TABLE OF CONTENTS

EXECUTIVE SUMMARY INTRODUCTION		i
		1
1.	AIR QUALITY Background Particulate Matter Deposited Particulate Monitoring Programme Environmental Reporting Programme Future Air Monitoring in Northland	3 3 4 6 8
2.	SURFACE WATER QUALITY Regional Water Quality Network Recreational Bathing Case Study: Ruawai Drains Macroinvertebrate Monitoring	9 9 15 17 18
3.	SURFACE WATER QUANTITIES AND FLOWS The Hydrometric Network The Telemetry Network Rainfall Case Studies: From Dry to Wet Rivers and Streams Tidal Monitoring	26 26 28 31 33 37 39
4.	LAKES Lake Omapere Lake Monitoring Network	40 40 43
5.	GROUNDWATER Background State of the Environment Monitoring Specific Groundwater Investigations National Survey of Pesticides in Groundwater	46 46 47 51 53
6.	COASTAL MONITORING Marine Bathing Water Quality Antifouling Co-biocides in Northland Coastal Waters Whangarei Harbour Sediment Metal Monitoring Coastal Processes Hokianga Harbour Sediment Study	54 54 64 66 68 72

7 .	LANDUSE SUSTAINABILITY MONITORING	75
8.	FARM DAIRY EFFLUENT	78
9.	INCIDENTS	82
	Incident Reporting	82
	Air Incidents	85
	Freshwater Incidents	86
	Coastal Incidents	87
	Land Incidents	88
10.	NGAWHA GEOTHERMAL FIELD	89
11.	IWI MONITORING	95
12.	WASTE HAZARDOUS SUBSTANCES & CONTAMINATED SITES	98
	Waste Hazardous Substances	99
	Contaminated Site Management	101
	Solid Waste Management	102
	Northland Regional Council Waste Minimisation Strategy	104
APP	PENDIX ONE	107
A DE	ACAIDIV TIMO	400
APP	PENDIX TWO	109
APP	APPENDIX THREE	
APP	APPENDIX FOUR	