



Colorado River Interim Surplus Criteria

Final
Environmental Impact
Statement

Executive Summary

U.S. Department of the Interior
Bureau of Reclamation
December 2000

TABLE OF CONTENTS

S.1 INTRODUCTION AND BACKGROUND	1
S.1.1 INTRODUCTION	1
S.1.2 PROPOSED FEDERAL ACTION	4
S.1.3 BACKGROUND	4
S.1.3.1 Long-Range Operating Criteria	5
S.1.3.2 Annual Operating Plan	6
S.1.4 PURPOSE AND NEED FOR ACTION	7
S.1.5 RELATIONSHIP TO UNITED STATES–MEXICO WATER TREATY	8
S.1.6 RELATED AND ONGOING ACTIONS	8
S.1.6.1 California’s Colorado River Water Use Plan	8
S.1.6.1.1 Imperial Irrigation District/San Diego County Water Authority Water Transfer	9
S.1.6.1.2 All-American and Coachella Canal Lining Projects	10
S.1.6.2 Glen Canyon Dam Operations	10
S.1.6.2.1 Adaptive Management Program	11
S.1.6.2.2 Beach/Habitat-Building Flows and Beach/Habitat-Maintenance Flows	11
S.1.6.2.3 Temperature Control at Glen Canyon Dam	12
S.1.6.3 Actions Related to the Biological and Conference Opinion on Lower Colorado River Operations and Maintenance	12
S.1.6.4 Lower Colorado River Multi-Species Conservation Program	13
S.1.6.5 Secretarial Implementation Agreement Related to California’s Colorado River Water Use Plan	13
S.1.6.6 Offstream Storage of Colorado River Water and Development and Release of Intentionally Created Unused Apportionment in the Lower Division States	14
S.2 ALTERNATIVES	14
S.2.1 DEVELOPMENT OF ALTERNATIVES	14
S.2.1.1 Origins of California, Six States and Basin States Alternatives	14
S.2.1.2 Utilization of Proposals from Basin States	15
S.2.2 DESCRIPTION OF ALTERNATIVES	16
S.2.2.1 No Action Alternative and Baseline Conditions	16
S.2.2.1.1 Approach to Surplus Water Determination	16
S.2.2.1.2 70R Baseline Surplus Triggers	16
S.2.2.2 Basin States Alternative (Preferred Alternative)	17
S.2.2.2.1 Approach to Surplus Water Determination	17
S.2.2.2.2 Basin States Alternative Surplus Triggers	18

S.2.2.3	Flood Control Alternative.....	18
S.2.2.3.1	Approach to Surplus Water Determination	18
S.2.2.3.2	Flood Control Alternative Surplus Triggers.....	18
S.2.2.4	Six States Alternative	18
S.2.2.4.1	Approach to Surplus Water Determination	18
S.2.2.4.2	Six States Alternative Surplus Triggers.....	19
S.2.2.5	California Alternative	19
S.2.2.5.1	Approach to Surplus Water Determination	19
S.2.2.5.2	California Alternative Surplus Triggers	19
S.2.2.6	Shortage Protection Alternative.....	20
S.2.2.6.1	Approach to Surplus Water Determination	20
S.2.2.6.2	Shortage Protection Alternative Surplus Triggers.....	20
S.3	SUMMARY OF ENVIRONMENTAL CONSEQUENCES	20
S.3.1	USE OF MODELING TO IDENTIFY POTENTIAL FUTURE COLORADO RIVER System Conditions.....	20
S.3.2	BASELINE CONDITIONS.....	20
S.3.3	IMPACT DETERMINATION APPROACH	21
S.3.4	PERIOD OF ANALYSIS	21
S.3.5	POTENTIALLY AFFECTED AREA	21
S.3.6	COMPARISON OF SURPLUS ALTERNATIVES TO BASELINE CONDITIONS	22
S.3.6.1	Effects on Reservoir Surface Elevations and River Flows.....	22
S.3.6.2	Summary of Environmental Impacts.....	24
S.3.6.3	Environmental Commitments.....	24
S.3.6.3.1	Water Quality	25
S.3.6.3.2	Riverflow Issues	25
S.3.6.3.3	Aquatic Resources	25
S.3.6.3.4	Special-Status Species	26
S.3.6.3.5	Recreation.....	26
S.3.6.3.6	Cultural Resources.....	26
S.3.6.3.7	Transboundary Impacts	26
S.4	OTHER NEPA CONSIDERATIONS.....	27
S.4.1	CUMULATIVE IMPACTS.....	27
S.4.2	RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND Long-Term Productivity	28
S.4.3	IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES	28

S.5 CONSULTATION AND COORDINATION.....	29
S.5.1 GENERAL PUBLIC INVOLVEMENT ACTIVITIES.....	29
S.5.1.1 Project Scoping.....	29
S.5.1.2 Public Review of DEIS	30
S.5.2 FEDERAL AGENCY COORDINATION	31
S.5.2.1 National Park Service	31
S.5.2.2 U.S. Section of the International Boundary and Water Commission.....	31
S.5.2.3 U.S. Bureau of Indian Affairs.....	31
S.5.2.4 U.S. Fish and Wildlife Service Including Endangered Species Act Compliance.....	31
S.5.2.5 National Marine Fisheries Service	33
S.5.2.6 National Historic Preservation Act Compliance	33
S.5.3 TRIBAL CONSULTATION	34
S.5.4 STATE AND LOCAL WATER AND POWER AGENCIES COORDINATION.....	34
S.5.5 NON-GOVERNMENTAL ORGANIZATIONS COORDINATION	35
S.5.6 MEXICO CONSULTATION	36
S.5.7 SUMMARY OF COORDINATION CONTACTS	36
S.5.8 <i>FEDERAL REGISTER</i> NOTICES	36