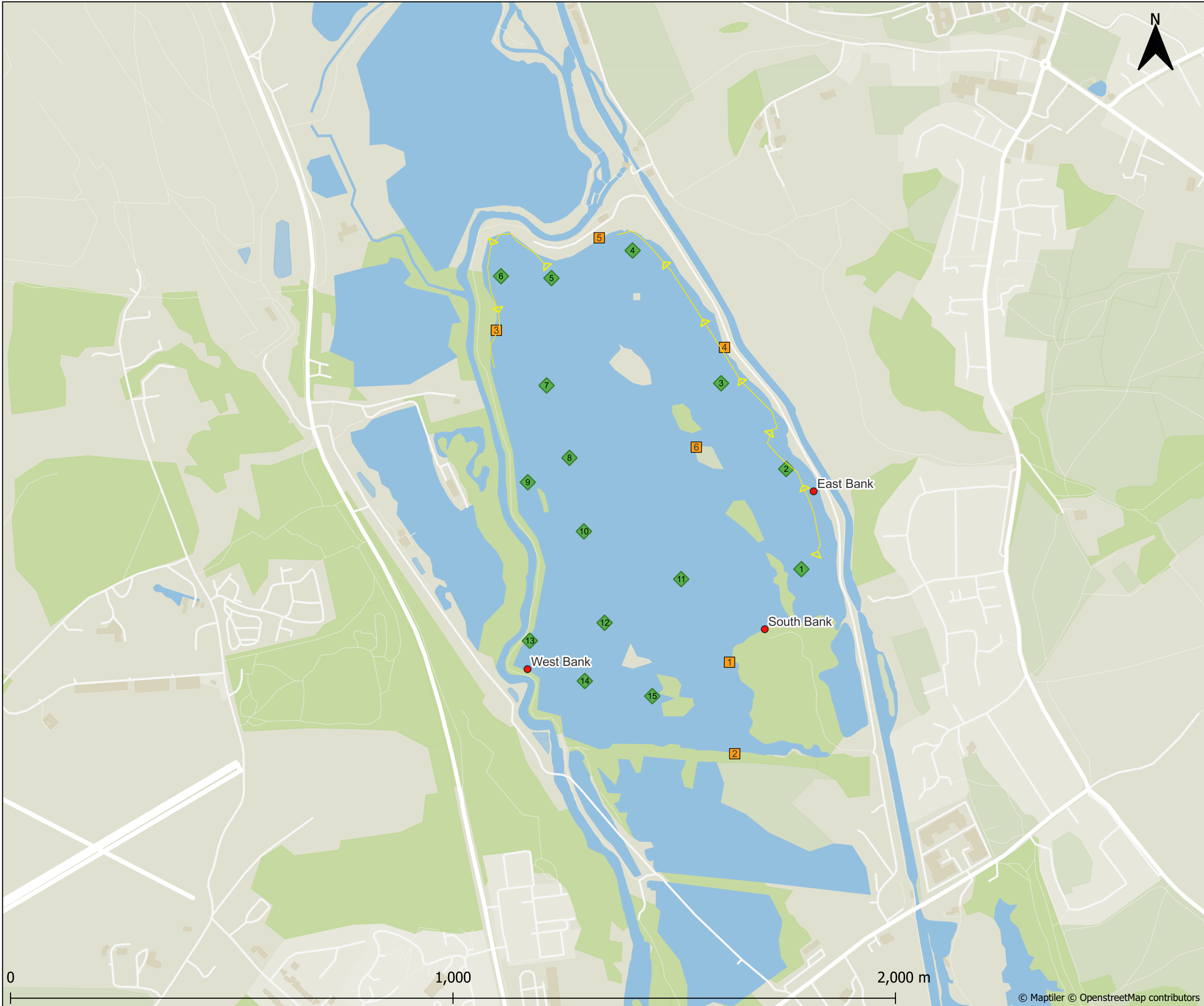




Legend

Electrofishing Route

Fyke Net Location

Macroinvertebrate Sample Location

Seine Net Location

General notes

All dimensions shown are in metres unless otherwise stated and levels in metres to Ordnance Datum

© Five Rivers Ltd all rights reserved 2022

1	29/11/2022	DATA	DH	TE	TE
Ver.	Ver. Date	Status	Drawn	Check'd	Appr'd



Hangar 5A
Thruxton Airfield
Andover
Hampshire
SP11 8PN

Tel: 01722 783041
www.five-rivers.com



7871
ISO 14001:2004

Client



Project

2933 - Broadwater Lake - Fish Assessment

Title

Figure A-1. Broadwater Survey Map

Scale

1:12,634 @ A3

Appendix B. Catch Photos



Figure B-1. Common carp (only one caught).



Figure B-2. Perch (lower size range).



Figure B-3. Perch (middle size range).



Figure B-4. Perch (upper size range).



Figure B-5. Pike (lower size range).



Figure B-6. Pike (middle size range).



Figure B-7. Pike (upper size range).



Figure B-8. 3-Spined stickleback (all were of similar size range).

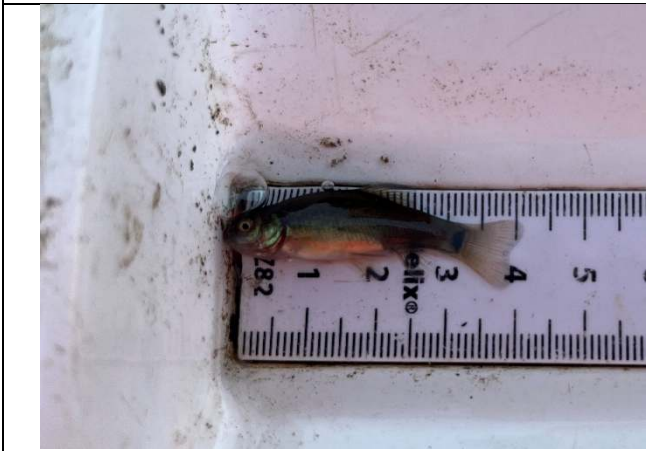


Figure B-9. Tench (lower size range).



Figure B-10. Tench (middle size range).



Figure B-11. Tench (upper size range).



Figure B-12. North American signal crayfish



Figure B-13. North American signal crayfish.

Appendix C. Site Photos



Figure C-1. South bank looking north over Broadwater.



Figure C-2. North bank looking south over Broadwater.



Figure C-3. Seine netting.



Figure C-4. Electric fishing.



Figure C-5. Fyke netting.



Figure C-6. Macro-invertebrate Site – east bank.



Figure C-7. Macro-invertebrate Site – west bank.



Figure C-8. Macro-invertebrate Site – south bank.

Appendix D. Fisheries Data

Table D-1. Water quality parameters recorded each morning before survey.

Date	Conductivity (SPC)	Temperature (°C)	Dissolved Oxygen (%)	Dissolved Oxygen (mg/l)	pH
10/10/2022	487.5	13.8	85.3	8.83	9.28
11/10/2022	466.3	14.5	83.3	8.47	9.22
12/10/2022	489.5	13.1	79.9	8.37	9.29

Table D-2. Electrofishing – Run 1 (TQ 0474389490 to TQ 0427590194). Time = 46 minutes 10/10/2022.

Fish No.	Species	Length (mm)	Estimated Weight (g)
1	PI	730	3,266.01
2	PI	673	2,525.16
3	PI	332	269.90
4	PE	98	12.18
5	PE	92	9.94
6	PE	76	5.36
7	TE	38	0.75
8	TE	127	29.61
9	CC	115	32.61

Table D-3. Electrofishing – Run 2 (TQ 0411590124 to TQ 0400489891). Time = 20 minutes 10/10/2022.

Fish No.	Species	Length (mm)	Estimated Weight (g)
1	TE	171	73.33
2	PE	85	7.70
3	PE	86	7.99
4	PE	103	14.30

Table D-4. Fyke Netting – Details.

Fyke Number	NGR	Water Depth (m)	Soak Time (HH:MM:SS)			Signal Crayfish Caught
			Day 1	Day 2	Total	
1	TQ 04707 89449	2.7	20:21:00	27:20:00	47:41:00	31
2	TQ 04668 89674	2.4	20:30:00	27:15:00	47:45:00	8
3	TQ 04517 89864	3.6	20:30:00	27:13:00	47:43:00	7
4	TQ 04311 90159	3.2	20:38:00	28:30:00	49:08:00	3
5	TQ 04129 90093	3.2	20:39:00	28:48:00	49:27:00	7
6	TQ 04015 90095	2.9	20:17:00	28:47:00	49:04:00	26
7	TQ 04123 89851	4.9	20:18:00	26:38:00	46:56:00	2
8	TQ 04178 89689	3.6	20:38:00	26:25:00	47:03:00	8
9	TQ 04085 89632	2.7	20:31:00	28:23:00	48:54:00	50
10	TQ 04214 89524	3.8	20:34:00	26:54:00	47:28:00	7
11	TQ 04436 89421	2.7	20:16:00	28:20:00	48:36:00	14
12	TQ 04265 89319	2.3	20:18:00	28:20:00	48:38:00	9

Fyke Number	NGR	Water Depth (m)	Soak Time (HH:MM:SS)			Signal Crayfish Caught
			Day 1	Day 2	Total	
13	TQ 04097 89275	2.6	20:16:00	26:36:00	46:52:00	17
14	TQ 04223 89187	3.1	20:14:00	26:27:00	46:41:00	11
15	TQ 04376 89156	2.4	20:18:00	26:33:00	46:51:00	10

Table D-5. Fyke Net – Catch Data.

Fyke Number	Fish No.	Species	Length (mm)	Estimated Weight (g)	Date
1	1	PE	93	10.29	11/10/2022
2	2	PE	103	14.30	11/10/2022
2	3	PE	84	7.41	11/10/2022
2	4	PE	85	7.70	11/10/2022
2	5	PE	113	19.29	11/10/2022
2	6	PE	104	14.76	11/10/2022
2	7	PE	107	16.17	11/10/2022
2	8	PE	100	13.00	11/10/2022
2	9	PE	98	12.18	11/10/2022
2	10	PE	105	15.22	11/10/2022
2	11	PE	107	16.17	11/10/2022
2	12	PE	104	14.76	11/10/2022
2	13	TE	194	107.75	11/10/2022
3	14	PE	122	24.70	11/10/2022
3	15	PE	93	10.29	11/10/2022
3	16	PE	91	9.59	11/10/2022
3	17	PE	94	10.65	11/10/2022
3	18	PE	101	13.43	11/10/2022
3	19	PE	92	9.94	11/10/2022
3	20	PE	103	14.30	11/10/2022
4	21	PE	104	14.76	11/10/2022
4	22	PE	123	25.35	11/10/2022
5	23	PI	251	111.39	11/10/2022
6	24	PE	93	10.29	11/10/2022
6	25	PE	94	10.65	11/10/2022
7	26	PE	109	17.17	11/10/2022
7	27	PE	115	20.41	11/10/2022
7	28	PE	84	7.41	11/10/2022
7	29	PE	124	26.03	11/10/2022
7	30	PE	98	12.18	11/10/2022
7	31	PE	101	13.43	11/10/2022
7	32	PE	95	11.02	11/10/2022
7	33	PE	102	13.86	11/10/2022
7	34	PE	90	9.26	11/10/2022

Fyke Number	Fish No.	Species	Length (mm)	Estimated Weight (g)	Date
7	35	PE	92	9.94	11/10/2022
7	36	PE	95	11.02	11/10/2022
7	37	PE	114	19.84	11/10/2022
7	38	PE	112	18.74	11/10/2022
7	39	PE	211	144.60	11/10/2022
7	40	PE	98	12.18	11/10/2022
7	41	PE	96	11.40	11/10/2022
7	42	PE	122	24.70	11/10/2022
7	43	PE	100	13.00	11/10/2022
7	44	PE	96	11.40	11/10/2022
7	45	PE	100	13.00	11/10/2022
7	46	PE	117	21.58	11/10/2022
7	47	PE	94	10.65	11/10/2022
7	48	PE	89	8.93	11/10/2022
7	49	PE	103	14.30	11/10/2022
7	50	PE	98	12.18	11/10/2022
7	51	PE	105	15.22	11/10/2022
7	52	PE	118	22.18	11/10/2022
7	53	PE	179	85.06	11/10/2022
7	54	PE	122	24.70	11/10/2022
7	55	PE	100	13.00	11/10/2022
7	56	PE	102	13.86	11/10/2022
7	57	PE	98	12.18	11/10/2022
7	58	PE	99	12.59	11/10/2022
7	59	PE	91	9.59	11/10/2022
7	60	PE	97	11.79	11/10/2022
7	61	PE	114	19.84	11/10/2022
7	62	PE	118	22.18	11/10/2022
7	63	PE	81	6.59	11/10/2022
7	64	PE	92	9.94	11/10/2022
7	65	PE	95	11.02	11/10/2022
7	66	PE	93	10.29	11/10/2022
7	67	PE	114	19.84	11/10/2022
7	68	PE	100	13.00	11/10/2022
7	69	PE	107	16.17	11/10/2022
7	70	PE	153	51.27	11/10/2022
7	71	PE	85	7.70	11/10/2022
7	72	PE	111	18.21	11/10/2022
7	73	PE	98	12.18	11/10/2022
7	74	PE	96	11.40	11/10/2022
7	75	PE	96	11.40	11/10/2022
7	76	PE	93	10.29	11/10/2022
7	77	PE	102	13.86	11/10/2022

Fyke Number	Fish No.	Species	Length (mm)	Estimated Weight (g)	Date
7	78	PE	100	13.00	11/10/2022
7	79	PE	97	11.79	11/10/2022
7	80	PE	113	19.29	11/10/2022
7	81	PE	103	14.30	11/10/2022
7	82	PE	106	15.69	11/10/2022
7	83	PE	97	11.79	11/10/2022
7	84	PE	97	11.79	11/10/2022
7	85	PE	158	56.87	11/10/2022
7	86	PE	102	13.86	11/10/2022
7	87	PE	104	14.76	11/10/2022
13	88	PE	101	13.43	11/10/2022
14	89	PE	83	7.13	11/10/2022
14	90	PE	102	13.86	11/10/2022
14	91	PE	98	12.18	11/10/2022
14	92	PE	97	11.79	11/10/2022
14	93	PE	104	14.76	11/10/2022
14	94	PE	96	11.40	11/10/2022
2	95	PE	95	11.02	12/10/2022
3	96	PE	99	12.59	12/10/2022
3	97	PE	93	10.29	12/10/2022
4	98	PE	102	13.86	12/10/2022
4	99	PE	94	10.65	12/10/2022
4	100	PE	94	10.65	12/10/2022
4	101	PE	96	11.40	12/10/2022
4	102	PE	91	9.59	12/10/2022
4	103	PE	92	9.94	12/10/2022
4	104	PE	87	8.30	12/10/2022
4	105	PE	84	7.41	12/10/2022
4	106	PE	106	15.69	12/10/2022
4	107	PE	87	8.30	12/10/2022
4	108	PE	84	7.41	12/10/2022
5	109	TE	185	93.22	12/10/2022
6	110	PE	307	484.81	12/10/2022
6	111	PE	93	10.29	12/10/2022
6	112	PE	113	19.29	12/10/2022
6	113	PE	76	5.36	12/10/2022
6	114	PE	98	12.18	12/10/2022
6	115	PE	86	7.99	12/10/2022
6	116	PE	104	14.76	12/10/2022
6	117	PE	109	17.17	12/10/2022
6	118	PE	94	10.65	12/10/2022
6	119	PE	84	7.41	12/10/2022
6	120	PE	89	8.93	12/10/2022

Fyke Number	Fish No.	Species	Length (mm)	Estimated Weight (g)	Date
6	121	PE	99	12.59	12/10/2022
6	122	PE	88	8.61	12/10/2022
6	123	PE	104	14.76	12/10/2022
6	124	TE	194	107.75	12/10/2022
7	125	PE	171	73.40	12/10/2022
7	126	PE	104	14.76	12/10/2022
7	127	PE	103	14.30	12/10/2022
7	128	PE	102	13.86	12/10/2022
7	129	PE	111	18.21	12/10/2022
7	130	PE	114	19.84	12/10/2022
7	131	PE	108	16.67	12/10/2022
7	132	PE	100	13.00	12/10/2022
7	133	PE	96	11.40	12/10/2022
7	134	PE	107	16.17	12/10/2022
7	135	PE	108	16.67	12/10/2022
7	136	PE	163	62.89	12/10/2022
7	137	PE	94	10.65	12/10/2022
7	138	PE	116	20.99	12/10/2022
7	139	PE	117	21.58	12/10/2022
7	140	PE	117	21.58	12/10/2022
7	141	PE	116	20.99	12/10/2022
7	142	PE	102	13.86	12/10/2022
7	143	PE	103	14.30	12/10/2022
7	144	PE	124	26.03	12/10/2022
7	145	PE	102	13.86	12/10/2022
7	146	PE	103	14.30	12/10/2022
7	147	PE	113	19.29	12/10/2022
7	148	PE	104	14.76	12/10/2022
7	149	PE	97	11.79	12/10/2022
7	150	PE	106	15.69	12/10/2022
7	151	PE	103	14.30	12/10/2022
7	152	PE	98	12.18	12/10/2022
7	153	PE	85	7.70	12/10/2022
7	154	PE	94	10.65	12/10/2022
7	155	PE	102	13.86	12/10/2022
7	156	PE	114	19.84	12/10/2022
7	157	PE	101	13.43	12/10/2022
7	158	PE	98	12.18	12/10/2022
7	159	PE	100	13.00	12/10/2022
7	160	PE	115	20.41	12/10/2022
7	161	PE	110	17.68	12/10/2022
7	162	PE	96	11.40	12/10/2022
7	163	PE	102	13.86	12/10/2022

Fyke Number	Fish No.	Species	Length (mm)	Estimated Weight (g)	Date
7	164	PE	114	19.84	12/10/2022
7	165	PE	96	11.40	12/10/2022
7	166	PE	121	24.05	12/10/2022
7	167	PE	116	20.99	12/10/2022
7	168	PE	87	8.30	12/10/2022
7	169	PE	96	11.40	12/10/2022
7	170	PE	99	12.59	12/10/2022
7	171	PE	107	16.17	12/10/2022
7	172	PE	95	11.02	12/10/2022
7	173	PE	76	5.36	12/10/2022
7	174	PE	106	15.69	12/10/2022
7	175	PE	105	15.22	12/10/2022
7	176	PE	123	25.35	12/10/2022
7	177	PE	94	10.65	12/10/2022
7	178	PE	108	16.67	12/10/2022
7	179	PE	94	10.65	12/10/2022
7	180	PE	93	10.29	12/10/2022
7	181	PE	85	7.70	12/10/2022
7	182	PE	95	11.02	12/10/2022
7	183	PE	97	11.79	12/10/2022
7	184	PE	121	24.05	12/10/2022
7	185	PE	124	26.03	12/10/2022
7	186	PE	103	14.30	12/10/2022
7	187	PE	108	16.67	12/10/2022
7	188	PE	94	10.65	12/10/2022
8	189	PE	97	11.79	12/10/2022
10	190	PE	89	8.93	12/10/2022
14	191	PE	103	14.30	12/10/2022
14	192	PE	94	10.65	12/10/2022
14	193	PE	93	10.29	12/10/2022

Table D-6. Seine Netting – Details.

Seine Number	Date	Time of Deployment	NGR	Signal Crayfish Caught
1	11/10/2022	12:52	TQ 0454989236	12
2	11/10/2022	13:30	TQ 0456589030	10
3	11/10/2022	14:10	TQ 0400789973	10
4	11/10/2022	14:50	TQ 0452389945	12
5	11/10/2022	15:50	TQ 0423590186	11
6	11/10/2022	16:20	TQ 0446489719	1

Table D-7. Seine Netting – Catch Data.

Seine Number	Fish No.	Species	Length (mm)	Estimated Weight (g)
1	1	SP3	32	0.80
1	2	SP3	34	0.90
1	3	SP3	34	0.90
1	4	SP3	36	1.00
1	5	SP3	29	0.66
1	6	SP3	26	0.53
1	7	SP3	38	1.12
1	8	SP3	29	0.66
1	9	SP3	35	0.95
1	10	SP3	30	0.70
2	11	SP3	35	0.95
2	12	SP3	34	0.90
2	13	SP3	20	0.32
2	14	SP3	33	0.85
2	15	SP3	34	0.90
2	16	SP3	36	1.00
2	17	SP3	37	1.06
2	18	TE	58	2.71
2	19	TE	40	0.87
3	20	SP3	31	0.75
3	21	PE	83	7.13
3	22	PE	65	3.24
4	23	SP3	36	1.00
4	24	SP3	32	0.80
4	25	SP3	37	1.06
4	26	SP3	34	0.90
4	27	PE	109	17.17
5	28	SP3	29	0.66
5	29	SP3	31	0.75
5	30	PE	110	17.68
6	31	SP3	34	0.90
6	32	SP3	35	0.95
6	33	SP3	41	1.29
6	34	SP3	36	1.00
6	35	SP3	33	0.85
6	36	SP3	28	0.61
6	37	SP3	34	0.90
6	38	SP3	35	0.95
6	39	PE	69	3.93

Appendix E. Macro-invertebrate Data

Macro-invertebrate Metrics

Community Conservation Index (CCI) & Conservation Score (CS)

The Community Conservation Index (Chadd and Extence, 2004), represents the national rarity and diversity of species within a site and gives a total conservation score to the whole community. Table E-1 shows a guide to specific scores of from the metric.

Table E-1. CCI values.

CCI Score	Conservation Value
<5	Low
5-<10	Moderate
10-<15	Fairly High
15-<20	High
>20	Very High

Conservation Score looks at individual species rareness and is graded from 0 to 10, with definitions of each score shown in Table E-2.

Table E-2. Conservation Score values.

Conservation Score	Classification
10	RDB1 (Endangered)
9	RDB2 (Vulnerable)
8	RDB3 (Rare)
7	Notable (no RDB status)
6	Regionally Notable
5	Local
4	Occasional
3	Frequent
2	Common
1	Very Common

Biological Monitoring Working Party (BMWP), NTAXA and ASPT

Biological Monitoring Working Party (BMWP) is used mainly to assess general water quality and macro-invertebrate tolerance to pollution especially organic waste. This metric uses family level taxa and is scored from 1 to 10. With 1 scoring species most tolerant to pollution and 10 least.

NTAXA (Number of TAXA) is a metric used to help determine the diversity of taxa at family level. It counts the total number of family present within a sample, with the higher the score the higher the diversity.

ASPT (Average Score Per Taxa) is calculated by dividing BMWP by NTAXA to give an average score per taxon. This is used as a general indicator of water quality.

Macro-invertebrate Taxa List

Table E-3. Macro-invertebrate species list.

Family	Species	Abundance		
		South bank	West bank	East bank
Crangonyctidae	<i>Crangonyx pseudogracilis/floridanus</i> agg.	95	65	243
Gammaridae	<i>Dikerogammarus haemobaphes</i>	39	13	24
Sphaeriidae	<i>Euglesa henslowana</i>		14	
Sphaeriidae	<i>Euglesa</i> sp.		15	16
Sphaeriidae	<i>Euglesa subtruncata</i>			2
Sphaeriidae	<i>Sphaerium corneum</i>	3		13
N/A	Cladocera	1		
Dytiscidae	<i>Hyphydrus ovatus</i>	1		
Dytiscidae	<i>Laccophilus hyalinus</i>	4		
Halipidae	<i>Halipus confinis</i>			1
Halipidae	<i>Halipus flavicollis</i>		1	
Hygrobidae	<i>Hygrobia hermanni</i>	1		
Ceratopogonidae	Ceratopogonidae	1	1	1
Chironomidae	Chironomidae		47	30
Chironomidae	Chironomini	84	85	55
Chironomidae	Tanypodinae	18	40	48
Baetidae	<i>Cloeon dipterum</i>		2	13
Ephemeridae	<i>Ephemera</i> sp.		38	
Ephemeridae	<i>Ephemera vulgata</i>	1	16	
Bithyniidae	<i>Bithynia tentaculata</i>	1		
Lymnaeidae	<i>Ampullaceana balthica</i>	1		
Lymnaeidae	<i>Radix auricularia</i>	3		5
Physidae	<i>Physella acuta/heterostropha</i>	162	48	168
Planorbidae	<i>Gyraulus albus</i>	80	30	221
Planorbidae	<i>Gyraulus crista</i>	1		1
Planorbidae	<i>Planorbis carinatus</i>	1		1
Tateidae	<i>Potamopyrgus antipodarum</i>	1	16	31
Valvatidae	<i>Valvata piscinalis</i>			1
Corixidae	<i>Corixa panzeri</i>	5		7
Corixidae	<i>Corixa</i> sp.			13
Corixidae	Corixidae	6		3
Corixidae	<i>Cymatia coleoptrata</i>	1		1
Corixidae	<i>Paracorixa concinna</i>	2		4
Corixidae	<i>Sigara falleni</i>	1		1
Corixidae	<i>Sigara</i> sp.	3		1
Notonectidae	<i>Notonecta viridis</i>	2		
Pleidae	<i>Plea minutissima</i>	3		
Erpobdellidae	<i>Erpobdella octoculata</i>	7		1

Family	Species	Abundance		
		South bank	West bank	East bank
Glossiphoniidae	<i>Alboglossiphonia heteroclita</i>	1		4
Glossiphoniidae	<i>Helobdella stagnalis</i>	27		5
Glossiphoniidae	<i>Theromyzon tessulatum</i>	2		2
Asellidae	<i>Asellus aquaticus</i>	120	2	392
Sialidae	<i>Sialis lutaria</i>	2	8	4
N/A	Ostracoda	40	14	103
Aeshnidae	<i>Anax parthenope</i>	1		
Aeshnidae	<i>Anax sp.</i>	1		
Coenagrionidae	Coenagrionidae	9	5	22
Coenagrionidae	<i>Enallagma cyathigerum</i>	35	2	50
Coenagrionidae	<i>Erythromma najas</i>	7		8
Coenagrionidae	<i>Ischnura elegans</i>	34		12
N/A	Oligochaeta	84	112	53
Ecnomidae	<i>Ecnomus tenellus</i>			1
Leptoceridae	<i>Athripsodes cinereus</i>	1		3
Leptoceridae	<i>Leptocerus lusitanicus</i>		1	
Leptoceridae	<i>Molanna angustata</i>		1	
Leptoceridae	<i>Mystacides longicornis</i>	4	3	3
Dugesiidae	<i>Girardia tigrina</i>	12	5	84
Dugesiidae	<i>Schmidtea lugubris/polychroa</i>	5	2	7

Appendix F. Legislation & Designations

The UK Biodiversity Action Plan

Published in 1994, after the 1992 international Rio de Janeiro “Earth Summit” which called for the development and enforcement of national strategies and action plans to protect threatened species and habitats. This is through identification, conservation and protection of existing biological diversity and enhancing it where possible.

Salmon & Freshwater Fisheries Act

An Act which regulates fisheries in England and Wales. The legislation covers polluting effluents, barriers to fish migration, illegal fishing techniques and times of year for legal fishing.

The Bern Convention & Habitats Directive

The Bern Convention on the Conservation of European Wildlife and Natural Habitats 1979 was a binding international legal instrument aimed to conserve wild flora and fauna and their natural habitats. This was done through increasing co-operation between contracting parties and to regulate the exploitation of migratory species. The Habitats Directive was adopted from this in 1992 and is a means by which European Union meets its obligations to the Bern Convention. The main aims are to promote the maintenance and protection of biodiversity by requiring member states to take measures to maintain or restore natural habitats and protect wild species listed of European importance.

International Union for Conservation of Nature’s (IUCN) Red List

Is the most comprehensive and up to date information source on the global conservation status of plants and animals. The system classifies species according to their extinction risk based on criteria including; population size, rate of decline and population fragmentation. The classification system ranges from Extinct to species of Least Concern and is an easy way to communicate how threatened a species to policy makers and the public.

Wildlife and countryside Act 1981

The primary legislation in Great Britain for the protection of flora, fauna and the countryside. This includes the UK’s domestic implementation of the EU Birds Directive (Directive 2009/147/EC on the Conservation of Wild Birds). The Act protects native species, controls the release of INNS and enhances the protection of Sites of Special Scientific Interest (SSSI).

Water Framework Directive

This was established to protect inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater to achieve Good Ecological Status. Ecological Status has five class which are High, Good, Moderate, Poor and Bad. These designations are based on specific criteria including biological, physico-chemical and hydromorphological parameters. The overall classification is based on the lowest class of all the different assessments.

REFERENCES

- ¹ Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020) *The UK Habitat Classification User Manual Version*
- ² CIEEM (2017); *Guidelines for Preliminary Ecological Appraisal*, 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- ³ BSI (2013); *British Standard 42020:2013: Biodiversity – Code of practice for planning and development*, BSI Standards Publication
- ⁴ MAGIC (2019); *Interactive Map*. (Partnership project involving six government organisations: Defra (Department for Environment, Food and Rural Affairs); English Heritage; Natural England; Environment Agency; Forestry Commission; Department for Communities and Local Government). Available at: www.magic.gov.uk.
- ⁵ CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland*. Version 1.2 updated 2022. Available at: [ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf \(cieem.net\)](https://cieem.net/publications/ecia-guidelines-2018-terrestrial-freshwater-coastal-and-marine-v1.2-april-22-compressed.pdf)
- ⁶ GOV.UK. (2021). *Environment Act 2021*. Available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>
- ⁷ HM Government, (1981); *Part I and Part II of Wildlife and Countryside Act (as amended)*. HMSO
- ⁸ HM Government, (2017); *The Conservation of Habitats and Species Regulations 2017*. Statutory Instrument 2017 no. 490 *Wildlife Countryside*. OPSI
- ⁹ HM Government, (2000); *The Countryside and Rights of Way Act*. HMSO
- ¹⁰ HM Government, (2006); *Natural Environment and Rural Communities Act 2006*. HMSO
- ¹¹ HM Government, (1994); *The Conservation (Natural Habitats, &c.) Regulations*. HMSO
- ¹² CEC (Council of the European Communities), (1992); *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora*
- ¹³ *The European Parliament And Of The Council*, (30 November 2009); *Directive 2009/147/EC On The Conservation Of Wild Birds (Codified Version)*
- ¹⁴ CEC (Council of the European Communities), (1979); *Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 19.IX.1979)*. EC
- ¹⁵ *UK Biodiversity Action Plan (2007). UKBAP Priority Species and Habitats*. <http://www.ukbap.org.uk/newprioritylist.aspx>
- ¹⁶ JNCC and Defra (on behalf of the Four Countries' Biodiversity Group) (2012). *UK Post-2010 Biodiversity Framework*. July 2012. Available from: <http://jncc.defra.gov.uk/page-6189>
- ¹⁷ Defra (2011). *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*
- ¹⁸ *Convention on Biological Diversity (CBD) (2010). Decision X/2 Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets*. Available at <https://www.cbd.int/decision/cop/?id=12268>
- ¹⁹ *European Commission (2012). Our life insurance, our natural capital: an EU biodiversity strategy to 2020 European Parliament resolution of 20 April 2012 on our life insurance, our natural capital: an EU biodiversity strategy to 2020 (2011/2307(INI))*
- ²⁰ HM Government (1992). *Protection of Badgers Act*.
- ²¹ GOV.UK. (2021). *National Planning Policy Framework*. [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- ²² *Greater London Authority (2021) The London Plan: The Spatial Development Strategy for Greater London (GLA)*
- ²³ *Greater London Authority (2018). London Environment Strategy 2018*. London: Greater London Authority.