Organic sulfur-containing compounds represent greater than 80 percent of the total sulfur in sediments of eutrophic freshwater lakes. Although sedimentary sulfur is predominantly in the form of organic compounds, more sulfur is transformed by sulfate reduction than by any other process. Rates of sulfate reduction in these sediments average 7 mmol/m²/day. This rate is 19 times greater than the net rate of production of inorganic sulfur from organic compounds on an annual basis.


