Marine and Freshwater Research, 2020, **71**, 107–116
https://doi.org/10.1071/MF19034

Supplementary material

Spatiotemporal ichthyofaunal dynamics in a permanently open estuary, Otago, New Zealand

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Table S1. Summary of similarity-percentage analysis (SIMPER) conducted on the Bray–Curtis similarity matrix constructed from log(*x*+1)-transformed biological data

Differences in average abundances (i.e. log(*x*+1) of number of individuals of a species per seine haul) of species that contributed to the dissimilarities among upper, middle and lower reaches of the Waikouaiti Estuary. Differences between reaches are indicated in < and > signs. A cut-off value of 70% contribution to dissimilarity was used

Species	Upper		Middle		Lower
Forsterygion nigripenne	0.04	<	4.11	>	0.88
Aldrichetta forsteri	0.00	<	1.30	>	0.74
Gobiomorphus cotidianus	2.16	>	0.84	>	0.07
Galaxias maculatus	1.09	>			0.00

Table S2. Summary of similarity-percentage analysis (SIMPER) on the Bray–Curtis similarity matrix constructed from log(*x*+1)-transformed biological data

Differences in average abundances (i.e. log(*x*+1) of number of individuals of a species per seine haul) of species that contributed to the dissimilarities between spring, summer, autumn and winter seasons in the Waikouaiti Estuary. Differences among seasons are indicated in < and > signs. A cut-off value of 70% contribution to dissimilarity was used

Species	Spring		Summer		Autumn		Winter
Forsterygion nigripenne	0.97	<	2.00	<	2.03	>	1.90
Aldrichetta forsteri	0.85	<	1.51	>	0.33	>	0.04
Gobiomorphus cotidianus	1.51	>	0.71	<	1.26	>	0.42
Galaxias maculatus	0.30	<	1.66	>	0.24	>	0.05
Retropinna retropinna	0.14	<	1.08	>	0.35	>	0.10
Galaxiid sp.	0.64	>	0.00		0.00	<	0.29
Rhombosolea retiaria	0.19				0.17	<	0.22
Diplocrepis puniceus					0.00	<	0.19

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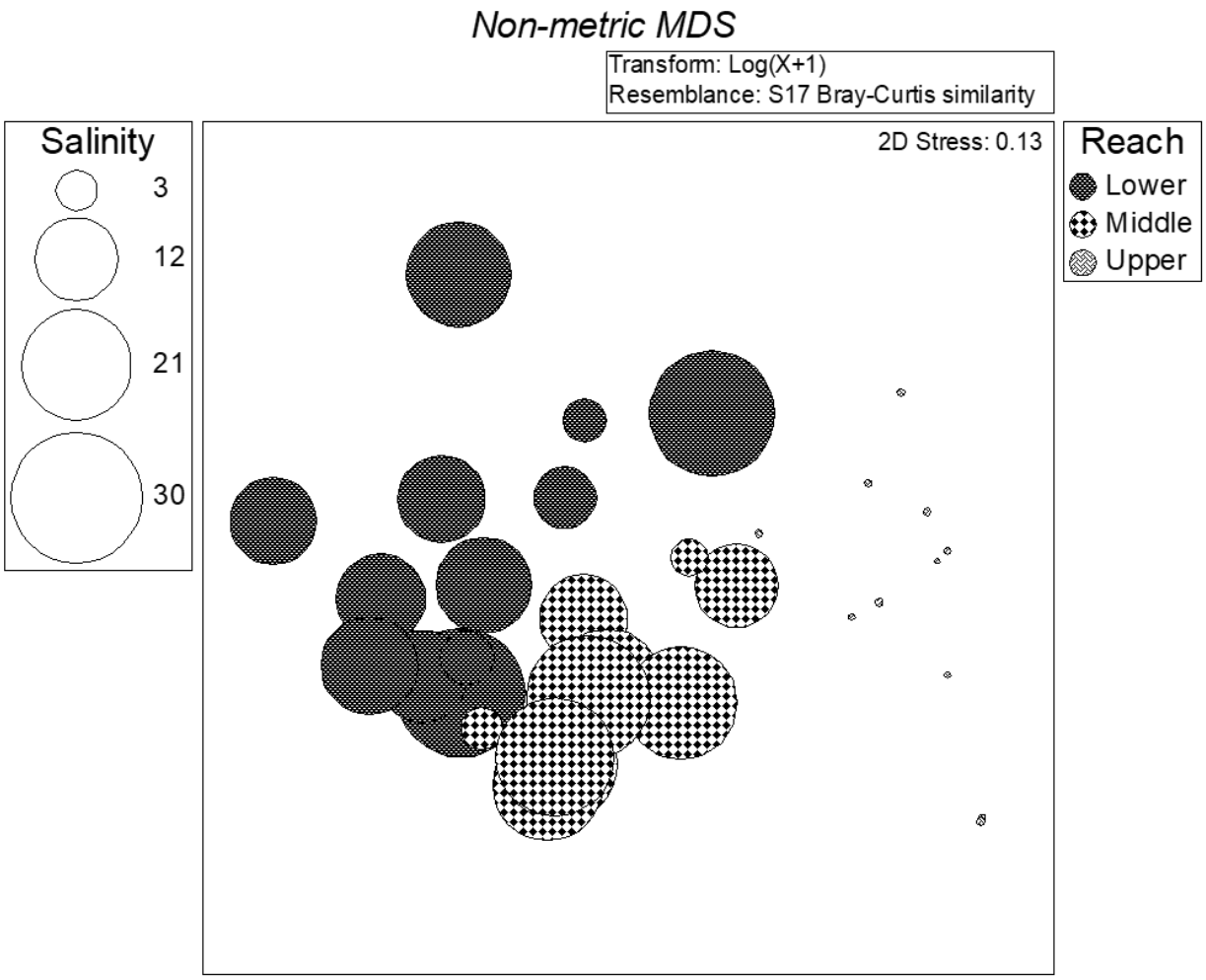

Fig. S1. Ordination by non-metric multidimensional scaling (nMDS) of samples based on Bray–Curtis similarities calculated from log(x+1)-transformed biological data. Bubbles indicate salinity measurements superimposed on the nMDS plot. Symbols are labelled to highlight differences among upper, middle and lower reaches of the Waikouaiti Estuary.

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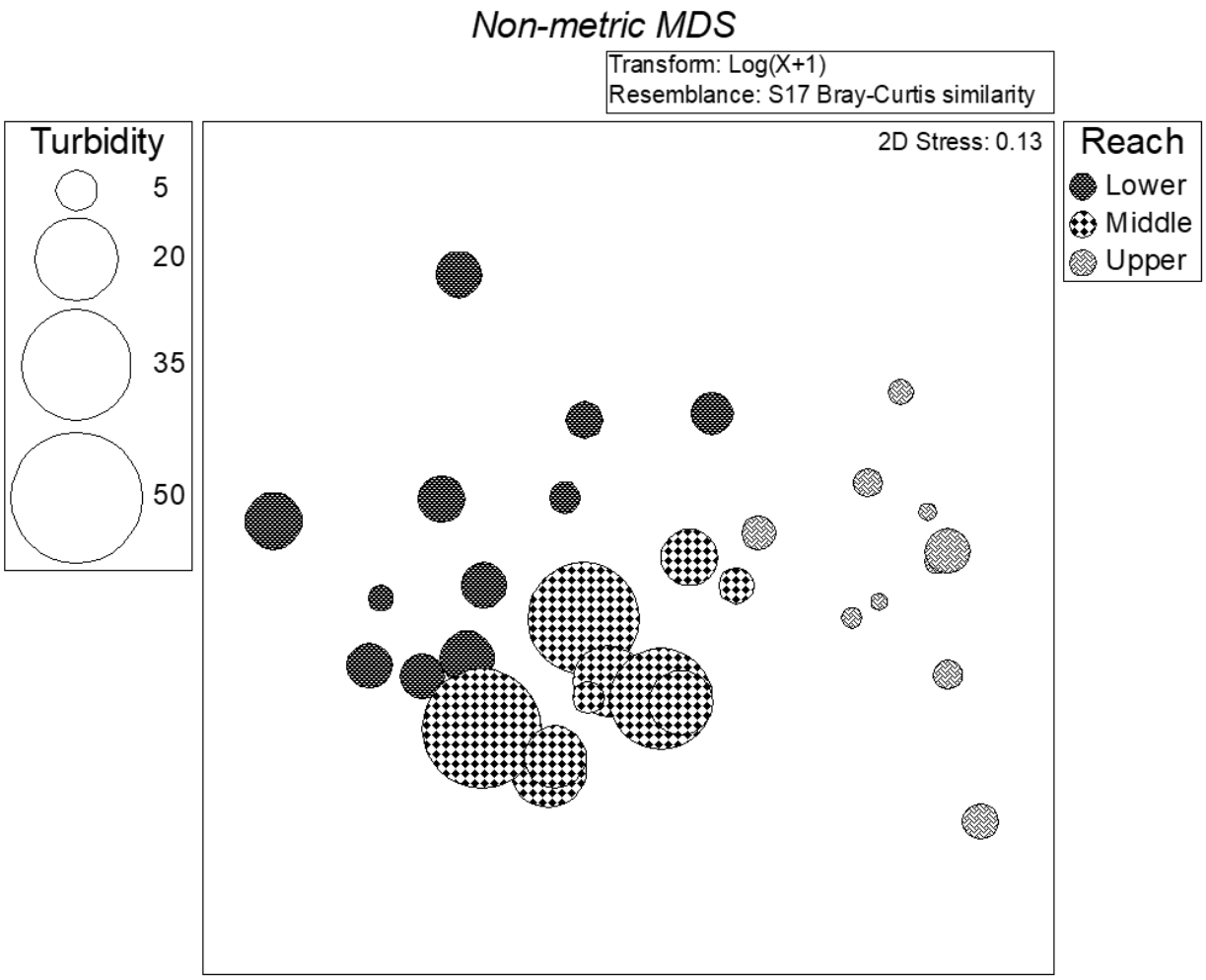

Fig. S2. Ordination by non-metric multidimensional scaling (nMDS) of samples based on Bray–Curtis similarities calculated from log(x+1)-transformed biological data. Bubbles indicate turbidity (NTU) measurements superimposed on the nMDS plot. Symbols are labelled to highlight differences among upper, middle and lower reaches of the Waikouaiti Estuary.