

Indices Results

Biotic Index							
	<i>Ditch 1</i>	<i>Ditch 2</i>	<i>Ditch 3</i>	<i>Ditch 4</i>	<i>Ditch 5</i>	<i>Ditch 6</i>	<i>Ditch 7</i>
	29/04/2021	29/04/2021	29/04/2021	29/04/2021	29/04/2021	30/04/2021	30/04/2021
Native Invertebrate Species Richness	17	18	15	20	8	7	18
Invertebrate Conservation Status Score (SQI)	1.18	1.11	1.13	1.15			1.06
Invertebrate Habitat Quality Score	1	1	1	1	1	1	1
Invertebrate Community Naturalness	0	0	0	0	0	0	-3

Glossary:

Native Invertebrate Species Richness - Number of native aquatic taxa recorded, based on the check list.

Invertebrate Species Conservation Status Score - Species Quality Index (SQI) – average score per native taxon. **if a sample contains fewer than ten invertebrate taxa the SQI is not calculated.*

Invertebrate Habitat Quality Score - mean of 'grazing marsh fidelity' scores for all the species present

Invertebrate Community Naturalness - The sum of threat scores for introduced species, expressed as a negative score

Family	Taxa Name	Salinity index	Species conservation status	Marsh Fidelity Score	Cons. Status Score	Threat Score
Dytiscidae	Agabus didymus	0	Local	1	2	0
Planorbidae	Anisus vortex	0		1	1	0
Asellidae	Asellus aquaticus	0		1	1	0
Leptoceridae	Athripsodes albifrons group					
Baetidae	Baetis rhodani	0		1	1	0
Bithyniidae	Bithynia tentaculata	0		1	1	0
Caenidae	Caenis luctuosa	0	Local	1	2	0
Calopterygidae	Calopteryx splendens	0		1	1	0
Erpobdellidae	Erpobdella octoculata	0		1	1	0
Gammaridae	Gammarus pulex	0		1	1	0
Glossiphoniidae	Glossiphonia complanata	0		1	1	0
Coenagrionidae	Ischnura elegans	0		1	1	0
Limnephilidae	Limnephilus rhombicus	0		1	1	0
Lymnaeidae	Lymnaea stagnalis	0		1	1	0
Psychomyiidae	Lype reducta					
Sphaeriidae	Pisidium amnicum	0		1	1	0
Sialidae	Sialis lutaria	0		1	1	0
Sphaeriidae	Sphaerium corneum	0		1	1	0
Valvatidae	Valvata piscinalis	0	Local	1	2	0
Veliidae	Velia sp.					

Family	Taxa Name	Salinity index	Species conservation status	Marsh Fidelity Score	Cons. Status Score	Threat Score
Lymnaeidae	Ampullaceana balthica	0	Local	1	1	0
Planorbidae	Anisus vortex	0		1	1	0
Asellidae	Asellus aquaticus	0		1	1	0
Leptoceridae	Athripsodes aterrimus	0		1	1	0
Baetidae	Baetis rhodani	0		1	1	0
Bithyniidae	Bithynia tentaculata	0		1	1	0
Caenidae	Caenis luctuosa	0		1	2	0
Calopterygidae	Calopteryx splendens	0		1	1	0
Erpobdellidae	Erpobdella octoculata	0		1	1	0
Gammaridae	Gammarus pulex	0		1	1	0
Glossiphoniidae	Glossiphonia complanata	0		1	1	0
Coenagrionidae	Ischnura elegans	0		1	1	0
Limnephilidae	Limnephilus rhombicus	0		1	1	0
Lymnaeidae	Lymnaea stagnalis	0		1	1	0
Notonectidae	Notonecta glauca	0		1	1	0
Sialidae	Sialis lutaria	0		1	1	0
Sphaeriidae	Sphaerium corneum	0		1	1	0
Valvatidae	Valvata piscinalis	0	Local	1	2	0

Family	Taxa Name	Salinity index	Species conservation status	Marsh Fidelity Score	Cons. Status Score	Threat Score
Hydrophilidae	Anacaena globulus	0		1	1	0
Planorbidae	Anisus vortex	0		1	1	0
Asellidae	Asellus aquaticus	0		1	1	0
Planorbidae	Bathyomphalus contortus	0	Local	1	2	0
Bithyniidae	Bithynia tentaculata	0		1	1	0
Caenidae	Caenis luctuosa	0	Local	1	2	0
Calopterygidae	Calopteryx splendens	0		1	1	0
Baetidae	Centroptilum luteolum					
Dixidae	Dixa sp.					
Erpobdellidae	Erpobdella octoculata	0		1	1	0
Gammaridae	Gammarus pulex	0		1	1	0
Hydracarina	Hydracarina					
Coenagrionidae	Ischnura elegans	0		1	1	0
Limnephilidae	Limnephilidae					
Limnephilidae	Limnephilus rhombicus	0		1	1	0
Lymnaeidae	Lymnaea stagnalis	0		1	1	0
Sphaeriidae	Pisidium sp.	0		1	1	0
Sialidae	Sialis lutaria	0		1	1	0
Sphaeriidae	Sphaerium corneum	0		1	1	0
Succineidae	Succineidae					

Family	Taxa Name	Salinity index	Species conservation status	Marsh Fidelity Score	Cons. Status Score	Threat Score
Dytiscidae	Agabus paludosus	0	Local	1	2	0
Lymnaeidae	Ampullaceana balthica	0		1	1	0
Asellidae	Asellus aquaticus	0		1	1	0
Baetidae	Baetis rhodani	0		1	1	0
Bithyniidae	Bithynia tentaculata	0		1	1	0
Caenidae	Caenis luctuosa	0	Local	1	2	0
Calopterygidae	Calopteryx splendens	0		1	1	0
Dytiscidae	Dytiscidae					
Erpobdellidae	Erpobdella octoculata	0		1	1	0
Gammaridae	Gammarus pulex	0		1	1	0
Halipidae	Halipus lineatocollis	0		1	1	0
Corixidae	Hesperocorixa linnaei	0		1	1	0
Coenagrionidae	Ischnura elegans	0		1	1	0
Limnephilidae	Limnephilus rhombicus	0		1	1	0
Nepidae	Nepa cinerea	0		1	1	0
Notonectidae	Notonecta glauca	0		1	1	0
Sphaeriidae	Pisidium sp.	0		1	1	0
Planorbidae	Planorbis planorbis	0		1	1	0
Sphaeriidae	Sphaerium corneum	0		1	1	0
Lymnaeidae	Stagnicola palustris	0		1	1	0
Succineidae	Succineidae					
Valvatidae	Valvata piscinalis	0	Local	1	2	0
Veliidae	Velia sp.					

Family	Taxa Name	Salinity index	Species conservation status	Marsh Fidelity Score	Cons. Status Score	Threat Score
Hydrophilidae	Anacaena globulus	0		1	1	0
Asellidae	Asellus aquaticus	0		1	1	0
Dytiscidae	Dytiscidae					
Gammaridae	Gammarus pulex	0		1	1	0
Helophoridae	Helophorus brevipalpis	0		1	1	0
Limnephilidae	Limnephilus rhombicus	0		1	1	0
Lymnaeidae	Lymnaea stagnalis	0		1	1	0
Notonectidae	Notonecta glauca	0		1	1	0
Lymnaeidae	Stagnicola palustris	0		1	1	0

Family	Taxa Name	Salinity index	Species conservation status	Marsh Fidelity Score	Cons. Status Score	Threat Score
Dytiscidae	Agabus paludosus	0	Local	1	2	0
Asellidae	Asellus aquaticus	0		1	1	0
Dytiscidae	Dytiscidae					
Dytiscidae	Dytiscus sp.					
Scirtidae	Elodes sp.					
Gammaridae	Gammarus pulex	0		1	1	0
Hydrophilidae	Laccobius bipunctatus	0		1	1	0
Limnephilidae	Limnephilus rhombicus	0		1	1	0
Ptychopteridae	Ptychoptera sp.	0		1	1	0
Lymnaeidae	Stagnicola palustris	0		1	1	0

Biotic Index	Spring	
	<i>R. Cam U/S Discharge</i>	<i>R. Cam D/S Discharge</i>
	28/04/2021	28/04/2021
BMWP (TL1)	117	92
NTAXA (TL1)	24	21
ASPT (TL1)	4.88	4.38
LIFE (TL5)	6.10	5.82
DEHLI	3.94	3.75
PSI (TL5)	0.00	0.00
CCI (TL5)	7.00	3.75

WHPT (TL2)	104.3	90.3
NTAXA (TL2)	24	23
ASPT (TL2)	4.35	3.93

Glossary:

Ntaxa - Count of BMWP family taxa in the sample

BMWP - Biological Monitoring Working Party score

ASPT - Average score per (BMWP) taxon

WHPT - Whalley-Hawkes-Paisley-Trigg index

DEHLI - Drought Effect of Habitat Loss on Invertebrates

LIFE - Lotic-Invertebrate index for Flow Evaluation (TL5 only)

PSI - Proportion of Sediment-sensitive Invertebrates (TL5 only)

CCI - Community Conservation Index (TL5 only)

TL1 - Taxonomic Level 1 - The 78 "BMWP family" level taxa in RIVPACS IV

TL2 - Taxonomic Level 2 - The 112 "WHPT family" level taxa in RIVPACS IV

TL5 - Taxonomic Level 5 - The 417 "WFD Species" level taxa in RIVPACS IV (including component members of species groups)

Where there are no sediment-sensitive taxa present (A&B groups), a value of '0' is given.

Key:		BMWP Score Category Interpretation		PSI Score Category Interpretation		CCI Score Category Interpretation		DEHLI Index Interpretation	
0 – 10	Very poor	0 - 20	Heavily sedimented	0 - 5	Low conservation value	1	Significant effects associated with the advanced stages of drought 1		
11 – 40	Poor	21 - 40	Sedimented	>5 - 10	Moderate conservation value				
41 – 70	Moderate	41 - 60	Moderately sedimented	>10 - 15	Fairly high conservation value				
71 – 100	Good	61 - 80	Slightly sedimented	>15 - 20	High conservation value	10	No evidence of an ecological drought effect		
> 100	Very good	81 - 100	Minimally sedimented	>20	Very high conservation value				

TAXA LIST

R. Cam U/S
Discharge
28/04/2021

R. Cam D/S
Discharge
28/04/2021

Family	Taxa Name	CS	Abundance	Abundance
Acroloxidae	<i>Acroloxus lacustris</i>	2	1	1
Planorbidae	<i>Anisus vortex</i>	1	1	4
Unionidae	<i>Anodonta anatina</i>	2	1	
Asellidae	<i>Asellus aquaticus</i>	1	10	49
Bithyniidae	<i>Bithynia tentaculata</i>	1	8	19
Caenidae	<i>Caenis luctuosa</i>	1		5
Caenidae	<i>Caenis rivulorum</i>	1	2	1
Chironomidae	<i>Chironomidae</i>	n/a	70	52
Baetidae	<i>Cloeon dipterum</i>	1	22	20
Corixidae	<i>Corixidae</i>	n/a		8
Crangonyctidae	<i>Crangonyx pseudogracilis/floridanus agg.</i>	n/a	28	150
Gammaridae	<i>Dikerogammarus haemobaphes</i>	n/a		1
Erpobdellidae	<i>Erpobdella octoculata</i>	1		1
Glossiphoniidae	<i>Glossiphonia complanata</i>	1		2
Planorbidae	<i>Gyraulus albus</i>	1	2	2
Halipidae	<i>Halipus ruficollis group</i>	n/a		1
Limoniidae	<i>Helius sp.</i>	n/a	1	
Hydroptilidae	<i>Hydroptila sp.</i>	n/a	1	1
Coenagrionidae	<i>Ischnura elegans</i>	1	4	3
Limnephilidae	<i>Limnephilus rhombicus</i>	3		2
Lymnaeidae	<i>Lymnaea stagnalis</i>	1	1	1
Molannidae	<i>Molanna angustata</i>	2	1	
Leptoceridae	<i>Mystacides longicornis/nigra</i>	n/a	2	2
Noteridae	<i>Noterus clavicornis</i>	2	1	
Notonectidae	<i>Notonecta glauca</i>	1	1	
N/A	<i>Oligochaeta</i>	n/a	3	46
N/A	<i>Ostracoda</i>	n/a		17
Physidae	<i>Physidae</i>	n/a		2
Sphaeriidae	<i>Pisidium amnicum</i>	2	3	
Sphaeriidae	<i>Pisidium henslowanum</i>	2		1
Sphaeriidae	<i>Pisidium sp.</i>	n/a	10	7
Sphaeriidae	<i>Pisidium subtruncatum</i>	1		30
Planorbidae	<i>Planorbis carinatus</i>	1		1
Hydrobiidae	<i>Potamopyrgus antipodarum</i>	n/a		2
Lymnaeidae	<i>Radix auricularia</i>	2	1	1
Scirtidae	<i>Scirtidae</i>	n/a	1	
Sialidae	<i>Sialis lutaria</i>	1	6	
Corixidae	<i>Sigara distincta/falleni</i>	n/a		1
Corixidae	<i>Sigara dorsalis</i>	1	3	6
Sphaeriidae	<i>Sphaerium corneum</i>	1	3	10
Sphaeriidae	<i>Sphaerium sp.</i>	n/a		5
Succineidae	<i>Succineidae</i>	n/a		1
Valvatidae	<i>Valvata piscinalis</i>	1	5	50
Viviparidae	<i>Viviparus viviparus</i>	3	1	