

1.0 INTRODUCTION

1.1 Purpose of the EIR 1.0-1
1.2 Known Trustee and Responsible Agency 1.0-1
1.3 Type of Document 1.0-2
1.4 Intended Uses of the EIR 1.0-2
1.5 Organization and Scope 1.0-3
1.6 Environmental Review Process 1.0-4
1.7 Comments Received on the Notice of Preparation 1.0-6

2.0 EXECUTIVE SUMMARY

2.1 Purpose and Scope of the Environmental Impact Report 2.0-1
2.2 Project Characteristics 2.0-1
2.3 Project Alternatives Summary 2.0-3
2.4 Areas of Controversy 2.0-3
2.5 Summary of Environmental Impacts 2.0-4

3.0 PROJECT DESCRIPTION

3.1 Introduction 3.0-1
3.2 Local and Regional Setting 3.0-1
3.3 Background and History of the General Plan Process 3.0-11
3.5 General Plan Update Components and Characteristics 3.0-13
3.6 General Plan Update Land Use Concept 3.0-21
3.7 Intended uses of the EIR and approval Process 3.0-29

4.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

4.1 Land Use 4.1-1
4.2 Agricultural Resources 4.2-1
4.3 Population/Housing/Employment 4.3-1
4.4 Hazards and Human Health 4.4-1
4.5 Transportation and Circulation 4.5-1
4.6 Air Quality 4.6-1
4.7 Noise 4.7-1
4.8 Geology and Soils 4.8-1
4.9 Hydrology and Water Quality 4.9-1
4.10 Biological Resources 4.10-1
4.11 Cultural and Paleontological Resources 4.11-1
4.12 Public Services and Utilities 4.12-1
4.13 Visual Resources/Light and Glare 4.13-1

5.0 CUMULATIVE IMPACTS

5.1 Introduction 5.0-1
5.2 Cumulative Setting 5.0-2
5.3 Cumulative Impacts Analysis 5.0-2

TABLE OF CONTENTS

6.0 PROJECT ALTERNATIVES

6.1	Introduction	6.0-1
6.2	Alternatives Under Consideration	6.0-1
6.3	No Project Alternative	6.0-3
6.4	Alternative 2 – Reduced Planning Area Alternative	6.0-23
6.5	Alternative 3 – Natural Resources Conservation Alternative	6.0-42
6.6	Alternative 4 – Land Use Modification Requests Alternative	6.0-62
6.7	Environmentally Superior Alternative	6.0-80

7.0 LONG-TERM IMPLICATIONS

7.1	Growth-Inducing Impacts	7.0-1
7.2	Significant Irreversible Environmental Effects	7.0-5
7.3	Significant and Unavoidable Environmental Effects	7.0-5

8.0 REPORT PREPARERS

APPENDICES

Appendix A	NOP & Letter Responses by Interested Parties
Appendix B	Growth Projections for Year 2030
Appendix C	Compatibility Criteria for Each Safety & Noise Zone, Plan Policies Relevant to the Proposed GP
Appendix D	List of LUST Sites in the Planning Area
Appendix E	Traffic Model Outputs
Appendix F	Air Model Outputs
Appendix G	Noise Levels/Contours Modeling Output Files
Appendix H	Complete Special-Status Species list, Habitat requirements, rationale for impact analysis, CNDDDB, CNPS, & USFWS queries for special-status species, and Plant & Wildlife species observed during "windshield" surveys

LIST OF TABLES

Table 2.0-1	Project Impacts and Proposed Mitigation Measures.....	2.0-5
Table 3.0-1	Summary of Existing, General Plan 2030, and Buildout Conditions.....	3.0-22
Table 3.0-2	Proposed General Plan Year 2030 Land Uses	3.0-22
Table 3.0-3	Proposed General Plan Buildout Land Uses (Post 2030)	3.0-23
Table 4.0-1	Proposed & Approved Projects.....	4.0-2
Table 4.1-1	Portions of Planning Area	4.1-1
Table 4.1-2	Existing Land Uses in the Planning Area	4.1-2
Table N-B	Exterior Noise Compatibility Guidelines for Noise from All Sources Including Transportation Noise (24-Hour Day-Night Average [CNEL/Ldn]).....	4.1-17
Table N-C	Exterior Noise Level Standards for Non-Transportation Noise, Measured as dBA Leq (30 Minutes) ⁷	4.1-18
Table N-D	Maximum Acceptable Interior Noise Levels Created By Exterior Noise Sources	4.1-18
Table 4.1-4	Comparison of County/City General Plan Land Use Designations (acres).....	4.1-22
Table LU-B	General Plan/Zoning Consistency.....	4.1-25
Table 4.2-1	Madera County Leading Farm Commodities, 2007.....	4.2-1
Table 4.2-2	Soil Capability Classification	4.2-2
Table 4.2-3	Storie Index Rating System.....	4.2-3
Table 4.2-4	Onsite Land Capability Classification and Storie Index Rating	4.2-6
Table 4.2-5	Important Farmland in Madera Planning Area.....	4.2-15
Table 4.2-6	Acres of Important Farmlands and Grazing Lands – Madera County (1984–2006)	4.2-16
Table 4.2-7	FMMP Rural Land Uses in Madera County, 2002–2006.....	4.2-17
Table 4.3-1	City of Madera and Planning Area Population Trends.....	4.3-1
Table 4.3-2	City of Madera and Planning Area Household Trends	4.3-2
Table 4.3-3	City of Madera and Planning Area Household Sizes	4.3-2
Table 4.3-4	City of Madera and Planning Area Household Tenure	4.3-3
Table 4.3-5	Age of Housing Units in Madera and Planning Area	4.3-4
Table 4.3-6	Median Sales Price for Single-family Homes in Madera County	4.3-4
Table 4.3-7	Employment by Industry in Madera and Planning Area, 2008 Estimate.....	4.3-5
Table 4.3-8	Top Manufacturing Employers in Madera	4.3-6
Table 4.3-9	General Plan Planning Area – Area Outside of Existing City Limits	4.3-12
Table 4.3-10	General Plan Planning Area – Area Within Existing City Limits.....	4.3-12
Table 4.3-11	Cumulative Projections – 2030.....	4.3-12
Table 4.4-1	Pesticide Persistence in Soil	4.4-3
Table 4.4-2	Regulatory Agencies for Hazardous Materials	4.4-6
Table 4.4-3	Other Applicable Hazardous Material Regulations.....	4.4-8
Table 4.5-1	Roadway Segment Daily Volume Thresholds ¹	4.5-5
Table 4.5-2	Roadway Level of Service - Existing Conditions	4.5-9
Table 4.5-3	Freeway Segment Level of Service - Existing Conditions	4.5-11
Table 4.5-4	Roadway Level of Service – Proposed General Plan Year 2030 Conditions	31
Table 4.5-5	Freeway Segment Level of Service – Proposed General Plan Year 2030 Conditions 4.5-32	
Table 4.5-6	Summary of Roadway and Freeway Segments Projected to Operate at a Deficient Level of Service by 2030	4.5-33
Table 4.6-1	Facility Emissions and Toxic Plus Risk Data for Madera	4.6-4
Table 4.6-2	Ambient Air Quality Standards	4.6-7
Table 4.6-3	Air Monitoring Station Annual Summary.....	4.6-9
Table 4.6-4	Federal and State Attainment Status for Madera	4.6-10

TABLE OF CONTENTS

Table 4.6-5 Construction Emissions From Hypothetical One-Acre Construction Site (Pounds/Day) 4.6-18

Table 4.6-6 Average Daily Vehicle Emissions in the Year 2030 (tons/day) 4.6-23

Table 4.6-7 Area Source Emissions from Energy Use (Tons/Day) 4.6-23

Table 4.6-8 Total Long-Term Emissions (Tons/Day) 4.6-24

Table 4.6-9 Summary of Existing And General Plan Buildout Conditions 4.6-24

Table 4.6-10 Summary of 2007 MCTC RTP Population Forecasts 4.6-24

Table 4.6-11 Comparison of General Plan Update 2030 Population Forecasts with Regional Air Plan Forecasts 4.6-25

Table 4.6-12 Greenhouse Gas CO₂ Emissions (2008 and 2030) (Tons/Day) 4.6-37

Table 4.6-13 Example of Typical Emissions from Construction Projects (Lb/Day CO₂) 4.6-38

Table 4.7-1 Common Acoustical Descriptors 4.7-2

Table 4.7-2 Ambient Noise Survey Results 4.7-9

Table 4.7-3 Typical Noise Levels Non-Transportation Noise Sources 4.7-11

Table 4.7-4 Predicted Railroad Noise Levels 4.7-18

Table 4.7-5 Existing Traffic Noise Levels City of Madera 4.7-25

Table 4.7-6 Construction Equipment Noise 4.7-30

Table N-B Exterior Noise Compatibility Guidelines For Noise From All Sources, Including Transportation Noise (24-hour day-night average [CNEL/Ldn]) 4.7-32

Table N-C Exterior Noise Level Standards for Non-Transportation Noise, Measured as dBA Leq (30 Minutes) 4.7-33

Table N-D Maximum Acceptable Interior Noise Levels Created By Exterior Noise Sources 4.7-33

Table 4.7-7 Future (Year 2030) Traffic Noise Levels 4.7-35

Table 4.7-8 Predicted Changes in Traffic Noise Levels 4.7-38

Table 4.7-8 (continued) Predicted Changes in Traffic Noise Levels 4.7-41

Table N-B Exterior Noise Compatibility Guidelines For Noise From All Sources, Including Transportation Noise (24-hour day-night average [CNEL/Ldn]) 4.7-43

Table N-D Maximum Acceptable Interior Noise Levels Created By Exterior Noise Sources 4.7-43

Table N-B Exterior Noise Compatibility Guidelines For Noise From All Sources, Including Transportation Noise (24-hour day-night average [CNEL/Ldn]) 4.7-47

Table N-D Maximum Acceptable Interior Noise Levels Created By Exterior Noise Sources 4.7-47

Table N-B Exterior Noise Compatibility Guidelines For Noise From All Sources, Including Transportation Noise (24-hour day-night average [CNEL/Ldn]) 4.7-51

Table N-D Maximum Acceptable Interior Noise Levels Created By Exterior Noise Sources 4.7-51

Table N-B Exterior Noise Compatibility Guidelines For Noise From All Sources, Including Transportation Noise (24-hour day-night average [CNEL/Ldn]) 4.7-54

Table N-C Exterior Noise Level Standards for Non-Transportation Noise, Measured as dBA Leq (30 Minutes) 4.7-55

Table N-D Maximum Acceptable Interior Noise Levels Created By Exterior Noise Sources 4.7-55

Table 4.8-1 Soil Types and Associated Acreage - City of Madera General Plan Planning Area 4.8-1

Table 4.8-2 Magnitude and Intensity Comparison 4.8-3

Table 4.8-3 Typical Effects of Earthquake Activity 4.8-3

Table 4.8-4 Probabilistic Ground Motion in the General Plan Planning Area 10 Percent Exceedance in 50 Years 4.8-5

Table 4.8-5 Pre-Quaternary Faults Within 100 Miles of the City of Madera 4.8-6

TABLE OF CONTENTS

Table 4.9-1 Historical and Projected Future Groundwater Pumpage by City of Madera (AFY) 4.9-14

Table 4.9-2 Past, Current, and Future Water Use (AFY) 4.9-16

Table 4.9-3 Types of Potential Environmental Impacts that Could be Caused by New Water Supply Projects, Water Rights Transfers, and Related Infrastructure 4.9-38

Table 4.10-1 Cover Types Identified in the City of Madera Planning Area by Total Acres.... 4.10-2

Table 4.10-2 Special-status Plant Species Potentially Occurring Within the Planning Area 4.10-15

Table 4.10-3 Special-status Wildlife Species Potentially Occurring Within the Planning Area 4.10-18

Table 4.10-4 Proposed General Plan Update Designation Changes from Existing Land Uses to Developed Land Uses 4.10-32

Table 4.10-5 Listed Special-status Species Organized by Impacted Land Cover Types Within the Planning Area 4.10-35

Table 4.10-6 Species of Concern and Non-Listed Special-status Species Organized by Land Cover Types Within the Planning Area 4.10-41

Table 4.11-1 Historical Resources in the City of Madera General Plan Update Planning Area 4.10-4

Table 4.12.4-1 Wastewater Collected and Treated (AFY) in the City of Madera Service Area 4.12-18

Table 4.12.4-2 Recommended Unit Flow Factors for Master Planning 4.12-21

Table 4.12.6-1 Madera Unified School District Student Generation Factors 4.12-29

Table 4.12.8-1 Existing CRPD Facilities and Services..... 4.12-38

Table 6.0-1 Alternative 3 Buildout Land Uses 6.0-43

Table 6.0-2 Alternative 4 Land Use Modification Requests 6.0-62

Table 6.0-3 Summary Comparison of Alternatives 6.0-81

TABLE OF CONTENTS

LIST OF FIGURES

Figure 3.0-1	Regional Vicinity.....	3.0-3
Figure 3.0-2	Planning Area SOI City Limits.....	3.0-5
Figure 3.0-3	Distribution of Existing (2008) Land Uses in the Planning Area (total of 67,415 acres).....	3.0-7
Figure 3.0-4	Distribution of Existing (2008) Land Uses in the City Limits (total of 9,519 acres)	3.0-9
Figure 3.0-5	Circulation Map	3.0-15
Figure 3.0-6	Trail Map	3.0-19
Figure 3.0-7	Draft General Plan Land Use Map	3.0-25
Figure 3.0-8	Villages and Districts.....	3.0-27
Figure 4.1-1	Existing Land Uses.....	4.1-3
Figure 4.1-2	Madera County General Plan Designations	4.1-7
Figure 4.1-3	Madera Airport Safety Zones	4.1-11
Figure 4.2-1	Important Farmland map – 11X17 color	4.2-11
Figure 4.2-2	Ag Conversion Map	4.2-13
Figure 4.2-3	Williamson Act/ Preserved Agricultural Lands 11x17 color	4.2-19
Figure 4.5-1	Average Daily Traffic Volumes and Roadway LOS – Existing Conditions	4.5-7
Figure 4.5-2	Existing and Planned Bikeways.....	4.5-13
Figure 4.5-3	Existing Transit Facilities.....	4.5-17
Figure 4.5-4	Existing Goods Movement and Aviation Facilities.....	4.5-19
Figure 4.5-5	Proposed Transportation System	4.5-23
Figure 4.5-6	Average Daily Traffic Volumes and Roadway Level of Service 2030 Conditions.....	4.5-29
Figure 4.7-1	Typical Community Noise Levels	4.7-3
Figure 4.7-2	Ambient Noise Monitoring Locations.....	4.7-7
Figure 4.7-3	Projected Noise Contours.....	4.7-13
Figure 4.7-4	Madera Municipal Airport Projected 2010 Noise Contours	4.7-19
Figure 4.7-5	Transportation Noise Contours.....	4.7-23
Figure 4.7-6	Projected Future Major Transportation Noise Contours.....	4.7-39
Figure 4.9-1	Surface Water Features and Water Provider Service Areas	4.9-3
Figure 4.9-2	FEMA Flood Zones.....	4.9-7
Figure 4.9-3	Hidden Dam Inundation Area	4.9-9
Figure 4.10-1	Land Cover Types within the Planning Area.....	4.10-3
Figure 4.10-2	Critical Habitat within and Surrounding the Planning Area	4.10-11
Figure 4.10-3	Previously Recorded Occurrences within a One-mile Radius of the Planning Area	4.10-13
Figure 6.0-1	Alternative 1 - Existing General Plan Alternative.....	6.0-5
Figure 6.0-2	Alternative 2 - Reduced Planning Area Alternative.....	6.0-25
Figure 6.0-3	Alternative 3 - Natural Resources Alternative	6.0-45