|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Factor** |  | **Flow** | **pH** | **Temp** | **O2** | **NH4** | **Nut** | **Index** | **Factor** |  | **Flow** | **pH** | **Temp** | **O2** | **NH4** | **Nut** |
| **Abundance** | **Overall** |  | **-0.088** |  |  | **0.074** |  | **-0.062** | **Func. redundancy** | **Overall** |  |  |  |  |  |  |  |
| River type | *Type 1* |  |  |  |  |  |  | River type | *Type 1* |  |  |  |  |  |  |
| *Type 2* | 0.958 |  |  |  |  |  | *Type 2* |  |  |  |  |  |  |
| *Type 3* |  |  | 0.234 |  |  |  | *Type 3* |  |  | 0.016 |  |  |  |
| *Type 4* |  |  | 0.135 |  |  | -0.098 | *Type 4* | -0.029 |  |  |  |  |  |
| *Type 5* | -0.392 | 0.155 |  |  |  | -0.105 | *Type 5* | -0.024 | 0.012 |  |  |  |  |
| Modified | *No* |  |  |  | 0.070 |  | -0.065 | Modified | *No* |  |  |  |  |  |  |
|  | *Yes* | -0.155 |  | 0.241 |  |  | -0.051 |  | *Yes* |  |  |  |  |  |  |
| EQC | *Bad/Poor* |  |  |  |  |  |  | EQC | *Bad/Poor* |  |  |  |  | 0.062 |  |
|  | *Moderate* |  |  |  |  |  | -0.047 |  | *Moderate* |  |  |  |  |  |  |
|  | *Good* |  |  |  |  |  | -0.048 |  | *Good* |  |  |  |  |  |  |
|  | *High* |  |  |  |  |  |  |  | *High* |  |  |  |  |  |  |
| **Taxon richness** | **Overall** |  | **-0.513** |  | **0.338** | **0.389** |  | **-0.162** | **Func. richness** | **Overall** |  | **-0.028** |  | **0.022** | **0.020** |  | **-0.010** |
| River type | *Type 1* |  |  |  |  |  |  | River type | *Type 1* |  |  |  |  |  |  |
| *Type 2* |  |  |  | 0.719 |  |  | *Type 2* |  |  |  |  |  |  |
| *Type 3* |  |  | 0.404 |  |  |  | *Type 3* |  |  |  |  |  |  |
| *Type 4* | -1.044 |  | 0.446 | 0.378 | 0.322 | -0.265 | *Type 4* | -0.053 |  | 0.019 | 0.024 | 0.043 |  |
| *Type 5* | -1.083 |  |  |  |  | -0.353 | *Type 5* |  |  |  |  |  | -0.014 |
| Modified | *No* | -0.398 |  | 0.272 | 0.349 |  | -0.157 | Modified | *No* | -0.024 |  | 0.022 | 0.019 |  | -0.011 |
|  | *Yes* | -0.683 |  | 0.537 |  |  | -0.147 |  | *Yes* | -0.029 |  | 0.024 |  |  | -0.008 |
| EQC | *Bad/Poor* |  |  |  |  |  |  | EQC | *Bad/Poor* |  |  |  |  |  |  |
|  | *Moderate* | -0.250 |  | 0.278 | 0.279 |  | -0.097 |  | *Moderate* |  |  |  | 0.018 |  |  |
|  | *Good* |  |  | 0.285 |  |  | -0.109 |  | *Good* |  |  | 0.032 |  |  |  |
|  | *High* |  |  | 0.356 |  |  |  |  | *High* |  |  | 0.030 |  |  |  |
| **Evenness** | **Overall** |  | **0.014** |  | **-0.012** | **-0.007** |  | **0.007** | **Func. evenness** | **Overall** |  |  |  |  |  |  | **0.009** |
| River type | *Type 1* |  |  |  | 0.048 |  | 0.023 | River type | *Type 1* |  |  |  | 0.185 |  | 0.062 |
| *Type 2* |  |  |  |  |  |  | *Type 2* | -0.364 |  |  |  |  | -0.083 |
| *Type 3* |  |  |  |  |  |  | *Type 3* |  |  |  |  |  |  |
| *Type 4* | 0.034 |  | -0.014 |  |  | 0.011 | *Type 4* |  |  |  |  |  | 0.036 |
| *Type 5* | 0.038 |  |  |  |  | 0.011 | *Type 5* |  |  |  |  |  |  |
| Modified | *No* | 0.013 |  | -0.010 |  |  | 0.006 | Modified | *No* |  |  |  |  |  |  |
|  | *Yes* | 0.017 |  | -0.017 |  |  | 0.007 |  | *Yes* |  |  | -0.059 | 0.052 |  |  |
| EQC | *Bad/Poor* |  |  |  |  |  |  | EQC | *Bad/Poor* |  |  |  |  |  |  |
|  | *Moderate* | 0.012 |  | -0.015 |  | -0.005 | 0.007 |  | *Moderate* |  |  |  |  |  |  |
|  | *Good* |  |  |  |  |  |  |  | *Good* |  |  |  |  |  |  |
|  | *High* |  |  |  |  |  |  |  | *High* |  |  |  |  |  |  |
| **Shannon's H** | **Overall** |  | **-0.265** |  |  | **0.221** |  |  | **Func. dispersion** | **Overall** |  |  |  |  |  |  |  |
| River type | *Type 1* |  |  |  |  |  |  | River type | *Type 1* |  | -0.011 |  |  |  |  |
| *Type 2* |  |  |  |  |  |  | *Type 2* |  |  |  |  | -0.008 |  |
| *Type 3* |  | 0.211 |  | 0.211 |  |  | *Type 3* |  | 0.002 | -0.002 |  |  |  |
| *Type 4* | -0.458 |  |  | 0.227 |  |  | *Type 4* |  |  |  |  |  |  |
| *Type 5* | -0.449 |  |  |  |  | -0.140 | *Type 5* |  |  |  |  |  |  |
| Modified | *No* | -0.168 |  |  | 0.188 |  |  | Modified | *No* |  |  |  |  |  |  |
|  | *Yes* | -0.437 |  |  | 0.312 |  |  |  | *Yes* |  |  |  |  |  |  |
| EQC | *Bad/Poor* |  |  |  |  |  |  | EQC | *Bad/Poor* |  |  |  |  |  |  |
|  | *Moderate* |  |  |  | 0.197 |  |  |  | *Moderate* |  |  |  |  |  |  |
|  | *Good* | -0.187 |  |  | 0.206 |  |  |  | *Good* |  |  |  |  |  |  |
|  | *High* |  |  |  | 0.360 |  |  |  | *High* | -0.002 |  |  |  |  |  |
| **Turnover** | **Overall** |  |  |  |  |  |  |  | **Func. turnover** | **Overall** |  | **0.092** |  |  |  |  |  |
| River type | *Type 1* |  |  |  |  |  |  | River type | *Type 1* |  |  |  |  |  |  |
| *Type 2* |  |  |  |  |  |  | *Type 2* |  |  |  |  |  |  |
| *Type 3* | 0.126 |  |  |  |  | 0.032 | *Type 3* |  |  |  |  |  |  |
| *Type 4* | -0.128 |  |  |  |  |  | *Type 4* |  |  |  | -0.158 | -0.254 |  |
| *Type 5* |  | 0.054 |  |  | -0.318 |  | *Type 5* |  |  |  |  | -0.594 |  |
| Modified | *No* |  |  |  | -0.036 |  |  | Modified | *No* |  |  |  |  |  |  |
|  | *Yes* |  |  |  |  |  |  |  | *Yes* | 0.176 |  |  |  |  |  |
| EQC | *Bad/Poor* |  |  |  |  |  |  | EQC | *Bad/Poor* |  |  |  |  |  |  |
|  | *Moderate* |  |  |  | -0.042 |  |  |  | *Moderate* | 0.138 |  |  | -0.093 |  |  |
|  | *Good* |  |  |  |  |  |  |  | *Good* |  |  |  |  |  |  |
|  | *High* |  |  |  |  |  |  |  | *High* |  |  |  |  |  |  |