

## **Coupled Biogeochemical Cycles**

### *4. Effect of landscape characteristics on DOC concentration in stream of Ontonagon watershed*

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**ABSTRACT:** Dissolved organic matter (DOM) in aquatic ecosystems attenuates ultraviolet radiation (UVR) flux into aquatic ecosystems to protect aquatic organisms. At the landscape scale, the percentage of wetlands in the watershed is strongly correlated to DOM concentration (measured in units of carbon [DOC]). The purpose of this poster is to find out which kind of wetland contributes stream DOC concentration most, and compare three wetland datasets according to stream DOC concentration. The research was made in Ontonagon watershed, which is located in northern Michigan and Wisconsin. National Wetland Inventory (NWI), Wisconsin Wetland Inventory (WWI), National Land Cover Dataset (NLCD), and U.S. Forest Service Ecological Land Type Phase (ELTP) maps are used in analysis. For the comparison of datasets, the NWI dataset relates stream DOC concentration best, then the ELTP data. Some kinds of wetland contribute DOC more than others, such as needle-leaved evergreen forested wetland, and scrub-shrub wetland.