

Removing excess nitrogen and phosphorus from water sources is crucial for reducing eutrophication, which causes excessive algae growth (What Is Nutrient Pollution?, n.d.). This process decreases the amount of dissolved oxygen in the water, harming aquatic life and generating toxins that impair water quality (Nutrient Pollution: How Excess Nitrogen and Phosphorus Are Shaping Health Outcomes | National Caucus of Environmental Legislators, 2022). This analysis examines the effectiveness of constructed wetlands in comparison to natural wetlands in removing nitrogen and phosphorus from water. Specifically, the percent of Total Nitrogen (TN) and Total Phosphorus (TP) removed leading to improved water quality. Studies indicate that constructed wetlands are more effective at removing pollutants, especially organic matter like nitrogen and phosphorus, because they are designed to perform this function (Ferreira et al., 2023).