

## TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
Executive Summary	i
Acknowledgements	iii

### Part A : WORKSHOP PROCEEDINGS

1. Introduction	2
2. The significance of cyclone Winifred	4
1. Biophysical and ecological significance	4
2. Socio-economic significance	5
3. Effects of Winifred on the understanding and use of the Great Barrier Reef	7
1. Scientific understanding	7
2. Human use	8
4. Relevance to the Great Barrier Reef Marine Park	9
1. Planning	9
2. Offshore design and development	9
3. Research and monitoring	10
4. Education	10
5. Adequacy of the research response	11
6. Conclusions and recommendations	13

### PART B : WORKSHOP PAPERS

G.G. Kelleher and I.M. Dutton. The Significance of Cyclonic Events to Management of the Great Barrier Reef Marine Park.	15
J.T. Baker and R. Bradbury. The Perspectives and Commitments of the Australian Institute of Marine Science to Cyclone Research.	18
G. Crane. The Meteorology of Cyclone Winifred.	20
G.R. Walker and R.F. Reardon. Wind Speeds in the Great Barrier Reef Region from Cyclone Winifred and their effect on buildings.	28
M. Furnas and A. Mitchell. Oceanographic Conditions on the North Queensland Shelf after the Passage of Cyclone Winifred.	41
L. Bode and E. Wolanski. Some Comparisons Between Observed and Modelled Oceanographic Response to Tropical Cyclone Winifred.	43
D.P. Johnson, R.M. Carter, M.K. Gagan, J.E. Dye and D.C. Carr. Sediment Redistribution on the Great Barrier Reef Shelf by Cyclone Winifred.	44

<b>M.W. Sandstrom.</b> Biochemical Effects of Cyclone Winifred.	46
<b>A. Birtles.</b> Some Preliminary Observations from a Survey of the Soft Sediment Biota of the Inner and Mid-Shelf of the Great Barrier Reef Following Cyclone Winifred.	47
<b>T.J. Done, P.J. Moran and L. de Vantier.</b> Cyclone Winifred - Observations on Some Ecological and Geomorphological Effects.	50
<b>V.J. Harriott and D.A. Fisk.</b> The Effects of Cyclone Winifred on Corals at Green Island.	52
<b>T.J. Smith III.</b> Comparative Effects of Cyclone Damage to Mangrove forests : Kathy versus Winifred.	59
<b>J.G. Blackman and J.W. Winter.</b> Effects of Cyclone Winifred on Coastal and Island Fauna.	60
<b>P. Foley and R. Thorpe.</b> Environmental Loss - The Hidden Aspect of Post-Natural Disaster Psychosocial Distress.	71
<b>K. McClymont.</b> Cyclone Winifred - A Wild Lady's List of Destruction.	72
<b>F. Muir.</b> Islands and Reefs Surveyed for Cyclonic Disturbance.	76
<b>R.J. Lewis, J.B. Burke and N.C. Gillespie.</b> Possible Effects of Cyclone Winifred on Ciguatera Endemicity at Sudbury Reef, North Queensland.	79
<b>J. Oliver.</b> Evaluating Tropical Cyclone Winifred, 1986, as an Environmental Threat.	82

#### **PART C : SUPPORTING INFORMATION**

<b>Beach Protection Authority.</b> Cyclone Winifred Hits North Queensland.	87
<b>Bedarra Island Resort.</b> Cyclone Damage Report.	88
<b>B. Marcum.</b> Pacific Clam Pty. Ltd.'s Experience with Cyclone Winifred.	89
<b>J. Muldoon.</b> Report on Field Trip to Taylor, Beaver, Farquarson and Eddy Reefs.	90
<b>Great Barrier Reef Marine Park Authority.</b> Cyclone Damage Report - Beaver Reef.	91

J. Ranicour.	92
After Winifred - Report from Joint Tropical Trials and Research Establishment.	
I.M. Dutton.	93
Cyclone Winifred: Aerial Assessment of Damage.	
J. Dartnall.	97
Annotated Bibliography on Cyclones: with Particular Reference to Coral Reefs.	

#### APPENDICES

Appendix I. List of workshop participants.	106
Appendix II. Workshop program.	108
Appendix III. Brief for small group discussions.	110