

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	S-1
Background.....	S-1
Need for Additional Water Supplies.....	S-2
Scoping and Identification of Issues	S-2
Alternatives Selection Criteria.....	S-3
Alternatives Considered but Eliminated from Detailed Study	S-3
Alternatives Considered in Detail.....	S-3
Document Structure	S-5
CHAPTER 1 -PURPOSE AND NEED FOR ACTION	1-1
1.1 Background.....	1-1
1.2 Need for Additional Water Supplies.....	1-4
1.3 Scoping and Identification of Issues	1-8
1.4 Required Permits, Approvals and Authorizing Actions	1-10
1.5 Decision Framework.....	1-10
CHAPTER 2 - ALTERNATIVES	2-1
2.1 Alternatives Screening Criteria.....	2-1
2.2 Alternatives Considered but Eliminated from Detailed Study	2-1
2.2.1 Water Conservation Alternative	2-1
2.2.2 Groundwater Development.....	2-3
2.2.3 Development of Alternative Spring Sources	2-4
2.2.4 Storage of Unused Flows from Spring #1 and #2.....	2-4
2.2.5 Surface Water Storage Alternative	2-4
2.2.6 Surface Water Diversion Alternative.....	2-5
2.3 Alternatives Considered in Detail	2-6
2.3.1 Alternative 1 - No Action	2-6
2.3.2 Alternative 2 - Proposed Action, Cow Canyon Spring #3 Development	2-6
2.3.3 Alternative 3 – Full Utilization of Cow Canyon Springs #1 and #2.....	2-11
2.4 Comparison of Alternatives	2-13
CHAPTER 3 - ENVIRONMENTAL CONSEQUENCES	3-1
3.1 Project Area Location	3-1
3.2 High Uintas Wilderness Area	3-1
3.3 Inventoried Roadless Areas/Recreation.....	3-2
3.4 Land Use/Grazing	3-7
3.5 Visual Resources.....	3-8
3.6 Air Quality	3-9
3.7 Water Resources/Wetlands/Water Quality	3-10
3.8 Water Rights	3-19
3.9 Soils/Vegetation	3-21
3.9.1 Federally Listed Threatened, Endangered and Candidate Species	3-22
3.9.2 Forest Sensitive Species (FSS)	3-23

3.10 Terrestrial Wildlife.....	3-25
3.10.1 Federally Listed Threatened, Endangered and Candidate Species	3-22
3.10.2 Forest Sensitive Species (FSS)	3-30
3.10.3 Management Indicator Species (MIS)	3-39
3.10.4 Migratory Birds of Conservation Concern	3-52
3.10.2 Utah Partners in Flight Conservation Species	3-56
3.11 Aquatic Wildlife.....	3-58
3.11.1 Federally Listed Threatened, Endangered and Candidate Species	3-60
3.11.2 Forest Sensitive Species (FSS)	3-61
3.11.3 Management Indicator Species (MIS)	3-62
3.12 Cultural Resources	3-65
3.13 Socio-Economics	3-66
3.14 Irreversible and Irrecoverable Commitments of Resources	3-69

CHAPTER 4 - CONSULTATION AND COORDINATION..... 4-1

CHAPTER 5 - REFERENCES CITED 5-1

LIST OF FIGURES

Figure 1-1. General Project Site Vicinity Map	1-2
Figure 1-2. Cow Canyon Springs Site Location Map.....	1-3
Figure 1-3. Duchesne County Upper Country Water Improvement District Service Area and Culinary Water Distribution System	1-5
Figure 1-4. Duchesne County Upper Country Water Improvement District’s 2002 Metered Water Usage	1-7
Figure 1-5. Duchesne County Upper Country Water Improvement District Water Usage Projections.....	1-7
Figure 2-1. Proposed Development Plan for Cow Canyon Spring #3.....	2-8
Figure 2-2. Proposed spring box design for Cow Canyon Spring #3.....	2-9
Figure 3-1. Location of Yellowstone River/Dry Gulch Lynx Analysis Unit (LAU).....	3-29

LIST OF TABLES

Table 2.1. Comparison of Environmental Consequences among Project Alternatives	2-13
Table 3.1. Water rights associated with Cow Canyon Springs.....	3-20
Table 3.2. Habitat use and local distribution for plant Forest Sensitive Species.....	3-24
Table 3.3. Habitat use and local distribution for federally listed terrestrial wildlife species	3-26
Table 3.4. Habitat use and local distribution for terrestrial Forest Sensitive Species	3-31
Table 3.5. Habitat use and local distribution for terrestrial Management Indicator Species.....	3-40
Table 3.6. Northern goshawk data collected on the ANF between 1992-2003	3-46
Table 3.7. USFWS Birds of Conservation Concern (BCC) for Regions 10 & 16, and Utah Partner in Flight (PIF) Priority Species	3-52
Table 3.3. Habitat use and local distribution for federally listed aquatic wildlife species	3-60

APPENDICES

Appendix A - Duchesne County Upper County Water Improvement District
2003 Water Resources Planning Report

Appendix B - Construction Schedule for the Proposed Action