**Supplemental Appendix A**. List of diatom species groupings included in relative frequency diagram and taxon codes used in RDA. Species present in low abundances (<2%) were not includes in the RDA. Some genera were grouped for RDA analysis (*Pinnularia* spp., *Eunotia* spp., *Amphora* spp.).

|  |  |  |
| --- | --- | --- |
| Groupings in relative frequency diagram | Species | Taxon Code |
| Small benthic Fragilariaceae | *Pseudostaurosira brevistriata* | PSEBREV |
| *Pseudostaurosira parasitica* | PSEPARA |
| *Staurosira construens* | STACONS |
| *Staurosira construens var venter* | STAVENT |
| Small *Navicula* spp. (*sensu lato*) | *Sellaphora nigri* | NAVMINI |
| *Sellaphora seminulum* | SELSEMI |
| *Encyonopsis* spp. | *Encyonopsis cesatii* | ENCCESA |
| *Encyonopsis descripta* | ENCDESC |
| *Pinnularia* spp. | Grouped for RDA | PINSPP |
| *Pinnularia gibba* | <2% |
| *Pinnularia interrupta* | <2% |
| *Pinnularia legumen* | <2% |
| *Pinnularia maior/viridis* | <2% |
| *Pinnularia microstauron* | <2% |
| *Pinnularia nodosa* | <2% |
| *Pinnularia obscura* | <2% |
| *Pinnularia streptoraphe* | <2% |
| Large *Navicula* spp. | *Navicula cryptocephala* | NAVCRC |
| *Navicula cryptotenella* | NAVCRT |
| *Navicula radiosa* | NAVRADI |
| *Brachysira* spp. | *Brachysira styriaca* | BRASTYR |
| *Brachysira vitrea* | BRAVITR |
| *Brachysira zellensis* | BRAZELL |
| *Encyonema* spp. | *Encyonema gracilis* | ENCGRAC |
| *Encyonema silesiacum* | ENCSILE |
| *Encyonema hebridicum* | <2% |
| *Encyonema perpusillum* | <2% |
| *Cymbopleura* spp. | *Cymbopleura incerta* | CYMINCE |
| *Cymbopleura angustata* | <2% |
| *Cymbopleura lapponica* | <2% |
| *Nitzschia* spp. | *Nitzschia fonticola* | NITFONT |
| *Nitzschia palea* | NITPAL |
| *Nitzschia alpina* | <2% |
| *Nitzschia angustata* | <2% |
| *Nitzschia intermedia* | <2% |
| *Nitzschia recta* | <2% |
| *Nitzschia vermicularis* | <2% |
| Large benthic spp. | *Neidium ampliatum* | NEIAMPL |
| *Stauroneis phoenicenteron* | STAPHOE |
| *Stauroneis javanica* | <2% |
| Planktonic *Fragilaria* spp. | *Fragilaria tenera* | FRATENE |
| *Fragilaria nanana* | <2% |
| *Fragilaria ulna* | <2% |
| Centric planktonic spp. | *Discostella pseudostelligera* | CYCPSEU |
| *Lindavia michiganiana* | CYCMICH |
| *Lindavia bodanica* | <2% |
| Dominant wetland spp. | *Gomphonema acuminatum* | <2% |
| *Gomphonema angustatum* | <2% |
| *Gomphonema gracile* | <2% |
| *Gomphonema parvalum* | <2% |
| *Gomphonema subtile* | <2% |
| *Gomphonema truncatum* | <2% |
| *Kobayasiella subtilissima* | KOBSUBT |
| *Tabellaria* spp | TABFLOC |
| *Eunotia* spp. (grouped for RDA) | EUNSPP |
| *Eunotia bilunaris* | <2% |
| *Eunotia circumborealis* | <2% |
| *Eunotia formica* | <2% |
| *Eunotia incisa* | <2% |
| *Eunotia praerupta* | <2% |
|  | *Gogorevia exilis* | ACHEXIG |
|  | *Achnanthidium minutissimum* | ACHMINU |
|  | *Amphora* spp. (grouped for RDA) | AMPSPP |
|  | *Amphora pediculus* | <2% |
|  | *Amphora thumensis* | <2% |
|  | *Chamaepinnularia mediocris* | CHAMEDI |
|  | *Cocconeis placentula* | COCPLAC |
|  | *Delicata delicatula* | DELDELI |
|  | *Denticula kuetzingii* | DENKUET |
|  | *Diploneis oblongella* | DIPOBLO |
|  | *Fragilaria capucina* | FRACAPU |
|  | *Kobayasiella jaagii* | KOBJAAG |
|  | *Microcostatus kuelbsii* | MICKUEL |
|  | *Navicula leptostriata* | NAVLEPT |
|  | *Navicula rhynchocephala* | NAVRHYN |
|  | *Navicula vulpina* | NAVVULP |
|  | *Nupela vitiosa* | NUPVITI |
|  | *Sellaphora laevissima* | SELLAEV |
|  |  |  |
|  | *Sellaphora pupula* | SELPUPU |
|  | *Sellaphora vitabunda* | SELVITA |