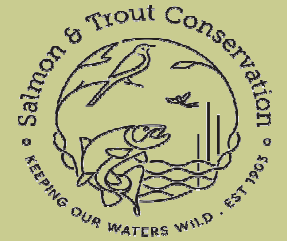


SmartRivers Benchmark Report

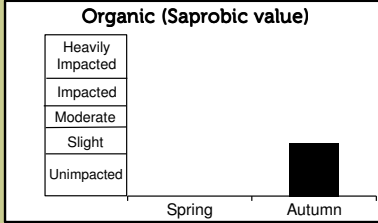
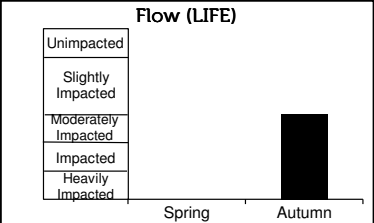
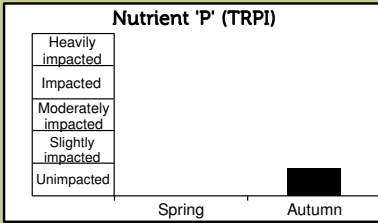
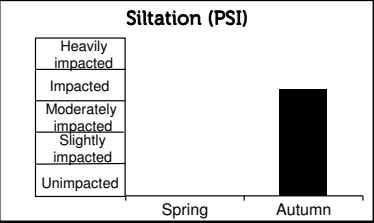
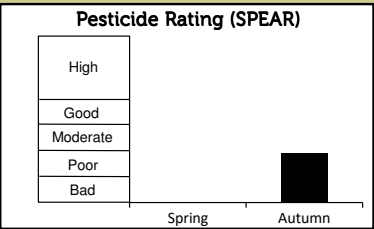


Species	Spring	Autumn
Beetles & Bugs		
<i>Oulimnius tuberculatus</i>		14
<i>Elmis aenea</i>		9
<i>Limnius volckmari</i>		6
Caddisflies		
<i>Hydropsyche siltalai</i>		9
<i>Hydropsyche pellucidula</i>		7
<i>Athripsodes cinereus</i>		6
<i>Mystacides azurea</i>		3
<i>Limnephilus</i>		1
<i>Polycentropus flavomaculatus</i>		5
Crustaceans		
<i>Asellus aquaticus</i>		3
<i>Crangonyx pseudogracilis</i>		5
Mayflies		
<i>Baetis rhodani/atlancticus</i>		1
<i>Ephemera danica</i>		1
Molluscs		
<i>Potamopyrgus antipodarum</i>		8
<i>Radix balthica</i>		13
<i>Theodoxus fluviatilis</i>		1
<i>Planorbis</i>		7
<i>Gyraulus albus</i>		1
<i>Sphaerium</i>		15
Stoneflies		
<i>Nemoura avicularis</i>		1
True Flies		
<i>Tanytarsini</i>		43
<i>Orthocladiinae</i>		26
<i>Simulium</i>		14
Worms		
<i>Oligochaeta</i>		23

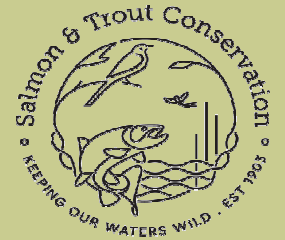
Species	Spring	Autumn
---------	--------	--------

River Chew
Spring 2020
Autumn 2019 - 21st November 2019
Site 5 - Dapps Bridge
Grid Reference - ST 65700 68036
Organisation

	Spring	Autumn
BMWP		90
ASPT		5.00
WHPT		93.2
WHPT ASPT		5.18
Number of Taxa		18
Riverfly - species		9
Riverfly - numbers		34
CCI		4.88
LIFE		7.00
PSI		32.43
SPEAR		20.94
TRPI		83.33
Saprobic		1.98



SmartRivers Benchmark Report



River Chew
Site 5 - Dapps Bridge
Grid Reference - ST 65700 68036
Organisation

Spring ****		
Date		
Boulder		%
Cobble/pebble		%
Gravel		%
Sand		%
Sediment		%

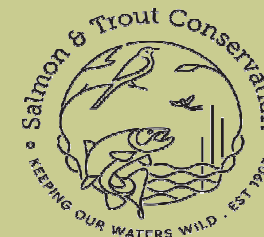
Autumn 2019		
21st November 2019		
Boulder		%
Cobble/pebble	45	%
Gravel	20	%
Sand	20	%
Sediment	15	%



Some, possibly connected, pesticide and fine sediment impact evident from aquatic faunal community. Borderline flow stress but not impacted.

SmartRivers Benchmark Report

Glossary



Metric	Name/Meaning	Measures	Healthy rating
BMWP	B iological M onitoring W orking P arty score	Scores, mostly at family level, invertebrate sensitivity to organic pollution. Looks at invertebrate presence but not abundance.	≥71
ASPT	A verage S core P er T axa	Calculated by dividing the BMWP score by the Number of Taxa (Ntaxa)	≥6
WHPT	W alley H awkes P aisley T rigg index	As BMWP but using a greater number of Taxa (families)	Requires RIVPACS O:E (observed to expected) for a particular watercourse
WHPT ASPT	W alley H awkes P aisley T rigg A verage S core P er T axa	Calculated by dividing the WHPT score by the Number of Taxa (Ntaxa)	
Number of Taxa	(or NTaxa)	The number of individual species	≥35
Riverfly - species	Mayfly, stonefly and caddisfly species	The number of riverfly species	≥20
Riverfly - numbers	Total mayfly, stonefly and caddisfly	The number of individual riverflies	N/A
CCI	C ommunity C onservation I ndex	The community richness and relative rarity of its species	≥15
LIFE	L otic I nvertebrate F low E valuation	Indicates the flow velocity	≥7
PSI	P roportion of S ediment-sensitive I nvertebrates	Indicates the level of sedimentation	61-100
SPEAR	S pecies A t R isk	Indicates the level of pesticides, herbicides and complex chemicals	≥33
TRPI	T otal R eactive P hosphorus I ndex	The level of nutrient enrichment	61-100
Saprobic	Organic enrichment	The amount of degradable organic material	2.29-1.0