

# Quantifying Contaminated Loadings into the Northeast Large Marine Ecosystems

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It has been estimated that about one-half of the forty-nine global Large Marine Ecosystem's (LME's) are impacted by pollutant stresses (Sherman). Critical to the development of management plans is the quantification of current pollutant loadings into the LME's. Also as critical is the development of pollutant loading trends over the past decade. Presented in the paper is the methodology used to estimate the pollutant loading to the US Northeast Shelf (LME).

The coastal watersheds in the Northeast Shelf (LME) encompass an area of 478,000 Km<sup>2</sup> and support a population of about 55 million people. The wastewater flow from municipal and industrial sources is about 7.2 billion gallons per day. The Northeast Shelf Ecosystem (LME) encompasses a coastal shelf area of about 258,000 Km<sup>2</sup>, extending from the Gulf of Maine in the north to Cape Hatteras in the south. Current loading estimates for total organic carbon ( $9800 \times 10^5$  Kg/yr) nitrogen ( $4700 \times 10^5$  Kg/yr) phosphorus ( $710 \times 10^5$  Kg/yr) and five metals are presented in this paper.