.91 %	-61	1B
108	BARLINGS EAU LANGMORTH	R03BFBARL110L	109.1	10.2	3	90	96.92 %	-35	1B
109	R.NENE WARMINGTON	R05BFNENE495W	174.4	28.3	1	121	97.05 %	-99	O2
110	R.ISE RUSHTON RD.BR.	R05BFRISE130R	135.7	22.0	1	94	97.10 %	-77	1B
111	R.WELLAND ROCKINGHAM A6003 RD.BR.	R05BFWELL150R	148.2	24.0	1	102	97.27 %	-85	1B
112	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R04BFLTH020	133.6	21.7	1	91	97.53 %	-77	O2
113	R.OUSE A5 RD.BR.OLD STRATFORD	R02BF03M04	153.3	24.9	1	104	97.64 %	-89	1B
114	R.STOUR HORSESHOE WEIR NAYLAND	R01BFST0402	152.0	24.6	1	103	97.67 %	-89	O2
115	R.IVEL TEMPSFORD DEPOT FT.BR.	R02BF19M07	154.2	25.0	1	104	97.77 %	-90	1B
116	R.YARE BLOKSTONE BRIDGE	R04BFYAR060	141.3	22.9	1	95	97.84 %	-63	1B
117	R.OUSE A422 RD.BR.BRACKLEY	R02BF01M04	125.0	14.3	2	96	97.84 %	-52	1B
118	R.GLEN (NEST) BANTHORPE LODGE	R05BFGLN2608	158.9	25.8	1	106	98.00 %	-94	1A
119	R.BAIN HEMKINGBY	R03BFBAIN190H	122.0	11.4	3	98	98.21 %	-42	1B
120	R.BLACKWATER WICKHAM MILL BRIDGE	R01BFBL0160	156.8	25.4	1	103	98.28 %	-95	O2
121	R.IVEL ASTWICK BRIDGE	R02BF14M02	140.4	22.8	1	92	98.33 %	-65	1B
122	R.BRETT 81115 BRIDGE SEMER	R01BFBT0164	149.5	24.2	1	96	98.63 %	-82	1B
123	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	147.3	23.9	1	94	98.72 %	-92	O2
124	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	R02BF02M13	163.6	26.5	1	103	98.89 %	-103	1B
125	R.CHATER STATION RD.BR.KETTON	R05BFCHAT140S	179.5	29.1	1	112	98.98 %	-114	1B
126	R.CHELMER RICKETTS LOCK	R01BFCH0129	169.2	27.4	1	105	99.04 %	-108	1B
127	R.PANT WETHERSFIELD MILL 81053 RD.BR.	R01BFBL0949	158.5	25.7	1	98	99.25 %	-104	1B
128	R.WISSEY A10 RD.BR.HILGAY	R02BF50M02	170.1	27.6	1	103	99.25 %	-111	1B
129	R.KYM MEAGRE FARM GAUGE	R02BF21M04	156.3	25.3	1	94	99.30 %	-103	1B
130	R.NENE DUSTON MILL	R05BFNENE0800	165.8	26.9	1	98	99.42 %	-111	1B
131	R.BOX THORINGTON STREET 81068 RD.BR.	R01BFBX01	164.9	26.7	1	96	99.50 %	-112	O2
132	R.TOVE RD.BR.CASTLETHORPE	R02BF04M07	179.5	29.1	1	104	99.53 %	-122	1B
133	R.WELLAND UFFINGTON BARNACK RD.BR.	R05BFWELL330U	191.1	31.0	1	108	99.63 %	-133	1B
134	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFH00030	159.8	25.9	1	90	99.66 %	-111	O2
135	R.OUSE A422 RD.BR.NEMFORT PAGNELL	R02BF05M03	186.4	30.2	1	104	99.68 %	-131	1B
136	R.RHEE HASLINGFIELD RD.BR.	R02BF30M07	189.8	30.8	1	102	99.78 %	-137	1B
137	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	R02BF32M02	166.2	26.9	1	89	99.79 %	-121	1B
138	R.STOUR PITHERE RAILWAY BRIDGE	R01BFST0604	195.4	31.7	1	104	99.80 %	-143	O2
139	R.GNASH FT.BR.U/S BELMESTHORPE	R05BFGNASH300B	196.3	31.6	1	103	99.83 %	-145	1A
140	STRINGSIDE STR.WHITE BR.OXBOROUGH	R02BF49M03	187.7	30.4	1	96	99.87 %	-141	1A
141	UPPER WITHAM LITTLE FONTON	R03BFWITH170L	163.6	18.8	2	105	99.91 %	-88	1B
142	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHMOL	R02BF48M09	225.5	36.5	1	108	99.95 %	-179	1A

Appendix 3: 1989 Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

As Appendix 2, but using the errors in the estimation of the RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMAP Score	Confidence of Compliance	Deficit	NMC Class
1	OLD RIVER ANCHOLME WRAMBY	R03BFAN0050W	7.3	.8	2	92	.92 %	71	2
2	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	15.5	1.8	2	95	1.10 %	65	2
3	WILLOW BK.SOUTH PRIORS HALL	R05BFWILSD60P	25.8	3.0	2	99	1.41 %	58	3
4	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R01BFRH0202	26.2	3.0	2	97	1.44 %	56	2
5	PDX BK.CHURCH END ARLESEY	R02BF14M07	30.1	2.8	3	97	1.57 %	52	3
6	ASHELDHAM BK.BROOK FARM COTTAGES	R01BFD0310	27.1	3.1	2	90	1.57 %	49	-
7	OLD RIVER SLEA EVEDON	R03BFOLDSD040E	29.2	3.3	2	93	1.63 %	49	3
8	WATTON BK.LT.CRESSINGHAM RD.BR.PILGRIMS	R02BF48M15	36.1	4.1	2	95	2.02 %	43	2
9	R.CROUCH MEMORIAL PARK WICKFORD	R01BFCR01	39.1	4.5	2	101	2.06 %	46	3
10	SKITTER BECK BROCKELSBY STATION	R03BFSKIT050B	35.2	4.0	2	83	2.34 %	34	1b
11	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	48.1	4.5	3	103	2.58 %	38	2
12	R.RASE WEST RASEN	R03BFRASE170W	44.7	5.1	2	98	2.65 %	36	1b
13	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R05BFBRAM160W	49.8	8.1	1	117	2.78 %	45	1b
14	R.WANG HILL FM.BR.	R04BFWNGD40	45.1	4.2	3	92	2.78 %	32	3
15	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF35M16	48.5	4.5	3	93	3.14 %	29	3
16	R.SNAIL RIVER LANE FORDHAM	R02BF36M19	46.4	5.3	2	92	3.19 %	29	3
17	R.HIZ CADWELL ARCH	R02BF13M04	51.5	4.8	3	98	3.19 %	30	2
18	R.WID WRITTLE BRIDGE	R01BFW00040	55.4	5.2	3	102	3.43 %	29	2
19	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R03BFWOLD090U	46.8	5.4	2	89	3.50 %	26	2
20	EASTON BROAD RIVER FOTTERS RD.BR.B1127	R04BFEST060	53.7	5.0	3	89	4.36 %	20	2
21	R.ISE BRITISH LEYLANDS B671 RD.BR.	R05BFRISE310B	57.5	6.6	2	99	4.37 %	23	2
22	LACEBY BECK LACEBY 87	R03BFPLACE040L	55.0	6.3	2	94	4.39 %	22	1b
23	LOUTH CANAL ALVINGHAM	R03BFL0UT040A	56.7	6.5	2	96	4.63 %	21	3
24	ROMAN RIVER BOUNSTEAD BRIDGE	R01BFR0108	62.3	5.8	3	98	5.05 %	19	1b
25	NEW RIVER ANCHOLME BRIGG	R03BFANON150B	63.1	7.2	2	95	6.64 %	13	2
26	R.BLYTH BLYFORD BRIDGE	R04BFBLY040	68.7	6.4	3	98	7.08 %	12	2
27	OLD RIVER ANCHOLME WRAMBY	R03BFAN0050W	63.1	7.2	2	92	7.29 %	11	2
28	R.CAM LAYBY LITTLE CHESTERFORD	R02BF27M22	74.7	7.0	3	104	7.94 %	10	1b
29	R.SLEA BONEMILL BRIDGE	R03BFSLEA090B	68.3	7.8	2	96	8.26 %	9	1b
30	R.WELLAND D/S MKT.HARBOROUGH STW	R05BFWELLO90M	70.0	8.0	2	99	8.32 %	9	2
31	R.IVEL ASTWICK BRIDGE	R02BF14M02	67.0	6.3	3	91	8.42 %	8	1b
32	HOBHOLE HALTOFT END	R03BFH08H130H	64.0	7.3	2	89	8.81 %	7	2
33	R.TOVE CAPPENHAM BRIDGE	R02BF04M04	72.2	6.8	3	97	8.88 %	7	1b
34	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	72.2	6.8	3	96	9.44 %	6	1b
35	R.CAM DIMHOOKS COTE RD.BR.	R02BF34M02	76.9	8.8	2	103	10.11 %	5	2
36	R.NENE DENFORD	R05BFNENE360D	88.5	10.1	2	116	11.43 %	3	3
37	R.HARDYKE CAUSEWAY BRIDGE	R01BFD0135	70.9	6.6	3	89	12.05 %	2	3
38	R.CAM BOTTISHAM LOCK	R02BF33M09	82.5	9.5	2	105	12.60 %	1	2
39	KYME EAU SOUTH KYME	R03BFKYMED80S	72.2	8.3	2	92	13.01 %	0	2
40	LONG EAU THREE BRIDGES	R03BFEA090T	72.2	8.3	2	92	13.04 %	0	1b

Appendix 3 (cont):

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

As Appendix 2, but using the errors in the estimation of the RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	MNC Class
41	SOHAM LODGE BARWAY RD.BR.	R02BF36M10	73.4	8.4	2	92	14.27 %	0	3
42	WILLOW BK.BLATHERWYCKE LAKE OUTLET	R05BFWILL080B	77.7	12.6	1	101	14.61 %	-1	2
43	MELBOURN BK.FD.CULVERT MELDRETH	R02BF30M21	77.7	7.3	3	94	15.32 %	-1	1b
44	R.WELLAND CROWLAND BR.	R05BFMELL420C	75.2	8.6	2	91	16.33 %	-2	2
45	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	R02BF32M02	73.9	8.5	2	89	17.38 %	-3	1b
46	OLD WEST R. HERMITAGE LOCK EARITH	R02BF35M01	75.2	8.6	2	88	19.50 %	-5	1b
47	R.TOVE ABTHORPE RD.BR.	R02BF04M02	81.6	7.6	3	94	19.71 %	-5	1b
48	UPPER WITHAM LONG BENINGTON B7	R03BFWITH330H	88.0	10.1	2	103	19.74 %	-6	2
49	R.PANT WETHERSFIELD MILL B1053 RD.BR.	R01BFBL0949	82.5	7.7	3	95	19.97 %	-5	1b
50	UPPER WITHAM LONG BENINGTON B7	R03BFWITH370L	88.5	10.1	2	103	20.29 %	-7	2
51	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	84.6	7.9	3	97	20.91 %	-6	2
52	R.SLEA ANWICK	R03BFSLEA140A	76.9	12.5	1	92	21.40 %	-8	2
53	WHADDON BK.RD.BR.WHADDON	R02BF30M19	81.2	7.6	3	90	25.93 %	-8	3
54	R.LARK FORNHAM ALL SAINTS RD.BR.	R02BF37M08	83.7	9.6	2	94	25.97 %	-10	2
55	R.WID LAMNESS BRIDGE	R01BFW005	89.8	8.4	3	99	26.07 %	-9	3
56	R.WAVENEY BILLINGFORD BRIDGE	R04BFWAV040	86.8	9.9	2	96	26.97 %	-11	1b
57	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFH00030	81.2	7.6	3	89	27.35 %	-9	2
58	WILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFWILL100W	85.9	13.9	1	97	28.43 %	-15	2
59	R.NENE NORTH BANK	R05BFNENE530N	106.5	12.2	2	117	28.65 %	-15	2
60	ELSTON BK.TRIB.OUSE OCTAGON FARM	R02BF12M24	84.2	9.6	2	93	28.87 %	-11	1b
61	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFST0120	88.5	8.3	3	96	30.26 %	-11	2
62	R.NENE DUSTON MILL	R05BFNENE800D	89.8	10.3	2	98	30.85 %	-13	1b
63	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	117.7	13.5	2	127	32.98 %	-19	2
64	R.WISSEY A10 RD.BR.HILGAY	R02BF50M02	96.2	11.0	2	103	34.00 %	-16	1b
65	THORPENESS HUNDRED R. THORPENESS RAIL BR	R04BFTHP010	85.9	8.0	3	90	36.37 %	-13	2
66	GREAT EAU WITHERN	R03BFGEAU100W	91.0	10.4	2	96	36.97 %	-16	1b
67	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	89.8	8.4	3	94	37.05 %	-14	2
68	R.KYM MEAGRE FARM GAUGE	R02BF21M04	89.3	8.4	3	94	37.05 %	-14	1b
69	LOUTH CANAL AUSTEN FEN	R03BFLOUT060A	89.8	10.3	2	93	41.06 %	-18	2
70	R.RHEE WENDY RD.BR.	R02BF30M24	88.9	8.3	3	92	41.10 %	-15	1b
71	R.STOUR COTTON HALL KEDDINGTON	R01BFST1403	91.0	10.4	2	94	41.49 %	-18	2
72	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANON090B	96.6	11.1	2	99	43.41 %	-20	1b
73	BRAMPTON BRANCH R.NENE BRIDWORTH-CREATON	R05BFBRAM070B	103.1	16.7	1	106	44.50 %	-28	1b
74	R.BAIN DALDERBY	R03BFBAIN280D	88.5	10.1	2	90	45.41 %	-19	1b
75	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	R01BFBR0150	96.2	9.0	3	97	46.82 %	-19	2
76	R.BRANT BLACKMOOR BRIDGE	R03BFBRAN150B	89.8	10.3	2	88	52.76 %	-22	2
77	R.HIZ A507 RD.BR.ARLSEY	R02BF13M06	99.6	9.3	3	98	53.25 %	-22	1b
78	R.CHELMER N END ROAD BRIDGE	R01BFCH0780	102.2	9.6	3	100	53.27 %	-22	1b
79	R.GLEN SURFLEET	R05BFGLEN590S	91.0	10.4	2	89	55.26 %	-23	2
80	R.IVEL TEMPSFORD DEPOT FT.BR.	R02BF19M07	107.4	12.3	2	103	57.35 %	-28	1b

Appendix 3 (cont):

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

As Appendix 2, but using the errors in the estimation of the RIVPACS Targets

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	NMC Class
121	R. BRETT B1115 BRIDGE SEMER	RD1BFBT0164	137.4	15.8	2	96	91.11 %	-70	1b
122	R. BLACKWATER WICKHAM HILL BRIDGE	RD1BFBL0160	141.3	13.2	3	103	91.45 %	-64	2
123	R. NENE COGENHOE	RD5BFNENE180C	164.9	18.9	2	113	91.58 %	-86	3
124	R. STOUR HORSESHOE WEIR NAYLAND	RD1BFST0402	149.9	17.2	2	102	91.72 %	-78	2
125	R. BLACKWATER GREYS MILL	RD1BFBL0350	144.3	13.5	3	103	91.98 %	-67	1b
126	BUCKLESHAM MILL R. A1093 BRIGHTWELL RD. BR.	RD4BFMIL020	135.3	12.7	3	96	92.26 %	-63	1a
127	R. TER BUMFORDS BRIDGE	RD1BFTE01	143.9	13.5	3	99	92.96 %	-70	1b
128	R. OUSE A422 RD. BR. BRACKLEY	RD2BF01M04	138.3	12.9	3	96	92.97 %	-67	1b
129	WILLOW BK. FOTHERINGHAY RD. BR.	RD5BFWILL170F	186.8	30.3	1	100	93.03 %	-137	2
130	R. YARE BICKERSTONE BRIDGE	RD4BFYARD60	137.0	12.8	3	94	93.10 %	-67	1b
131	R. COLNE LEDEN BRIDGE	RD1BFCL0185	155.9	14.6	3	103	94.03 %	-80	2
132	R. LYNN/STEEPING PARTNEY	RD3BFLYMN120P	164.5	18.9	2	100	94.06 %	-97	1b
133	R. WARING LOW TOYNTON BRIDGE	RD3BFWARI090L	138.7	15.9	2	85	94.06 %	-82	1a
134	R. WELAND TINWELL MILL	RD5BFWELL275T	159.8	15.0	3	105	94.10 %	-83	1b
135	R. STOUR PITMERE RAILWAY BRIDGE	RD1BFST0804	172.2	19.7	2	103	94.33 %	-104	2
136	R. BOX THORINGTON STREET BLOSS RD. BR.	RD1BFBX01	148.6	13.9	3	95	94.54 %	-79	2
137	R. BAIN HEMINGBY	RD3BFBAIN190H	168.4	19.3	2	98	94.74 %	-104	1b
138	R. GLEN (WEST) BANTHORPE LODGE	RD5BFGLEN280B	182.5	20.9	2	106	94.80 %	-113	1a
139	R. OUSE RADCLIVE BRIDGE	RD2BF01M06	161.5	15.1	3	99	95.23 %	-90	1b
140	CRINGLE BROOK THUNDER BRIDGE	RD3BFCRIN100T	224.2	25.7	2	120	95.59 %	-149	1b

Performance of Rivers against Biological Targets

1988

Ranking of Sites in order of Degree of Significant Shortfall

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	Deficit	M/C Class
1	OLD RIVER ANCHOLME WRAMBY	R03BFAN0050W	13.3	1.5	2	92	1.06 %	65	02
2	OLD RIVER ANCHOLME WRAMBY	R03BFAN0050W	13.3	1.5	2	92	1.06 %	65	02
3	R.LUD LOUTH TROUT FARM 87	R03BFRLLD030L	22.3	2.6	2	105	1.24 %	67	1B
4	WILLOW BK.SOUTH PRIORS HALL	R05BFWILS060P	24.1	3.9	1	99	1.43 %	59	03
5	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R01BFRH0202	31.8	3.6	2	97	1.71 %	50	02
6	PIX BK.CHURCH END ARLESEY	R02BF14M07	32.6	5.3	1	97	1.97 %	47	03
7	OLD RIVER SLEA EVEDON	R03BFOLDS040E	38.7	4.4	2	93	2.26 %	39	03
8	R.CROUCH MEMORIAL PARK WICKFORD	R01BF0R01	39.1	6.3	1	101	2.35 %	44	03
9	WATTON BK.LT.CRESSINGHAM RD.BR.PILGRIMS	R02BF48M15	42.5	6.9	1	95	3.02 %	34	02
10	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	51.5	8.4	1	103	3.80 %	31	02
11	SKITTER BECK BROCKELSBY STATION	R03BFSKIT050B	46.8	5.4	2	83	4.05 %	21	1B
12	ASHELDHAM BK.BROOK FARM COTTAGES	R01BFD0310	48.5	7.9	1	90	4.43 %	23	UC
13	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	51.1	8.3	1	95	4.47 %	24	02
14	R.WANG HILL FM.BR.	R04BFWNG040	56.3	6.4	2	92	5.03 %	19	03
15	R.HIZ CADWELL ARCH	R02BF13M04	57.1	9.3	1	98	5.50 %	20	02
16	R.WID WRITTLE BRIDGE	R01BFWD0040	61.0	9.9	1	102	5.94 %	19	02
17	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R05BFBRAM160W	71.7	11.6	1	117	6.45 %	19	1B
18	R.LARK FORNHAM ALL SAINTS RD.BR.	R02BF37M08	59.7	9.7	1	94	7.18 %	13	02
19	R.ISE BRITISH LEYLANDS B571 RD.BR.	R05BFRISE310B	63.1	10.2	1	99	7.18 %	14	02
20	EASTON BROAD RIVER FOTTERS RD.BR.B1127	R04BFEST060	58.4	9.5	1	89	7.83 %	11	02
21	R.WID LAWNESS BRIDGE	R01BFWD05	65.7	10.7	1	99	8.16 %	11	03
22	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	93.6	8.8	3	127	8.81 %	9	02
23	R.LARK JUDES FERRY	R02BF37M14	69.6	11.3	1	101	9.52 %	8	1B
24	MOLDGRIFT DRAIN U/S MABLETHORPE STW	R03BFWOLD090U	66.6	7.6	2	89	10.50 %	4	02
25	NEW RIVER ANCHOLME BRIGG	R03BFANON150B	73.0	8.4	2	95	11.89 %	2	02
26	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	78.6	7.4	3	96	14.71 %	-1	03
27	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	75.6	12.3	1	96	16.32 %	-3	1B
28	UPPER WITHAM LONG BENINGTON 87	R03BFWITH370L	86.8	9.9	2	103	18.19 %	-5	02
29	R.RASE WEST RASEN	R03BFRASE170W	82.0	9.4	2	98	18.30 %	-4	1B
30	R.BAIN DALDERBY	R03BFBAIN280D	78.2	7.3	3	90	20.53 %	-5	1B
31	R.CAM DIMMOCKS COTE RD.BR.	R02BF34M02	85.9	13.9	1	103	21.09 %	-9	02
32	R.SNAIL RIVER LANE FORDHAM	R02BF36M19	76.4	12.4	1	92	21.27 %	-8	03
33	R.WELLAND D/S MKT.HARBOROUGH STW	R05BFWELL090M	83.3	13.5	1	99	22.77 %	-10	02
34	ROMAN RIVER BOUNSTEAD BRIDGE	R01BFR0108	85.9	13.9	1	98	26.66 %	-13	1B
35	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	94.1	8.8	3	103	27.23 %	-11	02
36	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFWHIL100W	85.9	13.9	1	97	28.43 %	-15	02
37	HOGHOLE HALTOFT END	R03BFHOBH130H	79.5	12.9	1	89	30.03 %	-14	02
38	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	88.9	10.2	2	97	30.42 %	-13	02
39	R.TIFFEY CARLTON FOREHOE BRIDGE	R04BFTIF100	82.9	13.4	1	92	30.43 %	-15	02
40	WILLOW BK.BLATHERWYCKE LAKE OUTLET	R05BFWILLO80B	91.0	14.8	1	101	30.85 %	-17	02
41	HARPER'S BK.COWTHICK GAUGING SITE	R05BFRHARPI25C	81.6	13.2	1	89	32.78 %	-16	02
42	R.STOUR COTTON HALL KEDINGTON	R01BFPST1403	86.3	14.0	1	94	33.98 %	-18	02

43	LONG EAU THREE BRIDGES	R038FLEAU090T	87.6	8.2	3	92	37.40 %	-14	1B
44	R.NENE COGENHOE	R058FNENE180C	106.5	17.3	1	113	37.98 %	-25	03
45	R.WARING LOW TOYNTON BRIDGE	R038FWARI090L	81.6	7.6	3	85	39.38 %	-14	1A
46	R.ISE D/S WICKSTEED PARK	R058FRISE225W	91.0	14.8	1	96	39.98 %	-22	1B
47	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R028F35M16	89.3	14.5	1	93	41.68 %	-23	03
48	GREAT EAU WITHERN	R038FGEAU100W	93.6	8.8	3	96	42.34 %	-17	1B
49	BRAMPTON BRANCH R.NENE BRIDGNORTH-CREATON	R058FBRAM070B	102.2	16.6	1	106	42.97 %	-27	1B
50	SOHAM LODGE BARWAY RD.BR.	R028F36M10	88.9	14.4	1	92	43.58 %	-23	03
51	R.SLEA ANWICK	R038FSLEA140A	90.6	8.5	3	92	44.51 %	-17	02
52	THORPENESS HUNDRED R. THORPENESS RAIL BR	R048FTHF010	88.5	14.3	1	90	45.42 %	-24	02
53	R.NENE NORTH BANK	R058FNENE630N	115.1	18.7	1	117	45.63 %	-32	02
54	R.WELLAND WELHAM RD.BR.	R058FWELL100W	100.1	16.2	1	101	47.98 %	-29	02
55	R.RHEE WENDY RD.BR.	R028F30M24	92.8	15.0	1	92	51.48 %	-28	1B
56	R.HIZ A507 RD.BR.ARLSEY	R028F13M06	99.2	16.1	1	98	51.49 %	-30	1B
57	R.OUSE BROMSHILL STALNCH	R028F26M06	127.1	20.6	1	125	51.73 %	-39	1B
58	LACEBY BECK LACEBY 87	R038FLACED40L	95.8	9.0	3	94	52.13 %	-20	1B
59	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON090B	101.8	11.7	2	99	55.50 %	-26	1B
60	R.GLEN TONGUE END D/S FS	R058FGLEN525T	94.9	15.4	1	91	56.75 %	-31	1A
61	HARPERS BK.A8116 RD.BR.	R058FHARP200A	98.3	15.9	1	93	58.45 %	-33	1B
62	CRINGLE BROOK THUNDER BRIDGE	R038FORIN100T	125.4	14.4	2	120	58.79 %	-34	1B
63	R.MARDYKE CAUSEWAY BRIDGE	R018FMD0135	94.5	15.3	1	89	58.84 %	-32	03
64	R.SLEA BONEHILL BRIDGE	R038FSLEA090B	100.5	9.4	3	96	59.71 %	-24	1B
65	MELBOURN BK.RD.CULVERT MELDRETH	R028F30M21	99.6	16.2	1	94	59.82 %	-35	1B
66	R.NENE ORTON STALNCH	R058FNENE605O	119.4	19.4	1	112	61.01 %	-42	02
67	MINSHERE RIVER EAST BRIDGE	R048FMIND020	97.5	15.8	1	91	61.40 %	-35	1B
68	R.GLEN THURBY FEN	R058FGLEN510T	103.9	16.8	1	96	62.61 %	-38	1A
69	R.NENE DENFORD	R058FNENE360D	126.3	20.5	1	116	64.45 %	-47	03
70	R.WELLAND D/S DEEPIING STW	R058FWELL390D	103.5	16.8	1	95	64.51 %	-39	1B
71	UPPER WITHAM AUBOURN	R038FWITH510A	110.4	10.3	3	103	64.90 %	-29	1B
72	R.CHELMER FT.BR.D/S SANDFORD MILL	R018FCH0390	113.8	18.4	1	103	66.07 %	-43	1B
73	R.TOVE ABTHORPE RD.BR.	R028F04M02	104.4	16.9	1	94	66.23 %	-40	1B
74	R.NENE WOLLASTON MILL	R058FNENE230W	121.1	19.6	1	108	67.70 %	-47	02
75	OLD WEST R. HERMITAGE LOCK EARITH	R028F35M01	99.6	16.2	1	88	68.85 %	-40	1B
76	R.STOUR FLATFORD MILL FOUTERIDGE	R018FST0120	107.8	17.5	1	96	68.87 %	-43	02
77	R.STOUR LISTON WEIR	R018FST08	119.0	19.3	1	103	71.80 %	-50	1B
78	KYME EAU SOUTH KYME	R038FKYMED80S	102.6	11.8	2	92	72.11 %	-33	02
79	R.TAS FORNCETT BRIDGE	R048FTAS040	109.9	17.8	1	94	73.02 %	-47	1B
80	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON090B	105.2	12.1	2	93	73.29 %	-35	1B
81	R.GLEN SURFLEET	R058FGLEN590S	100.5	11.5	2	89	74.12 %	-34	02
82	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	R048FMIL020	112.9	18.3	1	96	74.15 %	-49	1A
83	R.CAN WARREN BRIDGE	R018FCA03	117.7	19.1	1	99	75.01 %	-52	02
84	R.KENNETT BECK BR.	R028F39M07	112.9	18.3	1	95	75.50 %	-50	1A
85	R.WELLAND CROWLAND BR.	R058FWELL420C	109.9	17.8	1	91	76.40 %	-50	02
86	R.CAN BOTTISHAM LOCK	R028F33M09	128.8	20.9	1	105	77.75 %	-60	02
87	WHADDON BK.RD.BR.WHADDON	R028F30M19	111.7	18.1	1	90	79.20 %	-53	03
88	R.BRAIN FT.BR.U/S FAULKBORNE HALL	R018FBRO150	121.1	19.6	1	97	79.66 %	-58	02
89	R.NENE BARNMELL PIONIC PARK	R058FNENE440B	158.9	25.8	1	127	79.76 %	-77	02
90	R.LYNN/STEEPING PARTNEY	R038FLYNN120P	119.8	13.7	2	100	80.34 %	-45	1B
91	R.COULNE CHAPPEL ROAD	R018FCL0357	129.7	21.0	1	102	81.14 %	-64	02
92	R.COULNE DOES CORNER	R018FCL07	126.7	20.5	1	99	81.23 %	-63	02
93	WILLOW BK.FOTHERINGHAY RD.BR.	R058FWILL170F	131.0	21.2	1	100	82.60 %	-67	02
94	R.TOVE CAPPENHAM BRIDGE	R028F04M04	129.7	21.0	1	97	83.90 %	-69	1B

95	R.BRANT BLACKMOOR BRIDGE	R03BFBRAN150B	106.9	10.0	3	88	84.09 %	-39	O2
96	R.CHELMER N END ROAD BRIDGE	R01BFCH0780	135.3	21.9	1	100	84.47 %	-73	1B
97	R.BLACKWATER CHINA BRIDGE	R01BFBL0560	134.0	21.7	1	99	84.57 %	-72	O2
98	BARLINGS EAU LANGWORTH	R03BFBARL110L	109.1	10.2	3	89	84.92 %	-40	1B
99	R.CAM LAYBY LITTLE CHESTERFORD	R02BF27M22	141.7	23.0	1	104	85.27 %	-78	1B
100	R.GLEN (WEST) LITTLE SYTHAM BRIDGE	R05BFGLEN200L	161.1	26.1	1	118	85.28 %	-88	1B
101	R.NENE ELTON LOCK	R05BFNENE500E	156.3	25.3	1	114	85.43 %	-86	O2
102	R.WELLAND TINWELL MILL	R05BFWELL275T	145.6	23.6	1	105	85.88 %	-81	1B
103	R.STOUR STOKE COLLEGE FLOODGATES	R01BFST1002	143.9	23.3	1	103	86.34 %	-81	O3
104	R.BAIN HEMINGBY	R03BFBAIN190H	122.0	11.4	3	98	86.42 %	-47	1B
105	ELSTOW BK.TRIB.OUSE OCTAGON FARM	R02BF12M24	130.6	21.2	1	93	86.61 %	-74	1B
106	R.BLACKWATER GREYS BRILL	R01BFBL0350	147.3	23.9	1	103	87.08 %	-85	1B
107	R.OUSE A422 RD.BR.BRACKLEY	R02BF01M04	125.0	14.3	2	96	87.29 %	-56	1B
108	R.OUSE BRAMPTON MILL	R02BF22M04	173.5	28.1	1	121	87.29 %	-101	1B
109	R.COLINE LEXDEN BRIDGE	R01BFCL0185	147.7	23.9	1	103	87.33 %	-86	O2
110	R.TER BUMFORDS BRIDGE	R01BFTE01	143.4	23.3	1	99	87.47 %	-84	1B
111	R.NENE WARMINGTON	R05BFNENE495W	174.4	28.3	1	121	87.56 %	-102	O2
112	R.ISE RUSHTON RD.BR.	R05BFRISE130R	135.7	22.0	1	93	87.73 %	-80	1B
113	R.WELLAND ROCKINGHAM A6003 RD.BR.	R05BFWELL150R	148.2	24.0	1	102	87.77 %	-87	1B
114	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R04BFLTH020	133.6	21.7	1	91	88.09 %	-79	O2
115	R.OUSE A5 RD.BR.OLD STRATFORD	R02BF03M04	153.3	24.9	1	104	88.27 %	-92	1B
116	R.STOUR HORSESHOE WEIR NAYLAND	R01BFST0402	152.0	24.6	1	102	88.48 %	-92	O2
117	R.IVEL TEMPSFORD DEPOT FT.BR.	R02BF19M07	154.2	25.0	1	103	88.58 %	-93	1B
118	R.YARE BICKERSTONE BRIDGE	R04BFYAR060	141.3	22.9	1	94	88.78 %	-86	1B
119	R.GLEN (WEST) BANTHORPE LODGE	R05BFGLEN280B	158.9	25.8	1	106	88.91 %	-97	1A
120	R.BLACKWATER WICKHAM MILL BRIDGE	R01BFBL0160	156.8	25.4	1	103	89.31 %	-97	O2
121	R.IVEL ASTWICK BRIDGE	R02BF14M02	140.4	22.8	1	91	89.45 %	-87	1B
122	R.BRETT B1115 BRIDGE SEMER	R01BFBT0164	149.5	24.2	1	96	89.87 %	-95	1B
123	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	147.3	23.9	1	94	89.99 %	-94	O2
124	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	R02BF02M13	163.6	26.5	1	103	90.37 %	-106	1B
125	R.CHATER STATION RD.BR.KETTON	R05BFCHAT140S	179.5	29.1	1	111	90.71 %	-118	1B
126	R.CHELMER RICKETTS LOCK	R01BFCH0129	169.2	27.4	1	104	90.83 %	-111	1B
127	R.WISSEY A10 RD.BR.HILGAY	R02BF50M02	170.1	27.6	1	103	91.18 %	-114	1B
128	R.PANT WETHERSFIELD MILL B1053 RD.BR.	R01BFBL0949	158.5	25.7	1	95	91.33 %	-107	1B
129	R.KYM MEAGRE FARM GAUGE	R02BF21M04	156.3	25.3	1	94	91.39 %	-105	1B
130	R.NENE DUSTON MILL	R05BFNENE0800	165.8	26.9	1	98	91.69 %	-113	1B
131	R.BOX THORINGTON STREET B1068 RD.BR.	R01BFBX01	164.9	26.7	1	95	92.00 %	-114	O2
132	R.TOVE RD.BR.CASTLETHORPE	R02BF04M07	179.5	29.1	1	103	92.12 %	-125	1B
133	R.WELLAND UFFINGTON BARNACK RD.BR.	R05BFWELL330U	191.1	31.0	1	107	92.49 %	-136	1B
134	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFHD0030	159.8	25.9	1	89	92.55 %	-114	O2
135	R.OUSE A422 RD.BR.NEWPORT PAGNELL	R02BF05M03	186.4	30.2	1	104	92.59 %	-133	1B
136	R.RHEE HASLINGFIELD RD.BR.	R02BF30M07	189.8	30.8	1	102	93.05 %	-139	1B
137	BOURN BK.TRIB.CAM CANTELLEPE FM.BR.	R02BF32M02	166.2	26.9	1	89	93.13 %	-122	1B
138	R.STOUR PITMERE RAILWAY BRIDGE	R01BFST0604	195.4	31.7	1	103	93.26 %	-145	O2
139	UPPER WITHAM LITTLE PONTON	R03BFWITH170L	163.6	18.8	2	104	93.34 %	-93	1B
140	R.GWASH FT.BR.U/S BELMESTHORPE	R05BFGWSH300B	196.3	31.8	1	103	93.37 %	-147	1A
141	STRINGSIDE STR.WHITE BR.OXBOUROUGH	R02BF49M03	187.7	30.4	1	95	93.68 %	-143	1A
142	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHMOL	R02BF48M09	225.5	36.5	1	105	94.46 %	-181	1A

Performance of Rivers against Biological Targets

1990

Ranking of Sites in order of Degree of Significant Shortfall

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BHP Score	Confidence of Compliance	Deficit	MNC Class
1	PDX BK.CHURCH END ARLESEY	R02BF14M07	14.6	2.4	1	97	1.10 %	67	03
2	R.CROUCH MEMORIAL PARK WICKFORD	R01BF0R01	19.3	3.1	1	101	1.22 %	66	03
3	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	20.6	3.3	1	103	1.26 %	66	02
4	SKITTER BECK BROCKELSBY STATION	R03BFSK170508	19.3	3.1	1	83	1.39 %	51	1B
5	ASHELDHAM BK.BROOK FARM COTTAGES	R01BF0T0310	21.5	3.5	1	90	1.41 %	55	UC
6	WILLOW BK.SOUTH PRIORS HALL	R05BFWILS060P	33.9	5.5	1	99	2.01 %	48	03
7	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R01BFRH0202	34.4	5.6	1	97	2.09 %	46	02
8	R.SNAIL RIVER LANE FORDHAM	R02BF36M19	38.2	4.4	2	92	2.29 %	38	03
9	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R02BF17M02	39.9	6.5	1	95	2.70 %	38	02
10	R.BLYTH BLYFORD BRIDGE	R04BFBLV040	42.5	6.9	1	98	2.84 %	37	02
11	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF35M16	49.0	5.6	2	93	3.47 %	28	03
12	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFST0120	47.7	7.7	1	96	3.74 %	29	02
13	OLD RIVER SLEA EVEDON	R03BFOLD5040E	46.8	7.6	1	93	3.78 %	28	03
14	R.HIZ CADWELL ARCH	R02BF13M04	52.0	8.4	1	98	4.31 %	26	02
15	R.WID LAWNESS BRIDGE	R01BFND005	54.5	8.8	1	99	4.70 %	24	03
16	R.CAM BOTTISHAM LOCK	R02BF33M09	63.6	7.3	2	105	4.83 %	22	02
17	R.WID WRITTLE BRIDGE	R01BFND0040	56.7	9.2	1	102	4.86 %	24	02
18	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	53.3	8.6	1	96	4.88 %	22	03
19	R.RASE WEST RASEN	R03BFRASE170W	58.4	9.5	1	98	5.93 %	18	1B
20	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFWHIL100W	58.4	9.5	1	97	6.03 %	18	02
21	BRAMPTON BRANCH R.NENE BRIDNORTH-CREATON	R05BFRAM070B	64.0	10.4	1	108	6.15 %	19	1B
22	EASTON BROAD RIVER FOTTERS RD.BR.B1127	R04BFEST060	55.8	9.1	1	89	6.76 %	14	02
23	R.TOVE CASTENHAM BRIDGE	R02BF04M04	65.7	7.5	2	97	6.89 %	13	1B
24	R.TIFFEY CARLTON FORBIDE BRIDGE	R04BFTIF100	64.0	7.3	2	92	7.57 %	10	02
25	NEW RIVER ANCHOLME BRIGG	R03BFANON150B	61.4	10.0	1	95	7.67 %	12	02
26	R.TOVE ABTHORPE RD.BR.	R02BF04M02	66.1	7.6	2	94	7.90 %	10	1B
27	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	83.3	13.5	1	127	8.03 %	14	02
28	R.WANG HILL FM.BR.	R04BFWNG040	61.4	10.0	1	92	8.38 %	10	03
29	MELBOURN BK.RD.CULVERT MELDRETH	R02BF30M21	62.7	10.2	1	94	8.44 %	10	1B
30	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFHD0030	60.1	9.7	1	89	8.73 %	8	02
31	SOHAM LODGE BARNAY RD.BR.	R02BF36M10	66.6	7.6	2	92	9.11 %	7	03
32	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	70.9	8.1	2	96	9.74 %	6	1B
33	R.TER BUMFORDS BRIDGE	R01BFTE01	70.0	11.3	1	99	10.20 %	6	1B
34	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF36M03	73.4	8.4	2	97	10.91 %	4	02
35	WOLDGRIFF DRAIN U/S MABLETHORPE STW	R03BFWOLD090U	64.0	10.4	1	89	11.29 %	3	02
36	STRINGSIDE STR.WHITE BR.OXBOROUGH	R02BF49M03	69.1	11.2	1	95	11.46 %	3	1A
37	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	69.6	11.3	1	94	12.45 %	1	02
38	R.CAM DIMMOCKS COTE RD.BR.	R02BF34M02	83.3	9.5	2	103	14.77 %	-1	02
39	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	R02BF32M02	69.1	11.2	1	89	15.55 %	-2	1B
40	R.SLEA ANWICK	R03BFSLEA140A	73.0	11.8	1	92	16.80 %	-3	02
41	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R05BFRAM160W	93.6	15.2	1	117	17.87 %	-6	1B
42	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	83.3	13.5	1	103	18.16 %	-6	02

43	R.STIFFKEY WIGHTON BRIDGE	RD48FSTF040	79.0	12.8	1	97	19.09 %	-6	1B
44	ROMAN RIVER BOUNSTEAD BRIDGE	RD18FRF0108	81.6	13.2	1	98	20.79 %	-8	1B
45	R.WELLAND CROWLAND BR.	RD58FMELL420C	77.7	12.6	1	91	23.51 %	-10	02
46	R.ISE BRITISH LEYLANDS B671 RD.BR.	RD58FRRISE310B	84.6	13.7	1	99	23.81 %	-11	02
47	R.NENE CUSTON MILL	RD58FRNENE800	83.7	13.6	1	98	24.46 %	-12	1B
48	GREAT EAU WITHERN	RD38FGEAU100W	82.5	13.4	1	96	24.62 %	-11	1B
49	NEW RIVER ANCHOLME BRANDY WHARF	RD38FANON090B	85.9	13.9	1	99	25.92 %	-13	1B
50	R.MARDYKE CAUSEWAY BRIDGE	RD18FRD0135	78.2	12.7	1	89	26.66 %	-12	03
51	R.OUSE BRAMPTON MILL	RD28F22M04	110.4	12.7	2	121	29.53 %	-16	1B
52	UPPER WITHAM LONG BENINGTON 87	RD38FRWITH370L	92.3	15.0	1	103	29.79 %	-17	02
53	R.SLEA BONGMILL BRIDGE	RD38FSLA090B	86.3	14.0	1	96	30.27 %	-16	1B
54	LACEBY BECK LACEBY 87	RD38FLACED40L	85.9	13.9	1	94	32.30 %	-17	1B
55	R.NENE NORTH BANK	RD58FRNENE630N	107.8	17.5	1	117	34.13 %	-23	02
56	BARLINGS EAU LANGMORTH	RD38FBARL110L	82.0	13.3	1	89	34.22 %	-17	1B
57	R.KYM MEAGRE FARM GAUGE	RD28F21M04	87.6	10.0	2	94	34.26 %	-14	1B
58	R.STOUR HORSESHOE WEIR NAYLAND	RD18FST0402	94.5	15.3	1	102	34.76 %	-20	02
59	R.OUSE A422 RD.BR.BRACKLEY	RD28F01M04	89.8	10.3	2	96	34.88 %	-15	1B
60	HOBHOLE HALTOFT END	RD38FRHOBH130H	82.0	13.3	1	89	34.98 %	-18	02
61	LOUTH CANAL AUSTEN FEN	RD38FLDUT060A	86.8	14.1	1	93	36.85 %	-20	02
62	NEW RIVER ANCHOLME BRANDY WHARF	RD38FANON090B	87.2	14.1	1	93	36.93 %	-20	1B
63	WHADDON BK.RD.BR.WHADDON	RD28F30M19	84.6	13.7	1	90	38.14 %	-20	03
64	THORPENESS HUNDRED R. THORPENESS RAIL BR	RD48FRTHP010	89.3	14.5	1	90	47.21 %	-25	02
65	R.BRETT B1115 BRIDGE SEMER	RD18FBT0164	95.3	15.5	1	96	48.10 %	-27	1B
66	R.STOUR COTTON HALL KEDINGTON	RD18FST1403	94.9	15.4	1	94	50.88 %	-29	02
67	R.CHELMER RICKETTS LOCK	RD18FCH0129	106.5	17.3	1	104	53.26 %	-33	1B
68	R.CAN WARREN BRIDGE	RD18FCA03	101.8	16.5	1	99	53.95 %	-32	02
69	LONG EAU THREE BRIDGES	RD38FLEAU090T	94.9	15.4	1	92	55.51 %	-31	1B
70	R.CHELMER N END ROAD BRIDGE	RD18FCH0780	104.8	17.0	1	100	56.78 %	-35	1B
71	R.CAM LAYBY LITTLE CHESTERFORD	RD28F27M22	107.4	12.3	2	104	57.19 %	-28	1B
72	R.OUSE BROMSHILL STAUNCH	RD28F26M06	131.8	21.4	1	125	58.25 %	-45	1B
73	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORN	RD28F02M13	107.8	12.4	2	103	59.71 %	-29	1B
74	R.ISE RUSHTON RD.BR.	RD58FRRISE130R	99.2	16.1	1	93	59.78 %	-34	1B
75	R.HIZ A507 RD.BR.ARLSEY	RD28F13M06	105.6	17.1	1	98	62.43 %	-38	1B
76	MINSHERE RIVER EAR BRIDGE	RD48FRMIN020	98.3	15.9	1	91	62.82 %	-36	1B
77	R.CHELMER FT.BR.D/S SANDFORD MILL	RD18FCH0390	112.1	18.2	1	103	63.78 %	-41	1B
78	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	RD48FRMIL020	104.8	17.0	1	96	64.39 %	-39	1A
79	R.BLACKWATER CHINA BRIDGE	RD18FBL0560	109.9	17.8	1	99	66.38 %	-42	02
80	R.NENE WOLLASTON MILL	RD58FRNENE230W	120.7	19.6	1	108	67.20 %	-47	02
81	R.COULNE DOES CORNER	RD18FCL07	110.8	18.0	1	99	67.57 %	-43	02
82	R.STOUR STOKE COLLEGE FLOODGATES	RD18FST1002	114.7	18.6	1	103	67.61 %	-45	03
83	R.COULNE CHAPPEL ROAD	RD18FCL0357	113.8	18.4	1	102	67.86 %	-45	02
84	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	RD18FRB0150	109.9	17.8	1	97	69.75 %	-44	02
85	R.STOUR LISTON WEIR	RD18FST08	117.2	19.0	1	103	69.99 %	-48	1B
86	R.TOVE RD.BR.CASTLETHORPE	RD28F04M07	115.1	13.2	2	103	71.77 %	-37	1B
87	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RD18FRLO949	110.4	17.9	1	95	72.48 %	-47	1B
88	R.LARK FORNHAM ALL SAINTS RD.BR.	RD28F37M08	106.1	12.2	2	94	73.72 %	-35	02
89	R.NENE ORTON STAUNCH	RD58FRNENE6050	131.4	21.3	1	112	74.12 %	-57	02
90	R.WELLAND D/S MKT.HARBOROUGH STW	RD58FMELLO90M	116.4	18.9	1	99	74.48 %	-51	02
91	R.NENE COGENHDE	RD58FRNENE180C	134.0	21.7	1	113	74.68 %	-59	03
92	R.BOX THORINGTON STREET B1068 RD.BR.	RD18FRB001	114.2	18.5	1	95	75.96 %	-51	02
93	KYME EAU SOUTH KYME	RD38FRKYM080S	110.4	17.9	1	92	76.41 %	-50	02
94	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	RD58FRGLEN200L	141.7	23.0	1	118	76.46 %	-64	1B

95	R.WELLAND TINWELL MILL	R058FWELL275T	127.1	20.6	1	105	76.94 %	-58	1B
96	R.WAVENEY BILLINGFORD BRIDGE	R048FWAV040	117.7	19.1	1	96	77.60 %	-54	1B
97	R.OUSE A5 RD.BR.OLD STRATFORD	R028FO3M04	128.0	20.7	1	104	78.47 %	-60	1B
98	HARPER'S BK.A6116 RD.BR.	R058FWHARF200A	115.5	18.7	1	93	78.85 %	-55	1B
99	R.BRANT BLACKMOOR BRIDGE	R038FWBRAN150B	109.9	17.8	1	88	79.39 %	-52	02
100	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHWOL	R028FW48M09	131.4	21.3	1	105	79.77 %	-63	1A
101	R.TAS FORNCETT BRIDGE	R048FWTAS040	118.5	19.2	1	94	80.08 %	-57	1B
102	R.COULNE LEXDEN BRIDGE	R018FWCLD185	132.3	21.4	1	103	81.74 %	-67	02
103	R.IVEL TEMPSFORD DEPOT FT.BR.	R028FW19M07	134.4	21.8	1	103	82.38 %	-69	1B
104	R.LLD LOUTH TROUT FARM 87	R038FWLLD0030L	137.4	22.3	1	105	82.86 %	-71	1B
105	R.BLACKWATER WICKHAM MILL BRIDGE	R018FWBLD160	134.4	21.8	1	103	82.88 %	-69	02
106	R.WELLAND ROCKINGHAM A6003 RD.BR.	R058FWELL150R	133.6	21.7	1	102	82.95 %	-69	1B
107	R.STOUR PITMERE RAILWAY BRIDGE	R018FWSTD604	139.6	22.6	1	103	84.70 %	-75	02
108	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R048FWLTH020	124.1	20.1	1	91	85.09 %	-68	02
109	R.LARK JUDES FERRY	R028FW37M14	128.4	14.7	2	101	85.79 %	-55	1B
110	R.GLEN SURFLEET	R058FWGLEN590S	125.8	20.4	1	89	86.90 %	-72	02
111	UPPER WITHAM AUBOURN	R038FWITH510A	148.2	24.0	1	103	87.22 %	-86	1B
112	R.KENNETT BECK BR.	R028FW38M07	124.1	14.2	2	95	87.42 %	-55	1A
113	R.LYNN/STEEPING PARTNEY	R038FWLYNN120P	145.6	23.6	1	100	87.68 %	-85	1B
114	R.OUSE A422 RD.BR.NEWPORT PAGNELL	R028FW05M03	137.4	15.8	2	104	88.01 %	-63	1B
115	R.BLACKWATER GREYS MILL	R018FWBL0350	154.2	25.0	1	103	88.66 %	-93	1B
116	R.OUSE RADCLIVE BRIDGE	R028FW01M06	134.9	15.5	2	99	89.28 %	-64	1B
117	R.WELLAND D/S DEEPING STW	R058FWELL390D	146.4	23.7	1	95	89.67 %	-92	1B
118	OLD WEST R. HERMITAGE LOCK EARLTH	R028FW35M01	124.5	14.3	2	88	90.54 %	-62	1B
119	UPPER WITHAM LITTLE PONTON	R038FWITH170L	170.9	27.7	1	104	91.04 %	-114	1B
120	R.GWASH FT.BR.U/S BELMESTHORPE	R058FWGWSH300B	176.5	28.6	1	103	91.91 %	-122	1A
121	R.RHEE HASLINGFIELD RD.BR.	R028FW30M07	199.7	32.4	1	102	93.63 %	-152	1B
122	R.CHATER STATION RD.BR.KETTON	R058FWCHAT140S	223.3	36.2	1	111	93.89 %	-173	1B
123	R.YARE BICKERSTONE BRIDGE	R048FWYAR060	156.8	18.0	2	94	94.28 %	-94	1B

Appendix 4:

1989 Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

As Appendix 3, but using 3-season aggregate BMWP Scores

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMWP Score	Confidence of Compliance	Deficit	M/C Class
1	R.HIZ CADWELL ARCH	RD2BF13M04	65.7	10.7	1	144	2.77 %	52	2
2	R.FLIT SHEFFORD NORTH BRIDGE	RD2BF16M04	85.0	13.8	1	150	4.68 %	35	2
3	R.WID WRITTLE BRIDGE	RD18FMD0040	87.6	14.2	1	149	5.20 %	31	2
4	ROMAN RIVER BOUNSTEAD BRIDGE	RD18FFRD108	88.9	14.4	1	143	6.19 %	24	1b
5	R.WANG HILL FM.BR.	RD48FWDG040	83.7	13.6	1	130	6.98 %	18	3
6	EASTON BROAD RIVER POTTERS RD.BR.81127	RD48FEST060	85.0	13.8	1	126	8.25 %	13	2
7	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	RD2BF35M16	95.3	15.5	1	136	9.56 %	10	3
8	MELBOURN BK.RD.CULVERT MELDRETH	RD2BF30M21	109.5	17.8	1	138	16.49 %	-5	1b
9	ALCONBURY BK.GRINDLEYS BR.	RD2BF23M04	117.2	19.0	1	141	20.74 %	-12	1b
10	THORPENESS HUNDRED R. THORPENESS RAIL BR	RD48FTHF010	108.2	17.5	1	127	23.49 %	-14	2
11	R.TOVE CAPPENHAM BRIDGE	RD2BF04M04	122.4	19.8	1	143	24.02 %	-16	1b
12	R.CHELMER N END ROAD BRIDGE	RD18FCH0780	128.8	20.9	1	147	27.11 %	-20	1b
13	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	RD2BF35M03	122.4	19.8	1	139	27.76 %	-20	2
14	R.WID LAMNESS BRIDGE	RD18FMD05	131.4	21.3	1	145	32.11 %	-25	3
15	R.CAM LAYBY LITTLE CHESTERFORD	RD2BF27M22	139.1	22.6	1	151	34.86 %	-29	1b
16	R.BLYTH BLYFORD BRIDGE	RD48FBLY040	134.0	21.7	1	144	36.54 %	-29	2
17	R.IVEL A600 RD.BR.LANGFORD	RD2BF15M01	130.1	21.1	1	137	40.24 %	-31	2
18	WHADDON BK.RD.BR.WHADDON	RD2BF30M19	125.0	20.3	1	129	43.94 %	-32	3
19	R.RHEE WENDY RD.BR.	RD2BF30M24	131.4	21.3	1	133	47.71 %	-37	1b
20	R.TOVE ABTHORPE RD.BR.	RD2BF04M02	145.6	23.6	1	139	58.57 %	-48	1b
21	R.COULNE CHAPPEL ROAD	RD18FCL0357	157.2	25.5	1	149	59.82 %	-53	2
22	R.KYM MEAGRE FARM GAUGE	RD2BF21M04	154.6	25.1	1	138	69.14 %	-61	1b
23	MINSHERE RIVER EAST BRIDGE	RD48FMIN020	144.3	23.4	1	128	69.97 %	-57	1b
24	R.TAS FORNCETT BRIDGE	RD48FTAS040	154.6	25.1	1	137	70.11 %	-62	1b
25	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	RD18FBFR0150	161.1	26.1	1	142	70.75 %	-65	2
26	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	RD48FLTH020	145.6	23.6	1	128	71.12 %	-59	2
27	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RD18FBLO949	163.6	26.5	1	140	74.31 %	-70	1b
28	R.HIZ A507 RD.BR.ARLSEY	RD2BF13M06	167.5	27.2	1	143	74.55 %	-72	1b
29	R.TIFFEY CARLTON FOREHOE BRIDGE	RD48FTIF100	154.6	25.1	1	131	75.35 %	-67	2
30	R.STOUR FLATFORD MILL FOOTBRIDGE	RD18FST0120	161.1	26.1	1	136	75.70 %	-71	2
31	R.CAN WARREN BRIDGE	RD18FCA03	173.9	28.2	1	145	76.96 %	-78	2
32	R.COULNE DOES CORNER	RD18FCL07	175.2	28.4	1	145	77.65 %	-80	2
33	R.CHELMER FT.BR.D/S SANDFORD MILL	RD18FCH0390	186.8	30.3	1	150	80.18 %	-89	1b
34	R.COULNE LEXDEN BRIDGE	RD18FCL0185	193.3	31.3	1	150	82.55 %	-97	2
35	R.BLACKWATER GREYS HILL	RD18FBLO350	195.8	31.7	1	151	82.96 %	-100	1b
36	R.RHEE HASLINGFIELD RD.BR.	RD2BF30M07	193.3	31.3	1	149	82.96 %	-98	1b
37	BUCKLESHAM HILL R.A1093 BRIGHTWELL RD.BR	RD48FMILO20	190.7	30.9	1	142	84.90 %	-102	1a
38	R.BLACKWATER CHINA BRIDGE	RD18FBLO560	195.8	31.7	1	145	85.18 %	-105	2
39	R.TER BUMFORDS BRIDGE	RD18FTE01	198.4	32.2	1	146	85.48 %	-108	1b
40	R.OUSE A422 RD.BR.NEWPORT PAGNELL	RD2BF05M03	206.1	33.4	1	151	85.70 %	-113	1b

Appendix 4 (cont):

Performance of Rivers against Biological Targets

Ranking of Sites in order of Degree of Significant Shortfall

As Appendix 3, but using 3-season aggregate BMWP Scores

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMWP Score	Confidence of Compliance	Deficit	NWC Class
41	PADEBURY BK. TRIB. OUSE B4034 RD. BR. THORNB	R02BF02M13	220.3	35.7	1	150	88.52 %	-131	1b
42	R. BLACKWATER WICKHAM MILL BRIDGE	R018FBLO160	221.6	35.9	1	150	88.71 %	-133	2
43	R. OUSE RADCLIVE BRIDGE	R02BF01M06	220.3	35.7	1	145	89.52 %	-136	1b
44	R. OUSE A5 RD. BR. OLD STRATFORD	R02BF03M04	231.9	37.6	1	152	89.64 %	-144	1b
45	R. OUSE A422 RD. BR. BRACKLEY	R02BF01M04	217.7	35.3	1	140	90.13 %	-138	1b
46	R. YARE BICKERSTONE BRIDGE	R04BFYARD60	216.5	35.1	1	139	90.16 %	-137	1b
47	R. CHELMER RICKETTS LOCK	R01BFCH0129	243.5	39.5	1	152	90.81 %	-158	1b
48	HOLLAND BK. HOLLAND MAIN RD BRIDGE	R01BFHD0030	206.1	33.4	1	126	91.24 %	-137	2
49	R. BOX THORLINGTON STREET B1068 RD. BR.	R01BFEX01	229.3	37.2	1	140	91.26 %	-152	2

Appendix 5: (cont)

Performance of Rivers against Biological Targets

Assessment of Significant Change

Rank	Name of Site	Code	1989			1990			Confidence of Improvement
			Mean	Standard Error	Number of Samples	Mean	Standard Error	Number of Samples	
81	ALCONBURY BK.GRINDLEYS BR.	R02BF23M04	56.0	3.2	3	59.7	4.2	2	71.27 %
82	R.TIFFEY CARLTON FORESHOE BRIDGE	R02BF37M14	93.3	6.6	2	100.3	7.1	2	72.06 %
83	R.TOVE CAPPENHAM BRIDGE	R01BFM00135	55.0	3.2	3	60.7	6.1	1	74.47 %
84	UPPER WITHAM LONG BENINGTON 87	R03BFSLEA0908	60.0	4.2	2	67.0	6.7	1	75.64 %
85	R.RHEE HASLINGFIELD RD.BR.	R02BF05M03	93.7	5.4	3	102.0	7.2	2	76.48 %
86	R.CAM DIMMOCKS COTE RD.BR.	R02BF19M07	91.0	6.4	2	104.3	10.4	1	79.47 %
87	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFBRD150	74.7	4.3	3	85.3	8.5	1	79.94 %
88	R.HIZ A507 RD.BR.ARLSEY	R03BFLEAU0907	64.0	4.5	2	73.7	7.4	1	79.98 %
89	R.NENE NORTH BANK	R04BFTAS040	80.3	4.6	3	92.0	9.2	1	80.21 %
90	R.BLYTH BLYFORD BRIDGE	R02BF34M02	66.0	4.7	2	74.0	5.2	2	80.35 %
91	OLD WEST R. HERMITAGE LOCK EARITH	R02BF21M04	69.3	4.0	3	77.3	5.5	2	80.96 %
92	LACEBY BECK LACEBY 87	R04BFYAR060	106.3	6.1	3	119.3	8.4	2	81.93 %
93	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R05BFWELL3900	94.7	6.7	2	113.7	11.4	1	84.46 %
94	HARRERS BK.A6116 RD.BR.	R04BFLTH020	78.0	4.5	3	96.3	9.6	1	87.35 %
95	BUCKLESHAM MILL R.A1093 BRIGHTWELL RD.BR	R02BF35M16	37.7	2.2	3	44.7	3.2	2	88.20 %
96	R.WANG HILL FM.BR.	R02BF38M07	81.0	5.7	2	97.7	6.9	2	88.46 %
97	R.GLEN SURFLEET	R03BFWITH330H	50.7	3.6	2	64.7	6.5	1	88.73 %
98	R.CHATER STATION RD.BR.KETTON	R03BFWITH170L	102.7	7.3	2	132.7	13.3	1	89.37 %
99	R.SLEA ANWICK	R03BFRKYMED80S	65.3	4.6	2	85.7	8.6	1	90.06 %
100	R.HIZ CADWELL ARCH	R01BFRD108	48.3	2.8	3	63.3	6.3	1	90.53 %
101	THORPENESS HUNDRED R. THORPENESS RAIL BR	R02BF37M08	67.3	4.8	2	84.0	5.9	2	90.66 %
102	R.WELLAND D/S MCT.HARBOROUGH STW	R05BFGLEN590S	72.7	5.1	2	97.7	9.8	1	91.08 %
103	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	R05BFHARP200A	66.3	4.7	2	89.7	9.0	1	91.29 %
104	ROMAN RIVER BOUNSTEAD BRIDGE	R01BFBLO949	64.0	3.7	3	85.7	8.6	1	91.37 %
105	R.CROUCH MEMORIAL PARK WICKFORD	R03BFPLACED40L	49.0	3.5	2	66.7	6.7	1	91.52 %
106	UPPER WITHAM LITTLE FONTON	R03BFOLD6040E	26.7	1.9	2	36.3	3.6	1	91.57 %
107	R.WAVENEY BILLINGFORD BRIDGE	R04BFWNG040	35.0	2.0	3	47.7	4.8	1	91.97 %
108	WILLOW BK.SOUTH PRIORS HALL	R05BFWELLO90M	65.3	4.6	2	90.3	9.0	1	92.04 %
109	R.TOVE CAPPENHAM BRIDGE	R02BF04M04	56.0	3.2	3	71.0	5.0	2	92.21 %
110	R.COULNE LEXDEN BRIDGE	R05BFRJSE310B	47.0	3.3	2	65.7	6.6	1	92.36 %
111	ASHELDHAM BK.BROOK FARM COTTAGES	R03BFWITH370L	50.7	3.6	2	71.7	7.2	1	92.70 %
112	R.ISE RUSHTON RD.BR.	R05BFCHAT140S	117.3	11.7	1	173.3	17.3	1	92.71 %
113	R.TOVE RD.BR.CASTLETHORPE	R01BFRH0202	18.0	1.3	2	26.7	2.7	1	93.78 %
114	MINSHERE RIVER EAST BRIDGE	R02BF36M10	42.3	3.0	2	61.7	4.4	2	95.52 %
115	R.SNAIL RIVER LANE FORDHAM	R02BF30M07	92.0	5.3	3	155.0	15.5	1	95.65 %
116	UPPER WITHAM LONG BENINGTON 87	R03BFRAN150B	49.7	3.5	2	85.3	8.5	1	95.81 %
117	EASTON BROAD RIVER POTTERS RD.BR.81127	R02BF35M01	60.7	4.3	2	92.0	6.5	2	96.11 %
118	SOHAM LODGE BARWAY RD.BR.	R02BF27M22	58.0	3.3	3	86.0	6.1	2	96.11 %
119	R.TOVE RD.BR.CASTLETHORPE	R02BF04M07	60.7	4.3	2	92.7	6.6	2	96.11 %
120	R.NENE COGENHDE	R05BFRAN160W	38.7	3.9	1	72.7	7.3	1	96.11 %
121	R.BLACKWATER WICKHAM HILL BRIDGE	R03BFWITH510A	62.7	4.4	2	115.0	11.5	1	96.11 %
122	R.COULNE DOES CORNER	R04BFPAVD040	48.7	3.4	2	91.3	9.1	1	96.11 %
123	R.BLACKWATER CHINA BRIDGE	R05BFGLEN280B	87.3	6.2	2	172.7	17.3	1	96.11 %

124 CAMPTON BK.SOUTH BRIDGE SHEFFORD

R028F17M02

15.3

1.1

2

31.0

3.1

1

97.02 %

Appendix 5: Performance of Rivers against Biological Targets
Assessment of Significant Change

Rank	Name of Site	Code	1989			1990			Confidence of Improvement
			Mean	Standard Error	Number of Samples	Mean	Standard Error	Number of Samples	
1	R.FLIT SHEFFORD NORTH BRIDGE	R02BF16M04	37.3	2.2	3	16.0	1.6	1	1.32 %
2	SKITTER BECK BROCKELSBY STATION	R03BFSKIT050B	36.7	2.6	2	15.0	1.5	1	1.54 %
3	BOURN BK.TRIB.CAM CANTELLUPE FM.BR.	R02BF14M07	23.3	1.3	3	11.3	1.1	1	1.69 %
4	LOUTH CANAL AUSTEN FEN	R01BFTED1	111.7	6.4	3	54.3	5.4	1	1.70 %
5	R.FLIT SHEFFORD NORTH BRIDGE	R01BFST0120	68.7	4.0	3	37.0	3.7	1	2.16 %
6	SKITTER BECK BROCKELSBY STATION	R01BFMD05	69.7	4.0	3	42.3	4.2	1	3.06 %
7	R.CHELNER N END ROAD BRIDGE	R01BFORD1	26.0	1.8	2	15.0	1.5	1	3.11 %
8	R.GLEN (WEST) BANTHORPE LODGE	R04BFBL040	53.3	3.1	3	33.0	3.3	1	3.25 %
9	UPPER WITHAM AUBOURN	R02BF49M03	99.7	10.0	1	53.7	5.4	1	3.81 %
10	R.STIFFKEY WIGHTON BRIDGE	R04BFTIF100	76.3	4.4	3	53.0	3.7	2	3.86 %
11	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R01BFST0402	115.0	8.1	2	73.3	7.3	1	4.22 %
12	R.IVEL TEMSFORD DEPOT FT.BR.	R03BFWITH740T	100.7	7.1	2	64.7	6.5	1	4.32 %
13	R.OUSE BRAMPTON MILL	R02BF01M04	107.3	6.2	3	78.7	5.6	2	4.91 %
14	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF22M04	130.3	9.2	2	93.0	6.6	2	5.23 %
15	R.NENE DUSTON MILL	R05BFBRAM070B	80.0	8.0	1	49.7	5.0	1	5.42 %
16	R.STOUR HORSESHOE WEIR NAYLAND	R01BFBT0164	108.0	7.6	2	74.0	7.4	1	5.48 %
17	R.COULNE CHAPPEL ROAD	R04BFSTF040	85.3	4.9	3	61.3	6.1	1	5.87 %
18	R.TOVE ABTHORPE RD.BR.	R01BRHD0030	63.0	3.6	3	46.7	4.7	1	6.78 %
19	R.TAS FORNCETT BRIDGE	R02BF36M19	45.3	3.2	2	34.3	2.4	2	6.87 %
20	LONG EAU THREE BRIDGES	R05BFWHIL100W	66.7	6.7	1	45.3	4.5	1	7.20 %
21	STRINGSIDE STR.WHITE BR.OXBOROUGH	R02BF33M09	77.3	5.5	2	60.0	4.2	2	7.78 %
22	OLD RIVER SLEA EVEDON	R03BFBARL110L	85.0	6.0	2	63.7	6.4	1	8.08 %
23	R.STOUR PITMERE RAILWAY BRIDGE	R01BFBX01	115.3	6.7	3	88.7	8.9	1	8.23 %
24	R.NENE MOLLASTON MILL	R04BFMIL020	105.0	6.1	3	81.3	8.1	1	8.58 %
25	R.CAM BOTTISHAM LOCK	R02BF15M01	69.7	4.0	3	54.0	5.4	1	8.61 %
26	GREAT EAU WITHERN	R05BFWELL275T	124.0	7.2	3	98.7	9.9	1	10.01 %
27	R.LARK JUDES FERRY	R02BF30M21	60.3	3.5	3	48.7	4.9	1	10.87 %
28	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	51.0	3.6	2	41.3	4.1	1	12.32 %
29	R.STOUR STONE COLLEGE FLOODGATES	R01BFPH0129	100.3	5.8	3	82.7	8.3	1	12.42 %
30	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFRISE130R	94.3	6.7	2	77.0	7.7	1	12.85 %
31	R.OUSE BROWNSHILL STAUNCH	R02BF01M06	125.3	7.2	3	107.7	7.6	2	13.03 %
32	R.YARE BICKERSTONE BRIDGE	R02BF48M09	129.3	12.9	1	102.0	10.2	1	13.22 %
33	R.TER BUMFORDS BRIDGE	R01BFCL0185	121.0	7.0	3	102.7	10.3	1	15.22 %
34	PADBURY BK.TRIB.OUSE BA034 RD.BR.THORNB	R02BF02M13	98.3	5.7	3	86.3	6.1	2	15.55 %
35	R.BRETT B1115 BRIDGE SEMER	R05BFNENE230W	111.0	7.8	2	93.7	9.4	1	15.99 %
36	R.TOVE ABTHORPE RD.BR.	R02BF04M02	63.3	3.7	3	56.0	4.0	2	16.22 %
37	R.WISSEY OIDLINGTON LODGE RD.BR.NORTHMOL	R02BF32M02	62.3	4.4	2	53.7	5.4	1	18.04 %
38	R.WELLAND CROWLAND BR.	R05BFNENE180C	120.0	8.5	2	104.0	10.4	1	18.86 %
39	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF26M06	118.0	8.3	2	102.3	10.2	1	19.49 %
40	ALCOBURY BK.GRINDLEYS BR.	R01BFST0604	124.0	8.8	2	108.3	10.8	1	19.9 %

Appendix 5: (cont)

Performance of Rivers against Biological Targets

Assessment of Significant Change

Rank	Name of Site	Code	1989			1990			Confidence of Improvement
			Mean	Standard Error	Number of Samples	Mean	Standard Error	Number of Samples	
41	R.OUSE A5 RD.BR.OLD STRATFORD	RD38FGEAU100W	73.0	5.2	2	64.0	6.4	1	20.41 %
42	R.OUSE A422 RD.BR.BRACKLEY	RD38FANON090B	76.7	5.4	2	67.7	6.8	1	21.39 %
43	R.BLACKWATER GREYS MILL	RD58FGLN200L	123.7	8.7	2	110.0	11.0	1	22.59 %
44	NEW RIVER ANCHOLME BRANDY WHARF	RD38FANON090B	75.7	5.4	2	67.7	6.8	1	23.46 %
45	R.WELLAND TINWELL MILL	RD58FNEENE080D	72.7	5.1	2	65.0	6.5	1	23.50 %
46	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	RD18FBL0560	93.3	5.4	3	85.3	8.5	1	26.31 %
47	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	RD18FDT0310	18.3	1.3	2	16.7	1.7	1	26.38 %
48	R.CHELMER FT.BR.D/S SANDFORD MILL	RD58FNEENE630N	92.0	6.5	2	83.7	8.4	1	26.45 %
49	NEW RIVER ANCHOLME BRANDY WHARF	RD18FST08	100.0	7.1	2	91.0	9.1	1	26.57 %
50	PIX BK.CHURCH END ARLESEY	RD38FLYMN120P	123.3	8.7	2	113.0	11.3	1	27.90 %
51	NEW RIVER ANCHOLME BRIGG	RD38FANON150B	52.0	3.7	2	47.7	4.8	1	28.00 %
52	LOUTH CANAL AUSTEN FEN	RD38FLDUT060A	73.3	5.2	2	67.3	6.7	1	28.33 %
53	R.WID LAWNESS BRIDGE	RD18FCL07	93.0	5.4	3	86.0	8.6	1	28.72 %
54	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RD58FQMSH300B	148.0	10.5	2	137.0	13.7	1	30.04 %
55	R.WID WRITTLE BRIDGE	RD18FCL0357	94.0	5.4	3	88.3	8.8	1	32.48 %
56	LOUTH CANAL ALVINGHAM	RD18FST1403	78.3	5.5	2	73.7	7.4	1	33.61 %
57	HOLLAND BK.HOLLAND MAIN RD BRIDGE	RD18FBL0160	109.7	6.3	3	104.3	10.4	1	35.63 %
58	R.STOUR LISTON WEIR	RD18FCA03	83.0	4.8	3	79.0	7.9	1	35.76 %
59	HOBHOLE HALTOFT END	RD58FWELL420C	63.3	4.5	2	60.3	6.0	1	36.77 %
60	BRAMPTON BRANCH R.NENE BRIDGORTH-CREATON	RD38FSLA140A	59.7	6.0	1	56.7	5.7	1	37.84 %
61	R.CAM LAYBY LITTLE CHESTERFORD	RD28F03M04	103.3	6.0	3	99.3	9.9	1	38.45 %
62	R.KYM MEAGRE FARM GAUGE	RD38FWOLD090U	51.7	3.7	2	49.7	5.0	1	39.11 %
63	R.CHELMER RICKETTS LOCK	RD58FNEENE6050	105.3	7.4	2	102.0	10.2	1	41.06 %
64	NEW RIVER ANCHOLME BRIGG	RD18FST1002	90.0	6.4	2	89.0	8.9	1	46.85 %
65	R.STOUR COTTON HALL KEDINGTON	RD18FCH0390	87.7	5.1	3	87.0	8.7	1	47.72 %
66	LOWER WITHAM TATTERSHALL BRIDGE	RD58FWILSO60P	26.3	1.9	2	26.3	2.6	1	50.00 %
67	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	RD28F35M03	65.7	3.8	3	66.0	4.7	2	51.91 %
68	R.RIZ CADWELL ARCH	RD28F13M04	40.0	2.3	3	40.3	4.0	1	52.47 %
69	R.IVEL A600 RD.BR.LANGFORD	RD38FRASE170W	44.3	3.1	2	45.3	4.5	1	56.21 %
70	R.NENE ORTON STALINCH	RD48FMIN020	74.7	4.3	3	76.3	7.6	1	56.50 %
71	R.LUD LOUTH TROUT FARM 87	RD18FMD0040	43.0	2.5	3	44.0	4.4	1	56.76 %
72	R.CHELMER N END ROAD BRIDGE	RD18FCH0780	79.3	4.6	3	81.3	8.1	1	57.31 %
73	NEW RIVER ANCHOLME BRANDY WHARF	RD58FWELL150R	99.7	7.0	2	103.7	10.4	1	60.72 %
74	R.GWASH FT.BR.U/S BELMESTHORPE	RD48FEST060	41.7	2.4	3	43.3	4.3	1	61.27 %
75	R.ISE BRITISH LEYLANDS B571 RD.BR.	RD48FTHP010	66.7	3.8	3	69.3	6.9	1	61.27 %
76	R.LARK FORNHAM ALL SAINTS RD.BR.	RD28F30M19	63.0	3.6	3	65.7	6.6	1	61.87 %
77	R.LUD LOUTH TROUT FARM 87	RD38FRLLD030L	100.7	7.1	2	106.7	10.7	1	65.28 %
78	R.OUSE A422 RD.BR.NEWPORT PAGNELL	RD38FROGH130H	60.0	4.2	2	63.7	6.4	1	65.61 %
79	WHADDON BK.RD.BR.WHADDON	RD28F13M06	77.3	4.5	3	82.0	8.2	1	66.20 %
80	R.MARDYKE CAUSEWAY BRIDGE	RD18FBL0350	112.0	6.5	3	119.7	12.0	1	67.99 %

Appendix 6: 1989 Performance of Rivers against Biological Targets

Assessment of Compliance with Class Limits (downgrading)

Assumptions as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	MWC Class	
1	OLD RIVER ANCHOLME WRABY	RD3BFANCO050W	7.3	.8	2	60	.00 %	51	2
2	CAMPTON BK.SOUTH BRIDGE SHEFFORD	RD2BF17M02	15.5	1.8	2	60	.00 %	42	2
3	SKITTER BECK BROCKELSBY STATION	RD3BFSKIT050B	35.2	4.0	2	80	.00 %	38	1b
4	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	RD1BFRH0202	26.2	3.0	2	60	.00 %	29	2
5	R.RASE WEST RASEN	RD3BFRASE170W	44.7	5.1	2	80	.00 %	27	1b
6	WATTON BK.LT.CRESSINGHAM RD.BR.PILGRIMS	RD2BF48M15	36.1	4.1	2	60	.00 %	17	2
7	LACEBY BECK LACEBY 87	RD3BFPLACE040L	55.0	6.3	2	80	.00 %	15	1b
8	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	RD5BFRAM160W	49.8	8.1	1	80	.01 %	17	1b
9	ROMAN RIVER BOUNSTEAD BRIDGE	RD1BFRFD108	62.3	5.8	3	80	.12 %	8	1b
10	R.FLIT SHEFFORD NORTH BRIDGE	RD2BF16M04	48.1	4.5	3	60	.41 %	4	2
11	WOLDGRIFT DRAIN U/S MABLETHORPE STW	RD3BFWOLD090U	46.8	5.4	2	60	.70 %	4	2
12	R.IVEL ASTWICK BRIDGE	RD2BF14M02	67.0	6.3	3	80	1.91 %	3	1b
13	R.HIZ CADWELL ARCH	RD2BF13M04	51.5	4.8	3	60	3.97 %	1	2
14	R.SLEA BONEMILL BRIDGE	RD3BFSLEA090B	68.3	7.8	2	80	6.72 %	0	1b
15	WILLOW BK.SOUTH PRIORS HALL	RD5BFWILSD60P	25.8	3.0	2	30	7.60 %	0	3
16	EASTON BROAD RIVER POTTERS RD.BR.B1127	RD4BFESTD60	53.7	5.0	3	60	10.44 %	-1	2
17	ALDONBURY BK.GRINDLEYS BR.	RD2BF23M04	72.2	6.8	3	80	12.25 %	-2	1b
18	R.TOVE CAPPENHAM BRIDGE	RD2BF04M04	72.2	6.8	3	80	12.25 %	-2	1b
19	LONG EAU THREE BRIDGES	RD3BFLEAU090T	72.2	8.3	2	80	17.13 %	-5	1b
20	R.WID WRITTLE BRIDGE	RD1BFMD0040	55.4	5.2	3	60	18.76 %	-3	2
21	R.CAM LAYBY LITTLE CHESTERFORD	RD2BF27M22	74.7	7.0	3	80	22.54 %	-5	1b
22	BOURN BK.TRIB.CAM CANTELUPE FM.BR.	RD2BF32M02	73.9	8.5	2	80	23.45 %	-7	1b
23	OLD WEST R. HERMITAGE LOCK EARITH	RD2BF35M01	75.2	8.6	2	80	28.70 %	-8	1b
24	R.ISE BRITISH LEYLANDS B571 RD.BR.	RD5BFRISE310B	57.5	6.6	2	60	35.51 %	-7	2
25	MELBOURN BK.RD.CULVERT MELDRETH	RD2BF30M21	77.7	7.3	3	80	37.77 %	-9	1b
26	OLD RIVER SLEA EVEDON	RD3BFOLDS040E	29.2	3.3	2	30	40.60 %	-4	3
27	PDX BK.CHURCH END ARLESEY	RD2BF14M07	30.1	2.8	3	30	50.89 %	-4	3
28	R.KENNETT BECK BR.	RD2BF38M07	100.9	11.6	2	100	53.19 %	-19	1a
29	R.TOVE ABTHORPE RD.BR.	RD2BF04M02	81.6	7.6	3	80	58.29 %	-13	1b
30	R.PANT WETHERSFIELD MILL B1053 RD.BR.	RD1BFBLO949	82.5	7.7	3	80	62.49 %	-14	1b
31	ELSTON BK.TRIB.OUSE OCTAGON FARM	RD2BF12M24	84.2	9.6	2	80	66.74 %	-19	1b
32	NEW RIVER ANCHOLME BRIGG	RD3BFANON150B	63.1	7.2	2	60	66.74 %	-14	2
33	OLD RIVER ANCHOLME WRABY	RD3BFANCO050W	63.1	7.2	2	60	66.74 %	-14	2
34	HOBHOLE HALTOFT END	RD3BFHOBH130H	64.0	7.3	2	60	70.68 %	-15	2
35	R.WAVENEY BILLINGFORD BRIDGE	RD4BFWAV040	86.8	9.9	2	80	75.14 %	-22	1b
36	R.BAIN DALDERBY	RD3BFBAIN280D	88.5	10.1	2	80	79.82 %	-24	1b
37	R.NENE DUSTON MILL	RD5BFRNENE080D	89.8	10.3	2	80	82.86 %	-26	1b
38	GREAT EAU WITHERN	RD3BFGEAU100W	91.0	10.4	2	80	85.51 %	-27	1b
39	R.RHEE WENDY RD.BR.	RD2BF30M24	88.9	8.3	3	80	85.76 %	-22	1b
40	R.KYM MEAGRE FARM GAUGE	RD2BF21M04	89.3	8.4	3	80	86.77 %	-22	1b

Appendix 6 (cont):

Performance of Rivers against Biological Targets

Assessment of Compliance with Class Limits

Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BWP Score	Confidence of Compliance	MNC Class
41	R.WELLAND D/S MKT.HARBOROUGH STW	R058FWELL090M	70.0	8.0	2	60	89.37 %	-22 2
42	R.SLEA ANWICK	R038FSLA140A	76.9	12.5	1	60	91.21 %	-36 2
43	R.BLYTH BLYFORD BRIDGE	R048FBLY040	68.7	6.4	3	60	91.23 %	-18 2
44	STRINGSIDE STR.WHITE BR.OXBOROUGH	R028F49M03	128.4	20.8	1	100	91.38 %	-62 1a
45	BRAMPTON BRANCH R.NENE BRIXWORTH-CREATON	R058FBRAM070B	103.1	16.7	1	80	91.63 %	-50 1b
46	WILLOW BK.BLATHERWYOKE LAKE OUTLET	R058FWILL080B	77.7	12.6	1	60	92.03 %	-37 2
47	R.WISSEY A10 RD.BR.HILGAY	R028F50M02	96.2	11.0	2	80	92.91 %	-33 1b
48	KYME EAU SOUTH KYME	R038FKYME080S	72.2	8.3	2	60	92.91 %	-25 2
49	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON090B	96.6	11.1	2	80	93.34 %	-34 1b
50	NEW RIVER ANCHOLME BRANDY WHARF	R038FANON090B	99.6	11.4	2	80	95.72 %	-37 1b
51	R.WELLAND CROMLAND BR.	R058FWELL420C	75.2	8.6	2	60	96.07 %	-28 2
52	MINSHERE RIVER EAST BRIDGE	R048FMIN020	96.2	9.0	3	80	96.40 %	-30 1b
53	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R058FWHIL100W	85.9	13.9	1	60	96.85 %	-48 2
54	R.CAM DIMMOCKS COTE RD.BR.	R028F34M02	76.9	8.8	2	60	97.22 %	-30 2
55	BARLINGS EAU LANGWORTH	R038FBARL110L	103.5	11.9	2	80	97.62 %	-42 1b
56	R.CROUCH MEMORIAL PARK WICKFORD	R018FROD1	39.1	4.5	2	30	97.87 %	-15 3
57	R.HIZ A507 RD.BR.ARLSEY	R028F13M06	99.6	9.3	3	80	98.24 %	-34 1b
58	R.IVEL TEMPSFORD DEPOT FT.BR.	R028F19M07	107.4	12.3	2	80	98.69 %	-47 1b
59	R.CHELMER N END ROAD BRIDGE	R018FCH0780	102.2	9.6	3	80	98.99 %	-37 1b
60	R.CAM BOTTISHAM LOCK	R028F33M09	82.5	9.5	2	60	99.12 %	-37 2
61	R.TOVE RD.BR.CASTLETHORPE	R028F04M07	110.8	12.7	2	80	99.23 %	-51 1b
62	R.TAS FORNCETT BRIDGE	R048FTA040	103.5	9.7	3	80	99.24 %	-38 1b
63	R.WARING LOW TOYNTON BRIDGE	R038FWARI090L	138.7	15.9	2	100	99.25 %	-64 1a
64	R.WISSEY DIDDLINGTON LODGE RD.BR.NORTHMOL	R028F48M09	166.6	27.0	1	100	99.32 %	-110 1a
65	R.LARK FORNHAM ALL SAINTS RD.BR.	R028F37M08	83.7	9.6	2	60	99.33 %	-39 2
66	HARRPERS BK.COMTHICK GAUGING SITE	R058FHARP125C	103.9	16.8	1	60	99.54 %	-71 2
67	R.LARK JUDES FERRY	R028F37M14	116.4	13.3	2	80	99.68 %	-57 1b
68	UPPER WITHAM ALBOURN	R038FWITH510A	117.2	13.4	2	80	99.72 %	-58 1b
69	UPPER WITHAM LONG BENINGTON 87	R038FWITH330H	88.0	10.1	2	60	99.73 %	-44 2
70	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R018FH00030	81.2	7.6	3	60	99.73 %	-33 2
71	BUCKLESHAM MILL R.A1063 BRIGHTWELL RD.BR	R048FMIL020	135.3	12.7	3	100	99.73 %	-55 1a
72	UPPER WITHAM LONG BENINGTON 87	R038FWITH370L	88.5	10.1	2	60	99.75 %	-44 2
73	LOUTH CANAL AUSTEN FEN	R038FLOUT060A	89.8	10.3	2	60	99.81 %	-46 2
74	R.BRANT BLACKHOOR BRIDGE	R038FERAW150B	89.8	10.3	2	60	99.81 %	-46 2
75	R.CHATER STATION RD.BR.KETTON	R058FCHAT140S	151.2	24.5	1	80	99.82 %	-110 1b
76	R.STIFFKEY WIGHTON BRIDGE	R048FSTF040	109.9	10.3	3	80	99.82 %	-46 1b
77	R.WELLAND WELHAM RD.BR.	R058FWELL100W	113.8	18.4	1	60	99.82 %	-83 2
78	R.STOUR COTTON HALL KEDINGTON	R018FST1403	91.0	10.4	2	60	99.85 %	-47 2
79	R.GLEN SURFLEET	R058FGLN590S	91.0	10.4	2	60	99.85 %	-47 2
80	R.ISE RUSHTON RD.BR.	R058FRISE130R	122.8	14.1	2	80	99.88 %	-65 1b

Appendix 6 (cont): Performance of Rivers against Biological Targets
 Assessment of Compliance with Class Limits
 Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	NMC	Class
81	R.SNAIL RIVER LANE FORDHAM	R02BF36M19	46.4	5.3	2	30	99.90 %	-24	3
82	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	84.6	7.9	3	60	99.91 %	-37	2
83	R.CHELMER FT.BR.D/S SANDFORD MILL	R01BFCH0390	112.9	10.6	3	80	99.91 %	-49	1b
84	THORPENESS HUNDRED R. THORPENESS RAIL BR	R04BFTHP010	85.9	8.0	3	60	99.94 %	-38	2
85	R.WELLAND D/S DEEPING STW	R05BFMELL390D	127.1	14.6	2	80	99.94 %	-70	1b
86	R.LUD LOUTH TROUT FARM BR	R03BFRJUD030L	129.7	14.9	2	80	99.96 %	-73	1b
87	R.WELLAND ROCKINGHAM A6003 RD.BR.	R05BFMELL150R	130.6	15.0	2	80	99.96 %	-74	1b
88	R.STOUR LISTON WEIR	R01BFST08	131.8	15.1	2	80	99.97 %	-76	1b
89	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFST0120	88.5	8.3	3	60	99.97 %	-41	2
90	R.RHEE HASLINGFIELD RD.BR.	R02BF30M07	118.5	11.1	3	80	99.97 %	-56	1b
91	HARPERS BK.A6116 RD.BR.	R05BFHARP200A	133.6	15.3	2	80	99.98 %	-78	1b
92	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	89.8	8.4	3	60	99.98 %	-43	2
93	R.WANG HILL FM.BR.	R04BFWNG040	45.1	4.2	3	30	99.98 %	-21	3
94	R.OUSE A422 RD.BR.NEWPORT PAGNELL	R02BF05M03	120.7	11.3	3	80	99.98 %	-58	1b
95	R.BRETT B1115 BRIDGE SEMER	R01BFBT0164	137.4	15.8	2	80	99.99 %	-82	1b
96	UPPER WITHAM LITTLE FORTON	R03BFWITH170L	138.7	15.9	2	80	99.99 %	-84	1b
97	R.NENE NORTH BANK	R05BFNENE630N	106.5	12.2	2	60	99.99 %	-66	2
98	PADBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	R02BF02M13	126.7	11.9	3	80	100.00 %	-65	1b
99	R.GLEN (WEST) BANTHORPE LODGE	R05BFGLEN280B	182.5	20.9	2	100	100.00 %	-116	1a
100	R.BRAIN FT.BR.U/S FAULKBOURNE HALL	R01BFBR0150	96.2	9.0	3	60	100.00 %	-50	2
101	R.CHELMER RICKETTS LOCK	R01BFCH0129	129.3	12.1	3	80	100.00 %	-68	1b
102	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R02BF35M16	48.5	4.5	3	30	100.00 %	-25	3
103	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	56.7	6.5	2	30	100.00 %	-36	3
104	R.NENE WARMINGTON	R05BFNENE495W	181.2	29.4	1	60	100.00 %	-169	2
105	R.OUSE BROWNSHILL STAINCH	R02BF26M06	152.0	17.4	2	80	100.00 %	-100	1b
106	R.TIFFEY CARLTON FOREHOE BRIDGE	R04BFTIF100	98.3	9.2	3	60	100.00 %	-52	2
107	WILLOW BK.FOTHERINGHAY RD.BR.	R05BFWILL170F	186.8	30.3	1	60	100.00 %	-176	2
108	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R05BFGLEN200L	156.3	17.9	2	80	100.00 %	-105	1b
109	R.OUSE A5 RD.BR.OLD STRATFORD	R02BF03M04	133.1	12.5	3	80	100.00 %	-73	1b
110	LOWER WITHAM TATTERSHALL BRIDGE	R03BFWITH740T	117.7	13.5	2	60	100.00 %	-79	2
111	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R04BFLTH020	100.5	9.4	3	60	100.00 %	-55	2
112	R.GHASH FT.BR.U/S BELMESTHORPE	R05BFGASH300B	201.4	23.1	2	100	100.00 %	-138	1a
113	R.YARE BICKERSTONE BRIDGE	R04BFYARD60	137.0	12.8	3	80	100.00 %	-77	1b
114	R.LYMN/STEEPING PARTNEY	R03BFLYMN120P	164.5	18.9	2	80	100.00 %	-114	1b
115	R.OUSE A422 RD.BR.BRACKLEY	R02BF01M04	138.3	12.9	3	80	100.00 %	-79	1b
116	R.BAIN HEMINGBY	R03BFBAIN190H	168.4	19.3	2	80	100.00 %	-119	1b
117	R.OUSE BRAMPTON MILL	R02BF22M04	169.6	19.4	2	80	100.00 %	-121	1b
118	R.CAN WARREN BRIDGE	R01BFCA03	106.9	10.0	3	60	100.00 %	-62	2
119	R.TER BUMFORDS BRIDGE	R01BFTE01	143.9	13.5	3	80	100.00 %	-85	1b
120	R.BLACKWATER GREYS MILL	R01BFBLO350	144.3	13.5	3	80	100.00 %	-86	1b

Appendix 6 (cont): Performance of Rivers against Biological Targets
 Assessment of Compliance with Class Limits
 Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	NMC Class
121	R.NENE WOLLASTON MILL	R05BFNENE230M	138.7	15.9	2	60	100.00 %	-104 2
122	R.NENE ORTON STAUNCH	R05BFNENE6050	140.9	16.1	2	60	100.00 %	-106 2
123	R.STOUR HORSESHOE WEIR MAYLAND	R01BFST0402	149.9	17.2	2	60	100.00 %	-117 2
124	SOHAM LODGE BARWAY RD.BR.	R02BF36M10	73.4	8.4	2	30	100.00 %	-56 3
125	R.COLNE DOES CORNER	R01BFCL07	119.8	11.2	3	60	100.00 %	-77 2
126	R.WELLAND TIMMELL MILL	R05BFWELL275T	159.8	15.0	3	80	100.00 %	-103 1b
127	R.WID LAMNESS BRIDGE	R01BFWD05	89.8	8.4	3	30	100.00 %	-73 3
128	R.STOUR STOKE COLLEGE FLOODGATES	R01BFST1002	112.5	12.9	2	30	100.00 %	-103 3
129	R.STOUR PITHERE RAILWAY BRIDGE	R01BFST0604	172.2	19.7	2	60	100.00 %	-144 2
130	R.MARDYKE CAUSEWAY BRIDGE	R01BFMD0135	70.9	6.6	3	30	100.00 %	-51 3
131	R.COLNE CHAPPEL ROAD	R01BFCL0357	121.1	11.3	3	60	100.00 %	-79 2
132	R.COLNE LEXDEN BRIDGE	R01BFCL0185	155.9	14.6	3	60	100.00 %	-119 2
133	R.BOX THORINGTON STREET B1068 RD.BR.	R01BFBX01	148.6	13.9	3	60	100.00 %	-110 2
134	R.BLACKWATER CHINA BRIDGE	R01BFBL0560	120.3	11.3	3	60	100.00 %	-78 2
135	R.BLACKWATER WICKHAM MILL BRIDGE	R01BFBL0160	141.3	13.2	3	60	100.00 %	-102 2
136	R.NENE DENFORD	R05BFNENE3600	88.5	10.1	2	30	100.00 %	-74 3
137	WHADDON BK.RD.BR.WHADDON	R02BF30M19	81.2	7.6	3	30	100.00 %	-63 3
138	R.OUSE RADCLIVE BRIDGE	R02BF01M06	161.5	15.1	3	80	100.00 %	-105 1b
139	R.NENE COYENHOE	R05BFNENE160C	164.9	18.9	2	30	100.00 %	-165 3

Appendix 7: 1989 Performance of Rivers against Biological Targets

Assessment of Compliance with Class Limits (Upgrades)

Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BWP Score	Confidence of Compliance	MWC Class	
1	OLD RIVER ANCHOLME WRABBY	R038FAN00050W	7.3	.8	2	80	.00 %	71	2
2	CAMPTON BK.SOUTH BRIDGE SHEFFORD	R028F17M02	15.5	1.8	2	80	.00 %	62	2
3	SKITTER BECK BROCKELSBY STATION	R038F5KIT050B	35.2	4.0	2	100	.00 %	58	1b
4	EASTWOOD BK.D/S NOBLESGREEN DITCH CON	R018FRH0202	26.2	3.0	2	80	.00 %	49	2
5	R.RASE WEST RASEN	R038FRASE170W	44.7	5.1	2	100	.00 %	47	1b
6	WATTON BK.LT.CRESSINGHAM RD.BR.PILGRIMS	R028F48M15	36.1	4.1	2	80	.00 %	37	2
7	BRAMPTON BRANCH R.NENE DIS WEST BRIDGE	R058FB8AM160W	49.8	8.1	1	100	.00 %	37	1b
8	LACEBY BECK LACEBY 87	R038FLACED40L	55.0	6.3	2	100	.00 %	35	1b
9	WILLOW BK.SOUTH PRIORS HALL	R058FWILS060P	25.8	3.0	2	60	.00 %	29	3
10	ROMAN RIVER BOUNSTEAD BRIDGE	R018FRFD108	62.3	5.8	3	100	.00 %	28	1b
11	PIX BK.CHURCH END ARLESEY	R028F14M07	30.1	2.8	3	60	.00 %	25	3
12	OLD RIVER SLEA EVEDON	R038FOLD6040E	29.2	3.3	2	60	.00 %	25	3
13	R.FLIT SHEFFORD NORTH BRIDGE	R028F16M04	48.1	4.5	3	80	.00 %	24	2
14	WOLDGRIFT DRAIN U/S MABLETHORPE STW	R038FWOLD090U	46.8	5.4	2	80	.00 %	24	2
15	R.IVEL ASTWICK BRIDGE	R028F14M02	67.0	6.3	3	100	.00 %	23	1b
16	R.HIZ CADWELL ARCH	R028F13M04	51.5	4.8	3	80	.00 %	21	2
17	R.SLEA BONEHILL BRIDGE	R038FSLEA090B	68.3	7.8	2	100	.00 %	19	1b
18	EASTON BROAD RIVER POTTERS RD.BR.B1127	R048FEST060	53.7	5.0	3	80	.00 %	18	2
19	ALCONBURY BK.GRINDLEYS BR.	R028F23M04	72.2	6.8	3	100	.00 %	17	1b
20	R.TOVE CAPPENHAM BRIDGE	R028F04M04	72.2	6.8	3	100	.00 %	17	1b
21	R.WID WRITTLE BRIDGE	R018FW00040	55.4	5.2	3	80	.00 %	16	2
22	R.CROUCH MEMORIAL PARK WICKFORD	R018FCR01	39.1	4.5	2	60	.00 %	14	3
23	R.CAM LAYBY LITTLE CHESTERFORD	R028F27M22	74.7	7.0	3	100	.02 %	14	1b
24	R.WANG HILL FM.BR.	R048FWANG040	45.1	4.2	3	60	.02 %	8	3
25	R.ISE BRITISH LEYLANDS B571 RD.BR.	R058FRISE310B	57.5	6.6	2	80	.03 %	12	2
26	LONG EAU THREE BRIDGES	R038FLEAU090T	72.2	8.3	2	100	.04 %	14	1b
27	BOURN BK.TRIB.CAM CANTELLUPE FM.BR.	R028F32M02	73.9	8.5	2	100	.10 %	12	1b
28	MELBOURN BK.RD.CULVERT MELDRETH	R028F30M21	77.7	7.3	3	100	.11 %	10	1b
29	OLD WEST R. HERMITAGE LOCK EARLITH	R028F35M01	75.2	8.6	2	100	.20 %	11	1b
30	R.SNAIL RIVER LANE FORDHAM	R028F36M19	46.4	5.3	2	60	.52 %	5	3
31	COTTENHAM LODGE SMITHY FEN RD.BR.COTTENHAM	R028F35M16	48.5	4.5	3	60	.58 %	4	3
32	R.TOVE ABTHORPE RD.BR.	R028F04M02	81.6	7.6	3	100	.80 %	6	1b
33	NEW RIVER ANCHOLME BRIGG	R038FAN0N150B	63.1	7.2	2	80	.99 %	5	2
34	OLD RIVER ANCHOLME WRABBY	R038FAN00050W	63.1	7.2	2	80	.99 %	5	2
35	R.PANT WETHERSFIELD HILL B1053 RD.BR.	R018FBLO949	82.5	7.7	3	100	1.15 %	5	1b
36	HOBHOLE HALTOFT END	R038FHOBH130H	64.0	7.3	2	80	1.45 %	4	2
37	R.BLYTH BLYFORD BRIDGE	R048FBLY040	68.7	6.4	3	80	3.97 %	1	2
38	ELSTON BK.TRIB.OUSE OCTAGON FARM	R028F12M24	84.2	9.6	2	100	5.05 %	0	1b
39	R.RHEE WENDY RD.BR.	R028F30M24	88.9	8.3	3	100	9.11 %	-2	1b
40	R.WAVENEY BILLINGFORD BRIDGE	R048FWAVD040	86.8	9.9	2	100	9.14 %	-2	1b

Appendix 7 (cont): Performance of Rivers against Biological Targets
 Assessment of Compliance with Class Limits (Upgrades)
 Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BHP Score	Confidence of Compliance	NMC Class	
41	R.KYM MEAGRE FARM GAUGE	R02BF21M04	89.3	8.4	3	100	10.09 %	-2	1b
42	R.WELLAND D/S MKT.HARBOROUGH STW	R05BFWELL090M	70.0	8.0	2	80	10.64 %	-2	2
43	R.BAIN DALDERBY	R03BFBAIN280D	88.5	10.1	2	100	12.78 %	-4	1b
44	R.NENE DUSTON MILL	R05BFNENE080D	89.8	10.3	2	100	15.98 %	-6	1b
45	KYME EAU SOUTH KYME	R03BFKYME080S	72.2	8.3	2	80	17.13 %	-5	2
46	GREAT EAU WITHERN	R03BFGEAU100W	91.0	10.4	2	100	19.55 %	-7	1b
47	R.WELLAND CROWLAND BR.	R05BFWELL420C	75.2	8.6	2	80	26.70 %	-8	2
48	LOUTH CANAL ALVINGHAM	R03BFLOUT040A	56.7	6.5	2	60	30.52 %	-6	3
49	MINSHERE RIVER EAST BRIDGE	R04BFMIN020	96.2	9.0	3	100	33.65 %	-10	1b
50	R.CAM DIMMOCKS COTE RD.BR.	R02BF34M02	76.9	8.8	2	80	36.14 %	-10	2
51	R.WISSEY A10 RD.BR.HILGAY	R02BF50M02	96.2	11.0	2	100	36.52 %	-13	1b
52	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANON090B	96.6	11.1	2	100	38.05 %	-14	1b
53	R.SLEA ANWICK	R03BFSLEA140A	76.9	12.5	1	80	40.10 %	-16	2
54	WILLOW BK.BLATHERWYCKE LAKE OUTLET	R05BFWILL080B	77.7	12.6	1	80	42.86 %	-17	2
55	R.HIZ A507 RD.BR.ARLSEY	R02BF13M06	99.6	9.3	3	100	48.44 %	-14	1b
56	NEW RIVER ANCHOLME BRANDY WHARF	R03BFANON090B	99.6	11.4	2	100	48.73 %	-17	1b
57	HOLLAND BK.HOLLAND MAIN RD BRIDGE	R01BFH00030	81.2	7.6	3	80	56.12 %	-13	2
58	BRAMPTON BRANCH R.NENE BRIXNORTH-CREATON	R05BFBRAM070B	103.1	16.7	1	100	57.29 %	-30	1b
59	R.CHELMER N END ROAD BRIDGE	R01BFC0780	102.2	9.6	3	100	59.15 %	-17	1b
60	R.CAM BOTTISHAM LOCK	R02BF33M09	82.5	9.5	2	80	60.26 %	-17	2
61	BARLINGS EAU LANGWORTH	R03BFBARL110L	103.5	11.9	2	100	61.61 %	-22	1b
62	R.TAS FORNCETT BRIDGE	R04BFTAS040	103.5	9.7	3	100	64.11 %	-18	1b
63	R.LARK FORNHAM ALL SAINTS RD.BR.	R02BF37M08	83.7	9.6	2	80	65.18 %	-19	2
64	WHILTON BRANCH OF NENE WEEDON A45 RD.BR.	R05BFWHIL100W	85.9	13.9	1	80	66.39 %	-28	2
65	OLD WEST R. TWENTYPENCE RD.BR.WILBURTON	R02BF35M03	84.6	7.9	3	80	71.96 %	-17	2
66	R.IVEL TEMPSFORD DEPOT FT.BR.	R02BF19M07	107.4	12.3	2	100	72.53 %	-27	1b
67	THORPENESS HUNDRED R. THORPENESS RAIL BR	R04BFTHP010	85.9	8.0	3	80	76.83 %	-18	2
68	UPPER WITHAM LONG BENINGTON 87	R03BFWITH330H	88.0	10.1	2	80	78.72 %	-24	2
69	UPPER WITHAM LONG BENINGTON 87	R03BFWITH370L	88.5	10.1	2	80	79.82 %	-24	2
70	R.TOVE RD.BR.CASTLETHORPE	R02BF04M07	110.8	12.7	2	100	80.25 %	-31	1b
71	LOUTH CANAL AUSTEN FEN	R03BFLOUT060A	89.8	10.3	2	80	82.86 %	-26	2
72	R.BRANT BLACKMOOR BRIDGE	R03BFBRAN150B	89.8	10.3	2	80	82.86 %	-26	2
73	R.STIFFKEY WIGHTON BRIDGE	R04BFSTFD040	109.9	10.3	3	100	83.31 %	-26	1b
74	R.STOUR FLATFORD MILL FOOTBRIDGE	R01BFST0120	88.5	8.3	3	80	84.69 %	-21	2
75	R.STOUR COTTON HALL KEDINGTON	R01BFST1403	91.0	10.4	2	80	85.51 %	-27	2
76	R.GLEN SURFLEET	R05BFGLEN590S	91.0	10.4	2	80	85.51 %	-27	2
77	R.IVEL A600 RD.BR.LANGFORD	R02BF15M01	89.8	8.4	3	80	87.73 %	-23	2
78	R.CHELMER FT.BR.D/S SANDFORD MILL	R01BFC0390	112.9	10.6	3	100	88.97 %	-29	1b
79	R.LARK JUDES FERRY	R02BF37M14	116.4	13.3	2	100	89.03 %	-37	1b
80	UPPER WITHAM AUBOURN	R03BFWITH510A	117.2	13.4	2	100	90.03 %	-38	1b

Appendix 7 (cont): Performance of Rivers against Biological Targets
 Assessment of Compliance with Class Limits (Upgrades)
 Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	NWC Class
81	HARPERS BK.COMTHICK GAUGING SITE	R058FHARP125C	103.9	16.8	1	80	92.23 %	-51 2
82	SOHAM LODGE BARWAY RD.BR.	R028F36M10	73.4	8.4	2	60	94.48 %	-26 3
83	R.ISE RUSHTON RD.BR.	R058FRISE130R	122.8	14.1	2	100	94.75 %	-45 1b
84	R.MARDYKE CAUSEWAY BRIDGE	R018FMD0135	70.9	6.6	3	60	94.93 %	-21 3
85	R.RHEE HASLINGFIELD RD.BR.	R028F30M07	118.5	11.1	3	100	95.26 %	-36 1b
86	R.BRAIN FT.BR.U/S FAULKEBOURNE HALL	R018FBRO150	96.2	9.0	3	80	96.40 %	-30 2
87	R.OUSE A422 RD.BR.NEWFORT PAGNELL	R028F05M03	120.7	11.3	3	100	96.64 %	-38 1b
88	R.WELLAND WELHAM RD.BR.	R058FWELL100W	113.8	18.4	1	80	96.66 %	-63 2
89	R.WELLAND D/S DEEPING STW	R058FWELL390D	127.1	14.6	2	100	96.86 %	-50 1b
90	R.TIFFEY CARLTON FOREHDE BRIDGE	R048FTIF100	98.3	9.2	3	80	97.69 %	-32 2
91	R.LUD LOUTH TROUT FARM 87	R038FRLLD0030L	129.7	14.9	2	100	97.71 %	-53 1b
92	R.WELLAND ROCKINGHAM A6003 RD.BR.	R058FWELL150R	130.6	15.0	2	100	97.94 %	-54 1b
93	R.CHATER STATION RD.BR.KETTON	R058FCHAT140S	151.2	24.5	1	100	98.16 %	-90 1b
94	R.STOUR LISTON WEIR	R018FST08	131.8	15.1	2	100	98.24 %	-56 1b
95	R.NENE NORTH BANK	R058FNENE630N	106.5	12.2	2	80	98.50 %	-46 2
96	LOTHINGLAND HUNDRED R. KESSINGLAND DAM	R048FLTH020	100.5	9.4	3	80	98.53 %	-35 2
97	HARPERS BK.A6116 RD.BR.	R058FHARP200A	133.6	15.3	2	100	98.58 %	-58 1b
98	PADEBURY BK.TRIB.OUSE B4034 RD.BR.THORNB	R028F02M13	126.7	11.9	3	100	98.78 %	-45 1b
99	R.BRETT B1115 BRIDGE SEMER	R018FBT0164	137.4	15.8	2	100	99.12 %	-62 1b
100	R.CHELMER RICKETTS LOCK	R018FOH0129	129.3	12.1	3	100	99.22 %	-48 1b
101	UPPER WITHAM LITTLE PONTON	R038FWITH170L	138.7	15.9	2	100	99.25 %	-64 1b
102	R.OUSE A5 RD.BR.OLD STRATFORD	R028F03M04	133.1	12.5	3	100	99.61 %	-53 1b
103	R.CAN WARREN BRIDGE	R018FCA03	106.9	10.0	3	80	99.64 %	-42 2
104	WHADDON BK.RD.BR.WHADDON	R028F30M19	81.2	7.6	3	60	99.73 %	-33 3
105	LOWER WITHAM TATTERSHALL BRIDGE	R038FWITH740T	117.7	13.5	2	80	99.74 %	-59 2
106	R.NENE DENFORD	R058FNENE360D	88.5	10.1	2	60	99.75 %	-44 3
107	R.YARE BICKERSTONE BRIDGE	R048FYARD60	137.0	12.8	3	100	99.80 %	-57 1b
108	R.OUSE A422 RD.BR.BRACKLEY	R028F01M04	138.3	12.9	3	100	99.85 %	-59 1b
109	R.OUSE BROWNSHILL STAUNCH	R028F26M06	152.0	17.4	2	100	99.86 %	-80 1b
110	R.GLEN (WEST) LITTLE BYTHAM BRIDGE	R058FGLN200L	156.3	17.9	2	100	99.92 %	-85 1b
111	R.TER GUMFORDS BRIDGE	R018FTE01	143.9	13.5	3	100	99.94 %	-65 1b
112	R.BLACKWATER GREYS MILL	R018FBLO350	144.3	13.5	3	100	99.95 %	-66 1b
113	R.LYNN/STEEPING PARTNEY	R038FLYNN120P	164.5	18.9	2	100	99.97 %	-94 1b
114	R.NENE WARMINGTON	R058FNENE495W	181.2	29.4	1	80	99.97 %	-149 2
115	WILLOW BK.FOTHERINGHAY RD.BR.	R058FWILL170F	186.8	30.3	1	80	99.98 %	-156 2
116	R.BAIN HEMINGEY	R038FBAIN190H	168.4	19.3	2	100	99.98 %	-99 1b
117	R.WID LAHNESS BRIDGE	R018FMD05	89.8	8.4	3	60	99.98 %	-43 3
118	R.COUNE DOES CORNER	R018FCLO7	119.8	11.2	3	80	99.98 %	-57 2
119	R.BLACKWATER CHINA BRIDGE	R018FBLO560	120.3	11.3	3	80	99.98 %	-58 2
120	R.OUSE BRAMPTON MILL	R028F22M04	169.6	19.4	2	100	99.98 %	-101 1b

Appendix 7 (cont): Performance of Rivers against Biological Targets
 Assessment of Compliance with Class Limits (Upgrades)
 Assumption as Appendix 2.

Rank	Name of Site	Code	Mean	Standard Error	Number of Samples	Target BMP Score	Confidence of Compliance	NWC Class	
121	R. COLNE CHAPPEL ROAD	R01BFCL0357	121.1	11.3	3	80	99.99 %	-59	2
122	R. NENE WOLLASTON MILL	R058PNE230W	138.7	15.9	2	80	99.99 %	-84	2
123	R. NENE ORTON STAUNCH	R058PNE6050	140.9	16.1	2	80	99.99 %	-86	2
124	R. WELAND TINMELL MILL	R058PWELL275T	159.8	15.0	3	100	100.00 %	-83	1b
125	R. STOUR HORSESHOE WEIR NAYLAND	R01BFST0402	149.9	17.2	2	80	100.00 %	-97	2
126	R. OUSE RADCLIVE BRIDGE	R028FO1M06	161.5	15.1	3	100	100.00 %	-85	1b
127	R. STOUR STOKE COLLEGE FLOODGATES	R01BFST1002	112.5	12.9	2	80	100.00 %	-73	3
128	R. BLACKWATER WICKHAM MILL BRIDGE	R018FBL0160	141.3	13.2	3	80	100.00 %	-82	2
129	R. STOUR PITMERE RAILWAY BRIDGE	R01BFST0604	172.2	19.7	2	80	100.00 %	-124	2
130	ORINGLE BROOK THUNDER BRIDGE	R038FCRIN100T	224.2	25.7	2	100	100.00 %	-165	1b
131	R. BOX THORINGTON STREET B1068 RD. BR.	R018FBX01	148.6	13.9	3	80	100.00 %	-90	2
132	R. COLNE LEXDEN BRIDGE	R01BFCL0185	155.9	14.6	3	80	100.00 %	-99	2