

BIOTA OF LYONS CANYON RANCH, NEWHALL, CALIFORNIA

Prepared for:
COUNTY OF LOS ANGELES REGIONAL PLANNING

On Behalf of:
D.R. HORTON

DMEC Mission Statement:
*To provide quality environmental consulting services with integrity
that protect and enhance the human and natural environment.*



June 2006

**Biota of
Lyons Canyon Ranch,
Newhall, California, California**

Prepared for:

County of Los Angeles

Department of Regional Planning
Hall of Records (13th Floor), Room 1351
320 West Temple Street
Los Angeles, California 90012

Contact: Daryl Koutnik, Supervising Regional Planner
213/974-6411

On Behalf of:

D.R. Horton

21300 Victory Blvd., Suite 700
Woodland Hills, California 91367
Contact: Eric Taylor 310/665-3700

Prepared by:

David Magney Environmental Consulting

P.O. Box 1346
Ojai, California 93024-1346
Contact: David Magney, President 805/646-6045

29 June 2006

This document should be cited as:

David Magney Environmental Consulting. 2006. Biota of Lyons Canyon Ranch, Newhall, California. 29 June 2006. (PN 03-0213.) Ojai, California. Prepared for the County of Los Angeles, Los Angeles, California, on behalf of D.R. Horton, Woodland Hills, California.

TABLE OF CONTENTS

	PAGE
SECTION 1. PROJECT DESCRIPTION	1
LOCATION.....	1
PROPOSED PROJECT.....	1
PERMITS REQUIRED.....	4
SUMMARY OF SIGNIFICANT IMPACTS.....	5
SECTION 2. SETTING.....	9
SITE CHARACTERISTICS	9
SUMMARY OF PROJECT DESCRIPTION.....	9
Background, Location, and Setting.....	9
Project Characteristics.....	10
Project Design and Environmental Considerations.....	11
SEA BOUNDARIES.....	12
WATERSHED DESCRIPTION.....	12
GEOLOGY.....	15
MAPPED SOIL UNITS.....	18
Castaic Series.....	18
Yolo Series.....	18
Hanford Series.....	20
Saugus Series.....	20
Riverwash.....	20
HABITAT DESCRIPTIONS.....	20
Riparian Habitat.....	21
Upland Habitat.....	26
Disturbed Area.....	34
SPECIES ANTICIPATED ONSITE.....	34
PROJECT SITE FLORA AND FAUNA POPULATION ESTIMATES.....	35
CHARACTERISTICS OF THE SURROUNDING AREA.....	36
EXISTING LAND USES.....	36
OPEN SPACE RESERVES.....	39
SURROUNDING VEGETATION.....	39
FLORA AND FAUNA POPULATION ESTIMATES IN THE RANGE.....	42
PROJECT SITE RELATIONSHIP WITH SURROUNDING BIOTIC MOSAIC.....	43
OVERALL BIOLOGICAL VALUE OF THE SANTA CLARITA AREA.....	44
SECTION 3. GENERAL BIOTA SURVEY	46
SURVEY DATES.....	46
PERSONNEL INVOLVED.....	47
METHODS.....	47
SURVEY METHODS.....	47

Floristic Surveys.....	48
Oak Tree Assessment	48
Wildlife Surveys.....	48
VEGETATION MAPPING METHODS.....	50
Mapping Upland Habitats	52
Mapping Wetland and Riparian Habitats	52
LITERATURE SEARCH.....	52
BIOTA SURVEY RESULTS.....	53
FLORA	53
OAK TREES.....	54
FAUNA.....	54
SMALL MAMMAL TRAPPING.....	55
WILDLIFE HABITATS	56
WILDLIFE MOVEMENT.....	62
SECTION 4. SPECIAL-STATUS BIOLOGICAL RESOURCES.....	67
DEFINITIONS OF SPECIAL-STATUS SPECIES	67
SPECIAL-STATUS BOTANICAL RESOURCES	71
SPECIAL-STATUS PLANT SPECIES	71
Observed Special-Status Plant Species	78
SENSITIVE PLANT COMMUNITIES	80
SPECIAL-STATUS WILDLIFE RESOURCES.....	80
OBSERVED SPECIAL-STATUS WILDLIFE SPECIES	89
Cooper’s Hawk (<i>Accipiter cooperii</i>)	89
Barn Owl (<i>Tyto alba</i>) Nest	89
Oak Titmouse (<i>Baeolophus inornatus</i>).....	89
Nuttall’s Woodpecker (<i>Picoides nuttallii</i>).....	90
San Diego Desert Woodrat (<i>Neotoma lepida intermedia</i>) Nest	90
SECTION 5. PROJECT IMPACTS	91
IMPACTS TO TREES AND SENSITIVE WOODLAND HABITAT	93
LOSS OF SOUTHERN CALIFORNIA BLACK WALNUT WOODLAND	93
LOSS OF OAK TREES, COAST LIVE OAK WOODLAND, COAST LIVE OAK RIPARIAN WOODLAND, AND VALLEY OAK WOODLAND	93
IMPACTS TO BIOLOGICAL LIFE HISTORY	95
DIRECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES.....	95
Loss of <i>Ambrosia confertiflora</i> (Weakleaf Burweed) Plants Known Onsite	100
Loss of Special-Status <i>Calochortus</i> Species Known Onsite.....	100
Loss of <i>Calystegia peirsonii</i> (Peirson’s Morning-glory) Plants Known Onsite	100
Loss of <i>Ericameria ericoides</i> ssp. <i>ericoides</i> (Mock Heather) Plants Known Onsite	101
Loss of <i>Juglans californica</i> var. <i>californica</i> (Southern California Black Walnut) Plants Known Onsite	101
Loss of <i>Navarretia hamata</i> ssp. <i>hamata</i> (Skunk Navarretia) Plants Known Onsite.....	101
Loss of Rare Plants Potentially Occurring Onsite.....	101
INDIRECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES	102
Impacts of Increased Dust and Urban Pollutants on Special-Status Plant Species	102



Impacts of Invasive Exotic Plant Species Introduction into Natural Plant Communities	102
IMPACTS TO GENERAL WILDLIFE SPECIES	102
Loss of and Disturbance to Aquatic/Semi-aquatic Wildlife During Construction	103
Loss of and Disturbance to Amphibian Wildlife During Construction	103
Loss of and Disturbance to Reptile Wildlife During Construction	103
Loss of and Disturbance to Breeding and Nesting Birds During Construction	103
Loss of and Disturbance to Mammal Wildlife During Construction	104
DIRECT IMPACTS TO SPECIAL-STATUS WILDLIFE SPECIES	104
Loss of Cooper’s Hawk (<i>Accipiter cooperii</i>) and Foraging and Nesting Habitat	107
Loss of Oak Titmouse (<i>Baeolophus inornatus</i>) and Foraging and Nesting Habitat	107
Loss of Nuttall’s Woodpecker (<i>Picoides nuttallii</i>) and Foraging and Nesting Habitat	107
Loss of Barn Owl (<i>Tyto alba</i>) Foraging and Nesting Habitat	108
Loss of San Diego Desert Woodrat (<i>Neotoma lepida intermedia</i>) and Habitat	108
Loss of Special-Status Reptiles Potentially Present	108
Loss of Special-Status Bird Species Potentially Present	109
Disturbance to Mountain Lion (<i>Puma concolor</i>) and Loss of Habitat	111
Disturbance to Ring-tailed Cat (<i>Bassariscus astutus</i>) and Loss of Habitat	111
Disturbance to Western Mastiff Bat (<i>Eumops perotis californicus</i>) and Loss of Habitat	111
INDIRECT IMPACTS TO SPECIAL-STATUS WILDLIFE SPECIES	112
Impacts Related to Noise	112
Impacts Related to Human Activity	115
Impacts Related to Night Lighting	115
IMPACTS TO NATURAL VEGETATION, INCLUDING SENSITIVE HABITATS	116
LOSS OF GRASSLAND HABITAT	118
LOSS OF LICHEN-ROCK OUTCROP HABITAT	118
LOSS OF COASTAL SAGE SCRUB	118
LOSS OF CHAPARRAL HABITAT	119
LOSS OF SOUTHERN CALIFORNIA BLACK WALNUT WOODLAND	119
LOSS OF COAST LIVE OAK WOODLAND AND COAST LIVE OAK RIPARIAN WOODLAND	119
LOSS OF VALLEY OAK WOODLAND	120
LOSS OF WETLAND HABITATS AND PLANT COMMUNITIES	120
Corps Jurisdictional Waters and Wetlands	121
CDFG Jurisdictional Riparian Habitats	122
Loss of Sensitive Wetland Plant Communities	122
LOSS OF WILDLIFE FORAGING AND COVER HABITATS	124
IMPACTS OF FUEL MODIFICATION	124
IMPACTS FROM LANDSCAPING	131
IMPACTS TO SEA INTEGRITY	132
IMPACTS TO NATURAL OPEN AREA	134
IMPACTS TO WILDLIFE TRAVEL ROUTES AND WILDLIFE CORRIDORS	134
LOSS OF WILDLIFE TRAVEL ROUTES ONSITE	135
INTERFERENCE WITH WILDLIFE CORRIDORS WITHIN LYON CANYON	135
CUMULATIVE IMPACTS TO BIOLOGICAL RESOURCES AND SEA INTEGRITY	137



CUMULATIVE IMPACTS TO OAK TREES, COAST LIVE OAK WOODLAND, COAST LIVE OAK RIPARIAN WOODLAND, AND VALLEY OAK WOODLAND.....	137
CUMULATIVE IMPACTS TO BIOLOGICAL LIFE HISTORY	137
Cumulative Impacts to Special-Status Plant Species	137
Cumulative Impacts to General Wildlife Species.....	138
Cumulative Impacts to Special-Status Wildlife Species	139
CUMULATIVE IMPACTS TO NATURAL VEGETATION, INCLUDING SENSITIVE HABITATS.....	142
Cumulative Impacts to Grassland Habitat.....	142
Cumulative Impacts to Lichen-Rock Outcrop Habitat	142
Cumulative Impacts to Coastal Sage Scrub Habitat.....	142
Cumulative Impacts to Chaparral Habitat	142
Cumulative Impacts to Coast Live Oak Woodland and Coast Live Oak Riparian Woodland Habitats	143
Cumulative Impacts to Valley Oak Habitats	143
Cumulative Impacts to Wetland Habitats and Plant Communities	143
Cumulative Impacts to Wildlife Foraging and Cover Habitats	143
CUMULATIVE IMPACTS OF FUEL MODIFICATION.....	144
CUMULATIVE IMPACTS TO SEA INTEGRITY.....	144
CUMULATIVE IMPACTS TO NATURAL OPEN AREAS	145
CUMULATIVE IMPACTS TO WILDLIFE TRAVEL ROUTES ONSITE	146
SECTION 6. MITIGATION MEASURES.....	150
MITIGATION FOR IMPACTS TO TREES AND SENSITIVE WOODLAND HABITAT ...	150
MITIGATION FOR LOSS OF SOUTHERN CALIFORNIA BLACK WALNUT WOODLAND.....	150
MITIGATION FOR LOSS OF OAK TREES, COAST LIVE OAK WOODLAND, COAST LIVE OAK RIPARIAN WOODLAND AND VALLEY OAK WOODLAND.....	151
MITIGATION FOR IMPACTS TO BIOLOGICAL LIFE HISTORY.....	154
MITIGATION FOR DIRECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES.....	154
Mitigation for Loss of Ambrosia confertiflora (Weakleaf Burweed) Plants Known Onsite	154
Mitigation for Loss of Special-Status Calochortus Species Known Onsite	154
Mitigation for Loss of Calystegia peirsonii (Peirson’s Morning-glory) Plants Known Onsite	157
Mitigation for Loss of Ericameria ericoides ssp. ericoides (Mock Heather) Plants Known Onsite	158
Mitigation for Loss of Juglans californica var. californica (Southern California Black Walnut) Plants Known Onsite	158
Mitigation for Loss of Navarretia hamata ssp. hamata (Skunk Navarretia) Plants Known Onsite	158
Mitigation for Loss of Rare Plants Potentially Occurring Onsite	159
MITIGATION FOR INDIRECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES..	159
Mitigation for Impacts of Increased Dust and Urban Pollutants on Special-Status Plant Species.....	159
Mitigation for Impacts of Invasive Exotic Plant Species’ Introduction into Natural Plant Communities	160



MITIGATION FOR IMPACTS TO GENERAL WILDLIFE SPECIES	161
Mitigation for Loss of and Disturbance to Aquatic/Semi-aquatic Wildlife During Construction	161
Mitigation for Loss of and Disturbance to Amphibian Wildlife During Construction .	161
Mitigation for Loss of and Disturbance to Reptile Wildlife During Construction.....	162
Mitigation for Loss of and Disturbance to Breeding and Nesting Birds During Construction	162
Mitigation for Loss of and Disturbance to Mammal Wildlife During Construction	162
MITIGATION FOR DIRECT IMPACTS TO SPECIAL-STATUS WILDLIFE SPECIES	162
Mitigation for Loss of Cooper’s Hawk (<i>Accipiter cooperii</i>) and Foraging and Nesting Habitat	164
Mitigation for Loss of Oak Titmouse (<i>Baeolophus inornatus</i>) and Foraging and Nesting Habitat	164
Mitigation for Loss of Nuttall’s Woodpecker (<i>Picoides nuttallii</i>) and Foraging and Nesting Habitat	164
Mitigation for Loss of Barn Owl (<i>Tyto alba</i>) Foraging and Nesting Habitat	164
Mitigation for Loss of San Diego Desert Woodrat (<i>Neotoma lepida intermedia</i>) and Habitat	164
Mitigation for Loss of Special-Status Reptiles Potentially Present.....	165
Mitigation for Loss of Special-Status Bird Species Potentially Present	165
Mitigation for Disturbance to Mountain Lion (<i>Puma concolor</i>) and Loss of Habitat ...	166
Mitigation for Disturbance to Ring-tailed Cat (<i>Bassariscus astutus</i>) and Loss of Habitat	166
Mitigation for Disturbance to Western Mastiff Bat (<i>Eumops perotis californicus</i>) and Loss of Habitat.....	166
MITIGATION MEASURES FOR INDIRECT IMPACTS TO SPECIAL-STATUS WILDLIFE SPECIES	166
Mitigation for Impacts Related to Noise	166
Mitigation for Impacts Related to Human Activity.....	167
Mitigation for Impacts Related to Night Lighting.....	168
MITIGATION FOR IMPACTS TO NATURAL VEGETATION, INCLUDING SENSITIVE HABITATS	169
MITIGATION FOR LOSS OF GRASSLAND	169
MITIGATION FOR LOSS OF LICHEN ROCK OUTCROP HABITAT	170
MITIGATION FOR LOSS OF COASTAL SAGE SCRUB	171
MITIGATION FOR LOSS OF CHAPARRAL.....	172
MITIGATION FOR LOSS OF SOUTHERN CALIFORNIA BLACK WALNUT WOODLAND	173
MITIGATION FOR LOSS OF COAST LIVE OAK WOODLAND AND COAST LIVE OAK RIPARIAN WOODLAND	173
MITIGATION FOR LOSS OF VALLEY OAK WOODLAND	174
MITIGATION FOR LOSS OF WETLAND HABITATS AND PLANT COMMUNITIES	174
MITIGATION FOR LOSS OF WILDLIFE FORAGING AND COVER HABITATS.....	177
MITIGATION FOR IMPACTS OF FUEL MODIFICATION.....	177
MITIGATION FOR IMPACTS FROM LANDSCAPING.....	177
MITIGATION FOR IMPACTS TO SEA INTEGRITY	178



MEASURES TO PROTECT/MANAGE OPEN AREAS.....	178
MITIGATION FOR LOSS OF WILDLIFE TRAVEL ROUTES ONSITE	178
MITIGATION FOR INTERFERENCE WITH WILDLIFE CORRIDORS WITHIN LYON CANYON.....	179
SECTION 7. SEA DESIGN COMPATIBILITY CRITERIA.....	180
PROJECT CONSISTENCY WITH SEA CUP COMPATIBILITY CRITERIA.....	180
LAND USES COMPATIBLE WITH GENERAL PLAN SEA REGULATIONS.....	181
LAND USES COMPATIBLE AS DETERMINED BY BIOTIC SURVEY	181
SECTION 8. MONITORING PROGRAM.....	182
MONITORING PROGRAM FOR SPECIAL-STATUS PLANT SPECIES	182
MONITORING PROGRAM FOR SPECIAL-STATUS <i>CALOCHORTUS</i> SPECIES	182
MONITORING PROGRAM FOR <i>CALYSTEGIA PEIRSONII</i> , <i>AMBROSIA CONFERTIFLORA</i> , <i>ERICAMERIA ERICOIDES</i> SSP. <i>ERICOIDES</i> , & <i>NAVARRETIA HAMATA</i> SSP. <i>HAMATA</i>	183
MONITORING PROGRAM FOR INDIRECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES	184
MONITORING PROGRAM FOR GENERAL WILDLIFE	184
MONITORING PROGRAM FOR AQUATIC/SEMI-AQUATIC WILDLIFE.....	184
MONITORING PROGRAM FOR BREEDING AND NESTING BIRDS.....	184
MONITORING PROGRAM FOR AMPHIBIAN, REPTILE, AND MAMMAL WILDLIFE	185
MONITORING PROGRAM FOR SPECIAL-STATUS WILDLIFE SPECIES	185
MONITORING PROGRAM FOR NOISE IMPACTS TO SPECIAL-STATUS WILDLIFE SPECIES	186
MONITORING PROGRAM FOR NATURAL VEGETATION, INCLUDING SENSITIVE HABITATS	186
MONITORING PROGRAM FOR LANDSCAPING.....	188
MONITORING PROGRAM FOR SEA INTEGRITY AND OPEN AREAS	188
CITATIONS.....	189
REFERENCES CITED	189
PERSONAL COMMUNICATIONS.....	192
ACKNOWLEDGEMENTS	193
GUIDELINE COMPLIANCE CHECKLIST.....	193
APPENDICES.....	194
APPENDIX A. INITIAL STUDY QUESTIONNAIRE	A-1
APPENDIX B. PHOTOGRAPH KEY MAP OF LYONS CANYON RANCH AND SURROUNDING AREA WITH PHOTOGRAPHS.....	B-1
APPENDIX C. PLANT SPECIES OBSERVED AT LYONS CANYON RANCH.....	C-1
APPENDIX D. WILDLIFE OBSERVED AND EXPECTED AT LYONS CANYON RANCH	D-1
OVERSIZED MAPS: (1) COLOR U.S.G.S. OAT MOUNTAIN QUAD SHEET; AND (2) LYONS CANYON RANCH SITE PLANS	OVERSIZED MAPS

LIST OF FIGURES

FIGURE	PAGE
1. General Location Map of the Lyons Canyon Ranch Project Site	2
2. Lyons Canyon Ranch Project Site on Aerial Photograph Base	3
3. SEAs in the Vicinity of Lyons Canyon Ranch	13
4. Watersheds in the Vicinity of Lyons Canyon Ranch.....	14
5. Lyons Canyon Ranch Geology	16
6. Significant Ridgelines in the Vicinity of Lyons Canyon Ranch.....	17
7. Mapped Soil Units of Lyons Canyon Ranch	19
8. Vegetation Observed and Classified at Lyons Canyon Ranch	23
9. Lyon Canyon Ranch Regional Context Map.....	37
10. Surrounding Land Uses and Their Effect on Adjacent Watersheds	38
11. Existing Land Uses, Including Open Space Reserves in Areas Surrounding Lyons Canyon Ranch.....	40
12. Vegetation in Areas Surrounding Lyons Canyon Ranch.....	41
13. Survey Paths and Data Collection Waypoints within Lyons Canyon Ranch	49
14. Small Mammal Trapping Transects.....	51
15. Small Mammal Trapping Results	57
16. California Wildlife Habitat Relationship (CWHR) Habitats of Lyons Canyon Ranch..	58
17. Wildlife Corridors of the Newhall Region.....	65
18. Wildlife Travel Paths at Lyons Canyon Ranch.....	66
19. Distribution of CNDDDB-Tracked Sensitive Species and Habitats in the Vicinity of Lyons Canyon Ranch.....	72
20. Special-Status Biological Resources Observed at Lyons Canyon Ranch	73
21. Grading Impacts to Lyons Canyon Ranch Vegetation, including Trees	92
22. Grading Impacts to Special-Status Species Observed at Lyons Canyon Ranch.....	96
23. Example of Los Angeles Fire Department Fuel Modification Unit Requirements	126
24. Impacts of Fuel Modification to Lyons Canyon Ranch Vegetation	128
25. Impacts of Fuel Modification to Lyons Canyon Ranch Special-Status Species.....	129
26. Impacts of Fuel Modification to Lyons Canyon Ranch SEAs.....	130
27. Grading Impacts to SEA Integrity	133
28. Impacts to Wildlife Travel Routes on Lyons Canyon Ranch	136
29. Potential <i>Calochortus</i> Mitigation Areas	156

LIST OF TABLES

TABLE	PAGE
1. Lyons Canyon Ranch Land Use Summary	4
2. Summary of the Lyons Canyon Ranch Project Significant Impacts	5
3. Classification and Area of Lyons Canyon Ranch Vegetation Alliances	22
4. Lyons Canyon Ranch Surrounding Vegetation Alliance Acreage Totals	42
5. Oak Tree Inventory within the Lyons Canyon Ranch Project Site.....	54
6. Small Mammal Trapping at Lyons Canyon Ranch.....	55
7. California Wildlife Habitat Relationship (CWHR) Habitats at Lyons Canyon Ranch	59
8. Definitions of Special-Status Species	68
9. California Native Plant Society List (CNPS List)	69
10. California Native Plant Society R-E-D Code	69
11. California Natural Diversity Database Element Ranking System	70
12. Special-Status Plant Species with Potential to Occur at Lyons Canyon Ranch	74
13. Sensitive Habitats Tracked in the Vicinity of Lyons Canyon Ranch	81
14. Special-Status Wildlife Species with Potential to Occur at Lyons Canyon Ranch	82
15. Impacts of Project on Onsite Oak Trees	94
16. Impacts of Project on Onsite Heritage Oak Trees	94
17. Observed Sensitive Plant Species Impacts Matrix.....	98
18. Observed Sensitive Wildlife Species Impacts Matrix	106
19. Noise Levels of Construction Equipment.....	115
20. Project Impact Area for Each Vegetation Type Onsite	117
21. Summary of All Jurisdictional Waters, Wetland, and Riparian Areas at Lyons Canyon Ranch.....	121
22. Impact Area of Fuel Modification to Lyons Canyon Ranch Vegetation Alliances.....	131
23. Cumulative Projects List (City of Santa Clarita).....	147
24. Cumulative Projects List (Unincorporated Area of Los Angeles County).....	148