Table 0.1: Importance of components, from Principal Components Analysis of the set of 18 hydrological metrics used as explanatory variables in this study.

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|------------------------|-------|-------|-------|-------|-------|
| Standard deviation | 2.787 | 1.995 | 1.273 | 1.079 | 0.996 |
| Proportion of variance | 0.431 | 0.221 | 0.090 | 0.065 | 0.042 |
| Cumulative proportion | 0.431 | 0.653 | 0.743 | 0.807 | 0.862 |

Table 0.2: Loadings across principal components for the set of 18 hydrological metrics used as explanatory variables in this study.

| metric | PC1 | PC2 | PC3 | PC4 | PC5 |
|--------------------|--------|--------|--------|--------|--------|
| MDFMDFWet | -0.068 | 0.127 | -0.647 | -0.183 | 0.210 |
| MDFMDFDry | 0.261 | -0.226 | -0.132 | -0.141 | 0.243 |
| CVMDFWet | -0.300 | -0.102 | 0.242 | -0.194 | 0.210 |
| CVMDFDry | -0.331 | -0.134 | 0.043 | 0.125 | -0.046 |
| HSPeak | -0.307 | -0.001 | -0.272 | 0.190 | -0.018 |
| HSMeanDur | 0.261 | -0.313 | -0.046 | 0.068 | -0.016 |
| CVAnnHSPeak | -0.296 | 0.063 | -0.210 | 0.082 | 0.131 |
| CV Ann HS Mean Dur | 0.141 | -0.367 | 0.150 | 0.312 | 0.029 |
| LSPeak | -0.137 | 0.384 | -0.023 | 0.314 | 0.257 |
| LSMeanDur | -0.283 | -0.193 | -0.067 | -0.336 | 0.205 |
| CVAnnLSPeak | 0.095 | -0.342 | 0.069 | -0.350 | 0.330 |
| CV Ann LS Mean Dur | -0.121 | -0.242 | -0.199 | 0.130 | 0.311 |
| BFI | 0.334 | -0.020 | -0.026 | 0.205 | 0.215 |
| CVAnnBFI | -0.250 | -0.286 | -0.139 | 0.160 | -0.235 |
| $C_{-}MinM$ | 0.200 | -0.225 | -0.403 | 0.394 | -0.045 |
| M_MinM | 0.172 | 0.159 | -0.211 | -0.233 | -0.451 |
| $C_{-}MaxM$ | -0.154 | -0.345 | -0.155 | -0.202 | -0.456 |
| $M_{-}MaxM$ | 0.259 | 0.175 | -0.246 | -0.283 | 0.066 |

Table 0.3: Summary statistics for trait data.

| trait | mean | SD |
|-----------------------------|--------|--------|
| flowering duration (months) | 4.72 | 2.58 |
| leaf area (cm2) | 28.61 | 28.05 |
| maximum height (m) | 19.79 | 13.98 |
| seed mass (mg) | 365.99 | 2078.8 |
| SLA (cm2/g) | 15.3 | 7.42 |
| wood density (g/cm3) | 0.609 | 0.13 |

Table 0.4: Proportional abundance of plants represented in the functional diversity analysis at each site.

| site | Total cover (individuals He 1) | Represented cover a- (individuals Ha- 1) | Proportion represented |
|------|--------------------------------------|--|------------------------|
| 1 | 8365 | 8219 | 0.983 |
| 2 | 13698 | 13643 | 0.996 |
| 3 | 28142 | 22487 | 0.799 |
| 4 | 9567 | 8177 | 0.855 |
| 5 | 3193 | 3179 | 0.996 |
| 6 | 25237 | 25140 | 0.996 |
| 7 | 14409 | 12887 | 0.894 |
| 8 | 9458 | 9384 | 0.992 |
| 9 | 16578 | 15068 | 0.909 |
| 10 | 12505 | 11118 | 0.889 |
| 11 | 42275 | 35464 | 0.839 |
| 12 | 9320 | 9320 | 1.000 |
| 13 | 25981 | 23881 | 0.919 |
| 14 | 12954 | 12007 | 0.927 |
| 15 | 11103 | 10882 | 0.980 |
| 16 | 20669 | 16540 | 0.800 |
| 17 | 25177 | 18199 | 0.723 |
| 18 | 4613 | 4219 | 0.915 |
| 19 | 3657 | 3443 | 0.942 |
| 20 | 27249 | 23889 | 0.877 |
| 21 | 23301 | 23008 | 0.987 |
| 22 | 15639 | 13730 | 0.878 |
| 23 | 10855 | 6067 | 0.559 |
| 24 | 17888 | 15538 | 0.869 |
| 25 | 3869 | 2603 | 0.673 |
| 26 | 14070 | 11862 | 0.843 |
| 27 | 17238 | 14213 | 0.825 |
| 28 | 13756 | 9638 | 0.701 |
| 29 | 7249 | 7208 | 0.994 |
| 30 | 21555 | 21483 | 0.997 |
| 31 | 7296 | 7227 | 0.991 |
| 32 | 5307 | 5307 | 1.000 |
| 33 | 19417 | 19046 | 0.981 |
| 34 | 9942 | 9782 | 0.984 |
| 35 | 8202 | 8185 | 0.998 |
| 36 | 3745 | 3607 | 0.963 |
| 37 | 13851 | 13535 | 0.977 |
| 38 | 18326 | 15187 | 0.829 |
| 39 | 8410 | 5840 | 0.694 |
| 40 | 5360 | 5283 | 0.986 |

Table 0.5: Proportion of species included in the functional diversity analysis for which trait values were available.

| trait | $data\ density$ | |
|----------------------|-----------------|--|
| flowering duration | 0.891 | |
| growth form | 1 | |
| leaf area | 0.983 | |
| maximum height | 0.971 | |
| seed mass | 0.868 | |
| SLA | 0.661 | |
| wood density | 0.672 | |