

# Temporal Variation of Nutrient and Phytoplankton Population in Coastal Waters of Odisha

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## Abstract

Determining the efficacy of efforts to conserve natural systems requires environmental baseline data, without of which it is impossible to determine any management actions. This study presents water quality baseline data (nutrients) for the coastal waters of Odisha coast, India. Surface waters have been analyzed between 2007 and 2011. The study has revealed a gradual declining status of all the physical and chemical factors associated with phytoplankton growth. Variations in nutrients between estuaries are driven by connectivity to the ocean and the river influx. Because of these relationships, it is hypothesized that these nutrient depletion levels are the natural status of the system, rather than the evidence of pollution. Moreover, a systematic climate change phenomena could also be predicted.

**Keywords:** Baseline data, Water quality, Nutrients, Odisha coast, Phytoplankton.