

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1.0	INTRODUCTION.....	1-1
1.1	Proposed Air Service and FAA Responsibility.....	1-1
1.1.1	The Proposed Air Service at MMH	1-1
1.1.2	FAA's Responsibilities	1-1
1.2	Background	1-2
1.2.1	Description of the Airport	1-2
1.2.2	Current Air Service at MMH.....	1-11
1.3	Aviation Forecasts.....	1-11
1.4	Organization of this Document.....	1-12
2.0	PURPOSE AND NEED	2-1
2.1	Proposed Federal Action	2-1
2.2	Purpose of and Need for the Proposed Federal Action.....	2-1
3.0	ALTERNATIVES	3-1
3.1	Introduction	3-1
3.2	Alternatives Considered	3-1
3.2.1	Use of Alternative Airports	3-1
3.2.2	Use of Alternative Aircraft	3-2
3.2.3	Alternatives Considered in Detail.....	3-2
3.3	Comparison of Alternatives	3-3
3.4	Applicable Federal Laws and Regulations.....	3-3
3.4.1	Federal Laws and Statutes	3-3
3.4.2	Executive Orders.....	3-4
3.4.3	Federal Regulations	3-4
3.4.4	FAA Orders and Advisory Circulars	3-6
4.0	AFFECTED ENVIRONMENT	4-1
4.1	Study Areas.....	4-1
4.1.1	Airport Study Area.....	4-1
4.1.2	Section 4(f) Resources Study Area.....	4-1
4.1.3	Socioeconomic Study Area.....	4-1
4.2	Human Environment	4-2
4.2.1	Political Jurisdictions	4-2
4.2.2	Land Use	4-2
4.2.3	Social and Economic Characteristics	4-2
4.2.3.1	Population.....	4-11
4.2.3.2	Racial and Ethnic Composition	4-11
4.2.3.3	Native American Tribes	4-13
4.2.3.4	Income Distribution.....	4-13
4.2.3.5	Employment Characteristics.....	4-14
4.2.4	Historical, Architectural, Archaeological, and Cultural Resources	4-19
4.2.4.1	Area of Potential Effect.....	4-19
4.2.4.2	Native American Tribes	4-19
4.2.4.3	Other Identified Resources.....	4-20
4.2.5	Department of Transportation Act Section 4(f) and Land and Water Conservation Fund Section 6(f) Properties	4-20
4.2.5.1	Department of Transportation Act Section 4(f) Resources	4-20
4.2.5.2	Land and Water Conservation Fund Section 6(f) Resources	4-28
4.3	Physical and Natural Environment.....	4-28
4.3.1	Water Resources	4-28
4.3.1.1	Surface Water Features in Vicinity of MMH	4-28

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Page</u>
	4.3.1.2 Groundwater Features in Vicinity of MMH 4-28
4.3.2 Floodplains.....	4-33
4.3.3 Fish, Wildlife, Plants, and Wetlands.....	4-33
4.3.3.1 Biotic Communities.....	4-33
4.3.3.2 Threatened and Endangered Species.....	4-34
4.3.4 Farmlands	4-40
4.4 Past, Concurrent, and Reasonably Foreseeable Projects and Actions.....	4-40
4.4.1 Past Projects and Actions	4-40
4.4.2 Concurrent Projects and Actions	4-40
4.4.3 Future Project and Actions.....	4-40
5.0 ENVIRONMENTAL CONSEQUENCES	5-1
5.1 Introduction	5-1
5.2 Resource Categories Not Affected	5-1
5.3 Noise	5-3
5.3.1 Overview of Impacts	5-3
5.3.2 Applicable Regulations	5-3
5.3.3 Methodology.....	5-4
5.3.3.1 Aircraft Noise Descriptors.....	5-4
5.3.3.2 Aircraft Noise Prediction.....	5-4
5.3.3.3 Operations	5-5
5.3.4 Baseline Condition	5-5
5.3.4.1 Data Sources.....	5-5
5.3.4.2 Modeled Aircraft Operations.....	5-6
5.3.4.3 2009 Aircraft Noise Exposure within the Airport Study Area.....	5-6
5.3.5 No-Action Alternative	5-13
5.3.6 Proposed Action.....	5-13
5.3.7 Mitigation.....	5-14
5.4 Compatible Land Use	5-14
5.5 Socioeconomic Impacts, Environmental Justice and Children's Environmental Health and Safety Risks	5-14
5.5.1 Overview of Impacts	5-14
5.5.2 Applicable Regulations	5-29
5.5.3 Methodology.....	5-29
5.5.4 Baseline Conditions	5-31
5.5.5 No-Action Alternative	5-31
5.5.6 Proposed Action.....	5-31
5.5.7 Mitigation.....	5-32
5.6 Secondary (Induced) Impacts	5-33
5.6.1 Overview of Impacts	5-33
5.6.2 Applicable Regulations	5-33
5.6.3 Methodology.....	5-33
5.6.4 Baseline Condition	5-33
5.6.5 No-Action Alternative	5-33
5.6.6 Proposed Action.....	5-34
5.6.7 Mitigation.....	5-34
5.7 Historical, Architectural, Archaeological, and Cultural Resources.....	5-34
5.7.1 Overview of Impacts	5-34
5.7.2 Applicable Regulations	5-34
5.7.3 Methodology.....	5-35
5.7.4 Baseline Conditions	5-35

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Page</u>
5.7.5 No-Action Alternative	5-35
5.7.6 Proposed Action.....	5-35
5.7.7 Mitigation.....	5-35
5.8 Department of Transportation Act Section 4(f) Resources and Section 6(f) Resources	5-36
5.8.1 Overview of Impacts	5-36
5.8.2 Applicable Regulations	5-36
5.8.3 Methodology.....	5-37
5.8.3.1 Noise Analysis for 4(f) Areas in the Vicinity of the Airport.....	5-38
5.8.3.2 Noise Analysis for MMH Operations Potentially Affecting 4(f) Areas with Quiet Settings	5-38
5.8.3.3 Additional Noise Analysis Including Non-MMH Operations Potentially Affecting 4(f) Areas with Quiet Settings.....	5-40
5.8.4 Baseline Conditions	5-40
5.8.5 No-Action Alternative	5-40
5.8.6 Proposed Action Alternative.....	5-40
5.8.7 Mitigation.....	5-45
5.9 Air Quality.....	5-45
5.9.1 Overview of Impacts	5-45
5.9.2 Applicable Regulations	5-45
5.9.3 Methodology.....	5-49
5.9.4 Baseline Condition	5-49
5.9.5 No-Action Alternative	5-50
5.9.6 Proposed Project.....	5-51
5.9.7 Mitigation.....	5-51
5.10 Hazardous Materials, Pollution Prevention, and Solid Waste	5-52
5.10.1 Overview of Impacts	5-52
5.10.2 Applicable Regulations	5-52
5.10.3 Methodology.....	5-53
5.10.4 Baseline Condition	5-53
5.10.4.1 Hazardous Materials.....	5-53
5.10.4.2 Solid Waste	5-54
5.10.5 No-Action Alternative	5-54
5.10.6 Proposed Project.....	5-54
5.10.7 Mitigation.....	5-55
5.11.7 Mitigation.....	5-59
5.12 Water Quality	5-60
5.12.1 Overview of Impacts	5-60
5.12.2 Applicable Regulations	5-60
5.12.3 Methodology.....	5-60
5.12.4 Baseline Conditions	5-61
5.12.4.1 Surface Water Management at MMH.....	5-61
5.12.4.2 Water Supply	5-62
5.12.4.3 Wastewater Treatment	5-67
5.12.5 No-Action Alternative	5-67
5.12.5.1 Surface Waters.....	5-67
5.12.5.2 Groundwater.....	5-67
5.12.5.3 Water Supply	5-67
5.12.5.4 Wastewater.....	5-68
5.12.6 Proposed Action.....	5-68
5.12.6.1 Surface Waters.....	5-68

TABLE OF CONTENTS (Continued)

<u>Section</u>		<u>Page</u>
	5.12.6.2 Groundwater.....	5-68
	5.12.6.3 Water Supply.....	5-69
	5.12.6.4 Wastewater.....	5-69
	5.12.7 Mitigation.....	5-69
5.13	Natural Resources and Energy Supply.....	5-69
	5.13.1 Overview of Impacts	5-69
	5.13.2 Applicable Regulations	5-70
	5.13.3 Methodology.....	5-70
	5.13.4 Baseline Condition	5-70
	5.13.5 No-Action Alternative	5-70
	5.13.6 Proposed Action.....	5-70
	5.13.7 Mitigation.....	5-71
5.14	Cumulative Impacts.....	5-71
	5.14.1 Overview of Impacts	5-71
	5.14.2 Applicable Regulations	5-71
	5.14.3 Methodology.....	5-71
	5.14.4 Baseline Conditions	5-72
	5.14.5 No-Action Alternative	5-72
	5.14.6 Proposed Action.....	5-72
	5.14.7 Mitigation.....	5-73
6.0	LIST OF PREPARERS	6-1
7.0	COORDINATION AND PUBLIC INVOLVEMENT	7-1
	7.1 Introduction	7-1
	7.2 Early Agency Coordination	7-1
	7.3 Draft EA Availability For Review	7-1
	7.4 Public Hearing.....	7-2
	7.5 Final EA Availability for Review	7-2
	7.6 Location of Draft EA for Public Review	7-2
8.0	REFERENCES.....	8-1
9.0	LIST OF ACRONYMS AND GLOSSARY	9-1
	9.1 Acronyms	9-1
	9.2 Glossary of Terms	9-3

LIST OF APPENDICES

Appendix A	Agency Coordination
Appendix B	Noise
Appendix C	Information Concerning Species of Elevated Concern
Appendix D	Aviation Forecast
Appendix E	Public Involvement

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1.3-1 MMH Commercial Aviation Forecast	1-13
3.3-1 Summary of Environmental Impacts	3-5
4.2-1 Population Growth Trends of Mono and Inyo Counties, 1980-2005.....	4-11
4.2-2 Racial and Ethnic Characteristics of Mono and Inyo Counties, 2000	4-12
4.2-3 Distance of Federal Native American Tribes from MMH	4-13
4.2-4 Household Income Distribution Characteristics of Mono and Inyo Counties, 2000	4-17
4.2-5 Area Median Income Distribution for Employee Households for Mono and Inyo Counties, 2000	4-18
4.2-6 Summary of Areas Containing Potentially Protected Section 4(f) Resources	4-24
4.3-1 Special Status Species in the Vicinity of MMH	4-39
5.9-1 National Ambient Air Quality Standards (NAAQS)	5-46
5.9-2 Attainment/Nonattainment Designations for Mono County.....	5-50
5.9-3 Mammoth Lakes 2008 Air Quality Monitoring Data – Summary for PM ₁₀	5-50
5.9-4 Impact of Aircraft Substitution	5-51
5.10-1 Federal Regulations Pertaining to Hazardous Materials Management	5-52
5.11-1 L _{eq} and L _{max} Noise Levels at Sage Grouse Lek #2	5-56

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1.1-1 Photograph of CRJ700 Aircraft	1-3
1.2-1 Vicinity Map	1-5
1.2-2 Airport Location	1-7
1.2-3 Existing Airport Facilities	1-9
4.1-1 Airport Study Area.....	4-3
4.1-2 Section 4(f) Resources Study Area.....	4-5
4.1-3 Socioeconomic Study Area.....	4-7
4.2-1 Existing Land Use	4-9
4.2-2 Regional Tribal Lands	4-15
4.2-3 Area of Potential Effect (APE).....	4-21
4.3-1 Long Valley Watershed	4-29
4.3-2 Hydrologic Features in Vicinity of MMH	4-31
4.3-3 Vegetative Communities on Mammoth Yosemite Airport	4-35
4.3-4 Non-Listed Species of Elevated Concern	4-37
4.3-5 Federal Endangered – Threatened Species	4-41
5.1-1 MMH Commercial Operations.....	5-2
5.3-1 2009 Existing Conditions East Flow Flight Tracks – Aircraft Using Runway 09	5-7
5.3-2 2009 Existing Conditions West Flow Flight Tracks – Aircraft Using Runway 27	5-9
5.3-3 Airport Study Area.....	5-11
5.3-4 2009 Existing Condition Noise Contours	5-15
5.3-5 2011 No-Action and Proposed East Flow Flight Tracks – Aircraft Using Runway 09	5-17
5.3-6 2011 No-Action and Proposed West Flow Flight Tracks – Aircraft Using Runway 27	5-19
5.3-7 2015 No-Action and Proposed East Flow Flight Tracks – Aircraft Using Runway 09	5-21
5.3-8 2015 No-Action and Proposed West Flow Flight Tracks – Aircraft Using Runway 27	5-23
5.3-9 2011 No-Action Alternative and Proposed Action Alternative Noise Contours.....	5-25
5.3-10 2015 No-Action Alternative and Proposed Action Alternative Noise Contours.....	5-27
5.8-1 Potential 4(f) Resource Grid Points	5-41
5.8-2 INM Uniform Grid	5-43
5.8-3 2015 Grid Points Exceeding 3 dBA L _{max} COE Criteria	5-47
5.11-1 Lek #2 Location with Flight Tracks.....	5-57
5.12-1 Deicing Pad	5-63
5.12-2 Groundwater Wells and Ground Water Basins in Vicinity of MMH	5-65