

School of Natural Resources and the Environment

Seminar Series: Spring 2024

## APPLYING ECOLOGICAL STOICHIOMETRY TO MANAGE FRESHWATER ECOSYSTEMS

**SPEAKERS:** Eric Moody, Middlebury College

DATE: Wednesday, April 3rd TIME: 3:00 - 4:00 pm LOCATION: ENR2 S210 & Zoom

## **ABSTRACT:**

Population management requires an understanding of the interactions between species of interest and the ecosystems they inhabit. Using the common currency of individual chemical elements and energy, ecological stoichiometry provides a framework to investigate these interactions.



In this seminar, I will describe how ecological stoichiometry can be applied to freshwater conservation and provide two case studies from my research. First, I will talk about how variation in nutrient availability across habitats affects production of a threatened desert fish, the humpback chub (Gila cypha). I will also discuss how urbanization affects water quality in streams in Vermont, where chloride pollution affects the energy demands of sensitive benthic invertebrates. Finally, I will discuss ideas for how ecological stoichiometry could more broadly be integrated into conservation biology and natural resource management.

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