

Impact of Salinity on Primary Production in the Marshes

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Abstract: The comparison the high salinity area (HS) with the lowest (LS), indicate that there was no change in water temperature, dissolved oxygen and turbidity, and they were not significantly correlated with the primary production (chlorophyll-a). There was also no change in phosphorus and nitrate concentrations and were not significantly related with primary production. Its affected DIC and pH value significantly. Furthermore zooplankton biomass changed significantly due to salinity (but it has not related to primary productivity). Therefore the study concluded that salinity had a clear effect on the primary productivity, and the study suggested that salinity, due to climate change, could be the main key driver for primary productivity in the subtropics but still needs more deeply field studies in different subtropical regions.

Keywords: Salinity, Climate change, Primary production