S1: Location and purpose of groundwater abstraction wells in the four water management units in the UK

Figure S1. The location and purpose of groundwater abstraction wells in the four water management units. The coloured diamonds indicate locations of abstraction wells and the colours represent the purpose of a provided abstraction licence. Please note that some wells overlap.
S2: Cluster composition of three clustering techniques applied to near-natural standardised time series

**Figure S2.** Cluster composition of three clustering techniques (single linkage, complete linkage, and Ward's minimum) shown for the five Chalk clusters using the matrix non-metric multidimensional scaling plot (NMDS) of the vegan package (Dixon, 2003). The clusters in Ward’s minimum technique show the least overlap and are therefore selected in further analysis.
S3: Accumulation period of monitoring wells in the four water management units in the UK

Figure S3. Accumulation period (in months) for monitoring wells in the four water management units.
References

Dixon, P.: VEGAN, a package of R functions for community ecology, Journal of Vegetation Science, 14, 927–930, doi:10.1111/j.1654-1103.2003.tb02228.x, 2003.