

## 1. INTRODUCTION

This report presents and summarises the results of biological and chemical oceanographic sampling carried out in the far northern Great Barrier Reef during February 1990. The region sampled (ca. 11-13°S), lies adjacent to the eastern side of Cape York Peninsula, locations on which are under consideration for national park declaration, the construction of a rocket launching facility and silica sand mining. As little is known regarding the biological and chemical oceanography of the region, a reconnaissance survey was carried out to obtain baseline data on hydrographic, nutrient and sediment characteristics of shelf waters and sediments. It is expected that the data presented herein will form part of the environmental assessment for development in, and conservation of, the region and serve as a basis for designing more detailed and focused water quality surveys.

Limited comparisons will be drawn with biological and chemical oceanographic data of similar type collected in the Torres Strait (Mitchell 1982) and in the vicinity of the Ribbon Reefs (ca. 14°S: Furnas unpublished). The Torres Strait data were collected in November-December 1979. Data from adjacent Gulf of Papua stations will not be considered herein. The Ribbon Reef data were collected in October 1987. Most of this latter group of stations were located in outer-shelf waters between Cooktown and Lizard Island. Three stations in this series were occupied in shelf waters between Lizard Island and Princess Charlotte Bay.