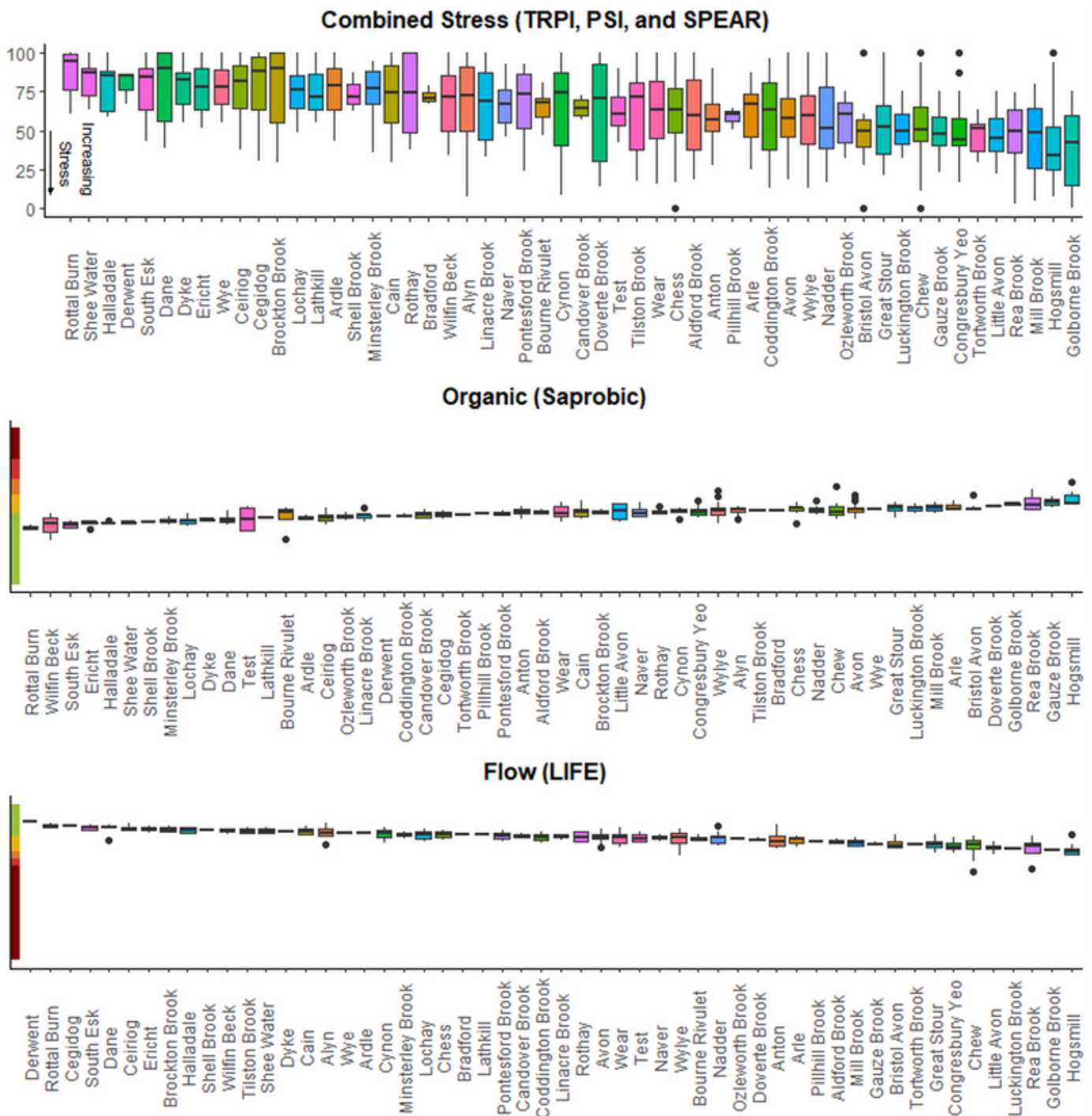


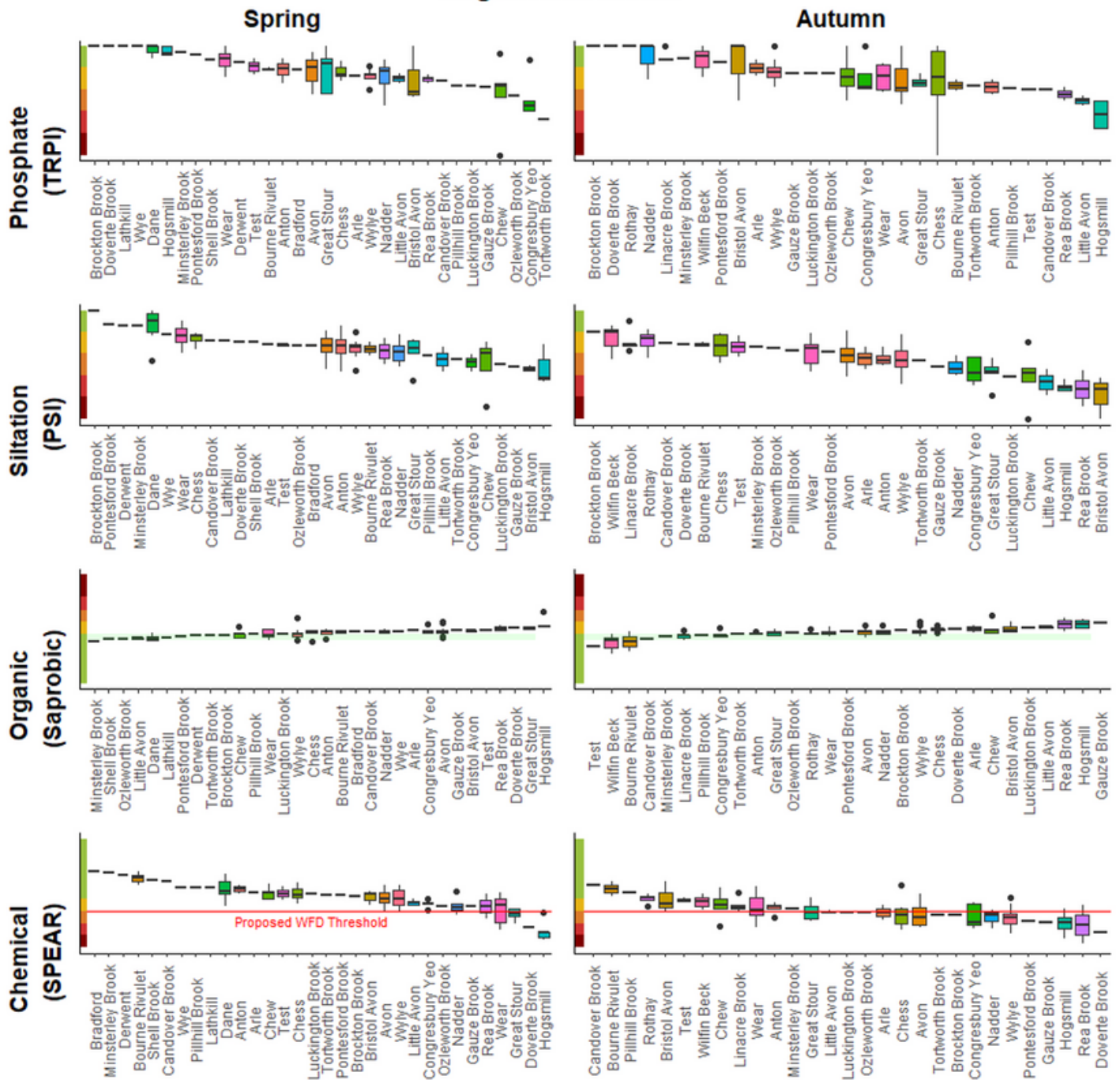
# SmartRivers 2022 data update

## Appendix - Water quality stress

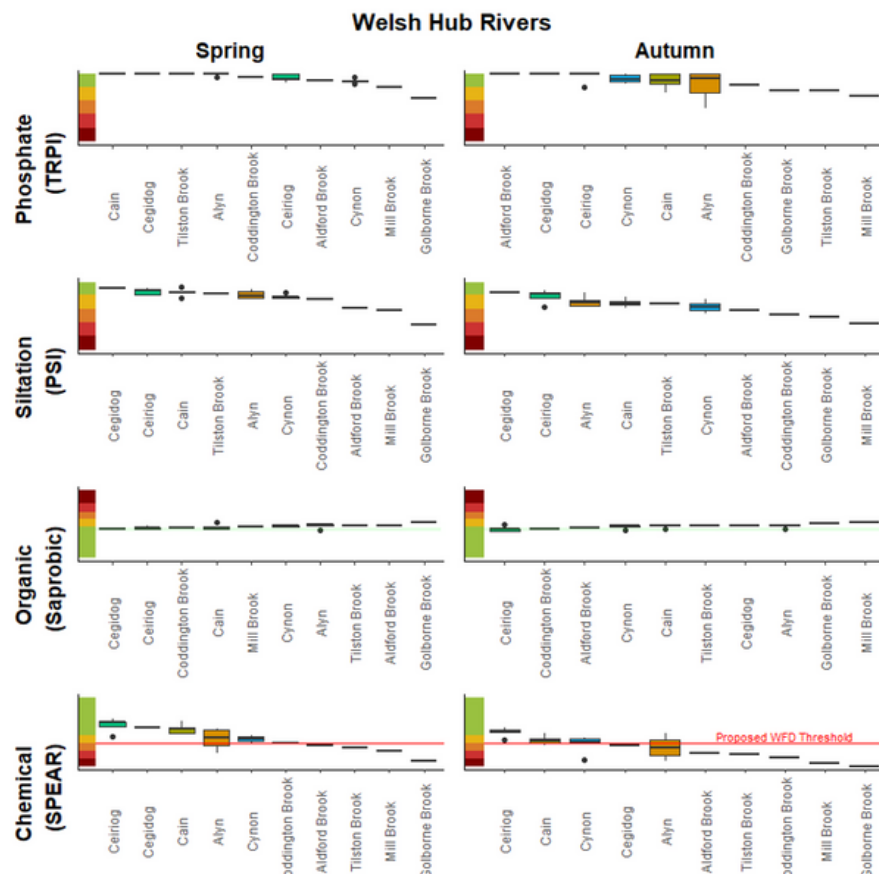


Appendix 1: All SmartRivers monitored rivers (England, Wales and Scotland) ranked by 1. Combined phosphorus, sediment and chemical stress 2. Organic enrichment stress. 3. Flow stress indicated by their invertebrate communities. Worst performing sites are on the right hand side.

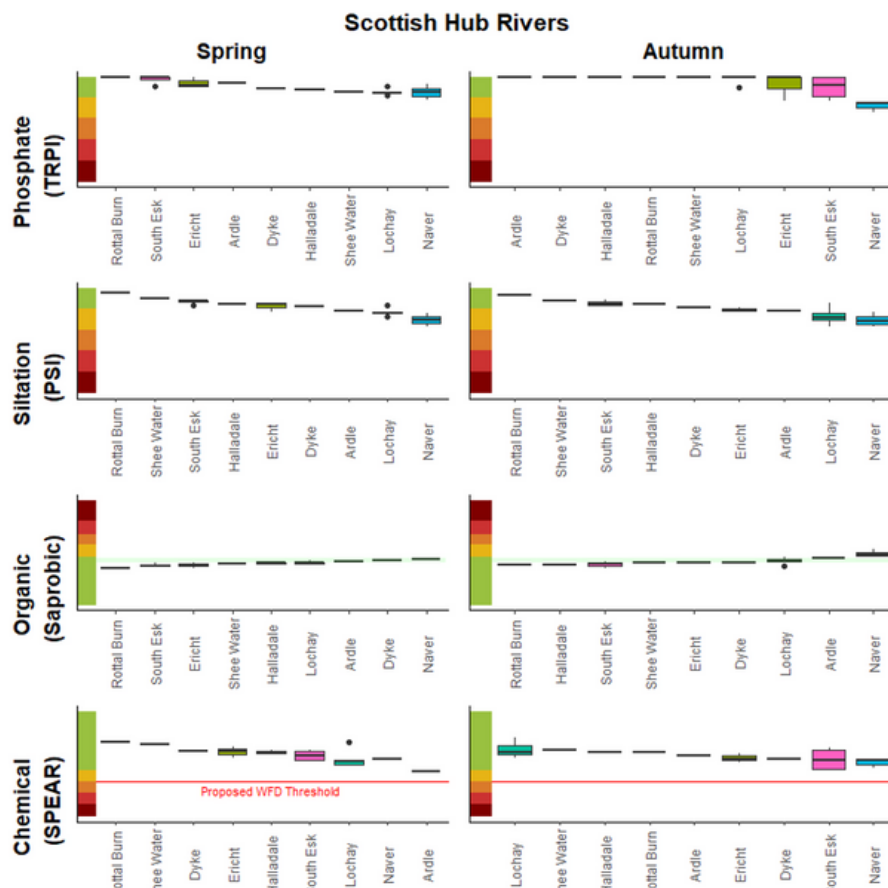
## English Hub Rivers



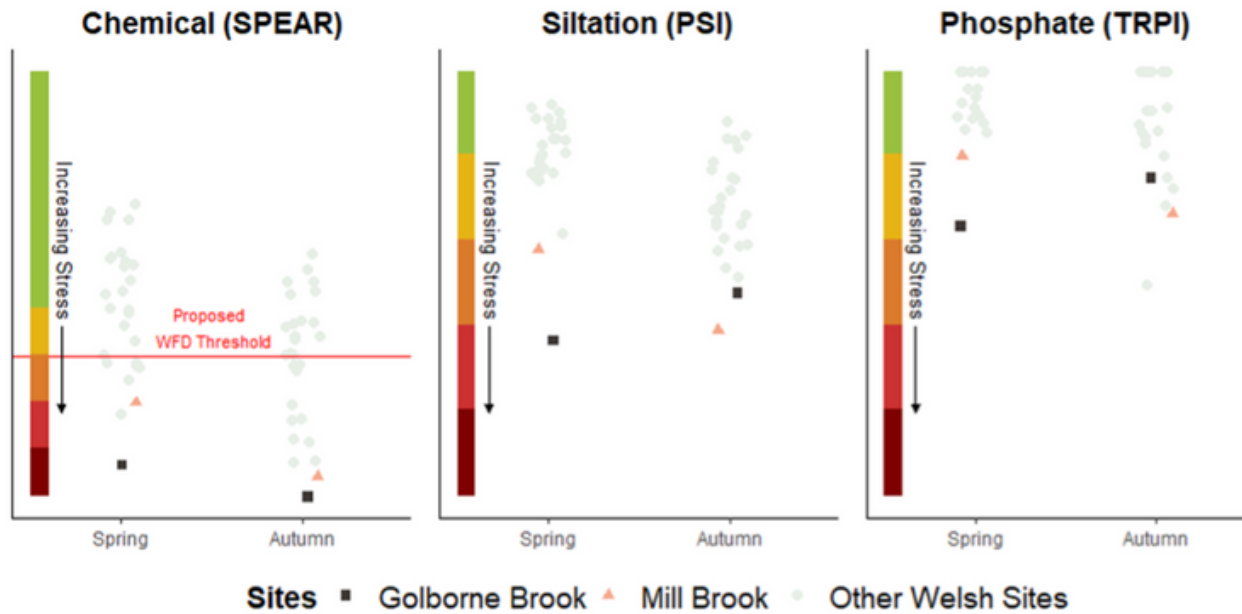
Appendix 2: English hub rivers ranked by stress indicated by their invertebrate communities. Worst performing sites are on the right hand side.



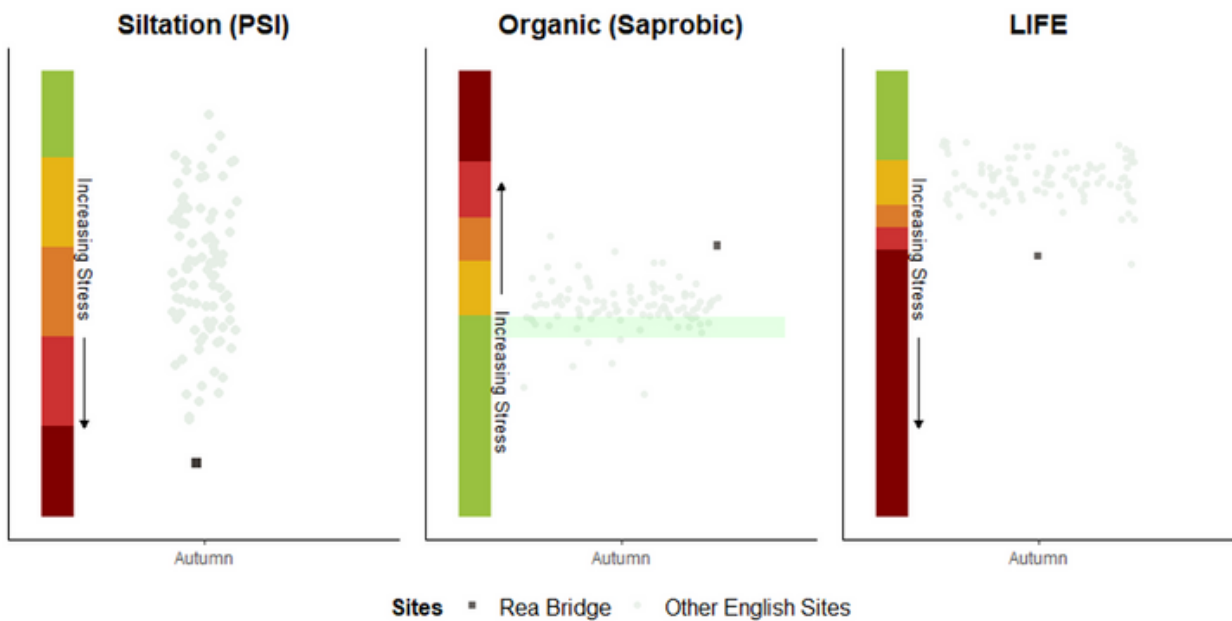
Appendix 3: Welsh hub rivers ranked by stress indicated by their invertebrate communities. Worst performing sites are on the right hand side.



Appendix 4: Scottish hub rivers ranked by stress indicated by their invertebrate communities. Worst performing sites are on the right hand side.



Appendix 5: Graphs showing stress indicated by the invertebrate community from chemical, sediment and phosphorus pollution at Golborne and Mill Brook, compared to the other monitored sites in Wales.

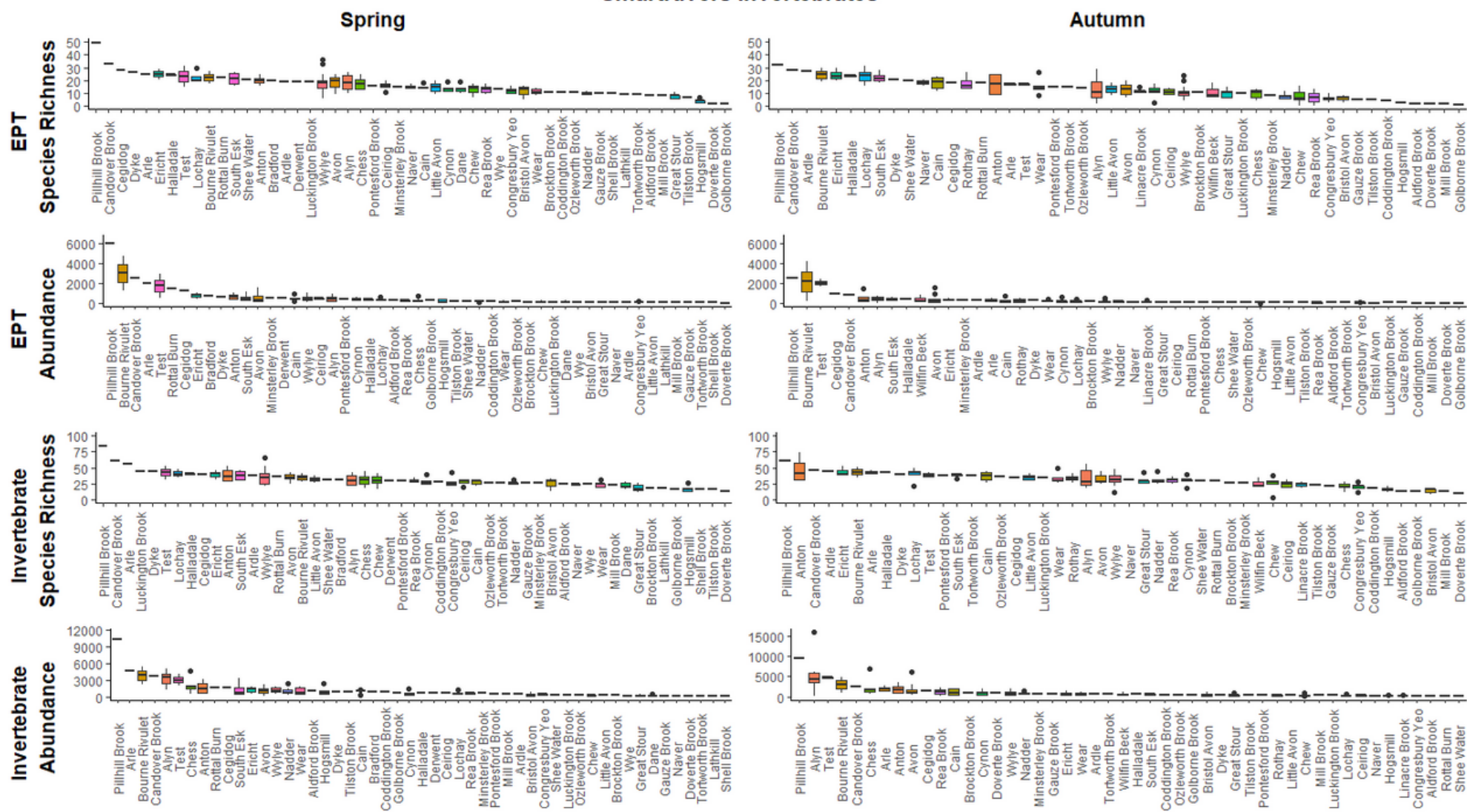


Appendix 6: Graphs showing sediment, organic and flow stress exhibited by the invertebrate community at Rea Bridge in autumn 2022 compared to other English sites.



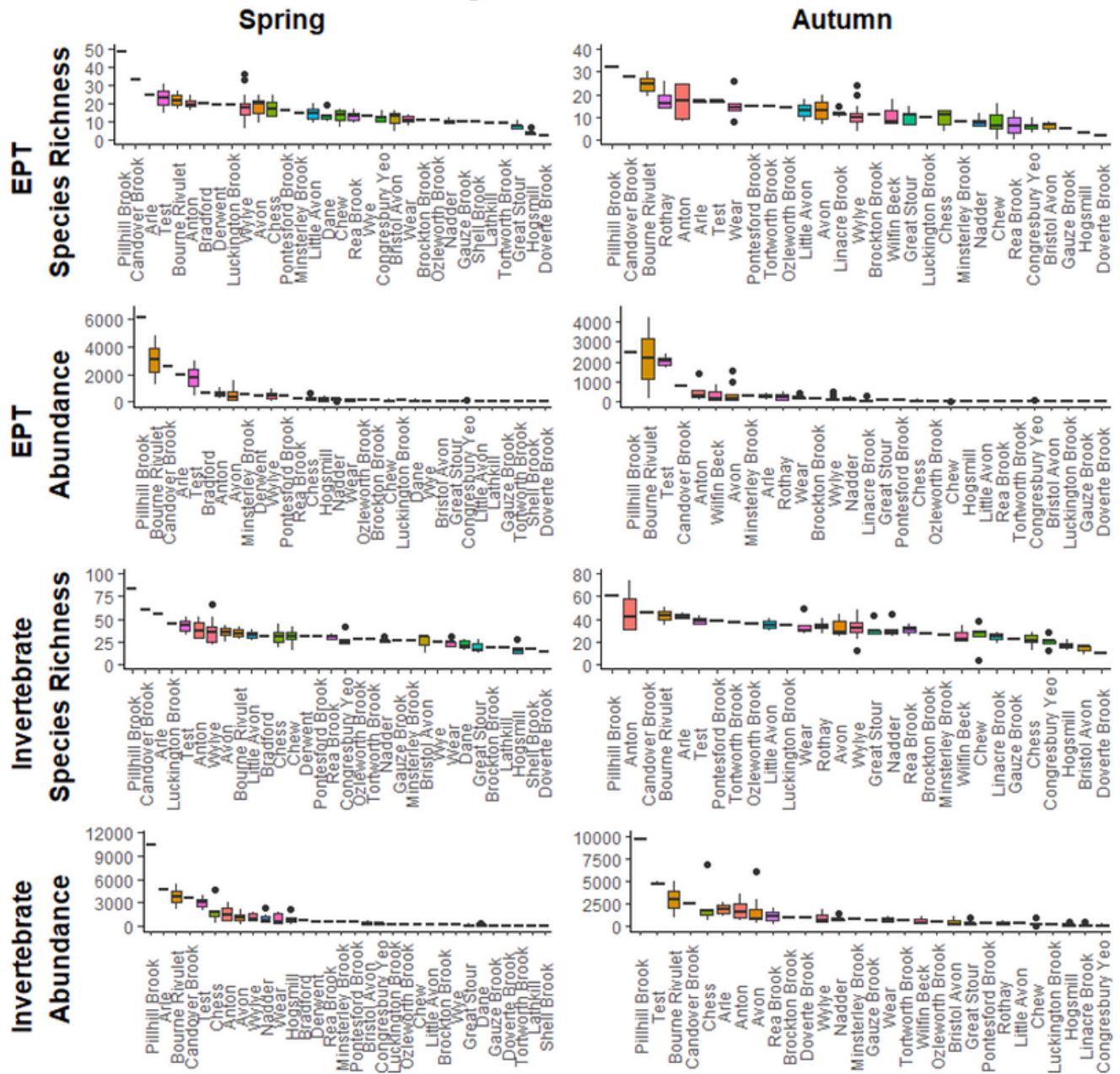
## Appendix - Invertebrates

## SmartRivers Invertebrates

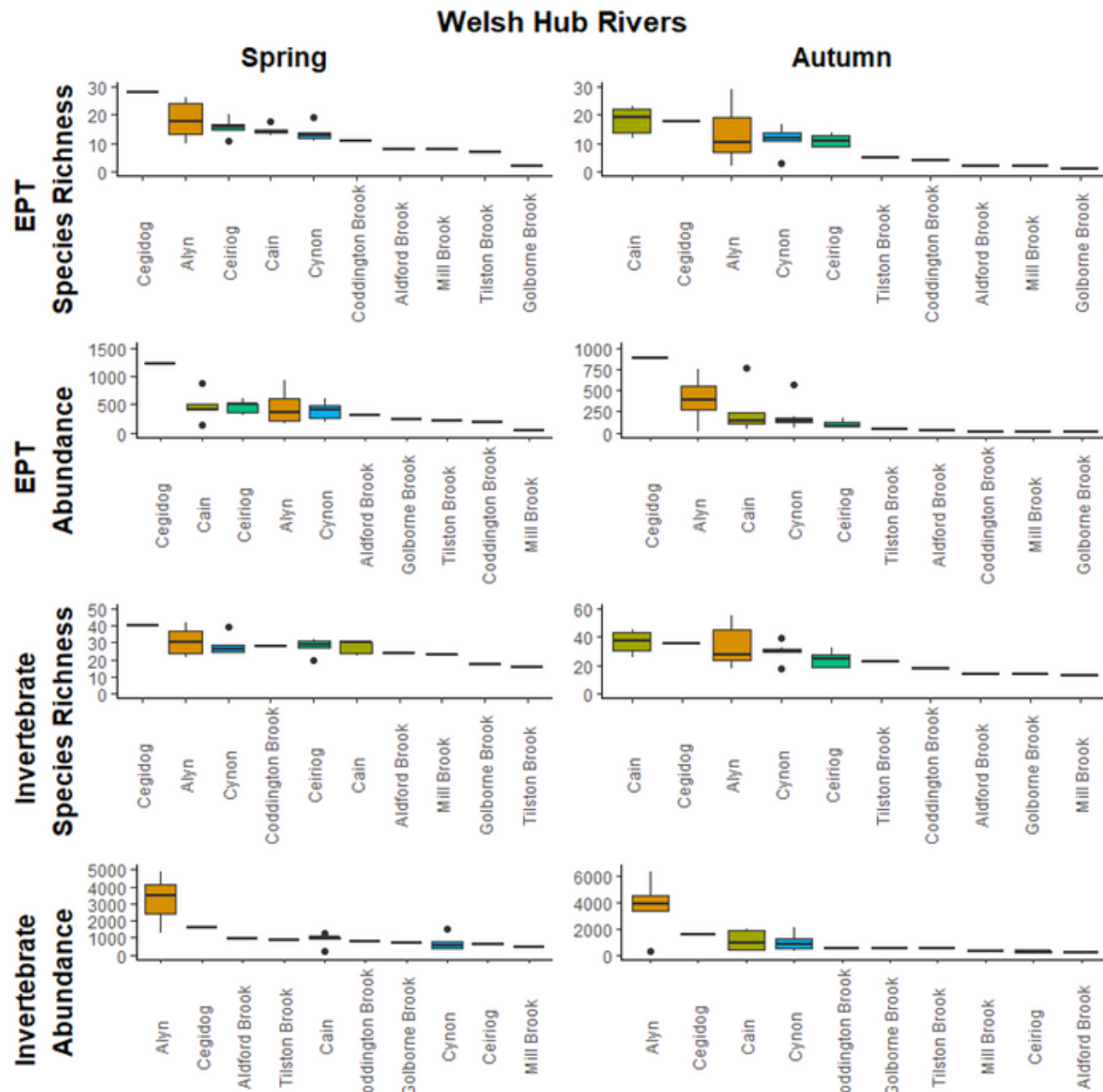


Appendix 7: All SmartRivers monitored rivers (England, Wales and Scotland) ranked by 1. Riverfly species richness (EPT = Ephemeroptera, Plecoptera and Trichoptera) 2. Riverfly abundance. 3. Total invertebrate species richness 4. Total invertebrate abundance. Rankings are split by season. Worst performing sites are on the right hand side.

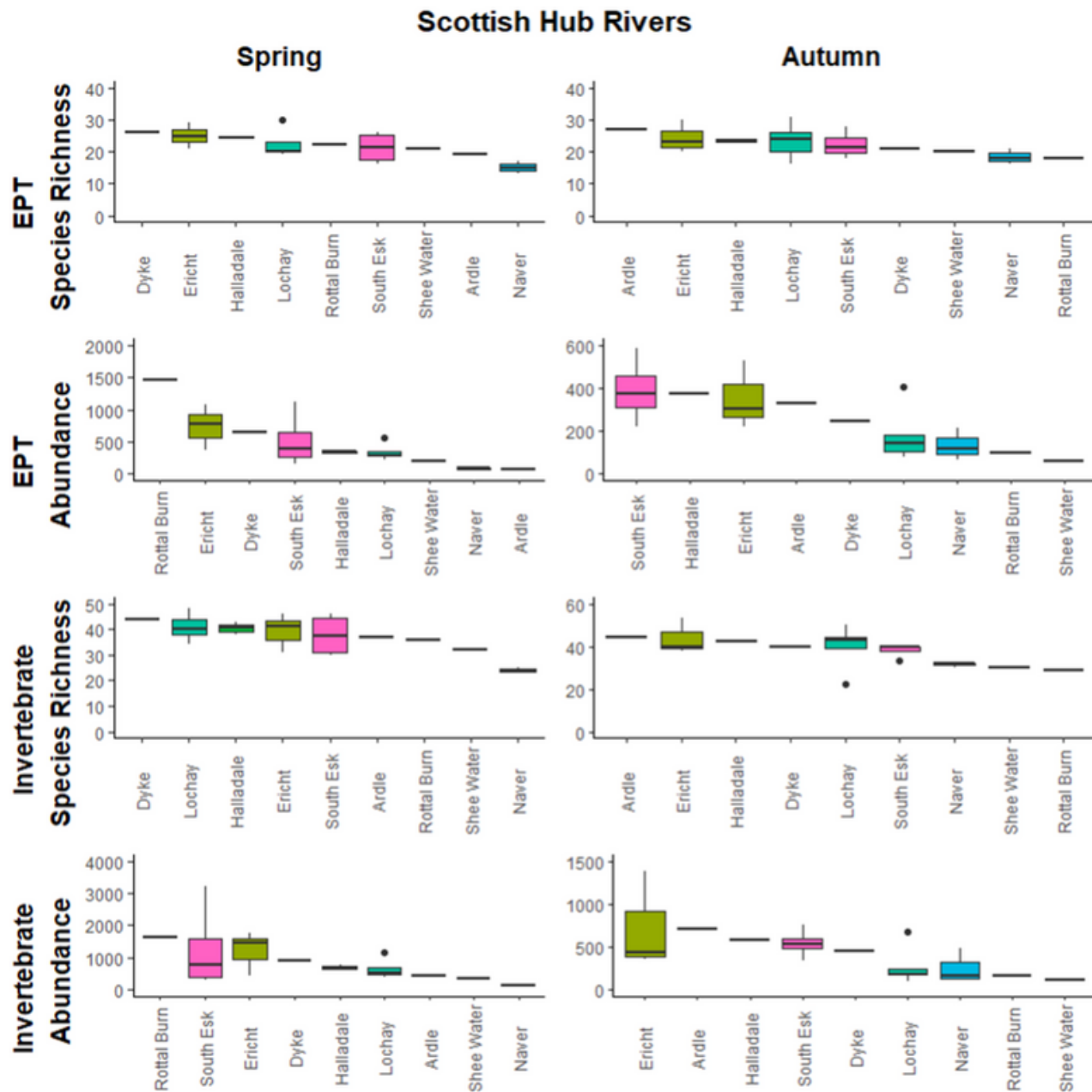
## English Hub Rivers



Appendix 8: English hub rivers ranked by 1. Riverfly species richness (EPT = Ephemeroptera, Plecoptera and Trichoptera) 2. Riverfly abundance. 3. Total invertebrate species richness 4. Total invertebrate abundance. Rankings are split by season. Worst performing sites are on the right hand side.

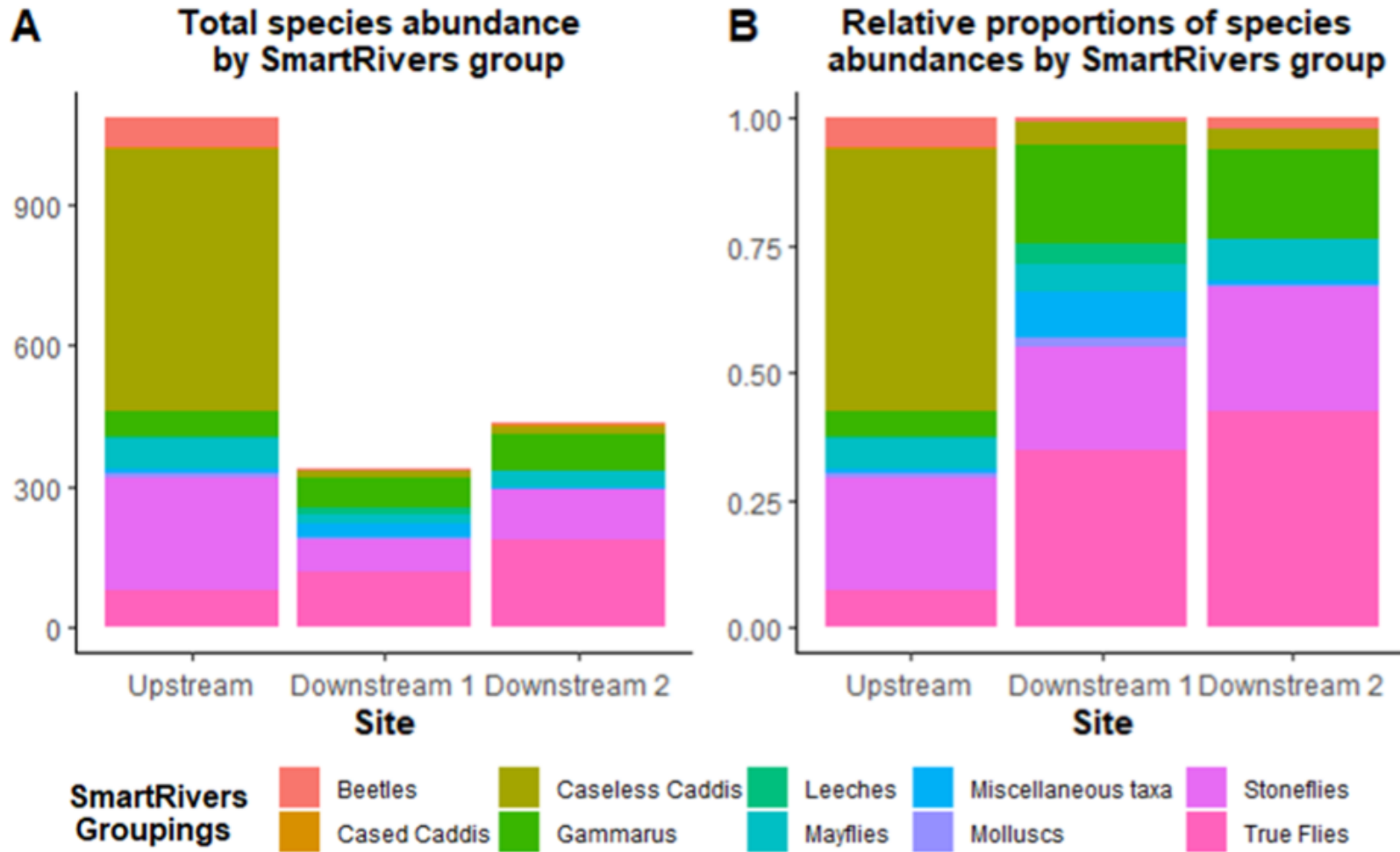


Appendix 9: Welsh hub rivers ranked by 1. Riverfly species richness (EPT = Ephemeroptera, Plecoptera and Trichoptera) 2. Riverfly abundance. 3. Total invertebrate species richness 4. Total invertebrate abundance. Rankings are split by season. Worst performing sites are on the right hand side.



Appendix 10: Scottish rivers ranked by 1. Riverfly species richness (EPT = Ephemeroptera, Plecoptera and Trichoptera) 2. Riverfly abundance. 3. Total invertebrate species richness 4. Total invertebrate abundance. Rankings are split by season. Worst performing sites are on the right hand side.





Appendix 11: Graphs showing differences in invertebrate abundance and community compositions upstream and downstream of Far Sawrey sewage works on Wilfin Beck.