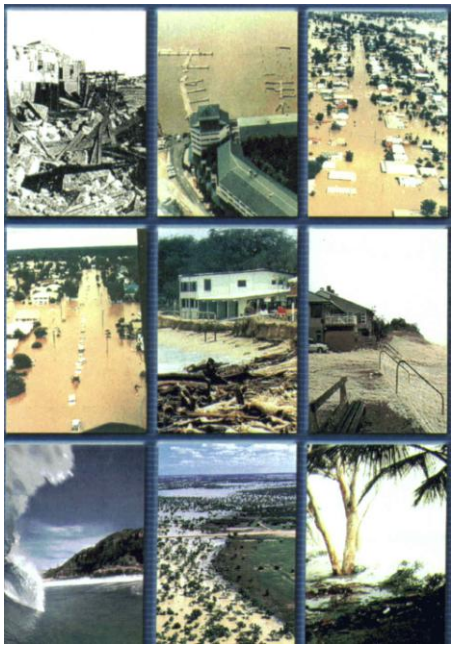
QUEENSLAND CLIMATE CHANGE AND COMMUNITY VULNERABILITY TO TROPICAL CYCLONES:
Ocean Hazards Assessment - Stage 1

Bureau of Meteorology

Queensland Government
Department of Natural Resources and Mines
Department of Emergency Services
Environmental Protection Agency



WINNER:
THE INSTITUTION OF ENGINEERS, AUSTRALIA
QUEENSLAND DIVISION
2002 ENGINEERING EXCELLENCE AWARDS

In association with:
JCU
JAMES COOK UNIVERSITY

CLIENT:
Bureau of Meteorology;
Queensland Government;
2000.

LOCATION
Queensland.

SEA PERSONNEL PROVIDED

- Overall technical and project management
- Historical assessment of major tropical cyclone impacts in Queensland
- Recommendations for further research and studies
- Lead author of the study report

PROJECT DESCRIPTION

The Bureau of Meteorology, in conjunction with a number of Queensland Government agencies and with financial support from the Queensland Greenhouse Taskforce, commissioned the study to assess the magnitude of the ocean threat from tropical cyclones in Queensland. The project is intended to update and extend the present understanding of the threat of storm tide inundation in Queensland on a state-wide scale including the effects of storm wave conditions in selected areas, and estimates of potential Greenhouse impacts.

The study was awarded on the basis of competitive tender to Systems Engineering Australia Pty Ltd (SEA) in association with the Marine Modelling Unit of James Cook University and involved a number of other eminent ocean modellers within Australia. A Project Steering Committee comprised representatives from the Department of Natural Resources and Mines, Environmental Protection Agency and Department of Emergency Services, as well as the Bureau of Meteorology.

The overall Community Vulnerability project will consist of a number of elements, including storm surge modelling, extreme wave analysis and statistical modelling of storm tide along the entire Queensland coast.

The Stage 1 study contract was awarded in 2000, being limited to:
(a) A comprehensive review of all technical requirements of the project in order to plan further development needs, and
(b) Establishment of a state-wide numerical storm surge modelling system for the Bureau of Meteorology.

SEA

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