

**SUPPLEMENTARY INFORMATION**

**Figure S1.** Presence/absence heatmap of aquatic macroinvertebrate families across sampling sites in the Quípar stream. Numbers at the bottom indicate the total family richness recorded at each sampling site. *Mapa de calor de presencia/ausencia de las familias de macroinvertebrados acuáticos en los puntos de muestreo del río Quípar. Los números situados en la parte inferior indican la riqueza total de familias registrada en cada punto de muestreo.*



**Table S1.** IBMWP reference value and Ecological Quality Ratio (EQR) cut-off points for determining ecological status class. Each ecological status class is highlighted with the colour associated with that typology; blue (high), green (good), yellow (moderate), orange (poor) and red (bad). *Valor de referencia del índice IBMWP y puntos de corte de la Relación de Calidad Ecológica (EQR) para la determinación de la clase de estado ecológico. Cada clase de estado ecológico está resaltada con el color asociado a esa tipología; azul (muy bueno), verde (bueno), amarillo (moderado), naranja (deficiente) y rojo (malo).*

Study area	Reference value	Cut-off thresholds among the EQR categories the EQR categories				
		High	Good	Moderate	Poor	Bad
Quípar stream	189	1-0.84	0.84-0.51	0.51-0.30	0.30-0.13	0.13-0

**Table S2.** List of families of aquatic macroinvertebrates in the Quípar stream. *Lista de familias de macroinvertebrados acuáticos en el río Quípar.*

- Platyhelminthes
- 1 Family PLANARIDAE
- Annelida
- 2 Family ERPOBDELLIDAE
- 3 Family LUMBRICIDAE
- Mollusca
- 4 Family HYDROBIIDAE
- 5 Family PHYSIDAE
- 6 Family TATEIDAE
- Crustacea
- 7 Ostracoda
- 8 Amphipoda
- 9 Family GAMMARIDAE
- Decapoda
- 10 Family ATYIDAE
- Insecta
- Orden Ephemeroptera
- 11 Family BAETIDAE
- 12 Family CAENIDAE
- 13 Family HEPTAGENIIDAE
- Orden Odonata
- 14 Family AESHNIDAE
- 15 Family CALOPTERYGIDAE
- 16 Family COENAGRIONIDAE
- 17 Family GOMPHIDAE
- 18 Family LIBELLULIDAE
- Orden Plecoptera
- 19 Family NEUMORIDAE
- Orden Trichoptera
- 20 Family HYDROPSYCHIDAE
- 21 Family HYDROPTILIDAE
- 22 Family LIMNEPHILIDAE
- 23 Family RHYACOPHILIDAE
- Orden Diptera
- 24 Family ATHERICIDAE
- 25 Family CERATOPOGONIDAE
- 26 Family CHIRONOMIDAE
- 27 Family DIXIDAE
- 28 Family EPHYDRIDAE
- 29 Family LIMONIIDAE
- 30 Family SIMULIIDAE

- 31 Family TABANIDAE
- 32 Family TIPULIDAE
  - Orden Hemiptera
- 33 Family CORIXIDAE
- 34 Family GERRIDAE
- 35 Family HEBRIDAE
- 36 Family HYDROMETRIDAE
- 37 Family MICRONECTIDAE
- 38 Family NEPIDAE
- 39 Family NOTONECTIDAE
- 40 Family PLEIDAE
- 41 Family VELLIDAE
  - Orden Coleoptera
- 42 Family DRYOPIDAE
- 43 Family DYTISCIDAE
- 44 Family ELMIDAE
- 45 Family GYRINIDAE
- 46 Family HYDRAENIDAE
- 47 Family HYDROCHIDAE
- 48 Family HYDROPHILIDAE

**Table S3.** Results of the environmental fitting (*envfit*) of abiotic variables onto the NMDS ordination based on Bray–Curtis dissimilarities. Vector loadings on the first two NMDS axes, the squared correlation coefficient ( $r^2$ ), and permutation-derived p-values are shown. *Resultados del ajuste ambiental (envfit, 999 permutaciones) de las variables abióticas sobre la ordenación NMDS basada en disimilitudes de Bray–Curtis. Se muestran los vectores de carga en los dos primeros ejes del NMDS, el coeficiente de determinación ( $r^2$ ) y los valores de significancia obtenidos.*

<b>Variable</b>	<b>NMDS1</b>	<b>NMDS2</b>	<b><math>r^2</math></b>	<b>p-valor</b>
Salinity	0.93	0.35	0.37	0.39
Conductivity	0.92	0.38	0.38	0.37
Temperature	-0.72	0.69	0.21	0.59
Altitude	-0.88	-0.46	0.39	0.33