Tracing the Source of Nutrients Entering North Central Florida Bay: A Stable Isotope Approach
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Problem Statement
Florida Bay has shown declining health from:
1. Increased nutrient concentrations
2. Recurring seagrass die-offs
3. Persistent seasonal algal blooms.

The origin of nutrients entering this region must be identified to inform restoration management.

Question: What is the source of Nitrogen entering Florida Bay?

Dual stable isotope analysis has revealed external loading rather than internal cycling as the main driver of nutrient influx in North Central Florida Bay.

Conclusions
• Allochthonous hydrologic inputs act as the primary input of N to the lake systems.
• Mixing model analysis shows a trend of Taylor Slough marsh and Florida Bay surface water influencing the nutrient regime of the northern and southern portion of the systems, respectively.