

## TABLE OF CONTENTS

Section No.		Page No.
	PREFACE	
	EXECUTIVE SUMMARY	ES-1
1	INTRODUCTION	1-1
2	WATER SUPPLY PLANNING IN NORTH CAROLINA	
	2.1 Background	2-1
	2.2 State and Local Water Supply Planning	2-2
	2.2.1 1989 Water System Surveys	2-3
	2.2.2 1992 Local Water Supply Plans	2-3
	2.2.3 1997 Local Water Supply Plan Updates	2-4
3	PHYSICAL AND SOCIAL ENVIRONMENT	
	3.1 Geography and Climate	3-1
	3.1.1 Coastal Plain	3-2
	3.1.2 Piedmont	3-3
	3.1.3 Mountains	3-3
	3.2 Economy and Growth	3-4
	3.3 Water Use Patterns	3-6
4	CURRENT WATER SUPPLY ISSUES	
	4.1 Ground Water Issues in Eastern North Carolina	4-1
	4.1.1 Capacity Use Area #1	4-1
	4.1.2 Central Coastal Plain Ground Water Issues	4-2
	4.1.3 Other Ground Water Issues	4-6
	4.2 Allocation of Water Supply Storage in B. Everett Jordan Lake	4-7
	4.2.1 Description of Lake	4-7
	4.2.2 Status of Allocations	4-8
	4.3 FERC Relicensing Issues	4-10
	4.4 Drought Monitoring and Response	4-12
	4.4.1 1998-2000 Drought	4-12
	4.4.2 Local Drought Response	4-14
	4.4.3 State Drought Response	4-14
	4.5 Growth in Headwaters	4-15
	4.6 Eno River Voluntary Capacity Use Area	4-16
	4.6.1 History of Problem	4-16
	4.6.2 Status of Agreement	4-16
5	MEETING FUTURE WATER SUPPLY NEEDS	
	5.1 Developing Additional Water Supplies	5-1
	5.1.1 Enhancing Existing Supplies	5-1
	5.1.2 Developing New Sources	5-2
	5.2 Water Conservation	5-3
	5.2.1 Water Shortage Response	5-3
	5.2.2 Water Loss Reduction and Leak Detection	5-4
	5.2.3 Water Use Efficiency	5-4
	5.2.4 Public Education and Outreach	5-5
	5.3 Water Reuse	5-6
	5.4 Regional Water Supply Systems	5-6

6	REGULATIONS AFFECTING WATER SUPPLY PLANNING	
	6.1 Water Use Act of 1967	6-1
	6.2 Local Water Supply Planning	6-1
	6.3 Interbasin Transfer of Surface Water	6-2
	6.4 Registration of Water Withdrawals and Transfers	6-8
	6.5 Instream Flow Assessment	6-8
	6.6 Water Supply Watershed Protection	6-9
	6.7 Basinwide Water Quality Planning	6-11
	6.8 Approval of Water System Expansions	6-12
	6.9 Coastal Area Management Act	6-12
	6.10 State Environmental Policy Act	6-13
7	DATA SOURCES	
	7.1 Local Water Supply Plans	7-1
	7.2 Water Withdrawal Registrations	7-2
8	STATEWIDE WATER USE	
	8.1 Total Water Use in North Carolina	8-1
	8.2 Water Use by Local Water Supply Plan Systems	8-2
	8.3 Registered Water Withdrawals	8-5
9	TECHNICAL ASSISTANCE NEEDS	9-1
10	EXPLANATION OF RIVER BASIN SUMMARIES	
	10.1 Basin Description	10-2
	10.2 Water Use	10-2
	10.2.1 Factors Affecting Water Demand	10-2
	10.2.2 Total Water Use in Basin	10-2
	10.2.3 Local Water Supply Plans	10-2
	10.2.4 Self-supplied Use	10-3
	10.2.5 Registered Water Withdrawals	10-3
	10.3 Water Availability	10-3
	10.4 Interbasin Transfers of Surface Water	10-4
	10.5 Summary of Water Supply Information from 1997 LWSPs	10-4
11	RIVER BASIN SUMMARIES	
	Broad Basin	
	Cape Fear Basin	
	Catawba Basin	
	Chowan Basin	
	French Broad Basin	
	Hiwassee Basin	
	Little Tennessee Basin	
	Lumber Basin	
	Neuse Basin	
	New River Basin	
	Albemarle Sound	
	Roanoke Basin	
	Tar-Pamlico Basin	
	Watauga Basin	
	White Oak Basin	
	Yadkin - Pee Dee Basin	

APPENDIX A: RIVER BASIN INDEX FOR LOCAL WATER SUPPLY PLAN SYSTEMS

APPENDIX B: SUPPLEMENTAL INFORMATION FROM 1997 LOCAL WATER SUPPLY PLANS