

ORAL PRESENTATION

THE RESPONSE OF DIATOMS TO AGRICULTURAL WATERSHEDS OF RIVERS FROM THE UNITED STATES.

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The assessment of diatom assemblages have been useful in the construction of metrics for environmental monitoring. However diatom-based metrics for rivers heavily effected by agriculture have not received much attention. We analyzed diatoms, basin characteristics, and water chemistry data collected by the USGS National Water-Quality Assessment (NAWQA) program: Nutrient Enrichment Effects Team (NEET). This consisted of 232 rivers found within 8 regional study units across the United States chosen for their low urban influences as well as a range of agricultural activity within their watershed. Diatom-based metrics were developed using species traits (indicator species analysis), weighted average scores, and previously developed calibration sets for both the entire dataset and regional subgroups (determined by ordination and multi-response permutation procedures). The utility of these new metrics will be discussed.