Retention of Phosphorus in High And Low Salt Marsh Sediments

This study examined the ability of high and low salt marsh sediment samples, as defined by the dominant species of marsh grass present, to retain phosphorus in their pore water. The high salt marsh samples, defined by *Spartina patens*, were able to retain more phosphorus than the low marsh samples, defined by *Spartina alterniflora*, at both natural and artificially increased concentrations of phosphorus. The amount of nutrients, including phosphorus, available to the marine system greatly impacts the organisms in the ocean, particularly for algae, where it can act as a limiting nutrient. Phosphorus levels in runoff and river waters are often increased due to anthropogenic sources such as farming, where it is found in fertilizer, and industry, usually as a detergent, so it is important to know the ability of marsh ecosystems to remove dissolved phosphorus from the waters before they reach the marine environment.

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