TABLE OF CONTENTS

	Page
Cover page	i
Dedication	ii
Acknowledgement	111
Abstract	iv
Table of Contents	v-vii
List of Tables	viii-x
List of Figures	xi
List of Plates	xii-xiii

CHAPTER ONE INTRODUCTION

1.1	BACKGROUND TO THE STUDY	1-2
1.2	STATEMENT OF THE PROBLEM	2-3
1.3	AIM AND OBJECTIVES OF THE STUDY	3-4
1.4	JUSTIFICATION FOR THE STUDY	4
1.5	THE STUDY AREA	4-7

CHAPTER TWO

LITERATURE REVIEW

2.1	IRRIGATED AGRICULTURE AND ENVIRONMENT	8-11
2.2	AQUATIC WEEDS FROM GLOBAL TO LOCAL SETTING	11-14
2.2.1	Plant Description and Identification	14-17
2.2.2	Type of Typha Species	18-21
2.3	DAMS AND IMPOUNDMENTS	21
2.3.1	Impact of Aquatic Weeds on Agriculture,	
	Health and Environment	22-24
2.4	CONTROL OF TYPHA AQUATIC WEED	24-30
2.5	MANAGEMENT OF DAMS/IRRIGATION SYSTEM/AQUATIC	
	ECOSYSTEM	30-32
2.6	PROCEDURE FOR SELECTING SAMPLING SITE	32
2.7	AN ANALYSIS OF THE KRIP OBJECTIVES AND STALKHOLDERS	
	IN THE CONTEXT OF ECOLOGICAL CHANGES IN THE AREA	
	AND ITS IMPACTS	32-34
2.7.1	Policy Analysis	34-35

CHAPTER THREE MATERIALS AND METHODS

3.1	INTRODUCTION	36
3.2	TYPES OF DATA REQUIRED	36-37
3.3	SAMPLING TECHNIQUES AND SAMPLING SIZE	38
3.4	METHODS OF DATA COLLECTION	38
3.4.1	Selection of Sites and Collections of Specimen	38-39
3.4.2	Identification and Measurements of Plant Features	40
3.4.3	Determination of Relevant Environmental Parameters	40
3.4.4	Administration of Questionnaire and Informal Interview	40-42
3.4.5	Monitoring of Typha Control Activities	42
3.5	ANALYTICAL TECHNIQUES	42

CHAPTER FOUR PRESENTATION AND DISCUSSION OF RESULTS

4.1	INTRODUCTION	43
4.2	MAJOR HABITATS OF TYPHA SP IN THE STUDY AREA	43-50
4.3	CHARACTERISTICS OF THE TYPHA	50-53
4.3.1	Identification of the KRIP Typha Species	54-55
4.3.2	Comparisons of Characteristics Features	
	of Sampled Species with Some Identified	
	Typha Species	56-58
4.4	WATER PARAMETERS INFLUENCING TYPHA GROWTH	58-60
4.4.1	Typha sp. Growth Responses to Water Depth	
	Gradient in the Study Area	60-63
4.4.2	Mean Values of some Water Parameters from <i>Typha</i> sp.	
	Habitats from April 2007 – 2008 in Kano River	
	Irrigation Project	63-65
4.4.3	Graphical Presentation of Water Parameters	
	Influencing Typha Growth in the Study Area	65-75
4.5	RESPONDENTS' SURVEY	75-81
4.5.1	Typha Control in the Study Area	82-85
4.6	ASSESSMENT OF THE CONTROL MEASURES	
	ADOPTED AT KRIP	85-89
4.7	MARKETING OF TYPHA STALKS AND INCOME EARNED	89-94

CHAPTER FIVE

PROPOSAL FOR AN INTEGRATED ENVIRONMENTAL MANAGEMENT

5.1	INTRODUCTION	95
5.2	NATURE OF THE APPROACH	95-98
5.3	THE NEED FOR AN INTEGRATED ENVIRONMENTAL	
	MANAGEMENT APPROACH	98-99

CHAPTER SIX SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1	SUMMARY OF FINDINGS	100-102
6.2	CONCLUSION	102
6.3	RECOMMENDATIONS	103-104
	REFERENCES	105-114
А	APPENDICES	115-142