PUBLIC REVIEW DRAFT
ENVIRONMENTAL IMPACT REPORT

Cumming Ranch Project
TM 5344; GPA 03-007; SP 03-005; STP 10-007; R 07-002
DPLU Environmental Log Number: 03-09-028
SCH: 2004031136

Lead Agency:

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, California 92123

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ACOE	U.S. Army Corps of Engineers
ADT	average daily traffic
ADWF	Average Dry Weather Flow
AF/YR	acre-feet per year
AIA	Airport Influence Area
ALUC	San Diego County Airport Land Use Commission
ALUCP	San Diego County Land Use Commission Plan
APS	Alternative Planning Strategy
ASBS	Areas of Special Biological Significance
ASPA	Activated Sewer Powers Area
B.P.	before present
BMP	Best Management Practice
BO	Biological Opinion
BRA	Building Restricted Areas
CAA	Federal Clean Air Act
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CC&Rs	Covenants, Conditions and Restrictions
CCAT	California Climate Action Team
CCR	California Code of Regulations
CAL FIRE	California Department of Forestry and Fire Protection
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cfs	cubic feet per second
CH_4	methane
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent
County	County of San Diego

CRHR	California Register of Historical Resources
CSS	Coastal Sage Scrub
CWA	Clean Water Act
dBA	A-weighted decibels
DCSS	Diegan Coastal Sage Scrub
DPLU	County of San Diego Department of Planning and Land Use
DPR	Department of Parks and Recreation
DPW	Department of Public Works
DTSC	CalEPA's Department of Toxic Substances Control
DWR	Department of Water Resources
EDA	Estate Development Area
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
EVPE	Emergency Vehicle Preemption Detectors
FAA	Federal Aviation Administration
FAHJ	Fire Authority Having Jurisdiction
FAZ	flight activity zones
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
GPA	General Plan Amendment
gpd	gallons per day
GPS	global positioning satellite
HLP	Habitat Loss Permits
HOA	Homeowners Association
HS	hydrogen sulfide
LAFCO	Local Agency Formation Commission
LBZ	Limited Building Zone
L_{eq}	Equivalent noise level
LOS	Level of Service
LVW	loaded vehicle weight
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MMT	million metric tons
mph	miles per hour
MPOs	Metropolitan Planning Organizations
MSCP	Multiple Species Conservation Program

MUP	minor use permit
NO_2	nitrogen dioxide
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NCMSCP	North County MSCP
NOI	Notice of Intent
NOP	Notice of Preparation
NO_X	oxides of nitrogen
N_2O	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
NSLU	Noise Sensitive Land Use
O_3	ozone
OHWM	Ordinary High Water Mark
OS-1	Open Space 1
OSE	open space easement
Pb	lead
PM_{10}	suspended particular matter
$PM_{2.5}$	fine particular matter
ppm	parts per million
PUC	California Public Utilities Commission
PVC	polyvinyl chloride
RAQS	Regional Air Quality Strategy
RCPG	Ramona Community Planning Group
RCRA	Resource Conservation and Recovery Act
RFD	Ramona Fire Department
RMP	Resource Management Plan
RMWD	Ramona Municipal Water District
ROW	right-of-way
RPO	Resource Protection Ordinance
RPRA	Ramona Parks and Recreation Association
RR	Rural Residential
RTP	Regional Transportation Plan
RUSD	Ramona Unified School District
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District

SDCWA	San Diego County Water Authority
SIP	State Implementation Plan
SMSSA	Santa Maria Sewer Service Area
SMWWTP	Santa Maria Wastewater Treatment Plant
SO_2	sulfur dioxide
SO_4	sulfates
SO_X	oxides of sulfur
SPA	Specific Planning Area
SR 67	State Route 67
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TIF	Transportation Infrastructure Development Fee
TM	Tentative Map
UBC	Uniform Building Code
USEPA	U.S. Environmental Protection Agency
USFS	United States Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compounds
WDR	Waste Discharge Requirement
$\mu g/m^3$	micrograms per cubic meter

SUMMARY

S.1 Project Synopsis

Location

The Cumming Ranch Specific Planning Area (SPA) is part of the Ramona Community Planning Area located in central San Diego County. The Cumming Ranch project site is located approximately 20 miles northeast of downtown San Diego, 11 miles east of Interstate 15, and 15 miles north of Interstate 8. The project site is located immediately west of the Ramona Town Center and approximately 0.25 mile northwest of the intersection of State Route 67 (SR 67) and Highland Valley Road.

Description

The proposed Cumming Ranch project is specifically designed to accommodate the County of San Diego's Ramona Grasslands Preserve by making available to the preserve certain privately-owned lands while retaining a portion of the acreage for residential development.

The project site is 682.6 acres in size. Of the 682.6 acres, 457.4 acres (approximately 67 percent) would be made available as permanent open space for inclusion in the Ramona Grasslands Preserve and 215.4 acres would be used for residential development. Approximately 9.8 acres of the property is located in right-of-way (ROW) for Highland Valley Road and SR 67.

Of the 457.4 acres of permanent open space, 143.3 acres would be dedicated as permanent open space throughout the development area. The owner plans, following recordation of the final map, to convey by sale 138.5 acres to the County of San Diego (County), or a conservancy acting on behalf of the Ramona Grasslands Preserve. In addition, the owner plans, with recordation of the final map, to convey approximately 113.1 acres in fee title to the County or a conservancy acting on behalf of the Ramona Grasslands Preserve.

The residential portion of the project would consist of 125 residential lots, ranging in size from 1.0 to 3.1 acres. Average lot size would be approximately 1.5 acres. The lots would be designed to be consistent with the rural character of the Ramona community and to transition seamlessly and as naturally as possible with the adjoining grasslands. Relatively large lots, the use of minimum grading techniques, retention of existing natural features, and natural landscaping

practices throughout the project are key design elements to maintain rural character and to transition easily with adjacent preserved areas.

Access for the project is via four points on Highland Valley Road. The project would be designed to collect all residential traffic internally to minimize and avoid unnecessary interference with traffic along Highland Valley Road. No individual lots have direct access to Highland Valley Road. The project includes two additional secondary access/egress points for fire and evacuation use only. Water and sewer service would be provided by the Ramona Municipal Water District (RMWD). No wells or septic systems would be used. Sewer lines have been specifically engineered within low areas to avoid the need to mass grade the project site for a gravity flow system. The project would install and fund construction for 3.40 miles of community trails and pathways, including a 2-acre trail staging area.

The land use plan and design of the project, including the owner's willing participation in making certain lands available for the Ramona Grasslands Preserve is guided by and in response to the County's Department of Planning and Land Use (DPLU) White Paper for the Ramona Grasslands (July 2002). The rural character theme incorporated in the design is intended to meet requirements of the Ramona Community Plan.

Setting

The project site is located in Ramona, an unincorporated community of the County of San Diego. According to the 2000 census, Ramona has a population of approximately 33,404 residents. Ramona is approximately 20 miles northeast of downtown San Diego, which serves as a principal employment center. As growth has occurred throughout the County, Ramona has maintained a rural and country lifestyle.

The project site is located immediately west and contiguous to the Ramona Town Center. The project site is divided into three main areas (Areas A, B, and C). Area A, located in the southernmost portion of the site, has rolling topography with the dominant topographic feature being an east-west-trending ridgeline. Stands of Engelmann and coast oak trees, rock outcroppings, and small unnamed drainages are scattered throughout portions of the area. Highland Valley Road bisects Area A. Area B, the center portion of the property, is located generally between Area A and Santa Maria Creek. The topography in the central area consists mostly of a wide-open, level plain area. Area C contains a scattering of vernal pools of which some are protected by conservation easements. Collectively, these conservation easements are referred to as the Ramona Vernal Pool Preserve.

Currently, portions of Areas A and B are used for dry-land farming, mostly oat-hay, and cattle grazing throughout the year. Area C is fenced and not used for farming or cattle grazing in order to protect the sensitive vernal pools.

The pattern of adjacent land uses is varied. Located to the east is the Ramona Town Center. To the north is the Ramona Airport and to the south and west, and along portions of the north boundary, are residential homes on lots mostly ranging in size from 1 to 5 acres. To the northwest of Areas B and C, the project site adjoins the Cagney Ranch and Hardy Ranch properties, both acquired by the County for inclusion in the Ramona Grasslands Preserve.

S.2 Summary of Significant Effects and Mitigation Measures That Reduce or Avoid the Significant Effects

This section provides a brief summary of the significant issues and whether the impacts can be mitigated. Table S-1, located at the end of this chapter, includes detailed descriptions of each environmental effect of the proposed project found to be significant, the mitigation measures that would reduce or avoid that effect, and the conclusion as to whether the effect is reduced to below a level of significance by applying the mitigation measures. The table also references the subchapters of the EIR where each topic is analyzed in detail.

Chapter 2 provides analysis of one issue area that would result in significant and unmitigable impacts. As outlined in Subchapter 2.1, cumulative traffic impacts at one segment of SR 67 between Poway Road and Archie Moore Road are considered significant and unmitigable.

The following environmental issues were found to have significant, but mitigable impacts: Biological Resources (Subchapter 3.1), Cultural Resources (Subchapter 3.2), Noise (Subchapter 3.3), Aesthetic and Visual Quality (Subchapter 3.4), Climate Change (Subchapter 3.5), and Public Services and Recreation (Subchapter 3.6). Mitigation measures have been proposed that reduce these potential environmental impacts to less than significant.

S.3 Areas of Controversy

The California Environmental Quality Act (CEQA) Guidelines state that an EIR shall identify areas of controversy known to the lead agency including issues raised by agencies and the public (Section 15123(b)(2)). The County issued a Notice of Preparation (NOP) for the Cumming Ranch project on March 25, 2004. The following is a summary of the most controversial issues received during the NOP comment period and those that have arisen during preparation of the Draft Environmental Impact Report (DEIR):

- Additional project traffic on area roadways
- Conversion of undeveloped farmland to urban development and the resulting change to the rural character of the community
- Potential impacts to biological resources and habitat onsite
- Potential for increases in noise from the proposed lift station on the project site
- Potential for drainage issues and flooding of offsite properties
- Potential connection into the Mount Woodson force main for sewer service
- Emergency access
- Water and sewer availability

S.4 Issues to Be Resolved by the Decision Making Body

The County Board of Supervisors (Board) will be required to make decisions concerning the significant impacts that would result with implementation of the proposed project. First, the Board must determine if the benefits of the proposed project outweigh the significant unavoidable impacts related to traffic. The Board would be required to adopt a Statement of Overriding Considerations explaining why they would be willing to accept each significant impact. This decision must balance the benefits of the proposed project against the unavoidable environmental effects in determining whether to approve the project.

Concerning significant impacts that can be avoided and reduced with mitigation measures, the Board would be required to adopt findings for each significant impact that show the project has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the impact. The Board must determine that adopted mitigation measures are feasible and fully enforceable through permit conditions, agreements, or other measures.

S.5 Project Alternatives

This environmental impact report (EIR) evaluates alternatives that would lessen or avoid significant impacts identified in Chapters 2.0 and 3.0. Five project alternatives (listed below) have been proposed for evaluation. Each alternative would in some way reduce one or more potentially significant impact through lot re-design, reduced density, etc. Additional project alternatives that were analyzed and eliminated during the EIR preparation process are described in Section 5.1.1, Alternatives Considered but Rejected. Five project alternatives (two "No Project" alternatives, one reduced density alternative, one clustered development alternative, and one General Plan update alternative) were analyzed.

CEQA requires that a No Project alternative be considered (CEQA Guidelines 15126.6(e)). This EIR evaluates the No Project alternative in two ways. The first is the "No Build Alternative" that would include no development of the project site. The second is the "Existing Community Plan Alternative." This alternative assumes that the site would be developed as defined in the Cumming Ranch SPA in the Ramona Community Plan at some future time.

The following five alternatives are compared in this EIR and are listed here in order of superiority using the detailed analysis in Chapter 5.0. Table S-2 at the end of this chapter provides a summary of the alternatives comparison.

- No Build Alternative
- Reduced Project Alternative
- General Plan Update Alternative
- Clustered Alternative
- Existing Community Plan Alternative

No Build Alternative

The No Build Alternative would most likely not include any development, at least in the near term. Although other development proposals could be pursued on the project site, any development would require a Specific Plan and approval by the Board. Thus, development of the project site could not immediately occur if the Cumming Ranch proposal is not approved. It is currently unknown if the onsite agriculture would continue due to the limited economic viability of continued farming operations on the project site. Under this alternative, no grassland acreage on the project site would be permanently preserved as part of the Ramona Grasslands Preserve.

As indicated in Chapter 5.0 of the EIR, the No Project Alternative would result in fewer impacts than the proposed project for many issue areas evaluated and is considered to be the environmentally superior alternative. However, based on CEQA Guidelines, the EIR must also identify an environmentally superior alternative among the other alternatives considered (Section 15126.6(e) (2)).

The No Build Alternative was rejected in favor of the proposed project because it does not meet the goals and objectives of the project as outlined in Subchapter 1.2 of the EIR. A full analysis of this alternative is contained in Subchapter 5.2 of Chapter 5.0. No graphical representation of this alternative exists because the project site would not be developed or significantly altered.

Reduced Project Alternative

Similar to the proposed project, development under this alternative would be confined to the area south of Etcheverry Creek. However, the density would be reduced to allow no more than 47 lots. The minimum lot size would be 2 acres and could range up to 4 acres. Due to the large lot size, encroachment into the upland habitats and landforms would result, though actual development would not take place on the steep slope areas. This alternative would not require a sewer connection as the large lot size would allow for use of a septic system for all lots. The trail system would remain the same as the proposed project. Similar to the proposed project, the areas north of Etcheverry Creek would be available for sale or donation for the Ramona Grasslands Preserve.

This alternative has the potential to reduce impacts for issue areas including traffic, public services, noise, aesthetics, and air quality. Potential issues areas that could result in greater impacts as compared to the proposed project include biology, cultural resources, and water quality. The Reduced Project Alternative was rejected in favor of the proposed project because the large lot size would encroach into unique landforms and isolate upland habitats and would be detrimental to the biological function of the site. See Subchapter 5.5 for a full analysis and graphical depiction of this alternative.

General Plan Update Alternative

This alternative is based on the proposed General Plan Update map (County of San Diego 2009) that shows the southern portion of the plan area as Semi-Rural Residential (SR-2), the middle portion as Semi-Rural Residential (SR-10) and the northern portion as Rural Lands (RL-40). This alternative would maintain Areas A, B, and C with the boundary between A and B shifting north to Etcheverry Creek. The project site would be developed with 81 1-acre minimum lots south of Highland Valley Road and 31 5-acre minimum lots to the north. Areas B and C would remain as open space. This alternative would be designed to accommodate a maximum of 112 residential lots, 13 less than the proposed project. The residential area would be increased by 38.6 percent and open space would be less than the proposed project.

This alternative has the potential to reduce impacts for issue areas including traffic, public services, air quality, and hydrology and water quality. Potential issues areas that could result in greater impacts as compared to the proposed project include biology, cultural resources, and aesthetics and visual quality. The General Plan Update Alternative was rejected in favor of the proposed project because the large lot sizes would encroach into unique landforms and isolate upland habitats and would be detrimental to the visual quality of the project and biological

function of the site. See Subchapter 5.6 of Chapter 5.0 for a full analysis and graphical depiction of this alternative.

Clustered Alternative

This alternative would develop 166 units and all of the lots would be located to the south of Highland Valley Road. The minimum lot size would be 0.5 acre. This alternative would result in the preservation of less open space south of Highland Valley Road, because of a relatively higher density in this area. The smaller and denser lots would require the area to be mass graded in a manner similar to a conventional subdivision and potentially require development on the small knolls. The grading required for this alternative would be approximately 330,000 cubic yards more than the proposed project. This type of project would have the appearance of a tract-home style of development and would not be consistent with the rural character of the community. This is not considered to be consistent with the surrounding residential development or the rural character of the Ramona community. However, the area to the north of Highland Valley Road would not be developed and would be available as mitigation land and for purchase for open space preservation.

This alternative would generally reduce the level of biological and cultural impacts over the proposed project. Issue areas that may have greater impacts include traffic, public services, noise, aesthetics, hydrology and water quality, geology and soils, air quality, and land use. Issue areas that would result in similar or slightly less impacts than the proposed project include biology, cultural resources, hazards, and agricultural resources. This alternative is not considered to be environmentally superior to the proposed project.

The Clustered Development Alternative was rejected in favor of the proposed project because it would not meet all objectives of the project and it would not be consistent with the community character of Ramona. See Subchapter 5.4 of Chapter 5.0 for a full analysis and graphical depiction of this alternative.

Existing Community Plan Alternative

Under this alternative, development would occur according to the existing Ramona Community Plan, which currently describes the Cumming Ranch SPA (0.25) and permits "…166 single-family dwelling units ranging in size from 2 to 4 or more acres…" and also permits industrial use adjacent to Ramona Airport. The industrial use is described as "…adjacent to the south of the Ramona Airport, and north of the 100-year floodplain" and assumes the uses would be Limited Impact Industrial Use, which includes custom manufacturing and is allowed in the M52 Use

Regulations of the County's zoning ordinance. As described below, this alternative development plan does not meet the exact specifications of the Cumming SPA as the development must be consistent with County RPO and other policies.

This alternative would add 2 more lots than the proposed project in Area A and would add an industrial development in the northern portion of the project site. The Ramona Community Plan would allow for development of residential properties on Area B; however, due to County RPO requirements, development in that area is not feasible. Area B would remain as open space with possible ongoing farming activities. Due to these constraints, the alternative could not accommodate the full 166 residential lots as described in the Ramona Community Plan. This alternative could not proceed without the approval of a Specific Plan and Tentative Map for the property. For this reason, this alternative is not presumed to be the immediate outcome if the Cumming Ranch project is not approved. However, it is a future development scenario that could be pursued in place of the proposed project.

This alternative would potentially reduce land use impacts over the proposed project. However, no grasslands acreage would be available to the Ramona Grasslands Preserve within Area A because development would be located throughout the entire area with no common open space. Also, the development of industrial uses in the northwestern corner of Area C would limit connectivity to parcels already purchased for the preserve. Issue areas that may have greater significant impacts under this alternative include traffic, public services, noise, aesthetics, biology, cultural resources, hazards, air quality, hydrology and water quality, and geology and soils. This alternative is not considered to be environmentally superior to the proposed project. This alternative was rejected in favor of the proposed project because it would not meet the objectives of the project. See Subchapter 5.3 of Chapter 5.0 for a full analysis and graphical depiction of this alternative.

Table S-1
Impacts and Mitigation Summary

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
Traffic – Direct Impacts			
IMPACT TR-1a. The project's contribution of more than 200 ADT to the poor ooperating condition of SR 67 between Scripps Poway Parkway and Archie Moore Road would cause a significant impact.	M-TR-1a SR 67 - Scripps Poway Parkway to Archie Moore Road This segment is currently a two-lane roadway with passing lanes at various locations. It currently operates at LOS F according to the County of San Diego's capacity standards for a two-lane highway. This segment will need widening to a four-lane facility to bring it to an acceptable level of service. Requiring the proposed project to mitigate with this regional transportation improvement, would not be proportional to the project's contribution of impact. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.	Significant and unavoidable	2.1.3
IMPACT TR-1b. The project's contribution of more than 200 ADT to the poor operating condition of the segments of SR 67 between Archie Moore Road and Pala Street would cause a significant impact.	M-TR-1b Existing plus Project Conditions, SR67 Street Segments, Archie Moore Road to Pala Street The roadway improvements as part of the project shall be implemented prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW (these improvements are illustrated in Figure 1-8 and described in Section 1.1.2) and include: a. Eastbound SR 67 – Widen eastbound SR 67 west of the Highland Valley Road intersection to provide two through lanes and storage in each lane. Widen east of the Highland Valley Road intersection to provide two through lanes for 400 feet and transition back to the existing roadway width within a 660-foot transition. b. Westbound SR 67 – Widen westbound SR 67 east of the Highland Valley Road intersection to provide two through lanes with storage in each lane with westbound right turn lane retained. Widen west of the Highland Valley Road intersection to provide two through lanes for 400 feet and transition back to the existing roadway width within a 660-foot transition. c. Highland Valley Road – Widen northbound Dye Road (Highland Valley Road) to provide duel left turn lanes at the intersection. d. Traffic Signal – The traffic signal at the SR 67/Highland Valley Road intersection would be modified to provide for the improvements described above. The construction of these improvements shall require additional ROW and the developer shall be responsible for funding the ROW acquisitions. In the event the developer is not able to acquire the necessary ROW from willing sellers during the final engineering process, the developer shall work with the County Real Property Department to acquire the ROW in accordance with County Board of Supervisors Policy J-33.	Less than significant	Section 2.1.3
IMPACT TR-2a. The project's direct contribution to the SR 67 and Highland	M-TR-2a Existing plus Project Conditions, SR 67 and Highland Valley Road Intersection	Less than significant	Section 2.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
Valley Road intersection.	The direct impacts to the SR 67 and Highland Valley Road intersection shall be mitigated with the widening of SR 67 in the westbound direction to two lanes to accommodate morning peak traffic. This improvement is included in the overall intersection mitigation measures proposed under Mitigation Measure M-TR-1b for the SR 67 and Highland Valley Road intersection to mitigate roadway segment direct impacts.		
IMPACT TR-2b. The project's direct contribution to the SR 67 and Archie Moore Road intersection.	M-TR-2b Existing plus Project Conditions, SR 67 and Archie Moore Road A signal warrant analysis shall be conducted at this intersection prior to approval of the final map. If signal warrants are met, the developer shall restripe the intersection and install a three-way traffic signal within the existing right of way, to the satisfaction of Caltrans and the County of San Diego. If warrants are met, installation of the traffic signal will be required to be complete prior to occupancy of the first dwelling unit.	Less than significant	Section 2.1.3
Traffic – Cumulative Impacts			
IMPACT TR-3a. The project's contribution to the poor operating conditions of segments of SR 67 (between Scripps Poway Parkway and Archie Moore R%oad) in the cumulative scenario is considered significant.	M-TR-3a Cumulative Conditions, SR 67 - Scripps Poway Parkway to Archie Moore Road Payment of TIF fees would partially mitigate the segment of SR 67 between Scripps Poway Parkway and Archie Moore Road. A portion of this segment is within the City of Poway. The cumulative impact at this segment is partially mitigated by payment of the County TIF for impacts within the jurisdictional boundaries of the County. To fully mitigate the impact at this segment, the mitigation would require additional travel lanes on the impacted portion of the segment within the jurisdictional limits of the City of Poway (between Poway Road and Cloudy Moon Drive), but this mitigation is not feasible and, therefore, is not proposed to address this Impact. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.	Significant and unavoidable	Section 2.1.4
IMPACT TR-3b. The proposed project's contribution to the poor operating condition of segments of SR 67 (from Poway Road to SR 78) in the cumulative scenario is considered a significant impact.	M-TR-3b Cumulative Conditions, SR 67 Segments in County Jurisdiction To mitigate the project's contribution to cumulative impacts along the three remaining SR 67 segments (Impact TR-3b) the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.	Less than significant	Section 2.1.4
IMPACT TR-4. Under the cumulative scenario, conditions on Dye Road would degrade to below the County's standard from LOS C to LOS E. The proposed project's contribution to this poor operating condition of Dye Road in the cumulative scenario is considered a significant impact.	M-TR-4 Cumulative Conditions, Dye Road Segments To mitigate the project's contribution to cumulative impacts along Dye Road segments (Impact TR-4), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.	Less than significant	Section 2.1.4
IMPACT TR-5. The proposed project's contribution to the poor operating conditions in the cumulative scenario at	M-TR-5 Cumulative Conditions, SR 67/Archie Moore Road Intersection To mitigate the project's contribution to cumulative impacts at the SR 67/Archie Moore Road	Less than significant	Section 2.1.4

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
the SR 67 / Archie Moore Road is considered a significant impact.	intersection (Impact TR-5), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.		
IMPACT TR-6. The proposed project's contribution to the poor operating conditions in the cumulative scenario at the SR 67 / Mussey Grade Road is considered a significant impact.	M-TR-6 Cumulative Conditions, SR 67/Scripps Poway Parkway Intersection To fully mitigate the project's contribution to cumulative impacts at the SR 67/ Scripps Poway Parkway intersection (Impact TR-6), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.	Less than significant	Section 2.1.4
IMPACT TR-7. The proposed project's contribution to the poor operating conditions in the cumulative scenario at the SR 67 / Highland Valley Road is considered a significant impact.	M-TR-7 Cumulative Conditions, SR 67/Highland Valley Road Intersection To mitigate the project's contribution to cumulative impacts at the SR 67/Highland Valley Road intersection (Impact TR-7), the project applicant shall construct the intersection improvements outlined in Mitigation Measure M-TR-1b prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.	Less than significant	Section 2.1.4
IMPACT TR-8. The proposed project's contribution to the poor operating conditions in the cumulative scenario at the SR 67 / Montecito Road is considered a significant impact.	M-TR-8 Cumulative Conditions, SR 67/Montecito Road Intersection To mitigate the project's contribution to cumulative impacts at the SR 67/Montecito Road intersection (Impact TR-8), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.	Less than significant	Section 2.1.4
IMPACT TR-9. The proposed project's contribution to the poor operating conditions in the cumulative scenario at the SR 67 / SR 78 is considered a significant impact.	M-TR-9 Cumulative Conditions, SR 67/SR 78 Intersection To mitigate the project's contribution to cumulative impacts at the SR 67/SR 78 intersection (Impact TR-9), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.	Less than significant	Section 2.1.4
Biological Resources – Direct Impacts			
IMPACT BI-1 through BI-11. Impacts to vegetation communities	M-BI-1 through M-BI-11: a. The primary mitigation acreage for the project would be located within Area A open space with additional mitigation acreage located within Area B and C. Open space lots C, E, and H in Area A were not included as mitigation acreage as they are considered isolated and are impact neutral areas. Mitigation acreage shall be provided through the permanent dedication of open space land and the provision of an open space easement over this land according to the ratios provided in Table 3.1-5. The open space lots throughout Area A are shown on Figure 1-5 and open space easements are shown on Figure 1-16, Open Space Map. b. The RMP shall be approved and funded for the open space area and approved prior to the approval of a grading permit for the project. The RMP provides for the monitoring and management of habitats and species such as oak tree replacement, habitat creation, species surveys and monitoring and other efforts involved in the day-to-day management of the	Less than significant	Section 3.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	open space area (i.e., budget control and analysis, debris removal, exotic weed removal, general maintenance of any open space signage, etc.). The RMP includes performance standards to measure the success of mitigation (e.g., percent improvements over time, success rates, etc.). The monitoring and management of these lands shall be conducted in perpetuity.		
IMPACT BI-1. Engelmann oak woodland would be directly impacted by the proposed project. Impacts would occur to 0.20 acre of Engelmann oak woodland. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-1 Direct Effects to Open Space Engelmann Oak Woodland Impacts to 0.20 acre of open Engelmann oak woodland shall be mitigated through the in-kind preservation of existing Engelmann oak woodland onsite in Area A open space at a 3:1 ratio for a total of 0.60 acre (see Table 3.1-5). All necessary mitigation acreage is available on the project site.	Less than significant	Section 3.1.3
IMPACT BI-2. Direct impacts would occur to 0.06 acre of open coast live oak woodland. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-2 Direct Effects to Open Coast Live Oak Woodland Impacts to 0.06 acre of open coast live oak woodland shall be mitigated through the preservation of existing Engelmann oak woodland onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 0.18 acre (see Table 3.1-5). All necessary mitigation acreage is available on the project site.	Less than significant	Section 3.1.3
IMPACT BI-3. Southern willow scrub, both on and offsite, would be directly impacted by the proposed project. Impacts would occur to 0.05 acre of southern willow scrub. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-3 Direct Effects to Southern Willow Scrub Impacts to 0.05 acre of southern willow scrub shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 0.15 acre (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).	Less than significant	Section 3.1.3
IMPACT BI-4. Mulefat scrub, both on and offsite, would be directly impacted by the proposed project. Impacts would occur to 0.05 acre of mulefat scrub. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-4 Direct Effects to Mulefat Scrub Impacts to 0.05 acre of mulefat scrub shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 0.15 acre (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).	Less than significant	Section 3.1.3
IMPACT BI-5. Cistmontane alkali	M-BI-5 Direct Effects to Cismontane Alkali Marsh	Less than	Section

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
marsh, both on and offsite, would be directly impacted by the proposed project. Impacts would occur to 0.98 acres of cistmontane alkali marsh. The impact to this sensitive vegetation community would be considered a significant impact.	Impacts to 1.02 acres of cismontane alkali marsh shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 3.06 acres (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be re-contoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).	significant	3.1.3
IMPACT BI-6. Nonvegetated channels, both on and offsite, would be directly impacted by the proposed project. Impacts would occur to 0.03 acre of nonvegetated channel. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-6 Direct Effects to Nonvegetated Channel Impacts to 0.03 acre of nonvegetated channel shall be mitigated onsite in Area A open space at a 3:1 ratio where the impact occurs (see Table 3.1-5) for a total of 0.09 acre. Creation and/or restoration mitigation shall occur where practicable onsite within Area A. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).	Less than significant	Section 3.1.3
IMPACT BI-7. Though there would be no adverse findings regarding the loss of CSS for the HLP, the loss of acreage of this sensitive vegetation community would be considered a significant impact.	M-BI-7 Direct Effects to CSS (inland form) Impacts to 26.80 acres of CSS-inland form shall be mitigated through the preservation of existing CSS onsite in Areas A and B open space at a 2:1 ratio (see Table 3.1-5). CSS inland form cannot be fully mitigated in-kind onsite. A total of 52.96 acres of CSS will be mitigated onsite. A remaining 0.64 acre of mitigation is required offsite. Prior to issuance of a grading permit, proof of acquisition and funding for management of 0.64 acre of like-functioning habitat in an offsite area approved by the DPLU shall be provided.	Less than significant	Section 3.1.3
IMPACT BI-8. Direct impacts would occur to 19.55 acres of granitic southern mixed chaparral. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-8 Direct Effects to Granitic Southern Mixed Chaparral Impacts to 19.55 acres of granitic southern mixed chaparral shall be mitigated through the preservation of existing granitic southern mixed chaparral onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 0.5:1 ratio for a total of 9.78 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.	Less than significant	Section 3.1.3
IMPACT BI-9. Direct impacts would occur to 4.05 acres of granitic chamise chaparral. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-9 Direct Effects to Granitic Chamise Chaparral Impacts to 4.05 acres of granitic chamise chaparral shall be mitigated through the preservation of existing granitic chamise chaparral onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 0.5:1 ratio for a total of 2.03 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.	Less than significant	Section 3.1.3
IMPACT BI-10. Direct impacts would occur to 13.75 acres of nonnative	M-BI-10 Direct Effects to Nonnative Grassland Impacts to 12.94acres of nonnative grassland shall be mitigated through the preservation of existing	Less than significant	Section 3.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
grassland. The impact to this sensitive vegetation community would be considered a significant impact.	nonnative grassland onsite in Areas A, B, and C open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 1:1 ratio for a total of 12.94 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.		
IMPACT BI-11. Direct impacts would occur to 164.54 acres of field/pasture. The impact to this sensitive vegetation community would be considered a significant impact.	M-BI-11 Direct Effects to Field/Pasture Impacts to 164.69 acres of field/pasture shall be mitigated through the preservation of existing nonnative grassland onsite in Areas A, B, and C open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 0.5:1 ratio for a total of 82.35 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.	Less than significant	Section 3.1.3
IMPACT BI-12. Though wetland buffers are included throughout the project, the loss of jurisdictional federal, state, and County RPO wetlands would be a direct impact of the project. These on and offsite impacts include ACOE waters and wetlands, CDFG wetlands, and County RPO wetlands and would be a significant impact.	M-BI-12 Direct Effects to Wetlands and Waters of the U.S. a. On and offsite impacts to 0.13 acre of ACOE waters and wetlands shall be mitigated onsite in open space easements at a 3:1 ratio. Proposed mitigation for wetlands shall consist of a 3:1 ratio where 1:1 shall include onsite restoration at impact locations and 2:1 shall include onsite creation or restoration of habitat. Creation and/or restoration mitigation shall occur as detailed in the Revegetation Plan. The Conceptual Revegetation Plan is included in Appendix D. On and offsite impacts to 1.18 acres of CDFG wetlands and 1.18 acres of County RPO waters and wetlands shall be mitigated onsite in Area A open space at a 3:1 ratio. Proposed mitigation for wetlands shall consist of a 3:1 ratio where 1:1 shall include onsite restoration at impact locations and 2:1 shall include onsite creation or restoration of habitat. Creation and/or restoration mitigation shall occur as detailed in the Revegetation Plan. Appropriate RPO wetland buffers will be incorporated and will be a minimum of 50 feet from the edge of the wetlands in accordance with the 2007 RPO. b. The Revegetation Plan will require approval by the appropriate agencies prior to issuance of grading permits for the project. A conceptual draft of this plan is provided in Appendix D. The Revegetation Plan details the performance measures for creation and restoration of wetlands and wetland habitats. The Revegetation Plan requires a bond be issued to the County to cover the full cost of the revegetation by the developer (to be released at the end of a successful monitoring period). Creation, restoration, and/or enhancement of wetland habitats shall occur throughout various sections of the unnamed drainages within the planned Area A open space area. In addition to the Revegetation Plan, the RMP developed for the open space area shall be approved and funded prior to the approval of a grading permit for the project **(M-BI-1b through 11b)**. c. To address indirect impacts to RPO wetlands associated with maintenance activities, the RMP for this project requires installation, inspection, and maintenance of appropriate best management practices (BMPs). d. To address potential indirect impacts to vernal pools, the proposed trail alignment and trail staging area, as well as an adequate buffer area (to be determined by a qualified biologist in	Less than significant	Section 3.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	coordination with the County of San Diego) shall be surveyed for vernal pools and their watersheds, prior to final trail siting, to confirm absence. If surveys indicate vernal pools or their watersheds are in close proximity to trail alignments, the trail shall be realigned and the staging area grading modified to avoid all potential impacts to vernal pools. e. Prior to approval of a grading plan, evidence of applicable permits (or verification that permits are not required) shall be provided to the County. f. The Resource Manager under the RMP shall avoid wet season creek crossings where feasible, recommend and install preventative bio-engineered erosion control devices, repair erosion damage, and remove sediment as determined necessary and appropriate for both the safety of trail users and for protection of the earthen stability of the trails from damage during the wet season.		
IMPACT BI-13. Impacts to 11 individual Engelmann and 4 individual coast live oak trees are considered a significant impact of the proposed project.	M-BI-13 Direct Effects to Individual Oaks Direct impacts to Engelmann oaks and coast live oaks shall be mitigated at a 2:1 replacement ratio. The replacement of 22 Engelmann and 8 coast live oak trees shall occur within Area A open space lots. A Revegetation Plan with monitoring and success criteria has been prepared and shall be submitted for resource agency approval. The success of these trees shall be monitored for no less than 3 years in accordance with all Revegetation Plan requirements (M-BI-12a).	Less than significant	Section 3.1.3
IMPACT BI-14. The direct impact to a total of 3.70 acres containing southern tarplant is considered a significant impact of the proposed project.	M-BI-14 Direct Effects to Southern Tarplant a. Impacts to 3.7 acres of southern tarplant shall be mitigated with preservation and management of approximately 21 acres of the onsite population within Areas A and B open space. b. In addition, the revegetation plan shall be implemented to provide for an expansion of the population on 3.7 acres of suitable habitat in the managed open space. The revegetation plan shall include provisions for seed to be harvested from impact areas and distributed on approximately 3.7 acres onsite adjacent to areas known to support the species. The revegetation plan shall also include measures for the southern tarplant that will be directly affected by sewer line installation (0.2 acre) to be implemented to retain the topsoil and return it to the same location to allow for regrowth of this species.	Less than significant	Section 3.1.3
IMPACT BI-15. Potential direct impacts to sensitive herpetofaunal, mammalian, and avian species are considered significant impacts.	M-BI-15 Direct Effects to Sensitive Animals a. Direct impacts to sensitive herpetofaunal species habitat shall be mitigated with preservation of habitat onsite within Area A open space lots for Western spadefoot toad; arroyo toad; San Diego horned lizard; granite spiny lizard; granite night lizard; coastal California whiptail; and orange-throated whiptail as required under Mitigation Measure M-BI-1 through M-BI-12. To avoid impacts specific to the arroyo toad, the following measure shall be implemented and all grading permits, improvement plans, and the final map shall include the following	Less than significant	Section 3.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	notice: "Prior to any grading, pre-construction surveys (in accordance with USFWS protocol) shall be conducted. If surveys determine there are no toads present, no further action is necessary. If it is determined that toads are present, then an Endangered Species Take Permit shall be obtained." b. Direct impacts to sensitive mammalian species habitat shall be mitigated onsite within Area A open space lots for mountain lion; American badger; San Diego desert woodrat; San Diego black-tailed jackrabbit; and southern mule deer, as required under Mitigation Measure M-BI-1 through M-BI-12. Direct impacts to sensitive avian species habitat shall be mitigated onsite within Area A open space lots for Canada goose; turkey vulture; white-tailed kite; northern harrier; golden eagle; Cooper's hawk; red-shouldered hawk; ferruginous hawk; loggerhead shrike; great horned owl; burrowing owl; zone-tailed hawk; red-tail hawk; rough-legged hawk; American kestrel; and barn owl, as required under Mitigation Measure M-BI-1 through M-BI-12. c. To avoid impacts specific to burrowing owls, which use their burrows year-round, the following measure shall be implemented and all grading permits, improvement plans, and the final map shall include the following notice: "Restrict all brushing, clearing, and/or grading such that: (1) from February 1 to July 31, no grading or clearing will be allowed within 800 feet of an occupied burrow; and (2) from July 31 (or after young owls have fledged) no grading or clearing will be allowed within 800 feet of an occupied burrow until CDFG is consulted and passive nest exclusion has occurred. This measure may be waived if pre-grading surveys show that no burrowing owls are present." d. At the time of construction, tree nesting raptors could be present in the project area. The developer shall have raptor nest surveys conducted prior to tree cutting or grading near mature trees to ensure that active nests are not present. A qualified biologist shall conduct the surveys between February 1 and July 31 and prepare a survey report. If no raptor nests are discovered in the trees to be removed, no further mitigation is required. If any active raptor nests are discovered, the biologist shall mark all occupied trees and delineate a 500-foot buffer area around each occupied tree. No construction activity shall occur within the 500-foot buffer until the young have fledged, as determined by a qualified biologist. All brushing, clearing, and/or grading shall be restricted such that no grading or clearing will be allowed within 300 feet of occupied coastal sage scrub during the gnatcatcher breeding season (February 15 – August 31) This measure may be waived if pre-grading surveys show that no gnatcatchers are present in or within 300 feet of the area to be		

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	brushed, cleared or graded. All brushing, clearing, and/or grading shall be restricted such that no grading or clearing will be allowed to take any active migratory bird nest during the breeding season (February 15 – August 31) This measure may be waived if pre-grading surveys show that there are no active migratory bird nests in the area to be brushed, cleared or graded. If construction is halted for a period of fourteen days or more during the avian nesting season, a biological survey of the habitat within 500 feet of proposed construction sites shall be required prior to restarting construction. The above measures shall be noted on all grading and improvement plans.		
Biological Resources – Indirect Impacts			
IMPACT BI-16. Potential sources for indirect impacts during project construction to the vegetation communities and sensitive plant or animal species known to occur adjacent to the project construction area could include trampling of vegetation outside of the limits of grading by workers and vehicles during construction, erosion, runoff, dust, and siltation into offsite areas, and impacts related to storage and access areas. Indirect effects could result from construction noise to sensitive avian species during their breeding seasons including coastal California gnatcatcher and raptors. These potential indirect construction impacts to sensitive vegetation communities and animal species would be short term but are considered significant impacts.	M-BI-16 Indirect Effects of Project Construction The following resource protection measures shall be implemented by the developer to ensure that indirect impacts to sensitive vegetation communities and sensitive plants do not occur: a. A DPLU-listed biological consultant shall supervise and monitor grading activities to ensure against damage to biological resources that are intended to be protected and preserved. The monitor shall be on site during all grading and clearing activities that are in or adjacent to any biological open space areas or sensitive habitats. If there are disturbances, the monitor must report them immediately to DPLU Permit Compliance Coordinator. Additionally, the biologist shall monitor fencing and erosion control measures, monitor equipment maintenance, staging, and fuel dispensing areas, stop or divert work when deficiencies require mediation, and attend construction meetings. When all grading activities have been completed, the biologist shall prepare and submit a final letter report. b. Prior to commencement of construction, the limits of each phase of project construction shall be clearly delineated with temporary fencing by a survey crew. Onsite, the temporary fencing shall be required when grading is proposed within 100 feet of open space. Offsite, temporary fencing shall be installed to indicate the allowable limits of grading, clearing, and staging areas. The limits shall be checked by the biological monitor before initiation of clearing or construction. The project biologist shall submit a letter to the County indicating that the limits of construction have been checked and work can commence. c. Activities, including staging areas, equipment access, and disposal or temporary placement of excess fill, shall be prohibited within drainages, sensitive habitats, or sensitive plant populations outside of the identified construction area. d. Erosion and siltation into offsite areas during construction shall be minimized through the implementation of an erosion control plan. The contractor shall prepare an erosion control plan for approval by the County. The contract supervisor shall be responsible for ensuring	Less than significant	Section 3.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	that the erosion control plan is developed and implemented. e. Construction access shall utilize existing developed areas or be within the identified construction area. Contractors shall clearly mark all access routes (i.e., flagged and/or staked) prior to the onset of construction. f. To avoid sensitive habitats, construction staging areas, equipment refueling areas, and other areas for equipment and materials storage shall be located within the identified construction area. To avoid inadvertent impacts to sensitive biological resources that may be present, storage and access areas shall be displayed on the approved project plans and specifications. g. Biological monitoring shall be required where impacts occur in proximity to proposed open space and other sensitive habitats and resources as determined by the project biologist. h. Biological monitoring shall be required along the alignment of the on and offsite infrastructure construction. i. To address potential indirect impacts to vernal pools, the proposed trail alignment and trail staging area, as well as an adequate buffer area (to be determined by a qualified biologist in coordination with the County of San Diego) shall be surveyed for vernal pools and their watersheds, prior to final trail siting, to confirm absence. If surveys indicate vernal pools or their watersheds are in close proximity to trail alignments, the trail shall be realigned and the staging area grading modified to avoid all potential impacts to vernal pools. j. The above measures shall be noted on all grading and improvement plans.		
IMPACT BI-17. Indirect effects of resident or trail user encroachment into sensitive areas and this is considered a potentially significant impact.	M-BI-17 Indirect Effects of Project Occupation a. The dedicated LBZ easements on each lot shall prohibit: (1) animal keeping without effective restraints or fencing, (2) lighting, (3) exotic invasive landscaping, and (4) focal use areas including arenas, pools, and patios, and (5) any other structures without approval of the County Fire Marshall and Ramona Fire Marshall. The LBZ easements would require large animals to be kept within fences. b. Open space signage, in accordance with County policy, shall be installed prior to grading activities and shall be maintained and replaced as needed under provisions within the RMP. Signs shall be located every 50 feet along all open space edges in conjunction with the Residential lot LBZ and where open space is adjacent to internal streets, pathways and trails. The signage shall have the following language or similar on it: **"Sensitive Environmental Resources** **Area Restricted by Easement** Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions contact the County of San Diego,	Less than significant	Section 3.1.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	Department of Planning and Land Use Ref: *(3810-03-005)*" Upon completion of the installation of the open space signage, the project engineer shall submit a signed statement to the County indicating that all signs are in place. c. The RMP Resource Manager will monitor and manage access and use of the open space easements and work with the HOA to educate residents and trail users about the prohibitions and the resource sensitivity of the area.		
Cultural Resources – Direct and Indirect Impacts			
IMPACT CR-1. Because of the cultural sensitivity throughout the project site, the potential to impact unknown cultural resources during ground-disturbing activities is considered a potentially significant impact.	M-CR-1 All-Ground Disturbing Activities a. A cultural resources monitoring program shall be implemented as summarized here and detailed in the Cultural Resources Report. The monitoring program shall include the observation of all grading by one or more Native American monitors and by an archaeological monitor or monitors (depending on the scale of grading going on at any one time). A preconstruction meeting to clarify procedures shall be held prior to the start of ground-disturbing activities. b. If cultural resources are identified during ground-disturbing activities, the following procedures shall be implemented: 1. Isolated artifacts and minor (non-significant) deposits shall be documented in the field, allowing grading to proceed. 2. Any potentially significant deposits or artifact concentrations shall be evaluated and the County Archaeologist shall be notified. A Research Design and Data Recovery Plan shall then be developed for any significant deposits and implemented. Grading in the vicinity of the deposits shall cease until the Data Recovery Plan is implemented to the satisfaction of the County Archaeologist. Standard County Procedures shall be followed in the case that human remains are inadvertently discovered. Material collected during the monitoring program shall be cataloged and analyzed and a report shall be prepared. This report shall address any data recovery that might be required during monitoring, as well as isolated artifacts found during the grading. Artifacts shall be curated at a qualified institution.	Less than significant	Section 3.2.3
IMPACT CR-2. Though the significant portion of Site CA-SDi-17,171 would be avoided and preserved, the proximity of construction activities to the site could result in potentially significant impacts.	M-CR-2 Significant Cultural Resource Site CA-SDi-17,171 a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1. b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site.	Less than significant	Section 3.2.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	c. A permanent fence shall be constructed between the road and the site. This shall be a rustic fence to blend with the nature of the proposed development and match fencing used in other areas of the development. d. Signs shall identify this as a sensitive area that is being preserved, but they shall not mention cultural resources or archaeological site. e. Site CA-SDi-17,171 shall be placed in an open space easement granted to the County of San Diego. f. The open space easement shall be managed in accordance with the RMP required for this project (the Conceptual Resource Management Plan is provided in Appendix C). Measures specific to management of cultural resources include: 1. A qualified Resource Manager, approved by the Director of Planning and Land Use and/or the County of San Diego Department of Parks and Recreation, shall take responsibility for the management of the open space lots. 2. At the time the Resource Manager assumes responsibility for the management of the lots, or just prior to this event, the condition of the sites in question shall be documented. This shall consist of establishment of permanent photography stations (either marked by permanent markers or by the designation of a recognizable and relocatable natural feature such as a rock as the station). These shall be identified on a map of the site. A series of panoramic photographs shall be taken from each photography station do record the condition of the site. Any disturbance or other pertinent conditions shall be photographed, as well, and noted on the site map. A copy of this base-line information shall be filed at the South Coastal Information Center. 3. Each year thereafter a site visit shall be made by a qualified archaeologist and a Native American Monitor. They shall check the condition of the site against the baseline data recorded in step 2. They shall note any problems and differences between the conditions as they exist on the ground and the conditions described in the baseline documentation. Reports of these visits shall be filed at the South Coastal Information Center. 4. If damage is noted to the archaeological sites, the archaeologist and Native American Monitor shall develop recommendations for preventing further damage. Such measures might include increased patrols, selected capping of site areas, posting of signs, or the formation of a neighborhood watch to monitor the sites and to report vandals.		
IMPACT CR-3. Though the significant portion of this site would be avoided and preserved, the proximity of the construction activity to Site CA-SDi-	M-CR-3 Significant Cultural Resource Site CA-SDi-17,177 a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1.	Less than significant	Section 3.2.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
17,177 could result in potentially significant impacts.	b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site. c. A permanent fence and signage shall be constructed between the road and the site, as described in Mitigation Measure M-CR-2. d. Site CA-SDi-17,177 shall be placed in an open space easement granted to the County of San Diego. e. The open space easement shall be managed in accordance with the RMP required for this project and shall includes the management requirements outlined in Mitigation Measure M-CR-2.		
IMPACT CR-4. Site CA-SDi-17,178 cannot be avoided and will be directly impacted by lot and road construction that could result in potentially significant impacts.	M-CR-4 Significant Cultural Resource Site CA-SDi-17,178 a. The mitigation of impacts to CA-SDi-17,178 shall be through data recovery (refer to Cultural Resource Evaluation). A research design has been prepared for this project and is included in the Cultural Report which outlines data recovery mitigation for the proposed destruction of a portion of the archaeological site CA-SDi-17,178. The research design, subject to approval by the County shall include, but is not limited to the following performance standards: 1. All data recovery shall include a Native American monitor. The presence of a Native American monitor shall be required for the duration of the excavation portion of the project. 2. Phase 1 data recovery shall include mechanical trenching (optional) and a 5-15% hand excavated sample of the subsurface artifact concentrations for CA-SDi-17,178. During excavation, attention would given to the need for special studies such as pollen analysis, flotation samples and botanical analysis, and protein residue analysis. If so, appropriate samples would be taken and processed. Attention would be given to collecting, documenting, and processing material for radiocarbon dating and obsidian source and hydration analysis. Material recovered from these excavations would be cataloged and analyzed using standard procedures. All artifacts collected in the data recovery or in any other phase of this project would be curated at a facility acceptable to the County of San Diego. 3. At the completion of Phase 1, a letter report shall be submitted to the Director of the Department of Planning and Land Use. The letter report will evaluate the issues of site integrity, data redundancy, spatial and temporal patterning, features, and other relevant topics in order to assess the adequacy of the initial (2.5% is typical) percent sample. Based on this assessment, the letter report shall recommend the need for and scope of a second phase of field investigations, not to exceed a total site hand excavated sample	Less than significant	Section 3.2.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	of (5 is typical) % of the subsurface artifact concentration. 4. Implement Phase 2 of fieldwork, as necessary. 5. Conduct artifact analysis, including lithics analysis, ceramics analysis, faunal analysis, floral analysis, assemblage analysis, and radiocarbon dating, as detailed in Appendix 6 of the archaeological extended study, "*Cultural Resources Evaluation of Cumming Ranch, County of San Diego, California*" prepared by G. Timothy Gross. b. Prior to recordation of the Final Map the applicant shall: 1. Complete and submit the Final Technical Report from the Principal Investigator to the satisfaction of the Director of Planning and Land Use. 2. Provide evidence to the satisfaction of the Director of Planning and Land Use that all archaeological materials recovered during both the significance testing and data recovery phases have been curated at a San Diego facility that meets standards per 36 CFR 79, and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.		
IMPACT CR-5. Though the significant portion of Site CA-SDi-17,186 would be avoided and preserved, the proximity of the construction activity to the site could result in potentially significant impacts.	M-CR-5 Significant Cultural Resource Site CA-SDi-17,186 a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1. b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site. c. A permanent fence and signage shall be constructed between the road and the site, as described in Mitigation Measure M-CR-2. d. Site CA-SDi-17,186 shall be placed in an open space easement granted to the County of San Diego. The open space easement shall be managed in accordance with the RMP required for this project and shall includes the management requirements outlined in Mitigation Measure M-CR-2.	Less than significant	Section 3.2.3
Noise – Direct Impacts			
Impact N-1. Construction of a project roadway may exceed County noise level standards at one offsite receptor and would be considered a significant	M-N-1 Construction Noise – Offsite Receptors During construction of the internal street system south of Highland Valley Road, a 14 foot high inversed "L"-shaped temporary noise barrier 420 feet in length shall be constructed along the project boundary as shown in Figure 3.3-6.	Less than significant	Section 3.3.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
impact.			
Impact N-2. Onsite noise sensitive receptors would include residences completed and occupied prior to completion of the entire project. Onsite receptors may be exposed to noise levels that would exceed the County's applicable construction noise threshold and would be considered a significant impact.	M-N-2 Construction Noise – Onsite Receptors When construction sites are located within 75 feet of an occupied residential property line, temporary noise barriers, with a minimum height of 8 feet, shall be required to block the line-of-sight from the occupied residence to the active construction site.	Less than significant	Section 3.3.3
Impact N-3. At distance less than 125 feet, noise levels from rock breaking activities could exceed the County construction noise ordinance and would be considered a potentially significant impact.	M-N-3 Rock Breaking and Material Handling When rock breaking activities are located within 125 feet of an occupied residential property line, temporary noise barriers with a minimum height of 8 feet shall be required. The temporary barriers shall be constructed no more than 5 feet from the point of impact and to block the line of sight from the active rock breaking/material handling site to the occupied residence The proposed barrier would provide approximately 18 dBA reduction from impact noise associated with rock breaking, which would reduce potential construction noise levels at future residential property lines to 73 dBA L_{eq}.	Less than significant	Section 3.3.3
Impact N-4. Construction noise is anticipated to exceed the applicable 60 dBA L_{eq} threshold for noise avian sensitive habitat and would be considered a potentially significant impact.	M-N-4 Noise Sensitive Avian Habitat The following measures are required to reduce the short duration impact of construction-related noise on sensitive avian habitat. a. Where feasible, the project shall avoid construction within 500 feet of habitat for noise sensitive species, between February 1 and September 15. b. If the pre-construction biological surveys required under IMPACT BI-15 determine nests of noise sensitive avians are present in the habitat, or construction noise would have a significant impact on the species using the habitat, an acoustical study will be prepared to assess noise sources, determine noise levels in the habitat, and determine mitigation measures capable of reducing noise levels to 60 dBA L_{eq} or less. If noise levels from construction cannot be reduced below 60 dBA L_{eq}, construction shall not be allowed between February 1 and September 15.	Less than significant	Section 3.3.3
Impact N-5. Portions of Lots 5 through 11, Lots 39 through 41, Lots 55 though 57, Lots 70 through 77, and Lots 98 and 99, would be exposed noise levels above 55 dBA CNEL and this would be considered a significant impact.	M-N-5 Traffic Noise Levels and Land Use Compatibility a. Prior to approval of the Final Map, (as required in the San Diego Code of Regulatory Ordinances, County of San Diego 1986a), the applicant shall dedicate to the County of San Diego "noise protection easements" on each of Lots 5 through 11, Lots 55 though 57, Lots 70 through 77, and Lots 98, and 99, over the area of the property from the lot line at the edge of Highland Valley Road to a line 300 feet from the centerline of Highland Valley Road. These easements are for the protection of NSLUs from traffic noise. The noise	Less than significant	Section 3.3.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
	protection easements shall be shown on the Final Map Prior to approval of the Final Map, (as required in the San Diego Code of Regulatory Ordinances, County of San Diego 1986a), the applicant shall dedicate to the County of San Diego "noise protection easements" on each of Lots 39 through 41 from the lot line at the edge of SR 67 to a line 795 feet from the centerline of SR 67. These easements are for the protection of NSLUs from traffic noise. The noise protection easements shall be shown on the Final Map These noise protection easements shall require that prior to the issuance of a Building Permit for residences located within the noise protection easement, evidence shall be d to the satisfaction of the Planning Director that exterior (outdoor) noise levels comply with the applicable NSLU noise level limits and land use compatibility guidelines of the County. The NSLU area does not include the entire lot but includes an area of reasonable size that adjoins the home to allow exterior use by residents at noise levels of 55 dBA CNEL or below. If noise barriers are required for compliance with the noise easement, barriers could be made of masonry, wood, and transparent materials, such as glass or Lucite. Earthen berms or a combination of berms and walls would also provide noise attenuation. The noise protection easement language shall contain a restriction stating that the structure and the exterior living area will be placed such that a noise barrier will complement the residences architecture and will not incorporate a solid (opaque) wall in excess of six feet. Conceptual modeling was prepared and is provided in the noise study (Appendix F) to show feasibility of noise reduction for each impacted lot. The conceptual noise barrier locations are shown on Figure 3.3-7. b. Noise barriers, as described above, would not reduce noise levels to second story elevations. Where two-story homes would be built in the area of properties where future noise levels, without abatement, are forecast to approach or exceed 60 dBA CNEL, the Building Permit applicant shall demonstrate that interior noise levels due to exterior noise sources would not exceed 45 dBA CNEL. Compliance shall require the submittal of a report with the building plans identifying the noise attenuation features included in the project's design to maintain interior noise levels at or below 45 dBA CNEL. In these cases, it is anticipated that the typical method of compliance would be to provide the homes with air conditioning or equivalent forced air circulation in order to allow occupancy with closed windows which, for most residential construction, would provide sufficient exterior-to-interior noise reduction.		
Impact N-6. Noise generated by the lift station would exceed the daytime noise level limit at the nearest property line due to testing of the emergency generator and would be expected to	M-N-6 Stationary Noise Sources – Lift Station Prior to the issuance of improvement plans or grading permits for the TM, the project applicant shall demonstrate that the sewer lift station noise will comply with the County Noise Ordinance. To verify noise compliance, a Minor Use Permit or Site Plan will be required to verify ongoing compliance. As	Less than significant	Section 3.3.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
exceed the County's Noise Ordinance daytime limits at any property within 515 feet of the lift station without shielding. This is considered a significant impact.	part of the Minor Use Permit, the applicant will develop and submit site plans for the lift station and proposed enclosure and a noise study demonstration the lift station's compliance to the County Noise Ordinance, Section 36.404 regulations of 50 dBA L_{eq} during daytime hours at the lot line and provide any necessary abatement measures to achieve this noise level. Abatement measures required to reduce noise levels may include complete enclosure of the equipment, specific orientation of the noise generating equipment, noise barriers, or berms. Specifications and recommendation from this study shall be incorporated into the final site plans to the satisfaction of the Director of the Department of Planning and Land Use.		
Aesthetic and Visual Quality – Direct Impacts			
Impact AE-1. Mitigation for noise impacts may necessitate noise abatement in the form of noise barriers. The presence of solid walls or barriers in a relatively open and natural environment is considered to be a potentially significant visual impact.	M-AE-1 Visual Appearance of Noise Barriers The Noise Protection Easement shall require that the overall look of the required noise barriers at each of the 22 noise impacted residences adhere to the following design measures to ensure that the noise barriers complement the natural setting and overall design of the Cumming Ranch project and surrounding community character. Measures include: a. Barriers shall be constructed of natural looking materials that complement the surrounding rural landscape. Materials such as stone, stone veneer, boulders, and stucco are all acceptable materials. b. The use of plexi-glass or other translucent materials shall be allowed. c. The color palette for the barriers shall be consistent with the adjacent rural landscape and consist of earth-toned hues. d. A minimum of a 5-foot-wide landscape buffer shall be required along the exterior base of barriers. All landscape material in this area shall be native and as defined in the Conceptual Landscape Plan. e. Earth berms or earth berm/wall combination are other acceptable forms of noise mitigation. Berms shall have a maximum of 1.5:1 slope. If a berm is used, it will be natural in appearance and reflect the aesthetic of the surrounding rural landscape. Berm plantings shall be consistent with the Landscape Plan. f. Wall portion of the barriers shall not exceed 6 feet. The use of natural materials on the wall facades to complement the open rural setting would reduce the intrusiveness of the walls and unite the walls with the overall design of the proposed project. Landscaping along the exterior base of the walls would partially conceal the walls as well as blend and so often the hard lines of the walls with the open surroundings. The use of plexi-glass or other transparent material would reduce the visibility of the walls, while still maintaining the appropriate noise reduction. These measures will be imposed upon the project by the Noise Protection Easement.	Less than significant	Section 3.4.3
Climate Change – Cumulative Impacts			

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
Impact CC-1. Implementation and operation of the proposed project could generate GHG emissions that would contribute to a cumulative climate change impact. This is considered a potentially significant cumulative impact.	M-CC-1 Reduce Project-Generated GHG Emissions Contributing to Climate Change <u>Construction-Generated Emissions</u> – To be required on the grading and improvement plans: The grading and improvement plans shall specify that the contractor shall: a. Maintain construction equipment in good working order per the manufacturer's specifications; b. Limit idling time for construction equipment and vehicles to five minutes; <u>Operational Emissions</u> – The Site Plan shall require that the project developer implement the following mitigation measures or other equivalent measures consistent with OPR guidance to meet the specified performance criteria deemed feasible by the County to reduce GHG emissions. c. Meet California Green Building Code standards for energy efficiency in all new residential units. Examples of these standards include use of Energy Star equipment, water conserving plumbing fixtures, use of regional materials and products with recycled content, etc.; d. Generate a minimum of 10 percent of the project's energy consumption from onsite renewable energy-generation sources (e.g., photovoltaic cells or other onsite energy generating technology). For example, the estimated roof size of the photovoltaic system required to generate 10 percent of the project's energy would be approximately 4,405 square feet; e. Reduce outdoor water consumption by a minimum of 50 percent (e.g., rainwater collection systems); and f. Install solar water heaters in all proposed units.	Less than Significant	Section 3.5
Public Services and Recreation – Direct Impacts			
IMPACT PS-1. Fire protection would not be available to the project while maintaining adequate service to the surrounding community and would result in a significant impact.	M-PS-1 Fire Protection Service. The Cumming Ranch project shall participate in a Community Facilities District as conditioned by the Ramona Fire Prevention Bureau. The project developer shall be required to pay all fees and meet all requirements of the Community Facilities District to the satisfaction of RMWD.	Less than significant	Section 3.6.3
IMPACT PS-2. If the Cumming Ranch project were to require service prior to completion of the RMWD water service improvements and cause demand to exceed service availability, a significant impact would result.	M-PS-2 Water Conveyance, Storage, and Treatment County approval of building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of water supply to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.	Less than significant	Section 3.6.3
IMPACT PS-3. If the Cumming Ranch project were to require service prior to completion of the RMWD sewer service	M-PS-3 Sewer Service and Treatment County approval of the building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of wastewater treatment capacity to serve the project. The	Less than significant	Section 3.6.3

Description of Impact	Mitigation Measure	Significance After Mitigation	Location in EIR
expansion and cause demand in excess of available service, a significant impact would result.	project developer shall be required to pay all service fees as determined by RMWD.		
Public Services and Recreation – Cumulative Impacts			
IMPACT PS-4. Fire protection would not be available to the project while maintaining adequate service to the surrounding community and would result in a significant cumulative impact.	M-PS-4 Cumulative Fire Protection Service. The Cumming Ranch project shall participate in a Community Facilities District as conditioned by the Ramona Fire Prevention Bureau. The project developer shall be required to pay all fees and meet all requirements of the Community Facilities District to the satisfaction of RMWD.	Less than significant	Section 3.6.4
IMPACT PS-5. If the Cumming Ranch project were to require service prior to completion of the RMWD water service improvements and cause demand to exceed service availability, a significant cumulative impact would result.	M-PS-5 Cumulative Water Conveyance, Storage, and Treatment County approval of building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of adequate water supply to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.	Less than significant	Section 3.6.4
IMPACT PS-6. If the Cumming Ranch project were to require service prior to completion of the RMWD sewer service expansion and cause demand in excess of available service, a significant cumulative impact would result.	M-PS-6 Cumulative Sewer Service and Treatment County approval of building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of adequate wastewater treatment capacity to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.	Less than significant	Section 3.6.4

Table S-2
Comparison of Project Alternatives Impacts to Proposed Project Impacts[1]

Issue Area	No Build Alternative	Existing Community Plan Alternative	Clustered Development Alternative	Reduced Project Alternative	General Plan Update Alternative
Transportation	Less	Greater	Greater	Less	Less
Public Services and Recreation	Less	Greater	Greater	Less	Less
Biological Resources	Less	Greater	Less	Greater	Greater
Cultural Resources	Less	Greater	Less	Greater	Greater
Noise	Less	Greater	Greater	Less	Similar
Hazards and Hazardous Materials	Less	Greater	Less	Similar	Similar
Aesthetics and Visual Quality	Less	Greater	Greater	Less	Greater
Air Quality	Less	Greater	Greater	Less	Less
Global Climate Change	Less	Greater	Similar	Similar	Similar
Hydrology and Water Quality	Less	Greater	Greater	Greater	Less
Soils and Geology	Less	Greater	Greater	Similar	Similar
Agricultural Resources	Less	Similar	Similar	Less	Similar
Land Use and Planning	Less	Greater	Greater	Similar	Similar

[1] Greater = Alternative results in greater impacts than the proposed project
Less = Alternative results in less impacts than the proposed project
Similar = Alternative results in similar impacts as the proposed project

CHAPTER 1.0
PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

This environmental impact report (EIR) has been prepared to provide an assessment of the proposed Cumming Ranch project. This project involves rural residential development of 125 homesites and open space preservation on a 682.6-acre parcel in Ramona, California. Ramona is a rural community in the unincorporated portion of San Diego County. The Cumming Ranch project would make available 457.4 acres of permanent open space toward the formation of the County of San Diego's (County's) Ramona Grasslands Preserve. Implementation of the project would require approval of a General Plan amendment (GPA), a tentative map (TM), a Specific Plan, and associated permits and approvals.

This assessment is designed to inform County decision-makers, responsible agencies, and the public of the environmental consequences of development of the project. The County is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA) statutes (California Public Resources Code Section 21000 et seq., as amended) and implementing guidelines (California Code of Regulations, Title 14, Section 15000 et seq., 2004). This EIR has been prepared consistent with the County's *Environmental Impact Report Format and General Content Requirements* (2004a).

This chapter provides information about the project, including project location; overview of project background and planning approach; detailed description of the project; project objectives; intended uses of the EIR; description of the environmental setting; list of past, present, and reasonably foreseeable projects for consideration in the cumulative impact analysis; and information on growth-inducing effects.

1.1 Project Description and Location

This subchapter provides a detailed description of the proposed project, including background information, in addition to precise location information. The 682.6-acre Cumming Ranch project is specifically designed to accommodate the County's Ramona Grasslands Preserve by making available certain lands to the preserve (approximately 457.4 acres) while retaining a portion of the acreage for residential development (approximately 215.4 acres). The proposed residential development would consist of 125 rural residential lots.

The project site would be divided into three main areas (Areas A, B, and C) to identify and facilitate the transfer of certain lands for inclusion within the Ramona Grasslands Preserve.

Approximately 9.8 acres of the project site acreage is located in the right-of-way (ROW) for Highland Valley Road and State Route 67 (SR 67). This ROW acreage is separate and not included in Areas A, B, or C. Areas A, B, and C are described below:

- Area A consists of 358.7 acres, of which 215.4 acres would be designated for residential development and 143.3 acres would be dedicated as open space. The 143.3 acres of open space would be used as the primary location for the project's biological mitigation requirements. The 143.3 acres of open space would be managed pursuant to a County-required Resource Management Plan (RMP) and would be subject to an open space easement granted to the County.
- Area B consists of 201.0 acres that would be designated as open space. A 62.5-acre portion of Area B would be used for the project's biological mitigation requirements and would be managed pursuant to a County-required RMP. The 62.5 acres used for mitigation requirements would be subject to an open space easement(s) granted to the County. The owner plans to sell Area B to the County or to a conservancy acting on behalf of the Ramona Grasslands Preserve, for inclusion in the Ramona Grasslands Preserve. The terms of such a sale would be based only on the remaining 138.5 acres in Area B. The owner would be authorized, until such time the sale is consummated, to continue farming operations on the 138.5 acres and to have access to existing farm roads.
- Area C consists of 113.1 acres that would be designated as open space. A 25.3-acre portion of Area C would be used for the project's biological mitigation requirements and would be managed pursuant to a County-required RMP. The 25.3 acres used for mitigation requirements would be subject to an open space easement(s) granted to the County. Additionally, contained within Area C are 21 existing open space easements, totaling approximately 22.2 acres. Collectively, these easements are commonly referred to as the Ramona Vernal Pool Preserve. The owner plans to donate Area C in fee title to the County or a conservancy acting on behalf of the Ramona Grasslands Preserve, for inclusion within the Ramona Grasslands Preserve.

Areas B and C provide valuable interconnectivity with other grassland properties recently acquired for inclusion in the Ramona Grasslands Preserve.

Residential development would consist of 125 residential lots, ranging in size from 1.0 to 3.1 acres. Average lot size would be approximately 1.5 acres. The lots would be designed to be consistent with the rural character of the Ramona community and to transition seamlessly and as naturally as possible with the adjoining grasslands preserve. Relatively large lots, the use of minimum grading techniques, retention of existing natural features, and natural landscaping

practices throughout the project are key design elements to maintain rural character and to transition within the larger environmental setting.

The project proposes to install and provide construction funding for approximately 3.4 miles of community trails and pathways, including a 2-acre trail staging area.

1.1.1 Precise Location/Boundary

The Cumming Ranch project site is located in central San Diego County, approximately 20 miles northeast of downtown San Diego, 11.5 miles east of Interstate 15, and 15 miles north of Interstate 8 (Figure 1-1 shows the regional location). The Cumming Ranch project site boundaries are the same as the Cumming Ranch Specific Planning Area (SPA) boundaries shown in the Ramona Community Plan (County of San Diego 2002a). The Ramona Community Plan assumed a total of 664 acres in the SPA. However, when the site was surveyed it was found that the correct acreage is 682.6 acres as shown on the TM and in the Specific Plan.

As shown in Figure 1-2, the project site is contiguous to the western boundary of the Ramona Town Center and approximately 0.25 mile northwest of the intersection of SR 67 and Highland Valley Road. Highland Valley Road bisects the southern portion of the project site. The Ramona Airport is adjacent to the site to the north and the northern property line is contiguous with Ramona Airport Road. The Santa Maria Wastewater Treatment Plant (SMWWTP), operated by the Ramona Municipal Water District (RMWD), is located on a parcel that is inset along the eastern boundary of the site. Santa Maria Creek runs generally east-west across the site just north of SMWWTP and Etcheverry Creek runs generally east-west across the site south of the plant. Both creeks converge west of the property boundary.

1.1.2 Project's Component Parts

The 682.6-acre Cumming Ranch project would be composed of two main development components: residential development, and open space as shown in the land use plan, Figure 1-3. A planning component addresses the discretionary approvals and the project implementation and phasing. These project components are discussed in detail below. The residential design and open space areas described below have been designed to accommodate ongoing conservation planning in the Ramona area, specifically the Ramona Grasslands Preserve. Project design has been driven by the owner's willingness to participate in the Ramona Grasslands Preserve in response to the Ramona Grasslands Preserve White Paper prepared by the County's Department of Planning and Land Use (DPLU) in July of 2002. Pertinent background information on nearby

conservation planning and the property itself is provided in Section 1.1.3, and the general boundaries of the Ramona Grasslands Preserve are shown in Figure 1-4.

Residential Component

The following section describes the residential component of the project. The residential component of the project is located throughout what is known as Area A of the project site. Table 1-1 provides a development summary and Table 1-2 details each specific land use type and associated acreage totals.

Residential Lots

As shown on the conceptual site plan, Figure 1-5, the project proposes 125 single-family residential lots within the southern half of the site. The residential portion of the project has been positioned to conform to the natural landforms of the property. Each lot within the residential development area has been individually designed to closely follow the existing natural contours and terrain of the site. Physical features, such as trees, boulders, rock outcroppings, drainages, and natural landscaping, would be incorporated into the lot design.

Residential lot development would occur on 188.6 acres within the southern portion of the site (Area A). The project would have a minimum lot size of 1.0 acre ranging up to a maximum lot size of approximately 3.1 acres. The average lot size would be approximately 1.5 acres. This averages to a density of 0.35 dwelling units per acre within the residential development area and an overall density of 0.18 dwelling units per acre relative to the project site. The Tentative Map for the project is shown in Figure 1-6. Based on anticipated average sales of three to four homes per month, the typical time from the start of sales to the completion of all homes would be between 3 and 5 years.

Grading

Throughout the development, lot size and shape would vary to provide an individual fit with the unique features of each lot. Lots would be sized to allow for the individual positioning of the driveway and building pad within the lot. Pads would be designed to blend into the terrain, minimizing terracing of pads and retaining contours that complement natural landforms. Unnecessary grading and disturbance to other portions of the lot would be avoided. Minimal grading techniques would be implemented to design a natural appearing landscape. The Landscape Concept Plan has been designed to further blend the transition between the natural terrain and the graded areas. It is estimated that by individually designing each lot and

minimizing ground disturbance, overall grading would be reduced by approximately 65 percent as compared to conventional mass grading methods. Additional fugitive dust suppression techniques as detailed in Table 1-6 would be specified on the project grading plans.

Overall grading for roads and building pads within the project is estimated to be approximately 170,000 cubic yards of balanced cut and fill. All building pads would be rough graded concurrent with the installation of improvements for each phase of the project. Finish grading, if necessary, would occur with construction of individual homes. Due to the relatively gentle, rolling terrain of the areas proposed to be graded, most cut and fill slopes would be less than 10 feet high, with a maximum height of approximately 29 feet to accommodate the roadway between lots 109 and 110. The maximum cut and fill slope ratio would be 1.5:1 (1.5 horizontal to 1 vertical) though most slopes would vary from 3:1 to 5:1 to reflect a more natural transition from existing natural contours to graded slopes. Erosion control requirements would include standard best management practices (BMPs) as well as additional measures specified in the Storm Water Pollution Prevention Plan (SWPPP) and Storm Water Management Plan.

Circulation

Onsite Improvements

The project site would have a total of four entrances located off of Highland Valley Road; two accessing lots on the north side of the road and two serving the lots on the south side of the road. Approximately 3,000 feet of Highland Valley Road traverses through the boundary of the project site and serves as access to all areas of the proposed residential development. As shown in the internal circulation plan, Figure 1-7, one entry point would serve the majority of lots located north of Highland Valley Road (lots 76 though 125). A second entry point on the northern side of Highland Valley Road would serve lots 1 through 4. The majority of properties south of Highland Valley Road (lots 5 though 57) would be served by one entry point on the south side of the road. A second entry road on the south side of Highland Valley Road would serve the remaining lots south of the road (lots 58 through 75).

Signage would accent the entry points and be designed to be unobtrusive and match the rural character of the project. Minimal lighting of signs would occur only at the main entry points off of Highland Valley Road.

The internal roadway network would consist of 24.3 acres and is shown in Figure 1-7. This roadway system would be implemented in conjunction with development of the residential portion of the project. All internal roadways would be constructed as public streets with either 52

or 56 feet of ROW. All internal streets would be built to County standards. The internal streets are a combination of looped roadways with some streets that end in cul-de-sacs. These cul-de-sacs would have a 38-foot radius to meet fire department access regulations. All internal project roadways would be constructed to rural development standards with asphalt berms instead of concrete curbs and gutters. Each residential lot would have its own individual 16-foot-wide driveway. A discussion of pathways along internal roadways is provided in the Community Trails and Pathways section below.

The project includes two additional secondary access/egress roads for fire and evacuation only. No normal traffic would be allowed on these access roads. These emergency access roads would be gated at each end and designed to allow individuals on either side to use them for emergency evacuation purposes. The gates would not be locked and would operate in either direction by any party perceiving an emergency, without key, code, special knowledge, or outside intervention. Signs prohibiting nonemergency use would be provided. One of the secondary access/egress roads is located between lots 101 and 102 and would link the two residential roadways to provide emergency fire and evacuation access into or out of the project area on the north side of Highland Valley Road. The second fire and evacuation access/egress road would be located between lots 40 and 41 on the south side of Highland Valley Road.

Offsite Improvements

The project includes improvements to surrounding roadways to address future traffic circulation and roadway operations needs. These improvements would occur on the onsite and offsite portions of Highland Valley Road and at the intersection of SR 67 and Highland Valley Road. The proposed improvements are described below and shown in Figure 1-8. Additional information can be found in the traffic study (Appendix A).

Highland Valley Road

Highland Valley Road in the project area would be widened to meet County Circulation Element Standards for a Rural Collector Road. A portion of Highland Valley Road is located within the project boundary. Approximately 3,000 feet of Highland Valley Road traverses onsite, through the project boundaries of Area A. Highland Valley Road extends approximately 700 feet from the eastern boundary of the project site to the intersection with SR 67. The existing pavement width is approximately 36 to 40 feet and the improvements would widen the roadway to 50 feet of paving from curb to curb. This improvement would continue to allow for one travel lane in each direction and provide left-turn lanes at all project access streets off of Highland Valley Road. In addition, the increased width would provide for a designated 5-foot bike lane on each

side of the road. The roadway would be paved with asphalt concrete, similar to the existing rural roadway style. No improved concrete curb and gutter system would be provided, but there would be an asphalt curb. The public pathways that would be adjacent to Highland Valley Road are described below under Community Trails and Pathways.

Intersection of SR 67 and Highland Valley Road

Improvements at the SR 67 and Highland Valley Road intersection would include widening eastbound SR 67, west of the intersection, to provide two through lanes. East of the intersection, eastbound SR 67 would be widened to provide two through lanes for 400 feet before transitioning back to the existing roadway width. West of the intersection, westbound SR 67 would be widened and the right-turn lane would be converted to a through lane and extended east of the intersection. This would result in two through lanes as well as a right-turn lane and left-turn lane on westbound SR 67. In addition, northbound Dye Road (south of the intersection) would be widened to provide dual left-turn lanes at the intersection. The existing traffic signal would be modified to provide for the above improvements.

Community Trails and Pathways

A stated objective of the proposed project is to provide a meaningful and scenic trail system. The project would install and provide construction funding for approximately 3.40 miles of community trails and pathways, including a 2-acre trail staging area. The proposed trails and pathways are for nonmotorized use only. Specifics with respect to alignment and design are defined in the Cumming Ranch Trails and Pathways Map (Figure 1-9) and distances are provided in Table 1-3. The system is designed to function independently or to interconnect and become a part of a larger system of community and/or regional trail systems in the future. The Cumming Ranch trail and pathway system has been planned and designed in close consultation with the Transportation and Trails Subcommittee of the Ramona Community Planning Group (RCPG) and the Ramona Trails Association. The routing and design of the trail and pathway system follow the planning guidelines of the Ramona Community Trails and Pathway Plan, which is part of San Diego County Trails Program Community Trails Master Plan (County of San Diego 2005a). On January 12, 2005, the County Board of Supervisors took action to adopt the Community Trails Master Plan to implement the goals for a County trails network of regional and community trails. Trails are typically soft-surfaced and away from vehicular roads. Trails are primarily recreational in nature but can also serve as an alternative mode of transportation, while pathways are typically defined as soft-surfaced and located within a parkway or road ROW.

Irrevocable trail easements would be recorded on title before the dedication, donation, or sale of any portion of the property with proposed trails. All easements for trails would be 20 feet wide with the exception of the 0.35-mile segment referred to as the Connector Trail, which would be 15 feet wide. All trails and pathways funded and constructed by the project are designed to accommodate and connect to the proposed trail and pathway system for the Ramona community. However, until the additional linkages are completed, the Cumming Ranch trails and pathways could operate in a stand-alone manner, independent of the regional connections. Trail tread widths would range from 8 to 10 feet; however, for impact assessment and mitigation purposes, a 20-foot impact corridor was used for all onsite and offsite trail alignments.

The above trail and pathway system, including the trail staging area, would be installed during the first phase of construction for the proposed project. Upon completion of installation, the County Department of Parks and Recreation (DPR) would assume management and maintenance responsibilities for the approximately 2.29 miles of trails and the trail staging area. The County Department of Public Works (DPW) would assume management and maintenance responsibilities for the approximately 1.11 miles of pathways located within the ROW for Highland Valley Road. The pathways along Highland Valley Road would have a tread width of 12 feet and overall width of 15 feet.

For that portion of the community trail system located in Area A of the Cumming Ranch project, the area to be retained by the owner for development and dedication of open space, the Cumming Ranch project would be responsible for reimbursement of operation and maintenance costs to the DPR. Said reimbursement would be funded through the establishment of a Landscape Maintenance District (LMD) that would annually assess each residential lot within the project. With respect to the Connector Trail segment in Area A, reimbursement under the LMD would include maintenance for the wood-rail fencing separating the trail from private property. The alignment of the trail system through Area A is approximately 1.00 mile in length and has been designed to be located within acreages to be dedicated as permanent open space.

With the exception of a 0.74-mile trail alignment, the proposed 3.40 miles of community trails and pathways system, including the trail staging area, are located within the Cumming Ranch property. Approximately 0.74 mile is located offsite on the Hardy Ranch property that was recently purchased by the County as part of its assemblage of acreage for inclusion within the Ramona Grasslands Preserve. A portion of the alignment within the Hardy Ranch (approximately 50 percent of the total distance) follows an existing dirt road and would share usage on an existing granted 30-foot sewer-water easement owned by the proposed project. As specified in Figure 1-9, the trail alignment would use the existing dirt road and culverts to cross

Etcheverry Creek. A natural crossing would be used for Santa Maria Creek, but within the same alignment as the sewer-water easement owned by the proposed project.

Pathways would be provided along one side of all internal streets. The pathways would not be paved but would be covered with decomposed granite or a similar material to maintain a rural and informal setting. All pathways would be approximately 6 feet wide. These internal project pathways are anticipated to be used mainly by residents living in the development. The internal pathways would not be obstructed by any landscaping, fencing, gates, aboveground utilities, or irrigation systems. These pathways replace a typical sidewalk and would be installed and funded by the project but would be maintained by the County DPW. These pathways would total 3.65 miles and would be considered part of the overall community trail system. The distance of these internal pathways was not included in the total distance of community trails and pathways, as outlined at the start of this section.

Utilities

Water

The Cumming Ranch project is located within the water service area of RMWD. No annexation process through the Local Agency Formation Commission (LAFCO) for water service would be required. The project site is located within the Downtown Operational Storage Zone of RMWD.

Connection for the project would be from a 16-inch main line that is being planned by RMWD for installation within Highland Valley Road. The new main line is part of the overall improvements proposed for the RMWD's Downtown Operational Storage Zone. It is planned that the Downtown Operational Storage Zone would receive its water via a West End Terminal Storage reservoir. Currently, there is a 10-inch main line that serves the local area that extends through the project site within a former alignment of Highland Valley Road. The 10-inch main line receives its water directly from the Mount Woodson Terminal Storage.

The delivery for water service to the residences would be through 8-inch to 12-inch pipelines located within the project's internal streets. As required by RMWD, these pipelines would be looped to provide redundancy in supply, improve water quality by avoiding dead end mains, and to meet fire flow demands and pressures by providing water from two directions to supply hydrants. The location of the proposed water lines are shown in Figure 1-10.

Sewer

The project would be served by the RMWD wastewater system. Action by LAFCO would be required to allow RMWD to expand its latent powers to serve the project site. LAFCO is responsible for encouraging the efficient provision of public services and has purview over changes to local government organization. The project is not currently served for sewer by RMWD. The project is not within the latent powers sewer service area of RMWD. The latent powers expansion is a discretionary action subject to LAFCO review and approval.

The SMWWTP is located within a parcel inset into the eastern boundary of Area B, directly south of Area C. The proposed sewer infrastructure for the development of the property would be a combination of gravity flow combined with one lift station. The proposed sewer system is shown in Figure 1-11. Because the project would not be mass graded, the sewer lines would be located in low-lying areas throughout the project site to allow for wastewater from residences to gravity-flow to the sewer lines. Some of the sewer lines would be located within the internal roadways. Avoidance of mass grading and individual design of relatively large and specifically placed lots would require portions of the sewer alignment to be placed in open space areas at a lower elevation than the residential lots to facilitate gravity flow. The minimum width of the sewer easements to be located outside of street ROWs would be 20 feet.

The project would require a lift station to convey wastewater to the SMWWTP as portions of the project site are at a lower elevation than the treatment facility. The lift station would be located within an individual lot (Lot O) to be owned by RMWD. The lift station lot would be approximately 100 feet east of Lot 125, 250 feet northeast of Lot 110, and approximately 150 feet south of the northern property of Area A, as shown in Figure 1-5. This lift station would be enclosed with a natural-looking façade to serve as an acoustical barrier that would reduce noise generated by the lift station operation. An emergency generator would be required as part of the lift station equipment. In addition, standard odor control devices would be installed to reduce potential odors.

The connection to the SMWWTP would be through a proposed 4- or 6-inch main sewer line that would run from the project's lift station directly to the SMWWTP for a distance of approximately 4,560 feet. Of the total distance, approximately 2,190 feet would be located offsite within the adjoining Hardy Ranch property with the remainder located within the project boundaries. The project owns easement rights for utilities within the Hardy Ranch property and all offsite locations are assessed and mitigated within this EIR. To minimize impacts, the alignment of the main sewer line was designed to avoid crossing Santa Maria Creek and would share the same alignment with a segment of the project's proposed trail system where practical.

The main sewer line would be located in a minimum 20-foot easement that would be separate and independent of other existing lines that enter the treatment plant from the west, including the main sewer line from the Mount Woodson area. The alignment for the proposed main sewer line connection is shown in Figure 1-11.

Removal of Existing Wells

There are two existing wells on the property that were used for livestock purposes. Well number 1 is located in Area A and Well number 2 is located in Area B. Well number 1 has two well shafts. The existing wells would be legally destroyed by a licensed C-57 well driller, under permit and inspection of the County of San Diego Department of Environmental Health. Said action would be taken before, or at the commencement of any grading. Location of these wells is shown in Figure 1-12.

Specific Plan

Residential Landscaping and Design Guidelines

The Cumming Ranch project will be subject to the County of San Diego Water Conservation in Landscaping Ordinance, which will require a Landscape Plan tailored to each lot if landscaping exceeds a threshold level. In addition, the Specific Plan provides design guidelines for implementation of the overall project as well as details about landscaping, buffers and natural barriers, animal keeping, fencing and walls, lighting, drainage, and education. This section will discuss each of these design features. The overriding design theme established in the Ramona Community Plan and policies dictated for the Cumming Ranch SPA is to preserve and enhance the existing rural character of the community. Rural character would be enhanced in the project design by large lots, provisions for animal keeping, minimal grading, and an emphasis on natural landscaping. The incorporation of trails and pathways and a policy toward maintaining dark skies would further accentuate the rural character. Additionally, in keeping with the goals of the Ramona Community Plan, large amounts of open space would provide for the permanent preservation of ridgelines, drainage areas, cultural resources, stands of oaks trees, and major rock outcroppings. Certain basic guidelines that would accomplish these goals are described below.

Landscaping

Landscaping requirements focus on maintaining a rural character and a seamless integration with the surrounding open space and grasslands. A Landscape Concept Plan has been prepared for the project to outline the specific details, such as allowed plant palette, fencing, pathway design, etc.

The Landscape Concept Plan is shown in Figure 1-13. The Landscape Concept Plan focuses on the use of native plant species appropriate to the individual areas of the project to provide a smooth transition from the developed pad areas to the surrounding natural setting and to act as a natural buffer between the interfacing land uses. The landscaping for the project would focus on maintaining the existing natural and unique features of the site, specifically oak trees and rock outcroppings. The proposed landscaping would accent and enhance the existing mature landscaping and natural features. The project entrances would be landscaped with clusters of oak trees and rocks.

Figure 1-14 shows a typical landscaping design for an individual lot. The majority of the homeowner-controlled landscape features are focused on the interior lot, which serves as the active outdoor use area for the homeowner. This area could include lawns, small structures, patios, children's play equipment, etc. The active yard then transitions into a more natural area that would blend into the adjacent open space preserve and also serve as a buffer between human activities and native areas. The design guidelines encourage a transitional landscape approach with native and naturalized plant material suited for sustainable maintenance practices. All plantings would be subject to the specified plant palette for each specific area.

Buffers and Natural Barriers

Buffers and natural barriers would naturally separate development and open space areas as an alternative to the use of fences, walls, or other physical barriers. Separation would be established through the use of limited building zones, habitat buffers, and natural barriers. These buffers and barriers would serve the purpose of traditional fencing but would allow integration with the natural setting, rather than appearing as a distinct separation. Figure 1-15 depicts the buffers and setbacks as described below. In addition, when properly sized and designed, buffers serve as effective safety features to protect development from wildfires.

Limited Building Zone. Each lot within the development would contain a Limited Building Zone (LBZ) easement of a minimum of 100 feet in width measured from any lot line that is adjacent to open space. The goal of the LBZ is to ensure adequate development area and the required 100-foot fuel modification zone around each structure without encroaching onto any adjacent open space area. The construction of homes will be prohibited in the LBZ. Certain plants and trees that burn easily would be prohibited in the LBZ. The list of prohibited plants and trees as well as building requirements can be found in the Fire Protection Plan prepared for the project (Scott Franklin Consulting 2010). Restrictions in the LBZ include (1) animal keeping without effective restraints or fencing, (2) lighting, (3) exotic invasive landscaping, (4) focal use areas including arenas, pools, and patios, and (5) any other structures without approval of the County Fire

Marshall and Ramona Fire Marshall. The LBZ easements would require large animals to be kept within fences.

The LBZ serves multiple purposes. The primary purpose of the separation between homes and natural open space is to protect homes from potential wildfires that may occur within the open space. The LBZ would also prevent a structure fire from rapidly spreading into the natural open space. The LBZ serves as a buffer between the development and the open space. This would also reduce potential indirect impacts such as lighting, noise, and encroachment by pets.

Habitat Buffer. Additional separation would occur beyond the property lines to protect sensitive habitat. The open space lots contain both sensitive and nonsensitive habitats. A minimum buffer of 50 feet would be provided within the dedicated open space lots between sensitive habitats and the adjacent residential lots. The minimum 50-foot buffer for sensitive habitats within the open space lots coupled with the 100-foot LBZ within the residential lots results in a design where all houses are set back from sensitive habitats by an overall separation of at least 150 feet.

Natural Barriers. The goal of creating natural barriers is to discourage infringement into the open space, specifically at points where a person could choose to not follow the designated pathway or cut through the sensitive open space area. Natural barriers would include such materials as impassable brush, mounding, rocks, and trees or shrubs at potential entry points into the open space areas.

Signage. Because no fencing would be erected between most private lots and open space areas, signage would be posted every 50 feet along these boundaries to designate the transition from private lots to open space. The signage would include the following information:

Sensitive Environmental Resources
Area Restricted by Easement
Entry without express written permission from the County of San Diego
is prohibited. To report a violation or for more information about easement
restrictions and exceptions contact the County of San Diego,
Department of Planning and Land Use
Reference: (*3810-03-005*)

Fire Protection Plan

A Fire Protection Plan has been prepared for the proposed project (Scott Franklin Consulting 2010). The plan is based on a catastrophic wildland fire analysis and provides measures and requirements to reduce the potential for wildfire damage to the project site. All measures

contained in the Fire Protection Plan would be incorporated into the proposed project. The plan addresses defensible space for fire suppression resources through fuel management zones, included in the LBZ discussed above, as well as a specific plant palette with restrictions on highly flammable plant material. The plan also addresses issues such as infrastructure and structural fire protection, project access, secondary access/egress (fire and evacuation only), and water supply. The requirements in the Fire Protection Plan meet or exceed current fire code requirements, including requirements for residential fire sprinklers and enhanced fire resistive construction.

Animal Keeping

Animal keeping would be an important part of the rural character of the Cumming Ranch project. The proposed zoning for the residential lots will allow animal keeping that is consistent with the surrounding properties. Certain additional restrictions would be placed on animal keeping, specific to both livestock-type animals and domestic pets. Only larger lots designed for animal keeping would be allowed to have a corral and associated barn or stables. Large animal enclosures would be subject to specific guidelines for the types of fencing material that may be used. Fencing is envisioned only on lots where equestrian or other large animal keeping is allowed. All proposals for large animal keeping will be reviewed by the Homeowners Association (HOA) and will be required to comply with the requirements of the Limited Building Zone Easement, County Zoning Ordinance, and other applicable regulations.

An RMP has been developed for the project (TAIC 2010) and includes restrictions on the outdoor activities of domestic pets, such as cats and dogs, because of the possible encroachment into the adjacent open space areas. The RMP would require, review, and monitor the following restrictions: dogs must be leashed at all times unless securely enclosed, cats must have bells on their collars, pets must be kept in the active yard area, and similar measures to reduce the potential for predatory or other disturbing activities that may occur when pets enter natural open space areas.

Fencing and Walls

Individual lots may be designed using individual noise barriers located within each lot to shield an exterior area of sufficient size in the proper location. Noise walls could be made of masonry, wood, or transparent materials, such as glass or Lucite. Earthen berms or a combination of berms and walls would also provide noise attenuation. The noise protection easement language will contain a restriction stating that the structure and the exterior living area will be placed such that

a noise barrier will complement the residence's architecture and will not incorporate a solid (opaque) wall in excess of 6 feet.

Fencing would be included in the project design only where necessary to enclose animals or provide separation between the Connector Trail and adjacent private lots. There may be special circumstances, such as roadways, that require the use of fencing where natural barriers or buffer areas would not create a physical separation. Allowed fencing types would include strand wire, wooden rail, or other natural materials. No chain-link or similar type of fencing would be permitted. Grading plans would require that permanent signage and markers be placed every 50 feet along the edge of residential lots to distinguish the boundaries between residential lots and open space areas.

Lighting

No street lighting would be used within the proposed project. Homeowners could have exterior lighting within allowed parameters, such as motion lights, shutoff timers, and downshielding. Minimal lighting at the major entry points along Highland Valley Road and entry signage is proposed.

Drainage

Specific requirements would be designed to prevent runoff from stables and corral areas. Maintenance requirements, such as removal of manure from corral and stable areas, would be created to prevent contaminated runoff from entering drainage areas. Requirements for manure management and vector control would be enforced through the San Diego County Code of Regulatory Ordinances Section 64.203–64.330. Homeowners would be provided with information and options on drainage requirements and ongoing maintenance.

Education

Education of Cumming Ranch homeowners and onsite recreational trail users would be an important component of the natural design of the site. These users would be educated in the importance of the natural resources that exist on the project site. Education of homeowners would begin before purchase through property disclosures. Information presented to home buyers would include descriptions of wildlife and vegetation native to the area, explanations of local cultural resources, limitations on activities that may occur in community open space areas, restrictions on sensitive resources that may exist on individual properties, and legal implications of disturbing cultural resource sites.

Education would be an ongoing process and may include yearly educational tours by biologists, updated information concerning the importance of natural resources and related policies protecting those resources, and ideas on how people can celebrate the natural surroundings without causing harm. Signage would be provided along key points between developed areas and open space areas to indicate that the area is a sensitive open space preserve and no entry is allowed except at designated trail areas. Educational programs and measures would be implemented through the RMP.

Open Space Component

The proposed project includes 457.4 acres of permanent open space (67 percent of the project site). The following is a breakdown and description of the open space areas throughout the site as defined by Areas A, B, and C. Land that is not required as mitigation or avoidance for the proposed project's environmental impacts may be designated as open space on the specific plan map. Dedication of easements or resource management would not be required for such land. The locations of open space easements are shown in Figure 1-16.

Area A

Area A consists of 358.7 acres, of which 215.4 would be designated for residential development and 143.3 acres would be dedicated as open space. The 143.3 acres of open space would be used as the primary location for the project's biological mitigation requirements. The 143.3 acres of open space would be managed in perpetuity pursuant to an RMP or other County-initiated management plan, and would be subject to an open space easement(s) granted to the County. The location(s) of open space easement(s) are shown in Figure 1-16.

A Landscape Maintenance District (LMD) will be established by the owner for funding in perpetuity the management and maintenance of the 143.3 acres of dedicated open space easements in Area A.

Area B

Area B consists of 201.0 acres that would be designated as open space. The owner plans, following recordation of the final map, to convey by sale 138.5 acres of Area B to the County or to a conservancy acting on behalf of the Ramona Grasslands Preserve, for inclusion in the Ramona Grasslands Preserve. The owner would be authorized, until such time the sale is consummated, to continue farming operations on the 138.5 acres and to have access to existing farming roads.

The remaining 62.5-acre portion of Area B would be used for the project's biological mitigation requirements and would be subject to an open space easement(s) granted to the County. It would be managed in perpetuity pursuant to an RMP or other County-initiated management plan after conveyance of the open space easement(s). The open space easement(s) would be self-extinguishing and would vacate automatically if the 62.5 acres are conveyed to the County in fee title. The location(s) of open space easement(s) are shown in Figure 1-16.

An endowment will be provided by the owner for funding in perpetuity the management and maintenance of the 62.5 acres of open space easements used for the project's biological mitigation in Area B. Funding for the management and maintenance of the remaining 138.5 acres in Area B would be the responsibility of the County or conservancy purchasing Area B in fee title.

Area C

Area C consists of 113.1 acres that would be designated as open space. The owner plans, with recordation of the final map, to convey by donation Area C in fee title to the County or to a conservancy acting on behalf of the Ramona Grasslands Preserve, for inclusion in the Ramona Grasslands Preserve.

A 25.3-acre portion of Area C would be used for the project's biological mitigation requirements and would be subject to an open space easement(s) or other legal guarantee of permanent open space granted to the County. It would be managed in perpetuity pursuant to an RMP or other County-approved management plan after conveyance, but prior to approval of the first Final Map for the project. The open space easement(s) would be self-extinguishing and would vacate automatically if conveyed to the County in fee title. Additionally, the County has agreed to own and manage existing open space easements, totaling approximately 22.2 acres. Collectively, these easements are commonly referred to as the Ramona Vernal Pool Preserve. The locations of the open space easements are shown in Figure 1-16.

An endowment will be provided by the owner for funding in perpetuity the management and maintenance of the 25.3-acre open space easement(s) used for the project's biological mitigation in Area C. Approximately 22.2 acres of existing open space easements owned by the County have endowments. Funding for the management and maintenance of the remaining 65.3 acres in Area C would be the responsibility of the County or conservancy accepting the donation of Area C in fee title.

Open Space Enhancement

Specific natural areas throughout Area A, as shown in the Conceptual Revegetation Plan (Appendix D), would be enhanced with compatible and appropriate plantings to increase wildlife habitat and natural aesthetic value. These areas are also mitigation for wetland impacts and for oaks that would be subject to direct and indirect impacts. One component of this design element would include the enhancement of the drainage corridors within Area A, with native plant species such as mule fat scrub or willows to provide additional protective cover for birds and small animals. The second component would include planting of local Engelmann and coast live oak trees within appropriate open space areas in the northern section of Area A to provide foraging, breeding, cover, and nesting areas for birds and other wildlife species that are associated with oak woodland habitats. The conditions of approval will require approval of the final revegetation plans and bonding prior to approval of the first Final Map for the project.

Planning Component

This project component section involves the overall land use planning of the project. Also included in this discussion are the major discretionary approvals required for project implementation. Additional discretionary approvals required for project implementation are summarized in Section 1.3.1 and Table 1-5.

General Plan Amendment

A GPA is required as part of the proposed project. GPA 03-007 proposes to amend the text of the Ramona Community Plan that currently describes the Cumming Ranch SPA (0.25) and permits "…166 single-family dwelling units ranging in size from 2 to 4 or more acres…" and also permits industrial use adjacent to the Ramona Airport. The proposed GPA would amend the Ramona Community Plan as follows:

- Authorize a density of 0.18 du/ac, allowing 125 residential lots within Area A on lot sizes ranging from 1 to 3.1 acres.
- Identify Areas B and C as Open Space.
- Remove the industrial element from the Cumming Ranch SPA.

Specific Plan

A specific plan would be required for implementation of the proposed project. The land use plan for Specific Plan 03-005 is shown in Figure 1-3 and proposes three distinct land use areas of the project as described above. Table 1-1 outlines the proposed development throughout the project site and Table 1-2 provides a land use summary. Additional provisions of Specific Plan 03-005 address recreational uses, design guidelines, conservation/environmental issues, circulation, and utilities and public facilities as required by the Ramona Community Plan. These provisions are detailed in the text of the Specific Plan itself. Design considerations that also serve as regulatory compliance are listed in Chapter 8.0, List of Mitigation Measures and Environmental Design Considerations.

As described in Table 1-2, the land use designations generally include two main categories: Open Space and Rural Residential. The Cumming Ranch Specific Plan would establish two Open Space land use designations (OS-1 and OS-2). Development is not allowed within OS-1 or OS-2 with the exception of limited road crossings, infrastructure and public utilities, trails, a trail staging area, and related improvements. OS-1 lands are those lands to be set aside for permanent preservation with project implementation. Approximately 257.6 acres of the Cumming Ranch property would be designated as OS-1. The OS-2 designation would allow for the continued use of agriculture within Area B until it is purchased for open space conservation. Approximately 201.0 acres would be designed as OS-2. A total of 457.4 acres (67 percent) of the Cumming Ranch property would be designated as open space.

The Rural Residential (RR) designation of Area A allows for the development of 125 dwelling units on lots ranging from 1.0 to greater than 3.1 acres in size with an overall density of 0.18 dwelling units per acre. The average lot size is 1.5 acres. In total, the Cumming Ranch project would designate approximately 215.4 acres for RR use. Agricultural uses within private lots would be allowed in conformance with RR use regulations and may include horticulture, tree crops, and row and field crops, among others.

Tentative Map

In addition to the GPA and Specific Plan, a tentative map (TM) would be required for approval of the project and is shown in Figure 1-6. TM 5344 provides additional detail on proposed pad grading, slopes, individual lot design, open space areas, etc. Custom pad grading shown on TM 5344 would result in balanced cut and fill grading on each lot to create level building sites. The increased ratio of horizontal length to vertical height enables the graded slopes to be more easily landscaped and maintained, and the potential for soil erosion is reduced. TM 5344 also provides

additional details on the LBZs. These project features were described previously under Buffers and Natural Barriers and are shown in Figure 1-15.

Site Plan

A Site Plan would be required in order to implement certain physical design features of the Cumming Ranch project. The Site Plan will cover all residential lots within the project. All lots within the project will be required by the Site Plan to implement the California Green Building Code, provide solar hot water heaters, minimize outdoor water usage and provide a minimum of 10 percent of the energy consumption from renewable energy generation sources. The Site Plan also identifies specific lots that contain Limited Building Zones, Noise Mitigation Easements or Building Restricted Areas.

Project Implementation

Once all necessary entitlements and approvals are secured for the Cumming Ranch project, final engineering would begin. Final engineering includes preparation and approval of the final map and all related construction plans for the roads and utilities. It is anticipated that final engineering would take 6 to 9 months to complete. The property conveyance of the northernmost 113.1 acres (Area C) donated by the owner in fee title would occur concurrent with the County issuing the first final map. All final permits and approvals from various agencies with jurisdiction over the project would be required.

Once final engineering is completed, the final map is recorded, and construction permits are issued, a detailed construction schedule would be developed and preconstruction meetings would occur with the owner's representatives, contractors, and governing agencies. Construction staging, SWPPPs, fire prevention, and habitat protection would be monitored by the owner's representatives. The sequence of construction activities from planning to finalized buildout is described in detail below under Project Phasing.

Evaluation of temporary and permanent construction impacts assumes that all residential lots would be affected by construction or subsequent homeowner activities. This is a conservative assumption because, within each individual lot, only the actual residential pad and driveway access would be directly impacted by construction. Additionally, the effects of temporary construction impacts may occur up to a distance of 20 feet along each side of project streets and the sewer line easements. The disturbance would be predicated on access and unforeseen circumstances would be minimized by properly identifying features that would remain. Except when beneath an existing or proposed roadway, all areas of temporary construction impacts

would be regraded to match the adjacent natural terrain and landscaped in accordance with the approved landscape plan, which would provide for vegetation similar in composition (e.g., hydroseeding) to the surrounding environment. The proposed hydroseed would consist of grasses and vegetation that would reintroduce native species back into the existing nonnative landscape.

Project Phasing

The first phase of development would include all roadway improvements to Highland Valley Road, SR 67, and the intersection of Highland Valley Road and SR 67; all offsite sewer improvements for the connection to the existing wastewater treatment plant, all internal project sewer mains necessary to serve the phased development, and the sewer pump station; all internal water improvements necessary to serve the initial development phase; and all community level trails, the Highland Valley Road pathway, and the trail staging area. The existing water wells and any remnants of the former septic system would also be abandoned and/or removed during the first phase. All required open space and LBZ easements would be dedicated before beginning any construction.

It is anticipated that the streets, utilities, and pads will be constructed over time in a phased sequence. Development of the residential lots would likely begin in the southern portion of the site and proceed toward the north. Construction would begin with the rough grading of the streets within the initial phase and installation of the offsite improvements. Building pads on the individual lots would most likely be constructed concurrent with the rough grading of the streets. All the streets and pads would not be graded at one time.

Subsequent development phases would include grading and construction of roadways and utilities necessary to serve that particular phase.

Development of the residential lots would include grading of the building pads and establishment of the LBZs. Building of homes on the lots may begin as soon as the pads are completed and utilities are available. This could take place as soon as 90 or 120 days after the commencement of initial construction. Based on anticipated average sales of three to four homes per month, the typical time from the start of sales to the completion of all homes would be between 3 and 5 years. Table 1-4 provides an outline of the assumed project implementation timeline.

1.1.3 Technical, Economic, and Environmental Characteristics

This subchapter provides detail about the project background that influenced specific design and development of the Cumming Ranch project. Details concerning technical, economic, and

environmental characteristics that have guided project elements that were incorporated to enhance the project and meet regulatory compliance requirements are also included. Table 1-6 provides a brief summary of the design features included in the project to positively benefit each resource area. As described below, specific design features were incorporated to create a project that was responsive to the existing community atmosphere as well as future planning efforts in the area.

Project Background Information

The Ramona area has many ongoing planning and conservation efforts. Three of these conservation efforts are located in the vicinity of the Cumming Ranch SPA and have played a role in the planning and design of the project. These efforts are described below and include the Ramona Grasslands Preserve, Ramona Vernal Pool Preserve, and the Santa Maria River Park.

Ramona Grasslands Preserve

The County has been involved in the preparation of regional open space programs, including the Multiple Species Conservation Program (MSCP) and the development of the North County MSCP Subarea Plan. These plans are intended to protect endangered habitats and species and promote continued biodiversity by creating a network of large interconnected habitat preserves throughout San Diego County. The Ramona grasslands are a significant potential preserve area in the proposed North County MSCP.

On June 1, 2000, the RCPG approved a conceptual plan for the Ramona Grasslands Greenbelt (Ramona Grasslands Preserve). The concept envisioned the purchase of approximately 5,000 acres of privately owned lands in the western areas of Ramona for the purpose of establishing a grasslands preserve. The general boundaries of the Ramona Grasslands Preserve are shown in Figure 1-4.

On November 1l, 2000, the County of San Diego Board of Supervisors approved the concept for the Ramona Grasslands Preserve. The Board of Supervisors directed the Deputy Chief Administrative Officer to work with the Grasslands Preservation Project to seek potential sources of funding for the acquisition of the grasslands in Ramona. The Board of Supervisors directed that purchase of private land would be from willing sellers only.

In July 2002, DPLU distributed a white paper (County of San Diego 2002b) for the Ramona Grasslands Preserve to landowners (under cover letter of Second District Supervisor Dianne Jacob, dated July 15, 2002). The white paper, among other topics, delineated specifics on the

acquisition program for lands to be acquired for the proposed Ramona Grasslands Preserve, including how landowners could participate in the program. According to the white paper, the proposed Ramona Grasslands Preserve could cover approximately 4,000 acres. A separate study map for the Ramona Grasslands Preserve indicates approximately 8,000 acres of grasslands exist from which the preserved acreage could be potentially acquired.

As of March 2010, the County has acquired approximately 3,491 acres of land for inclusion within the Ramona Grasslands Preserve. These acreages include all, or portions of, the Cagney Ranch (390 acres), Oak County I (220 acres), Hardy Ranch (70 acres), Oak Country II (486 acres), Davis-Eagle Ranch (946 acres), and Gildred property (1,379 acres) (DRP 2010). In the instance of the Hardy Ranch, the Iron Mountain Conservancy participated with the County in the acquisition.

As described above, the Cumming Ranch project would make available a total of 457.4 acres of open space for inclusion in the Ramona Grasslands Preserve.

Ramona Vernal Pool Preserve

The northern portion of the project site, Area C, located generally between Santa Maria Creek and Ramona Airport Road, contains environmentally sensitive vernal pools that support the federally endangered San Diego fairy shrimp. The project area north of Santa Maria Creek (113.1 acres) is currently fenced to restrict cattle grazing or any agricultural operations that would impact those resources. There are two smaller "satellite" pools south of this area, one in Area A and one in Area B, that are individually fenced. A total of 56 acres in Area C are managed as a mitigation bank for the sale of conservation credits. To date, approximately 22.2 acres are protected by conservation easements. Collectively, these easements are referred to as the Ramona Vernal Pool Preserve.

Santa Maria River Park

On March 3, 2000, RCPG approved the conceptual plan for the Santa Maria River Park. The plan envisions a linear greenbelt park along Santa Maria Creek that would connect various parks, key business areas within the Town Center, and a planned intergenerational center. It would include a series of pathways and hiking trails. In July 2001, the County of San Diego Board of Supervisors endorsed the plan and directed the Chief Administrative Officer to work with interested parties to identify and obtain funding to acquire land along Santa Maria Creek to implement the plan. The Cumming Ranch project site has approximately 0.5 mile of frontage along Santa Maria Creek through Areas B and C.

Environmental Characteristics

The following section contains a description of unique environmental characteristics and constraints of the project site and setting. Often, a unique environmental feature on the project site was considered a development constraint as the project design strived to maintain a natural setting with minimal impacts to existing site features. The initiation of the Cumming Ranch project began with a thorough assessment of the existing environmental resources on the property. Known resources include vernal pools supporting federally endangered species, sensitive native habitat, archaeological sites, floodplains and floodways associated with both Santa Maria and Etcheverry creeks, and one key ridgeline with slopes over 25 percent. The Cumming Ranch project has been designed specifically to incorporate the project into the surrounding environment and to avoid potential impacts as discussed below.

Grasslands

The project site is located within a unique area of open space grasslands. The County DPLU developed a white paper in June of 2002 that directed the formation of the Ramona Grasslands Preserve through multiple planning efforts, including the compilation of land from willing sellers. In response to the white paper and ongoing efforts to form the Ramona Grasslands Preserve, the owner would willingly participate in making available 457.4 acres of privately owned lands for the formation of the Ramona Grasslands Preserve. The dedicated open space in Area A, plus all of Areas B and C, would be made available for inclusion in the preserve, providing approximately 10 percent of the open space lands needed to achieve the County's goal of 4,000 acres for the preserve as called for in the white paper. Participation in the grasslands preservation effort drove the design of the project to confine all residential development to the south of Etcheverry Creek. The desire to blend with the grasslands dictated large lots; a natural landscaping plan; and avoidance of unique landforms, minimal grading, and other natural design features. The project would be designed with minimal fencing to maintain the open and seamless integration with the adjacent natural grasslands and open space areas throughout the site.

Vernal Pools

As described above, within the northernmost portion of the project site is a relatively pristine collection of vernal pools, known as the Ramona Vernal Pool Preserve. Currently 22.2 acres in this area are protected by conservation easements. A number of the pools contain the federally endangered San Diego fairy shrimp. These protected vernal pools, San Diego fairy shrimp, and conservation easements are a development constraint on the project site. For this reason, the project design avoided any development in the vernal pool area. All of the vernal pools, along

with added acreage for a protective buffer, would be placed in permanent open space. The project was designed to avoid impacts to the vernal pools and their watersheds, create additional buffer area, and provide protection for this unique collection of vernal pools. All project trails were designed specifically to avoid vernal pools and vernal swales.

Wildlife Habitat

Wildlife and raptors currently use the project site for foraging and movement. Santa Maria Creek and Etcheverry Creek serve as wildlife habitat and east-west linkages. The northern and central portions of the project site form a connection between the Ramona Grasslands Preserve to grassland areas south of SR 67, providing north-south connectivity. The need for connectivity between grassland areas to the northwest, through the site, and continuing to the south influenced the project design. Thus, all development would occur in the southern areas of the site, leaving both creeks undisturbed and providing Areas B and C as permanent open space to allow continued movement through the area. Specific natural areas throughout the open space in Area A would be enhanced with compatible and appropriate plantings to increase wildlife habitat.

Santa Maria Creek and Etcheverry Creek

As noted above, Santa Maria and Etcheverry creeks serve as wildlife habitat and linkages, as well as serving as major tributaries for the area. These creeks are also protected under the County Resource Protection Ordinance (RPO). In addition, as described above, RCPG approved a conceptual plan for a linear park along Santa Maria Creek. For these reasons, the project design has been developed to protect both creeks in their entirety as they pass through the project site by placing them in permanent open space. The total onsite linear frontage preserved along Santa Maria Creek by the proposed project would be approximately 2,700 feet and approximately 2,900 feet along Etcheverry Creek.

Natural Landforms and Vegetation

The project site has many unique landforms and features such as a main ridgeline through the center of the project site, substantial rock outcroppings, natural drainages, and stands of mature Engelmann and coast live oaks. Some areas of the project site, such as the rock outcroppings, contain cultural resources. The desire to maintain a natural openness to the project, integrate with the adjacent grasslands, and incorporate the rural character of Ramona required careful design of the residential portion of the project to avoid removal or destruction of the natural features of the project site. All of the major ridgelines, significant rock outcroppings, and natural drainages

would be protected by placement in open space. The majority of Engelmann and coast live oaks would be placed in permanent open space. Those Engelmann and coast live oaks located within residential lots would not be removed but would require mitigation because they would eventually be within privately owned lots. The oaks and rock outcroppings within lots would be used as a prominent feature for additional natural landscaping design and enhancement.

Additionally, to avoid alterations to natural landforms, lots would be of sufficient size and specifically shaped to allow the individual positioning of driveways and building pads to facilitate the use of minimal grading techniques and more natural landscaping practices. Only the driveway and pad would be graded. The majority of every lot would be left in the natural state to ease the transition between the lots and the adjoining open space areas. Mass grading and the creation of artificial slopes would be greatly reduced and each lot would have a balanced cut/fill. It is estimated that grading would be reduced by 65 percent as compared to traditional mass grading. The natural buffers within the private yards, as well as the designated open space, would help to minimize spillover into other sensitive areas, including both wildlife areas and adjacent residential properties. The large area of permanent open space would also protect the cultural resources in those areas.

Regulations/Policies

Multiple policies and regulations have influenced the initial design for the Cumming Ranch project. A complete policy analysis is provided in Section 4.1.4 of this EIR; however, below is a discussion of policies that played a role in the creation of the project design.

Ramona Community Plan

The Ramona Community Plan outlines policies and guidelines for development within the Ramona area. The project design was shaped and influenced by the need to be compliant with the Ramona Community Plan and the goal of maintaining a rural community feel. Design features that are incorporated to maintain the rural character and open space ambiance of the area include, but are not limited to, no gating of the community, public pathways and trails through the project site, minimal fencing, avoidance of major ridgelines disturbance, minimal landform alteration, minimal lighting, provisions for animal keeping, retaining mature oak trees and other native landscaping, and natural buffers and barriers. The landscape concept plan has been designed with a natural plant palette to blend the project with the existing vegetation and provide a seamless transition between the residential development area and the adjacent open space areas and grasslands. Many other specific project features as described in Section 1.1.2 have resulted from policies and goals of the Ramona Community Plan.

County of San Diego Zoning Ordinance

The San Diego County Zoning Ordinance (County of San Diego 2003) is applicable to all unincorporated areas of San Diego County. All land; structures; and the construction, reconstruction, alteration, expansion, or relocation of any structures must conform to all regulations established in the Zoning Ordinance.

Currently, the Cumming Ranch site is zoned as a SPA (S88) (County of San Diego 2004c). Until a Specific Plan applicable to the property is adopted, the following use types are permitted by the S88 Use Regulations: residential, civic, and agricultural (County of San Diego 2003). Almost the entire area surrounding the project site is zoned as Agriculture, including both A70 and A72 zoning designations. The agricultural zoning extends into the Ramona Town Center as well as the residential areas developed in the vicinity. A small portion near the northwest corner of the site is zoned as a separate SPA (S88) and extends westward. The area to the north that encompasses the Ramona Airport is zoned as Industrial.

The Cumming Ranch SP is proposing two main land use categories: Open Space (OS) and Rural Residential (RR). A total of 457.4 acres of the Cumming Ranch property would be designated as open space and approximately 215.4 acres would be designated as RR. Of 457.4 acres of OS, approximately 201.0 acres would allow for the continued use of agriculture until purchased for open space conservation.

Resource Protection Ordinance

The RPO is designed to protect the County's environmentally sensitive lands, such as wetlands, wetland buffers, floodplains, steep slopes, sensitive habitat lands, and significant prehistoric and historic sites. Many of these sensitive types of resources occur within the project site. For this reason, the design of the project focused on the protection of those resources and incorporated features to avoid RPO resources. The avoidance of RPO resources was a main consideration in the concept behind lot layout and size, roadway and utility alignments, placement of large portions of the site in permanent open space, and minimal grading requirements.

Community Trails Master Plan

The County Trails Program recently completed the Community Trails Master Plan, which was adopted by the County Board of Supervisors on January 12, 2005. The Cumming Ranch SPA lies within the Ramona segment of the Community Trails Master Plan titled Ramona Community Trails and Pathway Plan (County of San Diego 2005a). Within the Ramona Community Trails

and Pathway Plan, the Trails and Pathways for Ramona Map (County of San Diego 2004) shows portions of two community trails and one pathway within or adjacent to the Cumming Ranch SPA. The proposed alignments of the trails as part of the Cumming Ranch project are very similar to the location of the trails on the Trails and Pathways for Ramona Map. The Cumming Ranch community trail system is expected to interconnect and become part of a future regional trail system. The project trail system, as previously described, has been established in consultation with the Transportation and Trails Subcommittee of the RCPG and the Ramona Trails Association, which has included meetings and site visits to determine the best trail alignment. It is anticipated that this trail system would be part of a larger, community trail system, including potential future regional trails along Santa Maria Creek.

San Diego County Consolidated Fire Code

The San Diego County Consolidated Fire Code prescribes regulations governing conditions hazardous to life and property from fire. Due to substantial amounts of open space in and around the Ramona community, the project site and surrounding area are subject to the threat of wildfires. The project has been designed to meet all requirements of the Consolidated Fire Code as well as additional measures outlined in the Fire Protection Plan (Scott Franklin Consulting 2010). Some of these requirements that influenced the project design include adequate cul-de-sac lengths, looped roadways, secondary access/egress points for fire and evacuation only, and fuel modification zones. The project has been designed to exceed the minimum requirements for roadway widths and includes turnouts for emergency equipment.

Technical Characteristics

The following section describes various engineering requirements and land use density considerations that were necessary in the design of the proposed project.

Access

Entrances to and exits from the project site were designed via Highland Valley Road for all portions of the residential development. Access from areas other than Highland Valley Road would be difficult due to land ownership considerations. There are other roadways adjacent to the project site, such as Vorhees Lane; however it is a private roadway and not appropriate for site access. An alternative access point could be from the Ramona Town Center adjacent to the east of Area B; however, an access road from this location would require traversing and bisecting a large open space area and also crossing Etcheverry Creek. No other roadways pass through the project site and Highland Valley Road is an ideal access point as there is no need to cross

through large undeveloped portions of the site to access the residential areas. Four entry points would serve the project. No additional access points on Highland Valley Road were considered as there would not be adequate spacing between the turnoffs for safety. Project access was also designed to meet emergency access requirements. The project includes two additional secondary access/egress roads for fire and evacuation only.

Utility Alignment

The avoidance of mass grading on the project site necessitates the unique location of sewer lines. Without mass grading of the site, it is not possible to design the sewer lines within the internal roadway system to operate as a complete gravity flow system. For this reason, the sewer lines were placed not only in roadways, but also in low-lying areas throughout the project site. A lift station would be required to convey wastewater to SMWWTP, which is located at a higher elevation than the proposed residential development.

Land Use Density Considerations

As described previously, the existing Ramona Community Plan allows a total of 166 residential units throughout the project site. However, the Cumming Ranch project only proposes 125 residential units. This decision to reduce the onsite density results from careful consideration of lot placement and size based on surrounding sensitive resources and natural landforms within Area A. Each lot was designed to result in a balanced cut/fill within the site, incorporate natural features, and minimize grading. Though the Ramona Community Plan allows for a higher density, the placement of only 125 units on the project site would help to maintain the open space feel and rural atmosphere of the community and meet the individual lot design criteria.

1.2 Project Objectives

The project proponent has designed the proposed project to fulfill the following objectives:

1. Accommodate the Ramona Grasslands Preserve and other regionally important resources through an environmentally sensitive project design.
2. Provide a residential development that reflects Ramona's rural character and country lifestyle by minimizing impacts to natural drainage areas, major rock outcroppings, ridgelines, and major stands of oak trees.
3. Through design, seamlessly integrate the development portion of the Cumming Ranch project with adjacent natural areas.

4. Implement a scenic and meaningful trail system.

5. Integrate the existing Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve.

As designed, the Cumming Ranch project would meet and fulfill all five of the objectives stated above.

1.3 Intended Uses of the EIR

This EIR is an informational document that informs public-agency decision makers and the general public of significant environmental effects of a project, identifies possible ways to minimize the significant effects, and describes reasonable alternatives to the project. This EIR is a "Project" EIR and it is anticipated that its certification will result in CEQA compliance for the whole of the project.

1.3.1 Matrix of Project Approvals/Permits

This EIR will be used by several agencies who will be considering numerous project approvals and permits. The types of approvals and agencies are listed in Table 1-5. Where an agency would issue more than one approval or permit, they are listed in order of occurrence.

1.3.2 List of Related Environmental Review and Consultation Requirements

Federal, state, and local laws, regulations, and policies are considered in preparation of this EIR. Environmental review will be required by all agencies that have any responsibility or jurisdiction over the project. The associated consultation requirements include California Department of Fish and Game (CDFG) for a 1602 Streambed Alteration Agreement; CDFG and U.S. Fish and Wildlife Service (USFWS) for consultation related to the Natural Communities Conservation Plan (NCCP) for coastal sage scrub loss; Regional Water Quality Control Board (RWQCB) for a 401 Water Quality Certification; U.S. Army Corps of Engineers (ACOE) for a 404 Permit, LAFCO for expansion of the RMWD latent powers, and the Regional Airport Authority and Federal Aviation Administration (FAA) for land use compatibility.

1.4 Environmental Setting

Located within the San Diego area of southern California, the community of Ramona is known for its rural character and natural setting. Ramona is more than 20 miles northeast of downtown San Diego and maintains a small community atmosphere tied to historic agriculture operations.

The Ramona area has varied high-desert topography, including larger summits such as Mount Woodson and Iron Mountain. The region continues to experience fairly rapid growth and population increases.

The pattern of land uses adjacent to the project site is quite varied. The Ramona Town Center boundary abuts the property to the north and east. Within this boundary is the Ramona Airport (adjacent to the northern Area C property boundary). Located to the east of Areas B and C is the Ramona Town Center with single-family homes on lots typically 1 to 2 acres in size. To the south and west of the site is residential development on lots averaging 2 to 5 acres in size. North of the Area A boundary are homes on lots generally 5 acres or larger. To the northwest of the project site is a large area of open grasslands.

Regional access to the project site is via SR 67. Local roadways that serve the site include Highland Valley Road and Dye Road (Figure 1-2). SR 67 provides access to the Lakeside and Poway areas west of Ramona, and Julian east of Ramona. Within the study area, SR 67 is developed with two through lanes and shoulders. Approximately 850 feet of frontage on SR 67 is located in the southwest corner of the property. Highland Valley Road provides access to SR 67 for the properties located to the north. Highland Valley Road passes through the boundaries of Area A. The portion of this roadway within the study area is currently improved to two lanes with shoulders, with a pavement width varying from 36 to 40 feet. All entries to the property would be off of Highland Valley Road. Dye Road, located south of the intersection with SR 67 and Highland Valley Road, currently provides access to the San Diego Country Estates development as well as the Barona Indian Reservation to the south. Dye Road within the study area is currently improved to a two-lane facility with a pavement width of approximately 40 feet.

The physical features of the project site lend themselves to division of the property into the three distinct areas introduced earlier. The topography of the southern portion of the property (Area A) is most diverse, consisting of rolling uplands interspersed with rocky outcrops and drainages. The dominant topographic feature of Area A is the generally east-west–trending ridgeline. Small stands of Engelmann oak and coast live oak are scattered throughout portions of the area. One satellite vernal pool is located in the extreme northwest corner of Area A, along the southern side of Vorhees Lane. A ridgeline of steeper hillsides in the northeasterly portion of the area accentuates the diversity. Elevations in the southern area vary from 1,368 feet to 1,576 feet.

The middle of the project site (Area B) is located generally between Santa Maria Creek on the north and Area A to the south. The topography in this central area consists mostly of a wide-open, fairly level, plain extending from Etcheverry Creek north to Santa Maria Creek. One

satellite vernal pool is located in the southwestern corner of Area B. Elevations range from 1,359 feet to 1,392 feet. This open area has minimal rock outcroppings or other unique features.

The northern area of the property (Area C) is generally located between Santa Maria Creek and Ramona Airport Road. About 50 percent of this area consists of creek, wetlands, and shallow drainage areas. The remainder of the area consists of nonnative grasslands. A unique clustering of large boulders and rock outcroppings appears along the eastern boundary. Elevations in the northern area range from 1,365 feet to 1,400 feet with the higher elevations being in the north, along Ramona Airport Road. In this area, 22.2 acres are protected by conservation easements and are collectively known as the Ramona Vernal Pool Preserve. To protect the sensitive vernal pools, Area C is fenced.

The primary drainages on the site are Santa Maria Creek located in the northern portion of the site, and Etcheverry Creek through the central portion of the site. These two creeks drain from east to west and eventually converge just west of the property boundary. Santa Maria Creek is lined with trees, particularly at the eastern half. Etcheverry Creek is not characterized by trees or lush vegetation. Two smaller unnamed drainages occur in the southern portion of the site, flowing northward across Area A and ultimately joining Etcheverry Creek. The drainages can be seen in Figure 1-5.

The Cumming Ranch SPA is dominated by agricultural land as the result of historic and ongoing agricultural activities. The project site has historically been used for cattle grazing and dry-land farming of oat hay. Agricultural activity continues onsite in the middle and southern portions of the site. Portions of Area A that lend themselves to farming are tilled and used for dry oat hay production or grazing. The majority of Area B is farmed or grazed. All of Area C has been fenced to prevent any cattle grazing or other agricultural activity in the vicinity of the vernal pools. The only structures on the site are remnants of two old windmills and a wooden cattle corral. Section 4.1.3 describes in detail the ongoing agricultural activity onsite.

Natural vegetation remains on portions of the site that are not conducive to agricultural use. These areas include the central ridge, numerous pockets of rock outcroppings, slopes interspersed throughout the site, and along drainages. These habitats include coastal sage scrub, oak woodlands, and chaparral. Vernal pools in Area C are primarily clustered along two shallow drainage areas that slope toward Santa Maria Creek. Focused studies have confirmed the presence of San Diego fairy shrimp in certain pools. The San Diego fairy shrimp is a federally listed endangered species. The full detailed discussion of existing biological resources onsite is provided in Subchapter 3.1.

1.5 Consistency of Project with Applicable Regional and General Plans

The subject property is currently identified as the Cumming Ranch SPA in the Ramona Community Plan, which includes specific guidelines and conditions for development of the property. The existing Cumming Ranch SPA provides for both residential and industrial usage. Before the site was surveyed, the Ramona Community Plan assumed a total of 664 acres in the SPA. However, after the site was surveyed it was found that the correct acreage is 682.6 acres, as shown on the TM and in the Specific Plan. The residential component allows 166 single-family homes on minimum lot sizes ranging from 2 to 4 acres. The industrial component is not defined in specific size or acreage but is confined to an area south of the Ramona Airport and north of Santa Maria Creek.

As part of the proposed project, the Ramona Community Plan would be amended as described in Section 1.1.2. The proposed amendment would address inconsistencies of the project with the existing Cumming Ranch SPA, such as the development of only residential and no industrial use and lot size. This proposed amendment would be consistent with the overall goals of the Ramona Community Plan to maintain a rural atmosphere.

Regional plans that are applicable to the Cumming Ranch SPA were reviewed for inconsistencies and none were identified. The plans that were reviewed included:

- County of San Diego General Plan
- Ramona Community Plan
- NCCP
- RWQCB Basin Plan
- Regional Air Quality Strategy
- Air Quality Management Plan
- State Implementation Plan
- Ramona Airport Land Use Compatibility Plan

A complete policy analysis is provided in Section 4.1.4 and Appendix M of this EIR.

1.6 List of Past, Present, and Reasonably Anticipated Future Projects in the Project Area

A list of past, present, and reasonably foreseeable projects is provided based on research of DPLU databases and in cooperation with DLPU staff. The Ramona Community Planning Area

was included in the search for cumulative projects, and 90 projects were identified. Table 1-7 lists the projects and provides a brief summary of each. Figure 1-17 shows the general location of each project. This listing of projects provides the basis for the cumulative impact discussion provided in each of the issue area analyses. Each issue area will define the cumulative project area appropriate for the individual subject-based analysis, though for many issue areas it is important to look at the entire community area.

1.7 Growth-inducing Effects

As required by CEQA, this EIR must discuss ways in which the project could foster economic or population growth, either directly or indirectly, in the surrounding area (CEQA Guidelines, Section 15126.2). A project can be determined to have a growth-inducing impact if it directly or indirectly causes economic or population expansion through the removal of obstacles to growth, actions that are sometimes referred to as "growth accommodating."

Ramona is the fastest-growing community in unincorporated San Diego County (RCC 2004). The total population of the Ramona Community Planning Area in 2000 was 33,404 persons. By the year 2030, this population is forecast to increase to 54,048 persons. This growth represents a 38 percent increase over the current population (SANDAG 2003). The County also projects significant growth in the Ramona area. In planning for the General Plan 2020 update, the forecasted number used for the Ramona community was 53,340 (County of San Diego 2007a).

The Ramona area averages approximately three persons per household (SANDAG 2003). The proposed project would create 125 new single-family homes. Based on the average Ramona household occupancy, it is anticipated that the project would accommodate approximately 375 persons. Thus, the proposed project would provide for additional direct growth within the Ramona Community Plan Area.

As part of the project, Areas B and C would be preserved as open space in conjunction with the Ramona Grasslands Preserve to the northwest. With the preservation of this land as open space, there is no potential for future growth on those parcels. This preserved open space creates a natural barrier to the potential conversion of the undeveloped lands to the north and northwest of the project. The undeveloped areas to the northwest are zoned for agricultural use and are generally considered to be main components of the Ramona Grasslands Preserve as envisioned by the County. Because the County envisions preservation of these parcels, the project is not expected to result in their development. The area located to the east of Areas B and C is part of the Ramona Town Center and is already developed. The project is not expected to result in more

dense development of the Ramona Town Center because the Cumming Ranch project's density is similar to these adjacent land uses.

The areas surrounding the development proposed in Area A generally consist of residential development on a combination of smaller and larger lots with some undeveloped areas mixed in. The surrounding area is zoned as Agriculture except for the Ramona Airport and one other small parcel to the north, which are zoned Industrial (County of San Diego 2004c). The assemblage of the smaller lots is not likely because of economic factors. Therefore, it is anticipated that these smaller developed and undeveloped lots would not be converted to more dense land use with implementation of the Cumming Ranch project. Some of the infill lots are expected to be developed in the future, but this development would be expected with or without the implementation of the Cumming Ranch project. In addition, there are some larger lots that may be available for development in the immediate vicinity of the Cumming Ranch site. An example of this type of potential growth on a larger lot can be found in the List of Cumulative Projects (Project #68, Table 1-7). This project is located near the Cumming Ranch site (see Figure 1-17) and is a development of 35 acres into four single-family residential units. Other similar projects in the Ramona area are already occurring based on the overall regional growth and the demand for housing. This type of growth is anticipated regardless of whether the Cumming Ranch project is implemented. Additional development on larger lots in the area would not be attributable to the Cumming Ranch project.

The proposed project would introduce 125 new housing units that would require offsite commercial services, such as grocery stores, gas stations, etc. It is anticipated that these needs would be fulfilled in the adjacent Ramona Town Center, which is the commercial center of the Ramona area. The Ramona Town Center provides commercial services to the Ramona community and surrounding areas. The addition of 125 residential units to the community would create additional demand on the local business. However, this is 41 units less than what is planned in the Ramona Community Plan. The increased business generated by the project is not anticipated to increase demand for new commercial services. Daily commuter traffic associated with the proposed project would typically access the San Diego region to the southwest. Because the project is located to the west of the Ramona Town Center, the commuter traffic generated by the proposed project would not be required to pass though the Town Center as the majority of traffic would be traveling west toward the San Diego area. This would avoid adding additional peak hour traffic to the Town Center, which is congested during peak commuter hours.

The proposed Cumming Ranch project would extend infrastructure and public services to the project site. For sewer services, the project is located within the boundaries of the RMWD sphere of influence, but not within the Activated Sewer Powers Area (ASPA) or the Santa Maria Sewer

Service Area (SMSSA). Annexation into the ASPA for sewer service via LAFCO would be required. The project's eastern boundary and a portion of the northern boundary are contiguous with the SMSSA. The SMWWTP is located within an insert along the project's eastern boundary. For water service, the project is located within the latent powers area of the RMWD and no annexation process through LAFCO would be required.

In conformance with California Government Code 56668, LAFCO considers 14 main points during the review process of a latent powers sewer expansion. These points take into consideration current and future population and population density, both natural and political boundaries, the need for organized community services, the effect of the action on adjacent areas, efficient patterns of urban development, economic integrity of agricultural lands, consistency with the county general plan, coordination with affected agencies, the sphere of influence, and the timely availability of services. These points are considered in various sections of the EIR analysis. While the project is not in the sphere for sewer service, the project site is located adjacent to the existing SMWWTP, and the proposed project is in conformance with the local planning documents regarding growth and development, and meets all other findings as required by LAFCO for their approval.

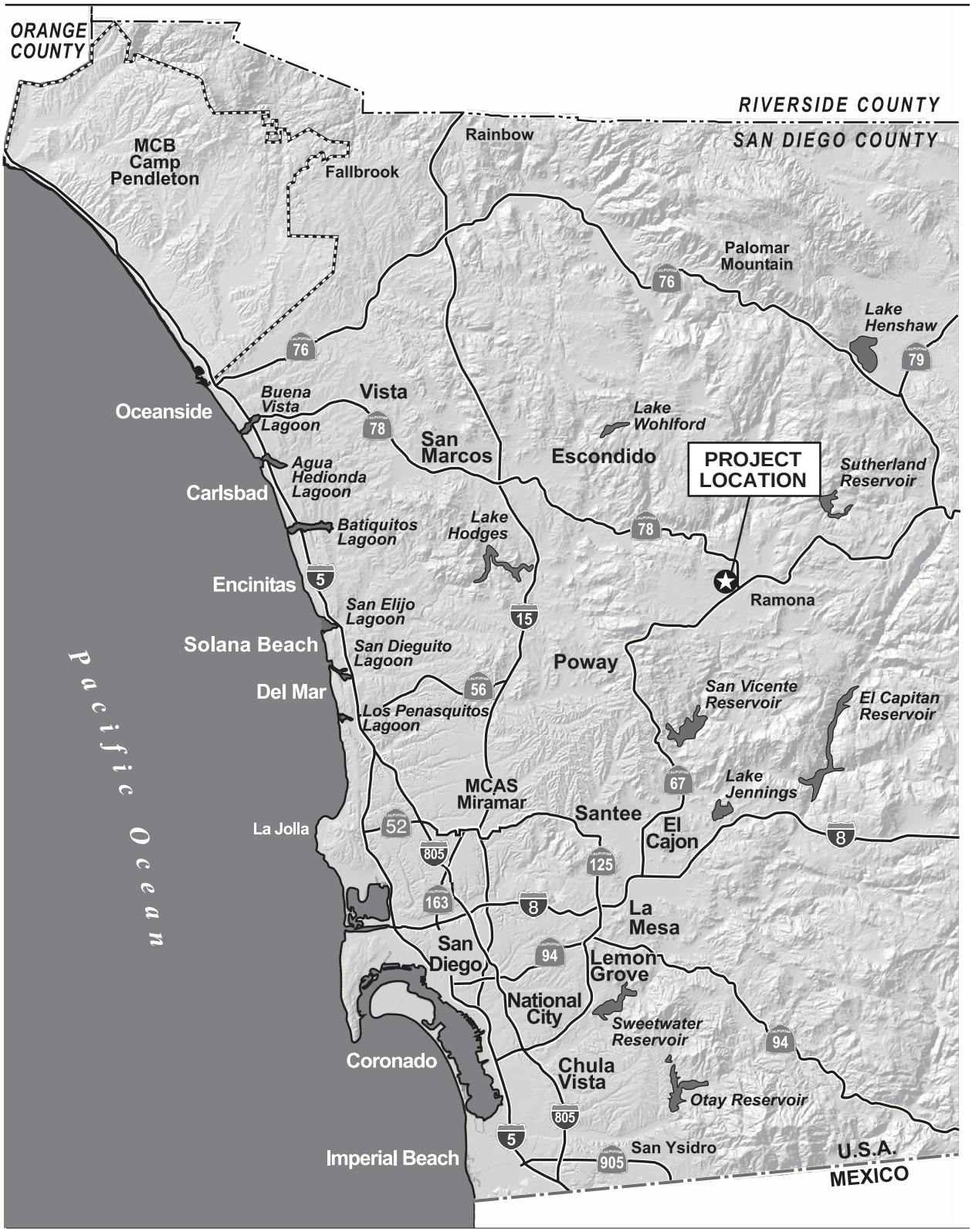
One of LAFCO's goals is to "discourage premature conversion of prime agricultural and open space lands to urban uses." The majority of the project site is currently dry-farmed and grazed, but there are no lands designated as Prime Farmland as discussed in Section 4.1.3. In addition, the site is located immediately west of the densely developed Ramona Town Center and is also surrounded by rural residential development to the north, west, and south. The majority of the project site, 67 percent, would remain as open space and agricultural operations may continue on Area B and will be encouraged within individual lots. For these reasons, the project would not prematurely convert prime agricultural or open space land to urban use and would be compatible with LAFCO's goal.

RMWD is in the process of planning and designing improvements and expansions of their water and wastewater service capacities as detailed in Subchapter 3.6. Planned expansion of the existing water supply system would modify the Downtown Operational Storage Zone and would likely include a new reservoir, which would provide water to the project site and surrounding area. It is anticipated that the new reservoir would have a total of 3 million gallons and would consist of two above ground storage tanks constructed in two phases, with the first phase being completed within the next 5 years. To improve and expand wastewater treatment capacities, RMWD as lead agency began the environmental process by filing a Notice of Preparation (NOP) as necessary to implement the planned systemwide expansion of the SMWWTP in December 2008. The proposed project is a three-phase expansion of the SMWWTP to 1.47 million gallons

per day (MGD). The project would also provide improvements to the existing spray fields and holding ponds to increase efficiencies (RMWD 2008). In 2008, RMWD purchased a 285-acre portion of Davis Ranch from The Nature Conservancy for use as spray fields. This land was formerly leased from the Davis Ranch.

As previously described, the project site is directly adjacent to the SMWWTP. A 4- to 6-inch main sewer line would be installed to convey project wastewater to the SMWWTP. A segment of the proposed main sewer line would extend through the southeastern portion of the Hardy Ranch property. However, this offsite infrastructure improvement would not induce growth as the Hardy Ranch was recently purchased by the County for conservation in the Ramona Grasslands Preserve, and development will not occur on this property. It is anticipated that the Spirit of Joy church project (listed as number 10 in Table 1-7, List of Cumulative Projects) located adjacent to the Cumming Ranch project site would connect into the proposed sewer system. This connection has been coordinated between the two projects as it is the most logical service solution with the least amount of future disturbance. However, if the Cumming Ranch project was not implemented, the church would need to pursue other options to facilitate planned development of the property. Development of the church property is considered infill development and would be expected to occur with or without implementation of the Cumming Ranch project.

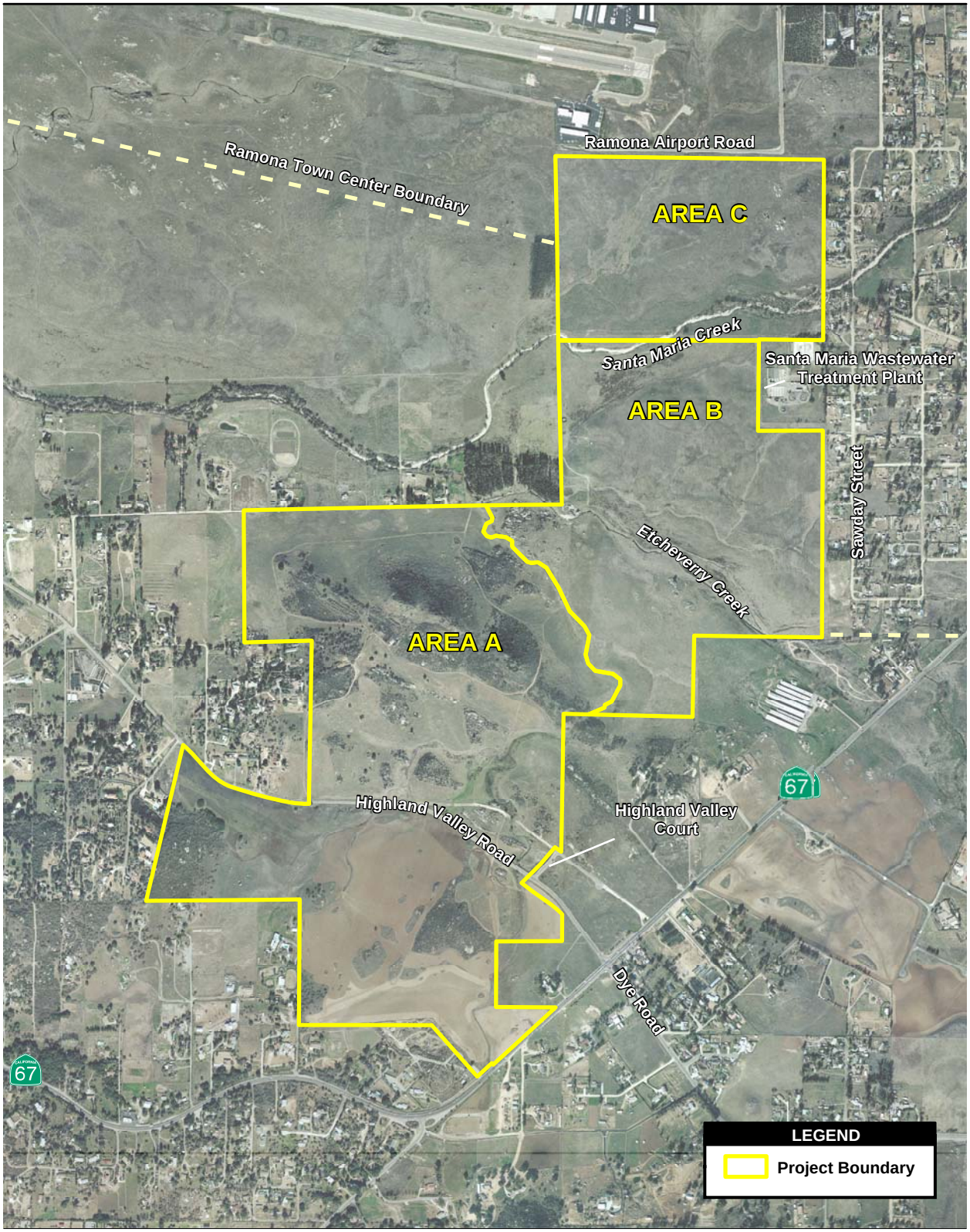
In conclusion, the proposed project would result in the direct growth of 125 residential units. The environmental impacts of this onsite growth are analyzed in Chapters 2.0 and 3.0 of this EIR. Additional growth beyond this project-specific development would not be induced by the project. Although some properties in the vicinity (e.g., the adjacent property to the east of the project site currently supporting rabbit farms) could conceivably be developed to denser land use in the future, this growth is not attributable to the proposed project; this growth would be expected to occur with or without the proposed project as a result of the regional demand for housing. For these reasons, implementation of the Cumming Ranch project would not result in secondary environmental effects related to additional growth beyond the proposed 125 residential units.



0 3.75 7.5 15 Miles

1" = 7.5 Miles

Figure 1-1
Regional Map

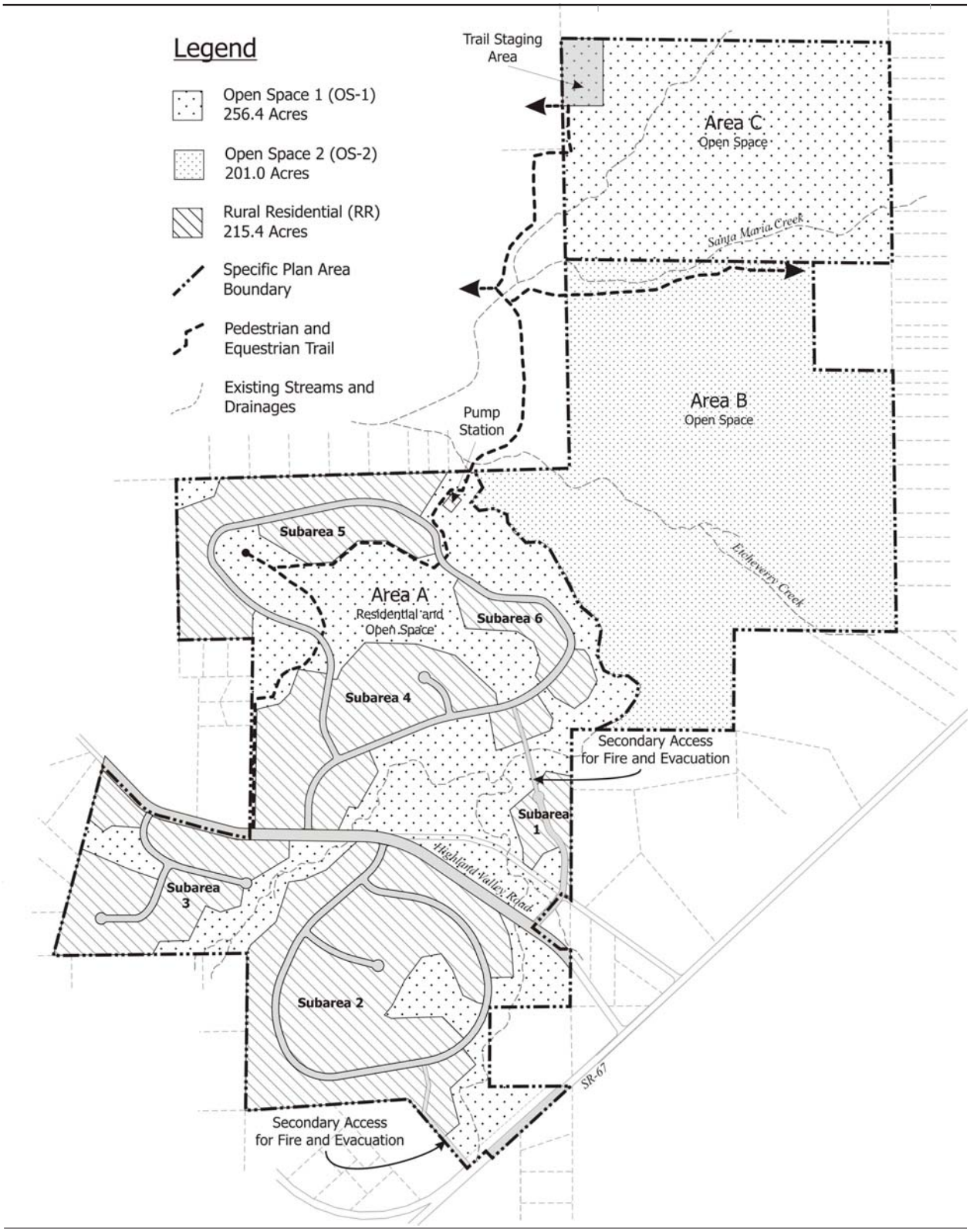


Source: AirPhotoUSA

1,500 750 0 1,500 Feet

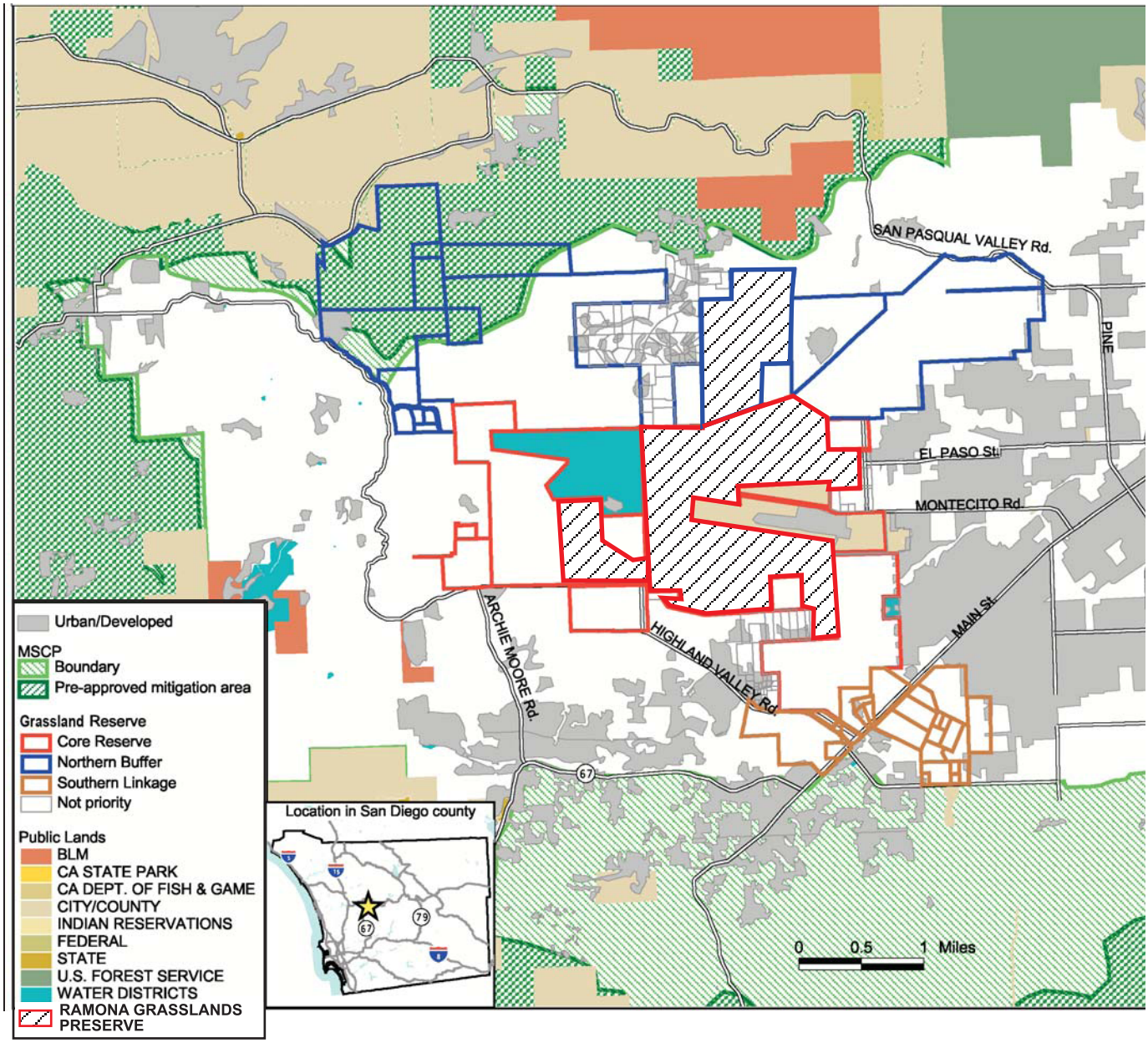
Scale: 1:24,000; 1 inch = 2,000 feet

Figure 1-2
Project Vicinity Map



0 800 1600 3200 Feet

Figure 1-3
Land Use Plan



Source: The Nature Conservancy; County of San Diego Department of Parks and Recreation Area Specific Management Directives for Ramona Grasslands Preserve June 2007

NORTH

Figure 1-4
Ramona Grasslands Preserve General Boundaries

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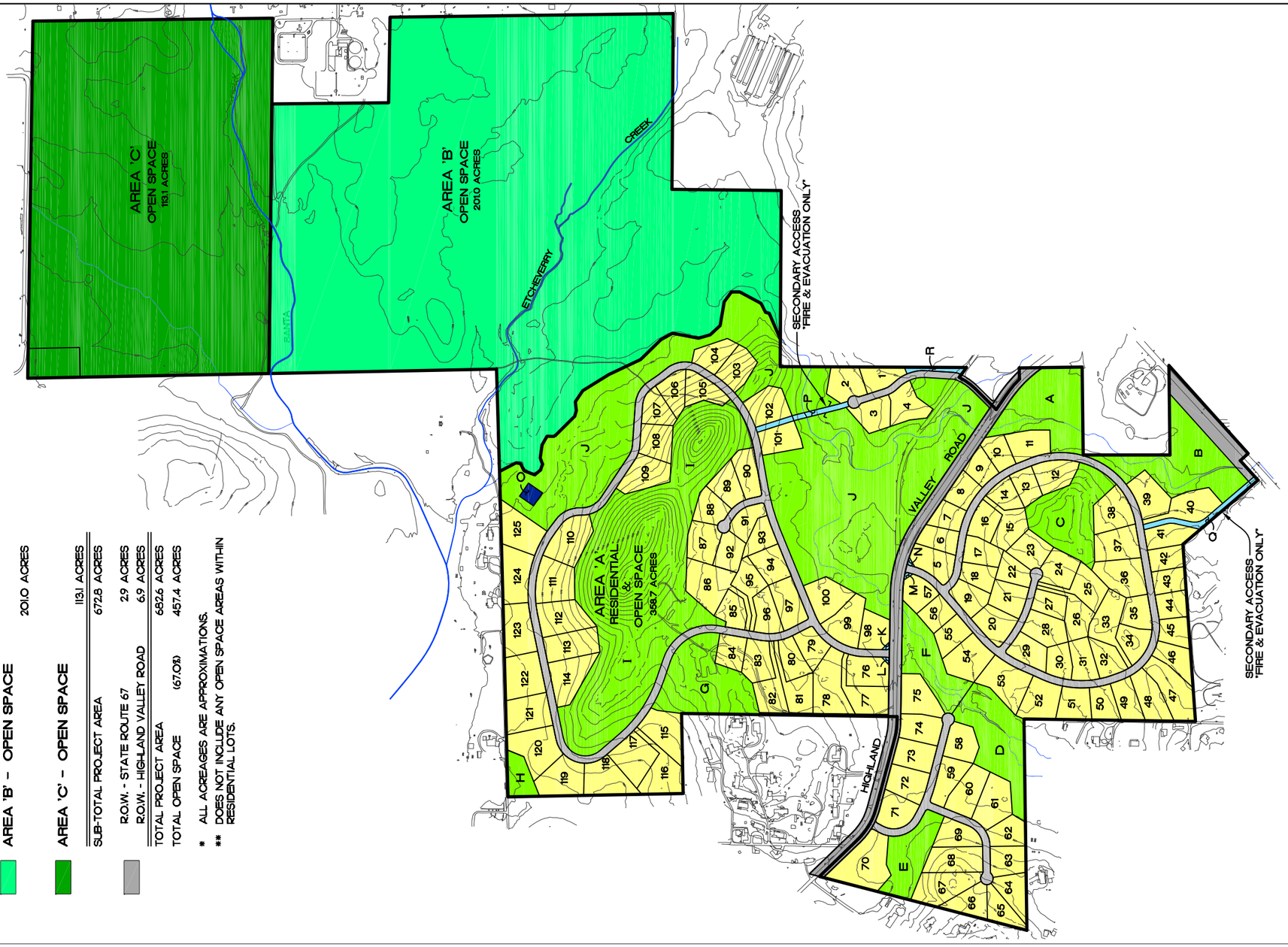

LAND USE AREA CALCULATIONS *

AREA 'A' - RESIDENTIAL & OPEN SPACE	
RESIDENTIAL LOTS	188.6 ACRES
RESIDENTIAL STREETS	24.3 ACRES
H.O.A. LOTS	2.1 ACRES
R.M.W.D. PUMP LOT	0.4 ACRES
TOTAL RESIDENTIAL	215.4 ACRES
OPEN SPACE LOTS **	143.3 ACRES
TOTAL AREA A	358.7 ACRES
AREA 'B' - OPEN SPACE	201.0 ACRES
AREA 'C' - OPEN SPACE	113.1 ACRES
SUB-TOTAL PROJECT AREA	672.8 ACRES
R.O.W. - STATE ROUTE 67	2.9 ACRES
R.O.W. - HIGHLAND VALLEY ROAD	6.9 ACRES
TOTAL PROJECT AREA	682.6 ACRES
TOTAL OPEN SPACE (67.0%)	457.4 ACRES

* ALL ACREAGES ARE APPROXIMATIONS.

** DOES NOT INCLUDE ANY OPEN SPACE AREAS WITHIN RESIDENTIAL LOTS.

Source: HDR 2008

NORTH

0 200 800 1600 Feet

Figure 1-5
Conceptual Site Plan

P:\2008\08080045 Cumming Ranch\6Graphics\Figures\4th Iteration EIR\Figure 1-5 concept site plan revised.ai dbrady 10/21/10

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Source: Snipes Dye Associates 2008

LAND USE AREA CALCULATIONS *

AREA 'A' – RESIDENTIAL & OPEN SPACE

RESIDENTIAL LOTS	188.6 ACRES
RESIDENTIAL STREETS	24.3 ACRES
H.O.A. LOTS	2.1 ACRES
R.M.W.D. PUMP LOT	0.4 ACRES
TOTAL RESIDENTIAL	215.4 ACRES
OPEN SPACE **	143.3 ACRES
TOTAL AREA A	358.7 ACRES

AREA 'B' – OPEN SPACE

201.0 ACRES

AREA 'C' – OPEN SPACE

113.1 ACRES

SUB-TOTAL PROJECT AREA		672.8 ACRES
R.O.W. - STATE ROUTE 67		2.9 ACRES
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TOTAL PROJECT AREA		682.6 ACRES
TOTAL OPEN SPACE	(67.0%)	457.4 ACRES

* ALL ACREAGES ARE APPROXIMATIONS.

** DOES NOT INCLUDE ANY OPEN SPACE AREAS WITHIN RESIDENTIAL LOTS.

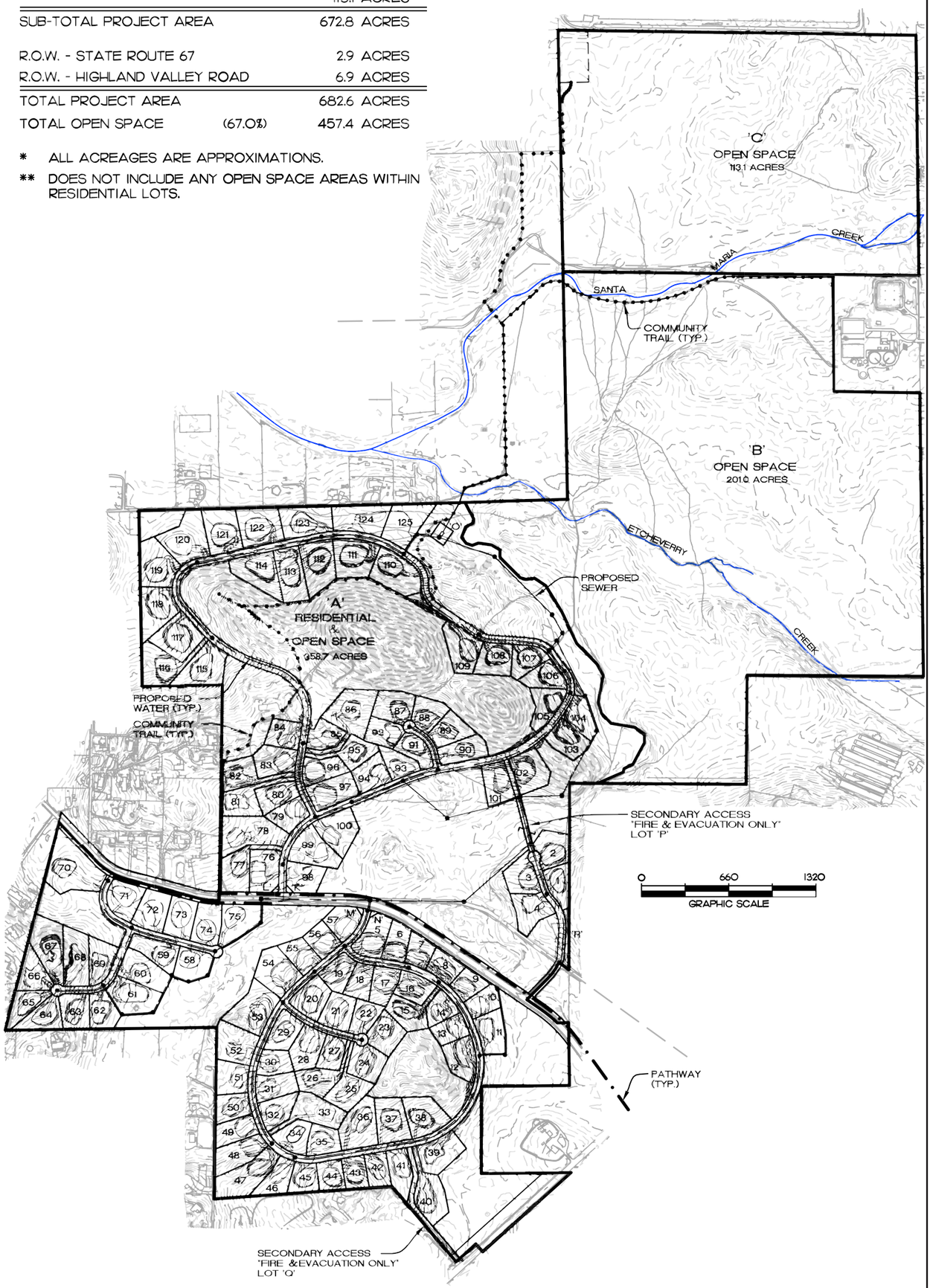

Figure 1-6
Tentative Map

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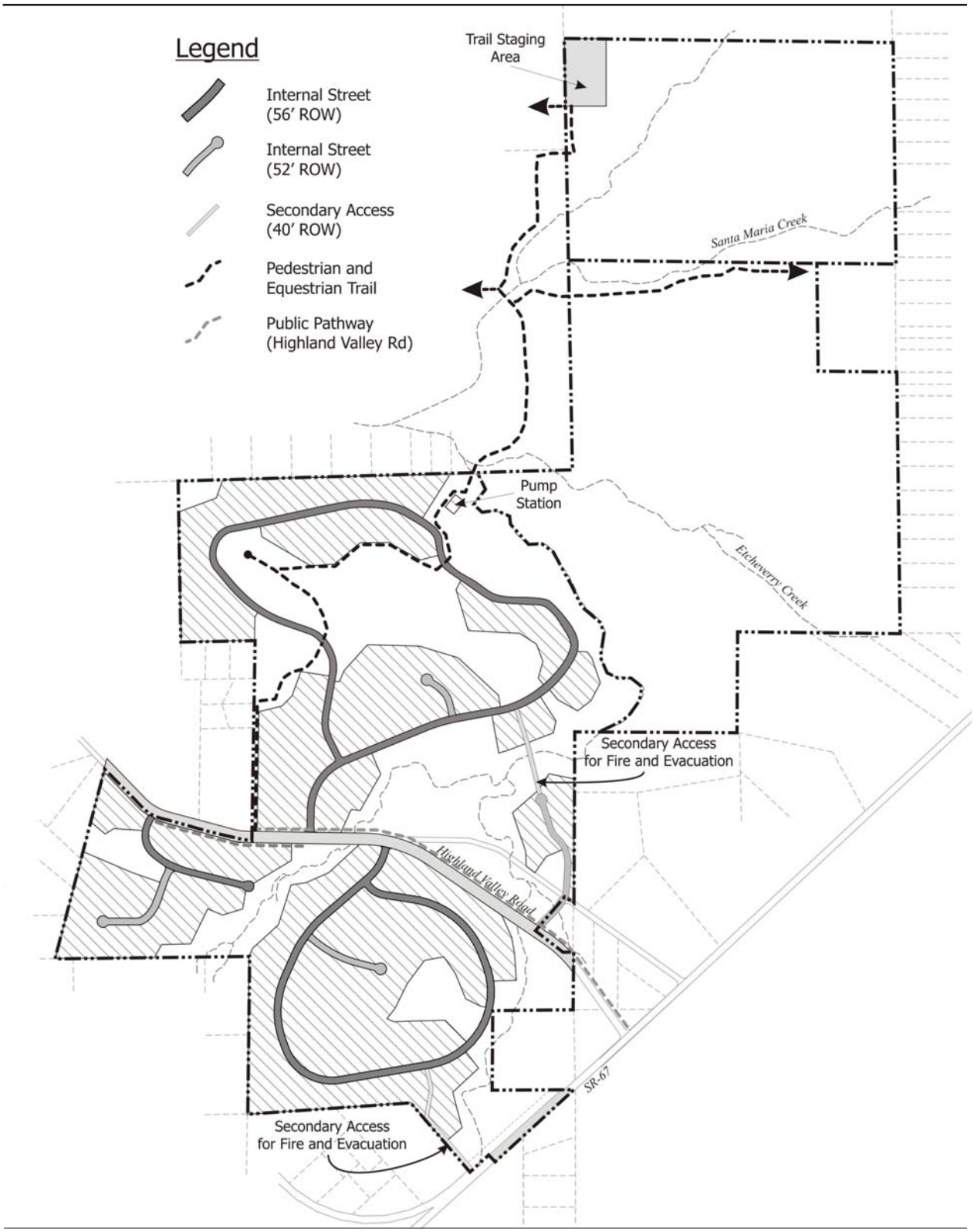


0 600 1200 2400 Feet

Figure 1-7
Internal Circulation Plan

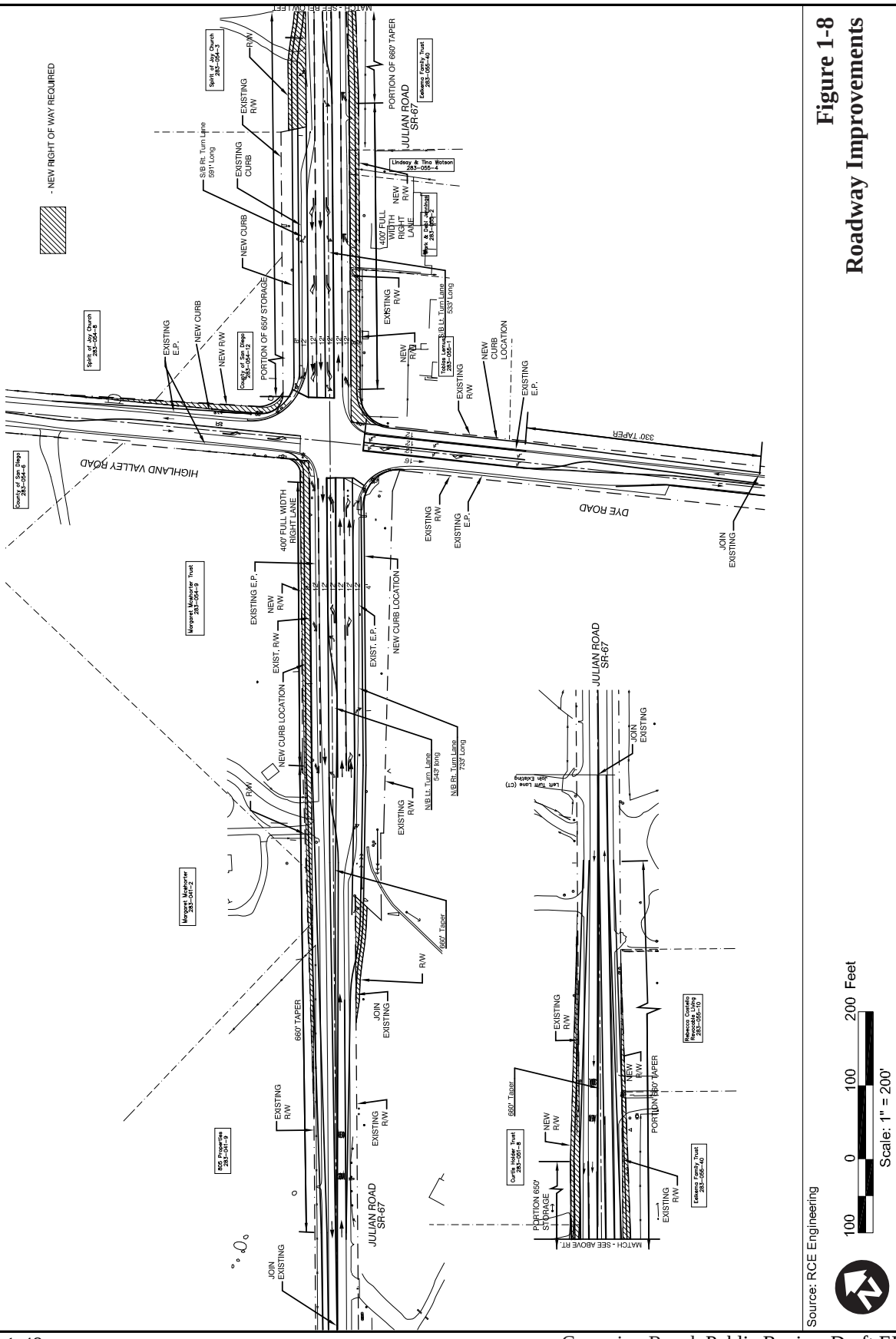
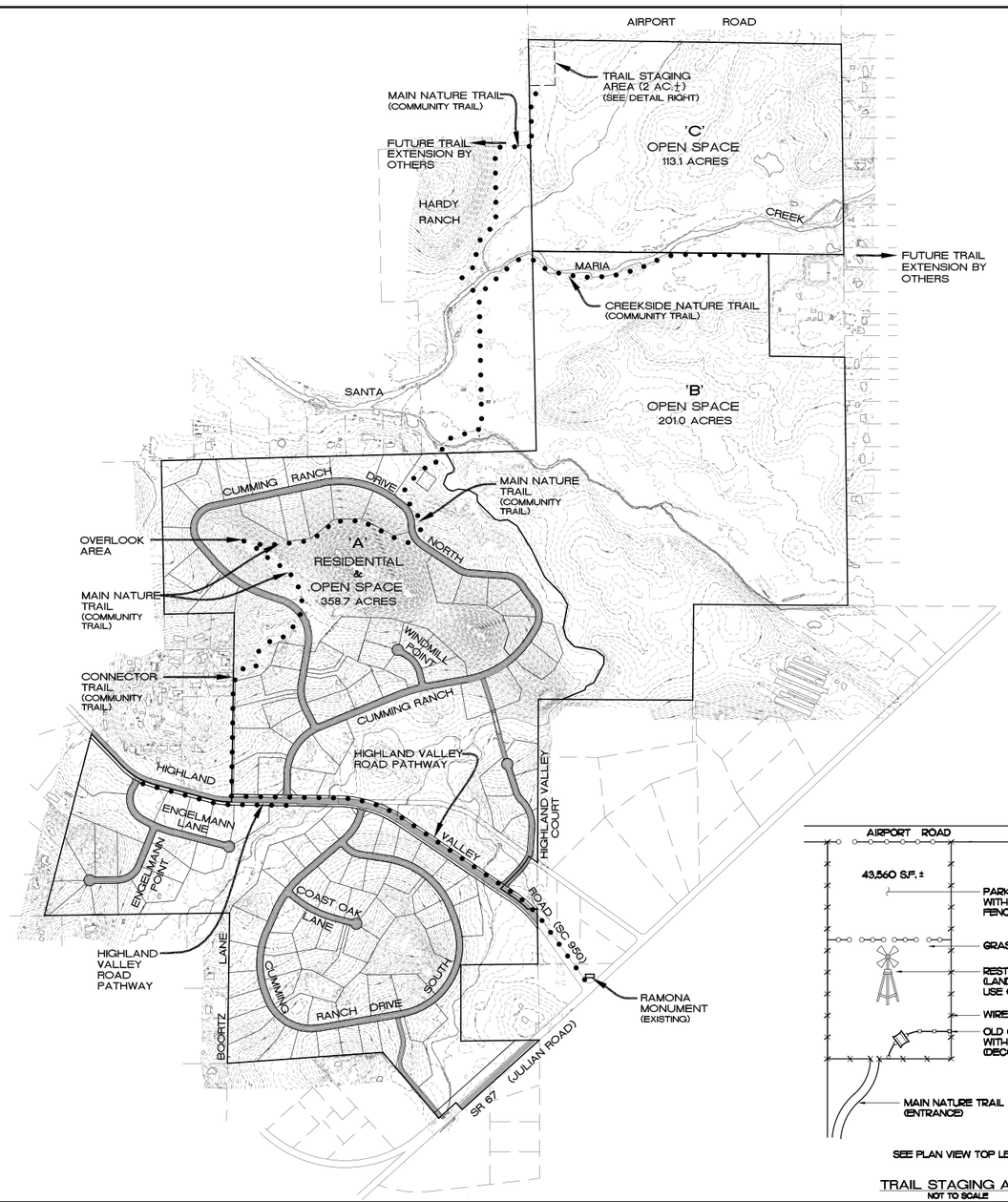
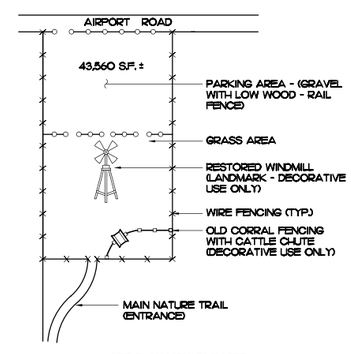


Figure 1-8
Roadway Improvements





TRAIL STAGING AREA
NOT TO SCALE

DISTANCES

THE CUMMING RANCH (CR) PROJECT PROPOSES TO INSTALL AND FUND CONSTRUCTION OF A TOTAL OF APPROXIMATE (3.40 MILES / 17,960 FEET) OF COMMUNITY - LEVEL TRAILS AND PATHWAYS. DISTANCES WITHIN THE VARIOUS SEGMENTS OF THE PROPOSED SYSTEM ARE AS FOLLOWS:

HIGHLAND VALLEY ROAD PATHWAY (1.11 MILES / 5,850 FEET)

CR - AREA A -	0.89 MILES / 4,695 FEET
HIGHLAND VALLEY COURT -	0.02 MILES / 80 FEET
COUNTY PARCEL (ROW) -	0.06 MILES / 325 FEET
CHURCH PROPERTY -	0.14 MILES / 750 FEET

CONNECTOR TRAIL (0.35 MILES / 1,830 FEET)

CR -AREA A -	0.35 MILES / 1,830 FEET

MAIN NATURE TRAIL (1.45 MILES / 7,680 FEET)

CR - AREA A - (INCLUDING OVERLOOK AREA)	0.65 MILES / 3,430 FEET
HARDY RANCH - (PARKS & RECREATION)	0.63 MILES / 3,350 FEET
CR - AREA C -	0.17 MILES / 900 FEET

CREEKSIDE NATURE TRAIL (0.49 MILES / 2,600 FEET)

HARDY RANCH - (PARKS & RECREATION)	0.11 MILES / 600 FEET
CR - AREA B -	0.38 MILES / 2,000 FEET

STAGING AREA (2 - ACRES)

CR - AREA C - 2 ACRES

NOTES

1. APPROXIMATELY 3.65 MILES / 19,250 FEET OF SMALLER PATHWAYS ALONG INTERNAL STREETS OF PROJECT MAINLY FOR USE OF RESIDENTS WITHIN THE PROJECT, ARE NOT CALCULATED WITHIN THE COMMUNITY - LEVEL TRAILS AND PATHWAYS SYSTEM STATED ABOVE.
2. ETCHEVERRY CREEK CROSSING USES EXISTING ROAD AND CULVERT. SANTA MARIA CREEK USES A NATURAL CROSSING.
3. TRAIL CROSSING SIGNAGE WILL BE INSTALLED AT MAJOR STREET CROSSINGS.
4. METAL POSTS WILL BE INSTALLED AT MAJOR TRAIL ENTRANCES TO RESTRICT MOTORIZED VEHICLE ENTRY. POSTS CAN BE UNLOCKED AND REMOVED FOR PERIODS OF TRAIL MAINTENACE.

STANDARDS

HIGHLAND VALLEY ROAD PATHWAY

TYPE 'D' PATHWAY WITH A 12 FOOT TREAD WIDTH & OVERALL WIDTH OF 15-FEET. WOOD-RAIL FENCE ON BOTH SIDES, EXCEPT INNER FENCE NOT REQUIRED WHERE ADJACENT TO DESIGNATED OPEN SPACE.

CONNECTOR TRAIL

TYPE 'B' RURAL TRAIL WITH A 10 FOOT TREAD WIDTH. WOOD-RAIL FENCE ON BOTH SIDES WHEN ADJACENT TO PRIVATE PARCELS. TRAIL EASEMENT IS 15 FEET WIDE.

MAIN NATURE TRAIL

TYPE 'C' PRIMITIVE TRAIL WITH A 8 FOOT TREAD WIDTH, FENCING NOT REQUIRED. TRAIL EASEMENT IS 20 FEET WIDE.

CREEKSIDE NATURE TRAIL

TYPE 'C' PRIMITIVE TRAIL WITH A 8 FOOT TREAD WIDTH, FENCING NOT REQUIRED. TRAIL EASEMENT IS 20 FEET WIDE.

LEGEND

• • • • • • COMMUNITY TRAILS AND PATHWAYS

TRAILS AND PATHWAYS MAP
SCALE 1" = 300'

Source: Snipes Dye Associates 2006

NORTH

Figure 1-9
Community Trails and Pathways

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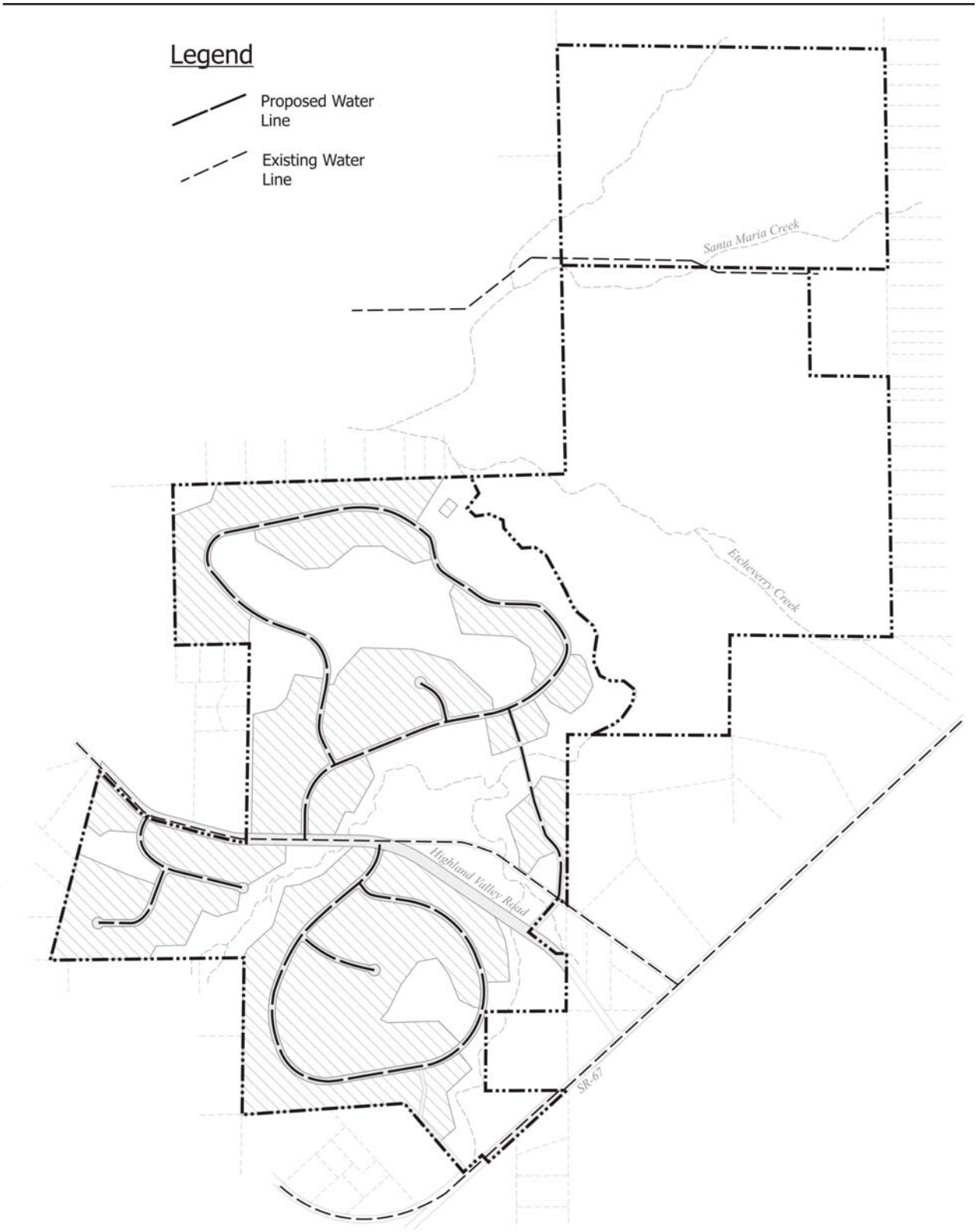
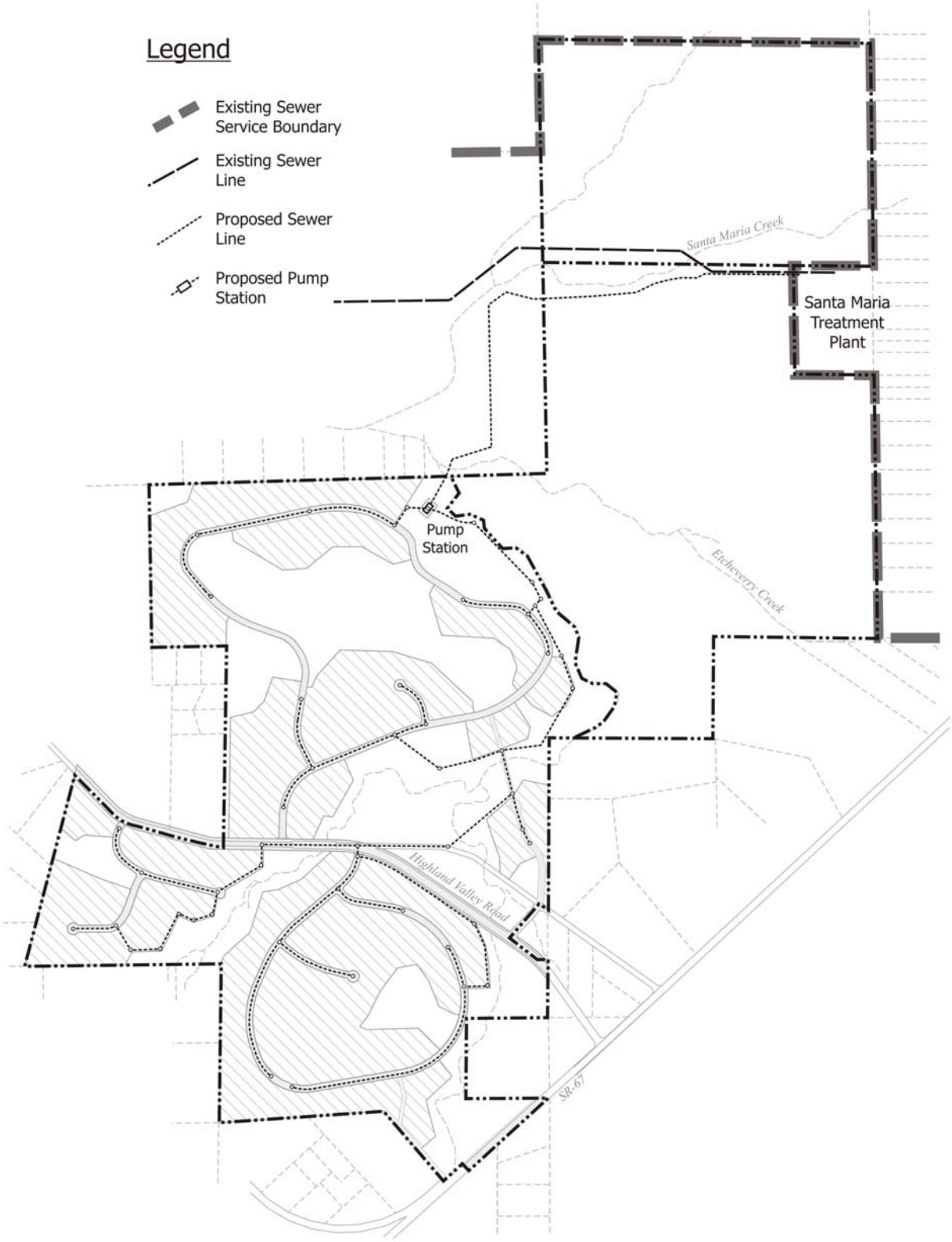


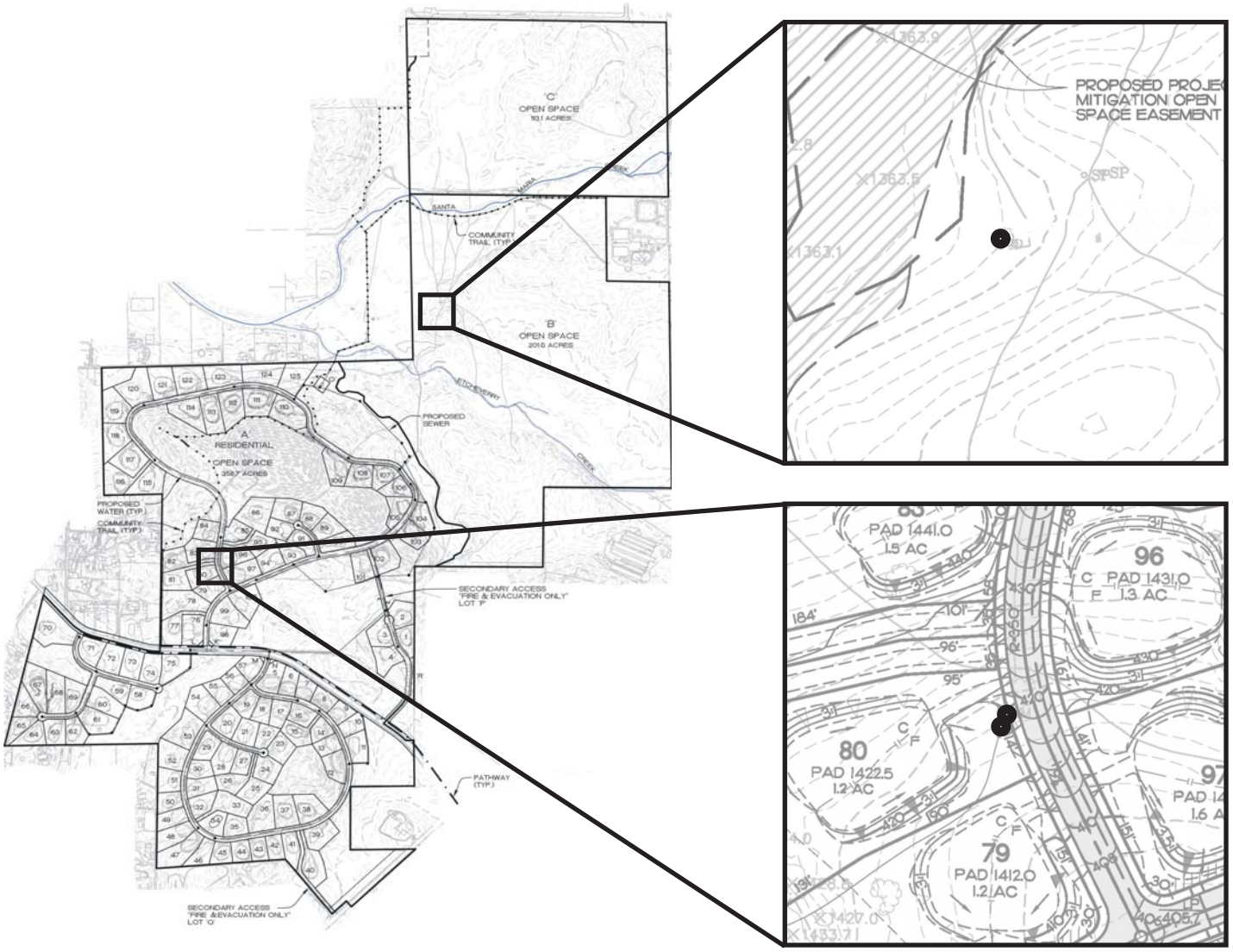
0 600 1200 2400 Feet

Figure 1-10
Proposed Water System



0 800 1600 3200 Feet

Figure 1-11
Proposed Sewer System



Well Number 2

Location:
Within Area B approximately 285 feet east of western property line.

Status:
To be legally destroyed by a licensed C-57 well driller, under permit and inspection by the County fo San Diego Department of Environmental Health.

Well Number 1

(Two Shafts)

Location: Within Area A on Lot 80, approximately 550 feet east of western property line.

Status:
To be legally destroyed by a licensed C-57 well driller, under permit and inspection by the County fo San Diego Department of Environmental Health.

0 660 1320 2640 Feet

Figure 1-12
Location and Status of Existing Wells

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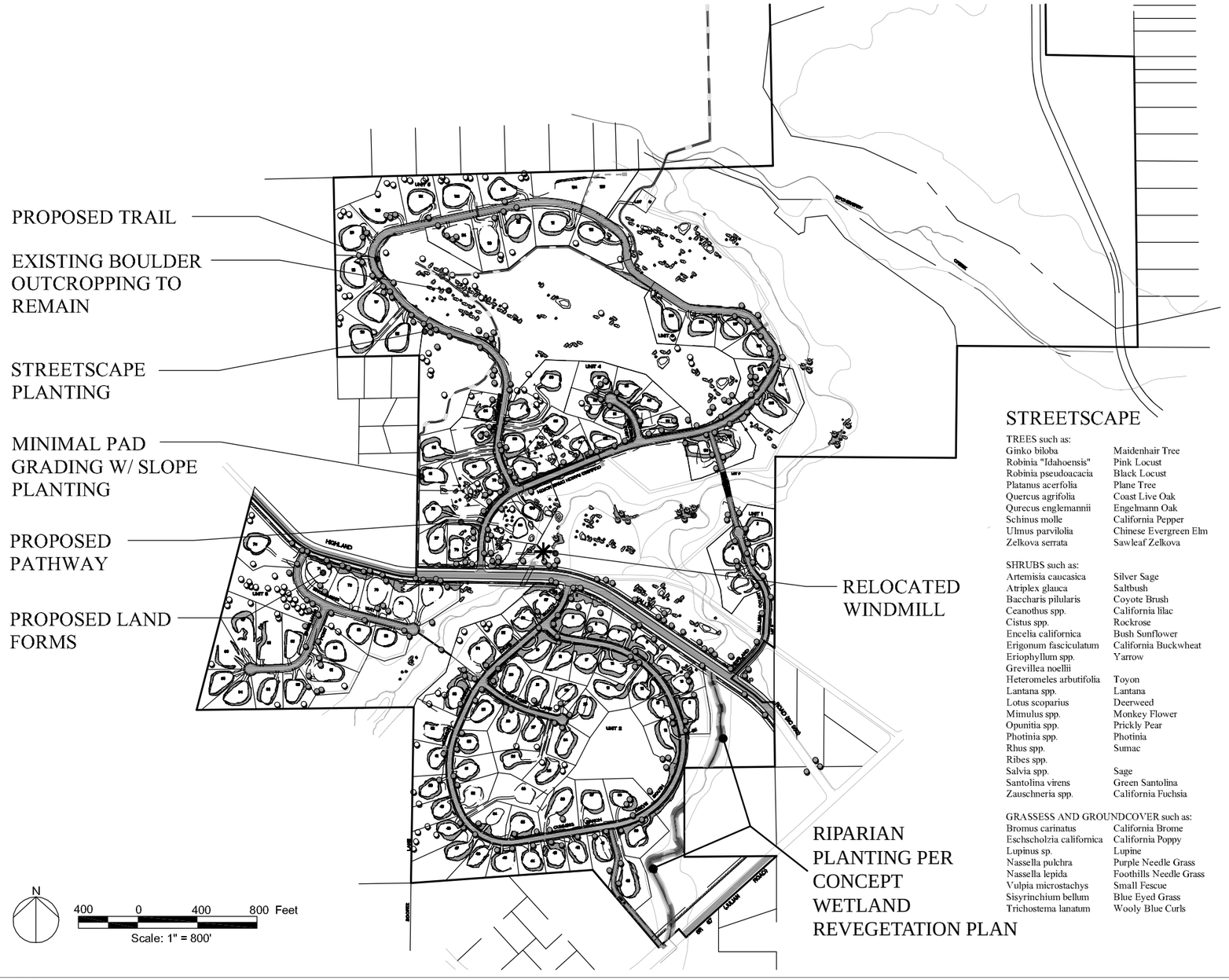

STREETSCAPE

TREES such as:

Ginko biloba	Maidenhair Tree
Robinia "Idahoensis"	Pink Locust
Robinia pseudoacacia	Black Locust
Platanus acerfolia	Plane Tree
Quercus agrifolia	Coast Live Oak
Qurecus englemannii	Engelmann Oak
Schinus molle	California Pepper
Ulmus parvilolia	Chinese Evergreen Elm
Zelkova serrata	Sawleaf Zelkova

SHRUBS such as:

Artemisia caucasica	Silver Sage
Atriplex glauca	Saltbush
Baccharis pilularis	Coyote Brush
Ceanothus spp.	California lilac
Cistus spp.	Rockrose
Encelia californica	Bush Sunflower
Erigonum fasciculatum	California Buckwheat
Eriophyllum spp.	Yarrow
Grevillea noellii	
Heteromeles arbutifolia	Toyon
Lantana spp.	Lantana
Lotus scoparius	Deerweed
Mimulus spp.	Monkey Flower
Opunitia spp.	Prickly Pear
Photinia spp.	Photinia
Rhus spp.	Sumac
Ribes spp.	
Salvia spp.	Sage
Santolina virens	Green Santolina
Zauschneria spp.	California Fuchsia

GRASSESS AND GROUNDCOVER such as:

Bromus carinatus	California Brome
Eschscholzia californica	California Poppy
Lupinus sp.	Lupine
Nassella pulchra	Purple Needle Grass
Nassella lepida	Foothills Needle Grass
Vulpia microstachys	Small Fescue
Sisyrinchium bellum	Blue Eyed Grass
Trichostema lanatum	Wooly Blue Curls

ADJACENT TO OPEN SPACE

TREES such as:

Platanus racemosa	California sycamore
Prunus ilicifolia	Hollyleaf Cherry
Quercus agrifolia	Coast Live OaK
Quercus dumosa	Scrub Oak
Qurecus englemannii	Engelmann Oak

SHRUBS such as:

Artemisia californica	California Sagebrush
Arctostaphylos spp.	Manzanita
Atriplex spp.	Saltbush
Baccharis pilularis	Coyote Brush
Ceanothus "concha"	Ceanothus
Cotoneaster spp.	Cotoneaster
Encelia californica	Bush Sunflower
Erigonum fasciculatum	California Buckwheat
Eriophyllum confertiflorum	Golden Yarrow
Lotus scoparius	Deerweed
Heteromeles arbutifolia	Toyon
Opuntia spp.	Beavertail
Rhus spp.	Sumac
Ribes spp.	Gooseberry or Currant
Salvia spp.	Salvia
Yucca spp.	Yucca

GRASSESS AND GROUNDCOVER such as:

Avena barbata	Slender Wild Oat
Bromus carinatus	California Brome
Eschscholzia californiaca	California Poppy
Festuca spp.	Festuca
Hordeum	
Lupinus spp.	Lupine
Melica spp.	Melic
Nassella pulchra	Purple Needle Grass
Nassella lepida	Foothills Needle Grass
Vulpia microstachys	Small Fescue

PROHIBITED PLANTS

Trees and shrubs

Ailanthus altissima	Tree of Heaven
Arundo donax	Giant Reed
Atriplex semibaccata	Australian Saltbush
Brassica spp.	Schefflera
Broussonetia papyrifera	Paper Mulberry
Cedrus deodrora	Deodar Cedar
Cortaderia selloana	Pampas Grass
Cynara cardunclus	Cardon
Cynara skolymus	Thistle
Foeniculum vulgare	Common Fennel
Juniperus spp.	Juniper
Melilotus spp.	Sweetclover
Nicotiana glauca	Tree Tobacco
Pennisetum setaceum	Fountain Grass
Picris echidodeso	NCN
Pinus spp.	Pine
Rhynchelytrum repens	NCN
Ricinus communis	Castor Bean
Salsola salina	Russian Thistle
Spartium junceum	Spanish Broom
Stipa tenuissima	Mexican Feather Grass
Tamarix spp.	Tamarisk
Xanthium strumarium	Common Cocklebur

Source: Revegetation Plan

Figure 1-13
Landscape Concept and Revegetation

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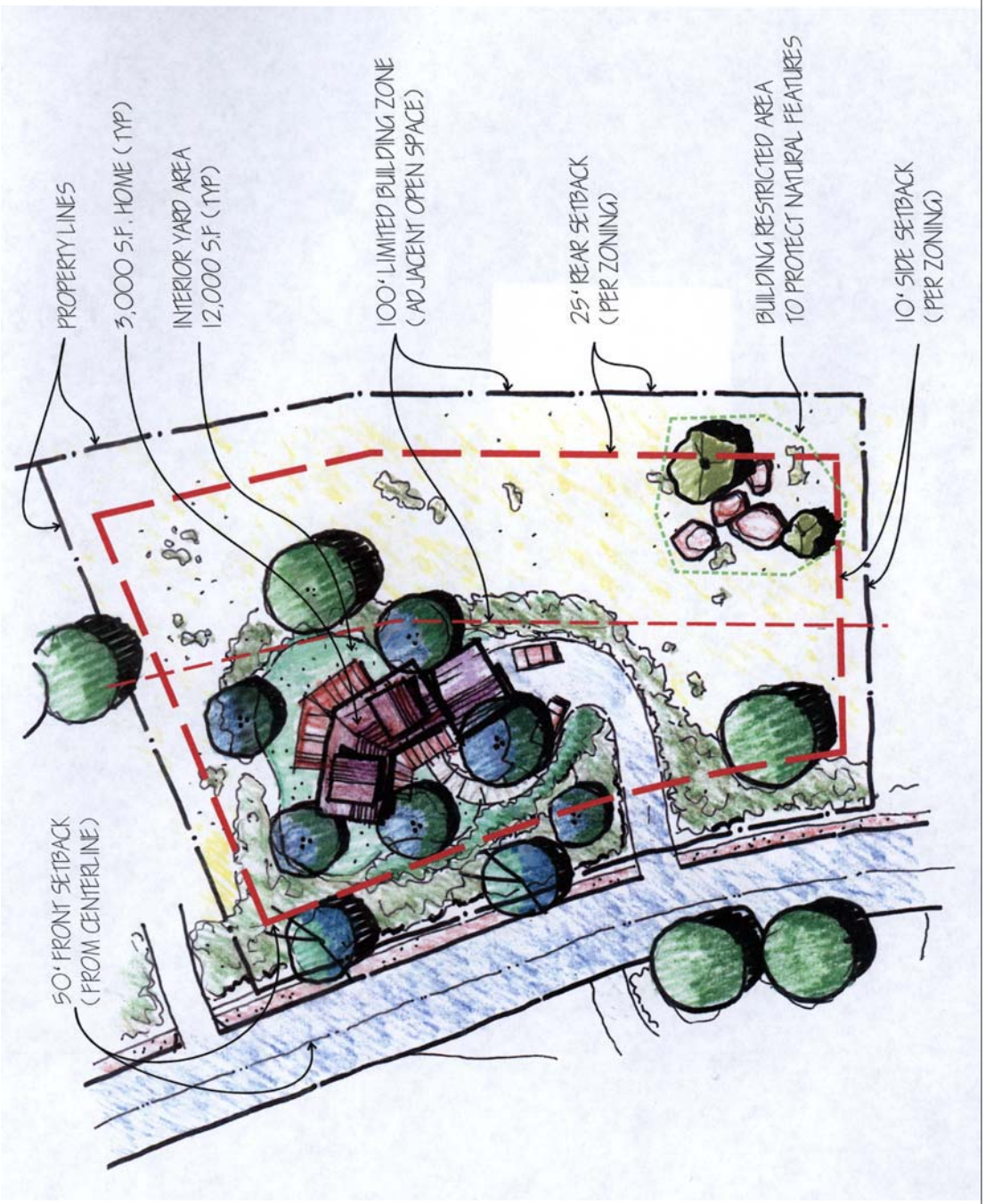
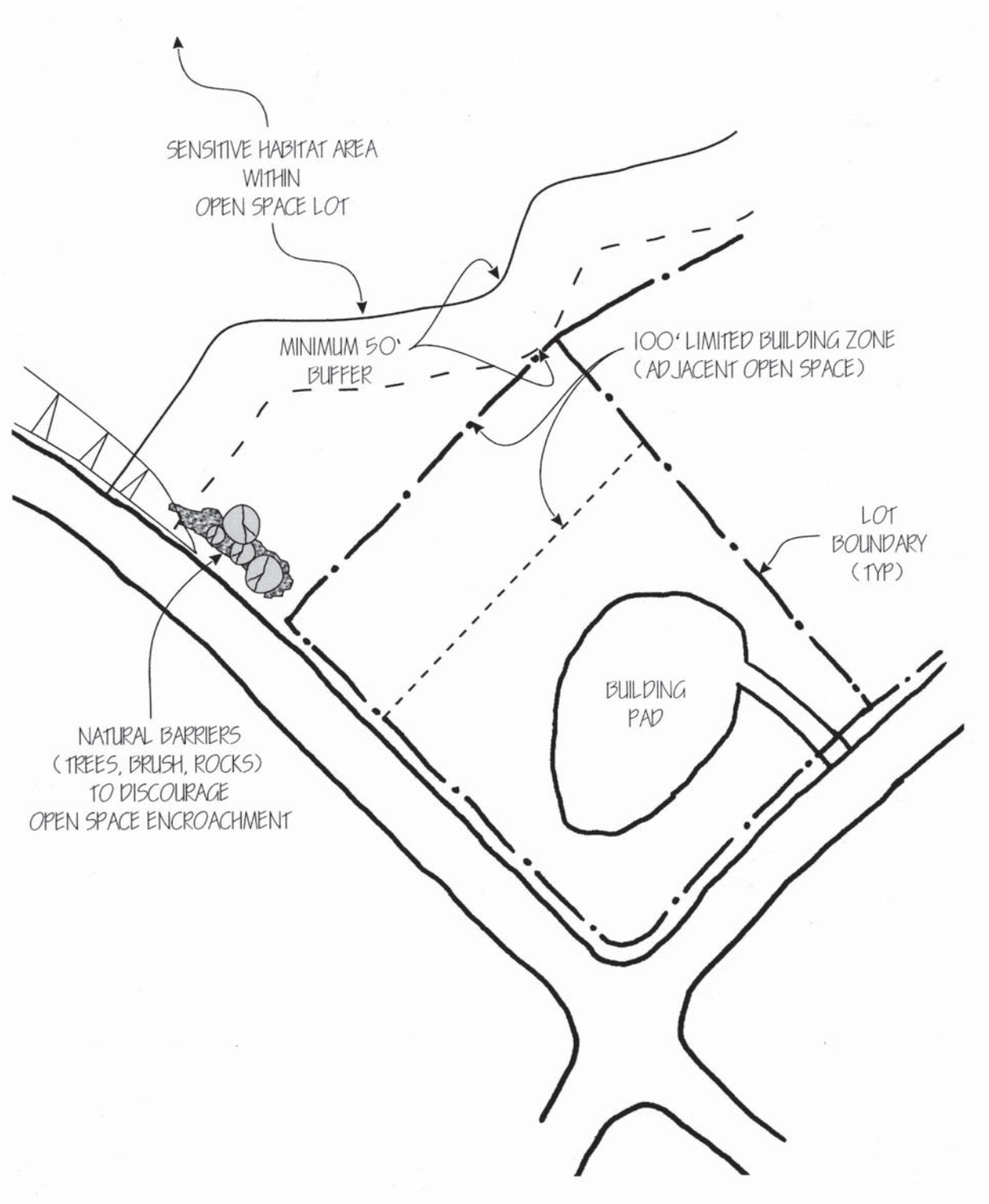


Figure 1-14
Typical Lot Landscaping

NORTH
NOT TO SCALE



NORTH

No Scale

Figure 1-15
Setbacks and Buffers

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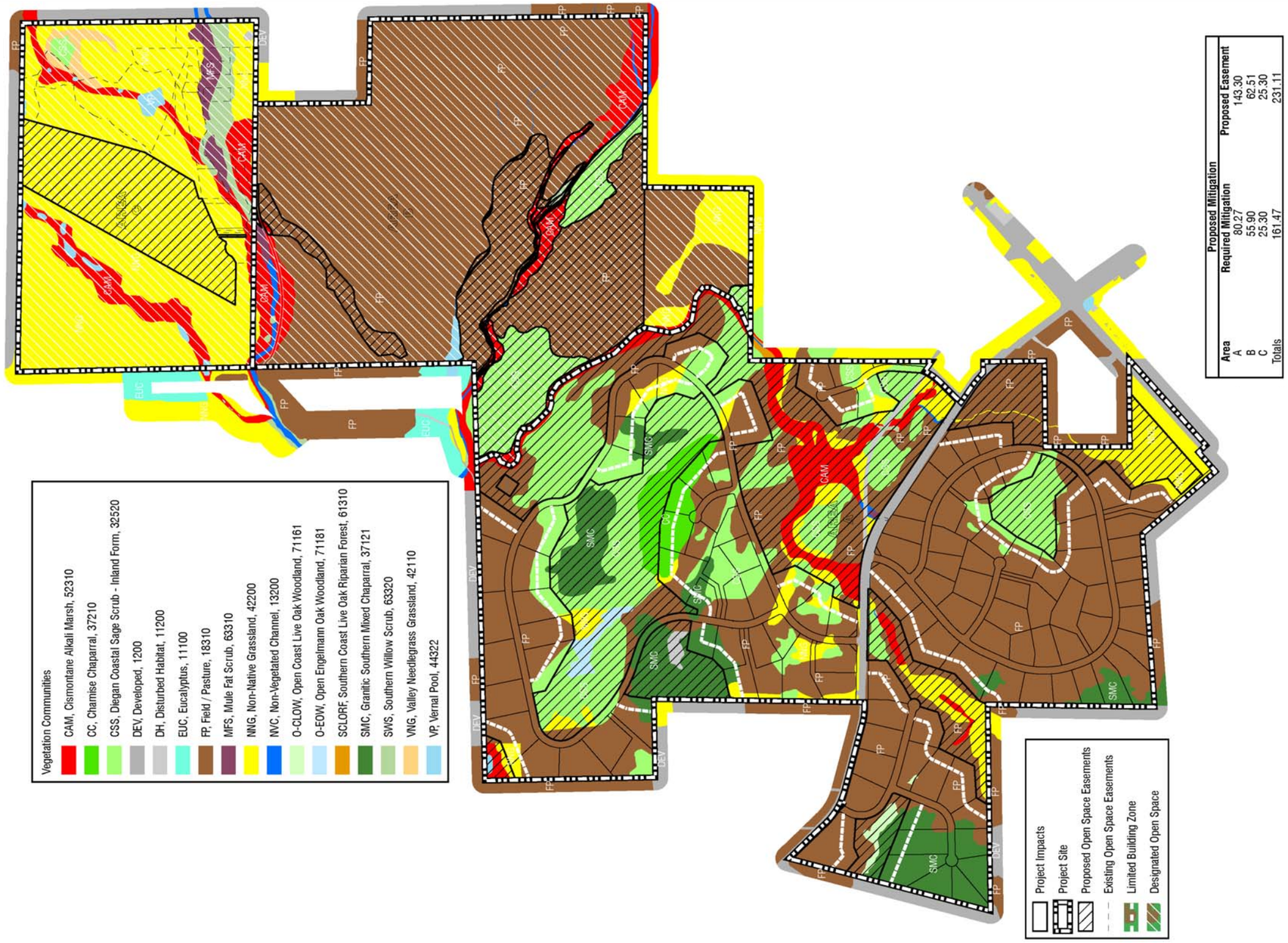

Area	Proposed Mitigation Required Mitigation	Proposed Easement
A	80.27	143.30
B	55.90	62.51
C	25.30	25.30
Totals	161.47	231.11

Source: HDR 2008

0 200 800 1600 Feet

Figure 1-16
Open Space Easements

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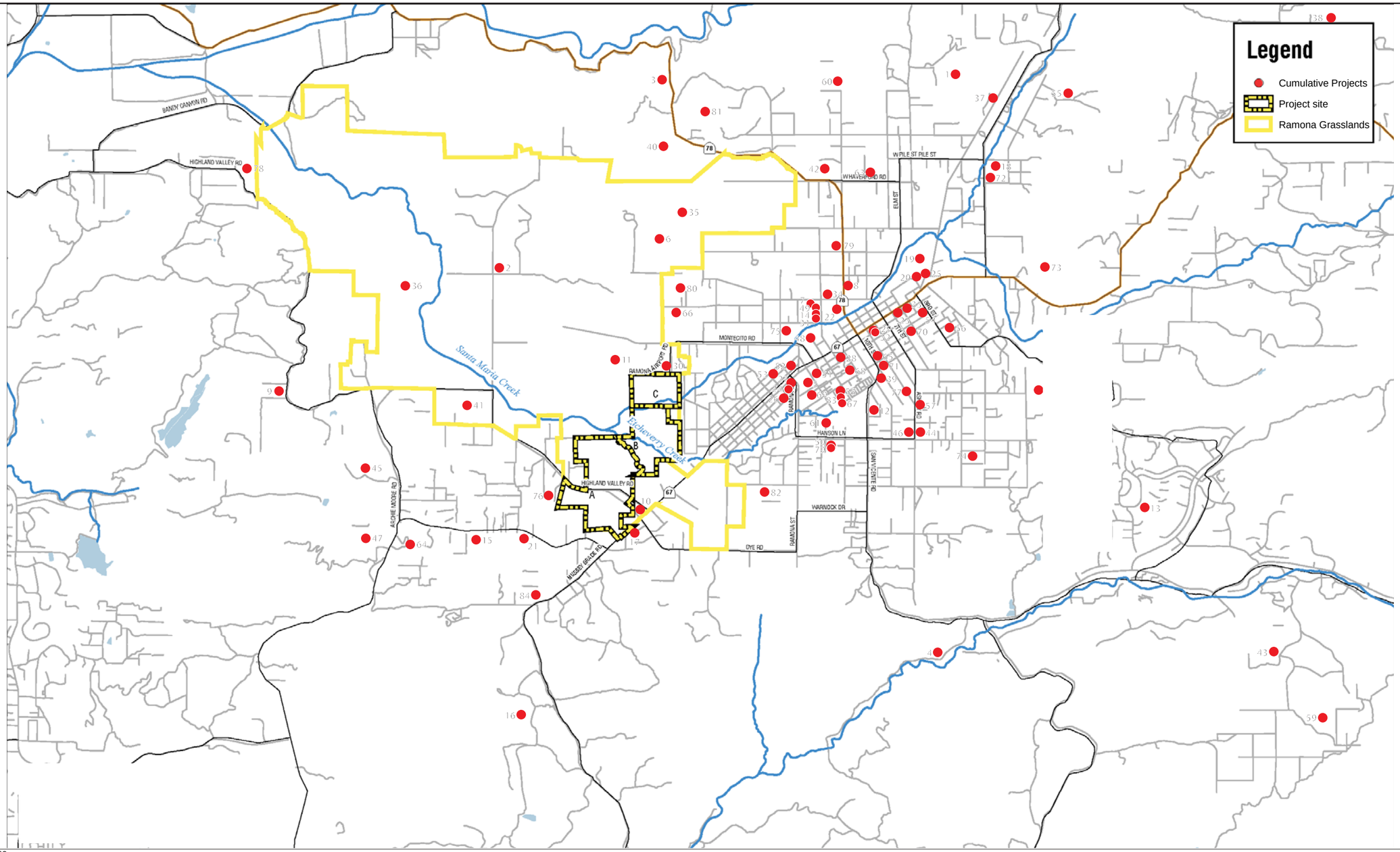

Source: HDR 2008

0 0.5 1 2 Miles

Approximate Scale

NORTH

Figure 1-17
Generalized Locations of Cumulative Projects

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Table 1-1
Development Summary Table

Project Component	Dwelling Units	Acreage	Average Lot Size	Density
AREA A				
Residential Lots	125	188.6	1.5	0.66
Internal Streets	0	24.3	NA	NA
HOA Lots	0	2.1	NA	NA
Open Space Lots	0	143.3	NA	NA
RMWD Lift Station Lot	0	0.4	NA	NA
Total Area A	**125**	**358.7**	**1.5**	**0.35**
AREA B	0	201.0	NA	NA
AREA C	0	113.1	NA	NA
OTHER				
Right-of-Way – SR 67	0	2.9	NA	NA
Right-of-Way – Highland Valley Road	0	6.9	NA	NA
TOTAL PROJECT AREA	**125**	**682.6**	**1.5**	**0.18**

Note: NA=Not Applicable

Table 1-2
Summary of Land Use Types and Totals

Land Use Type	Acreage	Percent of Project
Rural Residential	215.4	32%
Open Space	457.4	67%
Other (ROW)	9.8	1%
Project Total	**682.6**	**100%**

Table 1-3
Summary of Community-Level Trails and Pathways Distances[1]

HIGHLAND VALLEY ROAD PATHWAY		
Area A	0.89 mile	4,695 feet
Highland Valley Court	0.02 mile	80 feet
County Parcel (ROW)	0.06 mile	325 feet
Church Property	0.14 mile	750 feet
Total	**1.11 miles**	**5,850 feet**
MAIN NATURE TRAIL		
Area A	0.65 mile	3,430 feet
Hardy Ranch	0.63 mile	3,350 feet
Area C	0.17 mile	900 feet
Total	**1.45 miles**	**7,680 feet**
CONNECTOR TRAIL		
Area A	0.35 mile	1,830 feet
Total	**0.35 mile**	**1,830 feet**
CREEKSIDE NATURE TRAIL		
Hardy Ranch	0.11 mile	600 feet
Area B	0.38 mile	2,000 feet
Total	**0.49 mile**	**2,600 feet**
STAGING AREA		
Area C	2 acres	
Total	**2 acres**	

[1] Approximately 3.65 miles/19,250 feet of smaller pathways along internal streets of the project, mainly for use of residents within the project, are not calculated within the community-level trails and pathways system stated above.

Table 1-4
Assumed Project Implementation Timeline

Task	Duration
Entitlements	6 months
Final Engineering	9 months
Initial Site Construction	3 months
Ongoing Site Construction and Home Construction	36-60 months
Project Completion	–

Table 1-5
List of Approvals/Permits

Approval/Permit	Agency
General Plan Amendment (GPA 03-007)	County of San Diego
Specific Plan (Specific Plan 03-005)	County of San Diego
Tentative Map (TM 5344)	County of San Diego
Landscape Plans	County of San Diego
Clearing and Grading Permit	County of San Diego
Storm Water Management Plan	County of San Diego
County Right-of-Way Permits	County of San Diego
Habitat Loss Permit	County of San Diego
1602 Streambed Alteration Agreement	California Department of Fish and Game
401 Water Quality Certification	Regional Water Quality Control Board
404 Permit	U.S. Army Corps of Engineers
Expansion of RMWD Latent Power Service Area	Local Agency Formation Commission
State Highway Encroachment Permit	California Department of Transportation
Water District Approval	Ramona Municipal Water District
Sewer District Approval	Ramona Municipal Water District
Rezone (R 07-002)	County of San Diego
Site Plan (STP 10-007)	County of San Diego
Minor Use Permit (lift station)	County of San Diego
Determination of Consistency	Federal Aviation Administration

Table 1-6
Project Design Features

Resource Area	Design Features	Design Results
Transportation and Circulation	• Highland Valley Road in the project area would be widened to meet County Circulation Element Standards • Improvements made at the SR 67 and Highland Valley Road intersection	Widening of Highland Valley road would allow for bike lanes and community pathways. Improved traffic conditions at SR 67 and Highland Valley Road intersection; thus improving traffic flow on surrounding roadways.
Noise	• The Site Plan/Use Permit will require noise control façade to be placed around sewer lift station	Noise generated by the sewer lift station minimized through the use of a noise abating façade.
Biological Resources	• Maintain existing stands of oak trees • Preserve major ridgelines and rock outcroppings • Preserve Area B and C acreage (314.1 acres) and open space throughout Area A (143.3 acres) for inclusion in Ramona Grasslands Preserve • Protect all vernal pools • Pre-construction survey of trails • No mass grading • Maintain natural vegetation to extent feasible • Avoid development of Santa Maria and Etcheverry	Large acreage available for inclusion in the Ramona Grasslands Preserve to form the basis of a cohesive biological eco-region along with other properties recently purchased for preservation. Wildlife linkages onsite and extending to adjacent open space maintained. Enhancement of drainages provides additional cover and habitat for wildlife use and movement. Physical separation

Resource Area	Design Features	Design Results
	creeks and drainages through the site • Minimal fencing to maintain wildlife movement • Native landscaping palette • Physical separation of development from open areas with buffers and natural barriers • Open space signage posted every 50 feet • Minimal lighting • Habitat enhancement along drainage corridors • Biological education for homeowners • Prohibit animal keeping without effective restraints or fencing, lighting, exotic invasive landscaping, and focal use areas including arenas, pools, and patios through LBZ easement restrictions.	by distance eliminates need for extensive fencing or walls; thus maintaining wildlife movement ability. Natural vegetation maintained to full extent feasible and enhanced by native landscape palette with no invasive species. Minimal lighting and natural buffers reduce edge effects. Preservation of entire Area C provides additional protective buffer area for vernal pools and enhances the Ramona Vernal Pool Preserve. Large areas of open space allows for natural vegetation communities and plant populations including Englemann oaks to be mitigated onsite. LBZ restrictions ease transition from private use space to open space.
Cultural Resources	• Project design avoids most known significant cultural resources on the project site • Avoidance of features typically associated with cultural resources, such as rock outcroppings	Most known cultural resources would be undisturbed and preserved in open space.
Public Services and Recreation	• Designed for sewer service, not septic system • Designed for public water service, not wells • Provide a public trail/pathway system of approximately 3.40 miles • Trails designed to operate independently yet connect into regional trail system • Trails designed to provide connections for community use • Large lot design allows for recreation within private lots	All homes would be serviced through public water and sewer and there would be no reliance on wells or septic systems. Project would create a trail system for the Ramona community throughout the property that could operate independently in the immediate term, but would also be compatible with future regional trail plans. Trail alignment designed to showcase the natural aesthetic quality of the area and provide easy access for pedestrian and equine use.
Hazards and Hazardous Materials	• LBZ of 100 feet in width measured from any lot line to an open space area where only noncombustible structures would be allowed and plants that burn easily would be prohibited. • Project development would include fuel management zone and plant palette as defined in the Fire Protection Plan	Large LBZ and associated plant palette would provide natural fire protection, increased open space and rural character, and aesthetic value. LBZ and other buffer requirements create large distances between development and open space areas, reducing edge effects.
Aesthetics and Visual Quality	• Maintain natural landforms and unique features • Integrate existing topography into project design • Maintain existing natural landscaping in place • Natural landscape palette • Minimal fencing, no chain link or similar • Minimal lighting • No entry gates or large signage • Natural facades and low profile for lift station	Project would have smooth transition with adjacent grasslands and open space. Rural ambience is maintained though large lots and open space. Natural landscaping, appropriate lots sizes, and open space blends with existing community. Development "fits into" terrain rather than modifies it.
Air Quality	The grading plans shall specify: • Minimal grading of project site, no mass grading • Water graded areas a minimum of three times daily	Use of minimal grading techniques would reduce the amount of fugitive dust released into the air during construction

Resource Area	Design Features	Design Results
	• Install odor control devices on lift station • Minimize land disturbance • Stabilize graded areas as quickly as possible to minimize fugitive dust • Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry • Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads • Remove any visible track-out into traveled public streets within 30 minutes of occurrence • Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred • Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads • Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling • Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph miles per hour • Cover/water onsite stockpiles of excavated material • Hydroseed, landscape, or develop disturbed areas as quickly as possible and as directed by the County to reduce dust generation • Enforce a 15 miles-per-hour speed limit on unpaved surfaces	activities. Watering would minimize dust generation from graded areas. Other measures would minimize creation of fugitive dust during construction activities.
Hydrology and Water Quality	• Avoid natural drainages and streams onsite • No mass grading • Natural landscaping left in place • No development on steep slopes • No wells or groundwater use • No septic systems • Large pervious areas preserved throughout site	Encroachment into wetland areas would be minimized. Reduced erosion potential and need for erosion control and natural biofilters for stormwater throughout site. No potential for groundwater contamination from septic system or depletion of groundwater from well use.
Soils and Geology	• No development on steep slopes • Minimal grading of project site, no mass grading • Natural landscaping left in place • Geotechnical engineer would selectively test fill during site preparation and review any unusual or unexpected conditions and recommend measures if necessary • During site preparation, soil removal would include existing colluvium, alluvium, older alluvium, and highly weathered bedrock onsite. The exposed surface shall be reprocessed prior to the addition of fill • If soil imports are required, samples of the soil would be evaluated by a geotechnical engineer to ensure compatibility with onsite soils and the recommendations of the geotechnical report • During remedial earthwork, including lot capping	Integrity of soils and underlying formations would be maintained through avoidance of steep slope development. Minimal grading techniques would allow for large quantities of soil to remain undisturbed and stable.

Resource Area	Design Features	Design Results
	and cut/fill transitions, would be implemented with further evaluation of conditions in the field as grading occurs • Placement of an erosion control fabric, or similar protective system, would be placed over graded slope faces in order to minimize erosion of the slope face until a suitable vegetation cover is established • All cut slopes would be mapped by the project engineering geologist during grading to allow amendments to mitigation as necessary • Additional or alternative measures may be required by the County Engineer to ensure soils are appropriately engineered and stabilized prior to development	
Land Use and Planning	• Large lot sizes • Lots sized to match surrounding developments • Residential use as designed on SPA for the site • Animal keeping allowed • Minimal grading to maintain natural topography • Trails designed per community desires • Minimal fencing, lighting, signage • 67% of site preserved as open space • Avigation Easement Dedications and Overflight Easement Dedications would be placed over areas for airspace protection	Project would be consistent with the goals and policies of the Ramona Community Plan. Project would blend with surrounding communities and open space areas. Rural ambience of the community would be maintained. Trail system compatible with other regional trail planning efforts.

Table 1-7
List of Cumulative Projects

Number	Case #	Project Name	Location	Available Description
1	AP 03-065	Bluebird Vineyard	1105 Ash Street	Agricultural clearing of 7.61 acre site. Notice of violation filed.
2	AP 06-060	Westphal Agricultural Storage Project	18421 Rangeland Road	Oversized arena with an attached barn.
3	AP 07-041	Ramona 57 Acres	No Address available	Administrative Permit to encroach into an open space easement. The project consists of a 0.5696 acre encroachment into a 2.2040-acre biological open space easement.
4	MUP 02-005	Rancho Canada	22155 San Vicente Road	Project to convert historically refurbished ranch buildings (circa 1936) into a five-unit bed and breakfast, as an "eco/agri-tourism" destination on the 4,200-acre Monte Vista Ranch. Only minimum grading and landscaping required. An MND was prepared and filed, completed in 2004.
5	MUP 02-028	Elliot	988 Laky Lane	Comprises 21.6 acres proposed for subdivision of 62 lots for single-family residential and retail/commercial development. RPO wetland traverses property from east to west.
6	MUP 03-035	Mountain Valley Ranch	1080 Montecito Way	Equestrian Center with open space for arenas; parking; agriculture (pumpkins); a variety of sheds, barns, and animal pens; and two houses. Improvements include expansion of one existing house and addition of a game room, concession stand, swimming pool, riding arena, hay shed, new barn, and new animal pens.
7	MUP 03-094	RBS Towing and Storage	1148 Olive Street	Construction and operation of a towing yard, shops and offices on a 1.75 acre parcel with an existing single family dwelling and accessory building. Project included parking development, grading to fill a portion of the storage yard, and a grassy swale along the southerly property line to slow runoff to the southerly neighbor. The project was developed in two phases and is exempt from CEQA documentation. Completed in 2006.
8	MUP 04-052	Templo Monte Sinai	855 Olive Street	Project includes two church buildings totaling 15,410 square feet on a 4 acre site.
9	MUP 06-001	Immaculate Heart of Mary Catholic Community Church	16585 Highland Valley Road	Relocating church to a 23-acre site. The project will include a Church for seating of up to 1,500-persons, parish center, meeting rooms, administrative offices, a pre-K through 8th grade school, daycare facility, rectory, and support buildings.
10	MUP 08-017	Spirit of Joy Lutheran Church	17201 SR 67	The project consists of construction of a 5,745 square-foot sanctuary, 5,500 square-foot fellowship hall, two 3,700 square-foot administrative/classroom buildings, 300 square-foot maintenance/utility building, 182 parking spaces, and associated landscaping.
11	MUP 08-032	Ramona Air Center, GPA, PAA, TM, MUP	402 Hughes Street	PAA 08-006, TM 5554, MUP 08-032 and MUP 71-396 W1.
12	MUP 78-121-06	Grace Community Church	1234 Barger Place	Modification proposes additional parking, building addition, canopy trellis, and new educational buildings. Project approved in August 2007.
13	MUP 92-006	Western/WSGP Ramona	23622 Isla Del Rey	Request to amend the Rancho San Vicente Specific Plan to eliminate the requirement to dedicate open space over certain residential lots located generally along the riparian

Number	Case #	Project Name	Location	Available Description
				corridor that forms the border between the developed area and the open space to the west.
14	MUP 96-017	Ramona Disposal	324 Maple Street	Transfer station to increase capacity to 700 tons per day.
15	MUP 68-007-01	Lemurian Fellowship	1869 La Brea Street	This project proposes a new stand alone single family dwelling. There are already several structures on the property, and at least 3 septic systems.
16	MUP 70-379-03	Salvation Army	14488 Mussey Grade Road	Retreat and recreational facilities were destroyed from the October 2003 fires and are being rebuilt with increases in size of the structures by 4.9% ("Minor Deviation" from approved plot plan). Total building onsite will be 29,735 square feet. Erosion control study led to hydroseeding, Jan. 12, 2004. Certain Best Management Practices are being used during construction.
17	MUP 84-045-04	Ramona United Methodist Church	3394 Chapel Lane	Addition of 1,600 square feet to an existing religious education building, add 7 parking spaces and a 554 square foot courtyard with a 217 square foot trellis. Exempt from CEQA.
18	MUP 87-028-01	Highland Valley Ranch	1215 Magnolia Avenue	Increase residents (group care) from 16 to 52, add four new buildings and add 30 parking spaces.
19	MUP 94-010-09	Ramona Baseball Lighting Project	223 Aqua Lane	Minor Deviation for lighting.
20	MUP 94-010-10	Ramona Municipal Water District	125 N 2nd Street	Minor Deviation to add 1 Sea Cargo container and relocate Sea Cargo Containers
21	PAA 08-003	Mc Donald	17425 SR 67	9.78 acre site zoned A70 - RR2. Re-subdivision of TM5378. Originally 8 lots, proposed 15.
22	STP 02-064	Souza Site Plan / One Stop Rental	254 Pine Street	Site is currently used as landscape supply and equipment rental facility. The site plan proposes construction of two new buildings including paved parking areas and equipment and supply storage areas and the removal of the existing buildings. The first building would be 13,500 square feet and the second building would be 10,500 square feet.
23	STP 04-048	Ramona Fitness	558 Main Street	Remodel of existing 10,401 square foot Ramona Fitness Center to be used for the same purpose upon completion. The renovation of the front half of the structure is extensive, but the overall size of the building will not change.
24	STP 04-059	B&M Automotive	1850 Main Street	Auto repair shop. Negative Declaration approved April 2007.
25	STP 05-025	Ramona Municipal Water District	105 Earlham Street	The site plan is for a one-story 1,028 square foot accessory building for the Ramona Municipal Water District offices. CEQA exempt.
26	STP 06-009	Sunrise Villas	1918 Kelly Avenue	Site Plan pursuant to the "B" Special Area Regulations Designator (Community Design Review) and the "D" Special Area Regulations Designator (Design Review) to construct an 11 unit apartment building on a vacant lot.
27	STP 06-024	Ramona Longs Drugs	1750 Main Street	Project includes a 15,790 square foot drug store. Project approved June 2008.
28	STP 07-042	Ramona Care Facility	1236 D Street	Ramona Care Facility, "B" Designator for a 30-unit Elderly Care Facility. Project would generate 75 ADT.
29	STP 07-048	Day Site Plan	No Address	Site Plan to construct a 2-story 2,387 square foot commercial office building.

Number	Case #	Project Name	Location	Available Description
30	STP 07-051	Ramona Hangers	402 Hughes Street	Existing airport on leased County Airports Division - leasing portion to expand storage and maintenance facilities. Six new airplane hangars.
31	STP 08-009	Brewer Land Co, Crane Maintenance Site	845 Schoolhouse Road	The project is the construction of a crane maintenance facility to house an office building, crane maintenance building, and associated paved parking area.
32	STP 02-011-01	Progressive Properties	831 D Street	Reconfiguration of Handicapped Parking Spaces, addition of flag pole, and bicycle parking. CEQA exempt.
33	STP 03-077-01	Meurs Office	419 D Street	Construction of a 129,670 square foot self storage facility and a 1,320 square foot management office. Three one–story perimeter buildings surround four two-story interior storage buildings. The project requires 6,500 cubic yards of cut, 20,000 cubic yards of fill. A MND was completed in 2005. Minor deviation approved in August 2006.
34	STP 03-079-01	Olive Street Self Storage	North side of Olive Street between Pine Avenue and Maple Avenue	The project would add a 988 square foot second story addition to the office building of a previously approved self-storage facility.
35	SP 01-001	Montecito Ranch	Generally north of the Ramona Airport and north of the existing right-of-way of Montecito Way	Comprises approximately 953 acres. Rural development of 417 single-family units integrating large lot residential uses over most of the site and industrial uses located on the land in closer proximity to the Ramona Airport. Overall density of 0.5 dwelling units per acre. No industrial development allowed east of Montecito Way. The site has varying topography with the southern portion of the site being relatively level, while the more easterly and northerly portions of the site vary in topography from moderate to steep slopes.
36	SP 01-002	Oak Country Estates	No Address	57 lots - Sold for open space.
37	TM 4962	M.D.S. Development Corp.	West of Black Canyon Road near Nicole Street.	Replacement of road and open space easement to be vacated.
38	TM 5008	Ramona Ridge Estates	25858 SR 78	A subdivision of approximately 215 acres into 18 lots and a 45-acre remainder parcel. Proposed lots range in size from 8 to 17 acres. Lots will be served by wells and individual sewage disposal systems. The site is within a (20) Agriculture Preserve Land Use Designation and the A72 General Agricultural Use Designation. Major issues included biological impacts to the golden eagle and CSS, the loss of agricultural lands. A Negative Declaration was issued in 1999, but PERB denied the project based on inadequate environmental review and unmitigated impacts that could only be resolved in an EIR.
39	TM 5042	Lakeside Ventures	1760 Keyes Road	Construction of 20 single family residences on a 202 acre site.
40	TM 5091	Barrett, Hibbard & Co	1407 Main Street	Construction of 12 single family residences on approximately 49.67 acres.
41	TM 5188	Brisson	860 San Vicente Road	Project would create 12 residential lots on 3.75 acres. Access will be from 11th Street with a new private road and from San Vicente Road for one lot. Approved June 2007.
42	TM 5194	Teyssier	19587 Horizon View Drive	Subdivision of 287 acres into 36 residential parcels for single-family residential, ranging from 5.5 to 10 acres per parcel, but typical size of 8 acres. Site is currently an avocado grove with two reservoirs, which will remain. Per environmental analyses, the project could result in potentially significant impacts unless mitigated to

Number	Case #	Project Name	Location	Available Description
				Biological Resources including southern coast live oak riparian forest, southern willow scrub, wetlands and discharge/drainage patterns.
43	TM 5198	Rancho Esquilago	Highland Valley Road and Traylor Road	24 residential lots and open space.
44	TM 5244	Stonecrest Development	Haverford Road and Pine Street	A subdivision of 67.76 acres into 14 lots ranging in size from 4.08 to 5.88 acres. A 40-foot-wide private road easement to serve the lots will be located approximately 650 feet north of the Haverford Road/Pine Street intersection. Open space easements will be dedicated along the northwest and southern portions of the project site to protect and preserve southern coast live oak habitat and jurisdictional waters. An MND was revised in January 2004 in response to public comments.
45	TM 5257	Sunset Vista	1454 Ashley Road	The project proposes a major subdivision of 9.3 gross acres into eight residential lots ranging in size from 1.06 to 1.40 acres. Approved May 2007.
46	TM 5267	Roberts	17172 Salt Mine Road	Major subdivision of eight lots (53.34 gross acres) that will range in size from 2 to 14.11 net acres. Per the environmental analysis form, project impacts could result in potentially significant impacts unless mitigation was incorporated for Biological Resources. Site contains two sensitive habitats (southern coast live oak and oak riparian forest) in addition to wetland habitats and wildlife dispersal corridors. Approved October 2003.
47	TM 5311	Meadow Builders	1121 Pahls Way	Development of a 12-lot subdivision.
48	TM 5329	Mount Woodson	West Of SR 67 and south of South Woodson Road	Division of 84 acres into 23 lots for 22 single-family residents and 1 open space lot.
49	TM 5347	Nickel Creek	14th Street, just north of SR 67	Division of 10.10 acres into two lots. One lot will be subdivided into 4 more lots, to house 45 condominiums, up to 6000 square feet each. The second lot on the lowland portion of the site will be retained as open space, to mitigate biological impacts. Approved April 2007.
50	TM 5368	Maple Street Business Park Condos	432 Maple Street	The project proposes to convert 16 existing industrial and commercial units into a 16-unit industrial and commercial condominium complex. The project is exempt from CEQA. Approved February 2005.
51	TM 5378	Estates At Mcdonald Park	518 Ramona Street	Construct 11 single-family homes with lot size from 0.5 acre to 1.44 acres.
52	TM 5480	Valley Park Condominiums	430 16th Street	Project includes 62 lot condominium map with D3 Designator on a 2.86 acre site.
53	TM 5509	Paseo Village Townhomes	1037 Olive Street	Project includes 31 unit condominiums on 2.28 acre site. Project would generate 248 ADT.
54	TM 5535	LB Village Investments	1391 Pahls Way	Project proposing to develop an approximately 1.47 net acre site into 14 residential condominiums.
55	TM 5537	“F” Street Subdivision	310 E Street	10 lot subdivision on 2.06 acre site.
56	TPM 20465	Charles & Suzanne Cavins	Walnut Street	Construction of 5 single family residences on 40 acres.
57	TPM 20498	Quisenberry Family Trust	850 Main Street	Minor subdivision of a 37 acre lot into five parcels including a remainder parcel. An 8-inch water line will also be installed in Rancho Maria Lane to the northwest edge of the property. Approved August 2001.

Number	Case #	Project Name	Location	Available Description
58	TPM 20564	Mccandless	1666 Hanson Lane	Minor subdivision of 41.54 acres into four parcels and a remainder parcel. Building improvements, such as driveways, house pads, and leach fields. An open space easement on 47 percent of the property is proposed to mitigate encroachment into oak woodland and coastal sage scrub habitat.
59	TPM 20615	Weinstock, Norman	No Address	Construction of 5 single family residences on 37.5 acres.
60	TPM 20679	Herold	170 Hillcrest Lane	Minor subdivision of 4.67 acres into four lots ranging in size from 1.03 to 1.58 acres. Approved March 2007.
61	TPM 20703	Herold – Ashley Road	1292 Ashley Road	Project would subdivide 2.5 acres into four parcels, with a parcel size ranging from 0.5 to 0.78 gross acres. Each parcel would house 1.6 dwelling units per acre. Approved May 2005.
62	TPM 20724	Quisenberry	815 14th Street	A minor subdivision to create three parcels on a 1.26 acre parcel. The proposed use of the lots will be for residential occupancy, and will require minimal grading since the topography is flat. There is an existing onsite residence which will remain and a well that will be destroyed. A MND was adopted in 2006 and project approved in May 2006.
63	TPM 20747	Kvaas	Rainbird Road and Mykrantz Truck Road	Minor subdivision of 60.3 acres into four residential parcels and a remainder parcel ranging from 10.7 to 11.5 acres.
64	TPM 20749	Saffian	2198 Pine Street	Minor subdivision of 20 gross acres into four residential parcels ranging from 4.1 to 5.3 acres. Approved March 2007.
65	TPM 20760	Ledesma Lane	1205 Ledesma Lane	Project is a four-lot subdivision on a 2.53-acre parcel. One existing residence onsite that will remain and three single-family residences would be added. Grass-lined storm drainage swale will be constructed across the property. Approved July 2005.
66	TPM 20766	Wakeman	498 Grapefruit	Project is subdivision of 22.2 acres into four parcels and a remainder parcel. Parcel size would range from 4.1 to 5.2 acres. Approved December 2005.
67	TPM 20769	Thompson	717 Haverford Road	Project would create a 4.27-acre lot with access from a proposed private road easement from APN 279-180-12. The remainder parcel would be 7.14 acres and contains an existing single-family residence. No major grading is proposed. Approved October 2005.
68	TPM 20770	Taylor	East of SR 67 between Mount Woodson Road and Archie Moore Road	Minor subdivision of 34.7 acres into four lots measuring between 2.53 and 2.89 acres with a remainder parcel of 23.7 acres. Approved November 2006.
69	TPM 20771	Sorric	718 10th Street	Project would subdivide 1.01-acre parcel into four lots ranging from 0.19 to 0.25 acre. The project includes a remainder parcel of 0.21 acre. Approved August 2006.
70	TPM 20801	Herman	2268 El Paso Street	Project would subdivide 10.11 acres into four lots.
71	TPM 20808	Young	16th Street	A 1.77 acre site with four lots ranging from 10,000 square feet. Approved September 2005.
72	TPM 20909	12th St	705 12th Street	Project proposes a two-lot split in a residential neighborhood on 12th Street near H Street Approved January 2007.
73	TPM 20910	Parker Lane	1650 Parker Lane	The project proposes to divide 0.77 net acres into 2 parcels measuring 14,630 square feet and 18,893 square feet. An existing single-family residence is located on the proposed parcel 1. CEQA exempt. Approved February 2007.

Number	Case #	Project Name	Location	Available Description
74	TPM 20919	Herold	507 G Street	Standard Tentative Parcel Map for 4 lots. CEQA exempt. Approved October 2007.
75	TPM 20922	H Street	920 H Street	Tentative Parcel Map for 4 lots. Approved August 2006.
76	TPM 20926	Filippini	955 Cedar Street	Divide 9.25-acre parcel into two parcels of 4.01 and 5.34 gross acres. Approved December 2006.
77	TPM 20962	Neuman	23414 SR 78	Project would divide 39.4 acres into 4 lots. The site contains Steep Slopes as defined by RPO, coastal sage scrub and chaparral, and is in the scenic corridor of SR 78. Potential impacts to 7.31 acres of coastal sage scrub and 2.22 of chamise chaparral.
78	TPM 20977	Keyes Rd	1905 San Vicente Road	Project would create 4 parcels plus Remainder on 12.9 acres. Project is listed as inactive.
79	TPM 20990	Walnut Street	1512 Walnut Street	Project would create 4 lots on 4.22 acre parcel.
80	TPM 21031	Kruse	18729 Highland Valley Road	Project is a 2 lot subdivision on 4.67 acres. Mitigated Negative Declaration approved July 2008
81	TPM 21043	Agha	1219 9th Street	Project would subdivide a 1.03 acre lot into 2 parcels. The site contains an existing single-family residence that would be retained. Exempt from CEQA. Approved December 2007.
82	TPM 21051	Highland Valley	No Address	Project would divide 38 acre parcel into 3 lots and remainder parcel.
83	TPM 21056 PAA06-005; GPA07-005; ER Log No.: 07-09-002	Faaborg	1602 Hanson Lane	Rezone to decrease minimum lot size from 4 acres to 2 acres. General Plan Amendment to change General Plan from 19 (Intensive Agriculture) to 17 (Estate Residential).
84	TPM 21070	Dekoven Project	829 D Street	Project would subdivide a 10.87 acre lot into 4 discrete parcels.
85	TPM 21071	Pfau	1713 Vermont Street	Project is a 30 acre subdivision of 4 parcels plus remainder parcel. There are major project issues including secondary access and groundwater. No activity since April 2008.
86	TPM 21082	Zeigler	2126 Boundary Avenue	Project is a 2 lot subdivision on 10.87 acres. Applicant requesting Urban Lot Split Exemption Request.
87	TPM 21083	Wood	854 Rancho Bullard Lane	Project to split 1.28 acres into 4 lots. Approved October 2008.
88	TPM 21109	Bain	2018 Pine Street	Project would create 3 lots on 0.39 acres. Submitted 7/7/07
89	NA	RMWD SMWWTP Expansion Project	260 North Sawday Street	RMWD lead agency for project. Preojct would expand the capacity of existing SMWWTP to 1.47 MGD in three phases. The project would also construct two new wet weather storage ponds located west of the existing ponds and the existing spray fields east of Rangeland Road would be reconfigured as evaporation terraces Final EIR approved April 2010.
90	NA	RMWD Downtown Operational Storage Zone Improvements	Not yet finalized	RMWD is currently planning a new reservoir (consisting of two 1.5-million-gallon tanks) that would serve the southwestern area (Phase I) of the Downtown Operational Storage Zone. RMWD would serve as lead agency for the project.

CHAPTER 2.0
SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CAN NOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

This chapter of the EIR provides a detailed discussion of the issue area of Transportation and Traffic, as this issue area would have significant environmental effects that could not be avoided if the proposed project were implemented. For these significant environmental impacts, mitigation is either infeasible or does not reduce the impact to below a level of significance. The analysis for Transportation and Traffic follows the same format as those issue areas in Chapter 3 and consists of the following subsections:

- **Existing Conditions** – This section describes the existing conditions of the proposed project site at the time the NOP was issued with regard to the environmental factors reviewed.
- **Guidelines for the Determination of Significance** – This section explains how an impact is judged to be significant in this EIR.
- **Analysis of Project Effects and Determination of Significant Impact –** This section provides an analysis of potential impacts of the proposed project and explains why the impacts were found to be significant. Significant impacts are numbered to correspond with mitigation measures. Less than significant impacts are not numbered.
- **Cumulative Impact Analysis –** This section discusses the potential for the project to incrementally add to cumulative impacts. Analysis is provided to determine if implementation of the project would result in cumulatively considerable impacts. Significant impacts are numbered to correspond with mitigation measures. Less than significant impacts are not numbered.
- **Mitigation Measures –** This section identifies mitigation measures that would mitigate each impact found to be significant. When a mitigation measure would not reduce an impact to less than significant, discussion is included to show why the mitigation measures does not fully mitigate the impact or why additional mitigation is not feasible. Each mitigation measure is numbered to correspond with the associated impact. The level of significance after implementation of the mitigation measures is identified.
- **Conclusions** – This section states a conclusion as to whether each of the project's significant environmental effects of the specific subject area analysis have or have not been reduced to below a level of significance through mitigation and the supporting rational for that conclusion.

2.1 Transportation and Circulation

The information and conclusions in this section are based on the traffic analysis prepared by RCE Traffic and Transportation Engineering (RCE 2010), which is provided as Appendix A.

2.1.1 Existing Conditions

Existing Circulation Network

State Route 67

SR 67 is classified as a four-lane Collector Road from Mussey Grade Road to Ramona Street in the Circulation Element of the County General Plan. West of Mussey Grade Road, SR 67 is classified as a Major Road. Caltrans classifies SR 67 as a "four-lane conventional highway." In the vicinity of the project site, SR 67 has two through lanes and shoulders. SR 67 west of Archie Moore Road is a two land roadway with passing lanes at various locations and shoulders. Major intersections along SR 67 occur at Scripps Poway Parkway (signalized), Poway Road (signalized), Archie Moore Road (unsignalized), and Highland Valley Road (signalized). Due to capacity restrictions and intersection operations at the Highland Valley Road/SR 67 signalized intersection, lengthy queues develop on SR 67 exiting Ramona during the morning peak hour and entering Ramona during the afternoon peak hours. SR 67 is included in the County's bicycle network system.

Highland Valley Road

Highland Valley Road is a two-lane roadway that is classified as a Rural Collector in the County Circulation Element. Highland Valley Road provides access to SR 67 for the properties located to the north. In the project area, Highland Valley Road has two lanes, shoulders, and a pavement width of 36 to 40 feet. Highland Valley Road is included in the County's bicycle network system.

Dye Road

Dye Road is classified as a Major Road in the County Circulation Element. Dye Road currently provides access to the San Diego Country Estates development as well as the Barona Indian Reservation. Dye Road is included in the Ramona Community Plan as a major component to the proposed "south bypass" to provide alternatives to SR 67 and Main Street. In the vicinity of the

project site, the road has two lanes with a pavement width of approximately 40 feet. Dye Road is included in the County's bicycle network system.

Study Intersections

The area of study for the traffic analysis included those intersections that operate at LOS E or F, received 25 or more peak hour project traffic trips, or had the potential for significant effects. The area of study includes the following intersections:

- SR 67 and Scripps Poway Parkway
- SR 67 and Poway Road
- SR 67 and Highland Valley Road
- SR 67 and Archie Moore Road
- SR 67 and Montecito Road
- SR 67 and SR 78
- Project Roadways and Highland Valley Road

Level of Service Methodology

LOS is a qualitative measure used to describe the operational conditions within a traffic stream, and a motorist and/or passenger's perception of the performance of the roadway. LOS is designated a letter from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is typically used as a design standard, while LOS D is considered acceptable for peak period operating conditions by most jurisdictions.

Existing Roadway Level of Service

Circulation Element roadways within the project area were evaluated using daily LOS volumes provided by the County. This methodology compares daily traffic volumes to roadway classifications to determine the approximate daily street segment LOS. Existing daily traffic volumes for the study area roadways were obtained from traffic counts performed in May 2007. Existing weekday average daily traffic (ADT) volumes are shown in Figure 2.1-1. These volumes were compared to the County's capacity standards to determine the LOS for the Circulation Element roadway segments. This analysis shows that all roadways within the project area currently operate at LOS D or better with the exception of SR 67 between Scripps Poway Parkway and Pala Street, which currently operates at LOS F.

Existing Intersection Level of Service

Intersection LOS was evaluated using the 2000 Highway Capacity Manual methods for signalized and unsignalized intersections. LOS calculations are provided as an attachment to the traffic analysis, which is provided in Appendix A. Existing daily traffic volumes for the study area intersections were obtained from traffic counts performed in May 2007. The County of San Diego requires traffic counts to be taken within two years to accurately reflect current conditions. New counts were taken in September 2008 and compared with the May 2007 counts. It was determined that the September 2008 counts were slightly less than the May 2007 counts. The May 2007 counts were used in this study to provide a more conservative analysis. All study area intersections operate at LOS D or better under existing conditions with the exception of the SR 67 and Highland Valley Road intersection, which currently operates at LOS E during the morning peak hours.

Applicable Regulations and Policies

County of San Diego

An objective of the Public Facilities Element of the County General Plan (County of San Diego 1991a) is to provide an LOS C or better on County Circulation Element roads. Fairshare contributions to fee programs or other roadway improvements are allowed to achieve these objectives. The following applicable County policies are outlined below.

Objective 1:
A level of service "C" or better on County Circulation Element Roads.

> Policy 1.1: New development shall provide needed roadway expansion and improvements onsite to meet the demand created by the development, and to maintain a Level of Service "C" on Circulation Element Roads during peak traffic hours. New development shall provide offsite improvements designed to contribute to the overall achievement of the Level of Service "D" on Circulation Element Roads.

Objective 2:
Equitable sharing of funding for transportation facilities.

> Policy 2.1: New development shall be required to contribute its fair share toward financing transportation facilities.

Objective 4:
Reduction in the demand on the road system through increased public use of alternative forms of transportation or other means.

> Policy 4.2: The County will ensure the development of its bikeway system and encourage its use.
>
> Policy 4.4: Ensure the provision of bicycle facilities and other needed bikeway related improvements in new development.

The County approved a Transportation Impact Fee (TIF) program for County projects (County of San Diego 2005b and 2008). The purpose of a TIF is to make a provision for assessing and collecting fees as a condition of approval of a tentative subdivision map, approval of a tentative parcel map, or prior to issuance of a development permit, including building permit, to defray the actual or estimated costs of constructing planned transportation facilities necessary to accommodate increased traffic generated by future development pursuant to Section 66000 et seq. of the California Government Code (Mitigation Fee Act).

The TIF program provides a mechanism for mitigating the impacts created by future growth within the unincorporated area. The TIF is a fee program designed to facilitate compliance with the CEQA mandate that development projects mitigate their indirect, cumulative traffic impacts. The County TIF program assessed the fee on all new development that results in new/added traffic. The primary purpose of the TIF is twofold: (1) to fund the construction of indentified roadway facilities needed to reduce, or mitigate, projected cumulative traffic impacts resulting from future development within the County; and (2) to allocate the costs of these roadway facilities proportionally among future developing properties based upon their individual cumulative traffic impacts.

TIF fee are collected into 23 local Community Planning Area accounts, tree regional accounts, and tree regional freeway ramp accounts. TIF funds are only used to pay for improvements to roadway facilities identified for inclusion in the TIF program, which included both County roads and Caltrans highway faculties. TIF funds collected for a specific local or regional area must be spent in the same area. For Example, TIF fees collected in the North Region TIF account may only be used for improvements to TIF facilities in the North Region. By ensuring TIF funds are spent for the specific roadway improvements identified in the TIF program, the CEQA mitigation requirement is satisfied and the Mitigation Fee Act nexus is met.

As part of the TIF program process, the transportation infrastructure needs are characterized as existing deficiencies, direct impacts of future development, or indirect (cumulative) impacts of future development. Existing roadway deficiencies are the responsibility of existing developed land uses and government agencies and cannot be financed with impact fees. The TIF program is not intended to mitigate direct impacts which will continue to be the responsibility of individual development projects. The TIF program therefore is designed to only address the cumulative impacts associated with new growth.

The County TIF program enables projects to complete CEQA compliance and move forward by paying a fair share of the cost of improving roads in the future as the levels of service become unacceptable due to increased traffic volume caused by the cumulative impacts of various developments. The County's TIF program goes into great detail in identifying anticipated development, the roads affected, roadway costs, and the existing and projected levels of service on those roads. As sufficient funds become available, the County will implement the improvements that it has committed to.

2.1.2 Guidelines for the Determination of Significance

The guidelines for determination of significance for traffic impacts were derived from various sources. Quantifiable direct and cumulative impacts, such as LOS, ADT, or delay times are based on standards outlined in the County of San Diego Public Facilities Element or Circulation Element of the General Plan, which serve as the transportation planning documents for the project area. The County Traffic and Transportation Guidelines for Determining Significance (September 2006) is also used as a source for quantifiable thresholds. Additional thresholds related to safety are taken from the CEQA Appendix G Checklist. The Cumming Ranch project would result in a significant transportation and circulation impact if it would do the following:

1. result in a direct degradation of roadway or intersection LOS below LOS D, per the County General Plan Public Facilities Element;
2. result in a direct addition or redistribution of traffic that would significantly increase congestion on a roadway or intersection currently operating at LOS E or LOS F, as defined in the following table. Significant increases on congested roads and intersections are defined based upon a level that would be perceived by a driver;

Road Segments			
	2-LANE ROAD	4-LANE ROAD	6-LANE ROAD
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT
Intersections			
	SIGNALIZED	UNSIGNALIZED	
LOS E	Delay of 2 seconds	20 peak hour trips on a critical movement	
LOS F	Delay of 1 second, or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement	

Source: County of San Diego, Traffic and Transportation Guidelines for Determining Significance. http://www.sdcounty.ca.gov/dplu/Resource/docs/3~pdf/Draft_Traffic.pdf

3. result in a direct addition or redistribution of traffic that would cause an onsite roadway segment LOS (including Highland Valley Road through the project site) to degrade below LOS C;
4. contribute to a cumulative impact to a roadway or intersection LOS below LOS D. Cumulative impacts are considered by comparing existing conditions against conditions with projects that may be approved or developed in the project area in combination with the proposed project;
5. result in additional or redistributed traffic that would contribute to congestion on a roadway or intersection currently operating at LOS E or LOS F under cumulative conditions. Significant cumulative increases on congested roadways are the same as shown above for Guideline 2;
6. substantially impact traffic safety due to a design feature (e.g., sharp curves or dangerous intersections, limited site distance, etc.) or incompatible uses (e.g., farm equipment); or
7. result in a potentially significant hazard or barrier for pedestrians or bicyclists.

2.1.3 Analysis of Project Effects and Determination of Significant Impact

As detailed in the traffic report (Appendix A), the Cumming Ranch project is anticipated to generate ADT of 1,500 vehicles per day. The net increase of traffic to the street system during the AM peak is 120 trips and during the PM peak is 150 trips. The anticipated distribution of these additional trips is provided in Appendix A. Based on this distribution, the anticipated operation of project area roadways and intersections was considered for existing plus project conditions.

Roadway Segments

The LOS of the project area roadway system based on existing plus project traffic conditions are shown in Table 2.1-1. Analysis of these volumes reveal that all roadways in the project area with the addition of project traffic would operate at LOS D or better with the exception of the SR 67 street segments between Scripps Poway Parkway and Pala Street, which would continue to operate at LOS F based on the County's capacity standards. ADT along SR 67 between Scripps Poway Parkway and Poway Road would increase to 22,134 with 480 trips per day attributable to the proposed project. ADT along SR 67 between Poway Road and Archie Moore Road would increase to 26,392 with 930 trips per day attributable to the proposed project. ADT along SR 67 between Archie Moore Road and Mussey Grade Road would increase to 24,992 with 1,045 trips per day attributable to the proposed project. The ADT along SR 67 from Mussey Grade Road to Pala Street would increase to 24,475 with 225 daily trips attributable to the proposed project. Therefore, per Guidelines 1 and 2 above, the proposed project's contribution of more than 200 ADT to the poor operating condition of these segments of SR 67 would be a ***significant impact***. (**Impact TR-1**)

Onsite roadways include the proposed internal street system and a segment of Highland Valley Road. The internal street system is adequate to provide service to the new residential development and the segment of Highland Valley Road that passes through the project site would continue to operate at LOS B with the addition of project traffic. Therefore, the project would not result in a direct addition or redistribution of traffic that would cause an onsite roadway segment LOS to degrade below LOS C per Guideline 3 and the impact would be ***less than significant***.

Intersections

The LOS for project area roadway intersections under existing plus project conditions is shown in Table 2.1-3. This table shows that all project area intersections currently operate at LOS D or better. All of these intersections would continue to operate at LOS D or better with the addition of project generated traffic with the exception of the SR 67 and Highland Valley Road intersection, which would continue to operate at LOS E. This intersection currently operates at LOS E and thus, the addition of project traffic would not directly degrade the intersection to a poor operating condition per Guideline 1. However, per Guideline 2, the addition of project traffic would further degrade the LOS E operating condition of the SR 67 and Highland Valley Road intersection and would be considered a ***significant impact***. (**Impact TR-2a**)

The intersection of SR 67 and Archie Moore Road currently operates at a LOS D in both the AM and PM peak hours, based on the intersection counts taken in 2007. However, information provided by Caltrans (Caltrans 2008) indicates that current operation of this intersection is not adequate. Therefore, to be conservative in analysis of potential project effects, it is assumed that the addition of project traffic would significantly directly impact the intersection. As described above, in order to be consistent with Caltran's recommendations at this location and provide a conservative analysis of potential project impacts, the addition of project traffic to the SR 67 and Archie Moore Road intersection would be considered a ***significant impact.*** **(Impact TR-2b)**

Traffic Safety

The project and associated roadway improvements would not create any unsafe traffic conditions or hazards. The proposed roadway improvements would generally widen existing roadways and intersections and would not result in dangerous roadway conditions such as dangerous curves or limited lines of sight. In addition, the proposed entrances to the project off of Highland Valley Road are not located at dangerous locations such as a sharp curve or steep hill. The County requires a minimum distance of 300 feet between noncirculation element roads entering onto a circulation element roadway (i.e., Cumming Ranch project entry roads connecting to Highland Valley Road). The project has been designed with a minimum of 650 feet between the project entry roadways. The project includes left-turn lanes on Highland Valley Road to improve safety for vehicles turning to enter the property. The vehicles from the proposed residential development that would use the area roadways would be typical passenger vehicles and no incompatible use of the roads would result. Traffic and emergency vehicle safety hazards would be ***less than significant*** per Guideline 6 because the project does not include features that would substantially impact traffic safety.

The project proposes to improve Highland Valley Road adjacent to the project site to provide bike lanes per Rural Collector roadway standards. The project would also provide pedestrian pathways along Highland Valley Road in the project area as well as trails and pathways throughout the project site. There would be a ***less than significant*** impact to pedestrian or bicyclist safety per Guideline 7 because the project would create no hazards or barriers for pedestrians and bicyclists.

2.1.4 Cumulative Impact Analysis

This section analyzes the roadway network assuming the construction of all projected development within and adjacent to the Ramona Community Planning Area. The Ramona Community Planning Area is included as part of the cumulative traffic analysis as traffic tends to

be a regional issue with local problems resulting. A cooperative study was completed in 2004 by local traffic engineers preparing studies for projects in the Ramona area. The intent of this cooperative study was to assemble all cumulative projects and distribute their projected traffic onto the existing roadway network. A total of 60 cumulative projects were identified and included. The projected traffic for the Cumming Ranch project was included in this cumulative study. To accommodate the fluid nature of cumulative projects, a growth factor of ten percent was added to the cooperative cumulative numbers developed for this analysis. The December 2008 traffic analysis prepared for this project (RCE 2010) compared the traffic numbers associated with the cumulative list for the Cumming Ranch EIR with the 2004 cooperative cumulative study. The results revealed that the 2004 cumulative projects numbers with the ten percent growth factor added provided the most conservative (highest) traffic volumes and thus, were used in the traffic analysis and this EIR. A list of the cumulative projects is also included in the Traffic Report (Appendix A of this Draft EIR) as Appendix H.

The County Board of Supervisors adopted the TIF program in April 2005 to collect fees to fund identified transportation facilities (County of San Diego 2005b) and approved an update to the TIF program on January 30, 2008 (County of San Diego 2008). The TIF program for the Ramona area uses the projection method of analyzing cumulative impacts as provided in section 15130(b)(1)(B) of the CEQA Guidelines. San Diego Association of Governments (SANDAG) regional land use forecasts and traffic models were used to determine the amount of expected future development and the types of transportation improvements needed. The County will use impact fees to fund construction of the development portion of needed road improvements. These TIF facilities would provide the additional capacity necessary to accommodate the increased traffic generated by future development. The TIF program provides an opportunity for area projects to mitigate cumulative traffic impacts.

Roadway Segments

The LOS of the project area roadway system for existing plus cumulative traffic volumes are shown in Table 2.1-4. Five segments of SR 67 would continue to operate at LOS E or F based on the County's capacity standards as described below.

- The segment of SR 67 between Scripps Poway Parkway and Poway Road would experience an increase of ADT from 21,654 up to 29,532 with the addition of cumulative traffic. Of the 7,878 cumulative trips, 480 would be a result of the Cumming Ranch project. The LOS for this segment would continue to operate at LOS F. (Impact TR-3a)

- ADT along SR 67 would increase to as many as 32,862 trips per day from Poway Road to Archie Moore Road with the addition of 7,356 trips attributable to the cumulative projects. Of these trips, 930 trips per day would be associated with the Cumming Ranch project. The LOS for this segment would continue to operate at LOS F. (Impact TR-3b)
- The segment of SR 67 between Archie Moore Road and Mussey Grade Road would experience an increase of ADT from 23,947 up to 31,645 with the addition of cumulative traffic. Of the 6,637 cumulative trips, 975 would be a result of the Cumming Ranch project. The LOS for this segment would continue to operate at LOS F. (Impact TR-3c)
- ADT along SR 67 would increase to as many as 30,190 trips per day from Mussey Grade Road to Pala Street with the addition of 8,477 trips attributable to the cumulative project list. Of these trips, 225 trips per day would be associated with the Cumming Ranch project. The LOS for this segment would continue to operate at LOS F. (Impact TR-3d)
- The segment of SR 67 from Pala Street to SR 78 would increase to 35,800 ADT with the addition of 5,121 trips attributable to cumulative traffic. The Cumming Ranch project would attribute 165 of these trips. The LOS for this segment would degrade from LOS D to E. (Impact TR-3e)

The poor operating condition of these five segments of SR 67 in the cumulative scenario is considered a ***significant impact*** because Guidelines 4 and 5 would be exceeded. (**Impact TR-3a-3e**)

Under the cumulative scenario, conditions on Dye Road south of SR 67 would also degrade to below the County's standard from LOS C to LOS E. With the addition of traffic attributable to the cumulative projects, ADT on this roadway would increase from 6,128 to 11,870 trips per day, of which 75 trips would be attributable to the proposed project. The poor operating condition of Dye Road in the cumulative scenario is considered a ***significant impact*** because Guidelines 4 and 5 would be exceeded. (**Impact TR-4**)

<u>Intersections</u>

The intersection of SR 67 and Poway Road, as well as the four intersections of the project entry roadways and Highland Valley Road would operate at LOS B during the AM and PM peak hours; therefore, these intersections would not exceed Guidelines 4 and 5 and would result in a ***less than significant*** cumulative impact.

The SR 67/Archie Moore Road intersection would degrade to LOS F during the AM and PM peak hours. Cumulative conditions would add over 500 vehicle trips through this intersection in the AM peak hour. The cumulative delay increase at this intersection would be approximately 48 seconds in the AM and 31 seconds in the PM, meaning that motorists would wait approximately an additional minute in the AM and half minute in the PM to cross through the intersection. Because the increased ADT and delay at this intersection would exceed Guidelines 4 and 5, the cumulative impact at SR 67/Archie Moore Road is considered a ***significant impact***. (**Impact TR-5**)

The SR 67/Scripps Poway Parkway intersection would degrade to LOS E during the PM peak. The cumulative delay increase at this intersection would be 32 seconds in the PM, meaning that motorists would wait approximately an additional half minute to cross through the intersection. Because the increased delay at this intersection would exceed Guidelines 4 and 5, the cumulative impact at SR 67/Scripps Poway Parkway is considered a ***significant impact***. (**Impact TR-6**)

As shown in Table 2.1-5, the SR 67/Highland Valley Road intersection would operate at LOS F during the AM and LOS E during PM peak hours under cumulative conditions. The delay increase that would result from the addition of cumulative traffic at this intersection would be 70 seconds in the AM and 35 seconds in the PM, meaning that motorists would wait approximately 1 additional minute in the AM and 30 seconds in the PM to cross through the intersection. Because the increased delay at this intersection would exceed Guidelines 4 and 5, the cumulative impact at SR 67/Highland Valley Road is considered a ***significant impact***. (**Impact TR-7**)

The SR 67/Montecito Road intersection would operate at LOS F in the PM peak under cumulative conditions. The cumulative delay would increase at this intersection by 42 seconds, meaning that motorists would have to wait almost an additional minute to cross through the intersection in the PM. Because the increased delay at this intersection would exceed Guidelines 4 and 5, the cumulative impact at SR 67/Montecito Road is considered a ***significant impact***. (**Impact TR-8**)

The SR 67 and SR 78 intersection would operate at LOS E in the PM peak under cumulative conditions. The cumulative delay would increase at this intersection by 18 seconds, meaning that motorists would have to wait this much longer to cross through the intersection in the PM. Because the increased delay at this intersection would exceed Guidelines 4 and 5, the cumulative impact at SR 67/SR 78 is considered a ***significant impact***. (**Impact TR-9**)

2.1.5 Mitigation Measures

Mitigation Measure M-TR-1 Existing plus Project Conditions - Street Segments

M-TR-1a. SR 67 - Scripps Poway Parkway to Archie Moore Road

This segment is currently a two-lane roadway with passing lanes at various locations. It currently operates at LOS F according to the County of San Diego's capacity standards for a two-lane highway. This segment will need widening to a four-lane facility to bring it to an acceptable level of service. Requiring the proposed project to mitigate with this regional transportation improvement, would not be proportional to the project's contribution of impact. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.

M-TR-1b. SR 67 - Archie Moore Road to Pala Street

The roadway improvements as part of the project shall be implemented prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW (these improvements are illustrated in Figure 1-8 and described in Section 1.1.2.) and include:

a. Eastbound SR 67 – Widen eastbound SR 67 west of the Highland Valley Road intersection to provide two through lanes and storage in each lane. Widen east of the Highland Valley Road intersection to provide two through lanes for 400 feet and transition back to the existing roadway width within a 660-foot transition.

b. Westbound SR 67 – Widen westbound SR 67 east of the Highland Valley Road intersection to provide two through lanes with storage in each lane with westbound right turn lane retained. Widen west of the Highland Valley Road intersection to provide two through lanes for 400 feet and transition back to the existing roadway width within a 660-foot transition.

c. Highland Valley Road – Widen northbound Dye Road (Highland Valley Road) to provide duel left turn lanes at the intersection.

d. Traffic Signal – The traffic signal at the SR 67/Highland Valley Road intersection would be modified to provide for the improvements described above.

The construction of these improvements shall require additional ROW and the developer shall be responsible for funding the ROW acquisitions. In the event the developer is not able to acquire the necessary ROW from willing sellers during the final engineering process, the developer shall work with the County Real Property Department to acquire the ROW in accordance with County Board of Supervisors Policy J-33.

Mitigation Measure M-TR-2 Existing plus Project Conditions

M-TR-2a. SR 67 and Highland Valley Road Intersection

The direct impacts to the SR 67 and Highland Valley Road intersection shall be mitigated with the widening of SR 67 in the westbound direction to two lanes to accommodate morning peak traffic. This improvement is included in the overall intersection mitigation measures proposed under **Mitigation Measure M-TR-1** for the SR 67 and Highland Valley Road intersection to mitigate roadway segment direct impacts.

M-TR-2b. SR 67 and Archie Moore Road

A signal warrant analysis shall be conducted at this intersection prior to approval of the final map. If signal warrants are met, the developer shall restripe the intersection and install a three-way traffic signal within the existing right of way, to the satisfaction of Caltrans and the County of San Diego. If warrants are met, installation of the traffic signal will be required to be complete prior to occupancy of the first dwelling unit.

Cumulative Conditions

A TIF program has been adopted by the County for the Ramona community and provides opportunity for projects to mitigate cumulative traffic impacts through the payment of fees for their fair share of an impact. The widening of SR 67, improving Dye Road along the impacted segments, and improvements at the intersections described below are specifically included in the TIF program (County of San Diego 2006a, 2008). TIF improvements would be designed to create acceptable traffic operating conditions.

Mitigation Measure M-TR-3

Mitigation Measure M-TR-3a. SR 67 between Scripps Poway Parkway and Archie Moore Road

Payment of TIF fees would partially mitigate the segment of SR 67 between Scripps Poway Parkway and Archie Moore Road. A portion of this segment is within the City of Poway. The cumulative impact at this segment is partially mitigated by payment of the County TIF for impacts within the jurisdictional boundaries of the County. To fully mitigate the impact at this segment, the mitigation would require additional travel lanes on the impacted portion of the segment within the jurisdictional limits of the City of Poway (between Poway Road and Cloudy Moon Drive), but this mitigation is not feasible and, therefore, is not proposed to address this Impact. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.

Mitigation Measures M-TR-3b. SR 67 Segments in County Jurisdiction

To mitigate the project's contribution to cumulative impacts along the three remaining SR 67 segments (**Impact TR-3b**) the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

Mitigation Measure M-TR-4. Cumulative Conditions – Dye Road Segments

To mitigate the project's contribution to cumulative impacts along Dye Road segments (**Impact TR-4**), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

Mitigation Measure M-TR-5. Cumulative Conditions – SR 67/Archie Moore Road Intersection

To mitigate the project's contribution to cumulative impacts at the SR 67/Archie Moore Road intersection (**Impact TR-5**), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

Mitigation Measure M-TR-6. Cumulative Conditions – SR 67/Scripps Poway Parkway Road Intersection

To fully mitigate the project's contribution to cumulative impacts at the SR 67/ Scripps Poway Parkway intersection (**Impact TR-6**), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

Mitigation Measure M-TR-7. Cumulative Conditions – SR 67/Highland Valley Road Intersection

To mitigate the project's contribution to cumulative impacts at the SR 67/Highland Valley Road intersection (**Impact TR-7**), the project applicant shall construct the intersection improvements outlined in **Mitigation Measure M-TR-1** prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

Mitigation Measure M-TR-8. Cumulative Conditions – SR 67/Montecito Road Intersection

To mitigate the project's contribution to cumulative impacts at the SR 67/Montecito Road intersection (**Impact TR-8**), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

Mitigation Measure M-TR-9. Cumulative Conditions – SR 67/SR 78 Intersection

To mitigate the project's contribution to cumulative impacts at the SR 67/SR 78 intersection (**Impact TR-9**), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.

2.1.6 Conclusions

With the implementation of the mitigation measures listed in Section 2.1.5, the proposed project's contribution to circulation system impacts would not exceed the traffic operation performance criteria as outlined in Guidelines 1 though 7 for Impacts TR-1b, TR-2, TR-3b, and TR-4 through TR-9. Thus, the potential traffic impacts at these locations would be reduced to a ***less than significant*** level as described below. For Impacts TR-1a and TR-3a, no feasible mitigation was identified to reduce impacts or mitigation could not reduce impacts to less than

significant. Therefore, impacts at these locations would remain ***significant and unavoidable*** as described below.

Impact TR-1a: Existing plus Project Conditions, SR 67 between Scripps Poway Parkway and Archie Moroe Road. This segment of SR 67 between Scripps Poway Parkway and Archie Moore Road is currently a two-lane roadway with passing lanes at various locations. It currently operates at LOS F according to the County of San Diego's capacity standards for a two-lane highway. This segment will need widening to a four-lane facility to bring it to an acceptable level of service. Requiring the proposed project to mitigate with this regional transportation improvement, would not be proportional to the project's contribution of impact. The segment of SR-67 within the County of San Diego's boundaries is identified as a TIF facility and will be widened to a four-lane facility as part of the TIF program. The segment located within the City of Poway's boundaries is not included in the TIF and will require other funding sources to improve the roadway. Caltrans has prepared and approved a Project Study Report to improve SR-67 from Mapleview in Lakeside to Highland Valley Road in Ramona to a four-lane highway. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.

Rationale: Neither Caltrans, nor Poway, has a funded program in place for adding additional lanes to State Route 67 in this segment and even if there was a program, this impact would not result in mitigation by construction of facility improvements by the applicant because a mitigation measure must be roughly proportional to the impact caused by the project pursuant to CEQA Guidelines, Section 15126.4(a)(4)(B). Given the small percentage of traffic that the project would contribute, a mitigation measure requiring the project to construct required roadway improvements would not be roughly proportional to the impact.

This mitigation measure is infeasible because (i) it is within Caltrans' jurisdiction and (ii) it would not be roughly proportional to the impact. Therefore, the impact would remain significant and unavoidable and a statement of overriding considerations would be required.

The direct impact at SR 67 between Scripps Poway Parkway and Archie Moore Road would remain ***significant and unavoidable***.

Impact TR-1b: Existing plus Project Conditions, SR 67 between Archie Moore Road and Pala Street. Table 2.1-6 demonstrates that, for critical directions of traffic on SR 67, the mitigation improvements proposed for the SR 67/Highland Valley Road intersection improve the segment travel times to better than existing conditions. For the AM peak hour, westbound SR 67 between

Pala Street and Highland Valley Road is the critical segment. This segment is calculated to have an existing travel time of 195.1 seconds during the AM peak. Adding project traffic to this segment would increase this travel time to 202.0 seconds. After construction of the proposed mitigation improvements to the intersection, it is calculated that this travel time would be reduced to 181.3 seconds. For the PM peak hours, eastbound SR 67 between Archie Moore Road and Highland Valley Road is calculated to have an existing travel time of 184.1 seconds. This would increase to 184.5 seconds with the addition of project traffic volumes. After implementation of the proposed mitigation improvements to the intersection, it is calculated that this travel time would be reduced to 176.5 seconds. This impact is considered ***less than significant*** per Guidelines 1 and 2 because the travel time has been reduced to less than what a driver experiences in the existing conditions. This improvement to a Caltrans facility is considered feasible, because Caltrans has indicated that they agree with the scope of the improvements and the developer will be responsible for constructing the improvements prior to the impact occurring.

Impact TR-2a: Existing plus Project Conditions, SR 67 and Highland Valley Road Intersection. As shown in Table 2.1-2, project roadway improvements would improve the SR 67 and Highland Valley Road intersection LOS from E to C in the AM peak and from D to B in the PM peak. These improvements would substantially reduce the delay motorists experience at this intersection for the existing plus project conditions by over 57 seconds in the AM peak and 20 seconds in the PM peak. These improvements proposed for the SR 67/Highland Valley Road intersection shall improve the travel times to better than existing conditions. Therefore, this impact is mitigated to a ***less than significant*** level because LOS C and B are acceptable according to Guideline 2.

Impact TR-2b: Existing plus Project Conditions, SR 67 and Archie Moore Road Intersection. A signal warrant analysis prepared to the satisfaction of Caltrans and the County of San Diego and improvement of the intersection if warranted. Improvements shall include restriping of the intersection and installation of a three-way traffic signal within the existing right of way, to the satisfaction of Caltrans and the County of San Diego. The warrant or the improvements would demonstrate an acceptable LOS level (D or better) at the intersection. Therefore, any potential significant impacts at this intersection would be ***less than significant***.

Impact TR-3a: Cumulative Conditions, SR 67 between Poway Road and Archie Moore Road. Payment of TIF fees would mitigate all segments of SR 67, except the segment of SR 67 between Poway Road and Archie Moore Road. This segment is partially within the City of Poway. The cumulative impact at this segment is partially mitigated by payment of the County TIF for impacts within the jurisdictional boundaries of the County, as described in detail below.

To fully mitigate the impact at this segment, the mitigation would require additional travel lanes on the impacted portion of the segment within the jurisdictional limits of the City of Poway (between Poway Road and Cloudy Moon Drive), but this mitigation is not feasible because neither Caltrans, nor Poway, has a funded program in place for adding additional lanes to State Route 67 in this segment and even if there was a program, this cumulative impact would not result in mitigation by construction of facility improvements by the applicant because a mitigation measure must be roughly proportional to the impact caused by the Project pursuant to CEQA Guidelines, section 15126.4(a)(4)(B). The Cumming Ranch Project would contribute less than 3% of the traffic on this road segment and the cumulative projects combined would contribute approximately 20% of the traffic along this roadway segment. Given the small percentage of traffic that the cumulative projects would contribute, a mitigation measure requiring the Project to construct required roadway improvements would not be roughly proportional to the cumulative impact.

Rationale: Neither Caltrans, nor Poway, has a funded program in place for adding additional lanes to State Route 67 in this segment and even if there was a program, this cumulative impact would not result in mitigation by construction of facility improvements by the applicant because a mitigation measure must be roughly proportional to the impact caused by the project pursuant to CEQA Guidelines, Section 15126.4(a)(4)(B). The cumulative projects would contribute approximately 20% of the traffic along this roadway segment. Given the small percentage of traffic that the cumulative projects would contribute, a mitigation measure requiring the project to construct required roadway improvements would not be roughly proportional to the cumulative impact.

This mitigation measure is infeasible because (i) it is within Caltrans' jurisdiction, (ii) Caltrans has no plans for implementing this mitigation measure, and (iii) it would not be roughly proportional to the impact. Therefore, the impact would remain significant and unavoidable and a statement of overriding considerations would be required.

The cumulative impact at SR 67 between Poway Road and Archie Moore Road would remain ***significant and unavoidable***.

Impact TR-3b through 10 Cumulative Conditions

These impacts would be mitigated through the TIF program adopted by the County for the Ramona community, which provides opportunity for projects to mitigate cumulative traffic impacts through the payment of fees for their fair share of an impact. The TIF program includes the impacted segments of SR 67 as a planned improvement that would be funded by

developments with cumulative impacts to that roadway segment. Planned improvements would create better operating conditions and allow traffic to flow without substantial delays.

Implementation of these mitigation measures would reduce potential cumulative impacts to less than significant because the County has developed an overall programmatic solution that addressed existing and projected future road deficiencies in the unincorporated portion of the County.

Impact TR-3b: Cumulative conditions would degrade three street segments along SR 67 within the County. Project improvements at the SR 67/Highland Valley Road intersection, combined with the TIF improvements along SR 67 and at other key intersections would create better operating conditions, such as shorter delays at intersections and less slowing between intersections. Motorists would be able to perceive these improvements as they would pass through the SR 67 study area corridor quicker and with less traffic congestion. Implementation of the TIF improvements to achieve acceptable operating conditions would substantially reduce segment congestion and would be readily perceptible by motorists. The cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.

Impact TR-4: Cumulative conditions would degrade Dye Road east of SR 67. Project improvements at the SR 67/Highland Valley Road intersection, combined with the TIF improvements along the impacted section of Dye Road would provide readily perceivable traffic improvements along Dye Road due to better flow through the intersection with SR 67 and improved movement along the roadway segment. The cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.

Impact TR-5: Cumulative conditions would add over 500 vehicle trips through the SR 67/Archie Moore Road intersection in the AM peak hour and motorists would wait approximately an additional minute in the AM and half minute in the PM to cross through the intersection. Implementation of the TIF improvements to achieve acceptable operating conditions would substantially reduce the long delay at this intersection and would be readily perceptible by motorists. The cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.

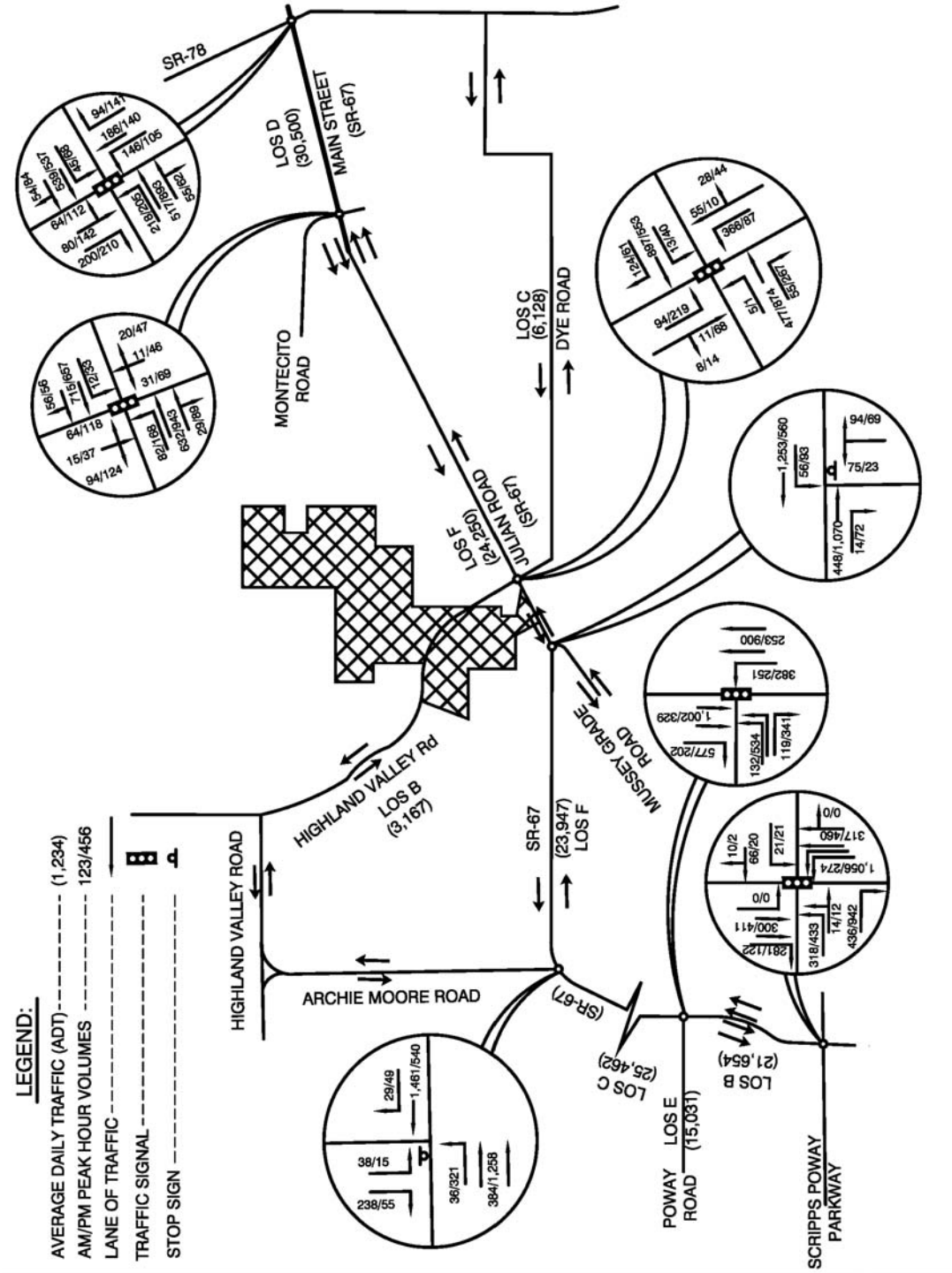
Impact TR-6: The cumulative delay increase at SR 67/Scripps Poway Parkway intersection would be 32 seconds in the PM, meaning that motorists would wait approximately an additional half minute to cross through the intersection. Implementation of the TIF improvements to achieve acceptable operating conditions would substantially reduce the long delay at this

intersection and would be readily perceptible by motorists. The cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.

Impact TR-7: As shown in Table 2.1-2, with the implementation of the project improvements, cumulative conditions at the SR 67/Highland Valley Road intersection would improve from LOS F to LOS C in the AM peak hour and LOS E to LOS C in the PM peak hour. As shown in Table 2.1-2, the cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.

Impact TR-8: The SR 67/Montecito Road intersection would operate at LOS F in the PM peak under cumulative conditions and motorists would have to wait almost an additional minute to cross through the intersection. Implementation of the TIF improvements to achieve acceptable operating conditions would substantially reduce the long delay at this intersection and would be readily perceptible by motorists. The cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.

Impact TR-9: The SR 67/SR 78 intersection would operate at LOS E in the PM peak under cumulative conditions and motorists would have to wait this much longer to cross through the intersection in the PM. Implementation of the TIF improvements to achieve acceptable operating conditions would substantially reduce the long delay at this intersection and would be readily perceptible by motorists. The cumulative impact would be reduced to ***less than significant*** per Guidelines 4 and 5.



Source: RCE Transportation Engineering

Figure 2.1-1
Existing Traffic Volumes

P:\2008\08080045 Cumming Ranch\6Graphics\Figures\4th Iteration EIR\Figure 2.1-1 existing traffic volumes.ai dbrady 10/21/10

Table 2.1-1
Street Segment LOS, Existing Plus Project Conditions

Segment	LOS E Capacity	Existing		Existing Plus Project		
	ADT	LOS	ADT	LOS	ADT	Significant?
SR 67						
Scripps Poway Parkway to Poway Road	34,200	B	21,654	B	22,134	No
Poway Road to Archie Moore Road	34,200	C	25,462	C	26,392	No
Archie Moore Road to Mussey Grade Road	16,200	F	23,947	F	24,992	**Yes**
Mussey Grade Road to Pala Street	16,200	F	24,250	F	24,475	**Yes**
Pala Street to SR 78	37,000	D	30,500	D	30,665	No
Highland Valley Road						
West of SR 67	16,200	B	3,167	B	3,392	No
Dye Road						
East of SR 67	16,200	C	6,128	C	6,203	No

Table 2.1-2
SR 67/Highland Valley Road Intersection Operating Conditions

	Existing Plus Project				Existing Plus Cumulative			
	AM peak		PM peak		AM peak		PM peak	
	LOS	Delay	LOS	delay	LOS	delay	LOS	delay
Without Project Roadway Improvements	E	79.8	D	39.7	F	147.0	E	71.5
With Project Roadway Improvements	C	21.9	B	19.4	C	29.3	C	33.0

Table 2.1-3
Intersection LOS, Existing Plus Project Conditions

	Existing				Existing Plus Project					
	AM Peak		PM Peak		AM Peak			PM Peak		
	LOS	Delay	LOS	Delay	LOS	Delay	Signifi-cant?	LOS	Delay	Signifi-cant?
Signalized										
SR 67/Scripps Poway Pkwy	C	26.0	D	46.0	C	26.7	No	D	44.7	No
SR 67/Poway Road	B	15.6	B	11.8	B	15.9	No	B	12.0	No
SR 67/Highland Valley Road	E	76.6	D	36.4	E	79.8	Yes	D	39.7	No
SR 67/Montecito Road	D	37.7	D	46.4	D	37.9	No	D	47.0	No
SR 67/SR 78	D	40.3	D	43.0	D	40.4	No	D	43.2	No
Unsignalized										
SR 67/Mussey Grade Road	C	19.3	C	21.3	C	20.5	No	C	23.3	No
SR 67/Archie Moore Road	D	29.9	D	30.5	D	32.2	No	D	32.0	No
Highland Valley Road/Engelmann	-	-	-	-	A	9.5	No	A	9.4	No
Highland Valley Road/Cumming North	-	-	-	-	B	10.4	No	B	10.4	No
Highland Valley Road/Cumming South	-	-	-	-	A	9.5	No	A	9.5	No
Highland Valley Road/Highland Ct.	-	-	-	-	A	10.0	No	B	10.0	No

Note: Delays shown are average intersection delays in seconds.

A dash (-) indicates that this intersection does not currently exist.

Table 2.1-4
Street Segment LOS, Cumulative Conditions

Segment	LOS E Capacity	Existing		Cumulative		
	ADT	LOS	ADT	LOS	ADT	Significant?
SR 67						
Scripps Poway Parkway to Poway Road	34,200	B	21,654	D	29,532	No
Poway Road to Archie Moore Road	34,200	C	25,462	E	32,862	**Yes**
Archie Moore Road to Mussey Grade Road	16,200	F	23,947	F	31,645	**Yes**
Mussey Grade Road to Pala Street	16,200	F	24,250	F	30,190	**Yes**
Pala Street to SR 78	37,000	D	30,500	E	35,800	**Yes**
Highland Valley Road						
West of SR 67	16,200	B	3,167	C	5,092	No
Dye Road						
East of SR 67	16,200	C	6,128	E	11,870	**Yes**

Table 2.1-5
Intersection LOS, Cumulative Conditions

	Existing				Cumulative					
	AM Peak		PM Peak		AM Peak			PM Peak		
	LOS	Delay	LOS	Delay	LOS	Delay	Signifi-cant?	LOS	Delay	Signifi-cant?
Signalized										
SR 67/Scripps Poway Pkwy	C	26.0	D	46.0	C	32.1	No	E	78.0	No[1]
SR 67/Poway Road	B	15.6	B	11.8	B	18.9	No	B	12.1	No
SR 67/Highland Valley Road	E	76.6	D	36.4	F	147.0	**Yes**	E	71.5	**Yes**
SR 67/Montecito Road	D	37.7	D	46.4	D	52.6	No	F	88.5	**Yes**
SR 67/SR 78	D	40.3	D	43.0	D	46.3	No	E	61.3	**Yes**
Unsignalized										
SR 67/Mussey	C	19.3	C	21.3	F	52.6	**Yes**	E	43.2	**Yes**
SR 67/Archie	D	29.9	D	30.5	F	78.0	**Yes**	F	61.6	**Yes**
Highland Valley Road/Engelmann	-	-	-	-	B	10.8	No	B	10.6	No
Highland Valley Road/Cumming N	-	-	-	-	B	12.7	No	B	12.6	No
Highland Valley Road/Cumming S.	-	-	-	-	B	10.8	No	B	10.7	No
Highland Valley Road/Highland Court	-	-	-	-	B	12.0	No	B	12.0	No

Note: Delays shown are average intersection delays in seconds.

[1] The intersection of SR 67 and Scripps Poway Parkway is within the limits of the City of Poway. That jurisdiction uses the Santec guidelines to determine significance of impacts. Under these guidelines, there are no significant cumulative impacts.

Table 2.1-6
Roadway Segment Operations with Improvements

Segment	Length (miles)	Existing (AM/PM)				Existing Plus Project (AM/PM)				Existing Plus Project – With Improvements (AM/PM)			
		Segment Travel Time (sec)	Delay (sec)	Total Travel Time (sec)	Arterial Speed MPH)	Segment Travel Time (sec)	Delay (sec)	Total Travel Time (sec)	Arterial Speed (MPH)	Segment Travel Time (sec)	Delay (sec)	Total Travel Time (sec)	Arterial Speed (MPH)
W/B SR 67 – Pala Street to Archie Moore Road													
Pala to Highland Valley Road	2.0	160/ 160	35.1/ 14.3	**195.1**/ 174.3	**36.9**/ 41.3	160/ 160	42.9/ 16.0	**202.0**/ 176.0	**35.5**/ 40.9	160/ 160	21.3/ 14.3	**181.3**/ 174.3	**39.7**/ 41.3
Highland Valley Road to Archie Moore Road	2.0	160/ 160	3.8/ 0.7	163.8/ 160.7	44.0/ 44.8	160/ 160	4.3/ 0.8	164.3/ 160.8	43.8/ 44.8	160/ 160	10.8/ 0.8	170.8/ 160.8	42.2/ 44.8
E/B SR 67 – Pala Street to Archie Moore Road													
Pala to Highland Valley Road	2.0	160/ 160	76.2/ 59.3	236.2/ 219.3	30.5/ 32.8	160/ 160	82.1/ 60.4	242.1/ 220.4	29.7/ 32.7	160/ 160	83.4/ 66.2	243.4/ 226.2	29.6/ 31.8
Highland Valley Road to Archie Moore Road	2.0	160/ 160	15.9/ 24.1	175.9/ **184.1**	40.9/ **39.1**	160/ 160	17.2/ 24.5	177.2/ **184.5**	40.6/ **39.0**	160/ 160	17.0/ 16.5	177.0/ **176.5**	40.7/ **40.8**

2.2 Significant Irreversible Environmental Changes Resultant from Project Implementation

Section 21100(b)(2)(B) of the CEQA Statutes and Section 15126.2(c) of the CEQA Guidelines require that an EIR analyze the extent to which the proposed project's primary and secondary effects would impact the environment and commit nonrenewable resources to uses that future generations would not be able to reverse.

"Significant irreversible environmental changes" include the use of nonrenewable natural resources during the initial and continued phases of the project, should this use result in the unavailability of these resources in the future. Primary impacts and, particularly, secondary impacts generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with projects. Irretrievable commitments of these resources area required to be evaluated in an EIR to ensure that such consumption is justified (CEQA Guidelines Section 15126.2(c)).

The first irreversible environmental change that would result from implementation of the project site would be the development of a portion of the project site from open space and agricultural use to an urbanized land use. This developed use would create changes to environmental factors such as visual resources, drainage, traffic, etc., which are all discussed in detail in this EIR.

A second irreversible environmental change that would result from project implementation would be wildlife's limited use of the developed portions of the project site as foraging areas or movement corridors. Though the development would result in these irreversible environmental changes, the Ramona Community Plan has planned developed uses for the project site as the rural area continues to grow and expand. Implementation of the Cumming Ranch project would be in-line with those planning and development goals of the Ramona Community Plan. The project proposes a less intensive and expansive development than outlined in the Ramona Community Plan and thereby, with development of the project site, would reduce the resulting irreversible environmental changes that could have occurred.

Thirdly, the Cumming Ranch project is not anticipated to result in irreversible damage from environmental accidents, such as an accidental spill or explosion of a hazardous material. During construction, equipment would be using various types of fuel and material classified as hazardous. In the state of California, the storage and use of hazardous substances are strictly regulated and enforced by various local, regional, and state agencies. The enforcement of these existing regulations would preclude credible significant project impacts related to environmental accidents.

The project would use minor amounts of both renewable and nonrenewable natural resources for project construction. Nonrenewable resources are those resources that cannot be replenished by natural means, including oil, natural gas, and iron ore. Nonrenewable natural resources used for project construction may include fossil fuels in the form of diesel, gasoline, or oil for construction equipment. The Cumming Ranch project would not use nonrenewable fossil fuels at a greater rate than other typical construction projects and may, in certain circumstances, use less. For instance, the project has been designed to have a balanced cut/fill ratio onsite and would not require long haul trips to import or export soil for the project, thus, reducing the amount of fossil fuel consumed by project implementation. Another example of nonrenewable resource conservation during project construction would be the grading of only individual lot pads rather than a mass grading of the entire site.

Uses of nonrenewable resources during project operation would include natural gas or other fossil fuels used to provide power and heating sources to the homes. The usage of nonrenewable resources in the homes developed by the project would not be greater than in other typical homes in the San Diego region. The new residences would accommodate forecasted growth in the San Diego region and would be expected to result in fossil fuel use if the new growth was accommodated through another project or location than the proposed project. In general, the proposed project would not increase the overall rate of use of any nonrenewable natural resource, or result in the substantial depletion of any nonrenewable resource.

Renewable natural resources are those resources that can be replenished by natural means, including water, lumber, and soil. Natural resources include minerals, energy, land, water, forestry, and biota. All biological impacts are discussed, and mitigated if necessary, in this EIR. Lumber and soil would be required for construction of the homes. However, as discussed above under nonrenewable resources, the homes that would result from this project would accommodate forecasted growth for the area and if this project were not to occur, most resources would be expected to be used in a similar housing project needed to fulfill the future housing demand.

The size of the average new house is 2,324 square feet and requires more than 1,300 cubic feet of lumber and 6,000 square feet of structural panels (plywood) to construct the house. Generally, other resources used to construct a typical home include approximately 780 pounds or insulation, 300 pounds of nails and screws made of iron and zinc, 270 pounds of glass for windows and glass doors, made from silica sand, limestone, and feldspar, 500 pounds of copper used plumbing pipes and electrical wiring, 14,200 pounds of gypsum for wallboard, and other materials such as aluminum, brick, steel, gravel, etc. (Mineral Information Institute 2001). These materials would be generally required for the construction of the 125 homes on the project site.

In recent years, construction in San Diego County has averaged approximately 12,000 new homes per year (Building Industry Association of San Diego 2007). If this trend continues, it is estimated that 120,000 new homes would be constructed within the next ten years, approximately the timeframe for completion and full occupation of the Cumming Ranch project. The project's contribution to the development of new homes in the San Diego region and the resources associated with that construction is minimal, less than .001 percent.

Water would also be necessary during construction and operation of the project as well as plant materials for landscaping. The native landscaping plan for the project, accompanied by the design which leaves much of the project site in its natural state, would reduce the amount of water used as compared to a typical high water demand type of residential development.

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CHAPTER 3.0
SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT WHICH CAN BE MITIGATED

This chapter of the EIR provides a detailed discussion of those issue areas that would result in potentially significant but mitigable impacts. For those impacts that are found to be significant, mitigation measures are included that would reduce the identified significant impact to less than significant levels. The topical sections in this chapter include Biological Resources, Cultural Resources, Noise, Aesthetic and Visual Quality, Climate Change, and Public Services and Recreation. Each issue area analysis follows the same format and consists of the following subsections:

- **Existing Conditions** – This section describes the existing conditions of the proposed project site at the time the NOP was issued with regard to the environmental factors reviewed.

- **Guidelines for the Determination of Significance** – This section explains how an impact is judged to be significant in this EIR.

- **Analysis of Project Effects and Determination of Significant Impact –** This section provides an analysis of potential impacts of the proposed project and explains why the impacts were found to be significant. Significant impacts are numbered to correspond with mitigation measures. Less than significant impacts are not numbered.

- **Cumulative Impact Analysis –** This section discusses the potential for the project to incrementally add to cumulative impacts. Analysis is provided to determine if implementation of the project would result in cumulatively considerable impacts. Significant impacts are numbered to correspond with mitigation measures. Less than significant impacts are not numbered.

- **Mitigation Measures –** This section identifies mitigation measures that would mitigate each impact found to be significant. Discussion is included to show why the mitigation measures fully mitigate the impact. Each mitigation measure is numbered to correspond with the associated impact. The level of significance after implementation of the mitigation measures is identified.

- **Conclusions** – This section states a conclusion as to whether each of the project's significant environmental effects of the specific subject area analysis have or have not been reduced to below a level of significance through mitigation and the supporting rationale for that conclusion.

3.1 Biological Resources

This section summarizes the potential onsite and offsite environmental impacts to biological resources that would result with implementation of the proposed project. This section is based on the Biological Technical Report for the Cumming Ranch project (HDR 2010), which is included in Appendix B. General biological resource surveys and vegetation community mapping were conducted on multiple visits throughout 2000 to 2004 and 2006 at the Cumming Ranch property. Several sensitive and/or potentially occurring sensitive resources were identified during those surveys. Based on this information, focused surveys were conducted between the years of 2000 and 2004 and in 2006, including surveys for federally and state-listed species, species considered sensitive by the County, and mapping of oak trees and jurisdictional wetland habitats. More information on the extent of these surveys is provided in the Biological Technical Report. Appendix C of this EIR contains the Conceptual RMP (TAIC 2010) and Appendix D includes the Conceptual Revegetation Plan (AECOM 2010a) for the project.

The biological assessment of impacts included both impacts that would occur onsite (236.92 acres) and offsite (3.61 acres) with implementation of the project. Offsite project impacts include:

1. Intersection improvements at Highland Valley Road and SR 67 (0.88 acres);
2. Widening of Highland Valley Road from Highland Valley Court to intersection of SR 67 (0.94 acres);
3. 30-foot wide sewer alignment within Hardy Ranch (0.83 acres); and
4. 20-foot wide trail alignment within Hardy Ranch (0.96 acres) (a portion of the trail alignment is within the same alignment as the sewer line).

3.1.1 Discussion of Existing Conditions Relating to Biological Resources

Vegetation Communities and Habitats

Vegetation types or plant communities are assemblages of plant species that usually coexist in the same area. The classification of vegetation communities is based upon the life form of the dominant species within that community and the associated flora. Figures 3.1-1a, 3.1-1b, and 3.1-1c show the locations of the vegetation communities on the Cumming Ranch site and at areas of offsite improvements (sewer lines, trails, and roadway improvements). The Cumming Ranch property supports the following 15 vegetation communities:

Open Engelmann Oak Woodland

Open Engelmann oak woodland is an oak community that is restricted to the interior of the Peninsular Ranges in the low-lying hills and mesas of western Riverside and San Diego counties. Open Engelmann oak woodland is dominated by Engelmann oak (*Quercus engelmannii*). This community occurs on the gentler, more arid slopes. The Cumming Ranch property has scattered Engelmann oaks throughout Area A. Some of these oaks occur within the agricultural area north of Highland Valley Road; others occur with a chaparral understory to the west of the central hills.

Open Coast Live Oak Woodland

Coast live oak woodland found onsite is an open-to-dense tree community with coast live oak (*Quercus agrifolia*) as the dominant overstory species and with Engelmann oak as an occasional associate. This community can occur on mesic north-facing slopes and in canyon bottoms. This community is well represented in the cismontane, interior valleys and foothills of the Peninsular Ranges. The Cumming Ranch property has scattered coast live oaks throughout Area A. These occur in the same areas as the Engelmann Oaks.

Valley Needlegrass Grassland

Native grasslands are communities dominated by perennial bunchgrasses such as purple needlegrass (*Nassella pulchra*), golden stars (*Bloomeria crocea* ssp. *crocea*), California blue-eyed grass (*Sisyrinchium bellum*), and rip-gut grass (*B. diandrus*). Nearly all of the native grasslands in California have been replaced by annual grasses, a majority of which originated in the Mediterranean region. Native grasslands in California presently exist as small isolated islands. Many of these small refugia occur on atypical soils, generally fine textured soils such as clays, where these natives may have a competitive advantage over the nonnative species. A small acreage of recovering native grassland occurs within Area C.

Southern Willow Scrub

The southern willow scrub onsite is a dense, broad-leaved, winter deciduous riparian thicket dominated by several species of willow (*Salix* sp.) in association with mule fat (*Baccharis salicifolia*). This community requires periodic flooding for its maintenance. In the absence of periodic flooding, this community would develop into a riparian woodland or forest. Southern willow scrub can be found within Area A within an unnamed drainage north of Highland Valley Road, at the northern boundary of Area B, and in the Santa Maria Creek drainage located adjacent to the southern boundary of Area C.

Mulefat Scrub

The mulefat scrub onsite is a riparian shrub community that is strongly dominated by mulefat, in association with several willow species. In the absence of periodic flooding, this community would develop into a riparian woodland or forest. Mulefat scrub can be found in Area A within an unnamed drainage north of Highland Valley Road, at the northern boundary of Area B, and in the Santa Maria Creek drainage located adjacent to the southern boundary of Area C.

Cismontane Alkali Marsh

The cismontane alkali marsh found onsite is a community dominated by perennial, emergent monocots that grow in either standing water, or in soils that are saturated during most or all of the year. High evaporation rates combined with low flow levels of fresh water create high saline conditions, which are particularly prevalent during the summer months. This community occurs along ephemeral streams and floodplains. Common species onsite include yerba mansa (*Anemopsis californica*) and salt grass (*Distichlis spicata* var. *stricta*). Cismontane alkali marsh is found within the low-lying areas throughout Areas A, B, and C in association with the various drainages onsite and contains significant populations of the County sensitive plant species southern tarplant (*Centromadia parryi* ssp. *australis*).

Vernal Pools

Vernal pools are ephemeral plant communities that support an unusual flora and fauna. This is reflected by the high number of species that are endemic (species that have a high fidelity to a certain region or habitat) to vernal pools. Vernal pools are islands, both spatially and temporally. As spatial islands they are somewhat isolated from each other by nonpool habitat, such as, mima mounds and other upland, plant communities. Vernal pools are temporal islands; these hydric communities are present only during certain portions of the year (if conditions warrant).

Several topographic and edaphic conditions are prerequisites for the occurrence of vernal pools. The topography requirement is a series of microdepressions (vernal pools) and microhummocks (mima mounds). The depressions collect water from precipitation and runoff from the mima mounds. The mima mounds that surround these pools prevent runoff from the pools. The important edaphic requirement is either a subsoil hardpan or claypan which prevents the draining of water from these pools through downward percolation. During the rainy season, vernal pools accumulate water, which eventually evaporates over the course of the dry season. With the receding pool margins gradients of water availability and ion concentration are established from the pool periphery to the pool center. This results in the successive establishment of plant

species, along the receding pool margins. Their location is highly dependent on these various microenvironmental gradients.

Some of the indicator species of the vernal pools that were identified onsite include grass poly (*Lythrum hyssopifolia*), wooly marbles (*Psilocarphus brevissimus*), and Boisduvalia sp. Other species common in the adjacent grasslands were prevalent. One vernal pool is located in the northwestern corner of Area A (Lot H open space), another vernal pool is located in the southwestern corner of Area B, and 12 vernal pools are located throughout Area C.

Nonvegetated Channel

Twelve drainages occur within the Cumming Ranch property that include the east-to-west traversing drainages of Santa Maria Creek and Etcheverry Creek as well as several smaller tributaries to these creeks, isolated "waters of the U.S.," and areas determined to only meet state and/or County RPO wetland criteria. The nonvegetated channels convey natural rain water and associated runoff but do not necessarily occur within all drainages or may just occur within a small section of a drainage. Of the twelve drainage segments within the Cumming Ranch property, eight exhibit nonvegetated channels where the channel comprises sandy substrate that exhibits no vegetative growth or that has been scoured by a storm event.

Coastal Sage Scrub (Inland Form)

Coastal sage scrub (CSS) is one of the major shrub-dominated (scrub) communities within California. This community occurs on xeric sites with shallow soils. CSS may be dominated by a variety of different species depending onsite specific topographic, geographic and edaphic conditions. Onsite, there are several recognized sub-associations of CSS based upon the dominant species. Typical CSS dominants include California sagebrush, flat-top buckwheat, laurel sumac (*Malosma laurina*), white sage (*Salvia apiana*), sawtooth sumac (*Hazardia squarrousus*), and California brickellbush (*Brickellia californica*). CSS can be found within large and small patches throughout the project site in all areas. Where it occurs in larger patches, it typically exhibits a very open shrub cover. A fire burned 22 acres of sage scrub in September 2003 in the central hills of Area A.

Granitic Southern Mixed Chaparral

Southern mixed chaparral is a diverse mixture of sclerophyllous shrubs that occurs in the foothills of San Diego County and northern Baja California. Southern mixed chaparral has a more pronounced community structure (canopy height and higher cover values) than other

chaparral communities. Southern mixed chaparral typically occurs on north-facing slopes where microenvironmental conditions are more mesic. Chamise (*Adenostoma fasciculatum*) and scrub oak are the most dominant species onsite. Granitic southern mixed chaparral can be found within small to medium sized patches in Area A on and adjacent to the central hills and south of Highland Valley Road along the western boundary.

Granitic Chamise Chaparral

Chamise has the widest range of any chaparral shrub, and occurs in a variety of chaparral communities. Chamise chaparral is dominated, sometimes exclusively, by chamise. In some localities this community can attain high cover values and height. Though the floristic diversity of this community is low, chamise and scrub oak (*Quercus berberidifolia*) are the predominant species. Granitic chamise chaparral can be found within small and larger patches in Area A on and adjacent to the central hills, representing senescent populations of chamise.

Nonnative Grassland

Most of the grasslands in the coastal and foothill areas of San Diego County are dominated by exotic, annual grasses of Mediterranean origin. The Mediterranean region has a maritime climate similar to that of much of cismontane California. The Mediterranean region has a long history of agriculture and grazing activities and many of these introduced species are disturbance associated. Intensive grazing and agriculture, accidental and intentional species introductions, along with some severe droughts during the early Spanish Era, allowed for the successful invasion of these exotic species and the subsequent displacement and exclusion of native grasses. Nonnative grassland occurs throughout various locations within Area A, adjacent to agricultural lands, drainages, and natural vegetation and makes up the majority of the acreage within Area C.

Field/Pasture

The field/pastures at the project site have historically been or are currently under cultivation or used for grazing. Agricultural activities occur throughout most of Areas A and B and cover a little more than half of the acreage onsite. These operations have been ongoing for the last 50 years and crop production has consistently been oat hay (*Avena sativa*). There is a clear demarcation of agricultural crop land from nonnative grassland. Even when resting between harvesting and planting, the agricultural lands continue to exhibit less than 50 percent cover of nonnative grasses (this does not include remnants of oat hay). During this time, the area is grazed by cattle to reduce the standing crop cover not harvested. This further precludes the invasion of nonnative grasses from the crop lands as they are quickly consumed by the cattle.

Eucalyptus Woodland

Two mature stands of eucalyptus woodland occur offsite on the Hardy Ranch property. Though offsite, the habitat is along the alignment of the proposed offsite sewer line and trail and; thus, is included in this section. This habitat is currently being utilized by cattle for shade, shelter, and limited grazing opportunities. Barn owl, red-tailed hawk, and red-shouldered hawk have been observed perching and foraging within and adjacent to these two stands.

Disturbed and Developed Habitats

Disturbed habitats on the Cumming Ranch property include Old Highland Valley Road which occurs north of the existing Highland Valley Road in Area A. The older section of road is in major disrepair and is showing regrowth of native and nonnative plant species. Disturbed area also includes a large brush pile that has been onsite for many years as well as some area that may have been under agricultural use at one time in Area A. Another small area of disturbed habitat occurs in Area B adjacent to SMWWTP as well as within the existing rights-of-way. The only developed area within the project footprint is Highland Valley Road which bisects Area A in an east to west direction. The Highland Valley Road easement comprises a 94-foot-wide right-of-way. Offsite developed areas include SR 67 and Dye Road.

Wildlife

Sixty-eight animal species (vertebrates and invertebrates) were detected during the multiple biological resource surveys conducted at the Cumming Ranch property between summer 2000 and summer 2004 and in 2006 during the wetland delineation update. Animal species present onsite were identified by direct observation or signs of their presence (tracks, scat, dens, etc.). The Biological Technical Report (Appendix B) contains a list of the animal species observed.

Wildlife Corridors

Wildlife movement corridors, also called dispersal corridors are linear features whose primary wildlife function is to connect at least two significant habitat areas. Corridors and linkages are further defined by the County of San Diego as a specific route that is used for movement and migration of species. A corridor may be different from a linkage because it represents a smaller or narrower avenue for movement. Linkages are areas of land which support or contribute to the long-term movement of wildlife and genetic material including year-round foraging, reproduction, and dispersal habitat for resident plants and animals.

The viability and quality of wildlife corridors or linkages are dependent onsite specific factors. Topography and vegetative cover are important factors and should provide cover for both predator and prey species. They should direct animals to areas of contiguous open space or resources and away from humans and development. A wildlife corridor that supports large predator and prey animals is typically considered to be functioning at the highest of levels for a wildlife corridor or linkage. Areas not considered as functional wildlife dispersal corridors or linkages are typically obstructed or isolated by concentrated development and heavily traveled roads, known as "chokepoints." One of the worse scenarios for dispersing wildlife occurs when a large block of habitat leads animals into "cul-de-sacs" of habitat surrounded by development. These habitat "cul-de-sacs" frequently result in adverse human / animal interface.

Cumming Ranch is located at the southern edge of the Ramona grasslands. The connectivity to open space to the south is partially restricted by rural developed parcels and heavy presence of traffic along SR 67. To the southeast of Cumming Ranch, a small portion of grassland and agricultural land extends across SR 67 towards the Barnett and Monte Vista Ranch Preserves. Some of these areas to the southeast of Cumming Ranch are proposed for future development. Connection to or from Cumming Ranch would be via Etcheverry Creek and across or under SR 67. West of Area A, rural residential developments exist with a network of dirt and paved road and fencing around properties. Ramona grasslands areas to the west and north of Areas B and C are much more open and less restrictive to potential wildlife movement. Both Etcheverry Creek and Santa Maria Creek provide linkages to these open areas to the west and northwest.

Etcheverry Creek is nearly devoid of vegetative cover and concealment, but offers a relatively deep creek bed for topographic cover. Santa Maria Creek has sparse vegetative cover in the form of oak and willow trees, with little to no substantive understory, but does offer a wide base of travel and uninhabited adjacent lands in Areas B and C, which connect to more open lands to the west and north. Corridor and linkage possibilities occur to the southeast at SR 67 for Etcheverry Creek towards the Barnett and Monte Vista Ranch Preserves. Santa Maria Creek is blocked to the east with the dense development of the Ramona Town Center.

Wildlife movement and associated dispersal corridors on the site are most directly related to medium to small predators and their associated prey (e.g., coyotes, badgers, raptors, longtail weasels, cottontails, jackrabbits, and small rodents). Small sized animals (i.e., reptiles, amphibians, birds, bats, etc.) use Etcheverry Creek and Santa Maria Creek as a linkage within the Cumming Ranch property and to adjacent lands to the north and west. Medium sized animals (i.e., raptors, coyotes, badgers, longtail weasels, cottontails, jackrabbits, ground squires, and small rodents) use the two creeks as linkages and corridors where the site functions on a high level for both predator and prey species given their residency on or adjacent to the site.

Large sized animals may use the creeks and suitable uplands as movement corridors, although their movement may be restricted due to the lack of concealment and thermal coverage. The site is not expected to function at a high level for large mammal movement due to the lack of significant cover; however, mule deer were observed moving northward in the central hills of Area A in 2004, and signs of mountain lion were detected along the dirt roads and trails in Area A also in 2004.

The location of the project site within the Ramona grasslands is important as the grasslands offer many of the more resident raptor species prime foraging, roosting, and nesting opportunities. Many migratory species reside in the Ramona grasslands during their seasonal stay or they will utilize the area as a primary stop-over point along their northern and southern routes of travel. Specifically, the project site provides foraging, roosting, and perching opportunities, with limited nesting availability. Area A is mostly comprised of active agriculture; however, Area A also supports ridgelines, rock outcrops, trees, and shrub lands that function as raptor perch and nesting areas with foraging opportunities throughout the rest of the area. Area B is currently under cultivation and provides raptor prey base. Dry farming does not substantially diminish the land value for raptor foraging. Area C is currently high-quality raptor habitat for a variety of raptor species.

Sensitive Biological Resources

Sensitive Vegetation Communities

The County of San Diego's RPO defines "sensitive habitat lands" as follows:

> "Land which supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State of California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq.),including the area which is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor."

Under the above definition, the specific vegetation communities present at the Cumming Ranch site that meet the criteria of sensitive habitat lands include southern willow scrub, mulefat scrub, cismontane alkali marsh, vernal pools, CSS-inland form, and grassland habitats, when of good quality and suitable for occupation by associated sensitive species known from the Ramona grasslands area. Lands contributing to the Ramona grasslands or linkages would also qualify as sensitive habitat lands.

Jurisdictional Wetlands and Waters

Wetland and riparian communities generally are considered sensitive due to their rarity, decline due to urban development, and the number of sensitive species dependent on them. Activities within wetlands, most open water bodies, and ephemeral or perennial streams are regulated by the CDFG and ACOE. Wetlands and nonwetland "waters of the U.S." are covered under the jurisdiction of the ACOE's Section 404 permit process if those areas connect to navigable waters as defined by the ACOE. The Clean Water Act (CWA) permit provisions regulating dredge and fill operations are enforced by the ACOE and USEPA, often with technical input from the USFWS. Wetlands are also specifically addressed by CDFG Code Sections 1600-1606 (Streambed Alteration Agreement). Vernal pools are considered wetlands under the County RPO. Some vernal pools are also regulated by the Endangered Species Act, depending on the presence of sensitive species.

A wetland delineation was performed between February 17 and March 5, 2004 prior to the completion of project design. The wetland delineation was then updated in February 2006 to provide specific locations and boundaries of federal, state, and County jurisdiction wetlands and waters in Areas A and B and offsite at the Hardy Ranch for project planning and designing purposes. The details of the 2004 and 2006 delineations are provided as an appendix to the Biological Technical Report (Appendix B). The amount of federal ACOE and CDFG jurisdictional "waters of the U.S." and County-defined wetlands within the project study area is summarized in Tables 3.1-1 through 3.1-3. Within the Cumming Ranch boundaries, there is a total of 4.29 acres of ACOE jurisdictional and/or regulated water and wetlands, 55.73 acres of CDFG jurisdictional wetlands, and 64.13 acres of County RPO wetlands.

Sensitive Plants

Sensitive plants include those listed by the USFWS and CDFG or are candidates for listing, and/or are considered sensitive by CDFG, the County, and/or the California Native Plant Society (CNPS).

Sensitive plant species surveys were conducted during the appropriate times of year throughout the spring and summer months between 2000 and 2004. In addition, a comprehensive oak tree inventory was conducted in 2004. Through these surveys, the following three sensitive plant species were identified on the Cumming Ranch property; Engelmann oaks (*Quercus engelmannii*), southern tarplant (*Centromadia parryi* ssp. *australis*), and spreading navarretia (*Navarretia fossalis*). These sensitive species are described in detail below.

Seven additional County sensitive plant species may have the potential to occur within or adjacent to the property (see Appendix B). These include Orcutt's brodiaea (*Brodiaea orcuttii*), San Diego goldenstar (*Muilla clevelandii*), little mousetail (*Myosurus minimus ssp. apus*), graceful tarplant (*Holocarpha virgata elongata*), Coulter's saltbush (*Atriplex coulteri*), Parish's brittlescale (*Atriplex parishii*), and vernal barley (*Hordeum intercedens*). Although focused surveys were conducted for these species over three field seasons, they were not identified onsite.

Engelmann Oaks

Thirty Engelmann oaks occur on the Cumming Ranch property within the open Engelmann oak woodland and within scattered locations throughout Area A. All oak trees were identified through a complete tree inventory in 2004. There are also 30 coast live oaks (*Quercus agrifolia*) and 41 oak hybrids. Engelmann oaks are considered a County of San Diego sensitive plant species (Group D) and are a CNPS List 4 species. The Ramona Community Plan identifies oaks as an important element of the rural character of the community.

Southern Tarplant

Southern tarplant occurs on approximately 24 acres of the Cumming Ranch property within low-lying areas throughout Areas A, B, and C and offsite at the Hardy Ranch. It is estimated that approximately 33,200 plants occur on a total of 8.4 acres within Area A; 63,000 plants on 15.6 acres in Area B; and 250 plants on 0.1 acres in Area C. It is known that this plant species occurs within a number of additional sites within Ramona that exhibit similar topography, hydrology, and soils. It is unknown, however, what the population levels may be at this time since many of these populations are located on privately held lands. Southern tarplant is considered a sensitive plant species (Group A) by the County and is considered rare by CNPS (List 1B).

Spreading Navarretia

The spreading navarretia plant species occurs in Area C (Ramona Vernal Pool Preserve) within Vernal Pool E5. This plant species is federally listed as threatened, is a County sensitive plant species (Group A), and is considered rare by the CNPS (List 1B). The U.S. Fish and Wildlife Service (Service) announced on October 7, 2010 a revised final rule designating approximately 6,720 acres of land in portions of Los Angeles, Riverside, and San Diego counties as critical habitat for the spreading navarretia (USFWS 2010). This critical habitat area overlaps with the northern portion of Area C within the project site and overlaps with portions of the offsite trail alignment within Hardy Ranch.

Sensitive Animals

Sensitive animals are species or subspecies that are listed as threatened or endangered, or are being evaluated (proposed) for listing by the USFWS or the CDFG and/or are considered sensitive by the CDFG or the County. Sensitive zoological resource surveys were conducted on the Cumming Ranch property between 2000 and 2010 and included wet season collection and analysis of fairy shrimp in all vernal pools, Quino checkerspot butterfly (*Euphydryas editha quino*) habitat assessments and focused surveys, breeding season arroyo southwestern toad (*Bufo microscaphus californicus*) surveys, breeding season coastal California gnatcatcher (*Polioptila californica californica*) surveys, Stephens' kangaroo rat (*Dipodomys stephensi*) aboveground assessments and trapping surveys, and focused herpetofauna and raptor surveys. Sensitive species identified at the Cumming Ranch site are summarized in Table 3.1-4 and are described in the following sections.

San Diego Fairy Shrimp

A comprehensive vernal pool botanical and fairy shrimp survey was conducted in Areas A, B, and C between December 18, 2002, and June 14, 2003. Additional sampling was conducted on March 4, 2004 and those results were provided for inclusion in the Ramona Vernal Pool Preserve 2004 Botanical and Fairy Shrimp Survey Results Report (HDR 2005). A portion of the Area C vernal pools contained the endangered San Diego fairy shrimp. The Area A satellite vernal pool was found to contain San Diego fairy shrimp; however the pool does not support vernal pool obligate species such as wooly marbles, or other expected vernal pool endemic species. The satellite vernal pool in Area B was negative for the presence of San Diego fairy shrimp. Three additional pools were sampled immediately offsite (to the northwest) on the Hardy Ranch and San Diego fairy shrimp were also located within these pools.

Quino Checkerspot Butterfly

Habitat assessments for Quino checkerspot butterfly were conducted in May of 2001 and focused surveys were completed in February, March, and April of 2004. Focused surveys for Quino checkerspot butterfly were conducted for Areas A and B as well as a 2-acre site within the northwest corner of Area C (for the proposed community trail staging area) and a linear survey of the proposed offsite sewer and trail alignment within the Hardy Ranch. Although appropriate habitat and host plants were identified, no Quino checkerspot butterflies or their larvae were observed.

Arroyo Southwestern Toad

Arroyo southwestern toad surveys were conducted during the breeding season between May 16 and June 20, 2001, April 29 and June 11, 2004, and June 21 and June 22, 2010. No arroyo southwestern toads were observed; however suitable habitat is present. The habitats on the Cumming Ranch property are considered marginal habitat due to lack of appropriate streambed substrate for breeding, presence of dense grass that make movement difficult, agricultural activities that could conflict with foraging and winter hibernation, the presence of urban runoff and other pollutants within the creeks and watersheds, and the filling in of Santa Maria Creek with additional siltation and gravel/sand from upstream.

Coastal California Gnatcatcher

Coastal California gnatcatcher breeding season surveys were conducted between May 14 and June 18, 2001, March 26 and April 16, 2004, and June 8 and June 22, 2010 within appropriate sage scrub habitat in Areas A and B (approximately 90 acres). No coastal California gnatcatchers were detected during these surveys. In subsequent visits to the Cumming Ranch, there have been no incidental sightings of coastal California gnatcatcher within appropriate coastal sage scrub habitats.

Stephens' Kangaroo Rat

Stephens' kangaroo rat surveys were conducted between August 20 and 25, 2000, and between February 16 and 19, 2004. Trapping areas were established within Areas A and B based on sparse kangaroo rat sign and appropriate soils. No Stephens' kangaroo rat were trapped.

Burrowing Owl

All field surveys included burrowing owl, but none were observed onsite. However, suitable habitat for the burrowing owl is present.

Herpetofauna

Focused herpetofauna surveys were conducted during the same survey period as the Arroyo southwestern toad as described above. The following seven County sensitive herpetological species were identified onsite within Area A and are described below: western spadefoot toad (*Scaphiopus hammondii*), coast horned lizard (*Phrynosoma coronatum*), granite spiny lizard (*Sceloporus orcutti*), granite night lizard (*Xantusia henshawi*), California whiptail

(*Cnemidophorus tigris mundus*), orange-throated whiptail (*Cnemidophorus hyperythrus*), and two-striped garter snake (*Thamnophis hammondii*).

Western Spadefoot Toad

Western spadefoot toads are typically found in CSS, chaparral, and grasslands habitats, but are most common in grasslands with vernal pools or mixed grassland/CSS. The highest concentrations of spadefoot toads were found within and adjacent to Etcheverry Creek and within the Area C vernal pools and associated drainages. Postbreeding spadefoot toads were located within and adjacent to CSS-inland form, chaparral, grassland, and agricultural lands in Areas A and B. During the peak of the 2001 survey season, approximately five adult western spadefoot toads were found throughout Area A north of Highland Valley Road, approximately 30 adult western spadefoot toads were identified in a single location on Etcheverry Creek with two more observed in Santa Maria Creek within Area B; approximately 10 adult western spadefoot toads were observed in Area C. The population onsite may vary from year to year due to climatic conditions and grazing; however, without focused pit-fall trapping and aboveground counts, the population of western spadefoot toads on the Cumming Ranch project site cannot be ascertained.

San Diego Horned Lizard

San Diego horned lizards are found within a variety of vegetation types including CSS, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas such as Ramona, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e., floods, fire, roads, grazed areas, fire breaks). The San Diego horned lizard was observed in sandy soils near Etcheverry Creek within Area B. Appropriate winter hibernation and summer estivation sites occur within Areas A and B, outside of active agriculture. Area C may not support the San Diego horned lizard due to the presence of heavy thatch and limited foraging opportunities. The population of San Diego horned lizard on the Cumming Ranch property is unknown at this time, but based on observations of harvester ant colony locations and individual sightings of horned lizards (approximately two individuals) it may be determined that the overall population of this species is very low.

Granite Spiny Lizard

Granite spiny lizards are found within a variety of chaparral, CSS, riparian, and forest habitats with boulders and rock outcrops as a key component. Two granite spiny lizards were found within rock outcrops in Area A. However, it is estimated that more may occur within other rock

outcrop sites in Areas A and B. The overall population of granite spiny lizards is unknown at this time. Since they may live in family/colonial groups or as individuals, it would be very difficult to estimate their population onsite without focused pit-fall trapping data.

Granite Night Lizard

This locally common but patchily distributed nocturnal lizard is found exclusively in areas of massive rocks, rock outcrops, and flaking granite, in a variety of desert, chaparral, and woodland habitats. It may utilize grasslands and other habitats between suitable rock outcrops for movement. Granite night lizards were found within the cracks of large rocks/boulders in rock outcrop habitats located in or near to Etcheverry Creek in Areas A and B. The granite night lizards were found within rock outcrops associated with drainages and upland vegetation communities at another location in Area A. Since only single adults were observed, it is unknown what the overall population of granite night lizards is at this time on the Cumming Ranch property.

Coastal California Whiptail Lizard

Coastal California whiptail lizards can be found in open, often rocky areas with little vegetation or within sunny microhabitats within shrub or grassland associations, as well as riparian habitats. Foraging and cover requirements are met within the understory of the shrub communities whereas thermoregulation and burrows are typically found within open and/or rocky areas. Thirteen coastal California whiptails were found throughout Area A in open- and closed-canopied CSS-inland form and southern mixed chaparral habitats in association with rock outcrops. Since only single adults were observed it is unknown what the overall population of coastal whiptails is at this time on the Cumming Ranch property.

California Orange-Throated Whiptail Lizard

California orange-throated whiptail lizards can be found within a variety of habitats including chaparral, CSS, nonnative grassland, and oak woodlands. Areas with California buckwheat and flattop buckwheat in association with California sage brush, black sage, and white sage are an important indicator of this species' presence. Dispersal of sub-adults and adults may be precluded by urbanization and agriculture development. Three orange-throated whiptails were found within associated upland habitat (CSS–inland form) within Area A. Since only single adults were observed it is unknown what the overall population of orange-throated whiptails is at this time on the Cumming Ranch property.

Two-Striped Garter Snake

Two-striped garter snakes are considered one of the most aquatic of garter snakes and are typically associated with wetland habitats such as streams, creeks, and pools and more specifically with ponds, lakes, wetlands, and vernal pools. It has also been found within mixed oak woodlands and chaparral on coastal slopes of mountains and foothills to sea level. Two-striped garter snakes were found exclusively adjacent to and within two locations of the Etcheverry Creek drainage within Area B during the 2004 arroyo southwestern toad surveys. It should be noted that at that time, the creek area had not been grazed by cattle and the cover of grasses was high. As of 2006, the area had been grazed heavily by cattle and that cover of grasses was reduced, thereby potentially precluding the presence of garter snakes. It can be assumed that the presence of two-striped garter snakes will be dependent on sufficient cover and availability of flowing or ponded water. The current overall population of two-striped garter snakes on the Cumming Ranch property is unknown.

Birds and Raptors

Raptors are defined as birds of prey and are protected by the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711). Several of these species have been observed using the Cumming Ranch property for various life functions (foraging, roosting, and nesting). County sensitive raptors observed onsite include turkey vulture (*Cathartes aura*), white-tailed kite (*Elanus caeruleus*), northern harrier (*Circus cyaneus*), golden eagle (*Aquila chrysaetos*), Cooper's hawk (*Accipiter cooperi*), red-shouldered hawk (*Buteo lineatus*), and ferruginous hawk (*Buteo regalis*). In addition to the above-listed raptors, the loggerhead shrike (*Lanius ludovicianus*) (County sensitive avian species) was also observed onsite. Also, Canada geese have been observed onsite and are classified as waterfowl and are protected by the MBTA. These sensitive species are discussed individually below.

Additional raptor species observed onsite include great horned owl (*Bubo virginianus*), zone-tailed hawk (*Buteo albonotatus*), red-tail hawk (*Buteo jamaicensis*), rough-legged hawk (*Buteo lagopus*), American kestrel (*Falco sparverius*), and barn owl (*Tyto alba*). An additional nine species have been observed within the Ramona vicinity by various professionals and amateur birders. They include osprey (*Pandion haliaetus*), bald eagle (*Haliaeetus leucocephalus*), sharp-shinned hawk (*Accipiter striatus*), Harris's hawk (*Parabuteo unicinctus*), Swainson's hawk (*Buteo swainsoni*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), peregrine falcon (*Falco peregrinus*), and burrowing owl (*Athene cunicularia hypugea*). Of these nine species, the burrowing owl is the most likely to inhabit the project site as suitable habitat is present, although they have not been observed onsite.

Two additional County sensitive avian species, grasshopper sparrow (*Ammodramus savannarum*) and horned lark (*Eremophila alpestris actis*), may have the potential to occur within or adjacent to the proposed project site. Although focused surveys were conducted for these species over four field seasons, they were not identified onsite.

Turkey Vulture

Turkey vultures are one of North America's largest birds, having a wingspan of 6 feet. The turkey vulture is most commonly observed in the desert regions, farmlands, and grasslands where human presence is more scattered. Although they are not a suburban bird they will take advantage of road killed animals and other carrion within rural and suburban areas. Turkey vultures have been observed flying over the Cumming Ranch property. There are no new or historic roosts onsite, nor does nesting occur onsite since the appropriate substrate is not readily available (i.e., rock crevices, hollow trees, caves, fallen hollow logs, or ledges).

White-Tailed Kite

White-tailed kites inhabit low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Riparian areas adjacent to open areas are also used. They prefer to forage in undisturbed, open grasslands, meadows, farmlands, emergent wetlands, ungrazed grasslands, fence rows and irrigation ditches adjacent to grazed lands. They will communally roost in the nonbreeding season throughout various locales within San Diego County. White-tailed kites have been observed foraging at the Cumming Ranch in the spring and summer months, however, they may utilize the property in the winter months as well, depending upon locales of winter roosts. White-tailed kites are not known to nest or winter roost at the Cumming Ranch property.

Northern Harrier

Northern harriers (also known as marsh hawks) are migratory bird species that can be found within open areas consisting of grasslands, shrublands, marshlands, agricultural fields, meadows, and coastal and inland areas. In southern California they may breed and/or over-winter and will often roost communally on the ground in winter, fanning out during the day to hunt small mammals and birds. Northern harriers have been observed foraging in winter and spring within Area C at the Cumming Ranch. Area C has the only appropriate habitat for foraging and could possibly be utilized for nesting, although no nests have ever been encountered in Area C. Foraging could also occur in Area A near the central hills where the shrublands and

grasslands/agriculture meet. The suspension of agricultural activities in Area B would increase the available foraging and nesting area for northern harriers.

Golden Eagle

Golden eagles are one of North America's largest birds with wing-spans of 6-feet and generally occur in open country such as tundra, open coniferous forest, desert, and especially in hills and mountainous regions. Nesting is primarily restricted to rugged, mountainous country and secluded cliffs with overhanging ledges and large trees for cover. Golden eagles are sparsely distributed throughout most of California, occupying primarily mountain and desert habitats. Approximately 500 breeding pairs are estimated to nest in California. Although golden eagles typically avoid developed areas, there are several records of golden eagle nesting sites within San Diego County near rural communities. Nest sites near the Cumming Ranch property are located in Bandy Canyon to the west, Iron Mountain to the south, Eagle Peak (Palomar Mountain) to the north, and Vulcan Mountain to the east. Golden eagles have been observed perching near the top of the central hills in Area A, as well as foraging over the open areas of the property.

Cooper's Hawk

The Cooper's hawk is a crow sized accipiter that can be found within mixed forests and open woodlands throughout the United States, southern Canada, Mexico, and South America. They are migratory but winter across most of the United States. Cooper's hawks primarily hunt songbirds and are commonly seen in suburban backyards near active bird feeders. They will also prey on small rodents and mammals during daylight hours. Cooper's hawks have not been observed directly at the Cumming Ranch but have been detected within the adjacent eucalyptus groves on the 70-acre Hardy Ranch. They may forage at the Cumming Ranch within the shrubland component in Areas A and B.

Red-Shouldered Hawk

Red-shouldered hawks are migratory in the northern portions of their range and resident within southern California. They typically inhabit mature deciduous or mixed deciduous-conifer forests and swamps. They prefer dead trees nearby where they can perch for foraging opportunities and territory. They will often use the same nest from year to year, refurbishing it each spring. Red-shouldered hawks are solitary and territorial and do not form flocks or communally roost as other raptors do in the winter. Red-shouldered hawks have not been observed directly at the Cumming

Ranch but have been detected within the adjacent eucalyptus groves on the Hardy Ranch. They may forage at the Cumming Ranch within the adjacent habitats in Areas A, B, and C.

Ferruginous Hawk

Ferruginous hawks are migratory and will over-winter in Southern California between September and April. They are found within open grasslands and foothills, open fields, agricultural areas, sagebrush flats, desert scrub and fringes of pinyon-juniper habitats. They roost in open areas, usually in a lone tree or on a utility pole. There are no breeding records of ferruginous hawks within southern California. This species, along with other raptors, have been shown to co-exist in urban and suburban open space grasslands. In winter, they are behaviorally flexible and tolerant of human disturbance and alteration of landscapes, as long as prey populations persist. The only communal over-wintering roosting site within San Diego County is located within the Warner Springs area. A solitary ferruginous hawk was observed in late April and early May of 2004 just outside of Area A near the western boundary in a tall western sycamore tree.

Loggerhead Shrikes

Loggerhead shrikes are a small Southern California resident bird that typically inhabits and forages within open landscapes characterized by open shrub lands, agriculture, grasslands, deserts, savannahs, prairies, and some suburban areas. They favor foraging areas that have fence lines and utility lines and poles for perching. They hunt for a wide variety of live food items that include large insects, small mammals, amphibians, reptiles, fish and invertebrates and use impaling as a means of handling prey. In agricultural and pasture lands they will impale their prey items on barbed wire fencing. A single loggerhead shrike was observed flying southward through the Cumming Ranch property during the February 2006 wetland delineation update effort. This adult individual was first observed flying south from Etcheverry Creek toward the south side of the central hills in Area A where it stopped momentarily to rest in open sage scrub before continuing southward. Based on this bird's behavior, it may be determined that this individual was traveling from one area to another and utilizing the Cumming Ranch as a travel corridor. This species has not been found to nest on the Cumming Ranch and this was the first observation of loggerhead shrike on the property in the past nine years.

Canada Geese

Canada geese are classified as waterfowl and are protected by the Migratory Bird Treaty Act. Canada geese are found throughout North America. Canada geese nest in Northern California

and migrate south in the winter to southern California. They are typically found in areas that support large expanses of irrigated grass such as those found in city parks, golf courses, airports, and any other such green area and native and nonnative grasslands as well as agricultural fields in association with ponds, lakes, and riparian systems. When on land, Canada geese eat a variety of grasses including Bermuda grass, salt grass, and wild barley. They also eat wheat, beans, rice, and corn. A small flock of Canada geese was observed foraging near the northeastern corner of Area B in February 2006.

Mammals

Five County sensitive mammals and/or signs of them have been identified onsite at various locations within or adjacent to the Cumming Ranch property. These species include mountain lion (*Felis concolor*), American badger (*Taxidea taxus*), San Diego desert woodrat (*Neotoma lepida intermedia*), San Diego blacktail jackrabbit (*Lepus californicus bennettii*), and southern mule deer (*Odocoileus hemionus*).

Mountain Lion

Mountain lions are large predatory animals that inhabit a variety of habitats within California. These include shrublands, woodlands, riparian areas, and grasslands in combination with rocky areas, cliffs, and ledges. Mountain lions are generally active around sunset and sunrise. Since the occurrence of the Cedar and Paradise fires in October/November 2003, the presence of mountain lion in new locations as well as in unlikely areas (i.e., residential neighborhoods) has increased. Mountain lion scat and tracks were found within Area A along and adjacent to the existing dirt roads and trails and were found in two locations. It is assumed that this species is utilizing the site for dispersal and hunting. However, due to the limited available cover, lack of appropriate denning habitat, and limited preferred prey base (mule deer) the Cumming Ranch property would not support a resident mountain lion. In addition, no appropriate den sites occur on the Cumming Ranch site. No new signs of mountain lion were observed during the February 2006 wetland delineation update.

American Badger

American Badgers are medium-sized carnivores that feed on ground squirrels, cottontail rabbits, jackrabbits, small rodents, pocket gophers, snakes, birds, and insects within associated dry, open, treeless regions, prairies, parklands, grasslands, and cold desert areas. Badgers are fossorial animals (burrowing) that live in dens. Two badgers were observed onsite within Area B, immediately south of Etcheverry Creek within a group of rock outcrops. One adult and one sub-

adult were observed during the AST surveys in 2004. Given this species' enormous territory size it is unlikely that another resident badger would occur on the Cumming Ranch property. Based on current knowledge of this species, it is expected that the juvenile dispersed in the fall season to an area outside of its mother's home range. It is assumed that this animal would have dispersed to the less populated areas north and/or west of the Cumming Ranch property.

San Diego Desert Woodrat

The San Diego desert woodrat is a nocturnal small rodent that prefers rock outcrops and shrub cover. This species is typically located within rock outcrops in shrubland and woodland habitat types. Woodrats build their nests primarily out of sticks and other materials such as cactus, dried cattle or horse manure, bones, seedpods, nails, and any other appealing or seemingly useful object. San Diego desert woodrat nests were observed within Area A in the large central hills and adjacent to the unnamed swale north of Highland Valley Road within rock outcrops. There are at least eight nest locations within Area A and possibly more that have not yet been detected. Additional San Diego desert woodrats may be present within the various rock outcrops located throughout the southern portion of Areas A and B.

San Diego Black-Tailed Jackrabbit

San Diego black-tailed jackrabbits are crepuscular to nocturnal mammals that are found within arid regions of the western United States in association with grasslands, shrublands, and agricultural lands. Black-tailed jackrabbits eat a variety of plants but particularly consume native and nonnative grasses, forbs, shrubs, and cultivated crops such as oat, wheat, and barley. Black-tailed jackrabbits were observed in four locations onsite within the central hills of Area A over the last four years. The population seems to be stable given their continued presence onsite and the availability of resources for cover and foraging. The future cessation of agricultural activities within Area B would largely increase this species' ability to persist onsite, increase their population, and open up new areas to disperse into. Due to the wide range of variances in biotic and abiotic conditions on a yearly basis and the shifting of distributions and densities in relation to food resources, estimating population densities is difficult.

Southern Mule Deer

The southern mule deer is a subspecies of deer that only occurs within extreme Southern California and into the northern third of the Baja Peninsula. In Southern California, they are frequently found in chaparral and oak woodland associations as well as within desert regions. In San Diego County, they are found within shrub land (chaparral) and oak and pine woodland

habitat associations with grassy openings where their preferred food sources occur (shrubs of all varieties may be consumed). Depending on resource availability, mule deer will typically stay within one location where food, cover, thermal, hiding, and escape resources may be of high quality and quantity. Three mule deer were observed moving northward in the central hills of Area A during early June of 2004. This was the first sighting of mule deer onsite. Like the mountain lion, mule deer have probably utilized the Cumming Ranch property for dispersal to new areas due to the loss of appropriate habitat from the Cedar and Paradise Fires. The Cumming Ranch property is most likely being utilized as a movement corridor since the lack of large blocks of upland habitat and oak woodland onsite will preclude the mule deer from becoming a resident species. Mule deer or associated signs (tracks and pellet groups) were not observed during the February 2006 wetland delineation update.

Applicable Regulations and Plans

Several federal and state regulations apply or provide guidance to the proposed project when considering biological resources. This section provides a regulatory overview of the requirements for projects with potential impacts to sensitive resources including sensitive habitats, endangered and threatened species, and wetlands and waters.

Federal Endangered Species Act

Under the federal Endangered Species Act (FESA), "take" (defined as hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill) of listed species is prohibited unless authorized by USFWS. If a project has the potential to take a listed species, consultation with USFWS would be required, pursuant to Section 7 of the FESA, to determine if the project would jeopardize the continued existence of any of these federally regulated species. As part of the Section 7 consultation process, a Biological Assessment is required to be submitted to USFWS outlining the potential impacts to federally listed, proposed, and candidate species and would also suggest mitigation measures for unavoidable impacts to these species. USFWS would issue a Biological Opinion (BO) to document the effects of the proposed project on the long-term viability of the species affected and any incidental *take* provisions. The BO can allow the "incidental take," or establish "jeopardy" and disallow any "take." This act is applicable to portions of the project that may impact San Diego fairy shrimp because they are a federally listed endangered species. This species and the project's potential impacts are discussed under Section 3.1.3 and listed in Table 3.1-2.

Migratory Bird Treaty Act

The MBTA restricts the killing, taking, collecting, and selling or purchasing of native bird species or their parts, nests, or eggs. Certain gamebird species are allowed to be hunted for specific periods determined by federal and state governments. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles and other birds of prey. Although no permit is issued under the MBTA, if vegetation removal within the project area occurs during the breeding season for raptors and migratory birds (February 15 through September 15), surveys should be conducted to locate active nests within the construction area. If active raptor or migratory bird nests are detected, project activities may be temporarily curtailed or halted.

This act is relevant to the project because migratory bird species, such as Cooper's hawk, white-tailed kite, etc., are known to the project site and are covered by the MBTA. Potential impacts to bird species protected under the MBTA are analyzed in Section 3.1.3.

Section 404 of the Clean Water Act

Pursuant to Section 404 of the CWA, ACOE regulates the discharge of dredged or fill material into "waters of the U.S." "Waters of the U.S." have been defined as:

> "(1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including such waters: (i) which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) which are used or could be used for industrial purposes by industries in interstate commerce; (4) all impoundments of waters otherwise defined as waters of the United States under the definition; (5) tributaries of waters identified in paragraphs (1) through (4) of this section; (6) the territorial seas; and (7) wetlands adjacent to waters identified in paragraphs (1) through (6) …" (33 CFR 328.3[b]; 40 CFR 230.3[t]).

However, as a result of a recent U.S. Supreme Court decision (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers,* No. 99-1178, January 9, 2001), ACOE no longer has direct regulatory authority over many isolated intrastate waters, including wetlands.

ACOE defines wetlands as:

> Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3[b]; 40 CFR 230.3[t]).

ACOE has developed standard methods (*ACOE Wetland Delineation Manual*) to identify and delineate wetland boundaries for the purpose of Section 404 regulation. A wetland determination is based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. ACOE's delineation manual uses primarily field-based indicators to determine whether the three parameters are present. The presence of positive indicators of all three parameters is necessary for a site to qualify as jurisdictional wetlands.

In the absence of wetlands, the limits of ACOE jurisdiction in nontidal waters, such as rivers, streams, lakes, and ponds, extends to the Ordinary High Water Mark (OHWM). The OHWM can also be conceptualized as the lateral extent of the active channel, usually the area just below the first terrace.

This act applies to portions of the project that include wetlands or other "waters of the U.S.," such as the onsite creeks, drainages, and vernal pools. Potential impacts to these waters are analyzed in Section 3.1.3.

Section 1600 of the California Fish and Game Code

Under Sections 1600-1607 of the CDFG Code, the CDFG regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFG jurisdiction are defined in the code as the "bed, channel or bank of any river, stream or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit." The California Code of Regulations (14 CCR 1.72) defines a stream as:

> [A] stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This

includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.

In practice, the CDFG usually extends its jurisdictional limit to the top of a stream or lake bank, or outer edge of the riparian vegetation, whichever is wider. Riparian habitats do not always have identifiable hydric soils, or clear evidence of wetland hydrology as defined by ACOE. Therefore, CDFG wetland boundaries often extend beyond ACOE wetland boundaries, which sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake.

This CDFG Code applies to portions of the project that include the onsite creeks, drainages, or riparian habitats. Potential project impacts to these riparian areas are discussed in Section 3.1.3.

Section 401 of the Clean Water Act

The RWQCB has primary authority for permit and enforcement activities under the Porter-Cologne Water Quality Control Act (Cal. Water Code 13000-13999.10) and the CWA. Section 401 of the CWA requires certification from the California RWQCB that the proposed project is in compliance with established water quality standards. Projects that have the potential to discharge pollutants are required to comply with established water quality objectives.

Under Section 401 of the CWA, the RWQCB implements the water quality certification process for any activity that requires a federal permit or license and that may result in the discharge of pollutants into "waters of the U.S.," including wetlands. The RWQCB reviews the proposal to determine whether the activity would comply with state water quality objectives and, subsequently, either issues a certification with conditions or denies the certification. Water quality standards, according to the CWA (40 CFR 131), include beneficial uses, water quality objectives, and the antidegradation policy.

No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Under the CWA, ACOE Section 404 permits are subject to RWQCB Section 401 water quality regulation. ACOE cannot issue an individual or nationwide 404 permit until a 401 certification has been obtained from the RWQCB. For the 401 certification process, the RWQCB typically uses the delineation verified by the ACOE as the basis for determining impacts to "waters of the U.S."

Section 401 of the CWA is applicable to project components that may result in increased sedimentation, polluted runoff, etc., which in turn could cause indirect effects to sensitive biological species. Section 401 certification would be required as part of the Section 404 permit

authorization process and is anticipated to be issued concurrently. These indirect effects are discussed in Section 3.1.3 and are also discussed in the Hydrology and Water Quality section.

County of San Diego Resource Protection Ordinance

The 2007 RPO includes special controls on development for the County's wetlands, floodplains, steep slopes, sensitive habitat lands, and prehistoric and historic sites. The RPO is a compilation of Ordinance Nos. 7968, 7739, 7685, and 7631, which strengthens methods adopted by the County to guarantee the preservation of sensitive lands (Ordinance No. 9842). This ordinance protects such sensitive lands by requiring a Resource Protection Study for certain discretionary projects. If the Resource Protection Study identifies RPO wetlands, RPO wetland buffers, or RPO sensitive habitat lands, then avoidance or avoidance to the maximum extent feasible and mitigation is required as specified under the code.

According to Sec. 86.602 of Chapter 6 RPO, wetlands and wetland buffers are defined as:

(q). "Wetland":

(1) Lands having one or more of the following attributes are "wetlands":

(aa). At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);

(bb). The substratum is predominantly undrained hydric soil; or

(cc). An ephemeral or perennial stream is present, whose substratum is predominantly non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

(2) Notwithstanding paragraph (1) above, the following shall not be considered "Wetlands":

(aa). Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:

(i) Have negligible biological function or value as wetlands;

(ii) Are small and geographically isolated from other wetland systems;

(iii) Are not Vernal Pools; and,

(iv) Do not have substantial or locally important populations of wetland dependent sensitive species.

(bb). Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:

(i) Have negligible biological function or value as wetlands even if restored to the extent feasible; and,

(ii) Do not have substantial or locally important populations of wetland dependent sensitive species.

(Note: Activities on lands not constituting "Wetlands" because of this paragraph (2) may still be subject to mitigation, avoidance and permitting requirements pursuant to CEQA or other applicable County, state and federal regulations.)

(r). "Wetland Buffer": Lands that provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community. Buffer widths shall be 50 to 200 feet from the edge of the wetland as appropriate based on the above factors. Where oak woodland occurs adjacent to the wetland, the wetland buffer shall include the entirety of the oak habitat (not to exceed 200 feet in width).

The RPO applies to the project because the site contains wetlands, wetland buffers, floodplains, steep slopes, sensitive habitat lands, and cultural resources. The RPO sensitive habitat lands are discussed as applicable in this section and potential impacts are discussed in Section 3.1.3.

County of San Diego Habitat Loss Permit

San Diego County Ordinance Nos. 8365, 8380, and 8608 provide for the issuance of HLP under certain circumstances. These ordinances regulate losses of DCCS prior to issuance of certain grading permits, improvement plans, and grading and clearing permits.

Because the Cumming Ranch property is located outside of the adopted portions of the County MSCP area, an HLP will need to be obtained pursuant to the listing of the coastal California gnatcatcher under the 4(d) ruling of the FESA (Interim Habitat Loss Permit) and pursuant to the provisions of the County Habitat Loss Ordinance (October 22, 1997). As part of this process, the County is required to make findings on the issuance of the HLP pursuant to Section 86.104 of the County of San Diego Ordinance No. 8365 (N.S.) and Section 4.2.g of the Coastal Sage Scrub Natural Communities Conservation Plan Process Guidelines. Findings include if the habitat loss will (1) not preclude connectivity between areas of high habitat values, (2) not preclude or prevent the preparation of the subregional NCCP, (3) be minimized and mitigated to the

maximum extent practicable in accordance with Section 4.3 of the NCCP Process Guidelines, (4) not appreciably reduce the likelihood of survival and recovery of listed species in the wild, and (5) be incidental to otherwise lawful activities.

The HLP is applicable to the proposed project because it would impact CSS as shown in Table 3.1-5. Because there would be a loss of CSS, an HLP would be required. Prior to the dedication of open space and the issuance of the HLP by the County, the RMP must be approved before the County can grant a grading permit. The RMP discusses mitigation and monitoring of sage scrub habitat but also addresses all other sensitive habitats and species occurring within Area A open space lots. The RMP includes provisions for mitigation and monitoring of habitats and species such as oak tree replacement, species surveys and monitoring, and other efforts involved in the day-to-day management of the dedicated open space lots (i.e., budget control and analysis, debris removal, exotic weed removal, general maintenance of any open space signage, etc.).

3.1.2 Guidelines for the Determination of Significance

The guidelines for the determination of significance are based on numerous sources. Many of the guidelines are based on specific County regulations and requirements, such as the RPO and HLP and others are based on state or federal requirements, such as the FESA. Development of the guidelines took into account the specific environmental setting and biological resources found on the project, such as wildlife linkages, wetland habitats, and fringe effects to ensure that all resources were considered. The project would have a significant adverse impact with regard to biological resources if the project would:

1. conflict with any local policies, plans, or ordinances protecting biological resources, including, but not limited to, the County RPO, the HLP Ordinance, or the NCCP;
2. result in a direct and/or indirect impact to individuals or local populations of an animal or plant species listed as federally or state Endangered or Threatened, Species of Special Concern, or County Sensitive;
3. result in either direct and/or indirect potentially significant effects to wetland habitats or wetland buffers as defined by federal, state, or County RPO regulations;
4. result in potentially significant adverse effects to habitats that serve as breeding, foraging, nesting, or migrating grounds and are limited in availability, or serve as core habitats for regional plant and wildlife populations;
5. result in significant adverse effects to vegetation communities or wildlife habitats that are restricted on a regional basis or serve as wildlife corridors;

6. result in potentially significant adverse effects on core habitat, regional linkages, or local wildlife movement corridors;
7. cause a decline in the value or function of onsite or offsite habitat as a result of substantial indirect edge-effects, such as elevated noise levels, light, introduced landscaping, domestic pets, etc.; or
8. result in a cumulatively considerable impact under any of the above guidelines.

3.1.3 Analysis of Project Effects and Determination of Significant Impact

Direct impacts are those that affect the biological resources such that those resources are not expected to recover to their preimpacted state (e.g., permanent development of a site through grading and building of structures, etc.). Direct impacts may be considered temporary or permanent. Indirect impacts occur secondary to the project's direct impacts, such as changes in general plant composition due to loss of substrate or other factors that may affect resources such as noise, dust, lighting, etc. Indirect impacts may be considered temporary or permanent depending on the situation. Permanent biological impacts are defined as all impacts that result in the irreversible removal of biological resources. Temporary impacts are those impacts that have reversible effects on biological resources.

Determination of project impacts include both onsite and offsite effects. For purposes of this impact analysis, it is assumed that all land within the residential lots is affected even though the actual grading will affect only a portion of the lot. Some open space lots are identified as impact neutral. Lot C is considered impact neutral because it is an isolated patch of CSS with no connection to similar habitats. The CSS is preserved; however, the area would not be considered part of the mitigation credits. Lot E preserves a large grove of mature oaks. This area is considered impact neutral because the resources are not directly impacted, but it is isolated and surrounded by residential lots. Lot H contains a vernal pool including a buffer area. While it contains a sensitive vernal pool resource, this location is not adjacent to or connected with similar habitat communities, thus it is considered impact neutral. No mitigation credits would be allocated as a result of the preservation of this resource. All staging and equipment lay-down areas would be located within the impact area. For this reason, no additional impacts to habitat areas would result from construction staging. These impacts are described in more detail in the following sections. Project trails range from 8 to 15 feet in width; however, for purposes of biological impact assessment, a 20-foot impact corridor was used along all trail alignments.

Conformance with Biological Resource Protection Policies

The County RPO requires that wetland buffers be established so as "…to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community." Fifty-foot minimum wetland buffers would be established throughout the proposed development. These buffers would protect the existing drainages and unnamed swales from direct and indirect construction and post-construction related impacts. Wetland buffers would extend from the edge of the wetland to the lot line. The determination to use a 50-foot-wide buffer on either side of wetlands and waters was based on the overall quality and function of the wetlands which have been subject to agriculture for many years as well as the abutment of the buffer to the 100-foot-wide residential lot LBZ which restricts (1) animal keeping without effective restraints or fencing, (2) lighting, (3) exotic invasive landscaping, and (4) focal use areas including arenas, pools, patios, and (5) any other structures without approval of the County Fire Marshall and Ramona Fire Marshall. In addition, these wetlands and wetland buffers would be protected within the large open space easements adjoining and/or integrated within the wetlands and wetland buffers. All wetlands and wetland buffers would be included within the dedicated Area A open space.

The RPO allows encroachment into RPO wetlands and wetland buffers under specific, limited circumstances. Encroachment for required trails and infrastructure are required to meet specific criteria as demonstrated by these findings for the project:

aa. There is no feasible alternative that avoids the wetlands.

The RPO wetlands that exist on the project site traverse the property in such a manner that it is impossible to install sewer lines connecting the proposed lots with the point of connection at the sewer treatment plant without crossing the wetlands.

The sewer collection system has been designed to reduce the amount of required grading for the lots and provide a more rural appearance to the overall development. Because each lot would be individually contoured into the existing topography and the site would not be mass graded, some sewer lines are designed to be placed within the low-lying areas of the property instead of within the project roadways.

There is no feasible alternative to connect the proposed lots to the existing sewer facilities that avoids the wetlands.

bb. The crossings are limited to the minimum number feasible.

The number of crossings has been limited through specific consideration during site design. Where feasible, crossings are designed to serve multiple purposes such as combining trail alignments with sewer crossings and combining the secondary access/egress road with a utility crossing.

cc. The crossings are located and designed in such a way as to cause the least impact to environmental resources, minimize impacts to sensitive species and prevent barriers to wildlife movement (e.g., crossing widths shall be the minimum feasible and wetlands shall be bridged where feasible).

In addition to impacts associated with the required widening of Highland Valley Road, there are four locations that crossings would occur. Each of these crossings is discussed below.

- The first crossing would be located north of Highland Valley Road, west of Highland Valley Court. This would be a crossing for a sewer line that conveys effluent from the homes south of Highland Valley Road. This crossing would occur at a narrowed point on the drainage at a right angle to the channel to minimize the amount of impact to sensitive resources. The pipeline would be installed below grade and the area of impact would be restored to its natural condition so as not to create a barrier to wildlife movement.
- The second crossing would be located north of the terminus of Highland Valley Court. This crossing would be a multi-purpose crossing to accommodate water and sewer pipelines as well a secondary fire access/egress road that would link Highland Valley Court with the homes located in the northern portion of Area A. This crossing also would occur at a narrowed point on the drainage at a right angle to the channel to minimize the amount of impact to sensitive resources. The secondary fire access/egress road would utilize a concrete dip section "wet crossing" design in order to minimize impacts to sensitive resources. The secondary access/egress road would only be used for emergency evacuation.
- The third crossing would be located just off the project site immediately north of the sewer pump station. This crossing would accommodate both a sewer line and the proposed offsite trail. This crossing would occur where an existing road crosses the drainage. The project has been specifically designed to co-locate the sewer line and trail at the point of an existing roadway crossing to minimize impacts to sensitive species.

- The fourth crossing would be located offsite where the community trail crosses Santa Maria Creek. No utilities are proposed with this crossing. This crossing is proposed as a natural earthen multi-purpose (foot, equestrian, and bicycle) trail crossing. The RMP requires that wet season creek crossings be avoided where feasible and that the Resource Manager install preventative bio-engineered erosion control devices, repair erosion damage, and remove sediment as deemed necessary and appropriate for both the safety of trail users and for protection of the earthen stability of the trails from damage during the wet season. The location of the crossing was specifically chosen to coincide with an existing cattle trail in an area with limited vegetation to minimize impacts to sensitive species.

dd. The least damaging construction methods are utilized.

Least-damaging construction methods shall be utilized for each of the four crossings, including the location of all staging areas outside of sensitive areas, work shall not be performed during the sensitive avian breeding season, and noise attenuation measures shall be included.

ee. The applicant shall prepare an analysis of whether the crossing could feasibly serve adjoining properties and thereby result in minimizing the number of additional crossings required by adjacent development.

The proposed crossings that are for the installation of utility lines and for trail use would not be utilized for vehicular access. One crossing will accommodate vehicular access too and it is a secondary fire access/egress roadway. This secondary access/egress is internal to the project and would not serve adjoining properties. The areas surrounding the project site are generally either built out or preserved as open space, so there is little potential to minimize the number of crossings by serving adjoining properties. The Spirit of Joy Lutheran Church, included as project number 10 in the Cumulative Project table, may potentially connect to the project sewer system, thus minimizing additional crossings.

ff. There must be no net loss of wetland and any impacts to wetlands shall be mitigated at a 3:1 (this shall include a minimum 1:1 creation component, while restoration/enhancement of existing wetlands may be used to make up the remaining requirements for a total 3:1 ratio).

There would be no net loss of wetlands because impacts to wetlands shall be mitigated at a minimum ratio of 3:1 on the project site as shown in Table 3.1-8.

As demonstrated by the above findings, the project design meets these criteria and the impacts to wetland habitat would not conflict with the RPO.

Areas distinguished by high quality southern willow scrub, mulefat scrub, cismontane alkali marsh, vernal pools, and CSS-inland form would meet the criteria of "sensitive habitat lands" because they currently support or have the potential to support County sensitive botanical and zoological species. Impacts and mitigation for these sensitive vegetation communities are detailed in Table 3.1-5 and are compliant with County policy per Guideline 1.

Since the property is located outside of the County of San Diego MSCP area, an HLP would need to be obtained pursuant to the listing of the California gnatcatcher under the 4(d) ruling of the Endangered Species Act (Interim Habitat Loss Permit) and pursuant to the provisions of the County of San Diego Habitat Loss Ordinance (October 22, 1997). As part of this process, the County is required to make findings in support of the issuance of the HLP. The discussion of impacts to CSS in the following section provides details regarding the conclusion of no adverse findings for the loss of CSS and an appropriate mitigation ratio is required of the project.

Thus, the impact would be ***less than significant*** regarding applicable biological resources protection policies would result per Guideline 1 because the project meets the requirements and/or makes the findings required for conformance as detailed above.

Direct Effects to Sensitive Vegetation Communities

Development of the project, including the residential pads, project roadways, installation of sewer lines and sewer lift station, trails and pathways, and road improvements, would result in permanent impacts on sensitive vegetation communities. Offsite impacts would include the installation of the sewer line and trail through the Hardy Ranch and the widening and improvements along Highland Valley Road and at the intersection of Highland Valley Road and SR 67. Temporary direct impacts may result from lay-down areas, noise, and dust. Details of impacts to all vegetation communities both on and offsite as a result of the proposed project are presented in Table 3.1-5. The areas where impacts on sensitive vegetation communities and the associated acreage would occur are described below.

Engelmann oak woodland would be directly affected by the proposed project. Impacts would occur to 0.20 acre of Engelmann oak woodland. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-1**)

Open coast live oak woodland would be directly affected by the proposed project. Impacts would occur to 0.06 acre of open coast live oak woodland. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-2**)

Valley needlegrass grassland would not be affected by development of the proposed project. All of the valley needlegrass grassland on the project site is located within Area C where no development would occur. Therefore, per Guidelines 4 and 5, the project would result in ***no impact*** to valley needlegrass grassland.

Southern willow scrub, both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 0.05 acre of southern willow scrub. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-3**)

Mulefat scrub, both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 0.05 acre of mulefat scrub. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-4**)

Cistmontane alkali marsh, both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 1.02 acre of cistmontane alkali marsh. Per Guidelines 3, 4, and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-5**)

Vernal pools are located mainly in Area C and the project would not affect this area. However, a small portion of the nature trail and the trail staging area are proposed within the north western corner of Area C. Trails and the trail staging area have been designed to avoid impacts to vernal pools. A satellite pool is located in Area B in a location that would not be affected by project development. In addition, Area B would be preserved through purchase and inclusion in the Ramona Grasslands Preserve. The satellite pool in Area A would be located in an open space lot and no impacts to this pool would result. Offsite pools on the Hardy Ranch are not located near the proposed alignment of the trail or sewer easement and would not be affected by the project. Per Guidelines 3, 4, and 5, there would be ***no impact*** to vernal pools.

Nonvegetated channels, both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 0.03 acre of nonvegetated channel. Per Guidelines 3, 4, and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-6**)

CSS (inland form), both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 26.80 acres of CSS (inland form). Because the project would cause impacts on CSS, an HLP would be required and findings must be made. In response to these findings, the following information regarding the Cumming Ranch project applies. Connectivity would not be lost because the Hardy Ranch, now under County ownership, increases the connectivity between Areas A and B to offsite preserved lands to the north and west and allows for a wider corridor of potential movement at the northern boundary of Area A, with appropriate widths for wildlife corridors. Based on the Draft North County MSCP (NCMSCP) subarea demarcated for the Ramona area, the development of the southern portion of the Cumming Ranch property would not impede the assembly of this subarea. With the preservation of Etcheverry Creek, Hardy Ranch, Area C, and the option to purchase Area B, this portion of the Ramona subarea remains intact for assembly of this preserve and adds greatly to its biological value for movement of wildlife through the Cumming Ranch to other offsite locations within the Ramona Grasslands Preserve. The project has been carefully designed to maximize impacts on already impacted lands (field/pasture) and minimize the impact to natural vegetation communities and jurisdictional waters and wetlands. A majority of the project impacts (pad site and internal street grading) would be restricted to these already impacted areas and human uses of the property would be concentrated within the already impacted portions of the site, thereby minimizing adverse affects to the wildlife that are resident or utilizing the open space areas. Habitat loss would not affect any listed species or their recovery in the wild. Impacts on sensitive vegetation communities would be minimized with preservation of those and other vegetation communities within large blocks of habitat. Habitat loss would be incidental to lawful activities.

Though there would be no adverse findings regarding the loss of CSS for the HLP, per Guidelines 4 and 5, the loss of acreage of this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-7**)

Granitic southern mixed chaparral would be directly affected by the proposed project. Impacts would occur to 19.55 acres of granitic southern mixed chaparral. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-8**)

Granitic chamise chaparral would be directly affected by the proposed project. Impacts would occur to 4.05 acres of granitic chamise chaparral. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-9**)

Nonnative grassland, both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 12.94 acres of nonnative grassland. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-10**)

Field/pasture, both onsite and offsite, would be directly affected by the proposed project. Impacts would occur to 164.69 acres of field/pasture. Per Guidelines 4 and 5, the impact to this sensitive vegetation community would be considered a ***significant impact***. (**Impact BI-11**)

Impacts to eucalyptus woodland, disturbed habitat, and developed areas are ***not significant*** as they are not sensitive vegetation communities per Guidelines 4 and 5.

Direct and Indirect Effects to Federal, State, and County RPO Jurisdictional Waters and Wetlands

Permanent impacts would occur to waters and wetlands from the development of the proposed project for a sewer line, pathways and trails, and widening of Highland Valley Road to include road slopes and culvert expansion. Tables 3.1-6, 3.1-7, and 3.1-8 detail the impacts to federal, state, and County RPO wetlands and waters. There would be a total impact of 0.13 acre to ACOE jurisdictional wetlands and waters, 1.18 acres of CDFG jurisdictional wetlands and waters, and 1.18 acres of County RPO jurisdictional wetlands. Due to the impact to jurisdictional wetlands and waters, federal, state, and local permits would be required for project implementation as detailed in the Biological Technical Report (Appendix B). Indirect impacts could occur as a result of maintenance vehicles crossing streams during or after rains (when water is flowing into streams) resulting in increased erosion.

Design of the project includes 50-foot minimum wetland buffers throughout the proposed development. These buffers would protect the existing drainages and unnamed swales from direct and indirect construction and postconstruction related impacts. Wetland buffers would extend from the edge of the wetland to the lot line. The determination to use a 50-foot wide buffer on either side of wetlands and waters was based on the overall low quality and function of the wetlands as well as the abutment of the buffer to the 100-foot wide residential lot LBZ (thus, creating a total of 150-feet between a wetland area and residential development). In addition, these wetlands and wetland buffers would be protected within the large open space easements adjoining and/or integrated within the wetlands and wetland buffers. All wetlands and wetland buffers would be included within the dedicated Area A open space.

As shown in Table 3.1-5, there would be no impacts to vernal pools. The majority of vernal pools are located in Area C which would not be affected and would continue to be preserved

through conservation easements. The project's preservation of the entire Area C would serve to further protect the vernal pools through increased buffering. A small portion of the proposed nature trail alignment is located in the northwestern portion of Area C and within offsite Hardy Ranch. This trail alignment was located to avoid impacts to vernal pools. If the final trail alignment were located within or in close proximity to a vernal pool watershed, indirect impacts to vernal pools could result from trail construction and maintenance and/or increased pedestrian traffic. The satellite pool in Area B would not be affected as no development is planned for that area. The second satellite pool located in the northwest corner of Area A would be placed in an open space lot and no impacts would result. There are no offsite improvements located near vernal pool locations.

The loss of jurisdictional federal, state, and County RPO waters and wetlands would be a direct impact of the project. Vehicles crossing streams during or after rains (when water is flowing into streams) could result in increased erosion and would be an indirect impact of the project. While trails and the trail staging area have been designed to avoid impacts to vernal pools, out of an abundance of caution, the proposed trail alignment through Area C has the potential for indirect impacts to vernal pools and/or their watersheds. Per Guideline 3, these on and offsite impacts include ACOE waters and wetlands, CDFG wetlands, and County RPO wetlands and would be a ***significant impact***. (**Impact BI-12**)

Direct Effects to Sensitive Plants

Engelmann oaks occur throughout Area A, both in oak woodland habitats and as individual trees within other nonwoodland habitats. Impacts to oak woodland habitats are discussed separately under sensitive vegetation communities.

There are a total of 30 Engelmann oaks on the project site. Eleven of the Engelmann oaks would be impacted by the project and 19 would be preserved in open space. Of the 11 impacted Engelmann oaks, one would be removed by grading within a residential lot. The remaining 10 oaks would be located within the lots, but outside of the residential pad grading limits. These 10 individuals are also considered impacted through potential human-associated uses within the tree's understory within private lots. This may include compacting of the soil within the drip-line and the potential for over-watering of mature trees, which may result in root rot. There are four Engelmann oaks located within proximity to the proposed trail. The trail has been designed to avoid potential impacts to these individuals, including avoiding impacts to the root zone. The impact to 11 Engelmann oak trees are a ***significant impact*** per Guideline 2. (**Impact BI-13**)

There are a total of 30 coast live oaks on the project site. Four coast live oaks would be impacted as they occur within the project development footprint within Area A and 26 would be preserved in open space lots. One out of the four impacted coast live oaks would be removed by grading within a residential lot. The remaining three oaks would be located within the lots outside of the residential pad grading limits. However, these three individuals are also considered directly impacted, as described above. Because coast live oak trees are not considered a sensitive species, impacts are ***less than significant*** per Guideline 2. However, since these trees enhance the habitat value for animal species, the four coast live oak trees will be moved or replaced within the biological open space. The biological open space is preserved because of the presence of a large grove of mature oaks; however, it is considered impact neutral because it is isolated and surrounded by lots.

There are at total of 41 oak hybrids found onsite (scrub oak crossed with either coast live oak or Engelmann oak). The individual oak hybrids found onsite are classified as shrubs. A total of 24 oak hybrids would be directly impacted, including seven that would be removed by grading and 17 located in lots but outside of the residential pad grading limits. A total of 17 oak hybrids would be preserved within open space lots. Because oak hybrids are not a sensitive species, impacts to oak hybrids are considered to be ***less than significant*** per Guideline 2.

Southern tarplant is considered a County sensitive plant species (Group A) and is considered rare by CNPS (List 1B). Development of Cumming Ranch would result in impacts to 3.70 acres of southern tarplant. This total is derived from impacts of 3.30 acres in Areas A and B, 0.20 acre in the ROW, and offsite impacts to 0.20 acre from installation of the sewer lines and trails. This impact totals approximately 15 percent of the total southern tarplant population within the Cumming Ranch site. The impact to southern tarplant is a ***significant impact*** of the proposed project per Guideline 2. (**Impact BI-14**)

Direct Effects to Sensitive Animals

There is a potential for the federally listed Arroyo toad to be located onsite; however, none were identified in previous surveys. No other federally and/or state-listed endangered or threatened species were detected within the area of the project proposed for development (Area A) or in the areas specified for offsite construction. Sensitive species (California Special Concern species or County Sensitive) found within the project area are listed in Table 3.1-4. Although these species are not threatened or endangered, they are considered rare and are afforded consideration under CEQA. Direct impacts to these species could occur from the proposed project through loss of resident habitat, including foraging, denning/nesting/burrowing, and dispersal habitats within Area A. Offsite preserved acreage at the adjacent Hardy Ranch and nearby Cagney Ranch would

add to the benefit of available dispersal, foraging, and breeding habitat. Additional preservation of these species habitats would occur within Areas B and C; however, lost habitat on Area A would affect sensitive species known to occupy the area as described below.

Sensitive herpetofaunal species affected include western spadefoot toad, arroyo toad, San Diego horned lizard, granite spiny lizard, granite night lizard, coastal California whiptail lizard, California orange-throated whiptail lizard, San Diego horned lizards, and two-striped garter snake. Sensitive mammalian species affected include mountain lion, American badger, San Diego desert woodrat, San Diego black-tailed jackrabbit, California pocket mice, and southern mule deer. Sensitive avian species affected include Canada goose, turkey vulture, white-tailed kite, northern harrier, golden eagle, Cooper's hawk, red-shouldered hawk, ferruginous hawk, loggerhead shrike, great horned owl, burrowing owl, zone-tailed hawk, red-tail hawk, rough-legged hawk, American kestrel, and barn owl. Impacts may also occur to nesting raptors and other species listed under the MBTA. These potential direct impacts to the above listed sensitive herpetofaunal, mammalian, and avian species due to habitat loss are ***significant impacts*** per Guideline 2. (**Impact BI-15**)

Indirect Effects of Project Construction

Potential sources for indirect impacts during project construction to the vegetation communities and sensitive plant or animal species known to occur adjacent to the project construction area could include trampling of vegetation outside of the limits of grading by workers and vehicles during construction, erosion, runoff, dust, and siltation into offsite areas, impacts related to storage and access areas, and indirect impacts to vernal pools through trail construction. Indirect effects could result from construction noise to sensitive avian species during their breeding seasons including coastal California gnatcatcher, raptors, and other species listed under the MBTA. These potential indirect construction impacts to sensitive vegetation communities and animal species would be short term but are considered ***significant impacts*** per Guidelines 2, 4, and 5. (**Impact BI-16**)

Indirect Effects of Project Occupation

Indirect effects of project occupation to sensitive plants or animals are those effects that could occur after project development with the introduction of development in an area that once was undeveloped. These types of impacts could include changes to wildlife dispersal, foraging, and denning, burrowing, and nesting that could result from increased night lighting, noise, storm water runoff, interface with domestic animals, etc. Indirect impacts to vegetation generally include human-associated uses such as compacting soil within the drip-line of trees,

overwatering mature trees, fugitive dust loads where located next to trails, and the potential for vegetation trampling where located next to trails.

The project has been designed with buffer areas, which provide a natural separation between development and the natural areas of the project site. This natural separation would deter people and pets from encroaching into the natural areas. Additional separation would occur beyond the property lines to protect sensitive habitat and wildlife by allowing space and distance between their habitat and active developed areas and to serve as natural biofilters for runoff from the developed areas.

Where existing paths and obvious pedestrian access has occurred, natural barriers (i.e., rock formations and heavily planted areas) would be provided with development of the project. The goal of creating natural barriers would be to discourage infringement into the open space, specifically at points where a person could choose to follow the designated pathway or cut through the sensitive open area. Natural barriers would include such materials as impassable brush, mounding, rocks, and trees at potential entry points into the open space areas. Examples of these points of entry may include areas surrounding trailheads or the open space area adjacent to the roadway near lots 100 and 101.

The project has been designed with minimal fencing in order to maintain the open and seamless integration with the natural grasslands and open space areas. Fencing would be included in the project design only where necessary to enclose domestic animals. Signage would be located at the edge of residential lots to delineate the boundary between private property and sensitive open space. There may be special circumstances, such as roadways, that require the use of fencing where natural barriers or buffer areas would not create a physical separation. Allowed fencing types would include strand wire, wooden rail, or other natural materials. No chain-link or similar type of fencing would be permitted. Fencing would be required on other lots that are suitable for large animal keeping.

To maintain the rural nighttime ambience that is important in Ramona, there would be no street lighting within the proposed project. Minimal lighting may be required at the project entrances off of Highland Valley Road for safety purposes. Homeowners could have exterior lighting within allowed parameters, such as motion lights, shutoff timers, and downshielding. The natural buffers within the private yards, as well as the designated open space would help to minimize spillover into other sensitive areas, including both wildlife areas and adjacent residential properties.

The design measures listed above would reduce potential indirect impacts of project development; however, per Guideline 7, the potential would still exist for resident or trail user encroachment into sensitive areas and this is considered a potentially ***significant impact***. **(Impact BI-17)**

Effects to Wildlife Dispersal Corridors and Linkages

As noted previously, the primary wildlife dispersal corridors and linkages are Santa Maria Creek in Areas B and C and Etcheverry Creek in Area B. Secondary corridors and linkages include the various unnamed drainages throughout Areas A and B that feed into Etcheverry Creek. Indirect impacts to wildlife could occur during construction and upon the habitation of the development. These indirect impacts may include temporary construction noise; temporary obstruction of or diversion of travel routes; increased presence of humans, vehicles, and associated construction debris; edge effects between open space lots and residential lots and internal streets where humans and vehicle traffic would occur more frequently; noise and lighting from residential units; and domestic pet interactions.

It is anticipated that some of the small and medium sized mammals and herpetofaunal species would either abandon their territories or adapt to the constraints of development within Area A. However, most of the small and medium sized animals were observed within the proposed open space areas within Area A and within adjacent open lands in Areas B and C. Mobile species such as the jackrabbit would avoid impacts from the construction of the proposed development. The presence of mesopredators such as domestic dogs and cats, increased vehicle traffic, and increased ambient lighting may result in both direct and indirect impacts to many of the smaller animals. In addition, development of the site may create impacts to raptor foraging and other wildlife uses.

The project has been designed to protect and maintain the wildlife movement and dispersion corridors throughout the site. Etcheverry Creek and Santa Maria Creek would both be preserved in open space within Areas B and C. The secondary corridors and linkages including the smaller drainages that traverse the site would be preserved within open space lots and/or easements. In addition, as described in Chapter 1, Open Space Enhancement, specific natural areas throughout Area A would be enhanced with compatible and appropriate plantings to increase wildlife habitat and provide natural aesthetic value. This would include the enhancement of the drainage corridors within Area A, with native species such as mule fat scrub or willows to provide additional protective cover for birds and small animals that use these local wildlife corridors. The enhanced drainage areas are shown in the Conceptual Revegetation Plan included in Appendix D. An increase in native riparian cover would enhance these areas for wildlife movement by

providing concealment from humans, pets, noise, and lighting. Indirect adjacency effects would be further minimized through the proposed buffers and LBZs which separate development from open space areas. Also, the project has been designed with minimal fencing. No chain link or similar type of fencing would be permitted; thus, wildlife movement throughout would not be restricted by project fencing. With these project design measures, the proposed dedication of 143.3 acres of open space habitat within Area A, the preservation and planting of oak trees onsite, preservation of the adjoining acreage within Areas B and C, and enhancement of drainages throughout Area A, potential direct and indirect impacts to wildlife corridors and linkages would be ***less than significant*** per Guideline 6.

3.1.4 Cumulative Impact Analysis

Because the Ramona grasslands are a primary biological component of the region, the biological cumulative study area is based upon the Ramona Community Planning area, including the Ramona Grasslands Preserve. The general boundaries of the Ramona Grasslands Preserve are shown in Figure 1-4 and a list of 84 projects with potential biological resources is included in the Biological Technical Report with a brief analysis of biological impacts associated with each project (Appendix B). This study area composes a comprehensive and cohesive biological eco-region for cumulative analysis.

The proposed project site is located in a region that is characterized by sparsely developed lands consisting of grasslands, oak woodlands, and chaparral and CSS covered hillsides. The expansive grasslands in the Ramona area have historically been maintained by grazing pressure and represent a unique biological resource in the region. These grasslands cover the eastern portion of the project site and form a contiguous habitat throughout the Santa Maria Valley and extend east beyond the Ramona Airport. The grasslands provide extensive foraging habitat for many species of raptors and support listed species such as Stephen's kangaroo rat.

The area is also characterized by clay soils that sustain vernal pools and their inhabitants (e.g., San Diego fairy shrimp) and also support important populations of sensitive plant species. The Ramona area has been identified as one of the most important areas in the region for vernal pool conservation and large portions of the area have been designated as critical habitat for the San Diego fairy shrimp. The sensitive vernal pools within and surrounding the project area have been studied specifically in the Ramona Vernal Pool Conservation Study (TAIC and EDAW 2005). The majority of the vernal pools occupied with San Diego fairy shrimp occur on the northern portion of the project site in Area C and within Lot H located in the northwest corner of Area A, all of which would not be affected by the project.

Shrublands and oak woodland habitats also provide important habitat in the Ramona region. These habitats provide cover, foraging, and nesting habitat for a wide range of wildlife and contribute to the floral diversity of the region. Chaparral and CSS are dominant on the slopes and hillsides in the project area, while open oak woodlands occupy the shadier portions of the valleys. Although the shrublands and woodlands are important biological components of the Ramona area, the grasslands, vernal pools, and the Santa Maria Creek corridor are the critical priorities for long-term conservation in the project vicinity.

The NCCP is a cooperative effort to protect habitats and species. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land use. The focus of the initial effort is the CSS habitat of Southern California (County of San Diego 2006b).

Total anticipated permanent impacts to habitat on and offsite from the proposed residential subdivision would primarily include impacts to field/pasture land, but would also include impacts to open Engelmann oak woodland, open coast live oak woodland, individual oak trees, riparian habitats such as cismontane alkali marsh and jurisdictional Waters of the United States, CSS-inland form, chaparral communities such as granitic southern mixed chaparral and granitic chamise chaparral, nonnative grassland, eucalyptus woodland, and southern tarplant for a total of 236.9 acres.

Quantitatively, implementation of recently developed and/or approved and foreseeable projects (detailed in the Biological Technical Report) would result in a permanent loss of approximately 169.9 acres of sage scrub communities, 22.5 acres of oak woodlands, 536.9 acres of chaparral, 159.9 acres of nonnative grassland, 0.6 acres of southern willow scrub, and 5.4 acres of wetland habitats in the Ramona area (see Biological Technical Report). These projects would collectively result in the loss of 2 percent of the sage scrub, less than 1 percent of the oak woodland, less than 2 percent of the chaparral, and 2 percent of the nonnative grassland in the Ramona area. However, these projects would be required to comply with applicable NCCP planning documents and also County RPO. Therefore, collective loss of these quantities of sage scrub, oak woodland and chaparral are not cumulatively considerable.

The collective loss of 2 percent of the nonnative grassland is not cumulatively considerable because the cumulative impacts to this vegetation community in Ramona are primarily occurring within infill parcels surrounded by development (refer to Figure 1-17). In addition one major project in the Ramona Grasslands has been withdrawn and purchased by a conservancy (number 36, Oak Country). Development of small patches of vegetation along the fringes of these habitat communities results in minimization of edge effects and the preservation of large, contiguous

patches of habitat, as is the case for the Cumming Ranch project. Also, the development of the proposed project in conjunction with other future developments would cumulatively affect CSS-inland form and various types of grasslands, which provide habitat for sensitive species including the threatened, federally listed coastal California gnatcatcher. Incremental loss of sensitive species habitat may be cumulatively significant. However, the design of the proposed project has included the preservation of Areas B and C (314.1 acres) and 143.3 acres in Area A. This acreage would be included in the Ramona Grasslands Preserve. Though the project would contribute to the overall cumulative loss of CSS-inland form and nonnative grassland, the preservation of large, contiguous acreage for preservation and inclusion in the Ramona Grasslands Preserve is a positive benefit to the regional conservation effort. For this reason, the project's contribution to the cumulative loss of nonnative grassland and CSS is not considered considerable.

Several of the projects in this cumulative analysis have or would likely impact vernal pools. While not included on the cumulative project list, the Olive Peirce Middle School and Ramona High School projects included plans to implement vernal pool enhancement and management programs to mitigate impacts to vernal pools. Because of the countywide rare status of vernal pools and the even more rare status of Ramona vernal pools, any direct impact would be significant at the project and at the cumulative level. However, implementation of the proposed project does not impact vernal pool habitat and, therefore, the proposed project would not contribute to potentially significant cumulative impacts to vernal pools (TAIC and EDAW 2005). In addition, the project would serve to further the protection of vernal pools through the provision of additional buffer acreage around the sensitive vernal pool area onsite. Spreading navarretia, a federally listed botanical species was identified during the recent surveys of the vernal pools. This plant species occurs in Area C (Ramona Vernal Pool Preserve), where no impacts, cumulative or project specific will occur.

Cumulatively, incremental impacts to wetlands may become significant when paired with other projects throughout the region. However, as shown in Tables 3.1-6 through 8 regulated waters and wetlands project impacts would be mitigated with ratios ranging from 1:1 to 3:1 and would actually result in an overall increase of acreage once mitigation is established. In addition, impacts to wetlands must be approved by the agency with proper jurisdiction. Each agency, such as ACOE and RWQCB, will consider cumulative impacts to Waters of the U.S. when authorizing permits to generate impacts. These agencies require mitigation to result in "no net loss" of wetlands. For these reasons, cumulative impacts to federal, state, and County RPO protected wetlands would be less than significant.

While the project will impact 3.70 acres of southern tarplant, no other cumulative project will impact southern tarplant. The Ramona Airport project had proposed improvements that could have resulted in impacts to southern tarplant; however, those improvements have been withdrawn. Therefore, the proposed project will not contribute to cumulative impacts to southern tarplant.

A direct project impact would result to 11 Engelmann oaks and 4 coast live oaks. The impacts to these 15 oak trees would be mitigated at a 2:1 ratio, resulting in the planting of 30 oak trees throughout the open space of Area A. This mitigation ratio would increase the number of oak trees on the project site thus, reducing the project impact as well as any potential cumulative impact to sensitive Engelmann oaks.

Federal, state, and County of San Diego policies require that projects have no net loss of riparian vegetation communities, including southern willow scrub, mulefat scrub, cismontane alkali marsh, and nonvegetated channels. The proposed project would mitigate impacts to southern willow scrub, mulefat scrub, and cismontane alkali marsh at an acreage of 3:1. Nonvegetated channels would be mitigated at an acreage ratio of 3:1. That means that for every acre of wetland impact, at least two acres of the affected habitat must be created elsewhere, and the remaining balance must be enhanced at the impact location at the 1:1 ratio. The proposed project, in addition to all other cumulative projects resulting in impacts to southern willow scrub, mulefat scrub, cismontane alkali marsh, and nonvegetated channels are also required to comply with these policies for wetland creation and mitigation. Therefore, there would be no net loss to wetlands due to mitigation and there is no cumulative impact to these habitat types.

The project site would not adversely impact raptor foraging within the Ramona grasslands. The project site does not currently support migratory nesting raptors. Large blocks of open space would be dedicated within Area A and Area C with an option for Area B to be purchased for open space as well. In addition, the recent purchase of the adjoining offsite acreage for preservation will ensure that raptor foraging and potential nesting sites are protected in perpetuity.

Another important biological resource in the Ramona area is Santa Maria Creek. This intermittent creek flows approximately east to northwest through the developed and undeveloped areas of the Ramona community. Although few sections of this creek support well-developed riparian habitat, this feature provides an important regional corridor for wildlife movement. Downstream of the project, segments of the creek are known to support populations of listed species such as the arroyo southwestern toad. Santa Maria Creek traverses the project site from east to west across Areas B and C. The project would not adversely impact any primary wildlife

corridors (Santa Maria Creek and Etcheverry Creek). The crossing of Santa Maria Creek for trail purposes is expected to be negligible to the function of this creek as a wildlife dispersal corridor and linkage. Therefore, the project would not contribute cumulatively to impacts to wildlife corridors. With the preservation of Areas B and C and the drainages throughout Area A, wildlife linkages onsite would be maintained. Buffers would reduce edge effects and proposed enhancements would be beneficial in providing additional coverage to wildlife species that use these areas for movement within the site as well as through the site to access offsite areas.

Cumulative impacts to the overall biological community in regards to habitat loss and listed and sensitive species impacts as well as expected traffic, noise, lighting, air pollution, urban storm water runoff and pollution, and other contributory factors may be significant. Project impacts to sensitive habitat, vegetation, and/or species will occur on the fringe of highly concentrated resources as the Ramona Town Center is adjacent and residential developments surrounds most of the project site. The proposed donation of Area C as open space and the proposed Area B option to purchase for open space/preserve ties in with the adjoining properties (Hardy Ranch and Cagney Ranch) as well as other nearby properties purchased for preservation in the Ramona Grasslands Preserve; thus, providing key acreage towards a cohesive and preserved grassland ecosystem. Absent compliance with appropriate policies and ordinances on the part of all future projects there would be a significant cumulative impact for each significance criteria. The appropriate agencies require that developments must incorporate mitigation measures to decrease their individual and collective impact on sensitive species. With incorporation of applicable mitigation measures and project design features, the cumulative contribution of the Cumming Ranch project to biological resources would be ***less than significant*** per Guideline 8.

3.1.5 Mitigation Measures

M-BI-1 through M-BI-11 Impacts to Sensitive Vegetation Communities

a. The primary mitigation acreage for the project would be located within Area A open space with additional mitigation acreage located within Areas B and C. Open space lots C, E, and H in Area A were not included as mitigation acreage as they are considered isolated and are impact neutral areas. Mitigation acreage shall be provided through the permanent dedication of open space land and the provision of an open space easement over this land according to the ratios provided in Table 3.1-5. The open space lots throughout Area A are shown on Figure 1-5 and open space easements are shown on Figure 1-16, Open Space Map.

b. The RMP shall be approved and funded for the open space area and approved prior to the approval of a grading permit for the project. The RMP provides for the monitoring and

management of habitats and species such as oak tree replacement, habitat creation, species surveys and monitoring, and other efforts involved in the day-to-day management of the open space area (i.e., budget control and analysis, debris removal, exotic weed removal, general maintenance of any open space signage, etc.). The RMP includes performance standards to measure the success of mitigation (e.g., percent improvements over time, success rates, etc.). The monitoring and management of these lands shall be conducted in perpetuity.

Mitigation Measure M-BI-1 Direct Effects to Open Engelmann Oak Woodland

Impacts to 0.20 acre of open Engelmann oak woodland shall be mitigated through the in-kind preservation of existing Engelmann oak woodland onsite in Area A open space at a 3:1 ratio for a total of 0.60 acre (see Table 3.1-5 and Table 3.1-9). All necessary mitigation acreage is available on the project site.

Mitigation Measure M-BI-2 Direct Effects to Open Coast Live Oak Woodland

Impacts to 0.06 acre of open coast live oak woodland shall be mitigated through the preservation of existing Engelmann oak woodland onsite in Area A open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**) at a 3:1 ratio for a total of 0.18 acre (see Table 3.1-5 and Table 3.1-9). All necessary mitigation acreage is available on the project site.

Mitigation Measure M-BI-3 Direct Effects to Southern Willow Scrub

Impacts to 0.05 acre of southern willow scrub shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**) at a 3:1 ratio for a total of 0.15 acre (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see **M-BI-12**).

Mitigation Measure M-BI-4 Direct Effects to Mulefat Scrub

Impacts to 0.05 acre of mulefat scrub shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**) at a 3:1 ratio for a total of 0.15 acre (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see **M-BI-12**).

Mitigation Measure M-BI-5 Direct Effects to Cismontane Alkali Marsh

Impacts to 1.02 acre of cismontane alkali marsh shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**) at a 3:1 ratio for a total of 3.06 acres (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see **M-BI-12**).

Mitigation Measure M-BI-6 Direct Effects to Nonvegetated Channel

Impacts to 0.03 acre of nonvegetated channel shall be mitigated onsite in Area A open space at a 3:1 ratio where the impact occurs (see Table 3.1-5) for a total of 0.09 acre. Creation and/or restoration mitigation shall occur where practicable onsite within Area A. The Revegetation Plan shall detail the performance measures for creation and restoration (see **M-BI-12**).

Mitigation Measure M-BI-7 Direct Effects to CSS (inland form)

Mitigation for CSS-inland form is based upon the CSS Evaluation Logic Flow Chart as part of the NCCP. This flow chart was completed and is detailed in the Biological Technical Report. The flowchart determined that the appropriate mitigation ratio for the value of CSS onsite is 2:1. Impacts to 26.80 acres of CSS-inland form shall be mitigated through the preservation of

existing CSS onsite in Areas A and B open space at a 2:1 ratio (see Table 3.1-5 and Table 3.1-9). CSS inland form cannot be fully mitigated in-kind onsite. A total of 52.96 acres of CSS will be mitigated onsite. A remaining 0.64 acre of mitigation is required offsite. Prior to issuance of a grading permit, proof of acquisition and funding for management of 0.64 acre of like-functioning habitat in an offsite area approved by the DPLU shall be provided.

Mitigation Measure M-BI-8 Direct Effects to Granitic Southern Mixed Chaparral

Impacts to 19.55 acres of granitic southern mixed chaparral shall be mitigated through the preservation of existing granitic southern mixed chaparral onsite in Area A open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**). Mitigation shall be at a 0.5:1 ratio for a total of 9.78 acres (see Table 3.1-5 and Table 3.1-9). All necessary mitigation acreage is available on the project site.

Mitigation Measure M-BI-9 Direct Effects to Granitic Chamise Chaparral

Impacts to 4.05 acres of granitic chamise chaparral shall be mitigated through the preservation of existing granitic chamise chaparral onsite in Area A open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**). Mitigation shall be at a 0.5:1 ratio for a total of 2.03 acres (see Table 3.1-5 and Table 3.1-9). All necessary mitigation acreage is available on the project site.

Mitigation Measure M-BI-10 Direct Effects to Nonnative Grassland

Impacts to 12.94 acres of nonnative grassland shall be mitigated through the preservation of existing nonnative grassland onsite in Areas A, B, and C open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**). Mitigation shall be at a 1:1 ratio for a total of 12.94 acres (see Table 3.1-5 and Table 3.1-9). All necessary mitigation acreage is available on the project site.

Mitigation Measure M-BI-11 Direct Effects to Field/Pasture

Impacts to 164.69 acres of field/pasture shall be mitigated through the preservation of existing nonnative grassland onsite in Areas A, B, and C open space (including acreage preservation and RMP requirements as detailed in **Mitigation Measure M-BI-1**). Mitigation shall be at a 0.5:1 ratio for a total of 82.35 acres (see Table 3.1-5 and Table 3.1-9). All necessary mitigation acreage is available on the project site.

<u>Mitigation Measure M-BI-12</u> Direct and Indirect Effects to Wetlands and Waters of the U.S.

a. On and offsite impacts to 0.13 acre of ACOE waters and wetlands shall be mitigated onsite in open space easements at a 3:1 ratio. Proposed mitigation for wetlands shall consist of a 3:1 ratio where 1:1 shall include onsite restoration at impact locations and 2:1 shall include onsite creation or restoration of habitat. Creation and/or restoration mitigation shall occur as detailed in the Revegetation Plan. The Conceptual Revegetation Plan is included in Appendix D.

   On and offsite impacts to 1.18 acres of CDFG wetlands and 1.18 acres of County RPO waters and wetlands shall be mitigated onsite in Area A open space at a 3:1 ratio. Proposed mitigation for wetlands shall consist of a 3:1 ratio where 1:1 shall include onsite restoration at impact locations and 2:1 shall include onsite creation or restoration of habitat. Creation and/or restoration mitigation shall occur as detailed in the Revegetation Plan. Appropriate RPO wetland buffers will be incorporated and will be a minimum of 50 feet from the edge of the wetlands in accordance with the 2007 RPO.

b. The Revegetation Plan will require approval by the appropriate agencies prior to issuance of grading permits for the project. A conceptual draft of this plan is provided in Appendix D. The Revegetation Plan details the performance measures for creation and restoration of wetlands and wetland habitats. The Revegetation Plan requires a bond be issued to the County to cover the full cost of the revegetation by the developer (to be released at the end of a successful monitoring period). Creation, restoration, and/or enhancement of wetland habitats shall occur throughout various sections of the unnamed drainages within the planned Area A open space area. In addition to the Revegetation Plan, the RMP developed for the open space area shall be approved and funded prior to the approval of a grading permit for the project **(M-BI-1b through 11b)**.

c. To address indirect impacts to RPO wetlands associated with maintenance activities, the RMP for this project requires installation, inspection, and maintenance of appropriate best management practices (BMPs).

d. To address potential indirect impacts to vernal pools, the proposed trail alignment and trail staging area, as well as an adequate buffer area (to be determined by a qualified biologist in coordination with the County of San Diego) shall be surveyed for vernal pools and their watersheds, prior to final trail siting, to confirm absence. If surveys indicate vernal pools or their watersheds are in close proximity to trail alignments, the trail shall be realigned and the staging area grading modified to avoid all potential impacts to vernal pools.

e. Prior to approval of a grading plan, evidence of applicable permits (or verification that permits are not required) shall be provided to the County.

f. The Resource Manager under the RMP shall avoid wet season creek crossings where feasible, recommend and install preventative bio-engineered erosion control devices, repair erosion damage, and remove sediment as determined necessary and appropriate for both the safety of trail users and for protection of the earthen stability of the trails from damage during the wet season.

Mitigation Measure M-BI-13 Direct Effects to Individual Oaks

Direct impacts to Engelmann oaks and coast live oaks shall be mitigated at a 2:1 replacement ratio. The replacement of 22 Engelmann and 8 coast live oak trees shall occur within Area A open space lots. A Revegetation Plan with monitoring and success criteria has been prepared and shall be submitted for resource agency approval. The success of these trees shall be monitored for no less than 3 years in accordance with all Revegetation Plan requirements (**M-BI-12a**).

Mitigation Measure M-BI-14 Direct Effects to Southern Tarplant

a. Impacts to 3.7 acres of southern tarplant shall be mitigated with preservation and management of approximately 21 acres of the onsite population within Areas A and B open space.

b. In addition, a revegetation plan shall be implemented to provide for an expansion of the population on 3.7 acres of suitable habitat in the managed open space. The revegetation plan shall include provisions for seed to be harvested from impacted areas and distributed on approximately 3.7 acres onsite adjacent to those areas known to support this species. The revegetation plan shall also include measures for the southern tarplant that will be directly affected by sewer line installation (0.2 acre) be implemented to retain the topsoil and return it to the same location to allow for regrowth of this species.

   The RMP includes monitoring and management provisions of the Open Space, which provides assurances of the long-term protection and enhancement of sensitive species and resources. The RMP establishes site specific measures that will enhance the population numbers and distribution of the southern tarplant, including seed harvest from impacted areas and distribution on approximately 3.7 acres onsite in areas adjacent to those known to support this species. Overall, the mitigation will achieve a no-net-loss for this species. (**M-BI-1 through 11**)

<u>Mitigation Measure M-BI-15</u> Direct Effects to Sensitive Animals

a. Direct impacts to sensitive herpetofaunal species habitat shall be mitigated with preservation of habitat onsite within Area A open space lots for Western spadefoot toad; arroyo toad; San Diego horned lizard; granite spiny lizard; granite night lizard; coastal California whiptail; and orange-throated whiptail as required under **Mitigation Measure M-BI-1 through M-BI-12**. The preservation of appropriate habitat for these herpetofaunal species would reduce the impact to below a level of significance.

   To avoid impacts specific to the arroyo toad, the following measure shall be implemented and all grading permits, improvement plans, and the final map shall include the following notice:

   "Prior to any grading, pre-construction surveys (in accordance with USFWS protocol) shall be conducted. If surveys determine there are no toads present, no further action is necessary. If it is determined that toads are present, then an Endangered Species Incidental Take Permit shall be obtained" and measures shall be implemented to avoid direct impacts.

b. Direct impacts to sensitive mammalian species habitat shall be mitigated onsite within Area A open space lots for mountain lion; American badger; San Diego desert woodrat; San Diego black-tailed jackrabbit; and southern mule deer, as required under **Mitigation Measure M-BI-1 through M-BI-12**. Direct impacts to sensitive avian species habitat shall be mitigated onsite within Area A open space lots for Canada goose; turkey vulture; white-tailed kite; northern harrier; golden eagle; Cooper's hawk; red-shouldered hawk; ferruginous hawk; loggerhead shrike; great horned owl; burrowing owl; zone-tailed hawk; red-tail hawk; rough-legged hawk; American kestrel; and barn owl, as required under **Mitigation Measure M-BI-1 through M-BI-12**.

c. To avoid impacts specific to burrowing owls, which use their burrows year-round, the following measure shall be implemented and all grading permits, improvement plans, and the final map shall include the following notice:

   "Restrict all brushing, clearing, and/or grading such that: (1) from February 1 to July 31, no grading or clearing will be allowed within 800 feet of an occupied burrow; and (2) from July 31 (or after young owls have fledged) no grading or clearing will be allowed within 800 feet of an occupied burrow until CDFG is consulted and passive nest exclusion has occurred. This measure may be waived if pre-grading surveys show that no burrowing owls are present."

d. At the time of construction, tree nesting raptors could be present in the project area. The developer shall have raptor nest surveys conducted prior to tree cutting or grading near

mature trees to ensure that active nests are not present. A qualified biologist shall conduct the surveys between February 1 and July 31 and prepare a survey report. If no raptor nests are discovered in the trees to be removed, no further mitigation is required. If any active raptor nests are discovered, the biologist shall mark all occupied trees and delineate a 500-foot buffer area around each occupied tree. No construction activity shall occur within the 500-foot buffer until the young have fledged, as determined by a qualified biologist.

All brushing, clearing, and/or grading shall be restricted such that no grading or clearing will be allowed within 300 feet of occupied coastal sage scrub during the gnatcatcher breeding season (February 15 – August 31) This measure may be waived if pre-grading surveys show that no gnatcatchers are present in or within 300 feet of the area to be brushed, cleared or graded.

All brushing, clearing, and/or grading shall be restricted such that no grading or clearing will be allowed to take any active migratory bird nest during the breeding season (February 15-August 31). This measure may be waived if pre-grading surveys show that there are no active migratory bird nests in the area to be brushed, cleared, or graded. If construction is halted for a period of fourteen days or more during the avian nesting season, a biological survey of the habitat within and adjacent to the proposed construction sites shall be required prior to restarting construction.

If construction is halted for a period of fourteen days or more during the avian nesting season, a biological survey of the habitat within 500 feet of proposed construction sites shall be required prior to restarting construction.

The above measures shall be noted on all grading and improvement plans.

Mitigation Measure M-BI-16 Indirect Effects of Project Construction

The following resource protection measures shall be implemented by the developer to ensure that indirect impacts to sensitive vegetation communities and sensitive plants do not occur.

a. A DPLU-listed biological consultant shall supervise and monitor grading activities to ensure against damage to biological resources that are intended to be protected and preserved. The monitor shall be on site during all grading and clearing activities that are in or adjacent to any biological open space areas or sensitive habitats. If there are disturbances, the monitor must report them immediately to DPLU Permit Compliance Coordinator. Additionally, the biologist shall monitor fencing and erosion control measures, monitor equipment maintenance, staging, and fuel dispensing areas, stop or divert work when deficiencies

require mediation, and attend construction meetings. When all grading activities have been completed, the biologist shall prepare and submit a final letter report.

b. Prior to commencement of construction, the limits of each phase of project construction shall be clearly delineated with temporary fencing by a survey crew. Onsite, the temporary fencing shall be required when grading is proposed within 100 feet of open space. Offsite, temporary fencing shall be installed to indicate the allowable limits of grading, clearing, and staging areas. The limits shall be checked by the biological monitor before initiation of clearing or construction. The project biologist shall submit a letter to the County indicating that the limits of construction have been checked and work can commence.

c. Activities, including staging areas, equipment access, and disposal or temporary placement of excess fill, shall be prohibited within drainages, sensitive habitats, or sensitive plant populations outside of the identified construction area.

d. Erosion and siltation into offsite areas during construction shall be minimized through the implementation of an erosion control plan. The contractor shall prepare an erosion control plan for approval by the County. The contract supervisor shall be responsible for ensuring that the erosion control plan is developed and implemented.

e. Construction access shall utilize existing developed areas or be within the identified construction area. Contractors shall clearly mark all access routes (i.e., flagged and/or staked) prior to the onset of construction.

f. To avoid sensitive habitats, construction staging areas, equipment refueling areas, and other areas for equipment and materials storage shall be located within the identified construction area. To avoid inadvertent impacts to sensitive biological resources that may be present, storage and access areas shall be displayed on the approved project plans and specifications.

g. Biological monitoring shall be required where impacts occur in proximity to proposed open space and other sensitive habitat and resources as determined by the project biologist.

h. Biological monitoring shall be required along the alignment of the on and offsite infrastructure construction.

i. To address potential indirect impacts to vernal pools, the proposed trail alignment and trail staging area, as well as an adequate buffer area (to be determined by a qualified biologist in coordination with the County of San Diego) shall be surveyed for vernal pools and their watersheds, prior to final trail siting, to confirm absence. If surveys indicate vernal pools or their watersheds are in close proximity to trail alignments, the trail shall be realigned and the staging area grading modified to avoid all potential impacts to vernal pools.

j. The above measures shall be noted on all grading and improvement plans.

<u>Mitigation Measure M-BI-17</u> Indirect Effects of Project Occupation

a. The dedicated LBZ easements on each lot shall prohibit: (1) animal keeping without effective restraints or fencing, (2) lighting, (3) exotic invasive landscaping, and (4) focal use areas including arenas, pools, and patios and (5) any other structures without approval o fthe County Fire Marshall and Ramona Fire Marshall. The LBZ easements would require large animals to be kept within fences.

b. Open space signage, in accordance with County policy, shall be installed prior to grading activities and shall be maintained and replaced as needed under provisions within the RMP. Signs shall be located every 50 feet along all open space edges in conjunction with the residential lot LBZ and where open space is adjacent to internal streets, pathways and trails. The signage shall have the following language or similar on it:

"Sensitive Environmental Resources
Area Restricted by Easement
Entry without express written permission from the County of San Diego
is prohibited. To report a violation or for more information about easement
restrictions and exceptions contact the County of San Diego,
Department of Planning and Land Use
Reference: (*3810-03-005*)"

Upon completion of the installation of the open space signage, the project engineer shall submit a signed statement to the County indicating that all signs are in place.

c. The RMP Resource Manager will monitor and manage access and use of the open space easements and work with the HOA to educate residents and trail users about the prohibitions and the resource sensitivity of the area.

3.1.6 Conclusions

With implementation of the mitigation measures listed in Section 3.1.5, biological resource impacts would be reduced to a less than significant level for the proposed project. **Mitigation Measures M-BI-1 through M-BI-11** address direct impacts to sensitive vegetation communities. These direct impacts are mitigated to a ***less than significant*** level because compensatory habitat will be preserved and managed on the project site at an appropriate ratio for the sensitivity of each individual vegetation type.

Impacts to wetlands and waters of the U.S. would be mitigated through a combination of onsite wetland restoration and onsite creation as detailed in **Mitigation Measure M-BI-12**. A Revegetation Plan has been prepared and shall be implemented to monitor the success of the

wetland mitigations to ensure certain performance criteria are met. These measures would reduce wetland and waters of the U.S. impacts to ***less than significant*** because onsite creation and restoration of wetlands would enhance the biological function, would result in a no-net-loss of wetlands, and wetland permits would be obtained from the appropriate regulatory agencies. In addition, the project applicant would provide for the long term preservation and management of the onsite revegetation area.

Mitigation Measure M-BI-13 would enhance the community-level mitigation for impacts to Engelmann and coast live oak trees (oak woodland is mitigated by **Mitigation Measures M-BI-1 and M-BI-2**). The impact to individual oak trees would be mitigated to ***less than significant*** because trees that must be removed and trees that are not protected within an open space easement would be replaced with the planting of oaks at a 2:1 ratio on the project site through implementation of the Revegetation Plan. The result will be the addition of 30 trees in the biological open space of Area A.

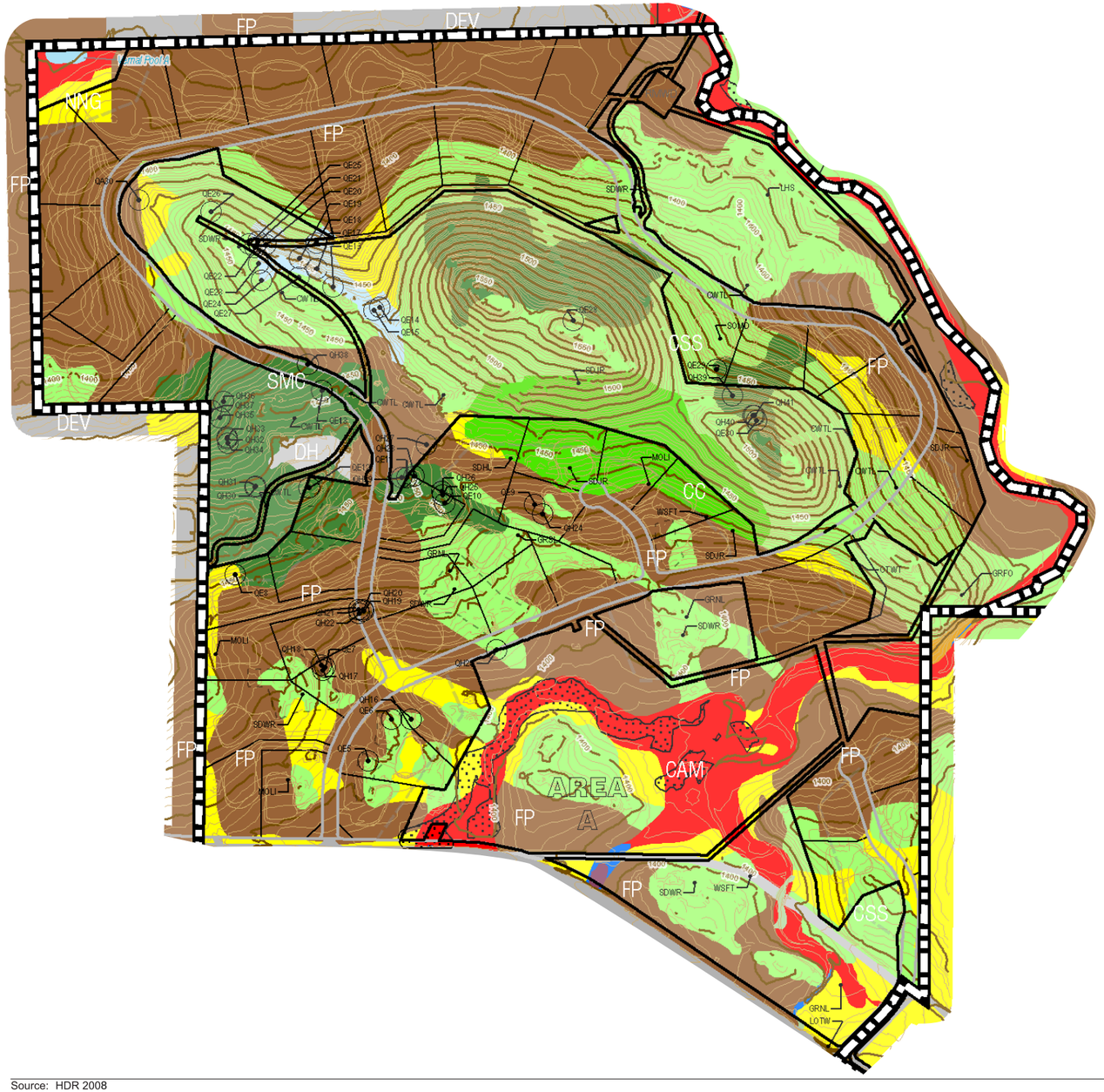
Impact BI-14 would remove 3.7 acres of habitat containing southern tarplant. This impact would be mitigated through the preservation and management of 21 acres of tarplant habitat and the restoration of an additional 3.7 acres within the biological open space. These measures, coupled with the monitoring for success of the habitat restoration mitigation, reduce the direct impacts to this sensitive plant species to ***less than significant*** because there would be a no-net-loss of tarplant habitat and adequate long term preservation and management of the species.

Impact BI-15 to the sensitive animal species known to occur on the project site would be mitigated to ***less than significant*** through habitat-based mitigation because the project incorporates a large acreage of open space that is contiguous with the Ramona Grasslands Preserve for preservation and management in perpetuity. Areas B and C would remain undeveloped and biological resource areas in Area A would be preserved and managed as open space. Important biological features including all drainages, the Santa Maria Creek, Etcheverry Creek, rock outcroppings, the main ridgeline through the site, and stands of oak trees would be preserved and continue to function as habitat for wildlife. In addition, **Mitigation Measure M-BI-15** also requires preconstruction surveys and construction limitations to ensure that no raptors, gnatcatchers, or arroyo toads would be affected during construction. The RMP would monitor sensitive species and manage habitat to maintain the ability for these species to use the Cumming Ranch property in perpetuity.

Mitigation Measure M-BI-16 provides multiple requirements to reduce the potential for indirect impacts during construction. Measures such as fencing and clear demarcation of work areas, biological monitoring during construction activities, pre-design surveys of trail locations,

and construction limitations during the avian breeding season would ensure that construction related impacts do not extend beyond what is anticipated and; therefore, potential indirect impacts would be reduced to ***less than significant*** by containing the construction actives to the appropriate areas.

Potential indirect impacts of project occupation are mitigated through project design and implementation of the RMP. Indirect effects of project operation would be reduced to ***less than significant*** because the RMP prescribes management requirements for all open space areas, including signage to be posted to inform residents and trail users of sensitive environmental areas, notifying them that they may not enter the sensitive areas, and because the project has been designed to reduce the potential for indirect effects from residents, pets, and other indirect development related impacts through features such as natural buffers and LBZ use limitations.



Zoological Resources

- AMBA, American Badger, Taxidea Taxus (den and 2 individuals)
- CG, Canada Geese, Branta canadensis (small winter flock)
- CWTL, Coastal California Whiptail, Cnemidophorus tigris mundus (IS)
- GHOW, Great Horned Owl, Bubo virginianus (nest and IS)
- GRFO, Gray Fox, Urocyon Cinereoanrenteus (scat)
- GRNL, Granite Night Lizard, Xantusia henshawi (IS)
- GRSL, Granite Spiny Lizard, Sceloporus orcutti (IS)
- LHS, Loggerhead Shrike, Lanius ludovicianus (IS)
- LOTW, Longtail Weasel, Mustela frenata (IS)
- MOLI, Mountain Lion, Felis concolor (scat)
- OTWT, California Orange-Throated Whiptail, Cnemidophorus hyperythrus (IS)
- RSHA, Red Shouldered Hawk, Buteo lineatus (IS)
- SDFS, San Diego Fairy Shrimp, Branchinecta sandiegoensis (analysis in lab)
- SDHL, San Diego Horned Lizard, Phrynosoma coronatum blainvillei (IS)
- SDJR, San Diego Black-Tailed Jackrabbit, Lepus californicus bennettii (IS)
- SDWR, San Diego Desert Woodrat, Neotoma Lepida (nests)
- SOMD, Southern Mule Deer, Odocoleus hemionus fuliginatus (IS and PG)
- TSGS, Two-Striped Garter Snake, Thanmophis hammondii (IS)
- WSFT, Western Spadefoot Toad, Scaphiopus hammondii (IS)
- IS - Individual Siting
- PG - Pellet Groups

- Project Impacts
- Southern Tarplant (Centromadia parryi ssp. australis)
- 10' Index Contour
- 2' Intermediate Contour
- Project Site

Oak Species

- Oak Tree
- QA Quercus agrifolia
- QE Quercus englmanii
- QH Quercus hybrid

Vegetation Communities

- CAM, Cismontane Alkali Marsh, 52310
- CC, Chamise Chaparral, 37210
- CSS, Diegan Coastal Sage Scrub - Inland Form, 32520
- DEV, Developed, 1200
- DH, Disturbed Habitat, 11200
- EUC, Eucalyptus, 11100
- FP, Field / Pasture, 18310
- MFS, Mule Fat Scrub, 63310
- NNG, Non-Native Grassland, 42200
- NVC, Non-Vegetated Channel, 13200
- O-CLOW, Open Coast Live Oak Woodland, 71161
- O-EOW, Open Engelmann Oak Woodland, 71181
- SCLORF, Southern Coast Live Oak Riparian Forest, 61310
- SMC, Granitic Southern Mixed Chaparral, 37121
- SWS, Southern Willow Scrub, 63320
- VNG, Valley Needlegrass Grassland, 42110
- VP, Vernal Pool, 44322

Source: HDR 2008

NORTH

0 200 400 800 Feet

Figure 3.1-1a
Biological Resources- Area A North of Highland Valley Road

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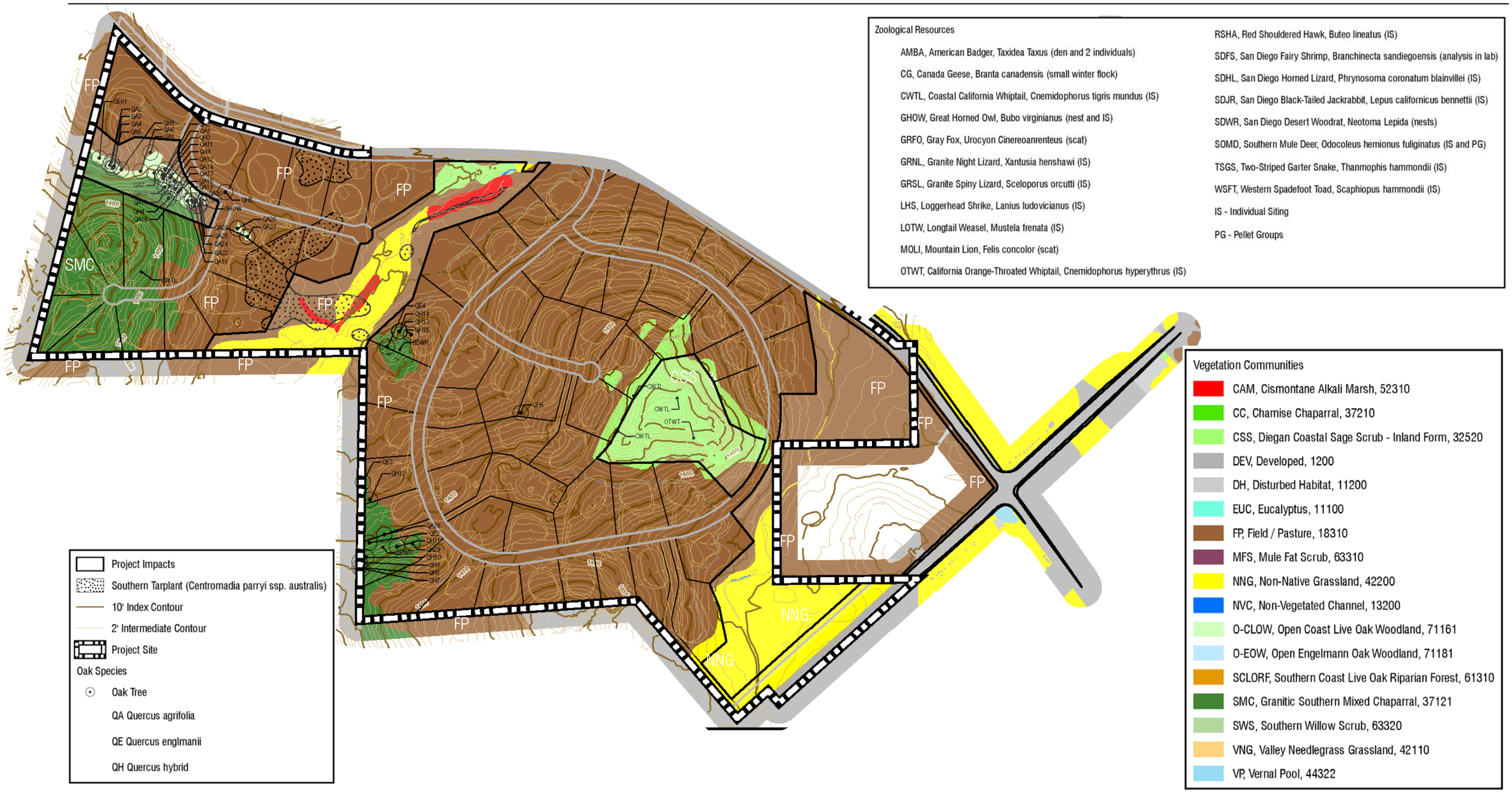

Source: HDR 2008

Figure 3.1-1b
Biological Resources- Area A South of Highland Valley Road

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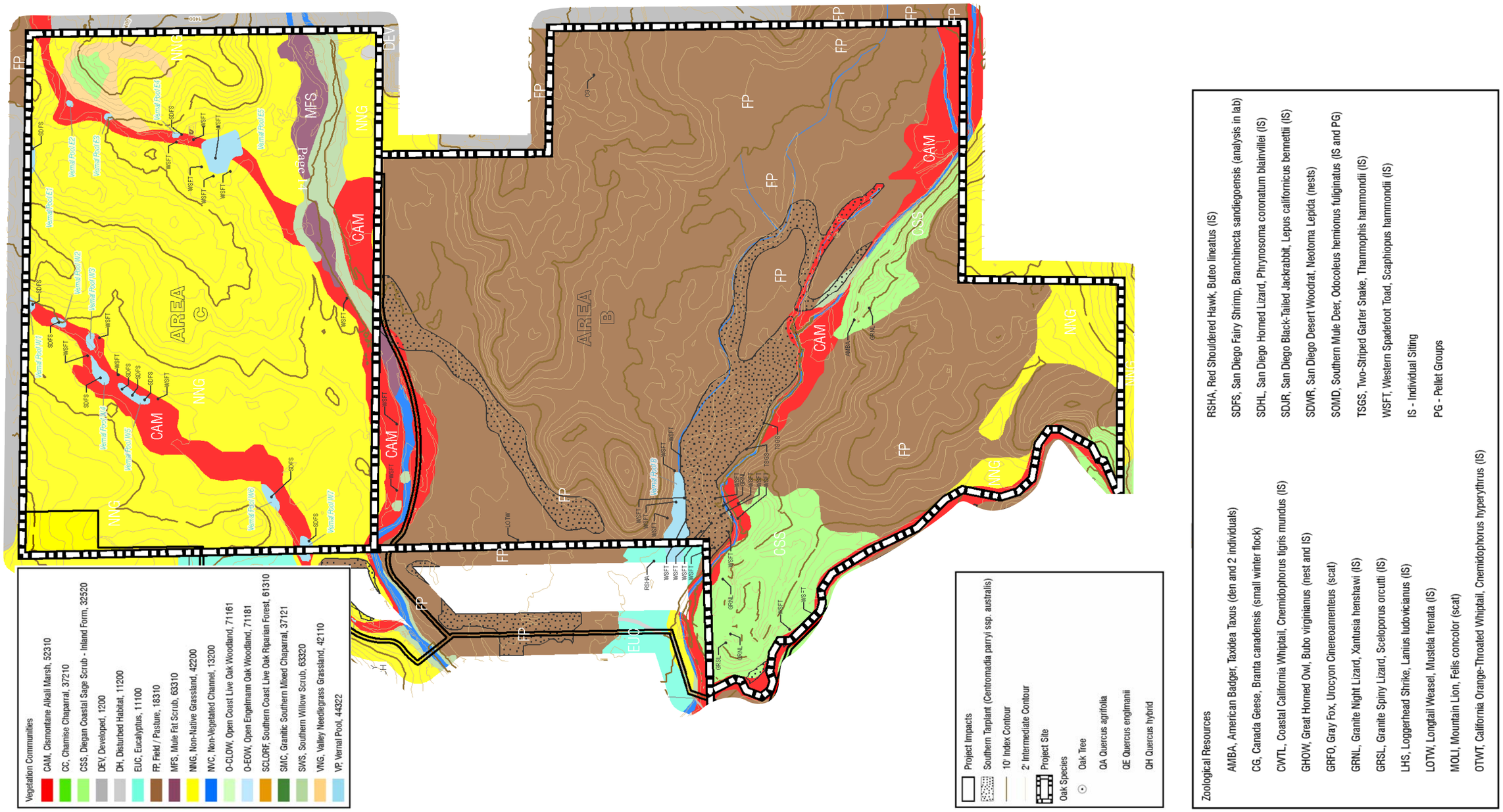

Source: HDR 2008

Figure 3.1-1c
Biological Resources- Areas B and C

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Table 3.1-1
Army Corps of Engineers Jurisdictional Waters and Wetlands

	Existing Acreage				
Vegetation Community	**A**	**B**	**C**	**ROW[1]**	**Total**
Mulefat Scrub	**0.08**	**0.54**	**0.26**	**0.02**	**0.90**
Cismontane Alkali Marsh	**1.06**	**N/A**	**N/A**	**N/A**	**1.06**
Nonvegetated Channel	**0.24**	**2.05**	**0.03**	**0.01**	**2.33**
Total Acreage	**1.38**	**2.59**	**0.29**	**0.03**	**4.29**

[1] Highland Valley Road and SR 67 ROW.

Table 3.1-2
California Department of Fish and Game Jurisdictional Waters and Wetlands

	Existing Acreage				
Vegetation Community	**A**	**B**	**C**	**ROW[1]**	**Total**
Southern Willow Scrub	0.14	0.55	4.46	0.02	5.17
Mulefat Scrub	0.08	0.54	2.97	0.02	3.61
Cismontane Alkali Marsh	15.05	14.01	11.59	0.15	40.80
Vernal Pools	0.18	0.63	1.80	0.00	2.61
Nonvegetated Channel	0.20	2.09	0.03	0.01	2.33
Nonnative Grassland	1.19	0.00	0.00	0.02	1.21
Total Acreage	**16.84**	**17.82**	**20.85**	**0.22**	**55.73**

[1] Highland Valley Road and SR 67 ROW.

Table 3.1-3
County Resource Protection Ordinance Jurisdictional Wetlands

	Existing Acreage				
Vegetation Community	**A**	**B**	**C**	**ROW**	**Total**
Southern Willow Scrub	0.14	0.55	4.46	0.02	5.17
Mulefat Scrub	0.08	0.54	2.97	0.02	3.61
Cismontane Alkali Marsh	15.05	14.01	11.59	0.15	40.80
Vernal Pools	0.18	0.63	1.80	0.00	2.61
Nonvegetated Channel	0.20	2.09	0.03	0.01	2.33
Nonnative Grassland	1.19	0.00	0.00	0.02	1.21
Field Pasture[1]	0.00	8.40	0.00	0.00	8.40
Total Acreage	**16.84**	**26.22**	**20.85**	**0.22**	**64.13**

County RPO jurisdiction where drainage traverses Field Pasture in Area B.

Table 3.1-4
Sensitive Species Identified at the Cumming Ranch Site

Species	Sensitivity Status	Preferred Habitat	Occurrences
Crustaceans			
San Diego fairy shrimp *Branchinecta sandiegoensis*	Federal Endangered	Vernal pools	Identified within most of the vernal pools located within Area C.
Herpetofauna			
western spadefoot toad *Scaphiopus hammondii*	California Species of Concern County Sensitive	Vernal swales, vernal pools, and cismontane alkali wetlands	Large numbers of spadefoot toads were detected within the vernal pools, vernal swales, and ephemeral drainages of Areas A, B, and C. Approximately 5 individuals in Area A, 32 in Area B and 10 in Area C.
California orange-throated whiptail *Cnemidophorus hyperythrus*	California Species of Concern County Sensitive	Open scrub habitats – primarily coastal sage scrub	Three individual detected within the sage scrub located along the central ridgeline of Area A.
coastal California whiptail *Cnemidophorus tigris mundus*	County Sensitive	Open shrublands within the cismontane regions of southern California	Fairly common species within the shrubland habitats onsite, thirteen individuals identified.
granite night lizard *Xantusia henshawi*	California Species of Concern County Sensitive	Exfoliating rock outcrops	Three individuals identified within large and small cracks among several rock outcrops in all three areas.
granite spiny lizard *Sceloporus orcutti*	County Sensitive	Rock outcrops both cismontane and transmontane above 1,500 feet in elevation	Two individuals identified within the rock outcrops located along the northern boundary of Area A.
San Diego coast horned lizard *Phrynosoma coronatum*	California Species of Special Concern County Sensitive	Open shrublands at all elevations within southern California	Two individuals identified along a dirt access road located near the central ridgeline in Area A north of Highland Valley Road.

Species	Sensitivity Status	Preferred Habitat	Occurrences
two-striped garter snake *Thanmophis hammondii*	California Species of Special Concern County Sensitive	Ponds, streams, rivers, and most open freshwater habitats	Two individuals identified within Etcheverry Creek as it enters into the Hardy Ranch property.
Birds			
Cooper's hawk *Accipiter cooperi*	California Species of Concern Migratory Bird Treaty Act County Sensitive	Woodlands and chaparral	Have not been observed directly at the Cumming Ranch site but have been seen roosting within the adjacent eucalyptus grove of Hardy Ranch. Species may forage within the shrubland in Areas A and B.
golden eagle *Aquila chrysaetos*	California Species of Concern Migratory Bird Treaty Act County Sensitive	Woodlands and grasslands	Observed foraging over the site on several occasions and perched on several of the rock outcrop features located in Areas A, B, and C. Closest known nest located in the east-facing cliffs of Iron Mountain.
white-tailed kite *Elanus caeruleus*	California Species of Concern Migratory Bird Treaty Act County Sensitive	Woodlands and grasslands	Observed foraging over the site on several occasions in Areas A, B, and C. Not known to nest or roost at the Cumming Ranch site.
red-shouldered hawk *Buteo lineatus*	Migratory Bird Treaty Act County Sensitive	Woodlands	Observed foraging within the oak woodlands located south of Highland Valley Road and within the eucalyptus woodlands located just offsite.
ferruginous hawk *Buteo regalis*	California Species of Concern Migratory Bird Treaty Act County Sensitive	Grassland habitats preferred for foraging	Observed foraging over the site on several occasions in Areas A, B, and C.
northern harrier *Circus cyaneus*	County Sensitive	Grasslands, shrublands, agricultural fields	Observed foraging in Area C in winter and spring.
turkey vulture *Cathartes aura*	Migratory Bird Treaty Act County Sensitive	All habitat types	Observed foraging over the site on several occasions in Areas A, B, and C. Known to have communal roost on Mount Woodson. Not known to nest or roost on the Cumming Ranch site.
loggerhead shrikes (*Lanius ludovicianus*)	Federal and California Species of Special Concern County Sensitive	Shrublands, agricultural areas, grasslands	One adult observed resting in open sage scrub in Area A before continuing flight southward.
Canada Geese (*Branta Canadensis*)	Migratory Bird Treaty Act	Native and nonnative grasslands, open space area associated with ponds, lakes, and riparian areas.	A small flock was observed foraging near the northeastern corner of Area B.
Mammals			
San Diego desert woodrat *Neotoma lepida intermedia*	California Species of Concern County Sensitive	Rock outcrops, cactus, and abandoned mines	At least eight nests were detected within the rock outcrops located within Areas A.

Species	Sensitivity Status	Preferred Habitat	Occurrences
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	California Species of Concern County Sensitive	Open grasslands and deserts	Several jackrabbits were flushed during surveys of the habitats located along the central ridgeline of Area A.
southern mule deer *Odocoileus hemionus*	California Species of Concern County Sensitive	Known to occur in a variety of habitats, but prefers shrublands, woodlands, and other habitats that provide concealment and thermal cover, and foraging opportunities	Three individuals were observed traveling north along the central ridgeline of Area A north of Highland Valley Road.
American badger *Taxidea taxus*	California Species of Concern County Sensitive	Open grasslands and deserts	One adult and one sub-adult badger were observed sunning on a rock outcrop in Area B.
mountain lion *Felis concolor*	California Species of Concern County Sensitive	Known to occur in all habitats	Mountain lion sightings have been reported by adjacent land owners, visitors (trespassers) to the site, and scat was positively identified during one of the surveys of the site. Not expected to be resident within the site boundaries due to lack of prey base. However, it is expected that mountain lions and other large mammals may use the site as a movement corridor.
Plants			
southern tarplant *Centromedia parryi australis*	CNPS List 1B County Sensitive	Vernally mesic soils in valley foothill grasslands and in vernal swales or pools	Several populations identified within Areas A, B, and C. Approximately 33,200 plants in Area A, 63,000 plants in Area B, and 250 plants in Area C.
Engelmann oak/coast live oak *Quercus engelmannii/ Quercus agrifolia*	CNPS List 4 County Sensitive	Mixed oak woodlands, and shrublands and grasslands that occur as an understory.	Thirty Engelmann oak individuals and thirty coast live oak individuals have been detected, numbered, and mapped within Area A.
San Diego Navarretia	CNPS List 1B County Sensitive	Within vernal pools	One occurrence in Area C within Vernal Pool E5.

CNPS List 1B = Rare or Endangered in California and Elsewhere
CNPS List 4 = Plants of Limited Distribution

Table 3.1-5
Impacts to Sensitive Vegetation Communities

Vegetation Community	Existing Acreage					Impacted Acreage							Mitigation Requirement		Available Open Space				Required Avoidance*	Impact Neutral**	Mitigation Available				Mitigation Habitat Remaining	
	A	B	C	ROW	Total	A	B	C	ROW	Sub-total	Off	Total	Ratio	Acreage	A	B	C	Total	A	Total	Available Area A	Available Area B	Available Area C	Total Available	Total	Area A
Open Engelmann Oak Woodland (OEOW)	1.81	0.00	0.00	0.00	1.81	0.20	0.00	0.00	0.00	0.20	0.00	0.20	3:1	0.60	1.61	0.00	0.00	1.61	0.00	0.00	1.61	0.00	0.00	1.61	1.01	1.01
Open Coast Live Oak Woodland (OCLOW)	1.07	0.00	0.00	0.00	1.07	0.06	0.00	0.00	0.00	0.06	0.00	0.06	3:1	0.18	1.01	0.00	0.00	1.01	0.00	1.01	0.00	0.00	0.00	0.00	-0.18	-0.18
Valley Needlegrass Grassland (VNG)	0.00	0.00	2.15	0.00	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	2.15	2.15	0.00	0.00	0.00	0.00	2.15	2.15	2.15	0.00
Southern Willow Scrub (SWS)	0.14	0.55	4.46	0.02	5.17	0.00	0.00	0.00	0.02	0.02	0.03	0.05	3:1	0.15	0.14	0.55	4.46	5.15	0.14	0.00	0.00	0.55	4.46	5.01	4.86	-0.15
Mule Fat Scrub (MFS)	0.08	0.54	2.97	0.02	3.61	0.00	0.03	0.00	0.02	0.05	0.00	0.05	3:1	0.15	0.08	0.51	2.97	3.56	0.08	0.00	0.00	0.51	2.97	3.48	3.33	-0.15
Cismontane Alkali Marsh (CAM)	15.05	14.01	11.59	0.15	40.80	0.35	0.48	0.00	0.15	0.98	0.04	1.02	3:1	3.06	14.70	13.53	11.59	39.82	13.94	0.76	0.00	13.53	11.59	25.12	22.06	-3.06
Vernal Pool (VP)	0.18	0.63	1.80	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.18	0.63	1.80	2.61	0.00	0.18	0.00	0.63	1.80	2.43	2.43	0.00
Non-Vegetated Channel (NVC)	0.20	2.09	0.03	0.01	2.33	0.00	0.00	0.00	0.01	0.01	0.02	0.03	3:1	0.09	0.20	2.09	*0.03*	2.32	0.20	0.00	0.00	2.09	0.03	2.12	2.03	-0.09
Diegan Coastal Sage Scrub-Inland Form (DCSS)	72.68	15.24	0.70	0.03	88.65	26.77	0.00	0.00	0.03	26.80	0.00	26.80	2:1	53.60	45.91	15.24	0.70	61.85	3.07	5.82	37.02	15.24	0.70	52.96	-0.64	-16.58
Granitic Southern Mixed Chaparral (GSMC)	33.82	0.00	0.00	0.00	33.82	19.55	0.00	0.00	0.00	19.55	0.00	19.55	0.5:1	9.78	14.27	0.00	0.00	14.27	0.00	1.18	13.09	0.00	0.00	13.09	3.32	3.32
Granitic Chamise Chaparral (GCC)	8.31	0.00	0.00	0.00	8.31	4.05	0.00	0.00	0.00	4.05	0.00	4.05	0.5:1	2.03	4.26	0.00	0.00	4.26	0.00	0.00	4.26	0.00	0.00	4.26	2.24	2.24
Non-Native Grassland (NNG)	26.21	6.81	89.28	2.12	124.42	8.90	0.00	2.29	0.72	11.91	1.03	12.94	1:1	12.94	17.31	6.81	86.99	111.11	9.45	1.96	5.90	6.81	86.99	99.70	86.76	-7.04
Field / Pasture (F/P)	197.19	161.13	0.00	1.88	360.20	161.26	0.41	0.00	1.88	163.55	1.14	164.69	0.5:1	82.35	35.93	160.72	0.00	196.65	10.28	2.22	23.43	160.72	0.00	184.15	101.81	-58.92
Eucalyptus Woodland (EW)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Disturbed Habitat (DH)	1.70	0.00	0.12	0.06	1.88	0.34	0.00	0.00	0.06	0.40	0.06	0.46	-	0.00	1.36	0.00	0.12	1.48	0.39	0.00	0.97	0.00	0.12	1.09	1.09	0.97
Developed (Dev)	0.27	0.00	0.00	5.50	5.77	0.23	0.00	0.00	5.50	5.73	1.06	6.79	-	0.00	0.04	0.00	0.00	0.04	0.02	0.00	0.02	0.00	0.00	0.02	0.02	0.02
Total Acreage	**358.71**	**201.00**	**113.10**	**9.79**	**682.60**	**221.71**	**0.92**	**2.29**	**8.39**	**233.31**	**3.61**	**236.92**	**-**	**164.92**	**137.00**	**200.08**	**110.81**	**447.89**	**37.57**	**13.13**	**86.30**	**200.08**	**110.81**	**397.19**	232.27	-78.62

*Required avoidance is all RPO habitats.
**Impact Neutral is Lots C, E, and H, and SR 67 ROW dedication.
Due to rounding, numbers may not total.

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Table 3.1-6
Summary of Impacts and Mitigation – ACOE Jurisdictional Waters and Wetlands

	Existing Acreage					Impacted Acreage						Mitigation Requirement for Area A Wetland Creation or Restoration		Open Space Habitat Remaining			
Vegetation Community	**A**	**B**	**C**	**ROW**	**Total**	**A**	**B**	**C**	**ROW**	**Off**	**Total**	**Ratio**	**Acreage**	**A**	**B**	**C**	**Total**
Mulefat Scrub	0.08	0.54	0.26	0.02	0.90	0.00	0.03	0.00	0.02	0.00	0.05	3:1	0.15	0.08	0.51	0.26	0.85
Cismontane Alkali Marsh	1.06	N/A	N/A	N/A	1.06	0.02	0.00	0.00	0.00	0.03	0.05	3:1	0.15	1.04	0.00	0.00	1.04
Non-Vegetated Channel	0.24	2.05	0.03	0.01	2.33	0.00	0.00	0.00	0.01	0.02	0.03	3:1	0.09	0.24	2.05	0.03	2.32
Total Acreage	**1.38**	**2.59**	**0.29**	**0.03**	**4.29**	**0.02**	**0.03**	**0.00**	**0.03**	**0.05**	**0.13**	**---**	**0.39**	**1.36**	**2.56**	**0.29**	**4.21**

Table 3.1-7
Summary of Impacts and Mitigation – CDFG Jurisdictional Waters and Wetlands

	Existing Acreage					Impacted Acreage						Mitigation Requirement for Area A Wetland Creation or Restoration		Open Space Habitat Remaining			
Vegetation Community	**A**	**B**	**C**	**ROW**	**Total**	**A**	**B**	**C**	**ROW**	**Off**	**Total**	**Ratio**	**Acreage**	**A**	**B**	**C**	**Total**
Southern Willow Scrub	0.14	0.55	4.46	0.02	5.17	0.00	0.00	0.00	0.02	0.03	0.05	3:1	0.15	0.14	0.55	4.46	5.15
Mulefat Scrub	0.08	0.54	2.97	0.02	3.61	0.00	0.03	0.00	0.02	0.00	0.05	3:1	0.15	0.08	0.51	2.97	3.56
Cismontane Alkali Marsh	15.05	14.01	11.59	0.15	40.80	0.35	0.48	0.00	0.15	0.04	1.02	3:1	3.06	14.70	13.53	11.59	39.82
Vernal Pools	0.18	0.63	1.80	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A	0.18	0.63	1.80	2.61
Non-Vegetated Channel	0.20	2.09	0.03	0.01	2.33	0.00	0.00	0.00	0.01	0.22	0.03	3:1	0.09	0.20	2.09	0.03	2.32
Non-Native Grassland	1.19	0.00	0.00	0.02	1.21	0.01	0.00	0.00	0.02	0.00	0.03	1:1	0.03	1.18	0.00	0.00	1.18
Total Acreage	**16.84**	**17.82**	**20.85**	**0.22**	**55.73**	**0.36**	**0.51**	**0.00**	**0.22**	**0.09**	**1.18**	**---**	**3.48**	**16.48**	**17.31**	**20.85**	**54.64**

Table 3.1-8
Summary of Impacts and Mitigation – County RPO Jurisdictional Wetlands

	Existing Acreage					Impacted Acreage						Mitigation Requirement for Area A Wetland Creation or Restoration		Open Space Habitat Remaining			
Vegetation Community	**A**	**B**	**C**	**ROW**	**Total**	**A**	**B**	**C**	**ROW**	**Off**	**Total**	**Ratio**	**Acreage**	**A**	**B**		**Total**
Southern Willow Scrub	0.14	0.55	4.46	0.02	5.17	0.00	0.00	0.00	0.02	0.03	0.05	3:1	0.15	0.14	0.55	4.46	5.15
Mulefat Scrub	0.08	0.54	2.97	0.02	3.61	0.00	0.03	0.00	0.02	0.00	0.05	3:1	0.15	0.08	0.51	2.97	3.56
Cismontane Alkali Marsh	15.05	14.01	11.59	0.15	40.80	0.35	0.48	0.00	0.15	0.04	1.02	3:1	3.06	14.70	13.53	11.59	39.82
Vernal Pools	0.18	0.63	1.80	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A	0.18	0.63	1.80	2.61
Non-Vegetated Channel	0.20	2.09	0.03	0.01	2.33	0.00	0.00	0.00	0.01	0.02	0.03	3:1	0.09	0.20	2.09	0.03	2.32
Non-Native Grassland	1.19	0.00	0.00	0.02	1.21	0.01	0.00	0.00	0.02	0.00	0.03	1:1	0.03	1.18	0.00	0.00	1.18
Field Pasture[1]	0.00	8.40	0.00	0.00	8.40	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A	0.00	8.40	0.00	8.40
Total Acreage	**16.84**	**26.22**	**20.85**	**0.22**	**64.13**	**0.36**	**0.51**	**0.00**	**0.22**	**0.09**	**1.18**	**---**	**3.48**	**16.48**	**25.71**	**20.85**	**63.04**

[1] County RPO jurisdiction where drainage traverses Field Pasture in Area B.

Table 3.1-9
Summary of Vegetation Community Mitigation

Vegetation Community	Required Mitigation	Area A Mitigation	Area B Mitigation	Area C Mitigation	Notes
Open Engelmann Oak Woodland (OEOW)	0.60	1.78	0.00	0.00	Fully mitigated within Area A with 0.18 acres of 1.01-acre balance used to mitigate OCLOW.
Open Coast Live Oak Woodland (OCLOW)	0.18	0.00	0.00	0.00	Fully mitigated within Area A by preservation of OEOW.
Diegan Coastal Sage Scrub – Inland Form (CSS)	53.60	37.02	15.24	0.00	Partially mitigated within Areas A and B with a balance of 1.34 acres to be mitigated by acquisition and management of 0.64 acres of like-functioning habitat offsite in an area approved by the DPLU.
Granitic Southern Mixed Chaparral (GSMC)	9.78	11.12	0.00	0.0	Fully mitigated within Area A with balance of 3.32-acres.
Granitic Chamise Chaparral (GCC)	2.03	2.03	0.00	0.00	Fully mitigated within Area A with balance of 2.2 acres.
Non-Native Grassland (NNG)	12.94	5.90	0.04	25.30	Mitigation of 95.29 acres of NNG and FP mitigated by preservation of 29.33 acres of NNG/FP in Area A, 40.66 acres of NNG/FP in Area B and 25.30 acres of NNG in Area C.
Field Pasture (FP)	82.35	23.43	40.62	0.00	
Total	**161.47**	**80.27**	**55.90**	**25.30**	

3.2 Cultural Resources

A cultural resources survey (Gross 2003) and limited subsurface testing program (Gross 2004) were conducted to identify resources and evaluate site significance of cultural resources within the project area. These cultural reports are compiled in the Cultural Resource Evaluation (Gross 2010), which is included as Appendix E. This section summarizes the findings of these analyses. Analyses completed for the project site included background research at the South Coastal Information Center at San Diego State University and San Diego Museum of Man, a field survey of the project site, including off-site improvement areas (sewer easements, trails easements, and intersection improvements), to determine the presence of previously unknown resources located on the property, and the evaluation of the significance of cultural resources that could be affected by the proposed project.

3.2.1 Existing Conditions

Categories of Cultural Resources

Cultural resources are nonrenewable. Cultural resources are districts, buildings, sites, structures, areas of traditional use, or objects with historical, architectural, archaeological, cultural, or scientific importance. Cultural resources can be divided into three categories: archaeological resources, architectural resources, and traditional cultural resources as follows:

Archaeological Resources

Archaeological resources include prehistoric and historic locations or sites where human actions have resulted in detectable changes to the area. This can include changes in the soil, as well as the presence of physical cultural remains. Archaeological resources can have a surface component, or a subsurface component, or both.

Historic archaeological resources are those dating after European contact. These resources may include subsurface features such as wells, cisterns, or privies. Other historic archaeological remains include artifact concentrations, building foundations, or remnants of structures.

Architectural Resources

Architectural resources are elements of the environment constructed by humans. Included are standing buildings, dams, bridges, and other structures of historic, engineering, or artistic significance. Factors in determining a resource's significance are its integrity, design,

associations with important events or persons, as well as age. To receive protection under existing federal laws for cultural resources, most resources must be at least 50 years old or have exceptional importance. Cold War-era military facilities may meet the exception criteria. For example, certain facilities associated with Cold War missile and torpedo programs have been designated as significant architectural resources.

Traditional Cultural Resources

Traditional cultural resources are resources associated with beliefs and cultural practices of a living culture, subculture, or community. These beliefs and practices must be rooted in the group's history and be important in maintaining the cultural identity of the group. Archaeological sites; locations of events; sacred places; and resource areas, including hunting or gathering areas, may be traditional cultural resources.

Cultural Background and History of the Project Area

The sequence of human occupation of southern California begins in the Paleo-Indian period, dating from 11,500 to 8500 before present (B.P.), a time in which adaptations were formerly believed to be focused on the hunting of large game but are now recognized to represent more generalized hunting and gathering, with considerable emphasis on marine resources (Erlandson and Colten 1991; Jones 1991). The following period, the Archaic (8500-1300 B.P.) is traditionally seen as encompassing both a coastal and an inland focus, with the coastal Archaic represented by the shell middens of the La Jolla complex and the inland Archaic represented by the Pauma complex (Willey and Phillips 1958). The Late Prehistoric period (1300-200 B.P.) is marked by the appearance of small projectile points indicating the use of the bow and arrow, the common use of ceramics, and the replacement of inhumations with cremations (Moratto 1984; Christenson 1990).

Ethnographically, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay or the Northern Diegueño. The Kumeyaay followed a seasonal gathering cycle, with bands occupying two or more seasonal villages with temporary campsites radiating away from these central places (Cline 1984). The village of *Pa'mu* has been identified approximately 2 miles northeast of the project area (Cooley and Barrie 2004).

By the late 1700s the Spanish missionaries had reached out to the Kumeyaay in the area of *Pa'mu* and named the area Santa Maria Valley. The missionaries used the area for grazing sheep, horses, and mules (Pourade 1961, 1963).

In 1843, an English sailor, Edward Stokes, and his father-in-law, José Ortega, acquired a Mexican land grant for the Rancho Santa Maria, located in the Santa Maria Valley (Pourade 1976). In 1849, Lieutenant Cave Couts brought the first four-wheeled wagon into the valley. Gold was discovered in Julian in 1870. This led to the creation of a stage line that ran between San Diego and Julian, and passed through Ramona. In 1872, tourmaline was discovered in the area east and north of Ramona, creating a gem rush in the area. In 1883, Amos Verlaque built a store and post office next to the stage line. This area became known as Nuevo (New Town). By 1886, a relative of Amos Verlaque, Theophile Verlaque, acquired 2 acres next to Amos's store and built the first house in the area (LeMenager 1989). During this time, in 1884, Milton Santee bought 6,000 acres of Rancho Santa Maria to subdivide into smaller parcels, including Nuevo. Approximately 3,800 acres were incorporated as the Santa Maria Land and Water Company. The company renamed the town of Nuevo after the heroine in Helen Hunt Jackson's novel, *Ramona*. The town of Ramona continued to grow as a ranching area. By the 1920s it was home to some of the largest turkey ranches in the world and was dubbed "The Turkey Capital of the World" (LeMenager 1989). Today, Ramona's ranching community is focused on horses.

Cultural Resources Inventory for the Cumming Ranch Site

Twenty seven archaeological sites and one isolate artifact have been identified within the project area. Two of the sites have been previously recorded (CA-SDi-12,022 and CA-SDi-14,161) and the remaining 25 were identified during this project's survey. Twenty-six of the archaeological sites are milling sites with several having associated artifacts and/or midden deposits and one is a historic trash lens, found in the sidewall of an unnamed seasonal drainage (Table 3.2-1).

3.2.2 Guidelines for the Determination of Significance

The guidelines for the determination of significance are based on State CEQA Guidelines as well as other local and state resource protection criteria. The local and state regulations include the County RPO for archeological resources and the California Register of Historical Resources (CRHR). The project would have a significant adverse impact with regard to cultural resources if the project would do any of the following:

1. directly, indirectly, or cumulatively damage or destroy a significant historic or archaeological resource. A significant resource is defined by CRHR as a resource that:
    a) is associated with events that have made a significant contribution to the broad patterns of California history and cultural heritage;
    b) is associated with the lives of persons important in our past;

c) embodies the distinctive characteristic of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

d) has yielded, or may be likely to yield, information important in prehistory or history;

2. cause a direct or cumulatively substantial adverse change to an archaeological resource as defined by the County RPO to include locations of "past intensive occupation" with "buried deposits" (RPO, Article II, 14); or

3. cause a direct or cumulatively substantial change in the significance of a historic resource may have a significant effect on the environment (PRC Section 21000-21177). Substantial adverse change in the significance of a historical resource includes demolition, destruction, relocation, or alteration of the resource or its immediate surroundings to the extent that the significance of the resource is materially impaired.

3.2.3 Analysis of Project Effects and Determination of Significant Impact

Cultural Resource Sites and Potential Significance

The known cultural resources are located within areas subject to different levels of potential impacts. These have been identified as follows: (1) cultural resources located on house pads, roads, and/or trenching alignments; (2) cultural resources located within lots, but outside of house pads; (3) cultural resources located completely within protected open space easements; and (4) cultural resources located outside the current planned development area. Cultural resources located on house pads and/or roads would be subject to construction grading and utilities trenching.

A cultural resources survey (Gross 2003) and limited subsurface testing program (Gross 2004) were conducted to identify resources and evaluate site significance of cultural resources within the project area (Table 3.2-2). Two previously recorded sites, 25 additional sites, and 1 isolated core were identified within the project area. Of these, ten sites (CA-SDi-17,168; CA-SDi-17,170; CA-SDi-17,172; CA-SDi-17,173; CA-SDi-17,174; CA-SDi-17,175; CA-SDI-17,182; CA-SDi-17,183; CA-SDi-17,187; and CA-SDi-17,190) are located in the areas that are proposed as open space within Areas A and B and one site (CA-SDi-14,161) is located in Area C, which is not proposed for development. Six of these eleven sites were not included in the testing program since no direct impacts would be expected. The remaining 16 sites were evaluated for

significance under a limited testing program (Gross 2004). Subsequent project redesign has placed some sites originally included in the testing program within open space.

Because of the cultural sensitivity throughout the project site, the potential to directly impact unknown cultural resources during ground-disturbing activities is a potentially ***significant impact*** per Guideline 1. (**Impact CR-1**)

CA-SDi-12,022

Site CA-SDi-12,022, a large milling complex, was originally recorded by the County in 1990 (Joyner et al. 1990). Highland Valley Road crosses the northern part of the site. A portion of CA-SDi-12,022 was evaluated by the County prior to construction of the current alignment of Highland Valley Road (Joyner et al. 1990). The County concluded this portion of the site was not an important resource. Portions of the site were tested south of the road near lots 14, 15, 16, and 23. The evaluated area has a very sparse subsurface artifact assemblage and is not a significant resource. The grading of pads for the lots on CA-SDi-12,022 would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-14,161

This site was originally recorded in the mid-1990s as two milling features with associated artifacts (O'Neill 1994). Site CA-SDi-14,161 was not evaluated since it lies in Area C, outside the proposed development area. Area C would be preserved as permanent open space. There would be no direct impacts to the resource and impacts would be ***less than significant*** per the Guidelines or the County RPO would result.

CA-SDi-17,168

CA-SDi-17,168 was recorded in 2003 as two bedrock milling features with associated artifacts. This site was not evaluated as it is located within the proposed permanent open space and would not be subject to direct impacts. Therefore, impacts would be ***less than significant*** per the Guidelines or the County RPO would result.

CA-SDi-17,169

CA-SDi-17,169 was recorded as two bedrock milling features with associated artifacts (Gross 2003). This site was evaluated due to its proximity to the proposed residential pad of Lot 99. The proximity of site CA-SDi-17,169 to the grading area for the residential pad of Lot 99 could result

in indirect impacts to the cultural resource site. However, testing of the site indicated that the deposits were sparse and not of significance. Thus, potential impacts would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,170

This site was recorded in 2003 as several bedrock milling features. This site was not included in the evaluation program because it is located within proposed open space and would not be subject to direct impacts. Thus, impacts would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,171

CA-SDi-17,171 was recorded in 2003. This large, Late Prehistoric site was evaluated as one of the most important resources on the subject property (Gross 2004). It appears to be a major settlement or camp and has deposits that contain information that can significantly contribute to understanding the past. Destruction of the site would constitute a significant impact under both CEQA and the County RPO. As mandated by the County RPO, CA-SDi-17,171 would be preserved in open space with the exception of a small marginal edge that extends into the roadway. Testing indicated that this marginal area has sparse subsurface deposits relative to other areas of the site and that the deposits most likely resulted from agricultural activities dragging artifacts out of the midden area. The direct impacts from roadway construction would be ***less than significant*** per the Guidelines or the County RPO. Though the significant portion of this site would be avoided and preserved, the proximity of construction activities to the site could result in ***potentially significant*** indirect impacts per Guideline 1. (**Impact CR-2)**

CA-SDi-17,172

CA-SDi-17,172 was recorded in 2003 as bedrock milling features. This site was not evaluated for significance as it is located within proposed permanent open space and would not be subject to direct impacts. Thus, ***less than significant*** impacts would occur per the Guidelines or the County RPO.

CA-SDi-17,173

This small milling site was recorded in 2003. Testing indicated this is not a significant site, as the subsurface material is minimal (Gross 2004). This site is located within proposed permanent

open space and would not be subject to direct impacts. Thus, ***less than significant*** impacts would occur per the Guidelines or the County RPO.

CA-SDi-17,174

CA-SDi-17,174 was recorded in 2003 as three bedrock milling features. This site was evaluated and is not significant (Gross 2004). This site is located within proposed permanent open space and would not be subject to direct impacts. Thus, ***less than significant*** impacts would occur per the Guidelines or the County RPO.

CA-SDi-17,175

This site was recorded in 2003 as four bedrock milling features. This site was evaluated and is not significant (Gross 2004). This site is located within proposed permanent open space and would not be subject to direct impacts. Thus, ***less than significant*** impacts would occur per the Guidelines or the County RPO.

CA-SDi-17,176

This site was recorded in 2003 as four bedrock milling features. This site was evaluated and is not significant (Gross 2004). CA-SDi-17,176 is located within Lots 87 and 88, but outside of the residential pad development areas. Indirect impacts could occur within the lots; however these potential impacts are ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,177

CA-SDi-17,177 is a long, narrow site composed of a number of bedrock milling stations on exposed boulders and bedrock outcrops. It was recorded in 2003. This large site is located in portions of Lots 85, 86, 89, 90, 91, 92, 93, 95, and 101 and would be bisected by two project roadways. Testing has demonstrated that significant archaeological deposits are lacking over most of the site (Gross 2004). Important deposits (significant under CEQA and the County RPO) have been placed in open space. The lot pads or roads do not cross areas of important deposits within the site. For these reasons, no significant deposits would be potentially affected and impacts to this site would be less than significant. However, the proximity of the construction activity to the site could result in ***potentially significant*** indirect impacts per Guideline 1. (**Impact CR-3**)

CA-SDi-17,178

CA-SDi-17,178 was recorded in 2003 as several milling features with associated midden. Located in Lots 94, 95, 96, and 97, areas of CEQA significant deposits for CA-SDi-17,178 are located outside of the residential pad on these lots. The driveway for Lot 86 would cross the site, but not in an area of important deposits. The areas where the pads or driveway are proposed do not contain significant deposits, based on the testing program (Gross 2004). Therefore, because impacted areas do not contain important deposits, construction of the pads and driveway would not constitute a significant impact per the Guidelines or the County RPO. Site CA-SDI-17,178 cannot be avoided and would be directly impacted by lot and road construction that could result in ***potentially significant*** direct CEQA impacts per Guideline 1. (**Impact CR-4**)

CA-SDi-17,179

This site was recorded in 2003 as two bedrock milling features. This site is located within Lot 116. This site was evaluated and is not a significant cultural resource (Gross 2004). Therefore, construction of the pad on Lot 116 would be a ***less than significant*** impact to the site per the Guidelines or the County RPO.

CA-SDi-17,180

CA-SDi-17,180 was recorded in 2003 as six bedrock milling features. This site was evaluated and is not a significant cultural resource (Gross 2004). CA-SDi-17,180 is located partially within the residential pad on Lot 87. Because the site is not significant, construction of Lot 87 is a ***less than significant*** cultural resource impact per the Guidelines or the County RPO.

CA-SDi-17,181

This site was recorded in 2003 as a single bedrock milling feature. This site was evaluated and is not significant (Gross 2004). CA-SDi-17,181 is located outside of the residential pad on Lot 12 and would not be subject to direct impacts. Because the resources is not significant, impacts from construction on Lot 12 would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,182

CA-SDi-17,182 was recorded in 2003 as two bedrock milling features with associated artifacts. This site was not evaluated for significance as it is located within proposed permanent open

space and would not be subject to direct impacts. Therefore, impacts would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,183

This site was recorded in 2003 as several bedrock milling features. The site is located completely within proposed permanent open space and would not be subject to direct impacts. Therefore impacts would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,184

CA-SDi-17,184 was originally recorded in 2003 as two bedrock milling features. This site extends into Lot 1 and would be affected by the grading of an internal roadway. However, subsurface testing indicates that this site does not constitute a significant resource (Gross 2004), therefore, impacts would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,185

This site was recorded in 2003 as several bedrock milling features. CA-SDi-17,185 is located outside of the residential pad for Lots 78 and 79 and in proposed open space within Area A. The site would not be subject to direct impacts. Based on the evaluation program (Gross 2004), CA-SDi-17,185 does not constitute a significant resource. Therefore, ***less than significant*** impacts per the Guidelines or the County RPO would result from construction of the project.

CA-SDi-17,186

CA-SDi-17,186 was recorded in 2003 as a large milling complex, consisting of several bedrock outcrops. The site has been placed in open space; however, a peripheral portion of the site extends into Lot 4 and is also crossed by one of the project roadways. Evaluation of the site indicates that it is an important resource with a subsurface deposit. The site has a well developed midden which contains ground stone, debitage, nonhuman bone, ceramics, and flaked tools. The portion of the site on Lot 4 and the areas crossed by the road are peripheral and most likely created by past agricultural activities dragging artifacts out of the site core and grading in these areas would not be significant per the Guidelines. The impact would not be significant per the County RPO. Though the significant portion of this site would be avoided and preserved, the proximity of the construction activity to the site could result in ***potentially significant*** indirect impacts per Guideline 1. (**Impact CR-5**)

CA-SDi-17,187

This bedrock milling site was recorded in 2003. The site was evaluated and does not constitute a significant resource under CEQA (Gross 2004). This site is located within proposed permanent open space and would not be subject to direct impacts. Thus, impacts would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,188

This site was recorded in 2003. Several bedrock milling features were reported. CA-SDi-17,188 is located on Lot 76 and partially extends into the residential pad area and an internal roadway alignment. CA-SDi-17,188 was evaluated and does not constitute a significant resource (Gross 2004). Therefore, ***less than significant*** impacts per the Guidelines or the County RPO would result from construction of the project.

CA-SDi-17,189

CA-SDi-17,189 was recorded in 2003 as several bedrock milling features. The site is located within Lot 99, but outside of the residential pad and would not be subject to direct impacts. This site was evaluated and does not constitute a significant resource (Gross 2004). Therefore, impacts due to construction of Lot 99 would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,190

This site was recorded in 2003 as several bedrock milling features. The site was evaluated and does not qualify as a significant resource (Gross 2004). This site is located within proposed permanent open space and would not be subject to direct impacts. Thus, ***less than significant*** impacts would occur per the Guidelines or the County RPO.

CA-SDi-17,191

CA-SDi-17,191 was recorded in 2003 as several bedrock milling features. The site is located outside of the residential pad on Lot 110 and would not be subject to direct impacts. CA-SDi-17,191 was evaluated and does not constitute a significant resource (Gross 2004). Therefore, potential impacts to site CA-SDi-18,191 would be ***less than significant*** per the Guidelines or the County RPO.

CA-SDi-17,192

This site was recorded in 2003 as a 1930-1950s historic trash lens, observed in the sidewall of an unnamed seasonal drainage located on Lots 94 and 95. The site is located outside of the residential pad on Lots 94 and 95 and would not be subject to direct impacts. This site was evaluated and does not constitute a significant resource due to its recent age (Gross 2004). Therefore, impacts this site would be ***less than significant*** per the Guidelines or the County RPO.

Isolate P-025842

One isolate was recorded in 2003. This consists of one metavolcanic, unidirectional core. Isolated items are not considered significant and therefore impacts would be ***less than significant*** per the Guidelines or the County RPO.

Summary of Cultural Resource Impact Analysis

There are 11 sites located entirely within proposed permanent open space. These sites include CA-SDi-14,161; CA-SDi-17,168; CA-SDi-17,170; CA-SDi-17,172; CA-SDi-17,173; CA-SDi-17,174; CA-SDi-17,175; CA-SDi-17,182; CA-SDi-17,183 CA-SDi-17,187; and CA-SDi-17,190. Because these sites would not be located in areas proposed for construction and there would be permanent resource management of the sites, impacts would be ***less than significant*** per Guidelines 1, 2, or 3, and the County RPO.

There are numerous sites that would be located either within project lots, partially or entirely within the residential pad development areas, within alignments for internal roadways, or within utility line alignments that may be directly or indirectly affected by construction activities. These site include CA-SDi-12,022; CA-SDi-17,169; CA-SDi-17,176; CA-SDi-17,179; CA-SDi-17,180; CA-SDi-17,181; CA-SDi-17,184; CA-SDi-17,185; CA-SDi-17,188; CA-SDi-17,189; CA-SDi-17,191; and CA-SDi-17,192. Of these, site CA-SDi-12,022 has been tested previously and found not to be significant. The other 11 sites lack significant deposits, and therefore, their destruction would not constitute significant impacts to cultural resources. Though the sites listed above could be potentially affected, both directly and indirectly by project construction, these sites were evaluated and found to be not significant cultural resources. Therefore, potential impacts to these sites would be ***less than significant*** per Guidelines 1, 2, and 3, and the County RPO.

The overall cultural sensitivity of the project site indicates a potential to directly impact unknown cultural resources during ground-disturbing activities. This is a potentially ***significant impact*** per Guideline 1. (**Impact CR-1**)

Sites CA-SDi-17,171 and CA-SDi-17-177 have significant deposits per CEQA and the County RPO that would be preserved through project design. Significant direct impacts would not occur because the important portions of the sites are avoided, but there would or may be direct impacts to non-significant portions of these sites. However, because of the proximity of these resources to the project's construction and residential uses, there would be ***significant indirect impacts***. (**Impact CR-2 and CR-3**)

One site, Site CA-SDi-17,178, cannot be avoided and would be directly impacted by project grading and development. The site has resources considered significant under CEQA that are located within portions of four lots (94, 95, 96, and 97) as well as a driveway alignment. Construction of the project would result in ***significant impact*** to the entire site per Guideline 1. **(Impact CR-4)**

Site CA-SDi-17,186 has significant deposits per CEQA and the County RPO that would be preserved through project design. Significant direct impacts would not occur because the important portions of the site are avoided, but there would or may be direct impacts to non-significant portions of the site. Because of the proximity of these resources to the project's construction and residential uses, there could be ***significant indirect impacts*** per Guidelines 1 and 2. (**Impact CR-5**)

3.2.4 Cumulative Impact Analysis

According to CEQA, the importance of cultural resources comes from the research value and the information that they contain. Therefore, the issue that must be explored in a cumulative analysis is the cumulative loss of that information. Typically, for sites considered less than significant, the information is preserved through recordation, test excavations, and preservation of artifacts. Significant sites that are placed in protected open space easements avoid direct impacts to these cultural resources as well as preservation of their potential research data. Significant sites that are not placed within open space easements and are directly impacted typically preserve the information through recordation, test excavations, and data recovery programs that would be presented in reports and filed with the County and South Coast Information Center. The artifact collections from any potentially significant site would be curated at a federally approved curation facility such as the San Diego Archaeological Center and would be available to researchers for

further study. Because cultural resources are non-renewable in nature, it is critical that information obtained through excavation is appropriately retained and utilized.

The cultural resources cumulative study area was identified based on potential future research questions that could be developed within the context of subsistence and settlement models for the Project area. In Ramona, major east-west drainages were the travel corridors utilized by prehistoric occupants in their seasonal rounds. The confluences of drainages are often major habitation site locations, with associated temporary camps and resource procurement stations established on surrounding tributaries and on adjacent uplands. Projects included in this cultural resource cumulative analysis and their known impacts to cultural resources are detailed in Table 3.2-3. The cumulative project list compiled for cultural resource analysis includes 75 projects as a subset of the projects on the overall cumulative list for the Cumming Ranch project. Of these cumulative projects, 45 projects did not require a cultural resources study or had negative cultural resources survey reports. Five projects had resources that were found to be less than significant. An additional 12 projects are in the process of being analyzed and the results of these cultural resource studies are not known at this time. The remaining 13 projects have identified significant cultural resources and provided mitigation when necessary. The typical method of mitigation is preservation of the resources in open space easements with some data recovery programs when preservation in open space easements is not feasible. As previously described, 27 archaeological sites and 1 isolated artifact have been identified at the Cumming Ranch site. The majority of these identified sites would be located either in open space or outside construction areas; thus, impacts to significant resources would generally be avoided. The proposed project's potentially significant impacts to cultural resources would be reduced below a level of significance by recordation, mapping, data recovery, and archaeological monitoring by a County-approved archaeologist and a monitor representing the local Tribes during both on and offsite grading activities as outlined in Section 3.2.5.

Similarly, impacts to any undiscovered or buried potentially significant cultural resources located within the cumulative projects' boundaries would be reduced below a level of significance by similar measures. Future development within the cumulative study area would be subject to similar analysis and mitigation requirements pursuant to CEQA and RPO. As noted above, the majority of projects with significant cultural resources have mitigation requiring preservation of the resources within open space easements, similar to the proposed project. If not feasible for preservation, the significant sites would be processed through a data recovery program to document and record the significant information provided by the resource. These forms of mitigation, including preservation in open space allows cultural resources to be protected and preserved and data collection allows for the important information relative to the resource to be retained and documented. These preservation and data collection methods ensure that the critical

information about the prehistoric occupants of the Ramona area gained through study of cultural resource sites and artifacts is not lost or destroyed by cumulative development within the area. The proposed project and related projects within the cultural resources cumulative study area must comply with CEQA and RPO, which require adequate analysis and mitigation of cultural resources. Thus, archaeological impacts associated with the related cumulative projects are expected to be less than significant and/or fully mitigated and the critical information regarding cultural history of the area preserved or documented. For these reasons, the proposed project would not result in a significant contribution to cumulative impacts for the issue of cultural resources and impacts would be ***less than significant*** per Guidelines 1, 2, and 3.

3.2.5 Mitigation Measures

Mitigation Measure M-CR-1 All Ground-Disturbing Activities

a. A cultural resources monitoring program shall be implemented as summarized here and detailed in the Cultural Resources Report.

   The monitoring program shall include the observation of all grading by one or more Native American monitors and by an archaeological monitor or monitors (depending on the scale of grading going on at any one time). A preconstruction meeting to clarify procedures shall be held prior to the start of ground-disturbing activities.

b. If cultural resources are identified during ground-disturbing activities, the following procedures shall be implemented:

   1. Isolated artifacts and minor (non-significant) deposits shall be documented in the field, allowing grading to proceed.

   2. Any potentially significant deposits or artifact concentrations shall be evaluated and the County Archaeologist shall be notified. A Research Design and Data Recovery Plan shall then be developed for any significant deposits and implemented. Grading in the vicinity of the deposits shall cease until the Data Recovery Plan is implemented to the satisfaction of the County Archaeologist. Standard County Procedures shall be followed in the case that human remains are inadvertently discovered. Material collected during the monitoring program shall be cataloged and analyzed and a report shall be prepared. This report shall address any data recovery that might be required during monitoring, as well as isolated artifacts found during the grading. Artifacts shall be curated at a qualified institution.

<u>Mitigation Measure M-CR-2</u> Significant Cultural Resource Site CA-SDi-17,171

a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1.

b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site.

c. A permanent fence shall be constructed between the road and the site. This shall be a rustic fence to blend with the nature of the proposed development and match fencing used in other areas of the development.

d. Signs shall identify this as a sensitive area that is being preserved, but they shall not mention cultural resources or archaeological site.

e. Site CA-SDi-17,171 shall be placed in an open space easement granted to the County of San Diego.

f. The open space easement shall be managed in accordance with the RMP required for this project (the Conceptual Resource Management Plan is provided in Appendix C). Measures specific to management of cultural resources include:

    1. A qualified Resource Manager, approved by the Director of Planning and Land Use and/or the County of San Diego Department of Parks and Recreation, shall take responsibility for the management of the open space lots.

    2. At the time the Resource Manager assumes responsibility for the management of the lots, or just prior to this event, the condition of the sites in question shall be documented. This shall consist of establishment of permanent photography stations (either marked by permanent markers or by the designation of a recognizable and relocatable natural feature such as a rock as the station). These shall be identified on a map of the site. A series of panoramic photographs shall be taken from each photography station do record the condition of the site. Any disturbance or other pertinent conditions shall be photographed, as well, and noted on the site map. A copy of this base-line information shall be filed at the South Coastal Information Center.

    3. Each year thereafter a site visit shall be made by a qualified archaeologist and a Native American Monitor. They shall check the condition of the site against the baseline data recorded in step 2. They shall note any problems and differences between the conditions as they exist on the ground and the conditions described in the baseline

documentation. Reports of these visits shall be filed at the South Coastal Information Center.

4. If damage is noted to the archaeological sites, the archaeologist and Native American Monitor shall develop recommendations for preventing further damage. Such measures might include increased patrols, selected capping of site areas, posting of signs, or the formation of a neighborhood watch to monitor the sites and to report vandals.

Mitigation Measure M-CR-3 Significant Cultural Resource Site CA-SDi-17,177

a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1.

b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site.

c. A permanent fence and signage shall be constructed between the road and the site, as described in **Mitigation Measure M-CR-2**.

d. Site CA-SDi-17,177 shall be placed in an open space easement granted to the County of San Diego.

e. The open space easement shall be managed in accordance with the RMP required for this project and shall includes the management requirements outlined in **Mitigation Measure M-CR-2**.

Mitigation Measure M-CR-4 Significant Cultural Resource Site CA-SDi-17,178

a. The mitigation of impacts to CA-SDi-17,178 shall be through data recovery (refer to Cultural Resource Evaluation). A research design has been prepared for this project and is included in the Cultural Report which outlines data recovery mitigation for the proposed destruction of a portion of the archaeological site CA-SDi-17,178. The research design, subject to approval by the County shall include, but is not limited to the following performance standards:

   1. All data recovery shall include a Native American monitor. The presence of a Native American monitor shall be required for the duration of the excavation portion of the project.

2. Phase 1 data recovery shall include mechanical trenching (optional) and a 5-15% hand excavated sample of the subsurface artifact concentrations for CA-SDi-17,178. During excavation, attention would given to the need for special studies such as pollen analysis, flotation samples and botanical analysis, and protein residue analysis. If so, appropriate samples would be taken and processed. Attention would be given to collecting, documenting, and processing material for radiocarbon dating and obsidian source and hydration analysis. Material recovered from these excavations would be cataloged and analyzed using standard procedures. All artifacts collected in the data recovery or in any other phase of this project would be curated at a facility acceptable to the County of San Diego.

3. At the completion of Phase 1, a letter report shall be submitted to the Director of the Department of Planning and Land Use. The letter report will evaluate the issues of site integrity, data redundancy, spatial and temporal patterning, features, and other relevant topics in order to assess the adequacy of the initial (2.5% is typical) percent sample. Based on this assessment, the letter report shall recommend the need for and scope of a second phase of field investigations, not to exceed a total site hand excavated sample of (5 is typical) % of the subsurface artifact concentration.

4. Implement Phase 2 of fieldwork, as necessary.

5. Conduct artifact analysis, including lithics analysis, ceramics analysis, faunal analysis, floral analysis, assemblage analysis, and radiocarbon dating, as detailed in Appendix 6 of the archaeological extended study, "*Cultural Resources Evaluation of Cumming Ranch, County of San Diego, California*" prepared by G. Timothy Gross.

b. Prior to recordation of the Final Map the applicant shall:

1. Complete and submit the Final Technical Report from the Principal Investigator to the satisfaction of the Director of Planning and Land Use.

2. Provide evidence to the satisfaction of the Director of Planning and Land Use that all archaeological materials recovered during both the significance testing and data recovery phases have been curated at a San Diego facility that meets standards per 36 CFR 79, and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

<u>Mitigation Measure M-CR-5</u> Significant Cultural Resource Site CA-SDi-17,186

a. All ground-disturbing activities would be monitored as described in **Mitigation Measure M-CR-1**.

b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site.

c. A permanent fence and signage shall be constructed between the road and the site, as described in **Mitigation Measure M-CR-2**.

d. Site CA-SDi-17,186 shall be placed in an open space easement granted to the County of San Diego. The open space easement shall be managed in accordance with the RMP required for this project and shall includes the management requirements outlined in **Mitigation Measure M-CR-2**.

3.2.6 Conclusions

The majority cultural resources that are in areas that would be affected by development would be located in open space to preserve the resource. However, because of the cultural sensitivity throughout the project site, there is a potential to impact cultural resources during ground-disturbing activities. This potential impact (**Impact CR-1**) is mitigated through a monitoring plan requiring monitoring during all ground-disturbing activities. Three sites, CA-SDi-17,171, CA-SDi-17,177, and CA-SDi-17,186 have significant deposits per CEQA and County RPO that are required to be preserved through project design, but the proximity of project activities to these cultural resources could result in indirect impacts. Through temporary fencing during construction to protect sensitive areas, monitoring during all ground disturbing activities, permanent fencing of sensitive areas, and placement of each site in an open space easement with long term management directed by the RMP, long-term impacts would be avoided, and therefore impacts (**Impacts CR-2, 3, and 5**) would be reduced to ***less than significant***. Direct impacts (**Impact CR-4**) to Site CA-SDi-17-178 which contains significant resources per CEQA would be mitigated through data recovery such that all the important information contained within would be extracted, researched, and made available for future scholarly use, and the impacts would be reduced to ***less than significant***. In summary, with implementation of these mitigation measures, there would be no conflict with Guidelines 1, 2, or 3 and potential impacts to sensitive resources would be reduced to ***less than significant***.

Table 3.2-1
Cultural Resources Identified within the Project Area

Site	Area	Description
CA-SDi-12,022	A	Bedrock milling features with localized midden and surface artifacts (flaked and ground tools and shards). A portion previously tested by the County (Joyner 1991).
CA-SDi-14,161	C	Two bedrock milling features with associated artifacts.
CA-SDi-17,168	A	Two bedrock milling features with associated artifacts.
CA-SDi-17,169	A	Boulders and bedrock outcrops with milling features.
CA-SDi-17,170	A	Numerous boulders and bedrock outcrops with milling features.
CA-SDi-17,171	A	This site consists of numerous boulders and bedrock outcrops with many slicks and shallow milling basins scattered on them. Over 450 milling elements.
CA-SDi-17,172	B	A large granitic outcrop with milling.
CA-SDi-17,173	B	Two bedrock outcrops with milling slicks.
CA-SDi-17,174	B	The site is a bedrock outcrop with at least three slicks.
CA-SDi-17,175	B	Two granitic bedrock outcrops with milling slicks.
CA-SDi-17,176	A	Bedrock outcrop with milling.
CA-SDi-17,177	A	The site is a long, linear group of boulders and bedrock outcrops with milling.
CA-SDi-17,178	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,179	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,180	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,181	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,182	A	Two small boulders in an intermittent drainage.
CA-SDi-17,183	A	A large, irregular outcrop of granitic bedrock with milling.
CA-SDi-17,184	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,185	A	A small cluster of granitic boulders with milling.
CA-SDi-17,186	A	A cluster of granitic boulders with milling slicks.
CA-SDi-17,187	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,188	A	Two bedrock outcrops with milling.
CA-SDi-17,189	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,190	B	An outcrop of granitic bedrock with milling.
CA-SDi-17,191	A	An outcrop of granitic bedrock with milling.
CA-SDi-17,192	A	Small 1930-1950s historic trash lens.
Isolate P-025842	A	One metavolcanic core.

Table 3.2-2
Summary of Potential Impacts to Identified Cultural Resource Sites

Site	Location	Tested	CRHR Eligibility	Potential Impacts	Impact Assessment
CA-SDi-12,022	House Pads for Lots 7, 8, 9, 14, 15, 16, 23 and open space	Yes	Not Eligible	Direct (pad grading)	Not Significant per CEQA or RPO
CA-SDi-14,161	Within permanent open space	No	Not Evaluated	None	Not Applicable
CA-SDi-17,168	Within permanent open space	No	Not Evaluated	None	Not Applicable
CA-SDi-17,169	Lot 99, outside pad	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,170	Within permanent open space	No	Not Evaluated	None	Not Applicable
CA-SDi-17,171	Roadway alignment	Yes	Eligible	Direct (roadway grading); indirect	Significant per RPO and CEQA
CA-SDi-17,172	Within permanent open space	No	Not Evaluated	None	Not Applicable
CA-SDi-17,173	Within permanent open space	Yes	Not Eligible	None	Not Significant per CEQA or RPO
CA-SDi-17,174	Within permanent open space	Yes	Not Eligible	None	Not Applicable
CA-SDi-17,175	Within permanent open space	Yes	Not Eligible	None	Not Significant per CEQA or RPO
CA-SDi-17,176	Lots 87 and 88, outside pad	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,177	Lots 85, 86, 89, 90, 91, 92, 93, 95, and 101; two internal roadways; and permanent open space. Most of the important part of the site is in proposed open space.	Yes	Eligible	Direct (pad and roadway grading)/ construction; indirect	Significant per RPO for the portions in open space and CEQA
CA-SDi-17,178	House pads for Lots 94, 95, 96, and 97. Driveway of Lot 86.	Yes	Eligible	Direct (pad grading); indirect	Significant per CEQA
CA-SDi-17,179	Lot 116, outside pad	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,180	Lot 87, edge of pad	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,181	Lot 12, outside pad, internal roadway	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,182	Within permanent open space	No	Not Evaluated	None	Not Applicable
CA-SDi-17,183	Within permanent open space	No	Not Evaluated	None	Not Applicable
CA-SDi-17,184	Lots 1 and internal roadway	Yes	Not Eligible	Direct (road grading)	Not Significant per CEQA or RPO
CA-SDi-17,185	Lots 78 and 79, outside pad. Partially in permanent open space.	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO

Site	Location	Tested	CRHR Eligibility	Potential Impacts	Impact Assessment
CA-SDi-17,186	Outside pad of Lot 4, and one internal road	Yes	Eligible	Direct (pad and road grading)	Significant per RPO for the portions in open space and per CEQA
CA-SDi-17,187	Within permanent open space	Yes	Not Eligible	None	Not Applicable
CA-SDi-17,188	Lot 76, edge of pad; one internal road	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,189	Lot 99, outside pad and within permanent open space	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,190	Within permanent open space.	Yes	Not Eligible	None	Not Significant per CEQA or RPO
CA-SDi-17,191	Lot 110, outside pad; within permanent open space	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
CA-SDi-17,192	Lot 94 and 95, outside pads	Yes	Not Eligible	Indirect	Not Significant per CEQA or RPO
Isolate P-025842	N/A	Yes	Not Eligible	None	Not Significant per CEQA or RPO

Table 3.2-3
Cumulative Project List for Cultural Resources

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
1	Salvation Army Camp	Major Use Permit	70-379W2	n/a	CA-SDI-15113, CA-SDI-15115, CA-SDI-15116, CA-SDI-114	Prehistoric Prehistoric	bedrock milling features lithic scatter w/ debitage	Not Sig Significant	Open Space Easement	
2	A Touch From Above	Major Use Permit	84-004W1	n/a	No cultural resources.			Not Sig	none	MUP 84-004 Milling feature, isolated mano and flake. Not sig. findings.
3	Rancho San Vicente	Major Use Permit	92-006W1	n/a	No cultural resources.					
4	Ramona Disposal Service	Major Use Permit	96-017W3	n/a	No cultural resource report required.					
5	Rancho Canada	Major Use Permit	02-005	n/a	No prehistoric or historical cultural resources found					
6	Mountain Valley Ranch	Major Use Permit	03-035	n/a	No cutlural resource report required.					
7	Lutheran Church Major Use Permit	Major Use Permit	08-017	n/a	CA-SDI-17299	Prehistoric	campsite with groundstone and lithics, projectile point		None Currently proposed	site proposed to be destroyed
8	Ramona Air Center, GPA, PAA, TM, MUP	Major Use Permit	08-032	n/a	CA-SDI-11472, RAC-1 & RAC-2; structures over 50 years old	Prehistoric and Historic	SDI-11472 - bedrock milling, no surface artifacts. RAC-1: large milling station 3 loci; extensive surface artifacts; midden soil. RAC-2- small milling feature; 2 surface artifacts. Two structures over 50 years old.	SDI-11472 and RAC-2 - significant; RAC-1 - undergoing testing for significance; historic buildings - not significant	Open space for SDI-11472 and RAC-2; not deterimined for RAC-1	
9	Souza Site Plan	Site Plan	02-064	n/a	No cultural resource report required.					

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
10	Big Apple Bagles	Site Plan	03-044	n/a	No cultural resource report required.					
11	Ramona Longs Drugs	Site Plan	06-024	n/a	No cultural resource report					
12	Ramona Hangers, STP	Site Plan	07-051	n/a	Negative Survey-no cultural resources					
13	Brewer Land Co, Crane Maintenance Site	Site Plan	08-009	n/a	No cultural report					
14	Black Canyon	Tentative Map	4844	30	No cutlural resources.					
15	M.D.S. Dev. Corp./DECA	Tentative Map	4962	30	No cultural resources.			Not Sig		
16	Fenton Ranch	Tentative Map	4979	9	CA-SDI-11925, CA-SDI-11926, CA-SDI-11927, CA-SDI-928, CA-SDI-12142, CA-SDI-12143H, CA-SDI-12144H	Prehistoric and Historic	Milling features, projectilie points, debitage, ceramics and animal bone. Historic buildings	Significant sites:CA-SDI-12142, 12143H,12144H	Open space easements for the three significant sites, data recovery for the unsignificant sites.	
17	Welsh TM	Tentative Map	5136	12	No report requested, less than significant impact.					
18	Brisson	Tentative Map	5188	11	No significant archaeological sites.					
19	Teyssier TM	Tentative Map	5194	37	HAD-S-1, HAD-S-2, HAD-S-3, HAD-S-4, HAD-S-5, HAD-S-6, HAD-S-7, HAD-S-8, HAD-S-9, HAD-S-10, HAD-S-11.	Prehistoric	Milling features,-grinding slicks.	Significance to be determined. Testing in Process.		
20	A Natural High INC	Tentative Map	5198	27	CA-SDI-5374 CA-SDI-5375	Prehistoric Prehistoric	Milling features, grinding slicks, manos, and flakes.	Significant Not Sig	Open space easements	

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
21	Monte Vista Ranch	Tentative Map	5235	134	Cutlural report in process					
22	Stonecrest Development	Tentative Map	5244	14	CA-SDI-16125, CA-SDI-16129, CA-SDI-16126, CA-SDI-16127, CA-SDI-16128	Prehistoric	milling features, flakes, ground stone tools	Data Recovery		
23	Montecito Ranch	Tentative Map	5250	360	CA-SDI-129901, CA-SDI-12472, CA-SDI-12473, CA-SDI-12474, CA-SDI-12475, CA-SDI-12476, CA-SDI-12477, CA-SDI-12478, CA-SDI-12479, CA-SDI-12479, CA-SDI-12480, CA-SDI-12481, CA-SDI-12482, CA-SDI-12483, CA-SDI-12484, CA-SDI-12485, CA-SDI-12486, CA-SDI-12487, CA-SDI-12488, CA-SDI-12489, CA-SDI-12490, CA-SDI-12491, CA-SDI-12492, CA-SDI-12493, CA-SDI-12494, CA-SDI-12495, CA-SDI-12496, CA-SDI-12497, CA-SDI-12498, CA-SDI-12499, CA-SDI-12500, CA-SDI-12501, CA-SDI-12502, CA-SDI-12503, CA-SDI-12504, CA-SDI-12505, CA-SDI-12506.	Prehistoric and Historic	4 Habitation sites, 9 Temporary camps, 16 Milling stations, 5 Lithic scatters, and 2 Quarries.	21 Sites not sig, 15 sites Significant	Open space easements	

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
24	Oak Country Estates	Tentative Map	5253	57	CA-SDI-7317, CA-SDI-7318, CA-SDI-7319, CA-SDI-7320, CA-SDI-7321, CA-SDI-7322, CA-SDI-7324, CA-SDI-7324, CA-SDI-7326, CA-SDI-7751, CA-SDI-7752, CA-SDI-7753, CA-SDI-7754, CA-SDI-7755, CA-SDI-7756, CA-SDI-7757, CA-SDI-7758, CA-SDI-7759, CA-SDI-7760, CA-SDI-7764, CA-SDI-7767, CA-SDI-7768, CA-SDI-15979, CA-SDI-15980, CA-SDI-15981, CA-SDI-15982, CA-SDI-16076, CA-SDI-16077, CA-SDI-16078, CA-SDI-16079, CA-SDI-16080, CA-SDI-16081	Prehistoric	Bedrock features including 1,317 slicks, 243 basins, 58 mortars, 172 flaked stone tools and cores with 9.115 pcs of debitage, 255 gorund stone tools, 16 pcs of modified bone, 256 pcs prehistoric ceramic artifacts, and 14,846 pcs of faunal bone, and 18 pcs of shellfish shell.	20 sites not sig, 12 significant.	Open space easements, monitoring, curation	
25	Rainbird Road	Tentative Map	5254	66	DR-1	Prehistoric	Milling features, lithic debitage, ceramics, and projectile points.		To-Be-Determined- Open space easement recommended.	
26	Sunset Vista	Tentative Map	5257	7	No archaeology report requested.					
27	Roberts TM	Tentative Map	5267	1	Negative survey					
28	Spitsbergen Subdivision	Tentative Map	5294	21	CA-SDI-5492, CA-SDI-13088, CA-SDI-16471, CA-SDI-16472	Prehistoric	Prehistoric campsite, milling features, lithic, ceramic and faunal remains.	Significance to be determined. Testing in Process.		

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
29	Elliot TM	Tentative Map	5302	62	In process	Historic	5 potentially hist. Structures	Testing in progress		
30	Lakeside Ventures TM	Tentative Map	5307	8	In process.					
31	Meadow Builders	Tentative Map	5311	12	I historic house			Not Sig		
32	Mt. Woodson	Tentative Map	5329	21	Arch. Survey requreste					
33	Cummings Ranch	Tentative Map	5344	136	In process; 25 sites	Prehistoric		To be determined by testing	Sites in OSE will not be tested	
34	Nickle Creek	Tentative Map	5347	45	Negative Survey					
35	Estates At Mcdonald Park TM	Tentative Map	5378	11	Negative Survey- no cultural resources					
36	Paseo Village Townhomes	Tentative Map	5509	31	No cultural resource report					
37	LB Village Investments TM	Tentative Map	5535	14	No cultural resource report					
38	"F" Street Subdivision/TM	Tentative Map	5537	10	No cultural resource report					
39	Koury TPM	Tentative Parcel Map	19982	4	CA-SDI-13175, CA-SDI-13176H, CA-SDI-13177, CA-SDI-13178	Prehistoric and Historic	Milling features, projectilie points, debitage, ceramics and animal bone. Historic buildings	Open space easements for prehistoric features.		
40	Fenton Ranch Gardening	Tentative Parcel Map	20299		CA-SDI-11925, CA-SDI-926, CA-SDI-927, CA-SDI-928, CA-SDI-12142H, CA-SDI-12144H	Prehistoric and Historic	`	Significant	Open Space Easements	
41	Brinkler TPM	Tentative Parcel Map	20318	2	CA-SDI-12590		Cermonial -Yoni	Significant	Open space easement	
42	Bagley & Quisenberry	Tentative Parcel Map	20498	5	CA-SDI- 12221	Prehistoric	isolates of lithic flakes	Not sig.	data recovery	
43	McCandles TPM	Tentative Parcel Map	20564	4	No cultural resource report					
44	Humphus TPM	Tentative Parcel Map	20656	4	No cultural resource report requested.					
45	Herold	Tentative Parcel Map	20679	4	Negative survey					
46	Means/ 3 lots ag20	Tentative Parcel Map	20692	3	In process.					

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
47	Herold- Ashley Rd.	Tentative Parcel Map	20703	4	No cultural resource report requested.					
48	KVAAS TPM	Tentative Parcel Map	20747	5	In process - Arch report requested					
49	Saffian TPM	Tentative Parcel Map	20749	4	Negative survey					
50	Ledesma Lane	Tentative Parcel Map	20760	4	In process.					
51	Wakeman TMP	Tentative Parcel Map	20766	2	No sites, two isolates	Prehistoric	Bedrock slick and flake	Not Sig		
52	Thompson	Tentative Parcel Map	20769	2	Cultural resource report not requested.					
53	Taylor TPM	Tentative Parcel Map	20770	5	In process.					
54	Sorric	Tentative Parcel Map	20771	5	No cultural resource report requested.					
55	Mc Donald	Tentative Parcel Map	20792	5	Negative Survey					
56	Herman TPM	Tentative Parcel Map	20801	4	Negative Survey					
57	Young TPM	Tentative Parcel Map	20808	5	No cultural resource report requested.					
58	Bates Parcel Map	Tentative Parcel Map	20809	5	No cultural resource report requested.					
59	12th St TPM	Tentative Parcel Map	20909	2	No cultural resource report					
60	Parker Ln TPM	Tentative Parcel Map	20910	2	No cultural resource report					
61	Herold TPM 3 Lots	Tentative Parcel Map	20919	3	No cultural resource report					
62	H. Street Ramona	Tentative Parcel Map	20922	4	No cultural resource report					
63	Filippini Parcel Map	Tentative Parcel Map	20926	2	Negative Survey- no cultural resources					
64	Neuman, TPM 4 Lots	Tentative Parcel Map	20962	4	CA-SDI-18321, CA-SDI-18322	Prehistoric		Sig	Open Space	
65	Keyes Rd TPM	Tentative Parcel Map	20977	4	No cultural resource report					

Number	Project Name	Permit Type	Permit #	# of Lots	Cultural Resources - Arch sites	Historic/ Prehistoric	Site Type	Significance	Mitigation	Pre-existing Conditions
66	Walnut Street, TPM 4 Lots	Tentative Parcel Map	20990	4	Negative Survey- no cultural resources					
67	Kruse, TPM 2 Lots	Tentative Parcel Map	21031	2	Negative Survey- no cultural resources					
68	Agha, TPM 2 Lots	Tentative Parcel Map	21043	2	No cultural resource report					
69	Highland Valley, TPM 3 Lots +	Tentative Parcel Map	21051	3	Negative Survey- no cultural resources					
70	Faaborg, GPA, REZ, TPM 2 Lots	Tentative Parcel Map	21056	2	Negative Survey- no cultural resources					
71	Dekoven Project, TPM 4 Lots	Tentative Parcel Map	21070	4	CA-SDI-8819	Prehistoric	Multi-loci site	Locus 5 sig	Locus 5 open space	
72	PFAU/TPM/4 Lots Plus Remainder	Tentative Parcel Map	21071	4	No cultural resource report					
73	Zeigler/TPM/2 Lots	Tentative Parcel Map	21082	2	No cultural resource report					
74	Wood TPM	Tentative Parcel Map	21083		No cultural resource report					
75	Bain, TPM, 3 Lots	Tentative Parcel Map	21109	3	In-process (needs to be survyed)					

Source: DPLU 2009

3.3 Noise

The analysis contained in this section summarizes the noise study completed for the Cumming Ranch project (EDAW 2008a), which is included as Appendix F. This section contains a summary of the potential noise impacts due to construction of the project, the compatibility of the proposed land uses with the existing and future noise environment of the project site, and the direct and indirect noise generated by operation of the project. A definition of the terms and noise analysis methodologies are provided in Appendix F.

3.3.1 Existing Conditions

Existing Noise Conditions

Access to the project site is provided by SR 67, Highland Valley Road, and Dye Road. Existing daily traffic volume data and peak hour turning volumes for the surrounding roadways and intersections were obtained from the project traffic report prepared by RCE Transportation Engineers (Appendix A).

Noise levels were measured within the project site and in the surrounding community as shown in Figures 3.3-1a and 3.3-1b. Short-term noise level measurements were taken within the project site and along SR 67. In addition to the short-term measurements, a long-term nighttime measurement was taken. The purpose of the nighttime measurement was to determine the lowest ambient noise level along the northern property line of Area A, which, based on the nighttime measurements is approximately 34 dBA (A-weighted decibels) L_{eq} (equivalent noise level). The measurement results are presented in Table 3.3-1.

As shown in Table 3.3-1 at measurement sites 2 and 4, along the southern border of the project site, the average measured noise level ranged from 46 to 49 dBA L_{eq}, with vehicle traffic as the principal sources of noise. Through the middle of the project site, at measurement site 5 along Highland Valley Road, measured noise levels averaged 55 dBA L_{eq} approximately 100 feet from the centerline of the roadway. The long-term noise level measurement, measurement site 6 along the northern boundary of the project site, indicates evening noise levels average 46 dBA L_{eq}.

SOUND2000, the California Department of Transportation (Caltrans) version of the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (Caltrans 2004), was used to predict existing peak hour traffic noise levels at specific onsite receptor locations. Based on the information in Table 3.3-2, the existing noise levels within 50 feet of the centerline of Highland Valley Road currently exceed the Ramona Community Plan

noise level standard of 55 dBA Community Noise Equivalent Level (CNEL). At no other locations within the project site does the existing noise level exceed 55 dBA CNEL. Noise receptor locations are shown in Figure 3.3-2a and 3.3-2b.

According to the project's Biological Technical Report, habitat for noise sensitive avian species that occurs onsite includes habitats that are associated with the coastal California gnatcatcher and habitat for raptors (HDR 2010). While the entire project site is suitable foraging habitat, the primary nesting habitat for these species onsite is sage scrub, chaparral, and oak woodland. Area A contains approximately 73 acres of sage scrub habitat, approximately 3 acres of oak woodland, and approximately 42 acres of chaparral (HDR 2010).

Applicable Regulations and Policies

County of San Diego General Plan

Policy 4b of the Noise Element of the County's General Plan (County of San Diego 2006c) sets a standard for exterior noise levels at noise sensitive land uses (NSLUs) of 60 dBA CNEL. According to Policy 4b, when a new development may result in any (existing or future) noise sensitive land use being exposed to noise levels of 60 dBA CNEL or greater, an acoustical analysis is required. A NSLU is defined as, " any residence, hospital, school, library, or similar facility where quiet is an important attribute of the environment." If the acoustical analysis shows that noise levels at any NSLU would exceed 60 dBA CNEL, modifications to the development are required to reduce the "exterior noise" level to 60 dBA CNEL or less and reduce the interior noise level to 45 dBA CNEL or less. If modifications to a development that would reduce the exterior noise to 60 dBA CNEL are infeasible, "the development shall not be approved unless a finding is made that there are specifically identified overriding social or economic considerations which warrant approval of the development without such modifications." However, if a project's acoustical study shows that sound levels for any NSLU would equal or exceed 75 dBA CNEL even with modifications to the development, "the development shall not be approved irrespective of social or economic considerations."

For single-family detached dwellings, "exterior noise" is defined as "noise measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum area:

- Net lot area up to 4,000 square feet: 400 square feet
- Net lot area 4,000 square feet to 10 acres: 10 percent of net lot area
- Net lot area over 10 acres: 1 acres"

For all other projects, exterior noise is defined as "noise measured at all exterior areas, which are provided for group or private usable open space purposes."

Ramona Community Plan

The Ramona Community Plan, the portion of the General Plan that applies specifically to the Ramona Community Planning Area, has a stricter goal than the Noise Element standard. Policy 6.3 of the Ramona Community Plan states "[n]ew development proposed within the projected noise contours exceeding CNEL 55 dB(A) will require buffering or other mitigation devices to return the ambient noise level to CNEL 55 dB(A)."

County of San Diego Noise Ordinance

The County Noise Ordinance (County of San Diego 2006d), Section 36.404, sets limits on the noise levels generated from one property to another, such as from mechanical equipment, and Section 36.410 governs noise generated by construction activities.

Section 36.404. Sound Level Limits

Unless a variance has been applied for by an applicant and granted by the County, it is unlawful for a person to cause or allow noise generated on a particular property to exceed the 1-hour average sound level, at any point on or beyond the boundaries of the property, set forth in Section 36.404 and shown in Table 3.3-3. The noise level limits vary with the zoning of the properties concerned. The proposed project site is currently zoned a Specific Plan area (S88) and the adjacent properties are zoned Agricultural A-70 and A-72 and the sound level limit is 50 dBA L_{eq} during daytime hours and 45 dBA L_{eq} during nighttime hours.

Section 36.410. Construction Noise

Section 36.410 requires that except for emergency work,

A) It shall be unlawful for any person to operate construction equipment between the hours of 7 p.m. of any day and 7 a.m. of the following day.

B) It shall also be unlawful for any person to operate construction equipment on Sundays, and days appointed by the President, Governor, or the Board of Supervisors for a public fast, Thanksgiving, or holiday.

C) It shall also be unlawful to operate any construction equipment so as to cause at or beyond the property line of any property upon which a legal dwelling unit is located an average sound level greater than 75 decibels (hourly) between the hours of 7 a.m. and 7 p.m.

Threatened and Endangered Species

The USFWS and other resource agencies, such as the ACOE and CDFG, require limitation of noise levels to the habitats of threatened and endangered noise-sensitive songbirds, such as the light-footed clapper rail, least Bell's vireo, and California gnatcatcher, during their breeding seasons. However, no formal standards have been issued by these agencies. In San Diego County, the precedent set over many years is that noise levels generated by a proposed project should not exceed 60 dBA L_{eq} at the designated habitat or a known nesting site. Where the existing ambient noise level exceeds 60 dBA L_{eq}, the project noise level should be limited to less than or equal to the ambient noise level.

3.3.2 Guidelines for the Determination of Significance

The guidelines for the determination of significant noise impacts are based on requirements of local planning documents. The quantitative thresholds listed below reflect the applicable noise level requirements of the Ramona Community Plan, County of San Diego General Plan, and County Noise Ordinance. The Cumming Ranch project would create a significant noise impact if it would:

1. expose new residential development to road, railroad, airport, or heliport noise in excess of 55 dBA CNEL (Ramona Community Plan); or expose exterior offsite NSLUs to road, railroad, airport, or heliport noise in excess of 60 dBA CNEL (Noise Element).
2. expose interior onsite or offsite, existing or planned NSLUs to interior noise in excess of 45 dBA CNEL (Noise Element);
3. generate non-transportation noise exceeding 50 dBA L_{eq} during daytime hours or 45 dBA Leq during nighttime hours based on an hourly average at or beyond the property line (Noise Ordinance);
4. in cases where existing noise levels already exceed the applicable noise guideline, the following guidelines for significance shall apply:
    a. The onsite operational noise generated by the project would have a measurable contribution to the existing noise conditions that increase noise levels at or beyond

the property line exceeding the property line noise standard specified within the County Noise Ordinance, Section 36.404. The received levels refer to the sum of the combined existing and proposed noise sources;

b. When the project has identified offsite existing and planned NSLU to experience a cumulative noise impact and project implementation would contribute more than one decibel to the cumulative noise impact (cumulatively considerable);

c. Project implementation would expose offsite existing and planned NSLUs to road, railroad, airport, or heliport noise that increases more than double than the existing noise energy of the site (more than 3 dBA CNEL over existing noise levels);

5. noise generated by the construction of the project would exceed the standards in the Construction Equipment Section of the Noise Ordinance (75 dBA L_{eq} at or beyond the property line); or

6. exceed a 1-hour average sound level of 60 dB(A) for noise sensitive avian habitat on a seasonal basis.

3.3.3 Analysis of Project Effects and Determination of Significant Impact

Construction Noise

Noise impacts from construction are a function of the noise generated by the construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Noise levels within and adjacent to the project site would increase during the construction period. Construction would not cause long-term impacts since it would be temporary and daily construction equipment operations would be limited by the County Noise Ordinance (Section 36.410).

No drilling or blasting (pile driving or explosives blasting) would occur as a result of the project; but, limited rock breaking and materials handling may be required due to presence of subsurface rock. Potential vibrations or groundborne noise associated with construction of the proposed project are typically not encountered with this type of construction.

In general, construction activities are carried out in phases and each phase has its own noise characteristics based on the mix of construction equipment in use. For purposes of noise assessment, construction equipment operates in two modes, stationary and mobile. Stationary equipment operates in one location for one or more days at a time, with either a fixed-power operation, such as, pumps, generators, and compressors, or a variable noise operation, such as

pile drivers, rock drills, and pavement breakers. Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders.

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels. The L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase. In typical construction projects, grading activities typically generate the highest noise levels as grading involves the largest equipment.

Offsite sensitive receptors that could potentially be affected by construction activities are residences located adjacent to the site boundary. In the southern portion of the project site, south of Highland Valley Road, residential properties are located along the southern and western property lines. In the northern portion of the project site, north of Highland Valley Road, residential properties occur along the western and northern property lines. Residences only occur along the western portion of the northern property line. All construction sites are in open field and are acoustically soft sites, which typically attenuate noise at rate of 7.5 dBA per doubling of distance. At a distance of 100 feet, noise levels could reach as high as 81 dBA during peak construction activity. Such levels could create temporary annoyance; however, it should be noted that peak noise levels would occur only sporadically since not all equipment would be operating at all times. Also, most construction activity would actually take place at longer distances from the receivers. The average construction equipment noise levels at 100 feet would be below 75 dBA L_{eq} over a 1-hour period. Based on a review of the preliminary grading plan for the proposed project, the nearest existing residential property line is located at least 110 feet from the center of the nearest proposed building pad.

Most grading for internal roadways would be completed prior to beginning site preparation for individual housing sites. This initial road construction phase represents the largest continuous grading effort and the greatest concentration of heavy construction would occur during this period. With the exception of a 480-foot-long strip south of Highland Valley Road along the eastern portion of site, all internal project roadways would be at least 130 feet from the project site property boundaries. This 480-foot portion of the internal roadway network passes adjacent to a property zoned for agricultural uses (A-70) and is developed with a residence.

For roadway construction, it has been assumed that a maximum of 2 dozers, 1 backhoe, and 1 grader would be working simultaneously at any given time. This mix of equipment would generate a noise level of 87 dBA L_{eq} at 50 feet and approximately 75 dBA L_{eq} at 130 feet. The majority of residential property boundaries are at distances greater than 130 feet, with the

exception of a 480-foot-long strip south of Highland Valley Road in the east portion of the site. The centerline of the proposed roadway passes within 30 feet of this property at this location. At this distance, noise levels from roadway construction may reach 92 dBA L_{eq} for a few hours during peak construction activity at the offsite receptor. Thus, the proposed project would exceed Guideline 5 during roadway construction and result in a ***significant impact*** to offsite receptors during construction. (**Impact N-1**)

Onsite grading for each building pad would occur in a limited area of each lot and would only include the area necessary for the construction of each house. No grading would occur along the property lines of adjacent existing residential properties. Grading of each building pad is assumed to require a maximum of two pieces of construction equipment, such as one dozer and one loader, at any one time. It is assumed that no more than five contiguous pads would be graded at any time.

For building pad grading, it has been assumed, due to a limited working area, that a maximum of 1 dozer and 1 front end loader would be working on any individual building pad at any given time. Based on a distance of 110 feet, average hourly noise levels would equal but not exceed 75 dBA L_{eq}. For a worst case scenario, it has been assumed a maximum of five pads would be graded at one time. From a noise perspective, the worst location for this would occur just north of Highland Valley Road at Lots 76, 77, 78, 81, and 82. Assuming an average hourly noise level of 82 dBA L_{eq} at 50 feet from the center of each of these sites and choosing the closest common point along the western property line the average hourly noise level from the grading of five building pads at once would be approximately 72 dBA L_{eq}. Thus, the noise associated with construction equipment operations would not exceed Guideline 5 and would result in a ***less than significant*** impact.

Onsite noise sensitive receptors would include residences built and occupied prior to completion of the project. The project proposes individual lot sales and construction noise analysis compliance for onsite occupied structures have been evaluated. Lots sale phasing is unknown at this time and County Construction Equipment noise level requirements are based on the property line of occupied structures where construction equipment operations are staged. Conceptual building pad locations indicated that the center of construction activities maybe as close as 75 feet from adjoining property lines. Assuming the same construction scenario as for the offsite receptors, at a distance of 75 feet, noise levels from a dozer and loader are anticipated to reach approximately 77 dBA L_{eq}, which would exceed the applicable hourly threshold by approximately 2 dBA. Therefore, this temporary exceedance of the County's applicable construction noise threshold per Guideline 5 at onsite receptors would be a ***significant impact.*** **(Impact N-2)**

Rock Breaking and Materials Handling

Rock breaking and materials handling would typically involve the use of jack hammers/rock drills or a mounted impact hammer (hoe ram) to break rock to be extracted by a backhoe or a front end loader and loaded into a truck for offsite disposal or transport to another portion of the project site. Given the limited size of each development pad, it is anticipated that only two pieces or equipment could operate at a given time in one location. It is assumed that a typical rock extraction scenario would include the operation of an impact tool to break the rock, then the extraction tool would remove the rock and load it onto a transport. No centralized rock crushing would occur onsite. No rock breaking or materials handling would occur within 25 feet of an occupied existing or future residential property. At 50 feet, a hoe ram operating alone would generate a noise level of approximately 83 dBA L_{eq}. Thus, at distance less than 125 feet, noise levels from rock breaking activities could exceed the County interpretation of the construction noise ordinance and would result in a potentially ***significant impact*** **(Impact N-3)** because noise could exceed Guideline 5.

Noise Levels at Sensitive Avian Habitat

Typical construction activities, including rock breaking and materials handling as described above, would generate noise levels in excess of 60 dBA L_{eq} at distances of 500 feet or closer from roadway construction and 350 feet or closer from building pads. All proposed roadways and the majority of building pads would occur within these distances of potential habitat of noise sensitive avian species. Therefore, construction noise is anticipated to exceed the applicable 60 dBA L_{eq} threshold for noise avian sensitive habitat as outlined in Guideline 6 and would be a ***significant impact.*** **(Impact N-4)**

Offsite Project Related Roadway Noise

The proposed project would increase traffic volumes on local roadways. Noise level increases would be greatest nearest the project site on Highland Valley Road as the greatest concentration of project-related traffic would occur along this roadway. Offsite traffic noise impacts have been evaluated based on the calculated change in noise levels due to the increase or decrease in traffic volumes.

As shown in Table 3.3-4, noise levels along Highland Valley Road, SR 67, and Dye Road would increase less than 2 dBA CNEL with implementation of the proposed project. It is widely accepted that the average healthy ear can barely perceive noise level changes of 3 dB (Caltrans 1998). For this reason the increase of 2 dBA would not be a noticeable change to noise levels.

Noise level increases adjacent to SR 67 and Dye Road would be 1 dBA or less, which is a less than significant increase in noise levels per Guideline 3. Therefore, these increases in noise are ***less than significant***.

Traffic Noise and Noise-Land Use Compatibility

Noise levels within the proposed project site would be primarily influenced by traffic noise from SR 67 and Highland Valley Road. Internal project streets would contribute a minor amount of traffic noise to the overall site as these streets would have limited speeds, would not create any new thoroughfares, and would only be used by residents of the proposed development and their guests. This land use compatibility analysis with noise levels is analyzed based on Level of Service (LOS) C future volumes (most traffic volume at highest speed).

The roadways of primary concern with regard to land use compatibility would be SR 67 and Highland Valley Road. Future noise levels affecting the compatibility of the project site were estimated using projected future traffic volumes and the same traffic speeds, traffic mixes, and site parameters used to model existing peak hour noise levels (County of San Diego 2005). Each lot was modeled individually using a conceptual lot layout placing the exterior use areas closest to the roadway to calculate the most conservative noise scenario (i.e., the loudest possible scenario). The modeled noise levels are shown in Table 3.3-5. CNEL values were developed using the future noise levels for each roadway and 24-hour traffic data for SR 67 to calculate the percentage of daytime, evening, and nighttime traffic. Predicted CNEL contour distances are shown in Figures 3.3-3, 3.3-4, and 3.3-5 and outlined in Table 3.3-6.

Based on these contours shown in Figures 3.3-3, 3.3-4, and 3.3-5, portions of Lots 5 through 11, Lots 39 through 41, Lots 55 through 57, Lots 70 through 77, and Lots 98 and 99 would be exposed noise levels above 55 dBA CNEL. Smaller portions of all of these lots, with the exception of Lots 11, 39, 41, 55, 56, and 99 would also be exposed to noise levels above 60 dBA CNEL. All other proposed lots would be located outside the 55 dBA CNEL and 60 dBA CNEL contours and would be compatible with future noise levels. Based on an exceedance of Guideline 1, there would be a ***significant impact*** on Lots 5 through 11, Lots 39 through 41, Lots 55 though 57, Lots 70 through 77, and Lots 98 and 99, if the new NSLUs are located within the 55 dBA CNEL contour. **(Impact N-5)**

Aircraft Noise and Noise-Land Use Compatibility

The portion of the project site that would be developed for noise-sensitive use is located approximately 1 mile south of the Ramona Airport. Based on a review of the Ramona Airport

Land Use Compatibility Plan (San Diego County Airport Land Use Commission 2006), no NSLUs associated with the proposed project would be located within the Ramona Airport's 55 dBA CNEL. Therefore, the proposed project would not be adversely affected by aircraft operations at the Ramona Airport and aircraft-related noise impacts would be ***less than significant*** because Guideline 1 would not be exceeded.

Noise Generated Onsite

The project would include the installation of a sewer lift station. The lift station would be located within an individual lot and require a Minor Use Permit. The lift station lot would be 130 feet by 120 feet and located approximately 100 feet east of Lot 125, 250 feet northeast of Lot 110, and approximately 150 feet south of the northern property line of Area A. To determine the anticipated noise generated during typical operations, a field survey and noise measurements of similar equipment were completed. It has been assumed the lift station would require a standby generator, a pressure regulation pump, and an odor control pump fan.

Noise levels from the proposed location of the lift station to the nearest property boundaries were estimated based upon the noise measurements taken at representative pump stations. The distance calculations are based on the distance from the center of the lift station lot to the boundary of the same lot (approximately 60 feet). Noise generated by the lift station would exceed the daytime noise level limit at the property line due to testing of the standby generator and would be expected to exceed the County's Noise Ordinance daytime limits at any property within 515 feet of the lift station without shielding as shown in Table 3.3-7. Guideline 3 would be exceeded and this would be a ***significant impact***. (**Impact N-6**)

3.3.4 Cumulative Impact Analysis

The cumulative study area for noise was determined to include those roadway segments throughout the Ramona community that would have an increase in traffic as a result of the proposed project and thus, a potential increase in noise. This area includes the SR 67 corridor from Scripps Poway Parkway north to SR 76, the Highland Valley Road corridor west of SR 67, and the Dye Road corridor east of SR 67 and is the same as the cumulative traffic study area. Cumulative traffic noise levels were estimated using traffic volumes from the traffic report (Appendix A). Table 3.3-4 shows forecast traffic noise for the cumulative scenario. To determine whether an offsite NSLU has a cumulative noise impact, the County Noise Guidelines identify this as doubling the existing noise conditions.

As shown in Table 3.3-4, noise levels in areas affected by SR 67 and Highland Valley Road are forecast not to double the existing noise levels, which is a less than significant cumulative increase in traffic noise levels. The greatest increase in noise levels due to cumulative traffic conditions would be along Dye Road east of SR 67, where noise levels would increase by approximately 2.8 dBA CNEL which is not doubling the existing noise conditions. This area is currently undeveloped. An increase of 3 dBA CNEL would not be a significant increase in noise levels. The project's contribution to cumulative noise does not have to be evaluated because there are no cumulative noise impacts identified and the project is not cumulatively considerable, therefore the cumulative impact is considered ***less than significant*** according to Guideline 4b.

3.3.5 Mitigation Measures

Mitigation Measure M-N-1 Construction Noise – Offsite Receptors

During construction of the internal street system south of Highland Valley Road, a 14-foot-high, inversed "L"-shaped, temporary noise barrier 420 feet in length shall be constructed along the project boundary as shown in Figure 3.3-6.

Mitigation Measure M-N-2 Construction Noise – Onsite Receptors

The project proposes individual lot sales and construction noise analysis compliance for onsite occupied structures have been evaluated. Lots sale phasing is unknown at this time and therefore the construction equipment noise level requirements must be flexible to address locations where structures are built and occupied and where construction equipment operations are being staged. Although phasing and completion of construction equipment operations is unknown, this mitigation measure is broad enough to ensure compliance with County noise standards in all situations:

> **M-N-2:** When construction sites are located within 75 feet of an occupied residential property line, temporary noise barriers, with a minimum height of 8 feet, shall be required to block the line-of-sight from the occupied residence to the active construction site.

Mitigation Measure M-N-3 Rock Breaking and Material Handling

Although mitigation measures are proposed for material processing onsite, the specific locations for these activities are not known at this time. Therefore, this mitigation measure is broad enough to ensure compliance with County noise standards in all situations:

M-N-3: When rock breaking activities are located within 125 feet of an occupied residential property line, temporary noise barriers with a minimum height of 8 feet shall be required. The temporary barriers shall be constructed no more than 5 feet from the point of impact and to block the line of sight from the active rock breaking/material handling site to the occupied residence.

The proposed barrier would provide approximately 18 dBA reduction from impact noise associated with rock breaking, which would reduce potential construction noise levels at future residential property lines to 73 dBA L_{eq}.

Mitigation MeasuresM-N-4 Noise Sensitive Avian Habitat

The following measures are required to reduce the short duration impact of construction-related noise and rock breaking and material handling noise to sensitive avian habitat.

a. Where feasible, the project shall avoid construction within 500 feet of habitat for noise sensitive species, between February 1 and September 15.

b. If the pre-construction biological surveys required under Impact BI-15 determine nests of noise sensitive avians are present in the habitat, or construction noise would have a significant impact on the species using the habitat, an acoustical study shall be prepared to assess noise sources, determine noise levels in the habitat, and determine mitigation measures capable of reducing noise levels to 60 dBA L_{eq} or less. If noise levels from construction cannot be reduced below 60 dBA L_{eq}, construction shall not be allowed between February 1 and September 15.

Avoiding construction or reducing noise levels to construction noise levels to 60 dBA L_{eq} or less would reduce potential construction noise levels within habitat for noise sensitive species to below the level identified in Guideline 6.

Mitigation Measure M-N-5 Traffic Noise Levels and Land Use Compatibility

Due to the potential conflicts with the proposed land uses and predicted future noise levels along Highland Valley Road and SR 67, the following measures would be required to reduce potential traffic noise impacts to a less than significant level and to ensure the proposed project complies with the County's noise standards. As detailed in the Noise Analysis for the project, conceptual feasibility analysis modeling was completed and found that all lots could obtain an area of reasonable size to allow exterior residential use below the 55 dBA CNEL threshold.

a. Prior to approval of the Final Map, (as required in the San Diego Code of Regulatory Ordinances, County of San Diego 1986a), the applicant shall dedicate to the County of San Diego "noise protection easements" on each of Lots 5 through 11, Lots 55 though 57, Lots 70 through 77, and Lots 98, and 99, over the area of the property from the lot line at the edge of Highland Valley Road to a line 300 feet from the centerline of Highland Valley Road. These easements are for the protection of NSLUs from traffic noise. The noise protection easements shall be shown on the Final Map.

   Prior to approval of the Final Map, (as required in the San Diego Code of Regulatory Ordinances, County of San Diego 1986a), the applicant shall dedicate to the County of San Diego "noise protection easements" on each of Lots 39 through 41 from the lot line at the edge of SR 67 to a line 795 feet from the centerline of SR 67. These easements are for the protection of NSLUs from traffic noise. The noise protection easements shall be shown on the Final Map

   These noise protection easements shall require that prior to the issuance of a Building Permit for residences located within the noise protection easement, evidence shall be provided to the satisfaction of the Planning Director that exterior (outdoor) noise levels comply with the applicable NSLU noise level limits and land use compatibility guidelines of the County. The NSLU area does not include the entire lot but includes an area of reasonable size that adjoins the home to allow exterior use by residents at noise levels of 55 dBA CNEL or below. If noise barriers are required for compliance with the noise easement, barriers could be made of masonry, wood, and transparent materials, such as glass or Lucite. Earthen berms or a combination of berms and walls would also provide noise attenuation. The noise protection easement language shall contain a restriction stating that the structure and the exterior living area will be placed such that a noise barrier will complement the residences architecture and will not incorporate a solid (opaque) wall in excess of six feet. Conceptual modeling was prepared and is provided in the noise study (Appendix F) to show feasibility of noise reduction for each impacted lot. The conceptual noise barrier locations are shown on Figure 3.3-7.

b. Noise barriers, as described above, would not reduce noise levels to second story elevations. Where two-story homes would be built in the area of properties where future noise levels, without abatement, are forecast to approach or exceed 60 dBA CNEL, the Building Permit applicant shall demonstrate that interior noise levels due to exterior noise sources would not exceed 45 dBA CNEL. Compliance shall require the submittal of a report with the building plans identifying the noise attenuation features included in the project's design to maintain interior noise levels at or below 45 dBA CNEL.

In these cases, it is anticipated that the typical method of compliance would be to provide the homes with air conditioning or equivalent forced air circulation in order to allow occupancy with closed windows which, for most residential construction, would provide sufficient exterior-to-interior noise reduction.

Mitigation Measure M-N-6 Stationary Noise Sources - Lift Station

Prior to the issuance of improvement plans or grading permits for the TM, the project applicant shall demonstrate that the sewer lift station noise will comply with the County Noise Ordinance. To verify noise compliance, a Minor Use Permit or Site Plan shall be required to verify ongoing compliance. As part of the Minor Use Permit, the applicant shall develop and submit site plans for the lift station and proposed enclosure and a noise study demonstrating the lift station's compliance to the County Noise Ordinance, Section 36.404 regulations of 50 dBA L_{eq} during daytime hours at the lot line and provide any necessary abatement measures to achieve this noise level. Abatement measures required to reduce noise levels may include complete enclosure of the equipment, specific orientation of the noise generating equipment, noise barriers, or berms. Specifications and recommendation from this study shall be incorporated into the final site plans to the satisfaction of the Director of the Department of Planning and Land Use.

3.3.6 Conclusion

Construction noise levels may exceed County noise level standards for construction activities at the property line of one offsite receptor (**Impact N-1**). With the identified mitigation, the potential construction impacts to the existing offsite residence from general construction would be reduced to ***less than significant*** because the proposed temporary barrier would attenuate noise levels by approximately 18 dBA. This will reduce the noise level to 74 dBA L_{eq} and meet the noise standard in Guideline 5 at the intervening property line.

Noise sensitive receptors would include residences built and occupied prior to completion of the project. Noise modeling had determined that at a distance of 75 feet, noise levels from a dozer and loader, noise is anticipated to reach approximately 77 dBA L_{eq} at the property line which would exceed the applicable hourly threshold by approximately 2 dBA (**Impact N-2**). Mitigation consisting of a temporary barrier to block the line of sight from the noise source to surrounding receptors would provide a minimum of 5 dBA reduction from general construction, which would reduce potential construction noise levels at residential property lines to 72 dBA L_{eq}. With the identified mitigation, the potential construction noise impacts to future residences from general construction would be reduced to ***less than significant*** according to Guideline 5.

Noise from rock breaking and materials handling would occur during construction and at distances less than 125 feet from sensitive receptors, could exceed the County interpretation of the construction noise ordinance **(Impact N-3)**. When rock breaking activities are located within 125 feet of an occupied residential property line, temporary noise barriers would be constructed to provide approximately 18 dBA reduction from impact noise associated with rock breaking, which would reduce potential construction noise levels at future residential property lines to 73 dBA L_{eq}. Thus, construction noise due to rock breaking would be ***less than significant*** per Guideline 5.

Project construction could result in temporary impact to noise sensitive avian species on the project site based on the location of their habitat to areas of construction (**Impact N-4**). Avoiding construction or reducing noise levels to construction noise levels to 60 dBA L_{eq} or less would reduce potential construction noise levels within habitat for noise sensitive species to below the level identified in Guideline 6. Thus, with the identified mitigation, the potential construction impacts to noise sensitive habitat from general construction would be reduced to ***less than significant*** in accordance with Guideline 6.

The analysis of future traffic noise levels indicates that traffic generated by the project would increase noise levels along affected roadways by less than 3 dBA CNEL. Thus, the increase would not result in any direct noise impacts and offsite traffic noise impacts would be ***less than significant*** per Guideline 4c.

The majority of the land uses proposed for the project site would be compatible with the existing and future noise environment except for proposed residential lots located within 300 feet of the center line of Highland Valley Road and 795 feet of the center line of SR 67 where future traffic noise levels would exceed the 55 dBA CNEL Ramona Community Plan noise level guideline. A noise protection easement would be placed on all impacted lots that would require verification that there is a reasonable area of outdoor use adjacent to each residence that is below the 55 dBA CNEL threshold as outlined in Guideline 1. Conceptual modeling was prepared to show feasibility of achieving the 55 dBA or less threshold for each impacted lot. With implementation of this measure, the impact (**Impact N-5**) would be ***less than significant*** because noise would be reduced to below the standards in Guidelines 1 and 2.

Stationary noise sources associated with the proposed project are related to a sewer lift station that would serve the proposed residences. Noise generated by the lift station could exceed the daytime noise level limit at the property line due to testing of the standby generator and would be expected to exceed the County's Noise Ordinance, Section 36.404 daytime limits of 50 dBA at the property boundary if noise attenuation is not provided. A Minor Use Permit or Site Plan

would be required for the lift station and would require a noise study specific to the exact equipment to be installed at the lift station and shall include specific enclosure details and/or other measures that would reduce the noise level at the nearest property line to comply with the County Noise Ordinance per Guideline 3. With implementation of this measure, the impact (**Impact N-6**) would be reduced to ***less than significant*** because a noise study will have demonstrated that the specific equipment and structure would lower noise from the lift station such that it would not exceed the standard in Guideline 3**.**

Source: Snipe Dye 2008; Digital Globe 2008.

400 200 0 400 Feet

Scale: 1:4,800; 1 inch = 400 feet

Figure 3.3-1a
Noise Measurement Locations Map A

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Source: Snipe Dye 2008; Digital Globe 2008.

400 200 0 400 Feet

Scale: 1:4,800; 1 inch = 400 feet

Figure 3.3-1b
Noise Measurement Locations Map B

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Source: Snipe Dye 2008; Digital Globe 2008.

400 200 0 400 Feet

Scale: 1:4,800; 1 inch = 400 feet

Figure 3.3-2a
Noise Receptor Locations Map A

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Source: Snipe Dye 2008; Digital Globe 2008.

400 200 0 400 Feet

Scale: 1:4,800; 1 inch = 400 feet

Figure 3.3-2b
Noise Receptor Locations Map B

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Source: Snipe Dye 2008; Digital Globe 2008.

200 100 0 200 Feet

Scale: 1:2,400; 1 inch = 200 feet

Figure 3.3-3
Future Noise Level Contours
Highland Valley Road - West

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Source: Snipe Dye 2008; Digital Globe 2008.

200 100 0 200 Feet

Scale: 1:2,618; 1 inch = 218 feet

Figure 3.3-4
Future Noise Level Contours
Highland Valley Road - East

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Source: Snipe Dye 2008; Digital Globe 2008.

200 100 0 200 Feet

Scale: 1:1,800; 1 inch = 150 feet

Figure 3.3-5
Future Noise Level Contours
SR 67

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Source: Snipe Dye 2008; Digital Globe 2008.

150 75 0 150 Feet

1 inch equals 150 feet

Figure 3.3-6
Temporary Noise Barrier Location

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Source: Snipe Dye 2008; Digital Globe 2008.

500 250 0 500 Feet

1 inch equals 500 feet

Figure 3.3-7
Conceptual Noise Barrier Locations

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Table 3.3-1
Existing Noise Measurement Levels

Site ID[1]	Location	Time	dBA L_{eq}	dBA L_{max}	dBA L_{min}
1	50 feet north of SR 67 at Boortz Lane	09:51 – 10:05	66	81	40
2	Southwestern Corner of project site, Lot 47	09:51 – 10:05	46	72	36
3	50 feet northwest of SR 67 (3725 SR 67)	10:27 – 10:40	66	77	40
4	Lot 40 Location	10:27 – 10:40	49	74	38
5	100 feet north of Highland Valley Road (Lot 76)	12:44 – 13:01	55	76	36
6	Along northern property line west of Lot 110	19:30 – 03:00	46	80	33

[1] Site ID corresponds to locations shown in Figures 3.3-1a and 3.3-1b.

Notes: All daytime measurements were taken on June 30, 2004. The nighttime noise measurement at Site 6 began on June 30, 2004, at 7:30 PM and ended July 1, 2004, at 3:00 AM

Table 3.3-2
Existing Onsite Peak Hour Noise Levels

Receptor ID[1]		Existing Noise Level dBA L_{eq}	Existing Noise Level CNEL
1	50 feet north of SR 67 at Boortz Lane	72	73
2	Southwestern corner of project site (Lot 47)	52	53
3	50 feet northwest of SR 67 (3725 SR 67)	69	70
4	Lot 40	53	54
5	100 feet north of Highland Valley Road (Lot 76)	59	60
6	Lot 45	50	51
7	Lot 42	50	51
8	Lot 39	53	54
9	Lot 11	55	56
10	Lot 9	60	61
11	Lot 6	59	60
12	Lot 57	60	61
13	Lot 74	59	60
14	Lot 72	58	59
15	Lot 70	60	61
16	Lot 98	59	60
17	Lot 4	52	53

[1] Receptor ID numbers correspond to location shown in Figures 3.3-2a and 3.3-2b.

Note: Based on 24-hour traffic volume data and assuming a peak hour traffic volume of 10%, CNEL values for areas affected by the proposed project are calculated to be equal to 1 dBA higher than the predicted peak hour noise level.

Table 3.3-3
County of San Diego Noise Ordinance Sound Level Limits

Zone	Applicable Hours	Sound Level Limit dB $L_{eq\ (1\ hour)}$
R-S, R-D, R-R, A-70, S-80, S-87, S-88, S-90, R-V and R-U Use Regulations with a density of less than 11 dwelling units per acre	7 AM to 10 PM 10 PM to 7 AM	50 45
R-RO, R-C, R-M, C-30, S-84, S-86, R-V and R-U Use Regulations with a density of 11 or more dwelling units per acre	7 AM to 10 PM 10 PM to 7 AM	55 50
S-94 and all other commercial zones	7 AM to 10 PM 10 PM to 7 AM	60 55
M-50, M-52, M-54	Anytime	70
S-82, M-58, A-72 and all other industrial zones	Anytime	75

Source: County of San Diego Noise Ordinance, Section 36.404.

Notes: If the measured ambient level exceeds the applicable limit noted above, the allowable 1-hour average sound level shall be the ambient noise level. The ambient noise level shall be measured when the alleged noise violation source is not operating.

The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts, provided that the 1-hour average sound level limit applicable to extractive industries, including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone where the extractive industry is actually located.

Table 3.3-4
Project Related Noise Level Increases

Roadway	Segment	Average Daily Traffic Volumes			Project Percentage Increase over Existing	Cumulative Percentage Increase Over Existing	Project Noise Level Increase (dBA)	Cumulative Noise Level Increase (dBA)
		Existing	Existing + Project	Existing + Cumulative				
SR 67	Scripps Poway Parkway to Poway Road	21,654	22,134	29,532	2,2%	36.4%	0.1	1.3
	Poway Road to Archie Moore Road	25,462	26,392	32,862	3.7%	29.1%	0.2	1.1
	Archie Moore Road to Mussey Grade Road	23,947	24,992	31,645	4.4%	32.1%	0.2	1.2
	Mussey Grade Road to Pala Street	24,250	24,475	30,190	0.9%	24.5%	0.0	1.0
	Pala Street to SR 78	30,250	30,665	35,800	0.5%	17.4%	0.0	0.7
Highland Valley Road	West of SR 67	3,167	3,392	5,092	7.1%	60.8%	0.3	2.1
Dye Road	East of SR 67	6,128	6,203	11,870	1.2%	93.7%	0.1	2.8

Source: RCE 2010
Auto – Automobiles, MT- Medium Trucks, HT – Heavy Trucks

Table 3.3-5
Predicted 2030 Onsite Noise Levels

Receptor ID	Location	2030 Noise Level (dBA CNEL)	Is the noise level compatible	
			County Noise Element Standards?	Ramona Community Plan Noise Standards?
1	50 feet north of SR 67 at Boortz Lane	75	NA	NA
2	Southwestern corner of project site (Lot 47)	55	Yes	Yes
3	50 feet northwest of SR 67 (3725 SR 67)	72	NA	NA
4	Lot 40	56	Yes	No
5	100 feet north of Highland Valley Road (Lot 76)	62	No	No
6	Lot 45	53	Yes	Yes
7	Lot 42	53	Yes	Yes
8	Lot 39	56	Yes	No
9	Lot 11	58	Yes	No
10	Lot 9	64	No	No
11	Lot 6	62	No	No
12	Lot 57	63	No	No
13	Lot 74	63	No	No
14	Lot 72	62	No	No
15	Lot 70	63	No	No
16	Lot 98	63	No	No
17	Lot 4	55	Yes	Yes

Note: Based on 24-hour traffic volume data and assuming a peak hour traffic volume of 10 percent, CNEL values for areas affected by the proposed project are calculated to be 1 dBA higher than the predicted peak hour noise level.

Table 3.3-6
CNEL Contour Distance from Center of Highland Valley Road and SR 67

Roadway - Segment	dBA CNEL @ 100 Feet	Distance to 55 dBA CNEL Noise Contour (in feet)	Distance to 60 dBA CNEL Noise Contour (in feet)	Distance to 65 dBA CNEL Noise Contour (in feet)
Future 2030				
Highland Valley	62	300	140	65
SR 67 – Southwest of Highland Valley Road	68	795	370	175

Notes: Peak hour noise levels and CNEL distance values are based on acoustically soft site conditions. CNEL values were developed from the 24-hour traffic mix data and peak hour traffic data for each roadway segment derived from the project traffic report turning movements and average daily trip volumes.

Table 3.3-7
Lift Station Noise Levels

Receptor Location	Noise Source	Noise Level at 23 Feet, dBA L_{eq}(1)	Shortest Distance to Property Line, Feet	Reduction Due to Distance, dBA	Noise Level at Property Line, dBA	Combined Noise Level dBA L_{eq}(1)
Daytime Noise Levels (50 dBA standard)						
Sewer Lot Property Boundary	Standby Generator	72	60	8	64	64
	Odor Control Pump	55	60	8	47	
	Pressure Regulation Pump	36	60	8	28	
Nighttime Noise Level (45 dBA standard)						
Sewer Lot Property Boundary	Odor Control Pump	55	60	8	47	47
	Pressure Regulation Pump	36	60	8	28	

[1]Distance calculations are based on an acoustically hard site.

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3.4 Aesthetic and Visual Quality

The purpose of this section is to evaluate potential impacts to visual resources that could result from project implementation. This section summarizes information from the Visual Resources Assessment (AECOM 2010b) that was prepared for this project, which is included as Appendix G.

3.4.1 Existing Conditions

Existing Visual Character

Cumming Ranch is located in a rural area with residential development located generally along the main transportation thoroughfares. Single-family homes are scattered throughout the area and are primarily accessed via dirt roads. Most of the houses are one story and are of varying architectural styles, shapes, and construction materials. There is no unifying architectural theme. Large animals, such as horses, are allowed within the residential lots, and their presence adds to the "country" feel of the area. Landscaping varies from property to property. There are clusters of ornamental or native trees near many of the homes. In hillier areas, rock outcrops are incorporated into the landscape design. Fencing of varying materials and heights runs along most lot lines and adds linear details to the viewscape.

Commercial establishments are limited in the vicinity of the project site, and those that do exist are small and modest in design. The few businesses located along SR 67 in this area are low profile, with minimal visibility and signage. The Ramona Airport and associated structures are located adjacent to the northern boundary of the project site. There are no large scale industrial areas near Cumming Ranch, so there are generally no utilitarian big-box structures in the vicinity. The SMWWTP to the east of the project site is generally hidden from the view of homes along Sawday Street and therefore does not detract from the rural atmosphere.

The surrounding mountains add a dramatic scenic backdrop to the Ramona area. The hills, covered with native vegetation and punctuated with numerous rock clusters, create a varied and visually interesting horizon.

In Area A, open fields of farmland or grasses are interrupted by scattered rock outcrops or clusters of trees. Farming activities have carved odd shapes into the flatter areas of the site, but the crops are low profile and contribute to the overall sense of open space. The three knolls north of Highland Valley Road are largely undisturbed and have the highest elevation in the Santa Maria Valley area north and west of SR 67. Dry farming occurs on Area B and the

site is a relatively flat expanse of crops. Adding to the open feeling are the adjacent grasslands in Area C and to the northwest.

Project Viewshed

The geographic limit for the visual assessment is the viewshed boundary. The viewshed is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, land use patterns, and landscaping. The viewshed boundary for the project was determined in the field and through analysis of aerial and topographic maps.

The viewshed for Cumming Ranch is an irregularly shaped area due to the varied terrain in the vicinity. A map of the viewshed is shown in Figure 3.4-1. The viewshed to the east of Areas B and C extends only to the homes that front on Sawday Street. These houses and associated landscaping obscure views from areas farther to the east. The immediate area to the southeast of Areas A and B generally has limited views of the property due to the presence of a small hill. The viewshed encompasses portions of SR 67 consisting of a segment from approximately Mussey Grade Road to Carnation Avenue and a segment from north of Rancho Maria Lane to south of South Hope Street. Much of the property, however, cannot be seen from SR 67 because of intervening topography. The portion that can be seen is limited to the central knoll line and areas to the east and south of that feature.

The viewshed boundary on the south and west of Area A is limited to an area north of SR 67 because of topography, structures, and landscaping. However, several houses on the hillside south of SR 67 have a possible view of portions of the site. The Santa Maria Creek area, which extends to the northwest and northeast of Cumming Ranch, is relatively level and undeveloped, and enables more distant views of the property.

Viewer Sensitivity

Viewer response consists of two elements: (1) viewer sensitivity and (2) viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project. Viewer sensitivity is defined by the viewers' concern for scenic quality and how the viewers respond to change in the visual resources that make up the view. Local values and goals may give visual significance to landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Persons may be sensitive to projects that fall short of local visual goals. Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, the type of viewer activity, the duration

of their view, the speed at which the viewer moves, and position of the viewer. High viewer exposure may increase the potential significance of a change in the visual environment.

Viewer sensitivity in the vicinity of Cumming Ranch varies due to the different types of viewers and their visual quality expectations. The viewshed has several viewer groups: motorists, residents, recreationalists (trail users), and workers and patrons. Viewer sensitivity ranges from low for workers and patrons, to high for hikers/equestrians and motorists on scenic highways. Table 3.4-1 summarizes the viewer response for four individual viewer groups. Additional explanation of the viewer groups is provided in the Visual Resources Assessment included in Appendix G.

Applicable Planning Documents

A number of planning documents set forth goals, policies, and restrictions that relate to the visual environment of the Cumming Ranch project. The applicable plans are described below.

Scenic Highway Element of the San Diego County General Plan

SR 67 is recommended as a Third Priority Scenic Route (Soledad Freeway to Anza Expressway) in the Scenic Highway Element of the San Diego County General Plan (County of San Diego 1986b). The goal of the Scenic Highway Element is to create a system of scenic highway corridors within which scenic, historic, or recreational resources are protected and enhanced. SR 67 is not an officially designated California Scenic Highway, nor is it on the list of eligible highways.

County Trails Program – Community Trails Master Plan

The purpose of the Community Trails Master Plan is to guide community trail development and management in the unincorporated County (County of San Diego 2005a). It also incorporates the concept of pathways (trails within public road rights-of-way) and describes them as an integral part of many community trail systems. The Ramona Community Trails and Pathway Plan is part of the overall Community Trails Master Plan and is the local trail planning document specific to the Ramona area. The Ramona Community Trails and Pathway Plan states that Ramona strives to retain its rural character, and a viable trail system will help to achieve that goal and provide a safe and healthy means to get from one place to another within the community (County of San Diego 2005a). The design and look of the trails is also outlined in the plan to maintain the rural character of the area.

San Diego County Light Pollution Code

The County has established a light pollution code (Division 9, Section 59) (County of San Diego 2005d) intended to "minimize light pollution for the enjoyment and use of property and the night environment by the citizens of San Diego County and to protect the Palomar and Mount Laguna observatories from the effects of light pollution that have a detrimental effect on astronomical research by restricting the permitted use of outdoor light fixtures on private property." Cumming Ranch is located 23 miles from Palomar Observatory and 30 miles from Mount Laguna Observatory. Therefore, the property is located in Zone B as defined by the light pollution code. Zone B allows low-pressure sodium lamps and other lamps above 4050 lumens if they are fully shielded. Lamps that are 4050 lumens and below (standard incandescent, 150-watt halogen, 40-watt fluorescent, etc.) are allowed in Zone B.

Ramona Community Plan

The Ramona Community Plan (County of San Diego 2002a) has a number of goals and policies that pertain to visual resources. Aesthetic goals that pertain to the project can be found in the Community Character, Trails, and Scenic Highways sections of the Ramona Community Plan. These goals are detailed in the Visual Resources Assessment in Appendix G. The Ramona Community Plan also includes aesthetic goals specific to the Cumming Ranch SPA; these selected goals and policies are summarized below.

Cumming Specific Planning Area, SPA (.25)

1. *The project shall create a rural residential community with an identity consistent with the community character of Ramona as described in the Ramona Community Plan text.*

23. *To ensure that the design of proposed neighborhoods and community areas maintains a sense of variety without sacrificing unity, the Specific Plan shall include a Design Plan that illustrates the intended character of individual neighborhoods and community areas.*

24. *The Design Plan shall contain the following elements: community architecture, residential architecture, landscape plan, fencing, lighting, and signing.*

25. *The Design Plan shall also contain proposed Covenants, Conditions and Restrictions (CC&Rs) or other design/aesthetics control mechanisms.*

34. *Existing large boulders and rock outcroppings shall be integrated into the design of the homesites.*

35. All utilities shall be undergrounded where feasible.

3.4.2 Guidelines for the Determination of Significance

The guidelines for determination of visual impact significance are based upon the CEQA Guidelines for visual analysis. The guidelines were appropriately modified to account for the high value of the local rural character and importance of visual pattern and scale related to the surrounding community. The proposed project would have a significant impact if it would:

1. result in a demonstrable, significant adverse effect on a scenic vista or scenic highway;
2. result in a substantial landform alteration;
3. produce excessive light or glare, or have dark sky impacts;
4. change the composition of visual pattern to be incompatible with the existing visual character in terms of dominance, scale, diversity, and continuity or with the Ramona Community Plan; or
5. result in cumulatively considerable impacts related to its effect on a County-designated scenic route, or due to its bulk and scale as compared to surrounding land uses.

3.4.3 Analysis of Project Effects and Determination of Significant Impact

<u>Permanent Visual Effects</u>

Visual Character

The visual character of the site would change from vacant land including grassy valleys and bolder strewn hills to a rural residential community with some manufactured slopes, landscaping, and open space. The primary views from Highland Valley Road and SR 67 would change from vacant land to residential on one to three acre lots. Surrounding land uses consist of urban development associated with the Ramona Town Center (including the Ramona Airport) to the north and east; the Ramona Town Center with single-family homes and the SMWWTP to the east of Areas B and C; rural residential homes to the north of the Area A boundary and south and west of the site; and a large area of open grasslands to the northwest of the project site. Although the project would change the visual character of the site by introducing new development to the area, the altered appearance would be compatible with existing surrounding residential development. The proposed lots would be designed to be consistent with the rural character of the Ramona community and to transition seamlessly and as naturally possible with the adjoining

grasslands because there will be minimal grading and preservation of ridgelines and hilltops. Therefore, the more distant views from the primary roads in Ramona would not change.

With adherence to the design guidelines detailed in the Cumming Ranch Specific Plan and the design restrictions in the CC&Rs, the viewscape of the completed project would be compatible with that of the surrounding area. Implementation of the project would create a change in the visual environment of the project site; however, through features of the project including minimal grading, maintaining natural features (ridgelines, hilltops, boulders and trees), natural landscaping, large open space areas, and other design measures, the change to the project site would be visually minimized and the resulting impact would be ***less than significant***.

The design guidelines contained within the Cumming Ranch Specific Plan outline recommend landform modification, architectural treatment, lighting, and landscaping. The Cumming Ranch project Landscape Plan would provide a cohesive plant palette to create visual unity and soften manufactured slopes at the site. The County's Light Pollution Code would place further restrictions on lighting sources. Adherence to existing regulations and project design concepts would further reduce any potential for visual impacts even though the visual environment would trend from agricultural to rural residential. The large scale changes to the visual environment resulting from the proposed project would be ***less than significant***.

Analysis of Key Views

Analyzing all possible views in which the proposed Cumming Ranch project would be seen is not feasible. It is therefore necessary to select several representative key viewpoints that would most clearly display the visual effects of the project. Five key views have been identified based on the types of project-related features that would be visible, the number and frequency of views, designated scenic resources, and the potential sensitivity of viewers. The locations of the key views are shown in Figure 3.4-2.

Visual simulations were prepared to show an accurate digital simulation of the future development conditions for four of the Key Views. The simulations are not generalized artist renditions. The simulations were created through photographing the project site with high resolution digital photography. The exact distances from the camera to points on the project site were recorded though the use of global positioning satellite (GPS) technology in order to achieve accuracy in the scale of future development. Computer imagery was then developed from details shown on the TM in order to place future homes in the appropriate locations and accurate scale in the photos. Since development of the visual simulations the project design has been modified slightly, but does not create noticeable changes within the simulations. The simulated homes in

the photos are generalized representations of the anticipated design of the future residential construction and are not meant to define the exact look of the individual homes on each lot.

Analysis of Key View 1

Key View 1 is the view from SR 67 near Carol Lane and represents the short-term view of the southeastern corner of Area A from passing northbound motorists. The view encompasses an undisturbed hill on the south side of Highland Valley Road, farmland that extends from SR 67 to the hill, and the knoll to the north of Highland Valley Road. Key View 1 toward the north is distinguished by the lack of structures and a sense of visual openness. The natural horizon is uninterrupted, providing a scenic panorama. Because SR 67 is a major transportation corridor, vehicles traveling on the road are also a part of the visual landscape, as are street and informational signage and utility poles.

A visual simulation of the Cumming Ranch development has been produced for Key View 1 to illustrate the future visual environment and is shown in Figure 3.4-3. The Cumming Ranch project would change the Key View 1 viewscape from natural and farmland-related open space to a rural residential development by introducing paved roads, one- and two-story houses on large lots, and native and ornamental landscaping. The Cumming Ranch project would result in a viewscape that is similar to existing residential development that generally surrounds Area A. In addition, as shown in the visual simulation (Figure 3.4-3), the high percentage of open space between the viewpoint and planned development minimizes the future view of residences. The use of native landscaping would allow the project to integrate more seamlessly with the surrounding areas. Therefore, the change in composition of the area's visual pattern would be compatible with the existing visual character in terms of dominance, scale, diversity, and continuity. From Key View 1, the change to the visual environment is not prominent in the viewscape of the passing northbound motorist and most new features on the site can be seen only in the distance. Impacts to the community's visual character per Guideline 4 would be ***less than significant***.

Grading activities would be confined to construction of the internal roads and individual building pads. All of the residential lots have been individually designed to follow the natural contours of the site and would minimize grading and reduce artificial slopes. No mass grading would occur and the maximum height of any artificial slope from this view would be approximately 6 feet with a cut and fill slope ratio of 3:1 (3 horizontal to 1 vertical) necessary for road grading. The landform alteration associated with development of the Cumming Ranch project site would be a ***less than significant*** impact on visual resources per Guideline 2.

The introduction of paved surfaces and structures to the Key View 1 viewscape would result in a substantial change in the visual environment that includes existing scenic vistas, comprised of views of undisturbed ridgelines, large areas of open space, and other natural features. In addition, the site is visible from a locally designated scenic highway (SR 67). As shown in Key View 1, the change to the visual character that would result from implementation of the proposed project would not be prominent in the viewscape of the passing northbound motorist and most new features on the site could be seen only in the distance. Physical features onsite, such as trees, boulders, etc. are incorporated into the residential lots' design as an amenity. All of the major ridgelines, larger groups of rock outcroppings, heavily wooded areas, and major drainage areas on the property would be preserved and included within open space areas. The use of native plantings within the landscape plan are intended to allow the project to integrate more seamlessly with the adjoining preserve areas. These and other features of the design further reduce the visual impacts of the project and views of the onsite scenic vistas from SR 67 would be maintained and not adversely affected as outlined in Guideline 1. Therefore, the resulting visual impacts would be ***less than significant***.

Analysis of Key View 2

Key View 2 is a view toward the southwest from SR 67 at its intersection with Highland Valley Road. This key view represents the short-term view from passing southbound motorists and encompasses the southern portion of the Cumming Ranch project site. Included in the foreground view are traffic light fixtures, an existing residence (left side of photograph), and open fields that are adjacent to the Cumming Ranch project site. The elevated hillside within the southern portion of the Cumming Ranch project site can be seen from this viewing location. This is the only area of the project site that is readily visible from SR 67. The segments of SR 67 to the north of Key View 2 and south of Key View 1 have limited to totally obstructed views of the site.

A visual simulation of the Cumming Ranch development has been produced for Key View 2 to illustrate the future visual environment and is shown in Figure 3.4-4. The Cumming Ranch project would change the Key View 2 visual character to include rural residential from existing natural and farmland-related open space. The new roads, houses, and landscaping would alter the existing viewscape. The Cumming Ranch project would result in an appearance that is similar to existing surrounding residential development. All of the major ridgelines, larger groups of rock outcroppings, heavily wooded areas, and major swales on the property would be preserved and included in the open space areas. In addition, the intervening open space between the project and Key View 2 reduces the visibility of the project development. The use of native landscaping would allow the project to integrate more seamlessly with the surrounding area. Therefore, the change in composition of the area's visual pattern would be consistent with the existing visual

character in terms of dominance, scale, diversity, and continuity. Impacts to the community's visual character per Guideline 4 would be ***less than significant***.

Grading activities would be necessary to construct internal roads and individual building pads. All of the residential lots have been individually designed to follow the natural contours of the site and would minimize grading and reduce artificial slopes. No mass grading would occur and the maximum height of any artificial slope from this view would be approximately 6 feet with a cut and fill slope ratio of 3:1 (3 horizontal to 1 vertical) necessary for road grading. The landform alteration associated with development of the Cumming Ranch project site would result in a ***less than significant impact*** on visual resources per Guideline 2.

The introduction of paved surfaces and structures to the Key View 2 viewscape would result in a substantial change in the visual environment that includes existing scenic vistas with views of undisturbed ridgelines, large areas of open space, and other natural features. In addition, the site is visible from a locally designated scenic highway (SR 67). Residential development onsite would change the existing natural scenic vistas to views that include developed and man-made features. However, the high percentage of open space and the careful selection of lands included in open space would significantly reduce the visual impact from development. Physical features onsite, such as trees and boulders would be incorporated into the individual residential lot design as a unique natural feature of each lot. The use of native plantings within the landscape plan are intended to allow the project to integrate more seamlessly with the adjoining areas. Natural contours would be maintained, such as the hillside shown in the middle of the visual simulation and views to distant mountainous areas would not be obscured. The other natural features of the site would also be preserved and views of these scenic vistas from SR 67 would not be adversely affected. For these reasons, the change to the visual character that would result from implementation of the proposed project is a ***less than significant*** impact to visual resources per Guideline 1.

Analysis of Key View 3

Key View 3 is the view from Highland Valley Road, just west of Adrienne Way at the westernmost boundary of the Cumming Ranch project site. This key view represents the short-term view of the southern portion of the project site from passing eastbound motorists. The view includes Highland Valley Road, adjacent wire fences and utility poles, and farmland. Existing stands of oak trees are visible, as is a small hill in the middle ground (to the right) and a mountain in the background (to the left). Although rural development is located adjacent to the Cumming Ranch project site immediately west of this Key View 3, the view encompasses an open landscape characterized by nonnative grasses or crops with a natural horizon of trees and

hillsides. Views of the project site from Highland Valley Road are considered scenic because of the open vistas, rolling countryside, and minimal presence of man-made features. A visual simulation of the Cumming Ranch development has been produced for Key View 3 to illustrate the future visual environment and is shown in Figure 3.4-5. The hill would remain a prominent feature as the residential pads have been individually designed to fit into the hillside with the least amount of grading possible. Homes on the hillside would be visible from this key view. Though these lots encompass most of the hill, the developed part of the lots are located within the southernmost portion of each lot with open space between the homes and the roadway.

The Key View 3 viewscape would change from natural and farmland-related open space to a rural residential development with implementation of the Cumming Ranch project. All of the larger groups of rock outcroppings and major swales on this portion of the property would be preserved and included in the open space areas. Some open space areas would also be enhanced with additional native vegetation. The project would result in a viewscape that is similar to existing residential development in the immediate and surrounding area. The change in composition of the area's visual pattern would be compatible with the existing visual character in terms of dominance, scale, diversity, and continuity. Based on Guideline 4, impacts to the community's visual character would be ***less than significant***.

Grading activities would be confined to the internal roads and individual building pads. No mass grading would occur. The residential lots have been individually designed to follow the natural contours of the site to minimize grading and avoid artificial slopes. The maximum height of any artificial slope from this view would be approximately 18 feet with a cut and fill slope ratio of 2:1 (2 horizontal to 1 vertical) within Lot 67. Much of the natural topography and vegetation would be retained within the open space lots. The landform alteration associated with development of the Cumming Ranch project site would be a ***less than significant*** impact on visual resources per Guideline 2.

The introduction of paved surfaces and structures to the Key View 3 viewscape would result in a change in the visual environment that includes existing scenic vistas of undisturbed ridgelines, large areas of open space, and other natural features. However, the physical features onsite, such as trees, boulders, etc. would be incorporated into the design of the residential lots. The use of native plantings would provide for the integration of the project with the preserved natural open space areas. A large amount of open space would be maintained throughout this area of development. This key view is located along Highland Valley Road, which is not designated as a scenic highway. For these reasons, the change to the visual character that would result from implementation of the proposed project would be a ***less than significant*** impact to visual resources per Guideline 1.

Analysis of Key View 4

Key View 4 is the view from Highland Valley Road approximately 1,300 feet east of the Key View 3 location. The view toward the east encompasses a portion of Area A north of Highland Valley Road. The view represents the short-term view of the site from passing eastbound motorists. Utility poles and fence posts are within this view, as are farmlands on rolling hills and the two onsite knolls. Views of the project site from the road are considered scenic because of the open vistas, rolling countryside, and minimal presence of man-made features.

A visual simulation of the Cumming Ranch development has been produced for Key View 4 to illustrate the future visual environment as shown in Figure 3.4-6. The Cumming Ranch project would change the Key View 4 vista from natural and farmland-related open space to a rural residential development by introducing paved roads, one- and two-story houses on estate lots, and native and ornamental landscaping. Large areas of open space would remain and the proposed lot sizes would provide separation between individual homes. Some open space areas would also be enhanced with additional native vegetation. All of the major ridgelines, larger groups of rock outcroppings, heavily wooded areas, and major swales on the property would be preserved and included in the open space areas. The Cumming Ranch project would have a visual character that is similar to existing adjacent residential development. The change in composition of the area's visual pattern would be compatible with the existing visual character in terms of dominance, scale, diversity, and continuity. Impacts to the community's visual character would be ***less than significant*** per Guideline 4.

Grading activities would be confined to construction of the internal roads and individual building pads. The residential lots have been individually designed to follow the natural contours of the site to minimize grading and avoid artificial slopes. No mass grading would occur and the maximum height of any artificial slope from this view would be approximately 5 feet with a cut and fill slope ratio of 3:1 (3 horizontal to 1 vertical) for lot pads. The central ridgeline would be retained within the largest open space lot, thereby preserving the natural horizon of the Cumming Ranch project site. The landform alteration resulting from development of the project site, visible from Key View 4, would be a ***less than significant*** impact on visual resources per Guideline 2.

The introduction of paved surfaces and structures to the Key View 4 viewscape would result in a change in the visual environment that includes views of undisturbed ridgelines, large areas of open space, and other natural features. However, the physical features onsite, such as trees, boulders, etc. would be incorporated into the residential lot design as an amenity and visual feature. The dominant topographical feature, the central ridgeline, would be preserved. The view of this ridgeline would be slightly obscured at some points as motorists travel on Highland

Valley Road, similar to the visual simulation. The use of native plantings would provide for the integration of the project with the preserved natural open space areas. The large amount of open space and lack of fencing throughout the development area further maintains the rural feel and aesthetic of the project site. The features which comprise the existing scenic vistas, such as the rocky center ridgeline, would not be adversely affected. For these reasons, the change to the visual character that would result from implementation of the proposed project would be a ***less than significant*** impact to visual resources per Guideline 1.

Analysis of Key View 5

Key View 5 is the view from a dirt road along the northern border of Area A and represents the view of the northern portion of Area A from hikers and equestrians on the future trail system. A representative photograph of this view is shown in Figure 3.4-7. The view to the southwest includes an intermittent creek, located offsite; a cluster of rock outcroppings; utility poles; and the ridgeline. There is relatively little development in the vicinity of Key View 5, except for several single-family homes to the west with yards that front on the north side of Voorhes Lane. A grove of trees is located immediately north of the viewpoint, a portion of which can be seen in the photograph in Figure 3.4-7.

Development of the Cumming Ranch project site in the northern portion of Area A would result in a change to the visual environment as shown in Figure 3.4-7. Based on the topography and horizontal angle of observation, only four houses (Lots 110, 111, 124, and 125) would be visible from this view point. These lots have been designed with the residential pad area located in the northern portion of the lots at the base of the hill. This would minimize encroachment into the hillside and reduce the amount of ground disturbance necessary to construct a level building pad. The design would leave the majority of the upland areas within the lots undeveloped and in a natural state. From Key View 5, the above-mentioned four homes at the base of the hillside would be visible, but the majority of the knolls would remain undeveloped even though the area would technically be within a private lot. Houses to be constructed to the north and east of the smaller knoll could not be seen due to the intervening topography and rock outcroppings. The lift station required for the project would be visible from the Key View 5 area and would be enclosed with a natural façade required as noise mitigation. The visual impacts from the lift station and enclosure are discussed below in the Analysis of Noise Mitigation Requirements section. The majority of the viewscape would be preserved in the uphill portions of the lots that would integrate with the large open space lot, which encompasses both of the knolls.

The addition of four homes in the distance, setting on large lots, would not significantly affect the overall enjoyment of hikers and equestrians, who are considered sensitive viewers from Key

View 5. Through the preservation of the majority of the main ridgeline, which is the main feature from this key view, there would be little change in composition of the area's visual pattern with the existing visual character in terms of dominance, scale, diversity, and continuity. Impacts to the community's visual character would be ***less than significant*** per Guideline 4.

Grading activities would be confined to the home sites and the looped roadway. Minimal grading for underground utilities would occur within the open space lot. This area would be hydroseeded with native vegetation subsequent to the grading activities. The landform alteration associated with development of the Cumming Ranch project site visible from the Key View 5 location would not have a significant impact on existing onsite visual resources and quality. The major topographic feature visible from the trail, the central ridgeline as shown in the center of the photo in Figure 3.4-7, would remain undeveloped and preserved in open space. The maximum height of any artificial slope from this view would be approximately 26 feet with a cut and fill slope ratio of 1.5:1 (1.5 horizontal to 1 vertical) for the roadway located along the bottom of the northeast side of the main ridgeline. The road and residential lots that partially encroach into the hillsides have been designed at lower elevations to minimize the visual disturbance. The visual impact that would result with implementation of the project from Key View 5 would be ***less than significant*** per Guideline 2.

Construction-Related Visual Effects

During the construction phase of the project, the presence of clearing and grading equipment and vehicles may be evident to the area residents and motorists. There could be storage of construction equipment and vehicles, and stockpiles of road materials. The combination of necessary construction activities, equipment storage, and stockpiled construction materials could create short-term, negative visual impacts. These impacts would be ***less than significant*** according to Guidelines 1, 2, and 4 because construction-related impacts would be temporary, moving throughout the project site based on where construction activities were ongoing, and not inconsistent with the rural landscape.

Light and Glare

No street lighting is proposed for the Cumming Ranch project, either on internal roads, or on Highland Valley Road or SR 67. Minimal lighting may be incorporated at each of the four project entrance roads for visibility and safety of turning vehicles. The only other light generated by the development would be from security or landscape lighting at each home, or from vehicle headlights traveling within Cumming Ranch. Light sources at the homes would be minimal and would be subject to the requirements of the Light Pollution Code (San Diego County 2005b) for

Zone B lighting as well as the project design guidelines. No structures or man-made features are proposed for the Cumming Ranch project that would create glare from reflective materials. There would be a ***less than significant*** impact resulting from light and glare on visual resources according to Guideline 3.

Noise Mitigation Requirements

The noise analysis for the Cumming Ranch project determined that 22 residences located along Highland Valley Road and SR 67 would have potentially significant noise impacts requiring mitigation. To mitigate the noise impacts, a noise protection easement would be required. To verify the feasibility of the noise reduction required in the noise protection easement, conceptual residences and individual noise barriers were modeled for each of the 22 impacted lots. Due to the level of detail available at this stage of the project, the noise analysis provides potential concepts of the shape and location of the required sound barriers around the backyard of each impact residence. It is assumed that the barriers would typically be L-shaped or U-shaped to partially shield the backyard area. Conceptual modeling showed that to achieve the required reduction in noise levels, the barriers would range from 6 to 10 feet high and be constructed of a solid material with no gaps or spacing within the barrier. To keep with community character, the noise protection easement would restrict solid (opaque) barrier height to 6 feet or less (restrictions specified in Noise **Mitigation Measure M-N-5**). The barrier heights and locations were based on simplified site design and conservative modeling assumptions for the feasibility analysis and should not be considered final design. The provision of noise barriers within the private properties would result in the avoidance of a long continuous wall along the roadway edge, which would be visually undesirable.

These noise barriers would serve to attenuate noise to the residential backyards from the roadways, either Highland Valley Road or SR 67. Therefore, the location of the barriers between the residences and the roadways would be visible to the passing motorists. Visually, the barriers would not appear as large obstructions in open areas as they would be closely associated with each of the affected residences. Six-foot high solid barriers would not be tall enough to block distant views or the natural features of the project site, especially in consideration of their proximity to taller residential structures. The barriers would enclose only the NSLUs (effectively, the exterior use areas) of the homes as required by County policy and would not encompass the entire lot or expand continuously across multiple lots.

Though the noise barriers would be associated with individual homes and would not be overly large in scale, the presence of solid walls or barriers, as shown in Figure 3.307, in association

with the existing and proposed rural residential environment could result in ***significant visual impacts*** per Guideline 4. (**Impact AE-1**)

During construction of the project's internal roadway network, a temporary noise wall would be required to lower noise levels at an existing residence located to the southeast of the project site. This wall would be 14 feet high and 420 feet in length. The height of this temporary noise wall would be intrusive to the existing visual environment; however, the wall would only be necessary during construction of the roadway in this specific area of the project site. Because this wall would be temporary (approximately 90 days) and viewed primarily from a distance (about 1,000 feet from SR 67/Highland Valley Road intersection), this visual impact is considered ***less than significant*** per Guideline 4.

In order to reduce noise generated by the onsite sewer lift station, the project proposes to enclose the lift station equipment and use a natural looking façade for that enclosure. Because the lift station equipment specifications are not available, the exact enclosure dimensions and need for additional measures such as walls or berms has not been fully determined. The lift station is located in a low-lying area on the north side of the main ridgeline in Area A. The lift station location would be visible to future trail users, approximately three future project residences, motorists on the internal looped project roadway, and potentially one existing home on Vorhees Lane. Though exact specifications of the enclosure are not known, the aboveground components of the lift station would be minimal and relatively low to the ground, likely three to four feet maximum height. Rather than having an industrial look, a natural façade such as rock, stone, or other natural looking material would be used. The natural façade combined with the low height of the required enclosure would help this visual element to more naturally blend into the surrounding area. The minimal size and visibility of this element would result in a ***less than significant*** visual impact per Guideline 4. Project design features would be required through the Minor Use Permit for the facility.

3.4.4 Cumulative Impact Analysis

The Cumming Ranch project site is located in a rural area of the county that is primarily surrounded by residential development with large areas of open space to the northwest and smaller parcels of open space to the southeast. The Cumming Ranch project is one of multiple different proposed projects throughout the Ramona Community Planning Area that are planning residential development in currently undeveloped areas. For purposes of the cumulative study, the study area extends out to approximately the project's viewshed and out approximately one mile along the major roads used by the project. Within this study area, the cumulative projects

include two airport projects, two church projects, and four parcel maps, two tentative maps, and three agricultural permits (Numbers 2, 6, 10, 11, 17, 30, 43, 47, 64, 66, 76, 80, and 76).

The proposed Cumming Ranch rural residential development is consistent with the adjacent viewscape, since existing residential lots are generally located along the north, west, and south, boundaries of Area A. Many of the projects in the immediate area of the Cumming Ranch site are minor subdivisions of existing lots for residential homes. These projects are consistent with the existing development in the area and would not significantly alter the visual environment of the area. Due to the large lot sizes and unique placement of each lot, rather than a tract-style development, the Cumming Ranch project is also visually compatible with the existing and future developments in the immediate area.

The Cumming Ranch project would incrementally add to the trend of developing rural areas of Ramona with residential uses. In particular, uses along major roads in Ramona. However, preservation of large tracks of open space is also preserving the overall visual environment. This project has been designed to seamlessly integrate with the surrounding environment. All of the major ridgelines, larger groups of rock outcroppings, heavily wooded areas, and major drainage areas on the property would be preserved and included within open space areas. Of the development area of the project, Area A, 143.3 acres of the 358.7 acres would be preserved as open space. Another 314.1 acres in Areas B and C would be designated open space. Many of the larger development projects on the cumulative project list also include large percentages of onsite open space, such as the Oak County Estates project (over 500 acres of open space) or the Montecito Ranch project (almost 600 acres). The designs of these larger projects help to visually maintain the feel of open space and rural character throughout Ramona.

As described above, the majority of the cumulative projects within the project viewshed are new residential developments on subdivided lots or expansions of existing developments, such as church facilities or airfield expansions. Though these projects would add to the trend of development within the project viewshed, the type of development, including rural residential, church facilities, and airfield operations are already present within the local area. The aesthetic change resulting from the new cumulative development would be compatible and typical within the existing visual environment. Development in the Ramona area is regulated through the zoning codes and Community Plan requirements which maintain large residential lot sizes and help to ensure the rural visual character of the area is maintained as the area continues to grow and expand. Development proposed in the cumulative study area would be subject to these regulations and requirements. The Cumming Ranch project has been designed to follow the natural contours of the site and minimal grading would occur, thus maintaining the natural topography and reducing the visual impact of the residential development. These and other

design features ensure that the project would visually integrate with the existing Ramona ambience and surrounding natural areas. For these reasons, the incremental change to the visual character that would result from implementation of the proposed project is a ***less than significant cumulative impact*** to visual resources based on Guideline 5.

3.4.5 Mitigation Measures

Mitigation Measure M-AE-1 Visual Appearance of Noise Barriers

The Noise Protection Easement shall require that the overall look of the required noise barriers at each of the 22 noise impacted residences (See Figure 3.3-7 for conceptual locations) to adhere to the following design measures to ensure that the noise barriers complement the natural setting and overall design of the Cumming Ranch project and surrounding community character. Measures include:

a. Barriers shall be constructed of natural looking materials that complement the surrounding rural landscape. Materials such as stone, stone veneer, boulders, and stucco are all acceptable materials.

b. The use of plexi-glass or other translucent materials shall be allowed.

c. The color palette for the barriers shall be consistent with the adjacent rural landscape and consist of earth-toned hues.

d. A minimum of a 5-foot-wide landscape buffer shall be required along the exterior base of barriers. All landscape material in this area shall be native and as defined in the Conceptual Landscape Plan.

e. Earth berms or earth berm/wall combination are other acceptable forms of noise mitigation. Berms shall have a maximum of 1.5:1 slope. If a berm is used, it shall be natural in appearance and reflect the aesthetic of the surrounding rural landscape. Berm plantings shall be consistent with the Landscape Plan.

f. Wall portions of the barrier shall not exceed 6 feet.

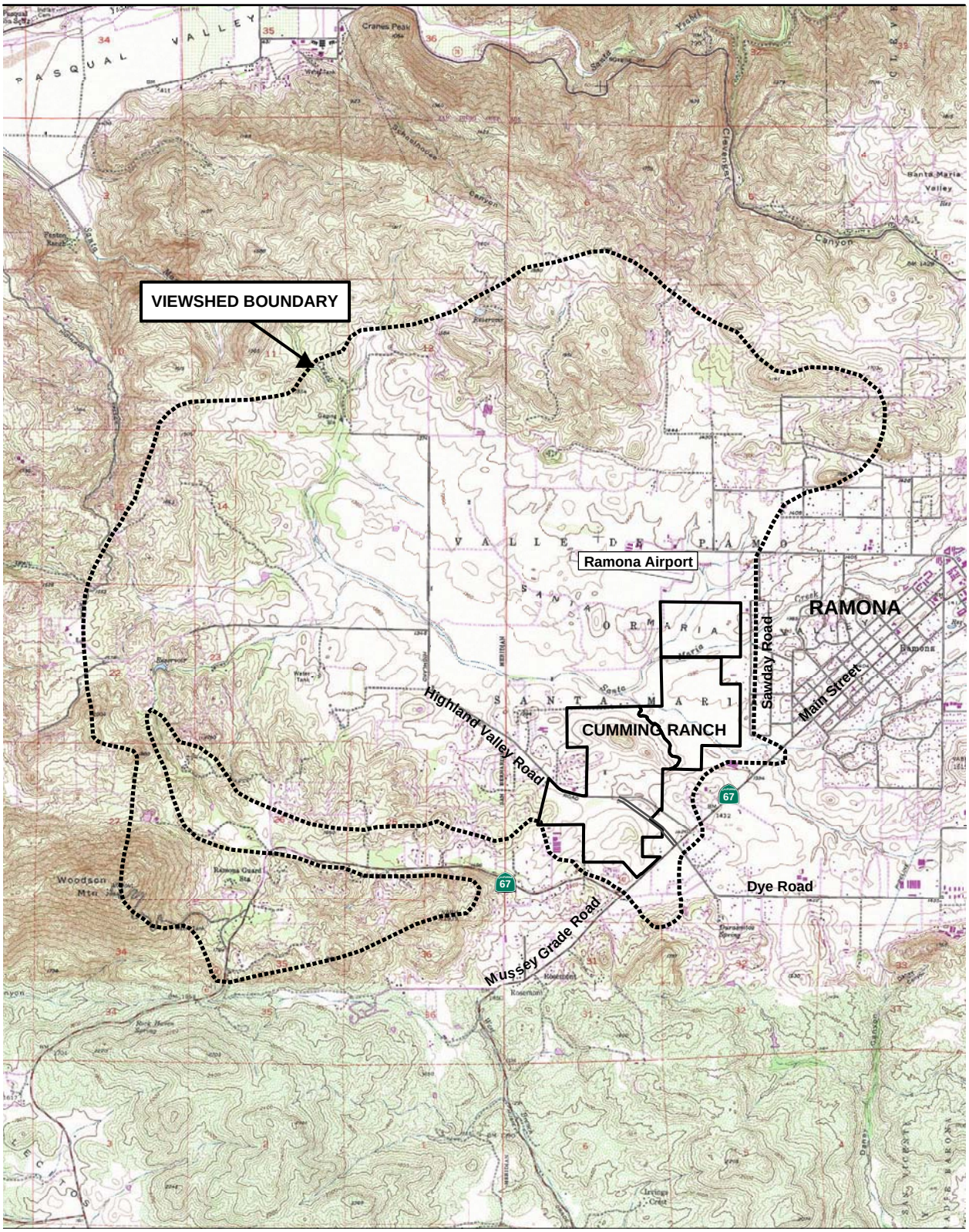
The use of natural materials on the wall facades to complement the open rural setting would reduce the intrusiveness of the walls and unite the walls with the overall design of the proposed project. Landscaping along the exterior base of the walls would partially conceal the walls as well as blend and soften the hard lines of the walls with the open surroundings. The use of plexi-glass or other transparent material would reduce the visibility of the walls, while still maintaining

the appropriate noise reduction. These measures will be imposed upon the project by the Noise Protection Easement.

3.4.6 Conclusions

The homes and internal roadways of the Cumming Ranch Specific Plan would be visually consistent with that of the surrounding area. Implementation of the project would create a change in the visual environment of the project site; however, through features of the project including minimal grading, maintaining natural features (ridgelines, hilltops, boulders and oak trees), natural landscaping, large open space areas, and other design measures, impacts to the visual character of the area would be minimized and the resulting visual impact would be ***less than significant***.

The Mitigation Measure (**M-AE-1a-f**) required for the noise barriers would reduce the potential visual impact of the walls (**Impact AE-1)** to less than significant because walls would be limited in height and use of natural materials and landscaping would be required. With incorporation of the mitigation measure, the individual noise barriers would be designed to be aesthetically pleasing and blend as naturally as possible with the proposed development and surrounding open space reducing the impact to ***less than significant***.



Source: USGS, San Pasqual and San Vicente Reservoir Quad; SanGIS, 2003

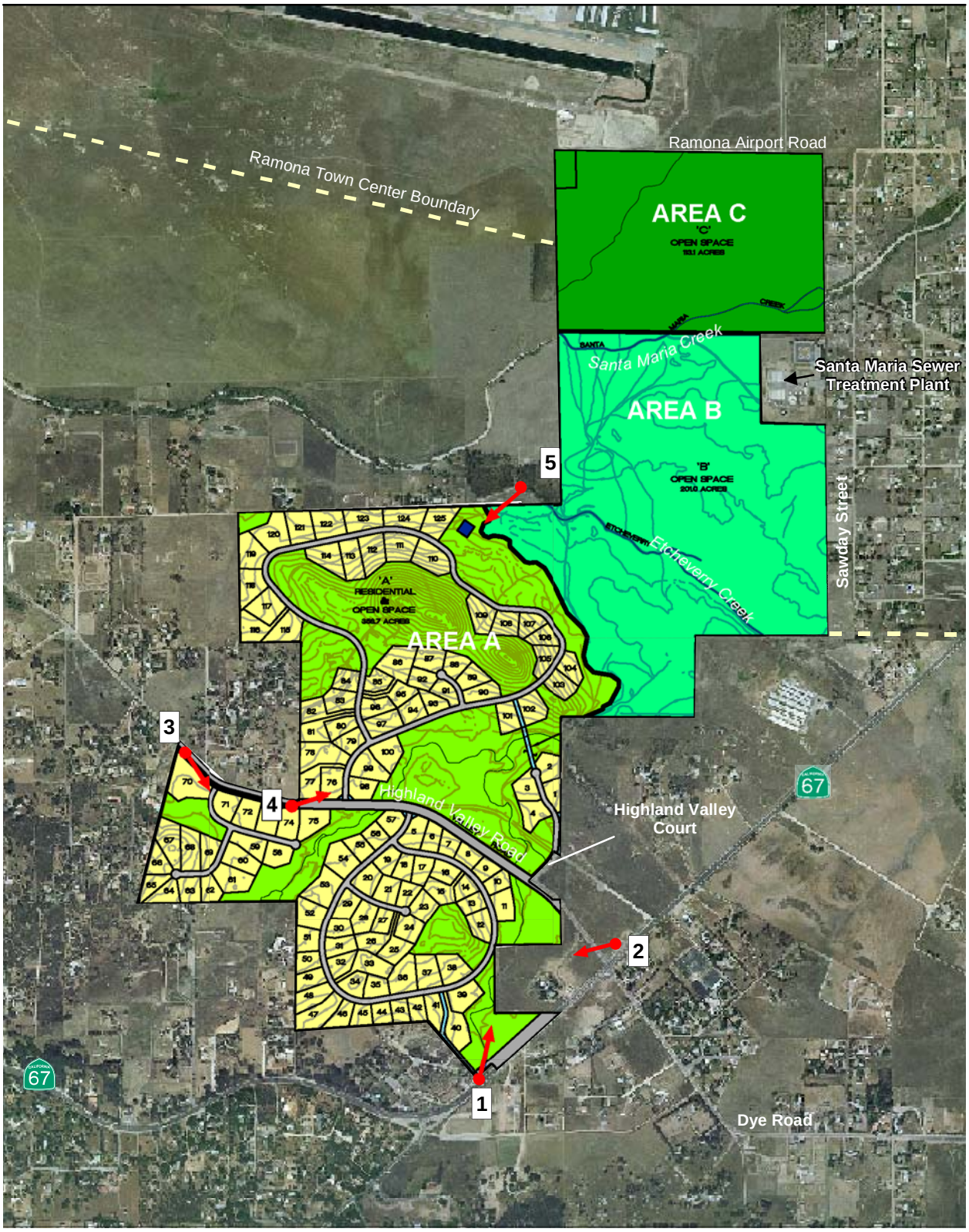
NORTH

5000 2500 0 5000 Feet

Scale: 1:60,000; 1 inch = 5,000 feet

Figure 3.4-1
Project Viewshed

P:\2008\08080045 Cumming Ranch\6Graphics\Figures\4th Iteration EIR\Figure 3.4-1 project viewshed.ai dbrady 10/21/10



Source: Eagle Aerial 2002; SanGIS, 2003

NORTH

1500 750 0 1500 Feet

Scale: 1:18,000; 1 inch = 1,500 feet

Figure 3.4-2
Key View Locations

Existing View looking north from SR 67.

Visual Simulation of Future Development; looking toward Lots 39, 12, and 11.

Figure 3.4-3
Key View 1

Existing View looking southwest from SR 67 at Highland Valley Road.

Visual Simulation of Future Development; looking toward Lots 12, 38, 39,40, and 41.

Figure 3.4-4
Key View 2

Existing View looking southeast from Highland Valley Road.

Visual Simulation of Future Development; looking towards Lots 59, 66, 67, 68, 70, 71, 72, and 73.

Figure 3.4-5
Key View 3

Existing View looking northeast from Highland Valley Road.

Visual Simulation of Future Development; looking toward Lots 76, 77, 78, 98, 99, and 100.

Figure 3.4-6
Key View 4

Existing Conditions looking southwest from existing dirt road and location of future trail.

Visual Simulation of Future Development; looking towards lots 110, 111, 124, and 125.

Figure 3.4-7
Key View 5

Table 3.4-1
Viewer Response Summary

Viewer Group	Sensitivity	Quantity	Distance*	Duration
Motorists	Moderate-High	High	Foreground	Short-term
Residents	Moderate	Moderate	Foreground - Far Ground	Long-term
Recreationalists	High	Low	Foreground	Short-term
Workers and Patrons	Low	Low	Foreground	Moderate

* Foreground = 0 to 0.25 mile; Middle Ground = 0.25 to 3 miles; Far Ground = 3 miles or more

3.5 Global Climate Change

CEQA requires that lead agencies consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. Greenhouse gas (GHG) emissions have the potential to adversely affect the environment because they contribute, on a cumulative basis, to global climate change. In turn, global climate change has the potential to result in rising sea levels, which can inundate low-lying areas; to affect rain and snow fall, leading to changes in water supply; to affect habitat, leading to adverse affects on biological and other resources. Thus, GHG emissions require consideration in CEQA documents.

3.5.1 Existing Conditions

Existing Climate

Climate is the accumulation of daily and seasonal weather events over a long period of time, whereas weather is defined as the condition of the atmosphere at any particular time and place (Ahrens 2003). The proposed project is located in the San Diego County Air Basin (SDAB), which experiences a Mediterranean climate. The climate can be characterized by warm, dry summers and mild, rainy winters, and low annual rainfall.

Local climate of the project site is represented by measurements recorded at the EL Capitan Dam station, which is located approximately 10 miles to the southeast of the project site. The normal annual precipitation, which occurs primarily from November through March, is approximately 16 inches. January temperatures range from a normal minimum of 41°F to a normal maximum of 69°F. July temperatures range from a normal minimum of 58°F to a normal maximum of 93°F (NOAA 1992). The predominant wind direction and speed, which is represented by measurements at the Miramar station, which is located approximately 15 miles to the southwest of the project site, is from the west-northwest at 7 miles per hour (mph) (CARB 1994).

Physical Scientific Basis of Climate Change

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared

radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, Earth would not be able to support life as we know it.
Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), and sulfur hexafluoride (SF_6). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is extremely unlikely that global climate change of the past 50 years can be explained without the contribution from human activities (IPCC 2007).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 54% is sequestered through ocean uptake, uptake by northern hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46% of human-caused CO_2 emissions remains stored in the atmosphere (Seinfeld and Pandis 1998).

Similarly, impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; suffice it to say, the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climate. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

Greenhouse Gas Emission Sources

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, electric utility, residential, commercial and agricultural sectors (CARB 2009a). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (CARB 2009a). Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4, a highly potent GHG, results from off-gassing

(the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively, two of the most common processes of CO_2 sequestration.

California is the 12th to 16th largest emitter of CO_2 in the world (CEC 2006a). California produced 484 million gross metric tons of CO_2 equivalent (CO_2e) in 2004 (CARB 2009a). CO_2e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing emissions in CO_2e takes the contributions of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2004, accounting for 38% of total GHG emissions in the state. This sector was followed by the electric power sector (including both in-state and out-of-state sources) (22%) and the industrial sector (20%) (CARB 2008).

Adaptation to Climate Change

According to the Intergovernmental Panel on Climate Change (IPCC), which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, global average temperature is expected to increase by 3–7°F by the end of the century, depending on future GHG emission scenarios (IPCC 2007). Resource areas other than air quality and global average temperature could be indirectly affected by the accumulation of GHG emissions. For example, an increase in the global average temperature is expected to result in a decreased volume of precipitation falling as snow in California and an overall reduction in snowpack in the Sierra Nevada. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state (including the project site). According to the California Energy Commission (CEC), the snowpack portion of the water supply could potentially decline by 30–90% by the end of the 21st century (CEC 2006b). A study cited in a report by the California Department of Water Resources (DWR) projects that approximately 50% of the statewide snowpack will be lost by the end of the century (Knowles and Cayan 2002). Although current forecasts are uncertain, it is evident that this phenomenon could lead to significant challenges in securing an adequate water supply for a growing population. An increase in precipitation falling as rain rather than snow also could lead

to increased potential for floods because water that would normally be held in the Sierra Nevada until spring could flow into the Central Valley concurrently with winter storm events. This scenario would place more pressure on California's levee/flood control system (DWR 2006).

Another outcome of global climate change is sea level rise. Sea level rose approximately 7 inches during the last century and it is predicted to rise an additional 7–22 inches by 2100, depending on the future levels of GHG emissions (IPCC 2007). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (CEC 2006b). As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the state if suitable conditions are no longer available.

The project site is situated approximately 1,500 feet above sea level and, thus, would not be directly affected by the potential sea level rise predicted to occur over the next 100 years.

Regulatory Setting

Federal Plans, Policies, Regulations, and Laws

USEPA is the federal agency responsible for implementing the Federal Clean Air Act (CAA). The Supreme Court of the United States ruled on April 2, 2007 that CO_2 is an air pollutant as defined under the CAA, and that USEPA has the authority to regulate emissions of GHGs. However, there are no federal regulations or policies regarding GHG emissions applicable to the proposed project at the time of writing.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, USEPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide USEPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publically available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act

On April 23, 2009, USEPA published their Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding) in the Federal Register. The Endangerment Finding is based on Section 202(a) of the CAA, which states that the Administrator (of USEPA) should regulate and develop standards for "emission[s] of air pollution from any class or classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The proposed rule addresses Section 202(a) in two distinct findings. The first addresses whether or not the concentrations of the six key GHGs (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether or not the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and therefore the threat of climate change.

The Administrator proposed the finding that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are very likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The Administrator also proposed the finding that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. The proposed finding cites that in 2006, motor vehicles were the second largest contributor to domestic GHG emissions (24% of total) behind electricity generation. Furthermore, in 2005, the U.S. was responsible for 18% of global GHG emissions. Therefore, GHG emissions from motor vehicles and motor vehicle engines were found to contribute to air pollution that endangers public health and welfare.

State Plans, Policies, Regulations, and Laws

CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act, which was adopted in 1988.

Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Because every nation emits GHGs and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG generation to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, in 2004 CARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1) require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily for the transportation of persons), beginning with the 2009 model year. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for the 2016 model year are approximately 37% lower than the limits for the first year of the regulations, the 2009 model year. For light-duty trucks with LVW of 3,751 pounds to gross vehicle weight of 8,500 pounds, as well as medium-duty passenger vehicles, GHG emissions would be reduced approximately 24% between 2009 and 2016.

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against CARB to prevent enforcement of 13 CCR Sections 1900 and 1961 as amended by AB 1493 and 13 CCR 1961.1 (*Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in Her Official Capacity as Executive Director of the California Air Resources Board, et al.*). The auto-makers' suit in the U.S. District Court for the Eastern District of California, contended California's implementation of regulations that, in effect, regulate vehicle fuel economy violates various federal laws, regulations, and policies.

On December 12, 2007, the Court found that if California receives appropriate authorization from USEPA (the last remaining factor in enforcing the standard), these regulations would be consistent with and have the force of federal law, thus, rejecting the automakers' claim. This authorization to implement more stringent standards in California was requested in the form of a CAA Section 209, subsection (b) waiver in 2005. Since that time, USEPA failed to act on granting California authorization to implement the standards. Governor Schwarzenegger and Attorney General Edmund G. Brown filed suit against USEPA for the delay. In December 2007, USEPA Administrator Stephen Johnson denied California's request for the waiver to implement AB 1493. Johnson cited the need for a national approach to reducing GHG emissions, the lack of a "need to meet compelling and extraordinary conditions," and the emissions reductions that would be achieved through the Energy Independence and Security Act of 2007 as the reasoning for the denial (Office of the White House 2009).

The state of California filed suit against USEPA for its decision to deny the CAA waiver. The recent change in administration directed USEPA to reexamine its position for denial of California's CAA waiver and for its past opposition to GHG emissions regulation. California received the waiver on June 30, 2009.

The federal government increased the federal Corporate Average Fuel Efficiency (CAFE) standards for fuel economy in 2009 from the 2004 fleet (passenger cars and light duty trucks) average of 25 to 35.5 mpg by 2016, starting with the 2012 models. The 2020 level represents a 40% increase in fuel efficiency from the 2004 standard. The federal government is expected to adopt the Pavley standards with agreement from California not to toughen its standards before 2017.

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050.

The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary is also directed to submit biannual reports to the governor and state legislature describing: progress made toward reaching the emission targets; impacts of global warming on California's resources; and mitigation and adaptation plans to combat these impacts.

To comply with the Executive Order, the Secretary of the CalEPA created the California Climate Action Team (CCAT) made up of members from various state agencies and commission. CCAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves the reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Assembly Bill 32 Climate Change Scoping Plan

In October of 2008, CARB published its *Climate Change Proposed Scoping Plan* (*Scoping Plan*), which is the State's plan to achieve GHG reductions in California required by AB 32 (CARB 2008). The *Scoping Plan* contains the main strategies California will implement to achieve reduction of 169 million metric tons (MMT) of CO_2e, or approximately 30% from the state's projected 2020 emission level of 596 MMT of CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10%, from 2002-2004 average emissions). The *Scoping Plan* also includes CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reductions are recommended from improving emission standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e),

implementation of the Low-Carbon Fuel Standard (15.0 MMT CO_2e, discussed below), energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e), and a renewable portfolio standard for electricity production (21.3 MMT CO_2e). CARB has not yet determined what amount of GHG reductions it recommends from local government operations; however, the *Scoping Plan* does state that land use planning and urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. (Meanwhile, CARB is also developing an additional protocol for community emissions.) CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The *Scoping Plan* states that the ultimate GHG reduction assignment to local government operations is to be determined (CARB 2008). With regard to land use planning, the *Scoping Plan* expects approximately 5.0 MMT CO_2e will be achieved associated with implementation of SB 375, which is discussed further below. The *Scoping Plan* was approved by the CARB on December 11, 2008.

Executive Order S-1-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at over 40% of statewide emissions. It establishes a goal that the carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10% by 2020. This order also directed CARB to determine if this Low Carbon Fuel Standard could be adopted as a discrete early action measure after meeting the mandates in AB 32.

Senate Bill 1368

Senate Bill (SB) 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The CEC was required to establish a similar standard for local publicly owned utilities by June 30, 2007. PUC adopted a GHG Emissions Performance Standard in January 2007. The CEC adopted consistent regulations for implementing and enforcing SB 1368 for the state's publicly-owned utilities in August 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33% renewable power by 2020. Executive Order S-21-09, signed by Governor Schwarzenegger in September 2009, directs CARB to adopt regulations increasing California's Renewable Portfolio Standard (RPS) to 33% by 2020 - first established by Executive Order S-14-08.

Senate Bill 97

SB 97, signed August 2007, acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. This bill directs the California Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA by July 1, 2009. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for GHG emissions, as required by SB 97. On February 16, 2010, the Office of Administrative Law (OAL) approved the amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010. These CEQA Guideline amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in draft CEQA documents.

This bill also removes inadequate CEQA analysis of effects of GHG emissions from projects (retroactive and future) funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1B or 1E) as a legitimate cause of action. This provision will be repealed on January 1, 2010, wherein inadequate CEQA analysis for those projects could then become a legitimate cause of action. This bill would only protect a handful of public agencies from CEQA challenges on certain types of projects for a few years time.

Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional

Transportation Plan (RTP). CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years, but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

This bill also extends the minimum time period for the Regional Housing Needs Allocation cycle from 5 years to 8 years for local governments located within an MPO that meets certain requirements. City or County land use policies (including General Plans) are not required to be consistent with the RTP (and associated SCS or APS). However, new provisions of CEQA would incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

Regional and Local Plans, Policies, Regulations, and Laws

The San Diego County Draft General Plan (October 2010) contains numerous policies in the Land Use, Mobility, Conservation and Open Space, and Housing Elements to address climate change. Suggested policies address the following major strategies in the General Plan:

- Reduce vehicle trips generated, gasoline/energy consumption, and GHGs.
- Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency).
- Increase generation and use of renewable energy sources.
- Reduce water consumption.
- Reduce and maximize reuse of solid wastes.
- Promote carbon dioxide consuming landscapes.
- Maximize preservation of open spaces, natural areas, and agricultural lands.
- Reduce risk from wildfire, flooding, and other hazards resulting from climate change.
- Conserve and improve water supply due to shortage from climate change.
- Promote agricultural lands for local food production.
- Provide education and leadership.

The San Diego County Draft General Plan has not been adopted by the County of San Diego Board of Supervisors at the time of writing. Therefore, climate change policies are subject to change.

3.5.2 Guidelines for the Determination of Significance

No air district in California, including the San Diego Air Pollution Control District (SDAPCD), has identified a significance threshold for analyzing GHG emissions generated by a land use development project, such as the proposed project, or a methodology for analyzing impacts related to GHG emissions or global climate change. Though, by adoption of AB 32 and SB 97, the state of California has identified GHG reduction goals and that the effect of GHG emissions as they relate to global climate change is inherently an adverse environmental impact issue. While the emissions of one single project will not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. The following significance guideline is used to evaluate the project's GHG emissions. "The project would not conflict with the implementation of AB 32."

To meet AB 32 goals, California would need to generate less GHG emissions than current levels. It is recognized, however, that for most projects there is no simple metric available to determine if a single project would substantially increase or decrease overall GHG emission levels.

AB 32 demonstrates California's commitment to reducing the rate of GHG emissions and the state's associated contribution to climate change, without intent to limit population or economic growth within the state. Thus, to achieve the goals of AB 32, which are tied to GHG emission rates of specific benchmark years (i.e., 1990), California would have to achieve a lower rate of emissions per unit of population than it has now. Further, in order to accommodate future population and economic growth, the state would have to achieve an even lower rate of emissions per unit than was achieved in 1990. (The goal to achieve 1990 quantities of GHG emissions by 2020 means that this will need to be accomplished with 30 years of population and economic growth beyond 1990 in place.) Thus, future planning efforts that would not encourage reductions in GHG emissions would conflict with the policy decisions contained in the spirit of AB 32, which would impede California's ability to comply with the mandate.

The state of California has established GHG reduction targets and has determined that GHG emissions as they relate to global climate change are a source of adverse environmental impacts in California that should be addressed under CEQA. Although AB 32 did not amend CEQA, it identifies the myriad environmental problems in California caused by global warming (Health and Safety Code, Section 38501[a]). SB 97, however, did amend CEQA by directing OPR to

prepare revisions to the State CEQA Guidelines addressing the mitigation of GHGs or their consequences. As an interim step toward development of required guidelines, in June of 2008, OPR published a technical advisory, entitled "CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review." OPR recommends that the lead agencies under CEQA make a good-faith effort, based on available information, to estimate the quantity of GHG emissions that would be generated by a proposed project, including the emissions associated with vehicular traffic, energy consumption, water usage, and construction activities, to determine whether the impacts have the potential to result in a project or cumulative impact and to mitigate the impacts where feasible (OPR 2008).

In that document, OPR acknowledged that "perhaps the most difficult part of the climate change analysis will be the determination of significance," and noted that "OPR has asked CARB technical staff to recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state." CARB has not yet completed this task at the time of writing.

OPR updated Appendix G of the state *CEQA Guidelines* to address impacts of GHG emissions, as directed by Senate Bill 97 (2007). OPR made the following additions to Appendix G. An impact related to global climate change is considered significant if the proposed Project would:

- generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or,
- conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The County DPLU recommends that a project should demonstrate that it would not conflict with the implementation of AB 32 by outlining how it would reduce overall carbon emissions below business-as-usual consistent with the State's GHG emissions reduction targets. Based on the above information and for the purposes of this analysis in this EIR, the proposed project would have a significant impact if it would:

- Result in emissions that would substantially hinder the State's ability to attain the goals identified in AB 32 (i.e., reduction of statewide GHG emissions to 1990 levels by 2020; approximately a 30% reduction from projected 2020 emissions per CARB's AB 32 Scoping Plan).

3.5.3 Analysis of Project Effects and Determination of Significant Impact

As described above, a single project does not have the ability to independently impact climate change on a global scale. Any climate change impacts associated with the Cumming Ranch project would be cumulative in nature and are discussed below in Section 3.5.4.

3.5.4 Cumulative Impacts

Short-term construction and long-term operation of the Cumming Ranch project would generate emissions of GHGs. Construction emissions would be associated with vehicle engine exhaust from construction equipment, vendor trips, and employee commute trips. Operational emissions would be associated with area, mobile, and stationary sources. Area-source emissions would be associated with activities such as natural gas use for space and water heating and maintenance of landscaping. Mobile-source emissions of GHGs would include project-generated vehicle trips for residents of, and visitors to the development. In addition, increases in stationary-source emissions could occur at offsite utility providers associated with electricity generation that would supply the proposed uses.

GHG emissions generated by the proposed project would predominantly be in the form of CO_2. In comparison to criteria air pollutants, such as ozone and particulate matter, CO_2 emissions persist in the atmosphere for a much longer period of time. While emissions of other GHGs, such as CH_4 and N_2O, are important with respect to global climate change, the emission levels of these other GHGs for the sources considered for this project are relatively small compared with CO_2 emissions.

<u>Construction Emissions</u>

Using the assumptions outlined in the Air Quality Study (Appendix H), construction emissions related to the roadway construction portion of the project were estimated using the Road Construction Model, version 5.2, and grading and building construction emissions for the project were evaluated using the emissions program URBEMIS 2007. Construction of the proposed project would generate a finite quantity of approximately 3,000 metric tons of CO_2 over the duration of construction activities (see Table 3.5-1). As stated as part of the project description, the project has been specifically planned with the proposed residential units designed into the existing topography of the site, and thus, the project would not necessitate any mass site grading. This would aid in minimizing the amount of emissions generated by construction equipment.

USEPA plays a primary role in providing emissions standards for OFFROAD construction equipment. The construction fleet used at a project site must meet these standards. USEPA has not adopted any regulations regarding reduction of GHG emissions on OFFROAD construction equipment as of this writing.

Recent federal engine and fuel regulations will play a role in reducing GHG emissions from off-road equipment. Specifically, these include: (1) current USEPA rules which set standards for all new on-road engines: (2) pending USEPA rules requiring similar reductions for all new non-road engines (to be phased in between 2008 and 2014); and (3) federal fuels standards for low sulfur and ultra low sulfur. This combination of engine and fuel standards will allow for use of new advanced retrofit technologies, which could potentially reduce GHG emissions. However, no regulations have been approved to date by USEPA to directly reduce GHG emissions.

Operation Emissions

Buildout of the proposed project would add a maximum of approximately 852 vehicle trips per day to the project area (RCE 2010). Operation of the project would generate total GHG emissions of 2,300 metric tons CO_2e annually during the lifetime of the project (see Table 3.5-2). Construction would contribute GHG emissions to a much lesser extent than operation of the proposed project since construction emissions would cease after project completion, whereas operational impacts would be ongoing (with annual estimates presented in Table 3.5-2).

As described in Chapter 1, the project would incorporate the following design features that would also act to reduce GHG emissions:

- A 3.40-mile community-level trail network including staging area has been incorporated into the project design. Trails would extend from the 2-acre staging area in Area C, south through a portion of Hardy Ranch and into Area A, eventually connecting to Highland Valley Road. Another trail would provide east-west connectivity along the south side of Santa Maria Creek through Area B and a portion of the Hardy Ranch. The community trails would be expected to interconnect and become part of a future regional trail system. Natural-colored decomposed granite would be installed in high use areas and compacted native material on the majority of the trail. The proposed alignments of the trails as part of the Cumming Ranch project are very similar to the location of the trails on the Trails and Pathways for Ramona map.
- Pathways would be provided along one side of all internal streets. The pathways would not be paved but would be covered with decomposed granite or a similar material to

maintain a rural and informal setting. These pathways would total approximately 3.65 miles. A community pathway would also be provided along the north side of Highland Valley Road, beginning at the westernmost entrance to the project site and continuing east to the intersection with SR 67.

- The landscape concept plan has been designed with a natural plant palette to blend the project with the existing vegetation and provide a seamless transition between the residential development area and the adjacent open space areas and grasslands. The design guidelines encourage a transitional landscape approach with native and naturalized plant material suited for sustainable maintenance practices. Natural vegetation would be maintained to the fullest extent.

The trail network and pathways provided by the Cumming Ranch project would be used by pedestrians and bicyclists to connect to other destinations in the project area. It was assumed that these design features would reduce vehicle miles traveled and associated mobile-source GHG emissions by approximately 1% below the values presented in Table 3.5-2. The required native plant palette would reduce the amount of landscape irrigation necessary (as compared with typical, non-native landscaping) as the plants would be appropriately adapted to the climate. In addition, the project shall comply with the County of San Diego's Ordinance on Water Conservation in Landscaping.

As discussed previously, in order to meet the AB 32 mandate of 1990 GHG emissions levels by 2020, California would also need to reduce GHG emissions by approximately 30% from business as usual (CARB 2009b, 2008). The CARB Scoping Plan identifies expected GHG emissions reductions from regulations, such as those that would reduce emissions from vehicles (e.g., AB 1493, Executive Order S-1-07 [i.e., the Low Carbon Fuel Standard]) and electric utilities (e.g., SB 107) (CARB 2008). Other regulatory measures identified under the Scoping Plan could reduce emissions associated with the Cumming Ranch project (as compared to the estimates presented in Table 3.5-2). The following reductions in GHG emissions from adopted regulations have been quantified and accounted for toward reductions from the values in Table 3.5-2:

SP-1: This analysis assumes full implementation of federal and/or state mandates for 2020 that would result in GHG emissions reductions associated with vehicle trips. According to the AB 32 Scoping Plan, implementation of the GHG emission reduction standards for new passenger cars, pickup trucks and sport utility vehicles under AB 1493 (or an equivalent federal program) would lead to a 19.7% reduction from the 2020 statewide GHG inventory. It is assumed that, due to the delay in the

implementation of AB 1493, approximately 75% of the estimated GHG reduction would be realized by 2020.

SP-2: The RPS rules will require the renewable energy portion of the retail electricity portfolio to be 33% in 2020. For SDG&E, the dominant electricity provider in the SDAB, approximately 6% of their current portfolio qualifies under the RPS rules and thus the gain by 2020 would be approximately 27%.

The effectiveness of project design features and AB 32 companion legislation was estimated at approximately 13% compared to the baseline emissions presented in Table 3.5-2. The proposed project would generate a substantial net increase in GHG emissions. In addition, the project does not include measures that would reduce GHG emissions to achieve a 30% reduction in GHG emissions from the levels presented in Table 3.5-2, consistent with CARB's Scoping Plan. For these reasons, the project is considered to have a ***potentially significant cumulative impact*** on climate change per the Guideline. (**Impact CC-1**)

3.5.5 Mitigation Measures

Table 3.5-3 summarizes the potential reduction in GHG emissions from onsite operational mitigation measures and existing legislation addressing climate change.

<u>Mitigation Measure CC-1</u> Reduce Project-Generated GHG Emissions Contributing to Climate Change

<u>Construction-Generated Emissions</u> – To be required on the grading and improvement plans:

The grading and improvement plans shall specify that the contractor shall:

a. Maintain construction equipment in good working order per the manufacturer's specifications;

b. Limit idling time for construction equipment and vehicles to five minutes;

<u>Operational Emissions</u>

The Site Plan shall require the project developer implement the following mitigation measures or other equivalent measures consistent with OPR guidance to meet the specified performance criteria deemed feasible by the County to reduce GHG emissions.

c. Meet California Green Building Code standards for energy efficiency in all new residential units. Examples of these standards include use of Energy Star equipment, water conserving plumbing fixtures, use of regional materials and products with recycled content, etc.;

d. Generate a minimum of 10 percent of the project's energy consumption from onsite renewable energy-generation sources (e.g., photovoltaic cells or other onsite energy generating technology). For example, the estimated roof size of the photovoltaic system required to generate 10 percent of the project's energy would be approximately 4,405 square feet;

e. Reduce outdoor water consumption by a minimum of 50 percent based on 2008 RMWD usage (e.g., rainwater collection systems); and

f. Install solar water heaters in all proposed units.

3.5.6 Conclusions

The project would contribute a limited amount of GHG emissions during the construction phase of the project. However, during operation the project would contribute ongoing GHG emissions, most considerably in the form of vehicle emissions associated with the residents of the development. Though the Cumming Ranch project would not independently cause a direct climate change impact, these project-generated emissions are considered to contribute cumulatively to global climate change.

The analysis and GHG inventory indicates that the proposed project will achieve a 30 percent reduction from the emissions levels as presented in Table 3.5-2 through mitigation. A minimum of 17.3 percent GHG emissions reduction mitigation will be implemented on the project site with the remaining GHG reduction occurring through the GHG emissions reductions from regulations identified in the CARB Scoping Plan. The emission reductions from forthcoming GHG regulation represent the upper bound of the potential emission reductions associated with Executive Order S-21-09 and AB 1493. The statewide emission reductions shown in Table 3.5-3 assume that no other emission reduction activities would occur. In reality, implementation of the project's GHG mitigation measures and these statewide regulations would occur at various times, potentially simultaneously or one preceding another. However, GHG emission sectors affected by both the project's mitigation measures and statewide regulations would not have a purely additive effect. Rather, emission reductions achieved by one (i.e., mitigation measures or statewide actions) would reduce the capacity for the other to reduce emissions. For example, if statewide actions would reduce electricity consumption-related emissions by 20 percent prior to

implementation of the project's energy efficiency measures, then the project's mitigation measures would only be able to affect the remaining 80 percent of the project's total electricity consumption emissions. The timing and synergistic effect of the statewide regulations in relation to the project's GHG mitigation measures is uncertain at the time of this writing. However, due to the focus of this EIR being on the project's emission reduction measures, the emission reductions achieved by the project's measures were determined first.

As a result of successful implementation of a 30 percent reduction in GHG emissions from the levels in Table 3.5-2, the project would be considered consistent with the goals of AB 32, and the incremental increase in GHG emissions associated with this project would be considered less-than-cumulatively considerable, with mitigation incorporated. This cumulative impact (**Impact CC-1**) would be reduced to a ***less than significant*** level.

Table 3.5-1
Estimated Construction-Generated Greenhouse Gas Emissions (unmitigated)

Year	CO_2 (lb/day)	CO_2 (MT/yr)
2008	1,839	37
2009	9,575	1,147
2010	6,958	833
2011	6,958	833
2012	4,586	137
Total CO_2 emissions (MT)	--	**2,987**

Notes: CO_2= carbon dioxide; lb/day= pounds per day; MT= metric tons; MT/yr= metric tons per year
See Appendix H and O respectively for URBEMIS model output and GHG calculations.
Source: EDAW 2009

Table 3.5-2
Estimated Operational-Related Greenhouse Gas Emissions (unmitigated)

Emission Source	CO_2e (MT/yr)	Percent of Total
Area (Natural Gas)	468	20%
Motor Vehicles	1,389	60%
Electricity Consumption	320	14%
Water Consumption	127	6%
TOTAL	**2,304**	

Notes: CO_2e= carbon dioxide equivalent; lb/day= pounds per day; MT/yr = metric tons per year
The first year of full project operation was assumed to occur in 2030.
See Appendix H and O respectively for URBEMIS model output and GHG calculations.
Source: EDAW 2009

Table 3.5-3
Estimated Greenhouse Gas Emissions Reduction Potential from Implementation of Project Design Features and Operational Mitigation Measures

Design Feature/ Mitigation Measure	Measure Performance Standard (Unscaled % GHG reduction)	Applicable GHG Emissions (% of total GHG inventory)	Scaled Emission Reduction (Unscaled % GHG reduction * % of inventory)	Sources of Information
Pathway/trail network throughout project	1%	60%	0.6%	1
MM 3.1-5c Meet CA Green Building Code[a] standards	21.2% (applicable to residential electricity consumption)	14%	3.0%	2
	8.5% (applicable to residential natural gas consumption)	20%	1.7%	2

Design Feature/ Mitigation Measure	Measure Performance Standard (Unscaled % GHG reduction)	Applicable GHG Emissions (% of total GHG inventory)	Scaled Emission Reduction (Unscaled % GHG reduction * % of inventory)	Sources of Information
MM3.1-5d 10% onsite renewable energy	10%	14%	1.4%	
DF-3, MM 3.1-5e Reduce outdoor water consumption by 50%	37%	6%[a]	2.2%	3
MM 3.1-5f Solar water heaters	70%	12%[b]	8.4%	4, 5
Total Reductions from Design Features and Mitigation Measures			*17.3%*	
SP-1 AB 1493 or equivalent standards	14.8%	60%	8.9%	6
SP-2 Renewable Portfolio Standard	27%	14%	3.8%	6
Total Reductions from Scoping Plan Measures			*12.7%*	
Total GHG Emission Reduction			**30%**	

Notes: GHG = greenhouse gas; MM = Mitigation Measure; SP = Scoping Plan Measure.
[a] Assumes approximately 74% of water consumption in single family residential units is for outdoor use.
[b] Assumes approximately 60% of natural gas consumption in single family residential units is for water heating.

Sources:

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2. California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings
3. Department of Water Resources. 2001. Statewide Indoor/Outdoor Split. Available at: http://www.landwateruse.water.ca.gov/annualdata/urbanwateruse/2001/landuselevels.cfm?use=8.
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5. U.S. Department of Energy; Energy Information Administration. 2009. Residential and Commercial Energy by End Use Sector. Available: http://www.eia.doe.gov/emeu/consumption/index.html.
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Data compiled by EDAW 2009.

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3.6 Public Services and Recreation

This section addresses potential environmental impacts associated with the provision of emergency services, schools, water and sewer systems, recreational facilities, and solid waste services. Additional information pertaining to wildfire hazards is provided in Section 4.1.2, Hazards and Hazardous Materials.

3.6.1 Existing Conditions

Fire Protection

Fire protection services are provided to the project site through the Ramona Fire Department (RFD) and California Department of Forestry and Fire Protection (CAL FIRE). In 1981, RFD was consolidated into RMWD. In 1993, RMWD entered into a contract with CAL FIRE to provide fire/paramedic personnel to RMWD.

The RFD/CAL FIRE boundaries correspond to the RMWD boundaries, serving roughly 22,000 people. RFD/CAL FIRE currently operates three stations in the area, one in the Town Center (Station 80), one within the San Diego Country Estates (Station 81), and one on Dye Road (Station 82) off of SR 67 in the Highland Valley area. The station closest to the project site is Station 82, located less than 0.5 mile east of the project. RFD/CAL FIRE and the San Pasqual Volunteer Fire Department have an automatic aid agreement; in the event of an emergency, both agencies have agreed to respond.

Law Enforcement

The San Diego County Sheriff's Department (Sheriff's Department) is the chief law enforcement agency in San Diego County. The Sheriff's Department includes approximately 4,000 employees, both sworn officers and professional support staff. The Sheriff's Department provides general law enforcement and jail functions for the people of San Diego County in a service area of approximately 4,200 square miles. In addition, the Sheriff's Department provides specialized regional services to the entire county, whether they are needed in the county's incorporated cities or in the unincorporated areas not serviced by a city law enforcement agency. In the unincorporated areas, the Sheriff's Department provides generalized patrol services as well as all the necessary law enforcement investigative services.

The Ramona Sheriff Substation serves the Cumming Ranch project site. The Ramona Sheriff Substation is located in the County complex at the corner of Main Street and Montecito Road.

Patrol deputies are available and on duty 24 hours a day, 7 days a week. There are two to five deputies on duty at any given time. Deputies at the Ramona Sheriff Substation have law enforcement responsibility for approximately 154 square miles. This area is bounded by Poway and unincorporated Escondido to the west, Valley Center and Mesa Grande to the north, Julian to the east, and Lakeside to the south. Due to the rural nature of Ramona, response times vary depending on the location of call (Brown 2004).

Schools

The Ramona Unified School District (RUSD) provides school services to the Ramona area. The schools within the RUSD are as follows:

- Barnett Elementary
- Hanson Lane Elementary
- James Duke Elementary
- Mount Woodson Elementary
- Ramona Community School
- Ramona Elementary
- Olive Peirce Middle
- Montecito High
- Ramona High

In 2003, RUSD had a total enrollment of 7,359 students in kindergarten through grade 12. However, in 2007, the total enrollment dropped to approximately 6,750 students (RUSD 2009). Historically, RUSD has experienced a steady increase in enrollment, reflecting growth patterns in the area. Enrollment typically increased by approximately 100 to 200 students per year since 1975. RUSD is currently operating at capacity and is utilizing all sources to maintain adequate levels of service.

Water Supply and Service

Water supply and service is provided to the Ramona area by RMWD. According to RMWD's 2005 Urban Water Management Plan, RMWD provides water service to approximately 7,000 urban parcels and 3,000 rural parcels (greater than 1 acre) and supplies an average of 11,903 acre-feet per year (AF/YR) of treated and untreated water. Municipal and industrial uses constitute about 64 percent of consumption and agricultural use accounts for approximately 36 percent of the water demand (RMWD 2005).

RMWD purchases the majority of its treated and untreated water through San Diego County Water Authority (SDCWA). In the past, RMWD also purchased a portion of its water supplies from nearby Lake Sutherland, which is owned by the City of San Diego. RMWD does not currently draw water from Lake Sutherland because RMWD's Bargar Treatment facility is not operational at this time. RMWD owns three wells that may be used in an emergency. As of 2005, RMWD's projected available water supply and demand during normal years between 2005 and 2025 is provided in Table 3.6-1.

As shown in Table 3.6-1, RMWD receives the majority of its water through the SDCWA. SDCWA is a public agency serving the San Diego region as a wholesale supplier of water. SDCWA serves 24 member agencies, including RMWD. Historically, SDCWA obtained the majority of its water through Metropolitan Water District, which receives its main water supplies from northern California and the Colorado River as depicted in Figure 3.6-1. In recent years, SDCWA and its member agencies have taken significant and measurable steps in water resource conservation and in diversifying water supplies sources. According to SDCWA's Updated 2005 Urban Water Management Plan (updated April 2007), water conservation programs in the San Diego region saved an average of 40,500 AF/YR of water over the period 2002-2006. Projections indicate potential annual savings will rise to 87,306 AF/YR by 2015 and 108,396 AF/YR by 2030. In 2003, conserved agricultural transfer water from the Imperial Valley (IID Transfer Agreement) began flowing to the San Diego region, which is projected to provide 200,000 AF/YR of water by 2021. Also in 2003, SDCWA was assigned rights to 77,700 AF/YR of conserved water from projects that are lining the All-American and Coachella canals. Deliveries have started and are projected to be at the full level of 77,700 AF/YR in 2010 (SDCWA 2007). Contributing to the region's diversified mix of water sources are member agencies local supplies including surface water, water recycling, groundwater, groundwater recovery, and seawater desalination. In November 2009, construction began on the Carlsbad Desalination Plant. The plant is being built by Poseidon Resources under a private-public partnership agreement between Poseidon Resources and nine local agencies. The facility, capable of 50 million gallons per day (56,000 AF/YR), is scheduled to be operational in 2012 (Poseidon 2009). SDCWA normal water year projected supply and demand is provided in Table 3.6-2. The diversified future water supply planned by SDCWA and member agencies, along with reliable imported water supplies from Metropolitan Water District, is critical to meet existing and future water demands of the region.

The Ramona area receives delivery of its purchased water from SDCWA through the Poway Pump Station. RMWD has two terminal storage reservoirs (West End and Mount Woodson). The immediate area surrounding the Cumming Ranch project site is currently provided water via the Mount Woodson Terminal Storage Reservoir. The Cumming Ranch project site is located within

Phase 1 of the RMWD Downtown Operational Storage Zone, which is planned to receive its water via the West End Terminal Storage Zone. Phase 1 encompasses the facilities within the southwestern downtown area and Phase 2 within the northeastern downtown area. Based on the outcome of the ongoing studies and engineering, it is likely that the planned improvements to the Downtown Operational Storage Zone would combine Phases 1 and 2 into a single storage zone and water would be delivered to the project from a new reservoir located southwest of the intersection of SR 67 and Dye Road. It is anticipated that the new reservoir would have a total capacity of 3 million gallons and would consist of two above ground storage tanks constructed in two phases, with the first phase being completed within the next 5 years. The new reservoir would likely be sited on approximately 2 acres of land, though no property has been purchased for this use at this time. It is anticipated that the pipelines associated with new storage would be located primarily in existing disturbed easements or roadways.

Existing water facilities in the vicinity of the Cumming Ranch project site include a 20-inch-diameter pipeline located in SR 67. Bringing water from the west, this pipeline transitions to a 16-inch-diameter main east of the intersection of Mussey Grade Road. A 10-inch-diameter pipeline in the original alignment of Highland Valley Road extends through the Cumming Ranch site and connects with the pipeline in SR 67, a few hundred feet east of the property boundary.

Sewer Service and Treatment

Sewer treatment service is provided to Ramona customers through two wastewater treatment plants: SMWWTP, which serves the downtown Ramona area, and the San Vicente Wastewater Treatment Plant (SVWWTP), which serves the San Diego Country Estates. The project site is contiguous to the SMWWTP service area and would be served by that facility.

The Cumming Ranch site lies outside the service area boundaries of RMWD's SMWWTP service zone but is located within the RMWD sphere of influence. SMWWTP is under the regulation of the San Diego region (Region 9) of the California Regional Water Quality Control Board (San Diego RWQCB). SMWWTP is an activated sludge secondary level treatment facility located near Sawday Street on the western edge of the Ramona Town Center.

The SMWWTP is currently at or above capacity. The SMWWTP is currently designed and rated for 1.0 MGD. The facility's capacity and spray fields for discharge are insufficient during periods of heavy rainfall when the Average Dry Weather Flow (ADWF) can approach or exceed the 1.0 MGD capacity (RMWD 2009a). Heavy rainfall increases the amount of wastewater entering the system and at the same time decreases the efficiencies of the holding ponds and spray fields.

As outlined below, certain actions have been taken by the RMWD Board of Directors to upgrade and expand the SMWWTP facilities.

- On December 27, 2006, the RMWD Board of Directors authorized RBF Consulting to prepare a Pre-Design Report to evaluate expansion of existing facilities. The scope for pre-design of the SMSSA Improvements consists of:
  a. determination of required facilities to accommodate phased expansion,
  b. conceptual layouts for phased expansion,
  c. preparation of cost estimates, and
  d. preparation and allocation of costs to existing and future customers.
- In 2008, RMWD purchased 285 acres for use in its spray field operations. This land was formerly under lease from the owners of the Davis Ranch. The spray fields are located east of Rangeland Road, across the road from other spray fields owned by RMWD.
- In December of 2008, RMWD as lead agency began the environmental process necessary to implement the planned system-wide expansion of the SMWWTP. A NOP of environmental review per CEQA requirements was issued on December 29, 2008 (SCH# 2008121130). This environmental evaluation is supplemental document to the previously prepared Program EIR for the RMWD Water and Wastewater Master Plans (SCH# 98111025) that was certified in February 1999, which included schematic expansions to the treatment plant (RMWD 2008).
- On April 14, 2009, RMWD's Board of Directors authorized the awarding of a design services contract to RBF Consulting for Santa Maria Sewer Service Area Facility Improvements (RMWD 2009a). As indicated earlier, RMWD's Final SEIR for the expansion of the SMWWTP from 1.0 MGD to 1.47 MGD was certified on May 25, 2010. According to the SEIR, the three-phase expansion is described as follows: Phase 1 would expand the plant to 1.14 MGD, which would provide service to the 4,087 EDUs connected as of June 30, 2005. Phase 2 would expand the plant to 1.28 MGD and provide treatment capacity for an additional 608 EDUs. Phase 3 would expand the plant to 1.47 MGD, which would serve an additional 608 EDUs for a total of 1,216 EDUs. The existing plant is sited on 13.1 acres of land on the west side of North Sawday Street. The project would also construct two new wet weather storage ponds located west of the existing ponds. The existing spray fields east of Rangeland Road will be reconfigured as evaporation terraces (RMWD 2010a).

Recreational Facilities

The Cumming Ranch property has been used primarily for cattle grazing and dry-land farming of oat hay since the 1950s. There are no existing parks or trails systems on the Cumming Ranch site. The Ramona Community Plan has set forth the goal to develop a comprehensive plan of local, neighborhood, community, and regional park facilities directed to the needs of all age levels and, whenever feasible, incorporate outstanding natural features of the planning area (County of San Diego 2002a). Existing recreational opportunities for the Ramona community consist of a local park within the Ramona Town Center called Collier Park. This is an 8-acre local park consisting of ball fields, play equipment, picnic areas, restrooms, and open areas. This park is located on 7th Avenue, west of Highway 78, approximately 3.5 miles from the Cumming Ranch site. The Ramona Community Park also exists within the Ramona Town Center west of Highway 78 and is approximately 4.0 miles from the Cumming Ranch site. This 166-acre park is located on RMWD land in conjunction with well fields. Currently, RMWD has an agreement with the Ramona Parks and Recreation Association (RPRA) to manage the well field area. The facilities provided at this park include baseball and soccer fields and a community center. In addition, west of the Cumming Ranch site, on Dye Road, is the Holly Oaks Equestrian staging area, which is a 42-acre local park.

The County also maintains the Dos Pico Regional Park located west of Mussey Grade Road, approximately 3 miles from the Cumming Ranch site. This 79-acre camping park serves the entire San Diego County. The County also maintains the Mount Gower and Simon Open Space Preserves. Mount Gower is a 1,591-acre preserve located southeast of the Ramona Town Center and has approximately 8 miles of hiking and equestrian trails within its boundaries. A primitive campground is available for groups of 10 or more, and water and vault toilets are provided at the trailhead. Simon Open Space Preserve is a 618-acre preserve located southwest of the Mount Gower Preserve, near the San Diego Country Estates development. The park offers a 550-foot trail climb to Ramona Peak, which is open to hikers, mountain bikers, and equestrians.

Solid Waste

Ramona Disposal Service is the exclusive solid waste hauler and recycler for residential and business accounts in Ramona. Solid waste is transferred to and disposed of at Ramona Landfill located at 20630 Pamo Road. The landfill is owned by Sycamore Landfill, Inc. and operated by Allied Waste Industries, Inc. The remaining capacity for the Ramona Landfill is 589,100 cubic yards (County of San Diego 2004d). The Ramona Landfill is projected to provide landfill capacity through 2014 (DeBraal 2005).

3.6.2 Guidelines for the Determination of Significance

The guidelines for determination of significance for public services and recreation impacts are derived from various sources. Quantifiable direct and cumulative impacts, such as emergency response times, are based on standards outlined in the County of San Diego Public Facilities Element of the General Plan. Additional thresholds are taken from Appendix G of the CEQA Guidelines. The project would have a significant environmental impact related to the provision of public services and recreation if project implementation would do any of the following:

1. have a direct or cumulative effect upon, or result in a need for new or altered services or infrastructure that would result in an adverse physical effect to the environment that would be considered significant;
2. substantially exacerbate directly or cumulatively the performance levels of existing public service facilities and infrastructure such that significant adverse physical effects to the environment would occur. The objective for emergency response times, as defined in the Public Facilities Element of the County's General Plan for residential lots less than two acres in size, is less than 5 minutes;
3. include recreational facilities (e.g., trails) or require the construction or expansion of recreational facilities, directly or cumulatively, that might have an adverse physical effect on the environment; or
4. result in the excessive use of water or exceed available entitlements or resources either individually or cumulatively.

3.6.3 Analysis of Project Effects and Determination as to Significance

<u>Fire Protection</u>

Fire protection for the project would be provided by RMWD/RFD, under contract with CAL FIRE for structural fire protection and emergency medical services. Wildland fire protection is the responsibility of CAL FIRE. The Cumming Ranch project would add 125 homes to the service area of Station 82.

Station 82 is approximately 0.5 mile from the project site, located directly east of the project on Dye Road. Due to the proximity of Station 82 to the project site, emergency fire service could respond to all residential lots of the project site in 5 minutes or less travel time, which is the objective stated in the Public Facilities Element. Caltrans has recently installed Emergency Vehicle Preemption Devices (EVPEs) at the intersection of SR 67 and Highland Valley Road to

facilitate signal preemption for emergency vehicles and stop opposite direction traffic, allowing the emergency vehicles to pass safely and more quickly through the intersection. Although Station 82 would provide first response service to the project site, Stations 80 and 81 would provide back-up service. These stations are approximately 3 miles and 9 miles, respectively, from the site. At 3 miles, back-up service from Station 80 could also serve the project site in an acceptable response time. Additionally, RMWD/RFD has an automatic aid agreement with the San Pasqual Fire Department to provide back-up service in an emergency situation. CAL FIRE would also provide emergency services, if the situation warranted, as they too have an automatic aid agreement with RFD.

The County's Fire Mitigation Fee Program would require an amount per square foot of development that is revised annually as determined by County Ordinance, to be paid to the fee program prior to the issuance of building permits. The fees would be allocated to RMWD/RFD for the development of facilities and capital improvements. However, the RMWD/RFD has indicated that they are in an extreme budget crisis and would not be able to adequately serve the project and continue to maintain an appropriate level of service and protection for the rest of the community (RMWD 2010b).

The project site would be served by existing facilities located in proximity to the project allowing for adequate response time. The applicant would also be required to contribute to the Fire Mitigation Fee program, which would provide for fairshare funding of facilities and other capital improvements. However, because the RMWD/RFD has indicated that they would not be able to adequately provide service to the project, a ***potentially significant*** impact to the environment related to the provision of fire protection services per Guideline 2. (**Impact PS-1**)

Law Enforcement

The Ramona Sheriff Substation would provide law enforcement service for the proposed project. The number of officers available to respond to calls for the Cumming Ranch project is dependent on several factors, including type of incident, distribution of manpower, level of activity, and time of day. The Sheriff's Department has indicated that there is adequate staff available to respond to calls from the Cumming Ranch area, and the proposed project would not generate a significant increase in police protection demand (Brown 2004). Due to the relatively small size of the project in relation to the population served by the Ramona Sheriff Substation, the law enforcement demands caused by the proposed project would not necessitate new or expanded facilities. For these reasons, none of the Guidelines would be exceeded and the proposed project would result in a ***less than significant*** impact to the environment related to the provision of law enforcement services.

Schools

The project site is within the service area of RUSD. Although RUSD has not provided student generation rates, an estimated student generation rate can be calculated based on existing school-age children per household for the area covered by RUSD. In the year 2000, the Ramona Community Plan Area had a total of 11,190 housing units (SANDAG 2003). In 2000, the total population for school-age children between the ages of 5 and 19 was 8,538 (SANDAG 2003). Using these numbers, approximately 1.3 students per household would be generated by the project. Thus, the Cumming Ranch project would generate around 163 students.

Due to overcrowded conditions at schools within the area, RUSD is not able to identify specific schools that students residing within the Cumming Ranch development would attend (RUSD 2007). Any new growth-generating increased school enrollments would necessitate increased school services, and possibly new school facilities. Within the past 5 years, RUSD constructed a new school facility for Hanson Elementary School and the Ramona Community School moved into the old Hanson Elementary school buildings. In addition, Olive Peirce Middle School was expanded with a new building for classrooms. If required, the expansion of facilities on existing RUSD property would likely not cause significant impacts to the physical environment as the facilities would be developed on previously disturbed sites. If additional schools were to be developed, they would be required to comply with CEQA and all applicable environmental regulations. These developments would increase the capacity of RUSD and their ability to service the increasing population.

California law allows the governing body of a school district to impose a fee on all new development within a district's jurisdiction for the purpose of funding the construction or reconstruction of school facilities. In the Ramona area, school fees are collected by the County and then transferred to RUSD. The fees for the Ramona area are currently $2.97 per square foot (RUSD 2009). The proposed project would be required to pay school fees prior to issuance of building permits. With the collection of school fees, it is estimated that the Cumming Ranch project would generate approximately $1.2 million for RUSD for the development of new facilities. Although this fee is often an insufficient amount to fund 100 percent of new school facility construction and operation, the California State Legislature has declared that the school impact fee is determined to be full and adequate mitigation under CEQA. Under California Government Code Section 65996, the County is limited to charging the statutorily created fee to offset impacts to local school districts generated by proposed projects. Section 95996 does not provide for remediation of existing deficiencies in school services. As described above, expansion of RUSD facilities, including elementary through high school facilities, is currently in the planning process and will increase the ability of the school district to serve an increased

student population. For these reasons, none of the Guidelines would be exceeded and implementation of the proposed project would result in a ***less than significant*** impact on school services and facilities.

Water Supply and Service

The average household in Ramona, based on 3.2 persons per household, consumes approximately 554 gallons of water per day (gpd). Thus, the 125 residential units included in the Cumming Ranch project would generate a total average daily demand of 69,250 gpd as shown in Table 3.6-3. The maximum daily demand for the project, using a peak factor of 3.0 would be 207,750 gpd (RMWD 2009b). Based on the project's total average daily demand, the project would consume the equivalent of approximately 78 AF/YR. As discussed in Section 3.6.1, SDCWA, which supplies the majority of RMWD's water, has diversified their water resources and implemented plans to ensure that water for the region would be available in the future. The project has been designed to substantially reduce this amount due to the Global Climate Change mitigation requirements.

A Project Facility Availablity Form for water service was prepared by RMWD (RMWD 2009c) and stated that water availability and facilities to serve the project could be available within five years, if specific conditions are met. Conditions included a water committement agreement, payment of fees, execution of all appropriate agreements, etc.

The proposed onsite water distribution system is illustrated in Section 1.1.3, Figure 1-10. The water distribution system would be constructed with 8-inch to 12-inch-diameter polyvinyl chloride (PVC) pipelines located beneath the project roadways. The onsite pipelines would be supplied from an RMWD-planned 16-inch main line located within Highland Valley Road. As required by RMWD, the onsite pipelines would be looped to provide redundancy in supply, improve water quality by avoiding dead end mains, and to meet fire flow demands and pressures by providing water from two directions to supply hydrants.

Water for the immediate project vicinity is currently provided from the Mount Woodson Terminal Storage Reservoir; however, there is a limitation on the quantity of water that can be delivered under the currently configured system. RMWD is currently planning a new reservoir (consisting of two 1.5-million-gallon tanks) that would serve the southwestern area (Phase I) of the Downtown Operational Storage Zone. The Downtown Operational Storage Zone would be served via the West End Terminal Storage Zone. The Cumming Ranch project is expected to receive its water from the new reservoir. Although these facilities are currently in the planning stage, it is reasonable to anticipate these facilities would be operational within 5 years (RMWD 2009c).

At this time, no NOP or other environmental documentation has been prepared for the planned water supply improvements to the Downtown Operational Storage Zone. RMWD as the lead agency under CEQA would be responsible for the environmental assessment of potential impacts associated with the planned water service expansion and providing mitigation to reduce those impacts. The environmental review would likely be a supplemental document to the Program EIR for the RMWD Water and Wastewater Master Plans, similar to the SMWWTP expansion project's Supplemental Environmental Impact Report (SEIR), which was certified in May 2010. The environmental analysis would occur once ongoing planning and engineering are more complete. However, it can be expected that potential environmental impacts may occur. Impacts typically resulting from infrastructure improvements, such as pipelines or pump stations, may include air quality emissions during construction, construction noise impacts, cultural impacts during ground disturbance, and temporary and permanent biological impacts to habitat and sensitive species among others. Similar construction impacts would likely result from the new reservoir. Also, it is possible that a visual impact would also result from the two above ground storage tanks. It is likely that these anticipated impacts could be mitigated to a less than significant level through measures such as BMPs to reduce air quality emissions of PM and fugitive dust during construction, monitoring for cultural resources during ground-disturbing activities, restoration or creation of sensitive habitats and wetlands at appropriate ratios, avoidance of construction during sensitive bird breeding seasons, and other mitigation requirements as determined through the environmental review. If required, visual mitigation of the storage tanks may include specific paint treatments, landscaping, or other aesthetically enhancing measures as proposed by RMWD as the lead agency for CEQA review.

As described above, it is anticipated that the potential impacts associated with implementation of improvements to the Downtown Operational Storage Zone and associated infrastructure, such as the storage reservoir, would be mitigated and would not create significant secondary impacts in addition to those resulting directly from the Cumming Ranch project. All potential environmental impacts would be addressed by RMWD, the lead agency for these improvements prior to implementation. The water demand described in this section would be within that anticipated and planned by RMWD and would not require the installation of additional facilities beyond those already planned by RMWD. Therefore, the project is not expected to result in a significant impact on water services. However, the expansion of RMWD water services is currently ongoing and is expected to be completed within the next 5 years. If the Cumming Ranch project were to require service prior to completion of the RMWD water service improvements and cause demand to exceed service availability, a ***significant impact*** would result per Guidelines 1 and 2. (**Impact PS-2**)

Sewer Service and Treatment

Wastewater from the Cumming Ranch project site would be conveyed to and treated at SMWWTP, located immediately east of the project at the northeast corner of Area B. The Cumming Ranch project site is not currently served by nor within the latent powers sewer service area of RMWD. Expansion of latent powers would be necessary for development of the Cumming Ranch sewer services, which would require LAFCO approval, as discussed in Section 3.6.1. A Project Facility Availablity Form for sewer service was prepared by RMWD (RMWD 2009d) and stated that facilities to serve the project could be available within five years if specific conditions are met. Conditions included a pre-annexation or pre-latent power expansion agreement; application to, and approval from LAFCO; payment of fees; execution of all appropriate agreements; etc.

The Cumming Ranch project would utilize an onsite gravity system to collect wastewater from the individual homes. The gravity system flows into the proposed sewer lift station located just east of Lot 125 in the northern portion of Area A. From the lift station, a proposed main sewer line would convey the wastewater directly to the SMWWTP.

The SMWWTP is currently at or above capacity. As described in Section 3.6.1, RMWD is currently planning major improvements and expansion of the SMWWTP, which would increase the capacity of the facilities from 1.0 MGD to 1.47 MGD in three phases. Phase 1 would be designed to improve service to existing clients, Phase 2 would serve 608 EDUs, and Phase 3 would also provide service for 608. This total expansion of wastewater service for over 1,216 additional EDUs would adequately provide service for the Cumming Ranch project, which would add 125 dwelling units. As described in Section 3.6.1, RMWD has completed the CEQA environmental review process required for implementation of the necessary improvements to the SMWWTP and their spray fields to accommodate future demand, including the Cumming Ranch project. The wastewater demand resulting from the proposed project would be within that anticipated by RMWD and would not require the installation of additional facilities beyond those already planned by RMWD. RMWD as the lead agency under CEQA was responsible for the environmental assessment of potential impacts associated with their wastewater service expansion and providing mitigation to reduce those impacts. The SEIR prepared by RMWD found potentially significant impacts to biological habitat including permanent and/or temporary impacts to southern coast live oak riparian forest, southern cottonwood-willow riparian forest, alkali meadow, coast live oak woodland, southern willow scrub, pasturelands, nonnative grasslands, areas functioning as Stephens' kangaroo rat habitat, non-wetland waters of the U.S./streambed, incised drainage, and emergent wetlands. Potential impacts to special status species including the arroyo toad and Stephens' kangaroo rat were also identified. The environmental analysis found that all potentially

significant impacts could be mitigated to below a level of significance with implementation of mitigation as detailed within the SEIR. Potential land use and planning effects, aircraft hazards (bird strikes), and short-term construction traffic impacts were evaluated as part of the SEIR and determined to result in less than significant environmental effects (RMWD 2010a). Cumming Ranch was included as part of the SEIR's cumulative project list. For these reasons, the SMWWTP expansion project would not create significant secondary impacts in addition to those resulting directly from the Cumming Ranch project.

It is anticipated that the SMWWTP improvements would be at the operational and capacity level necessary to serve the Cumming Ranch project within 5 years (RMWD 2009). However, the expansion of wastewater treatment services is not yet complete at this time, and the construction process can be dynamic and completion dates can change throughout project implementation. If the Cumming Ranch project were to require service prior to completion of the RMWD sewer service expansion and cause demand in excess of available service, a ***significant impact*** would result per Guidelines 1 and 2. (**Impact PS-3**)

Recreational Facilities

As discussed in Section 3.6.1, the Ramona community currently has a total of 218 acres of local park land and 79 acres of regional park land. The County's General Plan Recreation Element recommends the standard of 15 acres of local park land and 15 acres of regional park land per 1,000 persons (County of San Diego 1993a). Based on this standard and the year 2000 population for the Ramona Community Planning Area, Ramona should ultimately have a total of 622 acres of local park land and 622 acres of regional park land. The Cumming Ranch project would add an additional 375 persons to the Ramona community and would generate the need for an additional 5.7 acres of local park land and 5.7 acres of regional park land. To manage the County's park land deficiency, the County has established the Park Land Dedication Ordinance. As stated in Section 810.104-114 of the San Diego Code of Regulatory Ordinances (County of San Diego 1995), as a condition of approval of any development, as defined in Section 810.102(a), the applicant shall dedicate land or pay fees in lieu thereof, or do a combination of both, for neighborhood and community park or recreational purposes to serve future residents of the development. The payment of fees only applies to developments of 50 parcels or less. For developments containing more than 50 parcels, the approving body shall determine whether to require dedication of land, payment of a fee in lieu thereof, or a combination of both, and in making such determination shall consider the following factors:

(a) Conformity of lands offered for dedication with the Recreation Element of the General Plan.

(b) The topography, soils, soil stability, drainage, access, location, and general utility of land in the development available for dedication.

(c) The size and shape of the development and land available for dedication.

(d) The amount, usability, and location of publicly owned property available for combination with dedicated lands in the formation of local park and recreation facilities.

(e) Any additional recreation facilities that are to be privately owned and maintained by future residents of the development.

Because the Cumming Ranch project includes the development of approximately 125 parcels, the County has the discretion to determine the appropriate means of meeting the project's park and recreational demand. At the time of filing a tentative map, the County will require the applicant to indicate a preference whether to dedicate land for park or recreation purposes, or to pay a fee in lieu thereof, or do a combination of both (County of San Diego 1995). At this time, the Cumming Ranch project applicant has submitted a tentative map and applications for approval and has chosen to pay fees in lieu of dedicating park lands. Conformity with the Park Land Dedication Ordinance would meet the proposed project's fair-share allotment to ensure that recreational needs for the project are being met. Additional recreational opportunities would be provided by the Cumming Ranch project and include approximately 3.40 miles of community trails. This community trails system would be designed for use by both pedestrians and equestrians. Further discussion of the proposed trail system is provided in Section 1.1.3. The project has been designed with large lots, allowing for recreation and open space within the homeowner's private property. The large lots would generally reduce the demand for local and regional parks resulting from implementation of this project. For these reasons, a ***less than significant*** impact to recreational facilities would result per Guideline 3.

Solid Waste

The Cumming Ranch project would result in development of 125 residential units on the project site. The placement of residential units on the project site would result in the generation of household solid waste. The estimated generation rate per person in unincorporated San Diego County is 2.6 tons per year (DeBraal 2005). Therefore, based on a total of 375 persons, the proposed project would be expected to generate approximately 975 tons of solid waste per year. Because recycling is mandated by the Solid Waste Ordinance in the County, a substantial portion of the waste generated by the proposed project would be diverted away from the local landfills and recycled. With a recycling rate of 50 percent (DeBraal 2005), the amount of solid waste entering the landfill from the proposed project would be reduced to approximately 488 tons per year.

The increase of 488 tons of solid waste per year could be accommodated by the Ramona Landfill and would not represent a significant impact to landfill capacities. The landfill has anticipated growth in the region and, based on this growth, landfill capacity is projected to meet the region's needs through 2014. The proposed development is a smaller project than anticipated in the planning documents for the area, such as the Ramona Community Plan. For this reason, the development would not tax the landfill and solid waste disposal system beyond that anticipated with regional growth. Given that the Ramona Landfill has the capacity to accommodate the solid waste generated by the project, the project would not necessitate a landfill expansion, and a ***less than significant*** impact would result as none of the Guidelines would be exceeded.

3.6.4 Cumulative Impact Analysis

The study area for the public services and recreation cumulative impact analysis includes the Ramona Community Planning Area. The Ramona Community Planning Area was deemed appropriate for the cumulative study area because the services analyzed in this section are provided on a local level, not a regional basis. For example, fire and police services are provided to the Ramona community by the local fire department and sheriff's station, the school district serves the Ramona area, and the water and sewer service is provided by the local water district. Therefore, the local nature of public services and recreation facilities makes the Ramona Community Planning Area the appropriate study area for this cumulative analysis.

<u>Fire Protection</u>

Assuming an average household size of three people (SANDAG 2003), the existing population within the cumulative study area is estimated as 7,333 households. With the assumed level of development under the cumulative forecast scenario, approximately 1,000 residential units would be built. This growth in residential units would result in an over 20 percent increase in the number of homes and businesses that would need fire protection in the Ramona area. As previously noted, this area is currently served by three fire stations. It is reasonably assumed that a 20 percent growth within the RFD/CAL FIRE boundaries would necessitate the construction of additional fire protection facilities.

RFD/CAL FIRE has indicated that growth in the Ramona area could reduce their capability to effectively respond to calls from the Highland Valley area (Delgado 2004). With increased development in the region, relatively long response times could occur. The development of additional fire protection facilities could result in environmental effects that have yet to be determined. Because the location of additional fire protection facilities has not been planned and is not reasonably known, environmental review of these facilities cannot be completed.

However, RFD/CAL FIRE would be required to complete CEQA review for any new or expanded facilities. In addition, the Cumming Ranch project and other projects in the region would contribute to existing fee programs, which provide funding for the construction of new facilities.

However, the RMWD/RFD has indicated that they are in an extreme budget crisis and would not be able to adequately serve the project and continue to maintain an appropriate level of service and protection for the rest of the community (RMWD 2010b). For this reasons, the project would result in a ***potentially significant*** contribution to cumulative fire service demands per Guideline 2. (**Impact PS-4**)

Law Enforcement

As stated above, the growth anticipated for the cumulative study area (Ramona Community Planning Area) would result in an over 20 percent increase in the number of homes and businesses that would need law enforcement. The Sheriff's Department has indicated that there is adequate staff available to respond to calls from the Cumming Ranch area and the proposed project would not generate a significant increase in law enforcement demands. However, it is reasonable to assume that the 20 percent growth anticipated within the Sheriff's Department boundaries could necessitate the need for additional law enforcement officers and vehicles that would be procured by property taxes. No new facilities are planned at this time.

The project may contribute to the need for expanded services in the future, but it would not result in the provision of these facilities that would result in environmental consequences. For this reason, none of the Guidelines would be exceeded and the project's contribution to this potential cumulative impact is considered ***less than significant.***

Schools

Cumulative growth in the cumulative study area would necessitate additional RUSD facilities. Multiple expansions and a new school are currently in the planning process; however, the exact details of RUSD expansions are not known at this time. The expansion of facilities on existing RUSD property would not be expected to cause significant impacts to the physical environment, as the facilities would be developed on previously disturbed sites. Furthermore, RUSD would be required to conduct CEQA review prior to the construction of expanded or new facilities. A portion of the cost of these facilities would be borne by the Cumming Ranch project and other projects in the region through the collection of school fees. Although these fees are often insufficient to fund 100 percent of new school facility construction and operation, the California

State Legislature has declared that the school impact fee is determined to be full and adequate mitigation under CEQA. Under California Government Code Section 65996, the City is limited to charging the statutorily created fee to offset impacts to local school districts generated by proposed projects. Section 95996 does not provide for remediation of existing deficiencies in school services. As described above, plans for expansions of facilities of elementary through high school are currently ongoing. For these reasons, none of the Guidelines would be exceeded and the project's contribution to potential cumulative school facility impacts is considered ***less than significant***.

Water Supply and Service

In the 2005 Urban Water Management Plan, RMWD identified future treated water demand based on cumulative growth within their service area through the year 2025, shown as the total projected demand numbers in Table 3.6-1. It is projected that demand for treated water will increase by approximately 472 AF/YR every 5 years for a total increased demand of 1,886 AF/YR between 2005 and 2025 (RMWD 2005).

Cumulative development in the cumulative study area includes approximately 1,000 residential units and 230,000 square feet of additional commercial/retail development. This increase in development, along with the Cumming Ranch project, would result in a greater demand on the amount of water currently available and supplied by RMWD. RMWD has initiated engineering of improvements to expand their water supply services to adequately accommodate the planned future development in their service area, including the Cumming Ranch project. The current cumulative water demand would be within that anticipated and planned for by RMWD and would not require the installation of additional facilities beyond those already planned by RMWD. Due to ongoing cumulative growth in the Ramona Community Planning Area, it is likely that the water service expansion planned for by RMWD would be necessary to meet the growing demand, regardless of the Cumming Ranch project. It is possible that new water supplies or conveyance facilities would be required to serve additional development and could result in environmental impacts. RMWD as the lead agency would be responsible for environmental assessment of potential impacts associated with the planned water service expansion under CEQA and providing mitigation to reduce those impacts. However, the planned expansion of RMWD water services is currently ongoing and is expected to be completed within the next 5 years. If the Cumming Ranch project and other cumulative projects were to require service prior to completion of the RMWD water service improvements and cause demand to exceed service availability, a ***cumulatively significant impact*** would result per Guidelines 1 and 2. (**Impact PS-5**)

Sewer Service and Treatment

For this EIR, a cumulative list was compiled to estimate planned development in the area. This listing (provided in Subchapter 1.6) includes approximately 1,000 residential units and 230,000 square feet of additional commercial/retail development for which permit the County has received applications. As described above, in response to the anticipated growth in the area, RMWD is planning major improvements and expansion to the SMWWTP facility, including its spray fields. These improvements and expansions are expected to serve an additional 1,216 EDU's beyond those customers currently served (RMWD 2010a). This additional service level would provide adequate service availability for the known cumulative projects, including Cumming Ranch. Due to ongoing cumulative growth in the Ramona Community Planning Area, it is likely that the wastewater service expansion planned for by RMWD would be necessary to meet the growing demand, regardless of the Cumming Ranch project.

These expansions would be required to be completed to address the cumulative demands of the proposed project in combination with other anticipated projects in the area. As lead agency, RMWD completed an SEIR per CEQA to consider whether the expansions would cause any significant impacts to the physical environment and provide mitigation for identified impacts. As described above, that the SEIR found that the environmental impacts anticipated with implementation of improvements and expansions to the SMWWTP and spray fields could be mitigated to below a level of significance and would not create significant secondary impacts in addition to those resulting directly from the Cumming Ranch project or other cumulative projects. Cumming Ranch was included in the list of cumulative projects evaluated as part of the SEIR (RMWD 2010a).

However, the improvement and expansion of sewer treatment services are currently being undertaken by RMWD but are not yet complete. If the Cumming Ranch project, in combination with other cumulative projects, were to require service prior to completion of the RMWD sewer service expansion and cause demand in excess of available service, a ***cumulatively significant impact*** would result per Guidelines 1 and 2. (**Impact PS-6**)

Recreational Facilities

Assuming an average household size of three people (SANDAG 2003) and an assumed level of development under the cumulative projects scenario of approximately 1,000 residential units, the cumulative plus project population would be 3,375 persons. Based on the standards set forth in the County's General Plan Recreational Element as identified in Section 3.6.3, an additional 50 acres of local park land and 50 acres of regional park land would be required to meet the

recreational needs of the identified cumulative projects as well as the Cumming Ranch project. The Cumming Ranch project and other projects in the region would contribute to the Park Land Dedication Ordinance by either dedicating land or paying fees in lieu of dedication, thereby addressing the additional demand for parkland. In addition, the Cumming Ranch project includes funding and installation of more than 3 miles of community trails and pathways. Also, the project includes large lots for residents to recreate within their own property and reduce the dependence on community recreation facilities. For these reasons, Guideline 3 would not be exceeded and this would be a ***less than significant*** cumulative impact.

Solid Waste

Cumulative growth in the Ramona area, along with the proposed project would add to the waste stream being disposed of at the Ramona Landfill. The landfill has a capacity that is projected to meet the region's needs through 2014. It is not anticipated that the growth in the area would require an early closure of the landfill resulting in secondary environmental impacts associated with a new disposal location. In addition, the Cumming Ranch project is smaller than what was anticipated in the Ramona Community Plan and, thus, would contribute less solid waste than would have been accounted for in the regional plans. Therefore, none of the Guidelines would be exceeded and a ***less than significant*** cumulative impact would result.

3.6.5 Mitigation Measures

Mitigation Measure M-PS-1 Fire Protection Service

The Cumming Ranch project shall participate in a Community Facilities District as conditioned by the Ramona Fire Prevention Bureau. The project developer shall be required to pay all fees and meet all requirements of the Community Facilities District to the satisfaction of RMWD.

Mitigation Measure M-PS-2 Water Conveyance, Storage, and Treatment

County approval of Final Map for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of water supply to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.

Mitigation Measure M-PS-3 Sewer Service and Treatment

County approval of Final Map for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of wastewater treatment capacity to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.

Mitigation Measure M-PS-4 Cumulative Fire Protection Service

The Cumming Ranch project shall participate in a Community Facilities District as conditioned by the Ramona Fire Prevention Bureau. The project developer shall be required to pay all fees and meet all requirements of the Community Facilities District to the satisfaction of RMWD.

Mitigation Measure M-PS-5 Cumulative Water Conveyance, Storage, and Treatment

County approval of Final Map for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of adequate water supply to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.

Mitigation Measure M-PS-6 Cumulative Sewer Service and Treatment

County approval of Final Map for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of adequate wastewater treatment capacity to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.

3.6.6 Conclusions

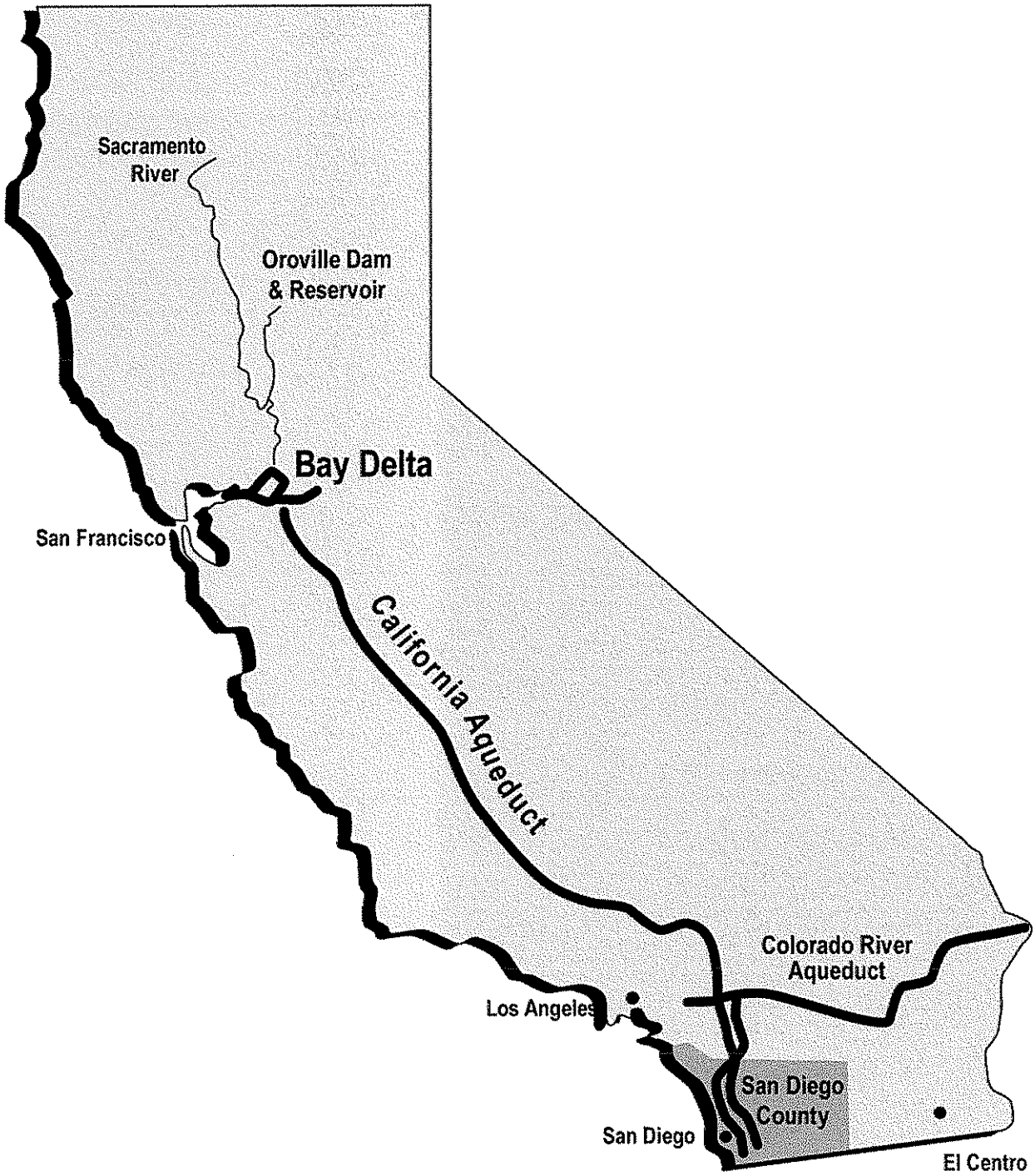
Potential environmental impacts, both direct and cumulative, to public services (i.e., law enforcement, schools, recreational facilities, and solid waste service) would not be significant because implementation of the project would not require additional services that would cause public services to be taxed beyond the levels outlined in the Guidelines.

Because of severe budget constraints, the RMWD/RFD would not be able to adequately serve the Cumming Ranch project and continue providing adequate service and protection to the rest of the community (**Impacts PS-1** and **-4**). The project would be required to participate in a Community Facilities District that would facilitate the adequate funding for fire protection. The project would pay all associated fees, and meet all responsibilities of the Community Facilities District to ensure appropriate funds are available for the District to maintain fire protection services for the project, cumulative projects, and the community.

RMWD is currently planning improvements and expansions of its facilities that provide water and sewer services to the general area in which the project is located. Planning has begun for new water storage facilities that would improve and expand services available within the Downtown Operational Storage Zone. RMWD recently completed its purchase of 285 acres used for spray field operations that were formerly leased, which adds more certainty to the availability

of the land for long-term use. Design contracts have been completed for increasing the wastewater treatment capacity of the SMWWTP from 1.0 MGD to 1.47 MGD to provide adequate service to existing and future RMWD clients, including the Cumming Ranch project. The Final SEIR (SCH #2008121130) for RMWD's sewer expansion was certified on May 25, 2010 (RMWD 2010a).

Because these projects are not completed at this time, the proposed project could cause a significant direct and cumulative impact if the project were operational and water and wastewater services were required prior to the planned RMWD improvements (**Impacts PS-2, 3, -5,** and **-6**). These impacts would be mitigated to ***less than significant*** by the requirement to coordinate with RMWD and receive verification that improvements would be in place and adequate service would be available prior to approval of the Final Map for the project. This timing would ensure that the project would not require water or sewer service prior to adequate availability and allows RMWD time for planning and implementation of improvements to meet cumulative project demands.



Source: Ramona Municipal Water District 2005 Urban Water Management Plan

No Scale

Figure 3.6-1
Water Conveyance Facilities Serving San Diego County

Table 3.6-1
RMWD Projected Available Water Supply and Demand during Normal Year for Period 2005 - 2025 (AF/YR)

Supply Source	2005	2010	2015	2020	2025
Treated Water					
SDCWA Imported Water[1]	20,842	20,842	20,842	20,842	20,842
Bargar WTP (Sutherland Lake)	2,500	2,500	2,500	2,500	2,500
Wells	0	0	0	0	0
Total Available Treated	**23,342**	**23,342**	**23,342**	**23,342**	**23,342**
Total Projected Demand	**7,459**	**7,931**	**8,401**	**8,873**	**9,345**
Untreated Water					
SDCWA Imported Water	9,636	9,636	9,636	9,636	9,636
Wells	200	200	200	200	200
Total Available Untreated	**9,836**	**9,836**	**9,836**	**9,836**	**9,836**
Total Projected Demand	**3,782**	**3,785**	**3,789**	**3,792**	**3,795**
Recycled Water	**880**	**1,480**	**1,480**	**1,480**	**1,480**

[1]Capacity that can be delivered through Poway PS and PL.
Source: RMWD 2005 Urban Water Management Plan (RMWD 2005)

Table 3.6-2
SDCWA Projected Normal Water Year Supply and Demand (AF/YR)

Supply Source	2010	2015	2020	2025	2030
SDCWA Supplies					
Imperial Irrigation District Water Transfer	70,000	100,000	190,000	200,000	200,000
AAC and CC Lining Projects	77,700	77,000	77,000	77,000	77,000
Subtotal	**147,700**	**177,700**	**267,700**	**277,700**	**277,700**
Member Agencies Supplies					
Surface Water	59,649	59,649	59,649	59,649	59,649
Water Recycling	33,668	40,662	45,548	46,492	47,584
Groundwater	17,175	18,945	19,775	19,775	19,775
Groundwater Recovery	11,400	11,400	11,400	11,400	11,400
Seawater Desalination	0	34,689	34,064	37,754	40,000
Subtotal	**121,892**	**165,345**	**172,436**	**175,070**	**178,408**
Metropolitan Water District Supplies	**445,858**	**399,855**	**311,374**	**342,870**	**372,922**
Total Projected Supplies	**715,450**	**742,900**	**771,510**	**795,640**	**829,030**
Total Estimated Demands with Conservation	**715,450**	**742,900**	**771,510**	**795,640**	**829,030**

Source: SDCWA Updated 2005 Urban Water Management Plan (SDCWA 2007)

Table 3.6-3
Projected Water Demands for the Cumming Ranch Project

Number of Units	125 EDUs
Unit Demand	554 gpd/EDU
Average Daily Demand	69,250 gpd
Maximum Daily Demand (Peak Factor 3.0)	207,750 gpd

EDU = Equivalent Dwelling Unit
gpd = gallons per day
Source: RMWD 2009

CHAPTER 4.0
ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

As allowed by Section 15063(c) of the CEQA Guidelines, issues that are identified as not significant or less than significant are not addressed in detail in the previous chapters. This determination of less than significant or not significant may have resulted from either the EIR analysis of an issue area or during preparation of the Initial Study. These issue areas and the reasons for these conclusions are provided in this chapter.

4.1 Effects Found Not Significant as Part of the EIR Process

Through the EIR analysis process, six issue areas were found to have no impacts or less than significant impacts: Hydrology and Water Quality, Hazards and Hazardous Materials, Agricultural Resources, Land Use and Planning, Population and Housing (excluding Growth Inducement), Mineral Resources, Geology and Soils, and Air Quality. The rationale for these conclusions is outlined below.

4.1.1 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions at the Cumming Ranch site and provides an analysis of the potential environmental effects related to flooding, drainage, groundwater quality, and surface water quality that may occur with implementation of the proposed project. This section is based on the Hydrology and Drainage Study (Snipes-Dye 2010a) and the Storm Water Management Plan (Snipes-Dye 2010b). Impacts of the proposed project on existing and future water supply sources and wastewater treatment are described and analyzed in Subchapter 3.6, Public Services and Recreation.

4.1.1.1 Existing Conditions

Regional Drainage

The proposed project is located within the San Dieguito Hydrologic Unit (Unit 5.00) of the San Diego Region. This unit is defined in the Water Quality Control Plan for the San Diego Basin (RWQCB 1994), referred to as the Basin Plan. As shown in Figure 4-1, the San Dieguito Hydrologic Unit is a rectangular-shaped area of about 350 square miles extending from Santa Ysabel to Solana Beach and Del Mar. The majority of this watershed is located within the unincorporated area of San Diego County and includes the San Dieguito River and its tributaries,

Santa Ysabel Creek and Santa Maria Creek. There are also three reservoirs located within the San Dieguito Hydrologic Unit: Lake Hodges, Sutherland, and San Dieguito reservoirs. The San Dieguito Slough is situated at the mouth of the San Dieguito River. This hydrologic unit is generally bordered by the San Luis Rey watershed to the northeast, Carlsbad watershed to the northwest, San Diego River watershed to the southeast, and Peñasquitos watershed to the southwest. Nearly half of the vacant land in this watershed is planned for future development, primarily residential use. The San Dieguito Hydrologic Unit is comprised of five hydrologic areas. The project site is located in the Santa Maria Valley Hydrologic Area, and specifically within the Ramona Hydrologic Subarea.

Site Topography and Drainage

The majority of the project site has gently rolling topography with the dominant feature being the generally east-west trending ridgeline. The topography of Area A consists of rolling uplands interspersed with rocky outcrops and drainages with a ridgeline of steeper hillsides located in the northeastern portion. Elevations range from 1,368 feet to 1,576 feet. Highland Valley Road and SR 67 are located in the southern portion of the property. The topography in Area B consists mostly of a wide-open, moderately level plain area extending from south of Etcheverry Creek north to Santa Maria Creek. Elevations range from 1,359 feet to 1,392 feet. Area C consists of creek area, wetlands and shallow drainage areas (vernal swales), and nonnative grasslands, and a clustering of large boulders and rock outcroppings appear along the eastern boundary. Santa Maria Creek traverses through portions of Areas B and C. Elevations in the northern area range from 1,365 feet to 1,400 feet with the higher elevations being in the north, along Ramona Airport Road. Twenty-two acres of Area C are protected by conservation easements which form the Ramona Vernal Pool Preserve.

The primary drainages within the project site are Santa Maria Creek located in the northern portion of the site (Areas B and C), and Etcheverry Creek through the central portion of the site (Area B). These two creeks drain from east to west and eventually converge just west of the property boundary. These features are shown in Figure 4-2. Santa Maria and Etcheverry creeks are not characterized by trees or lush vegetation. Two smaller unnamed drainages occur in the southern portion of the site and cross under Highland Valley Road merging into a single unnamed drainage course. The flow continues to the north until it merges with Etcheverry Creek and ultimately joins Santa Maria Creek.

The primary drainage areas at the project site can be divided into three general basin areas. The first basin is Santa Maria Creek Basin, which flows through Area C and the northern portion of

Area B. The second basin is Etcheverry Creek Basin, which flows through Area B. These basins are outside the portions of the project site that are proposed for development.

The third basin, the Cumming Ranch Basin, encompasses the vast majority of Area A. The top of this basin is located at SR 67 and Archie Moore Road. The drainage in this basin flows in an easterly direction parallel with SR 67 and then northerly to meet the project site in the southwest corner of the project boundary. The flow continues northwesterly and northerly through the site in an unnamed swale until it reaches the project boundary. This basin encompasses 2.6 square miles and has a watershed length of 3.32 miles. The average slope for this basin is approximately 103 feet per mile. The peak runoff for this basin as it discharges the project is 3,500 cubic feet per second (cfs).

Water Quality

Runoff is a term used to describe any water that drains or runs off of a defined land area into a waterway. Runoff can be the result of rain, in which case it is also sometimes referred to as storm water. Runoff can also result from various other sources or activities such as irrigation, hosing down of areas, errant wash water from cleaning, leaks in pipes, and air conditioner condensation. General hydrologic characteristics, land uses, and activities that involve pollutants have the greatest influence on the water quality runoff from a given area. The project site includes agricultural lands with historic and current agricultural activities in Areas A and B only. These activities include cattle grazing and dry-land farming of oat hay. Area C has been fenced to prevent any cattle grazing or other agricultural activity within the vicinity of the vernal pools.

Receiving Waters

Receiving waters is a general term typically used to describe any water body such as a creek, river, lake, bay, or ocean, which receives runoff. In the context of the proposed project, receiving waters refer to those water bodies that would receive runoff from the Cumming Ranch project. The potential receiving waters for the proposed project include Santa Maria Creek and its tributaries located within or adjacent to the project site. These waters flow into other water bodies before reaching the Pacific Ocean. Each of the receiving waters is described below. The beneficial uses designated for each of the receiving waters by the RWQCB are provided in Table 4-1. In general, beneficial uses are those uses, users, or activities that benefit from the presence of the water and could be adversely impacted if water quality were degraded. The definitions for the beneficial uses are provided in Table 4-2.

Etcheverry Creek

Etcheverry Creek, the southern tributary of Santa Maria Creek, is located within Area B. Etcheverry Creek merges with Santa Maria Creek just north of Area A and west of Area B. Runoff from the project site discharges into Etcheverry Creek from an unnamed creek through the project site just north of Area A before connecting with Santa Maria Creek.

Santa Maria Creek

Santa Maria Creek is located within portions of Areas B and C. Runoff from the project site discharges to Santa Maria Creek. However, there is no direct discharge into Santa Maria Creek from the project site. Santa Maria Creek flows west to meet with Santa Ysabel Creek.

Santa Ysabel Creek

Santa Ysabel Creek is located northwest of the project site in the San Pasqual Valley and receives water from various canyons and water bodies within the watershed, including Santa Maria Creek. Santa Ysabel Creek continues to flow west to discharge into Lake Hodges and is part of the San Dieguito River Park.

Lake Hodges

Lake Hodges is located in the city of Escondido, north of the community of Rancho Bernardo. Santa Ysabel Creek drains into Lake Hodges, which flows into the San Dieguito River. This reservoir supports a variety of recreational activities. Lake Hodges is a part of the San Dieguito River Park. When full, the reservoir at Lake Hodges has 1,234 surface acres, a maximum water depth of 115 feet, and 27 shoreline miles.

San Dieguito River

The San Dieguito River receives water from Lake Hodges and flows into the San Dieguito Lagoon. The San Dieguito River is a part of the San Dieguito River Park and stretches west of Lake Hodges to the San Dieguito Lagoon and the Pacific Ocean.

San Dieguito Lagoon

The San Dieguito Lagoon is located in the city of Del Mar. It is not identified as a California Critical Coastal Area, designated Marine Managed Area, or a Storm Water Quality Protection

Area (formerly Areas of Special Biological Significance) according to the California Coastal Commission. The San Dieguito Lagoon receives water from the San Dieguito River and flows directly into the Pacific Ocean.

Pacific Ocean

The Pacific Ocean borders the entire coast of California and is the ultimate or final receiving water for all Cumming Ranch runoff. The Pacific Ocean at the mouth of the San Dieguito River is listed as a 303(d) impaired water body for elevated coliform bacteria. Pollutants and oxygen depletion are particularly sensitive to this area due to restricted and intermittent tidal flushing.

Applicable Regulations and Policies

Several federal, state, and local agency databases have been established to regulate water quality. The federal databases are regulated by the USEPA. State databases are regulated by State of California agencies and local databases are regulated by County of San Diego agencies.

Clean Water Act

The CWA was designed to restore and maintain the chemical, physical, and biological integrity of the waters in the United States. The CWA also directs states to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from nonpoint sources. The USEPA has delegated responsibility for implementing portions of the CWA to the State Water Resources Control Board (SWRCB) and the RWQCBs, including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program is a set of permits designed to implement the CWA; these permits apply to various activities that generate pollutants with potential to impact water quality.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires the USEPA to publish water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to

supplement numerical standards. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which the USEPA has published water quality criteria, and which reasonably could be expected to interfere with designated uses of a water body. The regulations of the CWA are applicable to the project because new impervious surfaces would be created with development of the project that could create runoff and storm water.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and groundwater) and directs the RWQCB to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Water Quality Control Plan for the San Diego Basin (9) is designed to preserve and enhance the quality of water resources in the San Diego Region for the benefit of present and future generations. The purpose of the plan is to designate beneficial uses of the Region's surface and groundwater, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) from the RWQCBs. Land and groundwater-related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits. This regulation is applicable to the proposed project due to new impervious surfaces and associated surface water runoff as well as a new source of domestic wastewater.

Local Regulations

County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance

The County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance is designed to protect the health, safety, and general welfare of San Diego County residents; to protect water resources and to improve water quality; to cause the use of management practices by the County and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the state; to secure benefits from the use of storm water as a resource; and to ensure the County is compliant with applicable state and federal law. This

ordinance applies to the project because of the creation of impervious surfaces with the residential development that could impact the amount of storm water generated on the project site. This ordinance seeks to promote these purposes with the following:

1. Prohibiting polluted non-storm water discharges to the storm water conveyance system;
2. Establishing minimum requirements for storm water management, including source control requirements, to prevent and reduce pollution;
3. Establishing requirements for development project site design, to reduce storm water pollution and erosion;
4. Establishing requirements for the management of storm water flows from development projects, both to prevent erosion and to protect and enhance existing water-dependent habitats;
5. Establishing standards for the use of offsite facilities for storm water management to supplement onsite practices at new development sites; and
6. Establishing notice procedures and standards for adjusting storm water and non-storm water management requirements where necessary.

County of San Diego Grading Ordinance

The County of San Diego Grading Ordinance is designed to protect water resources and water quality; to cause the use of management practices by the County and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the state; and to ensure the County is compliant with applicable state and federal law. Though the proposed project has been designed to use minimal grading, the grading ordinance is still applicable because some grading would occur on the project site for development. This ordinance seeks to promote these purposes with the following:

1. Requiring the preparation and process of a grading plan for the site grading and proposed storm drains;
2. Requiring hydrology and hydraulic calculations for the proposed storm drains;
3. Sizing rock riprap energy dissipators for any storm drains to reduce velocities to nonerosive velocities;
4. Requiring a SWPPP for any ground disturbance greater than 1 acre and a Notice of Intent (NOI) to be filed with the RWQCB;

5. Preparing erosion control plans to show appropriate BMPs to be installed and maintained during the course of construction as listed in the Storm Water Management Plan;
6. Preparing landscape and irrigation plans for all slopes greater than 15 feet high that will be a part of the grading plan set;
7. Submitting a Storm Water Management Plan and Storm Water Maintenance Plan for review by the County;
8. Issuing a grading permit prior to any site clearing or grading;
9. Requiring the establishment of vegetation on all slopes greater than 3 feet high before grading is signed off to prevent slope erosion after grading is complete;
10. Requiring weekly site visits by the civil engineer of record during the course of construction to observe the BMPs in place and make any recommendations (but not limited to) for upgrade and file a report with the County stating the observations and progress of grading;
11. Requiring the preparation of a site erosion control plan as maintained by the general contractor (grading contractor) during the grading operations; and
12. Installing post-construction BMPs prior to the acceptance of the grading by the County.

4.1.1.2 Guidelines for the Determination of Significance

The guidelines for determination of significance for hydrology and water quality are primarily based off of the CEQA Guidelines and were specified to include compliance with local regulations. The project would have a significant adverse effect on the issue of hydrology and water quality if the project would:

1. not conform to the goals and requirements of the applicable federal, state, or local regulations, including, but not limited to, the CWA, the Porter-Cologne Water Quality Act, County of San Diego Revised Grading Ordinance, County of San Diego Watershed Protection Ordinance, Stormwater Management, and/or Discharge Control Ordinance by:
    a. contributing direct additional pollutants for which the receiving water body is already impaired as listed on the CWA Section 303(d) list;
    b. creating direct substantial new sources of polluted runoff, including the addition of impervious surfaces that would result in increased runoff of polluted storm water;

c. causing or contributing to the exceedance of applicable state or local surface or groundwater receiving water quality objectives or degradation of beneficial uses;

2. directly alter any drainage in a manner that would result in substantial erosion or siltation onsite or offsite or result in flooding onsite or offsite by:

   a. placing housing within a 100-year flood hazard area;

   b. placing structures that would impede or redirect flood flows within a 100-year flood hazard area;

   c. exposing people or structures to a significant risk of loss, injury, or death involving flooding directly or cumulatively;

3. create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems directly or cumulatively; or

4. significantly contribute to a cumulatively considerable increase in storm water runoff originating from the project site.

Consideration of these thresholds is provided in the following section under three generalized headings: drainage and hydrology, water quality, and flooding.

4.1.1.3 Analysis of Project Effects and Determination of Significant Impact

Drainage and Hydrology

The project site is 682.6 acres with the entire 2.6 square mile drainage basin through the site having an approximate peak flow rate of 3,500 cfs for the 100-year storm event. Runoff rates were based upon designated curve numbers from the San Diego County Hydrology Manual (June 2003) for both predevelopment and post-development conditions. The Hydrology/Drainage Study (Snipes-Dye 2010a) calculated a minimal increase in runoff between predevelopment and post-development conditions. Predevelopment conditions were based upon the existing agricultural land use. There would be a minimal increase in peak discharge with the development of the project site; however, this small increase would not significantly modify the hydrology or drainage of the site based on lengthened flow paths and a reduction of slope due to the creation of building pads and improved quality of vegetative cover, which provides for enhanced infiltration of surface storm discharge. The runoff from the proposed project with the development of the project site into 125 single-family residences is expected to be at or below predevelopment conditions. Guidelines 1, 2, and 3 would not be exceeded. Therefore, the

proposed project would result in a ***less than significant*** impact related to drainage and site hydrology.

Water Quality

The property site is a part of the Santa Maria Valley Hydrologic Area. This area is not listed on the 2006 list as an impaired waterbody, although the Pacific Ocean/San Dieguito River is impaired. Thus, no identified pollutants and stressors are known at this point in time that impact the Santa Maria Valley, but they exist further downstream from the project site.

The Cumming Ranch property does not discharge directly into a receiving water. All anticipated project pollutants would be treated onsite by appropriate site, source or treatment control BMPs, prior to being discharged from the project site, as outlined in the Storm Water Management Plan (Snipes-Dye 2010b).

Water quality standards are set forth in applicable storm water permits and also serve to establish WDRs for controlling pollutants in the runoff from the project. Various pollutants affecting water quality are potentially generated with the project and can adversely affect water quality in a wide range of impacts. The potential pollutants listed for detached single-family residences according to the County of San Diego Storm Water Standards Manual include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. A summary of the general adverse environmental effects that can result from these pollutant categories related to the project construction activities and post-construction conditions with impervious surfaces is provided in Table 4-3.

Project construction could result in polluted runoff, which may have short-term impacts on surface water quality through activities such as grading, stockpiling of soils and materials, concrete pouring, painting, and asphalt surfacing. Pollutants could impact water quality if they are washed offsite by storm water or non-storm water, or are blown or tracked offsite to areas susceptible to washoff by storm water or non-storm water. Sediment is the most common pollutant associated with construction sites due to associated earth-moving activities and areas of exposed soil. Sediment that is washed offsite can result in turbid waters in receiving waters, which can impact aquatic species. Sediment deposits can alter substrate and habitat as well as drainage courses. In addition, if appropriate BMPs are not implemented, the development of the project site could cause erosion downstream during the course of construction. Hydrocarbons such as fuels; asphalt materials; and oils, paints, and concrete slurries discharged from the project site could impact aquatic plants and animals downstream.

After construction, the pollutants that are expected to be generated from the introduction of impervious surfaces from the proposed project are sediment, trash and debris, and oil and grease. Sediment yield from the project would be reduced with a reduction of slope due to the creation of building pads, reduction of erodible surfaces with the creation of impervious surfaces, and improved quality of vegetative cover with lengthened flow paths, which provides for enhanced infiltration of surface storm discharge. All site discharges would sheet flow over naturally vegetated grades for an average of 100 feet in all directions surrounding each individual lot (Snipes-Dye 20010b). Impacts from sediment would be reduced to a negligible consideration due to the lack of concentrated flow and reduced overall flow energy from the site to well below erosive velocities.

All anticipated post-construction pollutants would be treated prior to being discharged from the project site. The main form of treatment would be vegetated swales surrounding each home and natural vegetation in the open space areas and buffers, which would serve as biofilters. Runoff from the roads and some small portion of the driveways shall be treated by vegetated swales adjacent to the roadways. The native site features would address potential issues of nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides (Snipes-Dye 2010b). Thus, these natural areas would provide for the filtration of pollutants and nonpoint discharge before the discharge reached any surface water body, or before the water infiltrated into the groundwater basin, and impacts would be less than significant to water quality would occur after project construction.

A SWPPP would be required and would be developed in compliance with General Construction Storm Water Permit and a WDID number shall be issued by the Regional Water Quality Control Board prior to the issuance of a grading permit by the County of San Diego. The SWPPP would include specific measures as well as standard construction BMPs to minimize potential water quality impacts during construction.

In summary, with the implementation of the Storm Water Management Plan (Snipes-Dye 2010b) and all measures required through the prepared SWPPP, the project would not result in the contribution of additional pollutants to surrounding water bodies after construction is complete. Because Guideline 1 has not been exceeded, the project would result in a ***less than significant*** impact related to water quality.

Flooding Hazards

Areas B and C are subject to significant flooding as depicted on the County's Flood Control Maps included in the Drainage Study (Snipes-Dye 2010a). However, no residential development

is proposed for Areas B and C. Residential development would occur only within Area A. The outside perimeter of a few residential lots, approximately 11, would be located within the delineated 100-year flood hazard area; however, no building pads are located within the limits of the lines of inundation. As part of the final map requirements, flowage easements would be placed over the portion of these lots within the 100-year flood hazard area. These flowage easements would restrict the construction of any facility or structure that could impede the flow of water through the area during a flood. Flood studies through the project site in the pre- and post-development conditions match at the point of confluence with the County's mapping. The runoff from the proposed project with the development of the project site would be at or below predevelopment conditions (Snipes-Dye 2010a) and, therefore, would not create flooding conditions. In addition, the development of the project would not alter the flow paths of the current swales with appropriate BMPs outlined in the Storm Water Management Plan (Snipes-Dye 2010b). Therefore, Guidelines 1 and 2 would not be exceeded and the proposed project would result in a ***less than significant*** impact related to flooding hazards.

4.1.1.4 Cumulative Impact Analysis

Water quality and hydrology impacts can have widespread effects throughout an entire watershed, hydrologic unit, and additional downstream locations. For this reason, the study area for analysis of potential cumulative impacts to water quality and hydrology includes the entire cumulative project list encompassing all of the Ramona Community Planning Area.

Drainage and Hydrology

Urban development within the Ramona Community Planning Area would increase impervious areas and consequently increase storm water runoff. These increases could result in flooding, drainage systems capacity issues, and erosion problems. However, most development projects are subject to NPDES regulations, which require addressing changes to hydrologic regime and mitigation for conditions of concern. In addition, most projects are reviewed by other jurisdictions for hydrologic impacts. Development of the cumulative projects would not create an increase of runoff or peak flow rates, rather conditions would be the same as predevelopment. Guideline 3 would not be exceeded. Therefore, a significant cumulative drainage and hydrology impact would be ***less than significant***.

Water Quality

Urban development would increase impervious areas and activities that generate pollutants and consequently could result in additional impacts to receiving waters in the San Dieguito

Hydrologic Unit. Most development projects are subject to NPDES regulations, which require that source control and nonpoint source BMPs be employed to control potential effects on water quality and that storm water quality control devices be incorporated into storm water collection systems to collect sediment and other pollutants. BMPs for construction activities, post-construction activities, and treatment control in compliance with applicable regulations would be incorporated for cumulative projects. Guidelines 3 and 4 would not be exceeded and cumulative impacts would be ***less than significant***.

Flooding Hazards

Some erosion and flooding problems occur naturally within the watershed. Potential significant impacts from cumulative projects would not occur due to required drainage controls. Overall, many of the cumulative projects are lot subdivisions and many others are located in the developed Ramona Town Center. These types of projects typically do not have the capacity to substantially change the overall hydrology of an area and result in flooding hazards as described in Guideline 3. Therefore, Guideline 3 would not be exceeded and cumulative impacts would be ***less than significant***.

4.1.1.5 Conclusions

Development of the proposed project would result in similar hydrologic conditions after project construction, when compared to preconstruction hydrologic conditions. Large areas of pervious open space would be preserved throughout the development footprint which would act as natural biofilters and all existing drainages throughout the site would be maintained. With implementation of the Storm Water Management Plan (Snipes-Dye 2010b) and a SWPPP, the project would achieve adequate water quality for stormwater runoff and Guidelines 1, 3, and 4 would not be exceeded. Impacts related to flooding would be less than significant without mitigation and Guideline 2 would not be exceeded. Therefore, hydrology and water quality impacts would be less than significant.

4.1.2 Hazards and Hazardous Materials

This section evaluates the potential for hazards and hazardous materials to affect public health and safety during the construction and operation of the proposed project. Hazardous materials are generally substances that by their nature and reactivity have the capacity of causing harm or a health hazard during normal exposure, accidental release, or mishap. They are characterized as being toxic, corrosive, flammable, reactive, an irritant, or a strong sensitizer.

Hazards associated with the proposed project include fire hazards, proximity to the Ramona Airport, and chemical exposure related to the historic use of the property for agriculture. Flooding risks are addressed in Section 4.1.1, Hydrology and Water Quality.

A Phase I Environmental Site Assessment (ESA) was conducted by GeoSoils, Inc. and a report was completed on June 30, 2006 (GeoSoils 2006a; Appendix I). As recommended in the Phase I ESA, a limited agricultural residue survey was conducted by GeoSoils, Inc. and was completed on June 30, 2006 (GeoSoils 2006b; Appendix J).

4.1.2.1 Existing Conditions

Hazardous Materials

The property is currently vacant and undeveloped. The presence of asbestos, lead, or lead paint is typically associated with building structures; however, there are no buildings located on the project site. Portions of the site are currently used for cattle grazing and growing oat hay. There are two water wells located on the property (one of the wells has two separate shafts). A few trash and debris piles have been removed from the project site and disposed offsite according to proper protocol. The site assessment revealed no evidence of recognized environmental conditions from the trash and debris within the project property. No evidence of visible surficial staining on the property or onsite hazardous materials and waste and/or petroleum contamination has been observed (GeoSoils 2006a). There are no signs of underground storage tanks, above ground storage tanks, or known storage of hazardous chemicals located on the property. Based on an interview with the previous landowners, no known underground storage or above ground storage tanks have been located on the property. In addition, there are no uses observed on the properties surrounding the project site that appear to be contributing significant hazardous waste/materials and/or petroleum contamination to the project site (GeoSoils 2006a).

A small gun club, also referred to as the Palomar Sportsman's Club, was located on the east side of Area A and was used from approximately 1956 to 1980. The gun club consisted of a shotgun range for skeet and trap shooting as well as a rifle/pistol range. Lead pellets and expended bullets remained on the surface, or within a depth of 3 inches from the surface, until 1994–1997 when a voluntary cleanup was performed on both range areas. A total of 21.2 fifty-five-gallon drums of recyclable lead, empty shell casings, and related materials were removed and transported to an authorized recycling facility by the cleanup contractor. Additionally, approximately 16 tons of spoil materials from the cleanup process (fine soils and lead fragments) were removed, transported, and disposed of in a hazardous waste landfill by Laidlaw Environmental Services, Inc. under an EPA manifest. Soil sampling and testing were performed by GeoSoils and tests

indicate that no downstream migration of lead or other metals occurred (GeoSoils 2006a). No residential lots are proposed within the former range areas.

A database records search was conducted by GeoSoils, Inc. on May 21, 2004, and included a 2-mile-radius search. No permitted underground storage tanks or above ground storage tanks were listed on the project site or within the surrounding vicinity. The database search also did not report any unauthorized releases of hazardous materials on or near the site. No solid waste landfills were reported in the radius search. No oil and gas fields are located in the immediate vicinity of the project site. A review of historical aerial photographs was conducted on June 4, 2004, at the County DPLU office. In addition, a review of the U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map was conducted. No surficial evidence of petroleum contamination and/or hazardous waste was observed immediately adjacent to or within the project property (GeoSoils 2006a).

Fire Hazards

Fire protection services are controlled by the RMWD, which governs the Ramona Fire Protection District. The fire district boundaries correspond to the RMWD boundaries. The RMWD fire protection service area includes the Ramona Town Center, San Diego Country Estates, the Highland Valley region, and various other outlying areas. In 1993, the RMWD entered into a contract with the CAL FIRE to provide fire and paramedic personnel to the RMWD. These two agencies primarily handle wildland fires and jointly operate an air attack base at the Ramona Airport. There are no buildings located on the project site; thus no structural fire threat exists. Fire stations servicing the project area are included in Table 4-4. Fire protection services for the proposed project are discussed in greater detail in Subchapter 3.6, Pubic Services and Recreation.

Wildfires are prevalent during the dry summer months in the northern and eastern portions of San Diego County. The project site is located in the northeastern region of the county. Native and nonnative grassland as well as Diegan coastal sage scrub to over a mile in depth occurs within the northern project area and to the north of the project boundary. The areas surrounding the western, eastern, and southern boundaries of the project site include nonnative grassland, eucalyptus, and small ranches typical of wildland urban interface as structures and flammable vegetation exist in the same area.

The Fire Protection Plan (Scott Franklin Consulting 2010, Appendix K) analyzes the wildfire potential for the project area with various fuel models for the summer and fall/winter catastrophic wildfire conditions. These two catastrophic wildfire conditions would reflect how fire moves through grass and brush found onsite and offsite and through surface litter. Table 4-5

summarizes the analysis for the fire spread models and catastrophic wildfire conditions related to the project site. These fire-spread models are utilized to indicate the amount of flame propagation that would exist under extreme fire weather conditions. Spotting distance is the distance a burning branch, leaf, or twig will carry in a wind-driven fire. Ignition component is an indicator of the flammability of the fuel and is measured in percent. A probability of ignition above 60 percent is considered severe. All ignition components used in the Cumming Ranch scenario displayed a 100 percent ignition component, reflecting a "worst case" wildfire scenario. The predominant fuel found on the project site and surrounding areas is Fuel Model 1 and the shrub areas are represented with Fuel Models 2 and 6.

As previously indicated, existing risk of wildfire to the project area is significant. The project site also has potential for catastrophic wildfire. These conditions are illustrated by the different model outputs summarized in Table 4-5, which attempt to typify the characteristics of a likely wildfire in the project area.

Airport Land Uses and Associated Hazards

The Ramona Airport is located north of the project property on Montecito Road. The U.S. Navy built the Ramona Airport as an emergency landing field in 1943 and constructed the existing runway in 1945. In 1956, the airfield was conveyed to the County of San Diego and 2 years later the U.S. Forest Service (USFS) and CAL FIRE created a joint Air Attack Base for firefighting out of the Ramona Airport. A parallel taxiway, a transient aircraft parking apron, runway extension, sewer lines, and air traffic control tower were constructed in the following decades. The Ramona Airport is the third busiest facility in the County's system with approximately 130,000 operations each year.

The Ramona Airport Land Use Compatibility Plan (Compatibility Plan) was adopted in December 2006 by the San Diego County Airport Land Use Commission. The purpose of the Compatibility Plan is to promote compatibility between the airport and the land uses in the surrounding area. The Compatibility Plan provides for the orderly growth of the Ramona Airport and the surrounding area and safeguards the general welfare of the inhabitants within the vicinity of the airport and the public in general. The Compatibility Plan addresses potential airport compatibility impacts related to exposure to aircraft noise; land use factors that affect safety both for people on the ground and the occupants of aircraft; protection of airport airspace; and annoyance and other general concerns related to aircraft overflights. The Cumming Ranch project site is directly south of the Ramona Airport and is within the Airport Influence Area (Review Area 1 and Review Area 2) as designated in the Compatibility Plan.

Applicable Regulations and Policies

Several federal, state, local agency databases have been established to regulate hazardous wastes. The federal databases are regulated by the U.S. Environmental Protection Agency (USEPA). State databases are regulated by State of California agencies and local databases are regulated by County of San Diego agencies. In addition, there are various local applicable policies and guidelines related to wildland fire hazards and fire protection. Many of the hazardous material regulations and programs listed below pertain to the proposed project because the site has been historically used for a gun range and for agriculture uses, which can involve the use of hazardous chemicals in the form of pesticides, herbicides, etc. and may sometimes include the storage of those chemicals onsite. Other regulations related to fire safety and standards are applicable to the proposed project due to the risk of wildland fires throughout the rural area.

Federal

Resource Conservation and Recovery Act Program

The USEPA Resource Conservation and Recovery Act (RCRA) Program was enacted in 1976 and amended in 1984. The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. Other goals of RCRA include conserving energy and natural resources by recycling and recovery; reducing or eliminating waste; and cleaning up waste that may have been spilled, leaked, or improperly disposed.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was created in 1980 to tax chemical and petroleum industries, but it also provides federal authority through the USEPA to respond to the release or threatened release of hazardous substances that could endanger the public or the environment. CERCLA provides funding and enforcement to clean up hazardous waste sites created in the past to respond to hazardous substance spills.

Federal Aviation Administration, 14 CFR Part 77 - Objects Affecting Navigable Airspace

Federal Regulation Title 14, Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for evaluating the effect of the construction or alteration on operating procedures, determining the potential hazardous effect of the proposed construction on air navigation, identifying mitigating measures to enhance safe air navigation, and charting of new objects. Notification allows the FAA to identify potential

aeronautical hazards in advance thus preventing or minimizing the adverse impacts to the safe and efficient use of navigable airspace. Once the FAA has completed an aeronautical study, a determination is made regarding the impact to air navigation. One of three responses is typically issued: No Objection (the subject construction did not exceed obstruction standards and marking/lighting is not required); Conditional Determination **(**the proposed structure would be acceptable contingent upon implementing mitigating measures); or Objectionable (the proposed structure is determined to be a hazard).

State

California Environmental Protection Agency

California Environmental Protection Agency (CalEPA) was created in 1991 and its mission is to restore, protect, and enhance the environment to ensure public health, environmental quality, and economic vitality. The CalEPA's Department of Toxic Substances Control (DTSC) goal is to protect the environment and the public from exposures to hazardous wastes.

Local

San Diego County Department of Environmental Health, Hazardous Materials Division

The County's Hazardous Materials Division is certified and responsible for regulating hazardous materials, hazardous wastes and tiered permitting, medical wastes, and underground storage tanks.

Consolidated Fire Code, County of San Diego Ordinance No. 9669

The County of San Diego Consolidated Fire Code prescribes regulations in the unincorporated territory of San Diego County for the protection of public health and safety, requiring a permit and inspection for the installation or alteration of systems, defining certain terms, and establishing minimum regulations (County of San Diego 2004e). These regulations are applicable for the erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, equipment use, and maintenance of buildings and structures, including the installation, alteration or repair of new and existing fire protection systems and the inspection thereof, and providing penalties for the violation. This Fire Code adopts the County of San Diego Amendments and the fire code portion of the California Building Standards Code, including Divisions I-A through VI-K inclusive, except for Appendix IIF and III-B, the Uniform Fire Code (2000 edition) and the Uniform Fire Code Standards (2000 Edition) published by the Western

Fire Chiefs Association, and the National Fire Protection Association Standards 13 & 13D, 1999 Edition.

County of San Diego Ordinance No. 9670

The purpose of Ordinance No. 9670 is to adopt the 2001 California Building Code and to amend the San Diego County Building Code to include measures that increase the likelihood of a building or structure to withstand intrusion by fire (County of San Diego 2004f). Building elements addressed include building design and construction methodologies that use fire resistant building materials and provide protection of structure projections including porches, decks, balconies and eaves, and structure openings including attic and eave vents and windows, with the intent of resisting the intrusion of a wildland or similar exposure fire. The Fire Authority Having Jurisdiction (FAHJ) is the designated entity providing enforcement of fire regulations as they relate to planning, construction and development. The FAHJ may also provide fire suppression and other emergency services.

Ramona Community Plan

The Ramona Community Plan includes a Public Facilities, Service and Safety Element. This element addresses the public facilities and services provided in the Ramona area by several agencies. The public facilities and services include electricity and telephone services, schools, fire and police protection, water and sewer services, and libraries. All public service agencies will be able to use the Ramona Community Plan as a basis upon which to forecast their expansion needs.

The Public Facilities, Services and Safety Element of the Ramona Community Plan includes a public safety goal, which states to

> "*provide maximum protection to residents of the planning area from natural hazards such as earthquakes, food, and fire, and provide adequate police protection and other emergency services*."

Memorandum of Understanding between USFWS, CDFG, CAL FIRE, San Diego County Fire Chief's Association, and the Fire District's Association of San Diego County

The purpose of this Memorandum of Understanding (Memorandum 1997) is to establish guidelines by which the CAL FIRE, San Diego County Fire Chief's Association, and the Fire District's Association of San Diego County can continue to protect lives and property from the

threat of fire by requiring the abatement of flammable vegetation pursuant to State Law, County and District ordinances, and Cities' municipal codes and to establish a cooperative mechanism whereby the USFWS and the CDFG may assess, minimize, and help account for potential adverse impacts to sensitive species and habitats resulting from vegetation abatement activities.

Ramona Airport Land Use Compatibility Plan

As described above, the Compatibility Plan for the Ramona Airport sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to land owners in their design of new development. As the area generally surrounding the Ramona Airport is unincorporated, the Compatibility Plan is, at this time, primarily applicable to the County as it prepares land use plans and reviews development proposals within its jurisdiction. Private parties are subject to the provision of the Compatibility Plan either directly or as implemented in plans and zoning of the County.

4.1.2.2 Guidelines for the Determination of Significance

The significance determination guidelines were based upon Appendix G of the CEQA Guidelines. The guidelines were specified to the project based on the local environment and surroundings, such as proximity to the Ramona Airport and use of the site and general area for agricultural purposes. The project would have a direct or cumulative significant adverse effect on the issue of hazards if the project would:

1. expose people to elevated levels of hazardous chemicals from past uses on the project site or current uses adjacent to the project site;
2. expose people or structures to a significant risk of loss, injury, or death involving wildland fires or conflict with applicable fire safety codes and regulations; or
3. conflict with safety regulations related to the Ramona Airport or result in a safety hazard for people residing or working in the project area due to the proximity of the Ramona Airport.

4.1.2.3 Analysis of Project Effects and Determination of Significant Impact

Hazardous Materials

Implementation of the project would not involve the use, transport, exposure, or disposal of hazardous materials beyond those typically used for construction. Although a gun range had

occupied the project site in the past, no residential lots are proposed within the former gun range areas. In addition, a records search based upon federal, state, and county hazardous waste lists and databases was conducted for the project and did not identify any sites within the search radius for each list and database.

Dry farming typically does not require the extensive application of pesticides/herbicides that might be required for other crops more prone to pest or weed infestations. Based upon chemical testing of near-surface soils on the project site, no detectable concentrations of restricted agricultural chemical residues were found and specifically no concentrations of compounds were reported to be greater than the detection limits for chlorinated pesticides, organophosphorous pesticides, and chlorinated herbicides (GeoSoils 2006b).

The proposed project would not conflict with Guideline 1 and would result in ***no impacts*** related to hazardous materials.

Fire Hazards

The wildfire risk analysis included in the Fire Protection Plan (attached in Appendix K) prepared for the project found that there is a significant risk of wildfire to the proposed project area due to continuous fuel supply surrounding the project area (Scott Franklin Consulting 2010). The analysis studied a worst-case wildfire scenario for the project site to determine the amount of flame propagation that would occur under extreme fire weather conditions. The results of the analysis were then used to determine measures appropriate to reduce the risk of catastrophic wildfire to the proposed development on the project site. The necessary measures to reduce wildfire risk are the basis for the Fire Protection Plan. The project would comply with the 5 minute travel time requirement for fire and emergency response as Fire Station 82 is located in the immediate project vicinity on Dye Road, approximately 0.5 mile from the project site.

The Fire Protection Plan addresses defensible space for fire suppression resources through fuel management zones as well as restrictions on highly flammable plant material. The plan also addresses issues such as infrastructure and structural fire protection, access, and water supply. All of the specifications and details of the Fire Protection Plan would be implemented as part of the project in order to provide adequate fire safety for the residential homes throughout the project site.

The project would be required to meet all current fire code requirements of the State of California as well as the County of San Diego. The project design features and requirements in the Fire Protection Plan meet or exceed those requirements. CC&Rs regarding the vegetation

management of the project site, adequate fuel management zones, infrastructure/structural fire protection systems with the water supply, roadway designs, and building designs are planned for the project.

Fire is a dynamic and somewhat unpredictable occurrence and there is no guarantee that injury or other loss will not result from a wildfire; however, implementation of the Fire Protection Plan would reduce the risk of wildfires through multiple means including vegetation management, structural requirements, water supply requirements, and other measures that exceed standard fire codes. Appropriate emergency access on and off of the project site has been developed in coordination with the Ramona Fire Marshall. Because the project would not conflict with applicable fire codes or create a substantial risk due to wildfires per Guideline 2, the project would result in a ***less than significant*** impact related to fire hazard.

Airport Hazards

The Compatibility Plan for the Ramona Airport shows that the development area (Area A) of the Cumming Ranch project would be located outside of the 55-60 dBA Noise Impact Zone, meaning that noise generated by airport operations would be below 55 dBA at future residences. The Compatibility Plan considers this noise level acceptable for residential development. The northernmost portion of the project site (Area C) would be located within higher decibel Noise Impact Zones; however, no residential development is proposed for that area as it would be designated as open space and no compatibility issues or hazards would result.

A portion of the Cumming Ranch site located generally north of Highland Valley Road, including areas of residential development, would be within Safety Zone 6. Residential development within Safety Zone 6 is described in the Compatibility Plan as an acceptable land use. Other uses throughout this area, such as trails, the trail staging area in Area C, and open space would also be compatible with Safety Zone 6. The northeastern most corner of Area C is within Safety Zones 2 and 3; however, no project development would occur within these Safety Zones and the area would continue to be preserved as open space.

The Cumming Ranch project site is also within the area shown for airspace protection surfaces and within policy boundaries requiring Avigation Easement Dedications and Overflight Easement Dedications. The location of the project within these areas does not create a compatibility conflict or hazard if certain conditions are met as described in more detail in the following paragraph.

A letter dated February 13, 2004, from the San Diego County Regional Airport Authority to the County of San Diego (San Diego County Regional Airport Authority 2004a and 2004b) stated that it approved the Cumming Ranch project under certain conditions as found in Resolution 2002-0012 dated February 2, 2004. These conditions do not pertain to hazards, but rather interior sound, aviation easements, and compliance with FAA Part 77 requirements, which address standards for aircraft operations and air safety and navigation. Specifically, FAA Part 77 addresses obstruction standards for building structures and infrastructure. Building structures unrelated to airport facilities are to be at a height no greater than 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport and 15 feet for roadways (FAA Section 77.23). Prior to issuance of building permits, the appropriate notification and determination from the FAA would be required to show that proposed residential structures would not conflict with any FAA safety regulations**.** The FAA completed an aeronautical study regarding the proposed windmill to be located at the trail staging area and concluded that the structure would not exceed obstruction hazards or be a hazard to air navigation and issued a Determination of No Hazard to Air Navigation (FAA 2009).

The project would not be in conflict with safety regulations related to the Ramona Airport or result in a safety hazard for people residing and working within proximity of the airport. The project would not conflict with Guideline 3 and implementation of the project would result in a ***less than significant*** impact related to airport hazards.

4.1.2.4 Cumulative Impact Analysis

While some hazardous conditions are very site specific, other types of hazards, such as wildfires or hazardous materials contamination have the potential to impact a widespread area. Because of the possibility for large areas to be affected by hazardous conditions, the entire Ramona Community Planning Area was considered for the cumulative impact analysis.

The residential project would not utilize, transport, expose, or dispose of hazardous materials that may impact the surrounding community. Development of residential units on the project site would also not result in additional hazardous materials being introduced to the Ramona Community. A large portion of the cumulative projects in the Ramona community are residential subdivisions or similar actions that would not generate or expose people to hazardous materials either during construction or operation. Therefore, there would be no conflict with Guideline 1 and ***no cumulative impact*** from hazardous waste/materials, contamination, and agricultural residue from chemicals and pesticides would occur with the implementation of the cumulative projects.

With increased development in the region, additional fire protection and emergency service demand would be generated. All new projects must meet County General Plan travel times, which would keep services in line with the demand. The County's current fee program would fund services for new developments. In addition to the contribution to the fee program, similar fire and vegetation management plans would be required for future projects. In addition, the placement of a housing development at the Cumming Ranch site would not increase wildfire hazards for any adjacent properties. There would be no conflict with Guideline 2 and cumulative impacts related to wildfire hazards would be ***less than significant***.

Projects located in the area surrounding the Ramona Airport would be required to be consistent with and adhere to the Compatibility Plan. For these reasons, there would be no conflict with Guideline 3 and cumulative impacts related to airport safety would be ***less than significant***.

4.1.2.5 Conclusions

As described above, the proposed project would not result in a significant hazard impact. No detectable amounts of hazardous chemicals were found to be present on the project site. The potential for wildfires to the residential development would be less than significant through implementation of the Fire Protection Plan, including buffers, appropriate landscaping in specifically defined areas, and other safety measures to protect the development. The Ramona Airport is located at a safe distance to the north and there would be no safety concerns for the residential development or the airport operations. For these reasons, all potential safety and hazard-related impacts would be less than significant without mitigation.

4.1.3 Agricultural Resources

This section evaluates the potential loss of agricultural resources due to implementation of the proposed project and summarizes information provided in the Agricultural Analysis Report prepared for this project (AECOM 2010c; Appendix L). Included is an explanation of the existing and previous agricultural uses on the site and surrounding areas, the various criteria and methods used to evaluate the significance and quality of agricultural land with a potential to be affected, and the analysis of the effect of the Cumming Ranch project on agricultural resources.

4.1.3.1 Discussion of Existing Conditions Relating to Agricultural Resources

Current and Historic Agricultural Use

The Cumming Ranch property has historically been used primarily for cattle grazing and farming since the 1950s. Farming consisted of dry farming and grazing and these agricultural activities

have remained generally the same to date. Currently, there is no irrigation on the project site and the property has not been irrigated in the past. The project site is not under a Williamson Act contract.

Currently, Areas A and B are used as farmland. Farming practices onsite rotate between nonirrigated oat hay crops and cattle grazing. Approximately 400 acres of the 682.6-acre project site are currently in agricultural use. Farming activities occur on approximately 220 acres of Area A and approximately 180 acres of Area B. Area C is not currently used as farmland due to the vernal pools on that portion of the property and the 22.2 acres of conservation easements that exist in that area. There are no buildings or structures on the site with the exception of two windmills and remnants of cattle corrals. Natural vegetation occurs on portions of the site that are not conducive to agriculture, such as rocky outcroppings, drainages, and steep slopes.

Agricultural operations occur on the project site throughout the year. The farming activities vary depending on the season; however, the rotation of these activities is generally consistent from year to year. Below is a description of the agricultural operations that take place on the site, broken down into four general categories. Information regarding ongoing agricultural practices on the Cumming Ranch site was provided by Jack Dempsey who is currently farming the property (Dempsey 2009). Table 4-6 shows the agricultural activities which occur on the project site throughout each year.

Oat hay crops that are grown on the property are either harvested or grazed-off, dependent on the crop condition. The majority of oat-hay harvested on the Cumming Ranch property is used for onsite supplemental cattle feed during periods of low grazing. Table 4-7 summarizes the oat hay crop production on the project site for the past 7 years as well as the weather conditions for each year.

The cattle that graze the project site for a few months spend the remainder of the year on the adjacent Hardy Ranch. The site sustains a maximum of 40 to 50 head of cattle on an annual basis. In order to run cattle, the property owner must carry liability insurance.

Over the past two decades, the economics of relatively small-scale dry farming has limited the viability of continued agricultural uses on the project site. It is becoming increasingly difficult to operate a small-scale dry farming operation and cattle grazing and maintain economic productivity and profit. In addition, the overall suitability of the site for farmland has declined as areas surrounding the project site have filled in with urban uses, such as the Ramona Town Center adjacent to the east and other surrounding residential areas. For this reason, shifting to a

more intense agricultural use at this location would not be practical, nor is it consistent with the planned land use of the site in the Ramona Community Plan.

The formation of the Ramona Grasslands Preserve is currently underway with the recent purchases of adjacent and nearby land in the area. The areas purchased for inclusion include all, or portions of, the Hardy Ranch, Cagney Ranch, Oak County Estates, Davis Ranch, and Gildred properties. The Cumming Ranch, specifically Areas B and C, are considered to be an important piece of the grasslands, providing connectivity to the areas already purchased for the preserve. The majority of the proposed grassland area is to the northwest of the project site.

Surrounding Agricultural Use

The agricultural interface surrounding the project site consists of generally nonintensive small family farming activities, such as raising 4-H type animals. Areas surrounding the southern portion of the site are generally developed with residential homes that may have small-scale animal-keeping and farming operations. A similar interface occurs along the western border of the site. Along the northwestern portion of the project site is a generally undeveloped area, which is currently used for cattle grazing. East of Areas B and C is the Ramona Town Center and SMWWTP where development is more urban and dense and generally no farming practices take place. In the southeast corner of the project site, along the SR 67 corridor, are additional large parcels used for farmland. A series of rabbit houses are located to the east of the project. Some parcels between the project site and SR 67 are generally used for cattle grazing, and southeast of SR 67 there are additional grazing lands and some areas of crop production. In general, large-scale, commercial livestock or crop production does not occur on lands surrounding the project site.

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) monitors and documents land use changes that specifically affect California's agricultural land. The FMMP program classifies the land's suitability for agricultural production, which includes physical and chemical characteristics of soils, as well as specified land use characteristics. The FMMP classifies land as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land.

The Cumming Ranch project site does not contain lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The San Diego County Important Farmland Map (California Department of Conservation 2008) shows the majority of Area A north of

Highland Valley Road designated as Grazing Land. Within Area A south of Highland Valley Road, the property is generally classified as Farmland of Local Importance. The majority of Areas B and C are also classified as Farmland of Local Importance.

Applicable Regulations and Policies

This section contains applicable regulations and policies that are found in the Ramona Community Plan (County of San Diego 2002a), zoning ordinance, and other County ordinances.

Ramona Community Plan

The following are policies and recommendations contained in the Ramona Community Plan (County of San Diego 2002a) that are relevant and applicable to agriculture as it relates to the Cumming Ranch project.

Agricultural Land Use

The overall Agricultural Goal of the Ramona Community Plan is, "Maintain and enhance the future of agriculture in the planning area." Applicable policies are:

- The County will promote and preserve viable agriculture land uses within the Ramona Planning Area.
- The preservation and further establishment of agriculture preserves will be actively promoted by the County.
- Review the agricultural use and/or agricultural potential of land prior to consideration of residential development proposals.
- Encourage the protection of areas designated for agricultural activities scatter and incompatible urban intrusions.

Residential Land Use

The overall Residential Goal of the Ramona Community Plan states, "Maintain and enhance the existing rural atmosphere in the planning area while accommodating a gradual, orderly increase in residential development which is in harmony with the natural environment." Applicable policies are:

- The majority of residential lots in the planning area shall be of a size sufficient to accommodate the keeping of large animals.
- Maintain the existing rural lifestyle by continuing the existing pattern of residential and agricultural uses on large lots outside of the Town Center and San Diego County Estates.

San Diego County Zoning Ordinance

The San Diego County Zoning Ordinance (County of San Diego 2003) is applicable to all unincorporated areas of San Diego County. Currently, the Cumming Ranch site is zoned as a SPA (S88) and the surrounding areas are generally zoned as agriculture (County of San Diego 2004c).

County of San Diego Agricultural Enterprises and Consumer Information Ordinance

As part of the San Diego County Code of Regulatory Ordinances, the purpose and intent of the Agricultural Enterprises and Consumer Information Chapter is to define and limit the circumstances under which agricultural enterprises activities, operations, and facilities constitute a nuisance (County of San Diego 2000). This Chapter provides a procedure to enhance the County's ability to identify and evaluate the potential conflicts between a land use proposal and an agricultural enterprise when the land use proposal is adjacent to, or in proximity of, an agricultural enterprise. To accomplish the procedure of evaluating potential land use conflicts, the Chapter limits the definition of an agricultural nuisance by stating:

> No agricultural enterprise, activity, operation, or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after the same has been in operation for more than three years if it was not a nuisance at the time it began (County of San Diego 2000).

4.1.3.2 Guidelines for the Determination of Significance

Several resource documents provide guidance for the evaluation of potential impacts to agricultural resources. These include the FMMP (California Resources Agency), the San Diego Agriculture and Consumer Information Ordinance, the Ramona Community Plan, the California Public Resources Code (PRC Section 21000[b] and [c]), and Appendix G of CEQA Guidelines.

The Cumming Ranch project would have a significant environmental impact on agricultural resources if it would:

1. convert important farmland including, but not limited to, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to developed land uses, precluding the future use of those lands for agricultural use;
2. conflict with existing General Plan policy or zoning for agricultural use, or a Williamson Act contract; or
3. result in the cumulatively significant impact to agricultural resources by making a cumulatively considerable contribution to the regional conversion of important farmland including, but not limited to, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance in the Ramona Community Plan area in a way that jeopardizes the long-term agriculture goals of the community.

4.1.3.3 Analysis of Project Effects and Determination of Significant Impact

Direct Impacts

Direct conversion of farmland occurs when an urban or other developed land use would replace agricultural uses or farmland. Methodologies for analysis are discussed in the Agricultural Analysis Report, Appendix L. Implementation of the proposed project would result in the direct conversion of land currently and historically used as farmland to residential use. The approximately 220 acres in Area A that are currently farmed would be developed with homes and areas of open space. Although animal keeping (e.g., horses) and small farming practices would be permitted on individual lots (consistent with County regulations and CC&Rs), ongoing farming and grazing would not be feasible. The approximately 180 acres in Area B that are currently farmed would remain as farmland and be made available by the owner for acquisition for the Ramona Grasslands Preserve. At the time of purchase for grassland preservation, dry-land farming could cease and a management plan would be developed. The management plan for that area may include continued grazing. Area C is not currently used as farmland and the land would continue to be preserved for onsite sensitive biological resources.

The following sections provide an evaluation of the significance of these changes in land use when considered against the Thresholds of Significance identified in Subsection 4.1.3.2.

Farmland Mapping and Monitoring Program

As previously discussed, the project site does not include Prime Farmlands, Unique Farmland, or Farmland of Statewide Importance, as classified and mapped by the FMMP. A majority of Area A north of Highland Valley Road is designated as Grazing Land while the area south of Highland Valley Road is generally classified as Farmland of Local Importance. For these reasons, the proposed project would not convert any lands designated as significant under the FMMP to developed land uses***. No impact*** would result to these farmland classifications as designated by the FMMP per Guideline 1.

Though the project site is not considered significant per the FMMP designations as discussed above, portions of the site, most prominently in Area A south of Highland Valley Road and Areas B and C, are designated as Farmland of Local Importance meaning the site could be a significant agricultural resource specific to the Ramona area. There is approximately 142 acres of land with prime soils interspersed throughout Areas A and B, which is about 35 percent of the 400 acres currently farmed. Though prime soils exist throughout the site, historically the site has not supported intensive agricultural production beyond dry row crops and grazing. No irrigation has been installed to facilitate increased agricultural productivity. Also, the adjacent development, including the Ramona Town Center and surrounding residential uses, as well as the vernal pool preserve in the northern portion of the site are additional limiting factors in increasing the onsite farming operations to make the project site a significant local agricultural resource. The Cumming Ranch property has historically been farmed for many years; however, there is no unique or considerable component of the farming history that makes this specific location important as a local agricultural resource. The land is not currently, nor has it historically, produced a crop that is important to the Ramona community's identity (i.e., flower fields in Carlsbad or poinsettias in Encinitas). In addition, the existing agricultural interface surrounding the project site is similar to that proposed by the project with small agricultural operations occurring within residential properties. The community has planned for the conversion of the Cumming Ranch site to developed uses as indicated by the designation of the site as a SPA in the Ramona Community Plan. For these reasons, the conversion of Farmland of Local Importance as designated by the FMMP is ***less than significant*** per Guideline 1.

Agricultural Zoning and Public Policy

Zoning

Currently, the Cumming Ranch site is zoned as a SPA (S88) (County of San Diego 2004b). The proposed project would be in conformance with the existing zoning for the site. Because the

project site is not zoned for agricultural use, there would be no agricultural zoning conflict from the land being used for purposes other than agricultural activities. Therefore, implementation of the project would be consistent with the existing zoning and ***no impact*** would result per Guideline 2.

Ramona Community Plan Policies

As outlined above, there are various policies in the Ramona Community Plan that relate directly to farmland and agriculture in the Ramona Community Planning Area. Overall, these policies support the maintenance and preservation of continued agricultural operations in the planning area. The evaluation of consistency with the Ramona Community Plan is intended to determine if the proposed project fits into the framework of goals that the County has adopted to guide future growth and development in the Ramona community.

As shown in Table 4-8, the project is consistent with the relevant policies of the Ramona Community Plan in relation to agricultural use in the planning area. Therefore, implementation of the proposed project would not be in conflict with Ramona Community Plan policies and ***no impacts*** related to agricultural planning policies would result per Guideline 2.

Land Use Designations

The Cumming Ranch site is designated in the Ramona Community Plan for both residential and industrial development. As indicated by these approved land use designations, development of the project site was not intended to include agricultural activities. The proposed project includes the removal of the industrial land use designation; only residential and open space designations would remain. The removal of the industrial designation on the project site would be beneficial to maintaining the rural character of the community and would reduce the intensity of development and other potential industry-related impacts on the site, as it would generally be replaced with open space designations. The site is not designated by the Ramona Community Plan for agricultural use; therefore, ***no impact*** or conflict with an agricultural land use designation would result with implementation of the project per Guideline 2.

Indirect Impacts

The proposed project has been designed to maintain and promote the rural atmosphere of the surrounding community. There is farmland in the vicinity of the project site; however, the area also supports many residential uses and other development. The project site is adjacent to the Ramona Town Center and the Ramona Airport. The placement of a residential development on

the project site would not segregate or divide an intensely farmed area, as the area surrounding the project site is developed with rural residential uses. Surrounding the project site, rural residential homes are typically on lots that allow for nonintensive agricultural uses, such as equestrian facilities and animal husbandry. Animal keeping would be allowed in accordance with County ordinances. The uses proposed for the project would be compatible to the surrounding land uses.

Open space areas would be integrated throughout the project to preserve unique features of the site and help maintain a natural aesthetic. The project also would not interfere, create barriers, necessitate modifications, inconvenience, or increase cost that would render farming of surrounding lands infeasible. These project features would help to reduce interface impacts with the existing developments surrounding the property. Because the project is designed to integrate with the surrounding property and existing community, it would not create a situation that would indirectly encourage the conversion of farmland to urban use.

The project would extend infrastructure throughout Area A of the project site. However, this infrastructure extension necessary to serve the residential component of the project would not create new opportunity for further development of nearby farmland as the surrounding areas are already developed with residential uses and the necessary infrastructure is in place to support those residential uses. Project implementation would not result in a demand on resources that would limit the continued viability of agricultural operation in the project vicinity. Therefore, development of the project site and the termination of existing dry-land farming would not encourage the conversion of surrounding farmland. Overall, implementation of the project would result in a ***less than significant*** impact related to potential indirect conversion of farmland per Guideline 1.

4.1.3.4 Cumulative Impact Analysis

A list of projects was compiled to analyze the potential cumulative impact of the loss of farmland through implementation of the proposed project as detailed in the Agricultural Analysis. This cumulative project analysis includes all the projects on that list which encompasses the majority of the Ramona Community Plan area because the rural character and identity of this area are so strong and important to local residents. As outlined in the Agricultural Analysis, Appendix L, this cumulative list was analyzed for projects that could potentially impact agricultural resources. An estimated 42 projects in the Ramona area have the potential to contribute to a cumulative loss of agricultural resources and could impact more than 800 acres. The majority of the projects on this list are subdivisions of existing residential lots into multiple lots. However, there are some

larger projects that would potentially require the conversion of farmland to residential or other urban use.

As described above, the Cumming Ranch project site does not contain Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as designated by the FMMP. A small area of Prime Farmland is located west of the project site at the southwest corner of the intersection of Highland Valley Road and Traylor Road. This area of Prime Farmland is approximately 1.25 miles west of the Cumming Ranch site. There are also a few small isolated areas of Unique Farmland designated in areas north of the project site. The majority of the land in the project area is designated as Grazing Land, Urban and Built-Up Land, Other Land, or Farmland of Local Importance. In the Ramona Community Planning Area, which is the area included in the cumulative analysis, there are larger areas of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland located in the western portion of the planning area. There are approximately 500 acres of Prime Farmland, 400 acres of Farmland of Statewide Importance, and 1,500 acres of Unique Farmland located throughout the Ramona Community Planning area in addition to many other acres of unclassified farmland. Though not all of these farmland acres would be converted with implementation of the cumulative projects, a portion would be developed into nonagricultural uses. Though some areas of important farmland, as designated by the FMMP, may be impacted by future development, many of the cumulative projects propose rural residential uses with larger lot sizes, similar to the proposed project. Agriculture often continues within these rural residential lots in a variety of ways, such as animal keeping, small orchards or row crops, or other small scale activities, This potential for continued agricultural operations within many of the cumulative projects reduces the possibility of cumulative impacts to agricultural resources in the Ramona area.

The Ramona Community Plan discusses the importance of farmland and agriculture to the local community. The Ramona area is historically known for its farming and ranching activities and lifestyle. The project site itself has historically been farmed since the 1950s. Though the project would eliminate some of the existing onsite agricultural uses, the project is designed to maintain the rural character of the area and allow for smaller agricultural activities, such as animal keeping, on residential lots within the project. The design of the project is based on preservation of the rural character of the area and maintaining the environmental benefits that currently result from the agricultural open space on the site. The project site is not planned for agricultural use as demonstrated by the zoning ordinance and Community Plan designations. Development surrounding the site has reduced the economical viability and feasibility of continued dry-oat hay farming on the project site. For these reasons, the conversion of the project site from agricultural use would not jeopardize the long-term agricultural goals of the community and this cumulative impact is ***less than significant*** per Guideline 3.

4.1.3.5 Conclusions

The project would eliminate farming on land which is currently being used for dry farming and grazing. Though used for agricultural purposes, the land is not considered to be prime farmland and is not zoned or designated for agricultural use. With the implementation of the project design features, such as the designated open space areas and large lot size, the project would maintain the integrity of the rural setting and be compatible with the community character of Ramona. Small family agriculture, such as animal keeping would be allowed within residential lots. As outlined throughout Subsection 4.1.3.4, implementation of the proposed project would have less than significant agricultural impacts through direct, indirect, or cumulative impacts per Guidelines 1, 2, and 3, and mitigation is not required.

4.1.4 Land Use and Planning

This section evaluates the potential land use and planning efforts of the proposed project. This section includes an explanation of the existing land uses on the Cumming Ranch site and the surrounding areas, the various plans and policies from applicable jurisdictions, and an analysis of the effects of the Cumming Ranch project related to land use and planning issues.

4.1.4.1 Discussion of Existing Conditions Relating to Land Use and Planning

Current Site Use

The Cumming Ranch property has historically been used primarily for cattle grazing and dry-land farming of oat hay. Portions of the site are still in agricultural production today as described below by individual area. Approximately 400 acres of the 682.6-acre project site are currently used as farmland.

Area A

The current land use on Area A is a rotation of nonirrigated oat hay farming and cattle grazing. Natural vegetation occurs on portions of the site that are not conducive to agriculture, such as rocky outcroppings, drainages, and steep slopes. On both sides of Highland Valley Road, farming practices occur on the majority of the land, with the exception of the undesirable areas described above. A series of dirt roads crisscross Area A, providing access throughout the area. Highland Valley Road bisects Area A from east to west. There are currently no structures on Area A. Remnants of an old cattle chute and a windmill are located in Area A; however, none of these items are operational or currently used.

Area B

This area is used almost entirely for farming, with similar practices to Area A, including dry oat hay farming and cattle grazing. Area B is generally a flat plain between the Santa Maria and Etcheverry creeks and is suitable for farming with the exception of the creeks and drainages, sensitive vernal pool area, and a few rocky areas along the southern boundary. There are no structures on Area B.

Area C

Area C is not currently in agricultural production due to the vernal pools on that portion of the property. There are 22.2 acres of conservation easements that exist on this 113.1-acre area. Because of the environmental sensitivity of this portion of the site, there are no current agricultural or other uses that occur within the area and no structures are located on Area C.

Surrounding Land Use

The pattern of adjacent land uses is varied and the general land use types are shown in Figure 4-3. To the north of the project site is the Ramona Airport. The Ramona Airport supports approximately 130,000 operations each year. CAL FIRE and the USFS jointly operate a fire attack base out of this airport. The project's northern boundary is along Airport Road and also coincides with the Ramona Town Center boundary. The area to the north and northwest is generally undeveloped, with the exception of the airport. This area is known for sensitive vernal pools. Areas adjacent to the northwest edge of the project site have been purchased for inclusion in the Ramona Grasslands Preserve.

Northeast and east of the project site (east of Areas B and C) is the developed portion of the Ramona Town Center. The town center boundary generally coincides with the eastern boundary of Areas B and C and delineates the more urban portion of Ramona. This area of Ramona is typically developed with single-family homes, typically 1 to 2 acres in size, with some areas of commercial/industrial uses. One of these industrial uses, the SMWWTP, is inset into the eastern boundary of Area B. This plant is designed to treat approximately 1 million gallons of wastewater per day.

In the southeast corner of the project site, along the SR 67 corridor, are generally large parcels of land that are either vacant or used for farming. Parcels between the project site and SR 67 are generally used for cattle grazing and southeast of SR 67 there is additional grazing and some areas of crop production. Small areas of single-family homes are also located southeast of SR 67.

SR 67 is a highly traveled road that provides access to Ramona and is the main thoroughfare through the community. Small commercial operations, such as nurseries and farming supply stores, are located along the SR 67 corridor.

Single-family homes continue across the southern boundary of the project (Area A) and also wrap around to the west side of the project site. These residences abut the project site and are generally 2 to 5 acres in size. Some homes have equestrian or other small animal keeping facilities on their property. There are a few single-family homes, north of Vorhees Lane, to the northwest of the project site that sit on large parcels, typically 5 acres or more, which support small equestrian or family farming activity. There are no large commercial farming operations in the vicinity of the project site.

Applicable Regulations and Plans

The Cumming Ranch project site is located within an unincorporated portion of San Diego County, within the Ramona Community Planning Area. The following policy documents govern development in this area and are applicable to the proposed project.

County of San Diego General Plan

The project site is currently designated as a SPA in the San Diego County General Plan as an Estate Development Area (EDA). However, there is currently no approved Specific Plan for the project site. According to the Regional Land Use Element of the General Plan, the EDA designation combines agricultural uses and low-density residential uses (County of San Diego 1995). Specific guidelines for development of the SPA are outlined in the Ramona Community Plan.

Ramona Community Plan

Similar to the San Diego General Plan, the Cumming Ranch site is designated by the Ramona Community Plan as the Cumming SPA (.25). The Ramona Community Plan includes specific guidelines and conditions for development of the Cumming SPA that allow both residential and industrial development. The plan's residential component allows 166 homes on lots ranging from 2 to 4 acres. The industrial component is not defined but is confined to an area south of the Ramona Airport and north of Santa Maria Creek (County of San Diego 2002).

County of San Diego Zoning Ordinance

As shown in Figure 4-4, the San Diego County Zoning Ordinance (County of San Diego 2003) is applicable to all unincorporated areas of San Diego County. All land; structures; and the construction, reconstruction, alteration, expansion, or relocation of any structures must conform to all regulations established in the Zoning Ordinance.

As shown in Figure 4-4, the Cumming Ranch site is zoned as a SPA (S88) (County of San Diego 2004c). Almost the entire area surrounding the project site is zoned as Agriculture, including both A70 and A72 zoning designations. The agricultural zoning extends into the Ramona Town Center as well as the residential areas developed in the vicinity. A small portion near the northwest corner of the site is zoned as a separate SPA (S88) and extends westward. The area to the north that encompasses the Ramona Airport is zoned as Industrial.

Resource Specific Plans

There are various other regional plans that have jurisdiction over the project site that contain policies and guidelines related to environmental impacts. As discussed in Subchapter 1.5, these plans include the RPO and Light Pollution Code. These resource Specific Plans are discussed in the appropriate issue area section, including Subchapter 3.1, Biological Resources; Subchapter 3.2, Cultural Resources; and Subchapter 3.4, Aesthetic and Visual Quality.

4.1.4.2 Guidelines for the Determination of Significance

As stated in the CEQA Guidelines, Section 15358(b), effects analyzed under CEQA must be related to a physical change in the environment. An incompatibility of a project with a plan or policy does not necessarily result in a significant environmental impact. The following significance thresholds focus on the potential for the project to result in environmental impacts. Thresholds were derived from CEQA Guidelines as well as applicable planning documents such as the County of San Diego General Plan and Ramona Community Plan. The project would have a significant adverse impact with regard to land use and planning if it would directly or cumulatively:

1. conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project, including but not limited to the San Diego County General Plan and Ramona Community Plan;

2. conflict with an adopted land use designation or intensity and result in indirect or secondary environmental impacts related to that conflict; or
3. result in land use incompatibilities that would result in indirect or secondary environmental impacts.

4.1.4.3 Analysis of Project Effects and Determination of Significant Impact

To fully evaluate potential land use and planning effects, all applicable policies in the Ramona Community Plan were considered. Due to the large number of policies that are applicable to the project, the policy analysis is provided in Appendix M, which includes a detailed analysis of whether the project is consistent with the policies of the Ramona Community Plan.

Inconsistency with SPA Guidelines

The project would be inconsistent with the Ramona Community Plan Land Use Policy 2 as summarized in Table M-1 in Appendix M. However, the project includes a GPA to slightly modify the existing guidelines and policies for the Cumming Ranch SPA. As discussed in Section 1.1.3, the proposed changes would remove the industrial element, reduce the number of homesites and reduce the required lot size, and delineate acreage that would be preserved as open space. These changes are compatible with the intent of the existing SPA standards and guidelines because they would continue to allow for orderly residential development on the site in a manner that is fitting with the community character of Ramona and the goals of the Community Plan. This change in the SPA guidelines would not generate additional environmental impacts but rather would likely reduce impacts that may occur if Area C was developed with industrial uses or if an additional 41 homesites were developed. With these amendments, the project would be compliant with the conditions of the Cumming Ranch SPA as outlined in the Ramona Community Plan. Impacts would be ***less than significant*** as a result of the proposed amendment per Guidelines 1 and 2.

Inconsistency with Planned Industrial Component of Cumming Ranch SPA

The guidelines in the Ramona Community Plan call for industrial use near the airport as part of development of this site. Conditions for development of the Cumming Ranch SPA specifically address industrial uses and include Conditions 3, 18, 19, 20, and 21 as summarized in Table M-2 in Appendix M. The project would be inconsistent with these conditions because there is no industrial development included in the project. The area proposed for industrial development in the Ramona Community Plan (Area C) is an environmentally sensitive area and currently has 22

acres of conservation easements onsite. As discussed in Section 1.1.3, the proposed GPA would remove the industrial element from the text of the Ramona Community Plan. This amendment to the SPA guidelines would not generate additional environmental impacts, but rather would likely reduce impacts that may occur if Area C were developed with industrial uses. Therefore, there would be ***less than significant*** impacts that would result from this proposed amendment per Guidelines 1 and 2.

Inconsistency with Required Lot Size

The proposed project would develop residential lots ranging in size from approximately 1 acre to over 3.1 acres with an average lot size of 1.5 acres. This would be inconsistent with policies related to lot size in the Ramona Community Plan, including Policy Community 22, and Conditions 8, 9, and 10. These policies are stated in Tables M-1 and M-2 in Appendix M. These lots would be smaller, on both the north and south side of Highland Valley Road than required in the Ramona Community Plan. The required lot size is 2 acres or greater. As discussed in Section 1.1.3, the proposed GPA would reduce the number of homesites and reduce the required lot size. The proposed lot sizes and locations have been designed to be compatible with the adjacent residential uses. In addition, the proposed project would develop less residential lots than originally planned in the Ramona Community Plan, leaving more area as open space and avoiding environmentally sensitive areas through lot design and layout. The project would also be compatible with confined agriculture practices as many agriculture activities in San Diego County occur on residential lots of 1 acre or more. For example, in Ramona small parcels with a single family residence and a small farming or equestrian use are common. Because of their direct involvement in agriculture or a rural lifestyle, these residential lot types tend to be very compatible with agriculture. In San Diego County, economically productive agriculture is conducted on small farms, with 63 percent of farms ranging from 1 to 9 acres in size, 77 percent of farmers living on their farms and 92 percent of farms being family owned (County of San Diego 1997c). Therefore, the smaller lot size would not preclude small family farming practices within lots, which is an important community element in Ramona. For these reasons, a ***less than significant*** impact would result from this policy inconsistency per Guidelines 1 and 2.

Inconsistency with Noise Levels

As summarized in Table M-1 in Appendix M, there would be an inconsistency with the Ramona Community Plan Policy Noise 3. This policy states that mitigation devices for new development would be required to return ambient noise level to 55 dBA CNEL if this level was exceeded. As discussed in Subchapter 3.3, Noise, this particular issue was determined to result in a potentially significant noise impact (**Impact N-5**) because certain receptors would be within projected noise

contours from traffic that would exceed 55 dBA CNEL. Mitigation is provided in Subchapter 3.3 that would require abatement to reduce future noise levels at those receptors to below 55 dBA CNEL. It is not feasible to reduce the ambient noise levels across the entire site to less the 55 dBA CNEL; however, the noise impact for individual receptors would be reduced to less than significant. For these reasons, this policy inconsistency would result in a ***less than significant*** impact per Guideline 3.

Compliance with County RPO

Installation of the project sewer system, trail system, and secondary emergency access/egress roads would require several crossing of RPO wetland areas. Appropriate findings must be made in order to allow RPO wetlands crossings. Statements of fact for each of the six required findings are found in section 3.1.3.

These findings indicate that the project has met all criteria required for RPO crossings and there would be a ***less than significant*** land use impact specific to the County RPO policy per Guideline 1.

4.1.4.4 Cumulative Impact Analysis

The cumulative study area for land use and planning was determined to be the Ramona Community Planning Area. It is necessary to cumulatively consider the proposed project within the complete context of the applicable planning documents with jurisdiction over the project site and the whole area encompassed by those planning documents. For this reason, the Ramona Community Planning Area was used as the study area for the cumulative analysis. The proposed project would not result in any significant land use or planning inconsistencies that would cause environmental effects. The proposed project would result in a residential development slightly smaller in size than that currently outlined in the Ramona Community Plan; however, it is compatible with the surrounding area. As discussed above, the inconsistencies between the guiding policies and the proposed project would not result in additional environmental impacts; rather the resulting change in policy may reduce potential impacts. The proposed project would result in a ***less than significant*** cumulative impact concerning environmental impacts resulting from land use and planning issues.

4.1.4.5 Conclusions

As outlined above in Subsection 4.1.4.3, the proposed project would have some inconsistencies with applicable policies and guidelines, such as lot size and noise requirements. However, these

policy inconsistencies would not cause environmental impacts per Guidelines 1, 2, or 3. Therefore, no significant environmental impacts would result and mitigation is not required.

4.1.5 Population and Housing (excluding Growth Inducement)

Appendix G of the CEQA Guidelines ask the question of whether the project would induce substantial population growth in an area either directly or indirectly. Subchapter 1.7 of this EIR contains a full analysis of potential growth-inducing impacts and found that the project would not be growth inducing.

4.1.5.1 Discussion of Existing Conditions Relating to Population and Housing

The project site has no housing units located within the site boundaries. The site is currently, and has historically been used for agricultural activities. No residential population is located on the project site or is supported by the project site.

4.1.5.2 Guidelines for the Determination of Significance

The guidelines for the determination of significance are taken from Appendix G of the CEQA Guidelines. The project would have a significant adverse impact with regard to population and housing if it would directly or cumulatively:

1. induce substantial population growth in an area, either directly or indirectly;
2. displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
3. displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.1.5.3 Analysis of Project Effects and Determination of Significant Impact

As described at the beginning of this section, Guideline 1, regarding population growth was analyzed within Subchapter 1.7 of this EIR. It was determined that the project would not be growth inducing and, thus, would not conflict with Guideline 1.

The questions concerning Population and Housing, as outlined in Appendix G of the CEQA Guidelines, ask whether the proposed project would displace a substantial number of existing homes or displace a substantial number of people, resulting in the construction of replacement

housing elsewhere. Because there are no existing homes on the project site, the proposed project would not displace existing homes or people and would have no potential impact on existing population or housing. The project would not conflict with Guidelines 2 and 3 and would have ***no impact*** to population and housing.

4.1.5.4 Cumulative Impact Analysis

The study area considered for population and housing cumulative impact analysis is the Ramona Community Planning Area. This study area was chosen as it is necessary to consider the community as a whole in regards to the population and housing situation of the area.

As shown by the types of projects included on the cumulative projects list, housing is being developed throughout the Ramona area. The development of new housing units is in response to demand and is not creating substantial population growth through the provision of residential units per Guideline 1. There are almost no projects which would displace existing housing or people and necessitate the need for new replacement housing to be constructed elsewhere. Therefore, there would be no cumulative conflict with Guidelines 2 and 3 and ***no significant cumulative impact*** would result.

4.1.5.5 Conclusions

The project would not conflict with Population and Housing Guidelines 1, 2, and 3 as there is currently no housing on the project site and no new housing would be required elsewhere as a result of the project. The project is not growth inducing as determined in Subchapter 1.7 of this EIR. Therefore, there would be no impacts related to population and housing.

4.1.6 Mineral Resources

4.1.6.1 Discussion of Existing Conditions Relating to Mineral Resources

There is currently no mining or mineral extraction that occurs on or near the project site. However, potential loss of availability of a known mineral resource of value to the region or the loss of a locally important mineral resources recovery site must be evaluated. The Ramona Community Plan delineates a Resources Conservation Area related to mineral resources known as the Ramona Pegmatite District. This is a regionally important mineral resource as gem-quality tourmaline, topaz, garnet, beryl, and smoky quartz have been mined from this area. The Ramona Pegmatite District is located northeast of the Ramona Town Center, approximately 6 miles northeast of the project site. The site is designated Mineral Resource Zone-3 (MRZ-3). MRZ-3

areas may contain known mineral deposits that may qualify as mineral resources. Further exploration work within this area is not likely to result in the reclassification of specific localities into the MRZ-2 category because of the site's proximity to the downtown Ramona area where development of MRZ-2 lands would result in significant traffic, noise, and air quality impacts.

4.1.6.2 Guidelines for the Determination of Significance

The guidelines for the determination of significance are taken from Appendix G of the CEQA Guidelines. The project would have a significant adverse impact with regard to mineral resources if it would directly or cumulatively:

1. result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state; or
2. result in the loss of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

4.1.6.3 Analysis of Project Effects and Determination of Significant Impact

The project site is not located within or adjacent to the Ramona Pegmatite District. Though the site is designated as MRZ-3, currently, no mineral extraction occurs onsite and no significant mineral resources are known to exist onsite. For these reasons, the project would not conflict with Guidelines 1 and 2 and the proposed project would have no impact on mineral resources.

4.1.6.4 Cumulative Impact Analysis

The cumulative study area for this topic was determined to be the Ramona Community Planning Area in order to encompass the Ramona Pegmatite District and fully consider regionally important mineral resources.

Because the Cumming Ranch project is not within an area of important mineral resources, development of the site would not contribute to a cumulative impact to important mineral resources in the area. Any cumulative projects that would take place within the Ramona Pegmatite District would be subject to all policies and or restrictions of the Resource Conservation Area as outlined in the Ramona Community Plan. There would be no conflict with Guidelines 1 or 2; therefore, ***no significant cumulative impact*** would result.

4.1.6.5 Conclusions

The project would not conflict with Guidelines 1 and 2 as the project site is not currently mined for minerals and is not located in an area known to have valuable mineral resources. Therefore, there would be no impact related to mineral resources.

4.1.7 Soils and Geology

This section includes a description of the existing geologic and soil conditions at the Cumming Ranch site. Following this discussion, an analysis of the potential geologic hazards associated with development of the project site is provided. The information in this section is based on the Preliminary Geotechnical Evaluation prepared for the project (GeoSoils 2004). This section focuses generally on Area A, which is where development would occur with implementation of the project. Erosion and sedimentation issues are addressed in Subsection 4.1.1, Hydrology and Water Quality.

4.1.7.1 Discussion of Existing Conditions Relating to Soils and Geology

Soils

A soil survey has been prepared for San Diego County that includes a map of soils found at the project site (USDA 1973). This map indicates that 11 soil series exist within Area A of the project site. Table 4-9 summarizes the soils that are present on Area A and their characteristics.

Geology

The San Diego area is underlain by three principal geologic provinces. The majority of the County, including the project site, is in the Peninsular Ranges province bounded by the coastal province to the west and the Salton trough province to the east. The western edge of the Peninsular Ranges province corresponds with the eastern hills and mountains along the edge of Poway, Lakeside, and El Cajon. Extending east of Julian and Jacumba, the province abruptly ends along a series of faults. The Peninsular Ranges are characterized by steep elongated mountain ranges and valleys that trend northwesterly.

Area A appears to be underlain by Cretaceous age granitic bedrock with relatively thin surface deposits of topsoil/colluvium, alluvium, and older alluvium (GeoSoils 2004). The granitic bedrock may be encountered at, or near, existing grades and beneath deposits of

topsoil/colluvium or alluvium. Bedrock materials are generally weathered to rounded, fractured surficial outcrops throughout the site.

Geologic Hazards

Seismic Activity

The San Diego region is located in a seismically active area with multiple fault lines transecting the area. An earthquake is the type of major disaster most likely to affect a large area of the County (County of San Diego 1991b). The nearest fault zone to the project site is the Elsinore Fault. The Elsinore Fault is the closest active fault to the San Diego area and represents a serious earthquake hazard for most of the populated areas of San Diego County. This fault is located approximately 16 miles east of the project site. The Elsinore Fault is approximately 135 miles long and is capable of generating an earthquake of magnitude 7.4 on the Richter scale. Depending on which segment moved, considerable damage may occur in Escondido, Ramona, Julian, Borrego, and Jacumba (County of San Diego 1991b). The Ramona area contains several faults that are classified as inferred faults. A series of parallel northwest trending faults are located in the northwest end of Santa Maria Valley. A series of east-west trending faults are found in the San Vicente Valley and vicinity. The south side of Mount Woodson is bordered by the Warren Canyon fault, which continues eastward along the south side of the Santa Maria Valley. Numerous lineaments are found throughout the Ramona Community Planning Area. In addition to these mapped faults, it is surmised that smaller faults probably exist in the rock beneath the soil surface (County of San Diego 2002a)

The project site is not located within a fault-rupture hazard zone as identified by the Alquist-Priolo Earthquake Fault Zoning Act (Hart and Bryant 1997). There are no known active faults crossing the Cumming Ranch site within the area proposed for development (GeoSoils 2004).

Landslides

Landslides, or mass wasting, are a type of erosion in which masses of earth and rock move down slope as a unit. The project site contains relatively steep natural slopes through the center of Area A. Common failures within natural slopes formed in granitic bedrock are rock fall, debris flow, and plane wedge failure. Natural slopes onsite are considered stable, due to their relatively thin soil mantle and dense granitic bedrock core (GeoSoils 2004).

Regulatory Framework

Alquist-Priolo Earthquake Fault Zoning Act

The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prohibit most new structures for human occupancy from being constructed across the traces of active faults thereby mitigating the hazard of fault rupture. This act mandated that the State Geologist delineate "Earthquake Fault Zones" along known active faults in California. A fault is defined as being active if it has had surface displacement within Holocene time (about the last 11,000 years). The Cumming Ranch site is not located within an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act and CDMG Special Publication 117

The California Division of Mines and Geology Special Publication 117 was adopted on March 13, 1997 by the State Mining and Geology Board in accordance with the Seismic Hazards Mapping Act of 1990. The purpose of the act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. Under the act, the State geologist is required to delineate the various "seismic hazard zones." Cities and counties, or other local permitting authority, must regulate certain development "projects" within these zones. The Cumming Ranch project is not located within a seismic hazard zone.

San Diego County General Plan

The County of San Diego has goals and policies in the General Plan pertaining to the geologic hazards within the county. The County specifically addresses the issue of seismic safety in the Seismic Safety Element of the General Plan (County of San Diego 1991b). The purpose of this element is to identify and evaluate hazards and establish policies to guide efforts to minimize the risk from these hazards. Policies related to geologic hazards are contained in the Public Safety Element of the General Plan (County of San Diego 1975). These policies are provided to introduce safety considerations into the planning and decision making process in order to reduce the risk of injury or loss of property associated with the hazards. The Conservation Element of the General Plan (County of San Diego 1993b) addresses soils and soil-related hazards, such as shrink-swell properties or erosion, and provides policies related to reducing potential risk.

Uniform Building Code

The Uniform Building Code (UBC) is a national building code published by the International Conference of Building Officials. It has been adopted in part by municipalities throughout the United States, including the County. The UBC provides a set of regulations covering all major aspects of building design and construction relating to fire, life safety, and structural safety. The California Building Code guidelines are derived from the UBC and encompass criteria specific to California, including geologic and seismic characteristics.

4.1.7.2 Guidelines for the Determination of Significance

The guidelines for determination of significant of geologic hazards are based upon the analysis questions for geology found in Appendix G of the CEQA Guidelines. The project would have a significant adverse effect on the issue of soils and geology if the project would:

1. directly or cumulatively expose people or structures to potential substantial adverse effects involving:
   (a) unsuitable soils,
   (b) known earthquake fault,
   (c) seismic ground-shaking or ground failure,
   (d) liquefaction, or
   (e) landslides.

4.1.7.3 Analysis of Project Effects and Determination of Significant Impact

Soils

As shown in Table 4-9, two soil types mapped onsite have a high shrink-swell behavior, indicating expansive soil characteristics. The two expansive soils are located along the northwestern boundary of Area A and along the drainage area in the southern portion of the site. These areas are generally not planned for development of residential pads; though, these soils may partially extend into development areas. However, soil testing done by GeoSoils found that soils onsite in development areas are generally considered to havw very low expansive characteristics (GeoSoils 2004).

The development limitations for residences of all soils onsite, except Cieneba very rocky coarse sandy loam, are considered to be slight to moderate, as shown in Table 4-9. This means that residential structures could be built on these soils using standard construction and engineering

practices and no extreme measures would be required. Cieneba very rocky coarse sandy loam has a high development limitation due to rockiness and slope (USDA 1973). This soil type is located along the main ridgeline through the central portion of Area A and no development is planned on the ridgeline area.

In general, the overall geotechnical concerns related to the onsite soils and underlying materials includes the potential for onsite soil types which may be unsuitable to support settlement-sensitive structures, such as homes. This means that homes built on these soils could be subject to significant settlement issues such as cracking, which could result in structurally unsafe conditions. Compounding this concern is that materials considered competent to bear the weight and maintain the integrity of residential structures may be located at great depths below the surface of the ground. These potential soil characteristics may result in unsafe conditions; however, the California Building Code and UBC requires that all appropriate soils testing be completed and the application of standard engineering requirements be met to ensure structurally sound building foundations. Prior to approval of the proposed project, site specific engineering measures would be required to address soils suitability hazards. Engineering details and specifications shall include those identified in the Preliminary Geotechnical Evaluation (GeoSoils 2004) or others, as deemed appropriate by the County Engineer. The following is a listing of the engineering measures that shall be implemented for the project.

a. Geotechnical engineer shall selectively test fill during site preparation and review any unusual or unexpected conditions and recommend measures if necessary.

b. During site preparation, soil removal shall include existing colluvium, alluvium, older alluvium, and highly weathered bedrock onsite. The exposed surface shall be reprocessed prior to the addition of fill.

c. If soil imports are required, samples of the soil shall be evaluated by a geotechnical engineer to ensure compatibility with onsite soils and the recommendations of the geotechnical report.

d. During remedial earthwork, including lot capping and cut/fill transitions, shall be implemented with further evaluation of conditions in the field as grading occurs.

e. Placement of an erosion control fabric, or similar protective system, shall be placed over graded slope faces in order to minimize erosion of the slope face until a suitable vegetation cover is established.

f. All cut slopes shall be mapped by the project engineering geologist during grading to allow amendments to mitigation as necessary.

Additional or alternative measures may be required by the County Engineer to ensure soils are appropriately engineered and stabilized prior to development. With project implementation of these engineering requirements, conformance with applicable regulations, and integration of future site engineering recommendations, the potential soils impact would be ***less than significant*** per Guideline 1(a).

Geologic Hazards

Seismic Activity

The project site is not located within any currently established Alquist-Priolo Earthquake Fault Zone and no active faults are known to underlie the project development area. However, the possibility of seismic activity at the site may be considered as approximately similar to the southern California region as a whole. Other seismic related hazards that were considered during the geotechnical evaluation of the project site include liquefaction, tsunami, surface fault rupture, ground lurching, and seiche. These potential hazards were found to be negligible (GeoSoils 2004). The project would be required to meet all applicable seismic safety standards and regulations, including adhering to California Building Code and UBC building design and construction requirements. By conforming to all seismic safety requirements, the project would result in a ***less than significant*** impact related to seismic activity per Guidelines 1(b), (c), and (d).

Landslides

The existing natural slopes on the project site are comprised of a dense bedrock core with only a thin layer of soil on top. Because the bedrock is considered stable and there is very little soil that could slide, the potential for a landslide onsite is not substantial. In addition, there is a lack of past landslide deposits on the project site and the project is designed to avoid development on steep slopes. For these reasons, the project would result in a ***less than significant*** impact related to the potential for landslides per Guideline 1(e).

4.1.7.4 Cumulative Impact Analysis

Though geology is a regional topic with geologic features sometimes spanning large areas, impacts to soils and geology are typically very site specific. Construction of a project in extreme geologic conditions, such as very steep slopes, may have the potential to impact surrounding areas. However, this situation is generally avoided by required conformance with the California Building Code, UBC, and other applicable regulations. For this reason, the cumulative study area for this topic is considered to be the area immediately surrounding the project site. There are

three cumulative projects in immediately proximity to the project site (Cumulative Project numbers 10, 17, and 76 in Table 1-7 and shown in Figure 1-17). These projects include a new church, expansion of an existing church facility, and a residential lot subdivision.

The potential soils and geology impacts from the proposed project would impact only onsite development because there are no significant geologic landforms or conditions which would be altered by project development, such as steep slopes or hillsides that could cause geologic conditions to become hazardous to the surrounding cumulative projects. Similarly, the three cumulative projects in the immediate vicinity of the Cumming Ranch project are not located on substantial or hazardous geologic formations or propose development that might significantly impact soil stability or geologic conditions. All development projects would be subject to the California Building Code, UBC, and any other applicable regulations requiring proper engineering and design to reduce potential for geologic hazards to result. For these reasons, implementation of the Cumming Ranch project along with the other three projects in the immediate vicinity of the proposed project would not create unstable geologic conditions in the surrounding area or impact soils offsite of each individual project area and ***no cumulative impact*** would result per Guidelines 1(a) through (e).

4.1.7.5 Conclusions

Many potential geologic hazards are avoided because the project does not propose development on steep slopes or hillsides. The soils and geology of the site are conducive for safe development. The potential for an unstable soils would be addressed through proper soil engineering. Adequate soil engineering allows for homes and other structures to be built in a safe manner on soil that is not ideal for construction. Additional requirements, such as California Building Code and UBC regulations, and future site engineering recommendations would also be implemented as part of the project. For these reasons, the project would result in less than significant impacts related to soils and geology as outlined in Guidelines 1(a) through (e).

4.1.8 Air Quality

This section summarizes the air quality study (EDAW 2008b) completed for the Cumming Ranch project, which is included as Appendix H. This section describes the existing air quality and identifies the air quality effects of development of the proposed project. More detail on the methodology to develop this analysis and background information and data are included in the air quality study provided in Appendix H.

4.1.8.1 Discussion of Existing Conditions Relating to Air Quality

Sensitive Air Quality Receptors

Sensitive air quality receptors are land uses where persons are especially sensitive to elevated pollutant concentrations. Sensitive air quality receptors include the elderly and the sick. For the purposes of CEQA analysis, the County also defines sensitive receptors to include residents. There are residences adjacent to the north, west, southwest, and southeast of the project site. Sensitive land uses are schools, hospitals, resident health care facilities, and day care centers. No sensitive land uses were identified within 1 mile of the project boundaries.

Applicable Regulations and Standards

Federal and State Standards

The Federal CAA (USC Section 7401) requires the adoption of National Ambient Air Quality Standards (NAAQS) to protect the public health, safety, and welfare from known or anticipated effects of air pollution. The NAAQS have been updated occasionally. Current standards are set for sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), suspended particular matter (PM_{10}), fine particular matter ($PM_{2.5}$), lead (Pb). These pollutants are collectively referred to as criteria pollutants. The State of California Air Resources Board (CARB) has established additional standards that are generally more restrictive than the NAAQS. Federal and state standards are shown in Table 4-10.

Regional Standards

In San Diego County, the SDAPCD is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. Included in the SDAPCD's tasks are the monitoring of air pollution, the preparation of the San Diego County portion of the State Implementation Plan (SIP), and the promulgation of Rules and Regulations. The SIP includes strategies and tactics to be used to attain and maintain acceptable air quality in the county; this list of strategies is called the Regional Air Quality Strategy (RAQS). The Rules and Regulations include procedures and requirements to control the emission of pollutants and prevent significant adverse impacts.

Regional and Local Air Quality

Specific geographic areas are classified as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with federal and state standards. If an area is redesignated from nonattainment to attainment, the CAA requires a revision to the SIP, called a "maintenance plan," to demonstrate how the air quality standard will be maintained for at least 10 years.

The San Diego Air Basin (SDAB) currently meets the federal standards for all criteria pollutants except O_3, and meets state standards for all criteria pollutants except O_3, PM_{10}, and $PM_{2.5}$. For the federal 8-hour O_3 standard, the SDAB is classified as "basic" nonattainment. Basic is the least severe of the six degrees of O_3 nonattainment. The SDAPCD submitted an air quality plan to the USEPA in June 2007; the plan demonstrates how the 8-hour O_3 standard would be attained by 2009. A decision from USEPA was anticipated the summer or fall of 2009; however, USEPA is currently in the process of reclassifying California air basins for the 0.075 ppm 8-hour O_3 standard. It is anticipated that USEPA will issue a final ruling for the new classification of the SDAB in 2010, which would then trigger a 12-month period for the SDAPCD to develop an air quality attainment plan according to the new classification and nullify the previous 2007 air quality plan (Reider, pers. comm., 2010).

The SDAB is currently classified as a state "serious" O_3 nonattainment area and a state nonattainment area for PM_{10}. The SDAB currently falls under a federal "maintenance plan" for CO, following a 1998 redesignation as a CO attainment area.

4.1.8.2 Guidelines for the Determination of Significance

The guidelines for determination of significance for air quality impacts are based on Appendix G of the CEQA Guidelines and quantitative thresholds established by the County of San Diego (County of San Diego 2007b). The Cumming Ranch project would create a significant air quality impact if it would:

1. conflict with or obstruct the implementation of the San Diego RAQS or applicable portions of the SIP as a direct result of the project;
2. result in direct emissions that would violate any federal or state ambient air quality standards or contribute substantially to an existing or projected air quality violation;
3. result in a cumulatively considerable net increase in the emissions of any criteria pollutant for which the project region is in non-attainment under applicable federal or

state ambient air quality standards. Specifically, would the emissions of the proposed project exceed quantitative thresholds for O_3 precursors, oxides of nitrogen (NO_X), volatile organic compounds (VOC), or for PM_{10} or $PM_{2.5}$.

Quantitative thresholds for the emissions of criteria pollutants have been established by the County of San Diego, as shown below (County of San Diego 2007b).

Pollutant	Total Emissions		
	Pounds Per Hour	**Pounds per day**	**Tons per Year**
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)	---	55[1]	10[1]
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOCs)	---	75[2]	13.7

[1] USEPA "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005. Also used by the SCAQMD.
[2] Threshold for VOCs based on threshold of significance for VOCs from the South Coast Air Quality Management District for Coachella Valley.
[3] 13.7 Tons Per Year threshold based on 75 lbs/day multiplied by 365 days/year and divided by 2000 lbs/ton.

These thresholds are used for significance determinations associated with Guidelines 1, 2, and 3 above;

4. result in a cumulatively considerable temporary increase of emissions of any criteria pollutant for which the project region is in nonattainment under applicable federal or state ambient air quality standards that was not accounted for in the RAQS;

5. place sensitive receptors, including, but not limited to, schools, hospitals, residential care facilities, or day care centers, near CO hotspots or create CO hotspots near sensitive receptors either directly or cumulatively;

6. expose sensitive receptors to TAC resulting in a maximum incremental cancer risk greater than one in one million or a health hazard index greater than one; or

7. create objectionable odors affecting a substantial number of people.

4.1.8.3 Analysis of Project Effects and Determination of Significant Impact

Regional Emissions - Construction and Operation

A summary of the regional emissions associated with the project is provided in Table 4-11. Because the construction and operational phases of the project would overlap, the table shows the combined emissions of construction and operation of the project, up until the project is fully operational, which is projected as 2012.

Operations emissions also come from area sources, including gas for residential space heating and water heating; fireplaces, gasoline-powered landscaping and maintenance equipment; and consumer products such as household cleaners. It was assumed that 85 percent of the homes would operate natural gas fireplaces, 10 percent would have wood stoves, and 5 percent would have wood fireplaces (these percentages are the standard assumptions used in URBEMIS 2007).

The primary sources of air pollutants during construction would be the engine exhaust from construction equipment and fugitive dust from grading activities. The operation of construction equipment and vehicles would result in emissions of CO, NO_X, VOC, SO_X, PM_{10}, and $PM_{2.5}$. Most equipment would be diesel powered, which would emit more NO_X, SO_X, and PM_{10} and less hydrocarbons and CO compared to equivalent gasoline-powered equipment.

The proposed project would phase construction efforts so that some road construction and utility installation would occur prior to grading or construction of the proposed housing. Construction of the homes may begin as soon as the pads are graded. Thus, a reasonable worst case air quality scenario would occur during the initial year of development when roadway construction, utility installation, building pad grading, and building construction would overlap. This would be the dominant pattern south of Highland Valley Road. North of Highland Valley Road, it is likely that while some of the pads would be graded in groups prior to building construction, the majority of lots would be graded individually, and then the structure would be erected, as the individual lots are sold. This style of development would result in much less intense construction activity than a more concerted effort such as envisioned south of Highland Valley Road. Full detail of assumptions used in the air quality modeling are provided in the Air Quality Study (Appendix H).

Using the assumptions outlined in the air quality study, construction emissions related to the roadway construction portion of the project were estimated using the Road Construction Model, version 5.2, and grading and building construction emissions for the project were evaluated using the emissions program URBEMIS 2007. For the URBEMIS calculation of fugitive dust emissions from grading, the model input included dust suppression by watering active grading

areas three times a day, which is a design feature of the proposed project. In addition to daily watering, the following measures would be incorporated into the project design and specified on the grading plan to minimize the emissions of PM_{10}, and $PM_{2.5}$: minimize land disturbance; stabilize graded areas as quickly as possible to minimize fugitive dust; apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry; install wheel washers adjacent to a paved apron prior to vehicle entry on public roads; remove any visible track-out into traveled public streets within 30 minutes of occurrence; wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces occurred; provide sufficient perimeter erosion control to prevent washout of silty material onto public roads; cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling; suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph miles per hour; cover/water onsite stockpiles of excavated material; hydroseed, landscape, or develop disturbed areas as quickly as possible and as directed by the County to reduce dust generation; and enforce a 15 miles-per-hour speed limit on unpaved surfaces. These dust suppression project features were not included in the URBEMIS calculations of fugitive dust emission.

Operational emissions come from mobile sources, that is, vehicle operations associated with the new housing. Operations emissions were estimated using URBEMIS 2007. Mobile source emissions are a function of the number and type of vehicles, as well as the number of trips and miles traveled by vehicles.

The reasonable worst-case construction and operations air pollutant emissions are shown in Table 4-11. The forecast emissions would not exceed the County screening level thresholds for daily emissions as outlined above in Subsection 4.1.8.2. Therefore, the construction and operations emissions would not have the potential to violate air quality standards or contribute to existing or projected violations of standards. The impact would be ***less than significant*** according to Guidelines 1 and 2.

Local Carbon Monoxide Emissions

Procedures and guidelines for use in evaluating the potential local level CO impacts of a project are contained in *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) (UCD ITS 1997). Signalized intersections that would operate at LOS E or F should be analyzed for potential local high concentrations of CO. Based on a review of the project traffic study (Appendix A), four signalized intersections would operate at LOS E or LOS F; SR 67/Highland Valley Road, SR 67/Montecito Road, SR 67/SR 78, and SR 67/Scripps Poway Parkway.

The results of the CO hot spot modeling, as shown in Table 4-12, indicate that the increased traffic volumes resulting from the proposed project would not create a CO hot spot at the intersection of SR 67/Highland Valley Road. The future traffic volumes at the SR 67/Montecito Road, SR 67/SR 78, and SR 67/Scripps Poway Parkway intersections would be similar to those at the SR 67/Highland Valley Road intersection. Because the analysis of SR 67/Highland Valley Road shows future values well below the Guidelines, and less than existing values, it is concluded that the values would be similar at the SR 67/Montecito Road, SR 67/SR 78, and SR 67/Scripps Poway Parkway intersections. Therefore, the proposed project's impact to local CO concentrations would be ***less than significant*** according to Guideline 5.

Diesel Exhaust Emissions

Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from onsite heavy-duty equipment. Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as TAC by CARB in 1998. Construction of the project would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from the project site.

Generation of diesel PM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over a multiyear period, but use of diesel-powered construction equipment in any one area would likely occur for no more than a few months and would cease when construction is completed in that area. The risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, if the duration of proposed construction activities near any sensitive receptor were 8 months, the exposure would be less than 1 percent of the total exposure period used for health risk calculation. Using conservative assumptions as detailed in the air quality study, a quantitative assessment of health risk associated with construction of the proposed project was prepared using the SCREEN 3 model. The results of this modeling found that the cancer risk would be less than 1 in 1 million and the hazard index would be less than 1. Because these values would not exceed Guideline 6, this impact would be ***less than significant***.

Odors

Odors are one of the most obvious forms of air pollution to the general public. Odors can present a significant problem for both the source and the surrounding community. A potential source for odor from the proposed project would be the required lift station associated with the wastewater system. When wastewater swirls and mixes, it releases odors and sulfurous gasses and could potentially create odors at nearby residences. The proposed location of the lift station lot, immediately surrounded by open space, would be approximately 100 feet east of Lot 125, 250 feet northeast of Lot 110, and approximately 150 feet south of the northern boundary of Area A. Due to proximity to residences, the project includes installation of standard odor control devices on the lift station. Potential types of odor control could include dry scrubbers, wet scrubbers, and/or bio filters. The odor control must comply with the standards set in the County Health and Safety Code, APCD Rule 51, and County Zoning Ordinance. The Minor Use Permit required for installation of the lift station would require that the sewer lift station be equipped with odor control filters or other equipment as necessary to avoid unpleasant odors to nearby receptors and provide ongoing compliance with applicable regulations. As proposed by the project and required by the Minor Use Permit for the lift station, odor control devices would be installed on the lift station and the potential for odor impacts at nearby residences would be ***less than significant*** according to Guideline 7.

4.1.8.4 Cumulative Impact Analysis

Air quality is typically considered to be a regional issue as pollutants can travel long distances, regardless of jurisdictional boundaries. For this reason, there is cumulative analysis of regional air quality throughout San Diego County. However, localized air quality impacts can result from numerous construction projects in a small area. Therefore, specific localized air impacts are also analyzed in the cumulative scenario.

Ozone and Ozone Precursors

The County of San Diego provides the following guidance for the assessment of cumulative air quality impacts:

> "It is assumed that a project which conforms to the County of San Diego General Plan, and does not have emissions exceeding the SLTs, (screening level thresholds) will not create a cumulatively considerable net increase in criteria pollutants since the emissions were accounted for in the RAQS." (County of San Diego 2007b)

As discussed below, the project would conform to the General Plan and the RAQS. As shown in Table 4-13, emissions would not exceed the SLTs. Therefore, the project would not create a cumulatively considerable net increase in O_3 or its precursor pollutants, and the impact would be ***less than significant*** according to Guidelines 3 and 4.

PM_{10} and $PM_{2.5}$

The discussion above is valid for cumulative impacts of O_3 and O_3 precursor pollutants because the RAQS is addressed to attainment of the state and federal O_3 standards. The RAQS does not address PM_{10} or $PM_{2.5}$, which are state nonattainment pollutants. The County provides the following guidance for the assessment of construction phase PM_{10} and $PM_{2.5}$ impacts:

> "… a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the guidelines …"

The specified guidelines are emissions of 100 pounds per day of PM_{10} and 55 pounds per day of $PM_{2.5}$.

As shown in Table 4-11, calculated maximum onsite dust emissions would be approximately 72 pounds per day of PM_{10} and 22 pounds per day of $PM_{2.5}$ during the most intense construction period. For PM_{10}, the proximity relevant for cumulative impacts would be, at most, a few hundred yards. Watering of active grading areas at least three times per day is a design feature of the project. Of the 90 potentially cumulative projects; 2 of the 90 are within approximately 2,000 feet of the project areas where onsite fugitive dust would be generated. The closest project would be the Spirit of Joy Lutheran Church, which would be located approximately 500 feet east of Cumming Ranch Lot 11; identified as project number 10 in the cumulative project list. An application has been filed with the County for the church project; however, the specific timing of construction is not known. If the church property (approximately 5 acres) were to be graded during the same time as the heaviest grading period anticipated for Cumming Ranch, it is conservatively estimated that a combined maximum of 1.5 acres per day would be graded, and maximum emissions would be 17 pounds per day of PM_{10} and 5 pounds per day of $PM_{2.5}$, resulting in a cumulative total of 89 pounds per day of PM_{10} and 27 pounds per day of $PM_{2.5}$. This cumulative total is less than the screening level thresholds. The RMWD SMWWTP Expansion Project, number 89 in the cumulative project list, would be approximately 1,700 feet from areas of active grading for residential development. The timing of this project is phased and

portions would likely occur prior to construction of Cumming Ranch. The expansion would occur at the existing SMWWTP site and significant land modification and grading would not be expected, minimizing the amount of fugitive dust generated. The SEIR for this project found no direct or cumulative air quality impacts. In consideration of these projects added to the proposed Cumming Ranch project, it is concluded that the cumulative emissions would not exceed Guidelines 3 or 4 and the impact would be ***less than significant***.

Conformity with the San Diego Regional Air Quality Strategy

Consistency with the SDAPCD RAQS is determined by two standards. The first standard is if the project would increase the frequency or severity of existing air quality violations, contribute to new violations, or delay the timely attainment of air quality standards or interim reductions as specified in the RAQS. The second standard is whether the project would exceed assumptions contained in the RAQS.

Based on the air quality emissions modeling contained in this report, the proposed project would cause less than significant short-term construction impacts and long-term operational impacts on air quality due to the proposed project. Thus, the project would not increase the frequency or the severity of air quality violations, contribute to new violations, or delay the timely attainment of air quality standards or interim reductions as specified in the RAQS.

Consistency with the RAQS assumption is determined by analyzing the project with the assumptions in the RAQS. Thus, the emphasis of this criterion is to ensure that the analyses for the project are based on the similar forecasts as the RAQS. Forecasts used in the RAQS are developed by SANDAG. SANDAG forecasts are based on local general plans and other related documents that are used to develop population projections and traffic projections. The current General Plan assumes development of the project site with 166 homes. Because the project only includes 125 homes, the project would result in less population growth and fewer vehicle trips than currently planned. Thus, the proposed project would not exceed the assumptions used to develop the RAQS and would not obstruct or conflict with the SDAPCD's RAQS.

For these reasons, the project would conform to the RAQS and per Guideline 1 and 4, the cumulative impact would be ***less than significant***.

4.1.8.5 Conclusions

Implementation of the proposed project would result in less than significant impacts related to air criteria pollutants because emissions would be below the appropriate thresholds. Potential odor

impacts would be controlled with the use of technology designed to contain and control the potential smell from the lift station and would be less than significant per Guideline 7.

4.2 Effects Found Not Significant during Initial Study

An Initial Study was prepared by the County in December of 2003 and is included as Appendix N. The Initial Study discusses whether significant environmental impacts are anticipated for each resource area. The Initial Study found that the proposed project would have a less than significant impact on paleontological resources and depletion of groundwater, as summarized below.

4.2.1 Paleontological Resources

The proposed project was found to have a less than significant impact on paleontological resources based on a review of paleontological maps provided by the San Diego Museum of Natural History. These maps indicated that the proposed project site is not located on geological formations that contain significant paleontological resources. The geologic formations that underlie the project site have a low probability of containing paleontological resources.

4.2.2 Groundwater Depletion

The Initial Study concluded that the proposed project would not deplete groundwater resources because it would receive water from the RMWD, which obtains its water supply from surface reservoirs and/or imported sources. The project does not propose to use groundwater for irrigation or domestic supply and no groundwater wells are proposed.

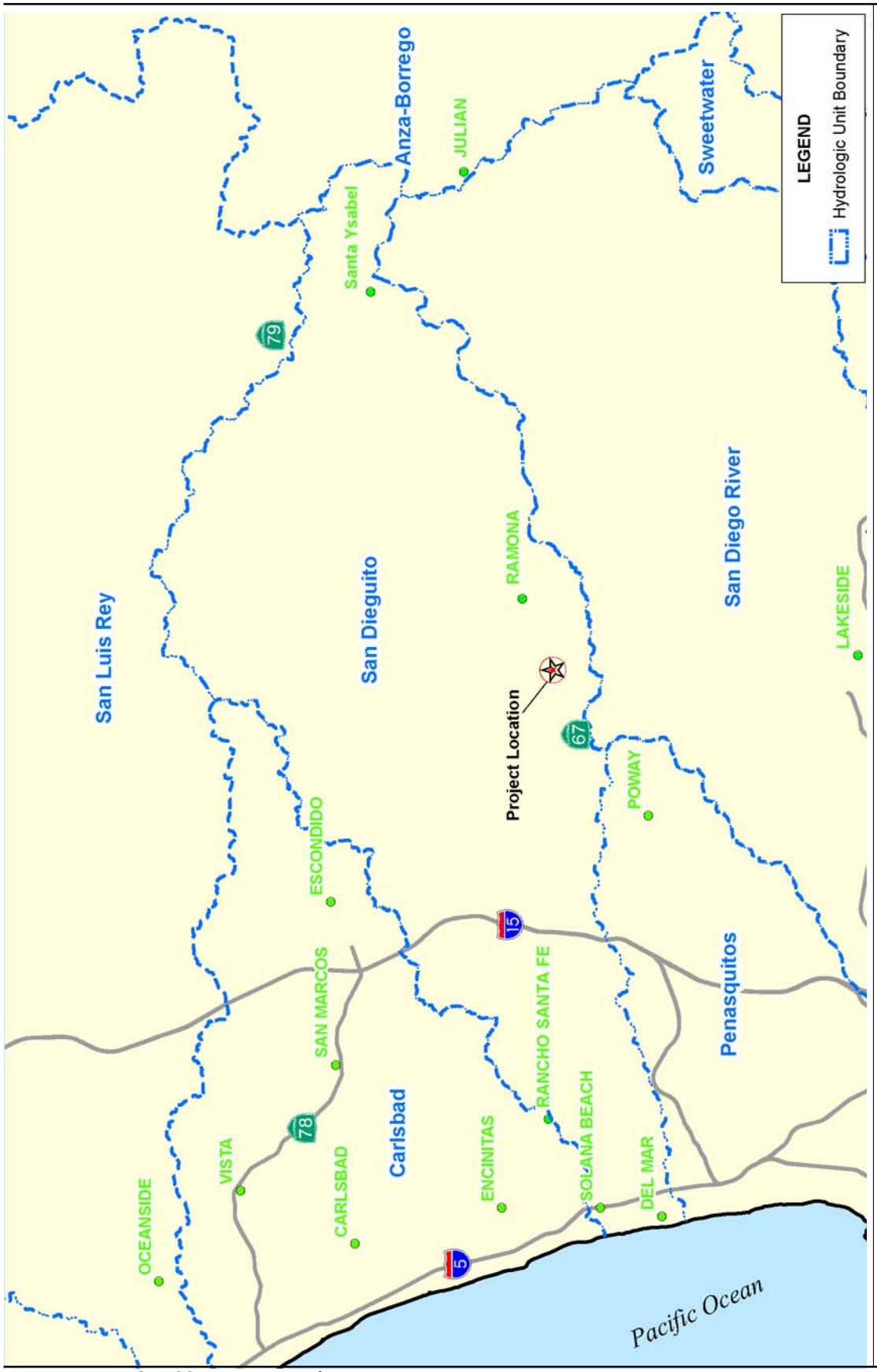


Figure 4-1
San Dieguito Hydrological Unit

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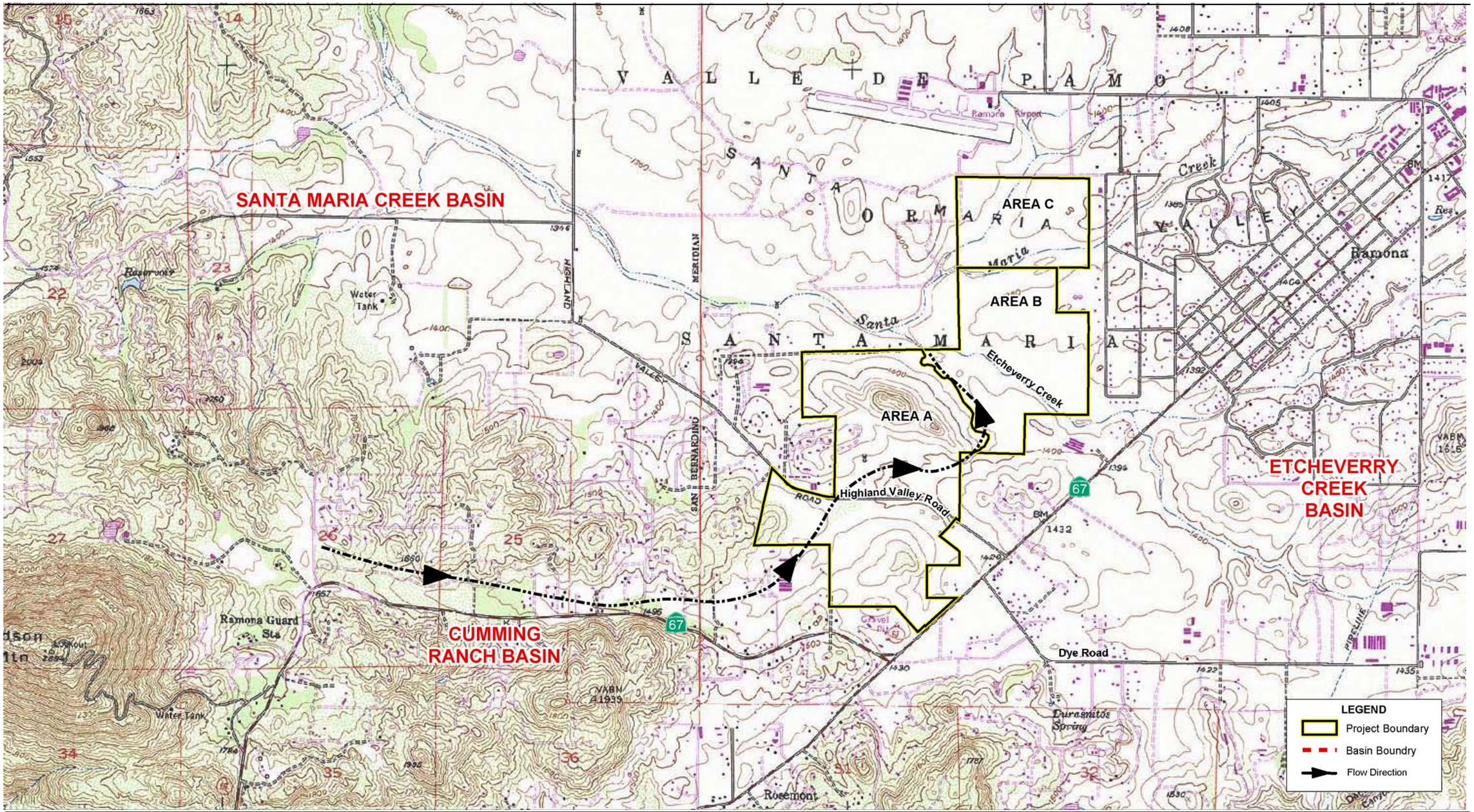

Source: USGS, San Vicente Reservoir and San Pasqual Quad, Snipes-Dye Associates, December 2004

NORTH

2000 1000 0 2000 Feet

Scale: 1:24,000; 1 inch = 2,000 feet

Figure 4-2
Project Drainage Basins

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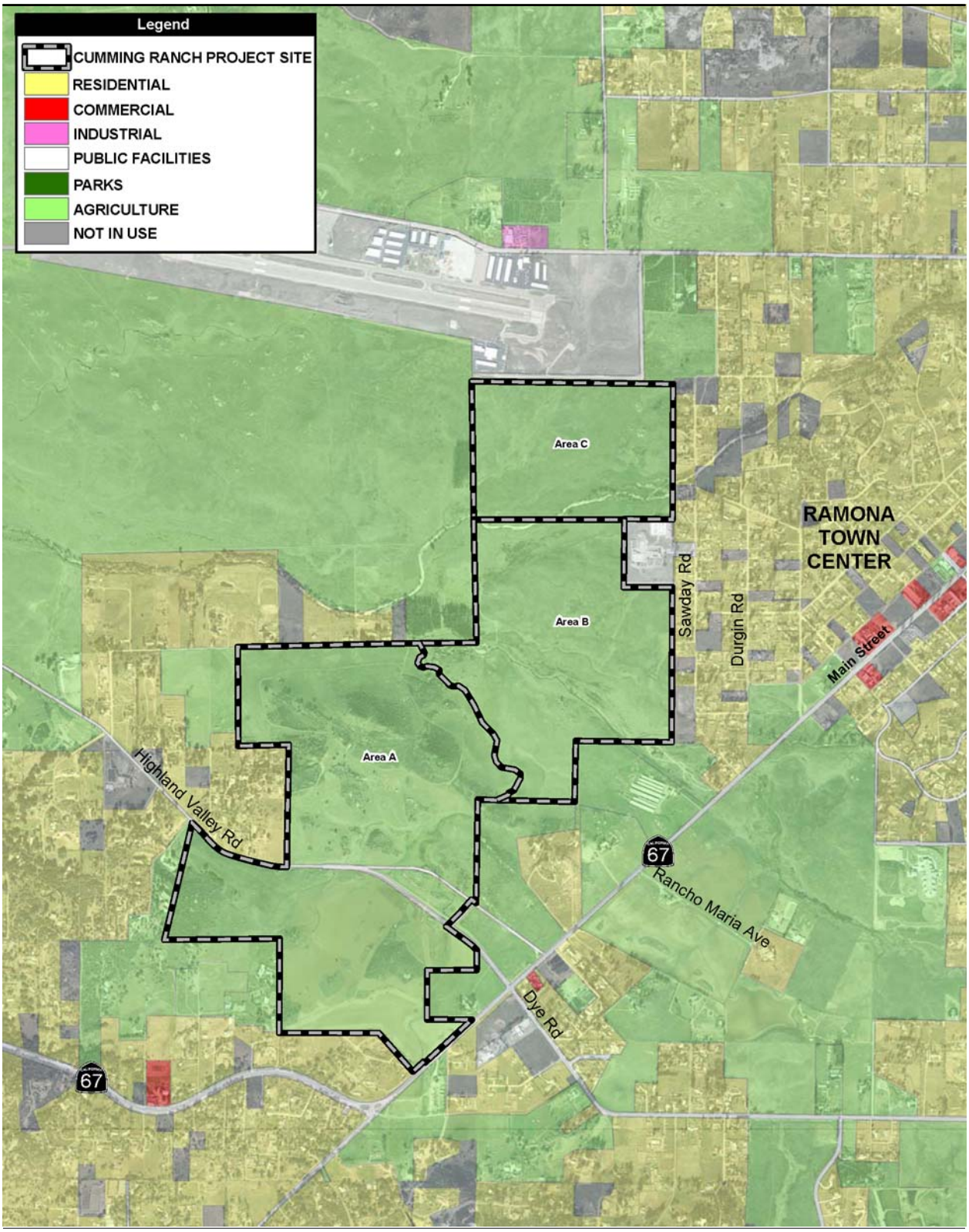


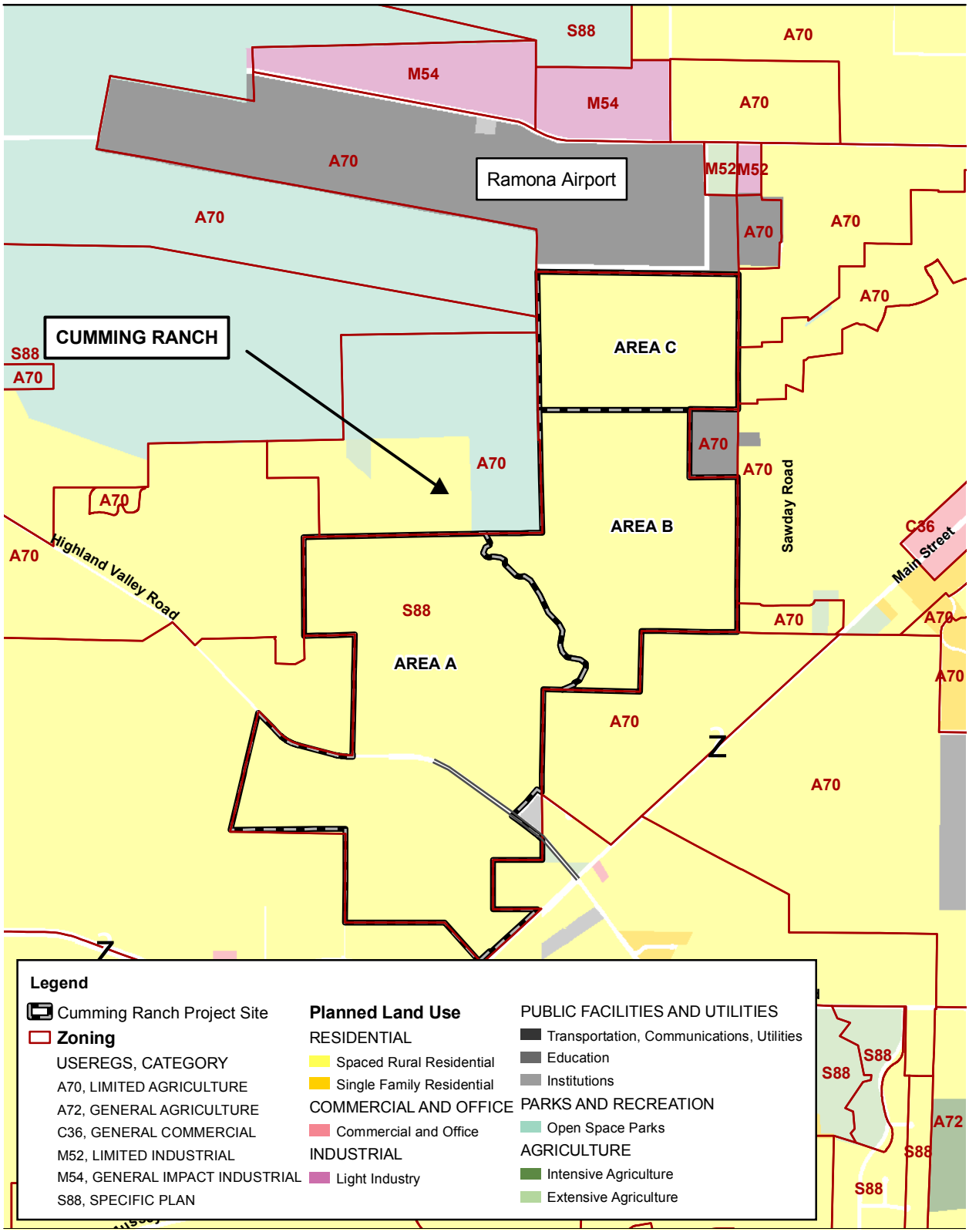
Source: AirPhotoUSA 2006; SANDAG 2003

NORTH

2000 1000 0 2000 Feet

Scale: 1:24,000; 1 inch = 2,000 feet

Figure 4-3
Generalized Land Uses



Source: SanGIS 2010; SANDAG 2009

NORTH

2000 1000 0 2000 Feet

Scale: 1 = 24,000; 1 inch = 2,000 feet

Figure 4-4
Land Use Designations and Zoning

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Table 4-1
Beneficial Uses of Cumming Ranch Receiving Waters

	Hydrologic Unit Basin Number	Beneficial Uses *																						
		MUN	AGR	PROC	IND	GWR	FRSH	NAV	POW	REC-1	REC-2	COMM	AQUA	WARM	COLD	SAL	EST	MAR	WILD	BIOL	RARE	MIGR	SPWN	SHELL
Inland Surface Waters																								
San Dieguito River Watershed	N/A																							
Etcheverry Creek[1] (southern tributary to Santa Maria Creek)	5.41	●	●	●	●					●	●			●					●					
Santa Maria Creek	5.41	●	●	●	●					●	●			●					●					
Santa Ysabel Creek	5.32	●	●	●	●					○	●			●					●		●			
Lake Hodges	5.21	●	●	●	●					●[2]	●			●	●				●		●			
San Dieguito River	5.11	+	○		○					●	●			●					●					
Coastal Waters																								
Pacific Ocean	N/A				●			●		●	●	●	●					●	●	●	●	●	●	●
San Dieguito Lagoon	5.11									●	●						●	●	●	●	●	●		
Groundwater																								
San Dieguito Hydrologic Unit	5.00																							
Santa Maria Valley Hydrologic Area	5.40																							
Ramona Hydrologic Subarea	5.41	●	●	●	●																			

Source: California Regional Water Quality Control Board, San Diego Region, 1994. Water Quality Control Plan for the San Diego Basin (9).

● Existing Beneficial Use
○ Potential Beneficial Use
\+ Excepted from MUN
N/A Not Applicable
*See Table 2.1-2 for definitions of the beneficial uses.
[1] Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.
[2] Fishing from shore or boat permitted, but other water contact recreational (REC-1) uses are prohibited.

Table 4-2
Applicable Beneficial Use Designations

Beneficial Use	Abbreviation	Definition
Municipal and Domestic Supply	MUN	Community, military, or individual water supply systems including, but not limited to, drinking water supply.
Agricultural Supply	AGR	Farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.
Industrial Process Supply	PROC	Industrial activities that depend primarily on water quality.
Industrial Service Supply	IND	Industrial activities that do not depend primarily on water quality including, but not limited to mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.
Ground Water Recharge	GWR	Natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
Freshwater Replenishment	FRSH	Natural or artificial maintenance of surface water quantity or quality (e.g., salinity).
Navigation	NAV	Shipping, travel, or other transportation by private, military, or commercial vessels.
Hydropower Generation	POW	Hydropower generation.
Contact Water Recreation	REC-1	Recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.
Non-contact Water Recreation	REC-2	Recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
Commercial and Sport Fishing	COMM	Commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.
Aquaculture	AQUA	Aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
Warm Freshwater Habitat	WARM	Warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Cold Freshwater Habitat	COLD	Cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Inland Saline Water Habitat	SAL	Inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.
Estuarine Habitat	EST	Estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Table 4-2. Continued

Beneficial Use	Abbreviation	Definition
Marine Habitat	MAR	Marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).
Wildlife Habitat	WILD	Terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food resources.
Preservation of Biological Habitats of Special Significance	BIOL	Designated areas or habitats such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.
Rare, Threatened, or Endangered Species	RARE	Habitats necessary, at least in part, for the survival and successful maintenance of plant and animal species established under state or federal law as rare, threatened, or endangered.
Migration of Aquatic Organisms	MIGR	Habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.
Spawning, Repro-duction, and/or Early Development	SPWN	High-quality habitats suitable for reproduction and early development of fish. This use is applicable only for the protection of anadromous fish.
Shellfish Harvesting	SHELL	Habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sport purposes.

Source: California Regional Water Quality Control Board, San Diego Region, 1994. Water Quality Control Plan for the San Diego Basin (9).

Table 4-3
General Categories of Water Pollution

Category	Definition and Associated Impacts
Sediments	Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organism survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Nutrients	Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause overabundant aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to extreme decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.
Trash and Debris	Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash and debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.
Oxygen Demanding Substances	This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.
Oil and Grease	Oil and grease are characterized as high molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies is very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.
Bacteria and Viruses	Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.
Pesticides	Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

Table 4-4
Fire Stations Servicing the Project Area

Fire Station No.	Address	Approximate Distance from Project Site
80	829 S. San Vicente Road, Ramona, CA 92065	2.5 miles
81	24462 San Vicente Road, Ramona, CA 92065	9.0 miles
82	3410 Dye Road, Ramona, CA 92065	0.5 miles

Source: Scott Franklin Consulting 2010.

Table 4-5
Fire Spread Models

Fuel Model No. and Description	Summer Fire			Fall/Winter Fire		
	Rate of Spread (mph)	Flame Length (feet)	Spotting Distance (miles)	Rate of Spread (mph)	Flame Length (feet)	Spotting Distance (miles)
Fuel Model 1 – low load, representing nonnative grassland	4.0	9.7	0.4	8.3	12.7	1.1
Gr4 – moderate load, representing oat hay	1.8	13	0.6	12.4	32.4	2.2
Sh5– high load, representing Diegan coastal sage scrub and southern mixed chaparral	2.5	27.0	0.9	10.7	53.6	3.1

Source: Scott Franklin Consulting 2010.

Table 4-6
Agricultural Activities on the Cumming Ranch Property

Farming Activity	Time Period	Description of Activity
Land Preparation and Crop Planting	November – January	During these months, the land is prepared for planting of dry oat hay. The preparation activities include tilling and discing of the soil. Once the soil is prepared, the crop is then seeded.
Growing Season	February – April	During these months the oat hay crop is growing and maturing.
Harvest	May – June	Throughout these 2 months, the oat hay crop is typically ready for harvest. Harvesting activities include mowing, raking, and baling the hay.
Grazing	August – October	During the early fall months while the land is fallow, cattle are allowed to graze.

Source: Dempsey 2009

Table 4-7
Crop Production History

Year	Weather Conditions	Crop Production
2002	Drought	No tonnage produced, crop grazed off
2003	Average	300 tons of good quality hay
2004	Drought	No tonnage produced, crop grazed off
2005	Unseasonably wet	75 tons of poor quality hay
2006	Low rainfall in beginning of season	75 tons
2007	Drought	100 tons of poor quality hay
2008	Drought	100 tons of poor quality hay

Source: Dempsey 2009

Table 4-8
Ramona Community Plan Relevant Agricultural Policies

Agricultural Land Use Policy	Consistent?	Discussion
Policy 1. The County will promote and preserve viable agriculture land uses within the Ramona Planning Area.	Yes	Though portions of the project site are currently in agricultural use, the viability of the project site has decreased over the last decade due to surrounding development. Area B would not be developed with urban uses that would preclude the continued agricultural use of that area. In addition, agriculture uses, such as animal keeping, would be allowed on residential lots in accordance with County policy.
Policy 4. Review the agricultural use and/or agricultural potential of land prior to consideration of residential development proposals.	Yes	An Agricultural Analysis Report was required by the County to specifically analyze the potential impact to farmland and agriculture with implementation of the proposed project.
Policy 5. Encourage the protection of areas designated for agricultural activities from scatter and incompatible urban intrusions.	Yes	The project site is not designated for agricultural activities. In addition, the project site is generally surrounded with development and is adjacent to the Ramona Town Center boundary.
Residential Land Use Policy	**Consistent?**	**Discussion**
Policy 2. The majority of residential lots in the planning area shall be of a size sufficient to accommodate the keeping of large animals.	Yes	The average sized lot in the proposed project is approximately 1.5 acres with some lots ranging up to approximately 3.1 acres. The proposed project would allow for animal keeping in accordance with County policy.
Policy 3. Maintain the existing rural lifestyle by continuing the existing pattern of residential and agricultural uses on large lots outside of the Town Center and San Diego County Estates.	Yes	The project is located directly adjacent to the Ramona Town Center boundary and proposes residential development, similar to what is planned in the Ramona Community Plan for this SPA. The residential development would allow for small agricultural practices in accordance with County policies.

Source: County of San Diego 2002a.

Table 4-9
Soils on Area A of the Cumming Ranch Site

Soil Name and Description	Map Symbol	Slope Percentage	Depth to Bedrock (inches)	Erosion Hazard	Shrink-Swell Behavior	Homesite Development Limitation
Bonsall-Fallbrook sandy loam Moderately deep to deep, moderately well drained soils that have a very slowly permeable subsoil.	BnB	2 to 5	18 to 44	Slight	High	Moderate
Cieneba very rocky coarse sandy loam Excessively drained, very shallow to shallow coarse sandy loams on uplands.	CmrG	30 to 75	3 to 17	Moderate to very high	Low	Severe
Fallbrook sandy loam Well-drained, moderately deep/deep soil formed in place by weathering from granodiorite.	FaB	2 to 5	32 to 60	Slight	Moderate	Slight
Fallbrook sandy loam Well drained soils, moderately deep to deep sandy loam on upland areas.	FaC	5 to 9	32 to 62	Slight to moderate	Moderate	Slight
Fallbrook sandy loam Well-drained, moderately deep/deep soil formed in place by weathering from granodiorite.	FaD2	9 to 15	26 to 60+	Moderate	Moderate	Moderate
Fallbrook rocky sandy loam Well-drained, moderately deep/deep soil formed in place by weathering from granodiorite.	FeC	5 to 9	10 to 40	Slight to high	Moderate	Slight
Fallbrook rocky sandy loam Well-drained, moderately deep/deep soil formed in place by weathering from granodiorite.	FeE	9 to 30	10 to 40	Moderate to high	Low	Moderate
Placentia sandy loam Moderately well drained soil that has a sandy clay subsoil.	PeC	2 to 9	40	Moderate	High	Moderate
Ramona sandy loam Well-drained, very deep soil formed in granitic alluvium.	RaB	2 to 5	60+	Slight to moderate	Moderate	Slight
Visalia sandy loam Moderately well drained, very deep soil formed in granitic alluvium.	VaA	0 to 2	60	Slight	Low	Moderate
Vista rocky coarse sandy loam Well-drained moderately deep soil derived from granodiorite or quartz diorite.	VvD	5 to 15	20 to 36	Slight to moderate	Low	Slight

Source: USDA 1973

Table 4-10
National and California Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS[1]		CAAQS[2]
		Primary[3]	Secondary[4]	Concentration[5]
Ozone (O_3)[6]	1-Hour	-	Same as Primary Standard	0.09 ppm (180 μg/m^3)
	8-Hour	0.08 ppm (157 μg/m^3)		0.070 ppm (137 μg/m^3)[9]
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	None	9.0 ppm (10 mg/m^3)
	1-Hour	35 ppm (40 mg/m^3)		20 ppm (23 mg/m^3)
Nitrogen Dioxide (NO_2)	Annual Average	0.053 ppm (100 μg/m^3)	Same as Primary Standard	0.030 ppm (56 μg/m^3)[10]
	1-Hour	-		0.18 ppm (338 μg/m^3)[10]
Sulfur Dioxide (SO_2)	Annual Average	0.03 ppm (80 μg/m^3)	-	-
	24-Hour	0.14 ppm (365 μg/m^3)	-	0.04 ppm (105 μg/m^3)
	3-Hour	-	0.5 ppm (1300 μg/m^3)	-
	1-Hour	-	-	0.25 ppm (655 μg/m^3)
Suspended Particulate Matter (PM_{10})[7]	24-Hour	150 μg/m^3	Same as Primary Standard	50 μg/m^3
	Annual Arithmetic Mean	Revoked		20 μg/m^3 [note 7]
Fine Particulate Matter ($PM_{2.5}$)[8]	24-Hour	35 μg/m^3	Same as Primary Standard	-
	Annual Arithmetic Mean	15 μg/m^3		12 μg/m^3
Lead (Pb)	30-Day Average	-	-	1.5 μg/m^3
	Calendar Quarter	1.5 μg/m^3	Same as Primary Standard	-
Hydrogen Sulfide (H_2S)	1-Hour	No Federal Standards		0.03 ppm (42 μg/m^3)
Sulfates (SO_4)	24-Hour			25 μg/m^3
Visibility Reducing Particles	8-Hour (10 am to 6 pm, Pacific Standard Time)			In sufficient amount to produce an extinction coefficient of 0.23 per km due to particles when the relative humidity is less than 70 percent.
Vinyl chloride[9]	24-Hour			0.01 ppm (26 μg/m^3)

[1] NAAQS (other than O_3, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the USEPA for further clarification and current federal policies.

[2] California Ambient Air Quality Standards for O_3, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2, PM_{10}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.

[3] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[4] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[5] Concentration expressed first in units in which it was promulgated. Ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.

[6] On June 15, 2005, the 1-hour ozone standard was revoked for all areas except the 8-hour ozone nonattainment Early Action Compact Areas (those areas do not yet have an effective date for their 8-hour designations). Additional information on federal ozone standards is available at http://www.epa.gov/oar/oaqps/greenbk/index.html.

[7] Due to a lack of evidence linking health problems to long-term exposure to coarse particle pollution, the USEPA revoked the annual PM_{10} standard on December 17, 2006.

[8] Effective December 17, 2006, the USEPA lowered the $PM_{2.5}$ 24-hour standard from 65 μg/m^3 to 35 μg/m^3.

[9] The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[10] The Nitrogen Dioxide ambient air quality standard was amended on February 22, 2007, to lower the 1-hr standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes become effective after regulatory changes are submitted and approved by the Office of Administrative Law.

ppm = parts per million; μg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; km = kilometers
Source: CARB 2007.

Table 4-11
Estimated Emissions (Pounds/Day)

Time Period[1] and Activity	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2008 – October through December						
New Road Construction[2,3]	15	88	94	-	34	10
Highland Valley Road Widening[2,3]	8	42	43	-	5	2
Utilities Construction	2	20	10	0	1	1
Total	**25**	**150**	**147**	**0**	**40**	**13**
Thresholds of Significance (Pounds/Day)	*75*	*250*	*550*	*250*	*100*	*55*
Does the Project Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
2009 – April through June						
New Road Construction[2,3]	15	88	94	-	34	10
Highland Valley Road Widening[2,3]	8	42	43	-	5	2
Utilities Construction	2	19	8	0	1	1
Grading – South areas[3]	4	36	20	0	30	8
Building Construction – South areas	5	23	35	0	2	1
Total	**35**	**208**	**201**	**0**	**72**	**22**
Thresholds of Significance (Pounds/Day)	*75*	*250*	*550*	*250*	*100*	*55*
Does the Project Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
2010 – October through December						
Grading – North areas[3]	3	25	13	0	23	6
Building Construction – South areas	5	22	33	0	2	1
Architectural Coating – South areas	2	0	0	0	0	0
Area Sources – 71 occupied homes[4]	15	2	31	0	5	5
Vehicle Operations – 71 occupied homes[4]	9	15	93	0	15	3
Total	**34**	**64**	**171**	**0**	**44**	**15**
Thresholds of Significance (Pounds/Day)	*75*	*250*	*550*	*250*	*100*	*55*
Does the Project Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
2012 – January through March						
Building Construction – North areas	4	19	29	0	1	1
Architectural Coating – North areas	2	0	0	0	0	0
Area Sources – 125 occupied homes[4]	27	4	55	0	8	8
Vehicle Operations – 125 occupied homes[4]	13	22	141	0	26	5
Total	**46**	**45**	**225**	**0**	**35**	**15**
Thresholds of Significance (Pounds/Day)	*75*	*250*	*550*	*250*	*100*	*55*
Does the Project Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Emissions rounded to the nearest pound; totals may not add due to rounding.

See Appendix A for road construction calculations and Appendices B and C for all other calculations.

[1] Time periods not shown in this table have less emissions; all time periods are shown in Appendices B and C. Time periods shown are outdated since completion of the air quality modeling; however, these calculations are considered to be conservative as better technology continues to reduce emission output from construction equipment[2] Road construction model does not calculate SO_X or $PM_{2.5}$. SO_X emissions are negligible; $PM_{2.5}$ emissions manually calculated from PM_{10} data.

[3] Road construction and grading operations include watering three times per day to suppress fugitive dust; a project design feature.

[4] Area and vehicle operations based on winter conditions with fireplace use; summer emissions would be less.

Table 4-12
Estimated Maximum CO Concentrations - Existing plus Project

Intersection	Existing		Existing + Project		Change	
	AM	PM	AM	PM	AM	PM
1-Hour Concentrations						
SR 67/Highland Valley Road	9.3	9.7	9.4	9.8	0.1	0.1
8-Hour Concentrations						
SR 67/Highland Valley Road	5.6	5.8	5.6	5.9	0	0.1

Table 4-13
Estimated Maximum CO Concentrations - Cumulative Conditions

Intersection	Existing		Cumulative		Change	
	AM	PM	AM	PM	AM	PM
1-Hour Concentrations						
SR 67/Highland Valley Road	9.3	9.7	8.7	9.4	-0.6	-0.3
8-Hour Concentrations						
SR 67/Highland Valley Road	5.6	5.8	5.2	5.6	-0.4	-0.2

Note: Due to anticipated improvements in vehicle fuel efficiency and fuel formulation, while the number of vehicles would increase, the overall emissions from vehicles would decrease over time.

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CHAPTER 5.0
PROJECT ALTERNATIVES

5.1 Rationale for Alternative Selection

The Cumming Ranch project, as proposed by the project applicant, has been described and analyzed in the previous chapters with an emphasis on potentially significant impacts and recommended mitigation measures to avoid these impacts. The environmental analysis in this EIR found that the proposed project could result in potential direct project impacts to issues including traffic, public services, noise, biology, cultural resources, visual resources, and global climate change. These impacts can be mitigated to below a level of significance with the incorporation of the mitigation measures in Chapter 3 of this EIR.

The CEQA Guidelines direct lead agencies that the "range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" (Section 15126.6[c]). This chapter provides a comparative analysis of four project alternatives that could lessen or avoid significant impacts that have been identified in Chapters 2.0 and 3.0. A total of four project alternatives including two "No Project" alternatives, one reduced density alternative, and one clustered development alternative are analyzed and discussed below. Several other project alternatives were considered but rejected from further evaluation; these rejected alternatives are discussed in Section 5.1.1 below. The alternative analysis evaluates each issue area in comparison to the proposed project.

The following discussion is intended to inform the public and decision-makers of some of the project alternatives that could be developed and the positive and negative aspects of those alternatives as compared to the proposed project. This chapter also includes analysis of the No Project Alternative, as required by CEQA.

It is noted that project objectives include designating specific lands (Areas B and C) as open space for the purpose of contributing to the Ramona Grasslands Preserve. Therefore, development of alternatives is focused on the southern portion of the property (Area A). Another of the project objectives, to avoid impacts to natural drainage areas, major rock outcroppings, ridgelines, and major stands of oak trees also limits feasible alternatives to those that incorporate open space for their protection in Area A. Therefore, the number of alternatives is fairly narrow due to the project's environmental design considerations.

5.1.1 Alternatives Considered but Rejected

This section outlines alternatives that were considered during the evaluation process but were rejected. In accordance with CEQA Guidelines (Section 15126.6[c]), factors that may be used to eliminate alternatives from detailed consideration in an EIR include (1) failure of the alternative to meet most of the basic project objectives, (2) infeasibility of the alternative, or (3) inability of the alternative to avoid significant environmental impacts. The five project objectives are stated in Subchapter 1.2 of this EIR. Factors that may be taken into account when considering the feasibility of project alternatives include site suitability; economic viability; availability of infrastructure; consistency with general plans or other plans or regulatory limitations; and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (CEQA Guidelines 15126.6[f][1]).

Offsite Alternatives

Per Section 15126.6(f)(2) of the CEQA Guidelines, the key question to ask when considering if an alternative location should be analyzed in an EIR is whether any of the significant effects of the proposed project would be avoided or substantially lessened by placing the project in another location. Potential alternative locations with over 400 acres of undeveloped land in the Ramona area were considered suitable in this analysis, because that is the approximate size of the development area of the project site.

Many of the remaining large parcels of undeveloped land in the Ramona area have been designated as SPAs for residential development in the Ramona Community Plan. These SPAs were defined by the Ramona Community Plan as being the most ideal locations for larger-sized residential developments in order to provide for expected growth in an organized manner. Many of the SPA areas are currently planned for development, such as the Oak County Partnership SPA or Montecito Ranch SPA (see the list of cumulative projects in Table 1-5), or development has already begun on other areas, such as the Woodson Ranch SPA and Rancho San Vicente SPA. Outside of these planned SPAs, there is a limited amount of appropriate space available for a project the size of the Cumming Ranch project.

The most potentially feasible areas for alternative locations for the proposed project include the lands northwest of the project site. There are large undeveloped parcels in this area that may provide for potential purchase of enough parcels to total 400 acres. However, these areas are not considered feasible for development of the project because they are located in the middle of the lands delineated by the County for the formation of the Ramona Grasslands Preserve. In addition, access to these areas is more difficult because of their distance from SR 67. It is also

expected that development of a project in this area, comparable to the one proposed, would result in equivalent environmental impacts because the land is generally undeveloped nonnative grasslands and is expected to have similar environmental characteristics. Because the environmental characteristics of an alternative site in this general area would be similar to those found on the project site, environmental impacts would not be avoided by development of the project in another location. In addition, many of these areas have not been specifically designated for residential development in the Ramona Community Plan. The increased distance from the Ramona Town Center and other more densely developed areas would create potential land use issues and may not meet the desired goals of the Ramona Community Plan to maintain rural character while allowing for organized growth. The proposed project's contiguous location to Ramona Town Center and the RMWD facilities for water and sewer service are important factors that make the project site desirable over other locations.

CEQA Guidelines 15126.6(f)(1) states that factors that must be taken into account when considering feasibility of alternatives include "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or that site is already owned by the proponent)." Other lands throughout the Ramona area would be difficult to develop with the requirement of a 400-acre project site because many parcels are smaller in size and have multiple owners. This would make the process of acquiring enough contiguous pieces of land to create a project site of the required size very complicated and financially difficult. The entire project site is currently owned by the project proponent.

Considering that the environmental impacts of developing in areas to the northwest of the project site or other undeveloped portions of Ramona would generally be equal to those of the proposed project site and acquisition of land elsewhere in Ramona of sufficient size is potentially infeasible, alternative locations were not considered further for this EIR.

Davis Ranch

The parcel of land known as the Davis Ranch was considered as an alternative location for development of the project. The 1,231-acre Davis Ranch SPA is located to the north of the proposed project site and is similar in character and allowable use of the Cumming Ranch property. A portion of the site was purchased by RMWD for continued use as spray fields and a portion of the site was purchased by TNC for inclusion in the Ramona Grasslands Preserve. Because this property is no longer available, it was not further considered as an alternative to the project.

Development in Area B

It was considered whether an alternative that would place all residential development within Area B would be appropriate for analysis. This alternative would be considered feasible because the property is already owned by the project proponent, the land is suitable for development, and it is possible that some biological impacts could be avoided if development occurred only within this area. However, this alternative was rejected from further consideration based on the importance of that particular area of the site as a wildlife corridor for movement throughout the grasslands and along the creeks. Development on this parcel would defeat the goals of the project to integrate and accommodate the Ramona Grasslands Preserve.

5.1.2 Alternatives Selected for Evaluation

The five alternatives that are compared in this chapter are the following:

1. No Build Alternative
2 Existing Community Plan Alternative
3. Clustered Development Alternative
4. Reduced Project Alternative
5. General Plan Update Alternative

In the following sections, each alternative is first described and then analyzed in consideration of the proposed project, according to whether it would have a beneficial or adverse effect. Subchapter 5.7 summarizes these findings and presents the conclusion about which alternative is the environmentally superior alternative as required by CEQA. Refer to Table S-2 for the comparison summary.

5.2 Analysis of the No Build Alternative

5.2.1 No Build Alternative Description and Setting

According to the CEQA Guidelines, the "no project" analysis shall discuss the existing conditions at the time the NOP is published, as well as what is reasonably expected to occur in the foreseeable future if the project is not approved (Section 15126.6 [e][2]). For the Cumming Ranch site, the No Build Alternative would most likely not include any development, at least in the near term, and is one of two "no project" alternatives analyzed per CEQA requirements. Although other development proposals could be pursued on the project site, any development would require a Specific Plan, as specified by the Ramona Community Plan. The Specific Plan

would require approval by the San Diego County Board of Supervisors. Thus, development of the project site under the current Ramona Community Plan policies could not immediately occur if the Cumming Ranch proposal is not approved. No figure is provided to depict this alternative as no change or development would occur.

Under the No Build Alternative, it is unknown if farming of the site would continue. Currently, Areas A and B are used as farmland and include approximately 400 acres of the 682.6-acre project site. However, due to the limited economic viability of agriculture on the project site, farming operations may cease under the No Build Alternative. Farming practices onsite currently rotate between nonirrigated oat hay crops and cattle grazing.

No grassland acreage within the project site would be permanently preserved in the Ramona Grasslands Preserve under the No Build Alternative. No land in Area A would be dedicated as open space. Portions of Area C would continue to have limited vernal pool protection consistent with the 22.2 acres of conservation easements that currently exist on this area.

This alternative would not meet most of the basic project objectives. Because the project site would not be partially developed, it would likely not be feasible to achieve the project objective of accommodating the Ramona Grasslands Preserve via meaningful participation through the formal preservation of important grassland acreage in Areas A, B, and C as land within the project site would not be made available for integrating in the preserve. As proposed by the applicant, one of the major objectives of the project is to provide a residential development that is reflective of Ramona's rural character and country lifestyle and the No Build Alternative would not accomplish this as no residential development would occur. In addition, an objective of the Cumming Ranch project is to implement a meaningful trail system based on community input, which would not be accomplished with the No Build Alternative as no trail system would be constructed through the project site. Additionally, this alternative would not provide additional conserved acreage for specific environmental resources, protective buffers, or for integration of the existing Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve.

5.2.2 Comparison of the Effects of the No Build Alternative to the Proposed Project

Transportation and Circulation

The No Build Alternative would not introduce any new land use at the project site; therefore, traffic would not increase with the implementation of the No Build Alternative. For this reason, the No Build Alternative would avoid the traffic impacts identified for the proposed project. The

significant traffic impacts associated with the proposed project would not occur with this alternative.

Public Services and Recreation

Because no new development would occur on the project site, there would be no potential impact on existing infrastructure systems or community services. Thus, the No Build Alternative would be less impactive than the proposed project in consideration of these services and utilities. This alternative would avoid the significant but mitigable impacts associated with sewer and water service under the proposed project.

Biological Resources

The No Build Alternative would not place development on the project site and would not impact habitat types or wildlife species. Wildlife species would continue to use both the farmed and undisturbed areas of the site for habitat, foraging, and movement. While the project would formalize participation in the Ramona Grasslands Preserve, this alternative would allow a larger area to contribute to the preserve in its existing informal manner. The No Build Alternative provides greater biological benefit based on the diversity of habitats within Area A that would remain undisturbed under this alternative. The No Build Alternative, with or without farming activities, also ensures that wildlife movement could continue through the site. For these reasons, the No Build Alternative would result in less biological impact when compared to the proposed project.

Cultural Resources

As identified in Subchapter 3.2, there are numerous cultural resources within the project site. Some of these sites are located near and within areas that are currently farmed. It is possible that historical farming operations may have affected these resources and the potential of future farming operations may result in a continuing impact on resources of unknown significance. Implementation of the proposed project could result in the destruction of some cultural resources, while others would be in preserved open space. However, maintaining the existing baseline conditions of the site with ongoing farming activities is considered less impactive than development of the site. Therefore, the impact is considered less when comparing the No Build Alternative to the proposed project.

Noise

The No Build Alternative would not introduce any residential uses to the project site, nor would it contribute to vehicle noise in the vicinity of the project. Thus, the No Build Alternative would result in less noise impact when compared to the proposed project.

Hazards and Hazardous Materials

The No Build Alternative would not introduce developed land uses into a wildland fire hazard area. For this reason, the No Build Alternative would avoid wildland fire hazards as compared to the proposed project.

Aesthetics and Visual Quality

The proposed project would alter and partially develop the existing scenic vista of the project site. The No Build Alternative would avoid this visual change because no new development would occur. The site would remain in its existing rural visual state. There would be less visual impact when comparing the No Build Alternative to the proposed project.

Air Quality

The potential continuation of farming practices would contribute particulate matter to the air basin through dust and equipment emissions. However, the No Build Alternative, with or without continued farming, would not contribute additional vehicle trips or other emission sources associated with development that could worsen air quality. The number of vehicle trips associated with the proposed project would generate more air pollution than the dust and emissions from the equipment associated with the existing farming practices. For this reason, the No Build Alternative is considered to have less air quality impact than the proposed project.

Global Climate Change

The No Build Alternative would not introduce development to the project site. No emissions associated with construction activities, vehicle trips, or residential uses would result. Thus, the No Build Alternative would have less cumulative impact on global climate change than the proposed project.

Hydrology and Water Quality

If farming were to continue, the No Build Alternative would continue to generate pollutants from herbicides and sediment as currently occurs with the ongoing agriculture activities. As described in Section 4.1.1, the proposed project would generate a similar amount of runoff as currently occurs onsite; however, all of this runoff would be treated through the biofilter system. It is assumed that, with the continued agriculture practices, the use of herbicides would continue and would be treated by the natural vegetation and swales prior to reaching receiving waters. It is also assumed that the unexposed soils during harvesting and planting would create water erosion and untreated sediment runoff. Thus, with continued agricultural practices, the No Build Alternative would result in greater hydrology and water quality impacts than the proposed project. However, if farming activities were to cease, no chemical pollutants would result and sedimentation would decrease as the soil would not be exposed during portions of the year. Under a no farming scenario, the No Build Alternative would result in fewer hydrology and water quality impacts than the proposed project.

Soils and Geology

The No Build Alternative would not introduce any new development onto the project site. The underlying geologic features would not be disturbed. The impact to soils and geology is considered to be less than the proposed project.

Agricultural Resources

Under the No Build Alternative, the project site may or may not continue to be used for agricultural purposes based on limited economic viability of the site to support continued farming. However, the site is not designated as an important farmland site. For this reason, neither the No Build Alternative nor the proposed project would negatively affect significant agricultural resources.

Land Use and Planning

The No Build Alternative would result in no development on the project site. In the Ramona Community Plan, the site is planned for residential development to accommodate future growth in the area. This alternative would not implement the land use plan or goals outlined in the Ramona Community Plan; however, vacant land would not result in any land use impact.

5.2.3 Rationale for Preference of the Proposed Project Design over the No Build Alternative

The No Build Alternative was rejected in favor of the proposed project because it does not meet the goals and objectives of the project. The No Build Alternative would result in fewer environmental impacts than the proposed project. However, many of the project goals could not be achieved, including the development of a residential community reflective of the Ramona rural character and integration of that residential community into the adjoining Ramona Grasslands Preserve. The No Build Alternative also would not achieve the goal of accommodating the Ramona Grasslands Preserve in a manner that helps to ensure the Ramona Grasslands Preserve concept becomes a reality because no property would be donated or sold for formal conservation purposes in this grassland preserve effort; however, the land would continue to contribute to the grasslands in the existing informal manner. The No Build Alternative would also not result in a community trail system or provide additional protective buffers or facilitate the formal integration of the existing Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve.

5.3 Analysis of the Existing Community Plan Alternative

5.3.1 Existing Community Plan Alternative Description and Setting

To consider the implications of implementation of the current Ramona Community Plan land use directives for the site, the Existing Community Plan is considered. According to the CEQA Guidelines, the "No Project" analysis shall discuss the existing conditions (i.e., No Build Alternative described above), as well as what is reasonably expected to occur in the foreseeable future if the project is not approved. This alternative is considered a reasonable foreseeable future project as it is based on the SPA for the site; therefore, this alternative is also considered a "No Project" alternative under CEQA.

Under this alternative, development would presumably occur on the Cumming Ranch site according to the existing Ramona Community Plan, which currently describes the Cumming SPA (0.25) and permits "166 single-family dwelling units ranging in size from 2 to 4 or more acres…" and also permits industrial use adjacent to Ramona Airport. The industrial use is described as "adjacent to the south of the Ramona Airport, and north of the 100-year floodplain" and assumes the uses to be of the type allowed in the M52 Use Regulations of the County Zoning Ordinance (Limited Impact Industrial Use, which includes custom manufacturing). A conceptual site plan for this alternative is shown in Figure 5-1. This alternative could not proceed without the approval of a Specific Plan and Tentative Map for the property under these parameters. For

this reason, this alternative is not presumed to be the immediate outcome if the Cumming Ranch project is not approved. However, it is a development scenario that could be pursued in place of the proposed project, consistent with existing development policies. As described below, this alternative development plan does not meet the exact specifications of the Cumming Ranch SPA as the development must be consistent with County RPO and other policies.

The Existing Community Plan Alternative included the development of 127 residential lots throughout Area A. The Cumming Ranch SPA would allow for development of residential properties on Area B; however, due to County RPO requirements, development in that area is not feasible. Therefore, in this alternative design, Area B would remain as open space with possible ongoing farming activities. Due to these constraints, the alternative design could not accommodate the full 166 residential lots as described in the Cumming Ranch SPA. The preserved acreage in Area C would be reduced due to the industrial development adjacent to the Ramona Airport, which is currently envisioned by the existing Ramona Community Plan. The residential lots would be between 2 and 4 acres and would be on septic systems due to their size. The industrial development would be on sewer service. All open space areas would be placed in open space easements within the residential lots. All sensitive biological or cultural resources located within private lots would require backyard easements.

This alternative would not be able to accommodate the Ramona Grasslands Preserve in a manner that would help to ensure the preserve concept becomes a reality because development would occur in areas critical to the connectivity of surrounding open space areas. Area C would be partially developed with industrial uses and would substantially reduce the connectivity to the east and southeast. Because of this, the alternative would also not meet the project objective of designing a project that would seamlessly integrate with the grasslands as the grassland area could not adequately connect through or co-exist with the industrial development portion of Area C. This alternative could meet the project objective of providing a residential development that is reflective of Ramona's rural character and country lifestyle by providing large lot sizes and provisions for large animal keeping and the possible preservation of natural features within the lots. Trails could be provided throughout the project area in a manner similar to the proposed project in order to meet the trails objective. However, due to the increased development footprint, the trails would be required to traverse private property with easements, which could result in some access and maintenance challenges. In addition, due to the industrial component in Area C that would be developed under this alternative, it is unlikely that habitat could be preserved to the same degree as the proposed project, resulting in a decline in the ability of the alternative to meet the project objective of providing protective buffers and additional preserve acreage in relation to the vernal pool habitats also located in Area C.

5.3.2 Comparison of the Effects of the Existing Community Plan Alternative to the Proposed Project

Transportation and Circulation

The Existing Community Plan Alternative would introduce two new land uses at the project site: residential and industrial. This alternative would increase traffic due to 127 new homes as well as employees and delivery trips related to the industrial uses as compared to the 125 residential units with the proposed project. This traffic increase would result in a minimal increase of an additional 24 ADT due to increased residential units; however, approximately 984 additional ADT from the industrial development (assuming warehouse use at 60 trips per acre) would be added. The total addition of approximately 1,000 ADT generated by the Existing Community Plan Alternative is an increase of approximately 65 percent as compared to the proposed project traffic. The severity of the significant traffic impacts associated with the proposed project would increase with this alternative.

Public Services and Recreation

This alternative would accommodate an additional 2 housing units beyond the proposed project as well as an industrial development onsite. When compared to the proposed project, this alternative would result in an increased demand to infrastructure and community services, such as fire and law enforcement, water and sewer service, and solid waste services, mostly attributable to the industrial development. The significant but mitigable sewer and water service impacts associated with the proposed project would also occur with this alternative and possibly increase in severity due to additional industrial demands.

Biological Resources

Based on design of the Existing Community Plan Alternative, there would be a potential for sensitive biological resources located in Area C to be disturbed, such as the vernal pools. The industrial development described in the existing Ramona Community Plan would be located generally south of the airport and north of Santa Maria Creek, which is generally the boundary of Area C. As shown in Figure 5-1, the industrial development is assumed to be located in the northwest corner of Area C to best avoid vernal pools; however, this reduces the ability to provide protective buffers for the vernal pools. If a portion of Area C were to be developed, the connectivity of the site as a wildlife movement corridor to grassland areas northwest and southeast would be reduced. The development of 127 housing units on 2 to 4 acre lots would have the potential to impact additional biological resources beyond those associated with the

development of 125 units in the proposed project. Less common open space would be included in this alternative, a decrease of approximately 145 open space acres when compared to the proposed project. The common open space included in the proposed project would be replaced with required backyard easements. For these reasons, this alternative would result in greater biological impacts than the proposed project.

Cultural Resources

This alternative would place development in areas with known cultural resource sites. In addition, the increased residential units and larger development footprint would require sites to be protected in backyard easements with a greater potential for indirect impacts to occur. When compared to the proposed project, this alternative would have a greater impact on cultural resources.

Noise

It is assumed that similar noise impacts from Highland Valley Road would occur to residential lots located along the roadway under the Existing Community Plan Alternative. However, because there would be a substantially higher number of vehicle trips and large industrial truck trips resulting from this alternative, the noise generated by the higher traffic volume and large heavy trucks would be increased. Noise generation onsite would increase with the inclusion of industrial development on the site and may include noise from sources such as machinery or delivery vehicles. This onsite noise generation would have the potential to result in a noise impact to the residences beyond what would occur with the proposed project.

Hazards and Hazardous Materials

The Existing Community Plan Alternative would continue to result in a substantial interface with potential wildland fires. The potential for wildfire hazards would be similar in nature to the proposed project. Dependent on the types of uses in the industrial development area, it is possible that hazardous materials may be transported and used on the site, thus increasing hazard potential.

Aesthetics and Visual Quality

From Highland Valley Road and SR 67, the visual impact of the Existing Community Plan Alternative would result in additional visual impacts as compared to the proposed project. As shown in Figure 5-1, the residential lots would encroach up hillsides and into the main ridgeline

and other knolls throughout the property. These homes would be in more visually prominent locations. This alternative could result in the loss of unique landforms and native vegetation. Negative visual effects would also be associated with the larger overall development footprint and increased scale of this alternative. The industrial development south of the airport may be visible to receptors in the Ramona Town Center located adjacent to the east of this area. The potential visual impact to the Ramona Town Center would be greater than what would occur with the proposed project.

Air Quality

This alternative would result in more vehicle trips per day from the additional residences and industrial use, resulting in greater air pollutant emissions. It is likely that with industrial development on the site, large delivery type trucks would travel to the site and increase potential air quality emissions. In addition, it is unknown what specific type of industrial use would be developed onsite and this use may potentially increase air pollution emissions. During construction, encroachment of lots into the steeper hillsides and knolls would result in additional grading and increased fugitive dust.

Global Climate Change

The Existing Community Plan Alterative would result in increased development on the project site. There would be more vehicle trips per day from the additional residences and the industrial use, resulting in greater vehicle emissions. There would potentially be additional emissions specific to the industrial operations onsite. For these reasons, this alternative would have a greater cumulative impact on global climate change than the proposed project.

Hydrology and Water Quality

This alternative would result in increased runoff from the additional impervious surfaces associated with the increased housing units, increased roadways, and industrial component. Based on the type of industrial development, pollutant loads in runoff could also increase. For this alternative, wastewater disposal for residential lots is assumed to be accommodated by septic systems. This could have the potential to negatively affect local groundwater. This alternative would have a greater impact to hydrology and water quality.

Soils and Geology

Additional homesites and the industrial component of the Existing Community Plan Alternative would require increased grading and potential placement of structures on unstable soils or geologic features. Residential lots would encroach into the main ridgeline and other knolls on the site and could increase the potential for erosion and unstable soil conditions. This alternative would result in increased potential for soil and geology impacts.

Agricultural Resources

Similar to the proposed project, this alternative would not develop residential uses within Area B and farming may or may not continue within this area. Therefore, this alternative is considered similar to the proposed project and would not result in any significant agricultural resource impacts.

Land Use and Planning

This alternative would develop the site as closely as possible to the specified Cumming Ranch SPA in the Ramona Community Plan. The large lot sizes would be consistent with the Ramona Community Plan and would meet the community character goal. However, this alternative would not necessarily preserve unique and natural landforms on the project site as directly by the Ramona Community Plan but approval would be subject to CEQA because a Specific Plan would still need to be developed for this alternative. The Existing Community Plan Alternative would have less land use impacts than the proposed project.

5.3.3 Rationale for Preference of Proposed Project Design over the Existing Community Plan Alternative

The Existing Community Plan Alternative was rejected in favor of the proposed project for multiple reasons. This alternative would not meet some of the goals of the proposed project. It would not accommodate the Ramona Grasslands Preserve via meaningful participation because no substantial amount of land would be formally included in the Ramona Grasslands Preserve from Areas A or C. Industrial development would occur in Area C, which is a critical and environmentally sensitive linkage to the grasslands to the northwest of the site. Because of this industrial development, it would not be possible to meet the goal of a seamless integration of the project with the grasslands as connectivity to surrounding open space areas would be restricted. Development in Area C would also encroach upon, rather than provide additional acreage for

protective buffers or facilitate integration of the existing Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve.

5.4 Analysis of the Clustered Development Alternative

5.4.1 Clustered Development Alternative Description and Setting

This alternative would cluster a development of 166 residential units with all of the lots and homes located to the south of Highland Valley Road. What was known as Area A would be located entirely to the south of Highland Valley Road on approximately 150 acres. Area B would be increased to 410 acres and Area C would remain the same as shown in Figure 5-2. The lots would have a minimum lot size of 0.5 acres. The lots would be a typical urban tract-style design and require that 100 percent of each lot be graded. This would require mass grading to accommodate the development. The grading requirement would necessitate approximately 500,000 cubic yards of balanced cut and fill. The lots would be graded with terraced slopes between street levels. Manufactured slopes would be up to 28 feet high. This alternative would require the development of the knolls within the area south of Highland Valley Road and natural landforms, such as rock outcroppings, would likely be removed. This alternative has been designed to avoid the drainages through this area. This alternative would result in the preservation of less open space south of Highland Valley Road, due to a relatively higher density in this area. Sewer service would be required for this alternative and the connection through the area north of Highland Valley Road to SMWWTP would be necessary, as would the sewer lift station. Because there is no development planned north of Highland Valley Road, the trails system as proposed by the project would depend upon future use/ownership and would not be built or funded by the applicant. The pathway along Highland Valley Road from SR 67 to the project would still be constructed.

This alternative would meet some of the project objectives. It could accommodate and expand the Ramona Grasslands Preserve in a manner that would help ensure the Ramona Grasslands Preserve concept becomes a reality, because the areas north of Highland Valley Road could be protected or made available for acquisition as open space. The design of this alternative would allow for continued grasslands connectivity through Areas B and C. The Clustered Development Alternative would provide for the integration of the existing Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve as preservation of all vernal pool areas within Areas B and C would result. However, the character of the residential development provided by the alternative would not be consistent with Ramona's rural character and country lifestyle, when compared to the proposed project, and would not meet the objective to design a project that is compatible with the Ramona community. The residential units would be clustered and tract-style with less open

space directly adjacent to most of the residential lots. The urban-style lots would be uniform in size, shape, and alignment with mass-graded stepped pads, and the home designs would be limited in variation and appearance. This type of development is not consistent with the surrounding residential areas and would not be consistent with the rural character of Ramona. There would be no provisions for large animal keeping. All natural vegetation within lots would be replaced with ornamental landscaping and natural land features would be lost. This alternative would also not seamlessly integrate with the grasslands as the development would be more separate and isolated from the open space preserve, rather than integrated with the preserve. The open space areas that are provided along the drainages would not function as an amenity of the project. The objective to provide a scenic and meaningful trail system for the community would not be met as only the pathway along Highland Valley Road would be constructed as part of the project.

5.4.2 Comparison of the Effects of the Clustered Development Alternative to the Proposed Project

Transportation and Circulation

This alternative would develop 41 additional residential units as compared to the proposed project and there would be an increase of approximately 490 ADT resulting in a greater amount of project-generated traffic. Therefore, increased traffic impacts would occur to the same surrounding roadways and intersections with the Clustered Development Alternative as with the proposed project. With the Clustered Development Alternative, the same number of project entrances would still be located off of Highland Valley Road. The opportunity for nonvehicle transportation would be reduced due to the loss of the trail system through the project site. The significant traffic impacts of the proposed project would also occur with this alternative and increase in severity due to increased daily trips.

Public Services and Recreation

Because this alternative would accommodate 41 more residential units than the proposed project, it would result in increased demand for infrastructure and community services. The alternative would require sewer service for the residential development, and the connection would likely need to pass through the area north of Highland Valley Road to connect to SMWWTP and would require a sewer lift station. The additional units in this alternative would increase demand for sewer and water service, solid waste service, police and fire protection, school services, and recreational facilities; however, this increase is not considered substantial and the impact is considered similar to the proposed project. Sewer and water service impacts associated with the

proposed project would also occur under this alternative and likely increase in severity due to increased service demand.

Biological Resources

This alternative would place all development entirely south of Highland Valley Road and it is assumed that all biological resources would be affected in this area. The design of the project would allow for protection of the drainages that pass through the area. However, this alternative allows for the potential preservation of the entire property located on the north side of Highland Valley Road, which has a high biological value, or for the agricultural operations to continue. The area north of Highland Valley Road provides a greater biological diversity and is adjacent to Etcheverry Creek. The adjacency to the creek and the open areas of Areas B and C would allow for a large contiguous parcel for wildlife use and movement. For these reasons, the Clustered Development Alternative would be better than the proposed project when considering biological resources.

Cultural Resources

It is assumed that the Clustered Development Alternative would impact all cultural resources located in the development area. There are multiple cultural resources sites located in the development area south of Highland Valley Road that would be preserved in open space under the proposed project. However, multiple known cultural resource sites on the north side of Highland Valley Road would be entirely avoided with this alternative because no development would occur. Because the majority of known sensitive cultural resources areas within the project site area located north of Highland Valley Road and this area would potentially be located in preserved open space, it is assumed that there is the potential for less cultural resource impacts to result from the Clustered Development Alternative when compared to the proposed project.

Noise

This alternative would place more than twice as many lots in the area south of Highland Valley Road as compared to the proposed project. Under the proposed project, the majority of the noise impacts occur to residential lots along Highland Valley Road. Approximately 17 units, adjacent to the southern side of the Highland Valley Road would be affected; only 4 lots are affected on the north side. As shown in Figure 5-2, due to the dense nature of this alternative, there are approximately 25 residential lots adjacent or in proximity to Highland Valley Road. This would increase the number of lots with a significant noise impact resulting from exposure to roadway traffic. It is likely that extensive, long-wall style noise barriers would be required to address the

potential noise impacts to these residential receptors as the compact, tract-style design is not conducive to individual walls. Also, roadway traffic noise may be increased due to the additional ADT generated by this alternative.

Construction of the Clustered Development Alternative would require mass grading, approximately three times the amount of grading required for the proposed project. This extensive soil work would generate increased construction noise levels as compared to the proposed project, specifically along the southwestern boundary of the project where sensitive noise receptors are located adjacent to the construction area. In addition, because the dense, clustered residential design would require development of the knolls south of Highland Valley Road, these features would probably require blasting during construction as granitic rock material would likely be encountered. For this reason, the noise impact would be greater for the Clustered Development Alternative than for the proposed project.

Hazards and Hazardous Materials

The Clustered Development Alternative would cluster all development together and reduce the amount of interface with potential wildfire areas. This clustering would reduce the number of homes that would be adjacent to open areas. In addition, the areas surrounding the portion of the site south of Highland Valley Road are generally developed with existing residential areas rather than the large areas of open lands to the north and northwest of the site on the north side of the road. When compared to the proposed project, this alternative would have less impact when considering wildfire and airport hazards.

Aesthetics and Visual Quality

The Clustered Development Alternative would create a greater visual impact to motorists on SR 67 and Highland Valley Road. The portion of the site that is located south of Highland Valley Road is the most visible portion of the site from SR 67 and the scenic quality would have a greater impact by the more dense clustered development with homes much closer together due to smaller lot size compared to the proposed project. The project would appear more intense and uniform as lots would be mass graded and homes would be in alignment with limited variation. This alternative would result in the loss of unique landform features, such as the knolls in this area of the project site as well as rock outcropping and stands of oak trees. Native vegetation would be replaced with ornamental landscaping. Due to noise impacts, the alternative would require extensive noise barriers (walls) adjacent to the south side of Highland Valley Road. The project would be seen from SR 67, a locally designated scenic roadway in the Ramona

Community Plan; therefore, the visual impact resulting from this alternative is more substantial than the proposed project.

Air Quality

The Clustered Development Alternative would result in additional ADT and thus would generate a slightly greater amount of air pollution due to traffic. An increase in air quality emissions would also occur during construction of this alternative. Because of the clustered tract-style type of development necessary to accommodate all units on the south side of the roadway, lots would be 100 percent graded with up to 28-foot-high cut slopes. This would require mass grading of approximately 500,000 cubic yards of cut and fill, which is three times the amount required for the proposed project. This extensive grading activity would result in increased dust during construction and the need for additional construction equipment and associated diesel emissions. Thus, air quality impacts would be greater with this alternative when compared to the proposed project.

Global Climate Change

The Clustered Development Alterative would result in increased short-term construction emissions due to mass grading. Increased vehicle trips and residential uses would also generate increased emissions. However, in consideration of the overall cumulative nature of climate change, the increased emissions from the Clustered Development Alternative would not create a substantial difference relative to the proposed project. The cumulative climate change impact is considered to be similar for this alternative as compared to the proposed project.

Hydrology and Water Quality

This alternative would result in a greater number of units when compared to the proposed project and would result in an increased amount of impervious surface. In addition, there would be a reduced area of open space incorporated throughout the development footprint that would serve as a natural biofilter. The significantly increased amount of grading required for this alternative and the density of the associated impervious surfaces would increase the potential for runoff and erosion-related water quality impacts throughout the construction and operation periods. This alternative would have a potentially greater impact to hydrology and water quality than the proposed project.

Soils and Geology

This alternative would require mass grading to accommodate all the units in the area south of Highland Valley Road. The increased amount of earth work required for this alternative would increase the potential for erosion-related impacts. In addition, the development footprint of this alternative would include the knolls and significant rock outcroppings south of Highland Valley Road. It is likely that these rock features would require blasting in order to accommodate the construction of the residential lots and rockfall hazards could be created. Therefore, this alternative would have a greater impact to soils and geology than the proposed project.

Agricultural Resources

Similar to the proposed project, this alternative would not result in any significant agricultural resource impacts. The area north of Highland Valley Road could continue to be farmed or it could be preserved as part of the Ramona Grasslands Preserve.

Land Use and Planning

The Ramona Community Plan emphasizes the importance of rural character of the area. The Clustered Development Alternative would create a dense clustered residential development on small parcels, approximately 0.5 acres each. This alternative would almost double the amount of residential lots and density south of Highland Valley Road as compared to the proposed project. The lots would be stepped and mass graded and the homes would be uniform with little variation. This type of dense development does not blend with the atmosphere and community character of the surrounding area or achieve the goals of the Ramona Community Plan. The alternative would be required to be compliant with the County RPO and thus, has been designed to avoid drainages and would require backyard easements for protection of sensitive resources. This alternative would introduce an urban-style development to the area and this is not consistent with the rural character goals of the community plan nor does it blend with or complement the existing development in the area. For this reason, the Clustered Development Alternative would result in worse land use and planning effects than the proposed project.

5.4.3 Rationale for Preference of the Proposed Project Design over the Clustered Development Alternative

The Clustered Development Alternative was rejected in favor of the proposed project because the dense, tract-style development does not meet the project goal of providing a residential development that is reflective of Ramona's rural character and country lifestyle. The density that

would be required to locate all 166 residential lots on the southern side of the road would create a development that is much denser than the surrounding area and would not blend with the existing community character of the Ramona area. The clustered development would potentially avoid some of the environmental impacts that result from the proposed project; however, it accomplishes this though a development style that is contradictory to the goals and objectives of the Ramona Community Plan. The urban-style development that would occur with the Clustered Development Alternative would not be compatible with the rural lifestyle promoted in the Ramona Community Plan and reflected in the existing development surrounding the project area. The alternative also does not meet the objective to design a project that integrates the development area with the surrounding grasslands as the residential area would be completely isolated from the open space areas north of Highland Valley Road. This alternative would not develop a trail system through areas north of Highland Valley Road and, therefore, could not meet the project objective to provide a scenic and meaningful trail system. For these reasons, the proposed project is preferred over the Clustered Development Alternative.

5.5 Analysis of the Reduced Project Alternative

5.5.1 Reduced Project Alternative Description and Setting

This alternative would maintain the same Areas A, B, and C as defined in the proposed project. The project site would be developed with small ranchettes with a 4-acre minimum lot size. With this lot size, the alternative would be designed to accommodate a maximum of 47 residential lots, 78 less than the proposed project. This alternative is shown in Figure 5-3. Because of the large lot sizes, it is assumed that all the ranchettes would be dependent on septic systems. The development area would extend throughout the majority of Area A and would allow for development of the trail system similar to what is designed with the proposed project. To accommodate the 4-acre lots, the individual lots would encroach into upland habitats and landforms, though not all of the lots would be graded by the project proponent beyond the development pad. Animal keeping would be allowed within the large lot size. It is likely that natural landforms could be preserved within the large lots. The alternative has been designed to protect drainages throughout the site. This alternative would include 300-foot setbacks from Highland Valley Road and 795-foot setbacks from SR 67 to avoid encroachment into areas with noise levels above those allowed by the Ramona Community Plan.

This alternative would generally meet all of the project objectives. The Reduced Project Alternative could accommodate the Ramona Grasslands Preserve in a manner that would help to ensure the preserve concept becomes a reality because Areas B and C would be available for preservation in a manner similar to the proposed project. This would allow a large portion of

the project site to be incorporated into the Ramona Grasslands Preserve and for connectivity to continue through the site. The objective of the project to provide a residential development reflective of the Ramona rural character and country lifestyle would be met by this alternative as the 4-acre lots would be compatible with the surrounding uses and rural character of the community. The design would allow for minimal grading techniques as the pads could be individually graded within the lots and natural features could be preserved. The Reduced Project Alternative could meet the seamless integration with the grasslands objective; however, the development footprint with large sized lots would encroach into upland areas and reduce the use of these knolls and hillsides by wildlife. This reduces the alternative's ability to meet the seamless integration objective though the large lot size allows for native vegetation. The design of the development could accommodate the trails similar to the proposed project. The objective to provide additional buffers and integrate the Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve could also be accomplished similar to the proposed project as Areas B and C.

5.5.2 Comparison of Effects of the Reduced Project Alternative to the Proposed Project

Transportation and Circulation

It has been assumed that this alternative could be developed to accommodate approximately 47 residential lots and still generally meet the project objectives. This is 78 less homes than with the proposed project. Therefore, the vehicle trip generation of this alternative would be approximately 936 less daily trips to that of the proposed project. Trip distribution would not be substantially different when compared to the proposed project. For these reasons, the Reduced Project Alternative would result in less transportation and circulation impacts than the proposed project. The significant traffic impacts associated with the proposed project would still occur with this alternative, however the severity of the impacts would decrease due to the reduced number of vehicle trips.

Public Services and Recreation

Because this alternative includes 78 less homes than the proposed project, it would generate less demand for infrastructure and community services. There would be no demand for sewer lines or service because homes would be on septic systems. For this reason, this alternative would have less impact on infrastructure and community services when compared to the proposed project. The requirement for water service associated with the proposed project would remain for this alternative, but would significantly decrease due to reduced service demand.

Biological Resources

As shown in Figure 5-3, residential lots in this alternative would surround and encroach into the main ridgeline in Area A. This would isolate the ridgeline from nearby areas of open space and grasslands. The connectivity of the ridgeline and upland habitats would be limited to open space through the residential lots. The large lots would encroach into upland habitat areas of both the main ridgeline and the knolls and stands of trees, specifically oaks, in the area south of Highland Valley Road. While open space easements would accomplish avoidance of some resources, this alternative could result in increased indirect biological resource impacts as compared to the proposed project. However, the alternative would preserve Areas B and C in the same manner as the proposed project.

Cultural Resources

Similar to the proposed project, the alternative design would include roadways and residential lots located in areas of known cultural resource sensitivity. However, additional significant cultural resources would be located within easements on individual lots for this alternative design. Additional mitigation measures would likely be required for this alternative. The indirect impact to cultural resources would be greater with this alternative as compared to the proposed project.

Noise

This alternative would include lot design that incorporates a 300-foot setback from Highland Valley Road to avoid placement of lots within areas with noise levels above the standard allowed by the Ramona Community Plan. A 795-foot setback from SR 67 would also be included to avoid noise impacts resulting from that roadway. As described in the Noise section of this EIR, residential lots located adjacent to Highland Valley Road and near SR 67 would be exposed to potentially significant noise impacts. Therefore, the lot design in this alternative with appropriate setbacks from the roadways would avoid a significant noise impact resulting from exposure to roadway traffic. Also, because the ADT would decrease with this alternative, less traffic noise would be generated. Less noise impact would result with this alternative as compared to the proposed project.

Hazards and Hazardous Materials

The Reduced Project Alternative would continue to result in a substantial interface with potential wildland fires with a similar type of residential design as the proposed project. The potential for wildfire hazards would be similar in nature to the proposed project.

Aesthetics and Visual Quality

The visual impact of this alternative would be similar to the proposed project as the homes would be located on large lots and native vegetation and landforms could be incorporated into the lots. The future homes may be more visible to motorists on SR 67 and Highland Valley Road as the lots encroach into the uplands areas and knolls across the site. There may be additional loss of landforms and natural elements, such as stands of trees or rock outcroppings within private lots dependent on individual lot owners. However, due to the similar minimalist design of the alternative and the ability to maintain large lots with unique layouts, native vegetation, and ability for large animal keeping, this alternative would result in similar aesthetics and visual quality impacts when compared to the proposed project. This alternative would include setbacks from Highland Valley Road and SR 67 to avoid potential noise impacts and eliminate the need for noise barriers as potential noise abatement. In comparison to the proposed project, which would require noise abatement measures in the noise protection easement areas to reduce noise, the Reduced Project Alternative would have fewer visual impacts as no noise barriers would be required.

Air Quality

This project would have a substantially lower unit count and result in fewer air quality emissions from reduced traffic generation. However, the development would require increased grading into hillsides, thus increasing dust and other construction-related air emissions. Overall, the impacts resulting from this alternative would be generally less than the proposed project.

Global Climate Change

The Reduced Project Alterative would result in increased short-term construction emissions due to increased mass grading. Emissions from vehicle trips and residential uses would be deceased due to the reduced unit count. However, in consideration of the overall cumulative nature of climate change, the slightly decreased emissions from the Reduced Project Alternative would not create a substantial difference relative to the proposed project. The cumulative climate change impact is considered to be similar for this alternative as compared to the proposed project.

Hydrology and Water Quality

The Reduced Project Alternative would result in a reduced amount of impervious surface due to the reduced number of homes as compared to the proposed project. Therefore, water quality impacts, such as runoff and sedimentation would be considered similar to the proposed project.

However, there would be an increased potential for groundwater quality impacts due to the use of septic systems for all of the residential units.

Soils and Geology

This alternative would accommodate a lower unit count as compared to the proposed project, but would result in additional encroachment into the uplands of the main ridgeline and into the knolls south of Highland Valley Road and could result in slightly increased erosion potential. However, because this alternative is designed in a minimalist manner and would not mass grade the project site, the soils and geology impacts are considered similar to the proposed project.

Agricultural Resources

This alternative would have agricultural impacts similar to the proposed project as the land uses for Areas A, B, and C are generally the same. Agricultural activities would cease on Area A and be dependent on future management plans for Area B.

Land Use and Planning

The Reduced Project Alternative would include the same residential land uses as the proposed project and in the same general areas. The large lot sizes would accommodate large animal keeping and would be consistent with the Ramona Community Plan and would meet the rural character goal of the plan. Some unique features, such as the knolls and stands of trees, would be within lots on the south side of Highland Valley Road. The project has been designed to be consistent with the County RPO, but would require backyard easements over sensitive resources for protection of these resources per the RPO. The 4-acre lot size would be compatible with surrounding residential land uses. Therefore, this alternative would be similar when considering land use and planning as compared to the proposed project.

5.5.3 Rationale for Preference of Proposed Project Design over the Reduced Project Alternative

The Reduced Project Alternative would generally accomplish the goals and objectives of the proposed project though the isolation of the main ridgeline and knolls may result in reduced connectivity to the grasslands and the ability of the alternative to meet the project objective to design a seamless integration of the development portion of the project with the surrounding open space. Though the large lot size is consistent with the Ramona Community Plan and the typical development in the project area, the lots would encroach into the upland habitats of the

main ridgeline in Area A and would require development of the knolls south of Highland Valley Road. The loss of these unique landforms would be detrimental to both the visual quality of the project and biological function of the site. The main ridgeline would be isolated from other open space and grassland areas and connectivity would be reduced as compared to the proposed project. For these reasons, the proposed project is preferred over this alternative.

5.6 Analysis of the General Plan Update Alternative

5.6.1 General Plan Update Alternative Description and Setting

This alternative is based on the proposed General Plan Update map (County of San Diego 2009) that shows the southern portion of the plan area as Semi-Rural Residential (SR-2), the middle portion as Semi-Rural Residential (SR-10) and the northern portion as Rural Lands (RL-40). Areas A, B, and C would be maintained with the boundary between A and B shifting northerly to Etcheverry Creek. The project site would be developed with 81 1-acre minimum lots south of Highland Valley Road and 31 5-acre minimum lots to the north. Areas B and C would remain as open space. This alternative would be designed to accommodate a maximum of 112 residential lots, which is 13 less than the proposed project. The alternative is shown in Figure 5-4. It is assumed that sewer service would be provided for all lots. Sewer service would be required for the lots south of Highland Valley Road, and the connection through the area north of Highland Valley Road to the SMWWTP would be necessary, as would the sewer lift station. The larger lots located to the north might be able to utilize onsite septic systems but since sewer lines would be installed through that area it is assumed that all lots would connect to the sewer system. The residential area would be increased by 38.6 percent and open space would be reduced compared to the proposed project. The lots would use a similar roadway system for access with some additional roadway to provide access to the most northerly lots. The overall amount of grading would be less for the residential lots due to the decreased number but greater for the roadways due to the increased length of roadways. Animal keeping would be allowed within the larger lot sizes. It is likely that natural landforms could be preserved within the large lots. The alternative has been designed to minimize impacts to drainages throughout the site.

The General Plan Update alternative would meet most of the project objectives. The objective of the project to provide a residential development reflective of the Ramona rural character and country lifestyle would be met by this alternative as the lots would be compatible with the surrounding uses and rural character of the community. The design would allow for minimal grading techniques as the pads could be individually graded within the lots and natural features could be preserved. The objective to provide additional buffers and integrate the Ramona Vernal Pool Preserve into the Ramona Grasslands Preserve would be met. However, this alternative would

not accommodate the Ramona Grasslands Preserve in the same manner as the proposed project because a larger portion of Area A would be in private ownership. This would reduce the acreage of the project site that would be incorporated into the Ramona Grasslands Preserve and reduce connectivity through the site. The objective of seamless integration with the grasslands would not be fully met with this alternative due to the reduction in available open space and reduced connectivity through the site. The design of the development could accommodate the trails similar to the proposed project but trails would be located on easements within residential lots.

5.6.2 Comparison of Effects of the General Plan Update Alternative to the Proposed Project

Transportation and Circulation

The General Plan Update Alternative would provide 13 fewer homes than with the proposed project. Therefore, the vehicle trip generation of this alternative would be approximately 156 less daily trips than the proposed project. Trip distribution would not be substantially different when compared to the proposed project. For these reasons, the General Plan Update Alternative would result in slightly less transportation and circulation impacts than the proposed project. The significant traffic impacts associated with the proposed project would still occur with this alternative; however the severity of the impacts would decrease due to the reduced number of vehicle trips.

Public Services and Recreation

Because this alternative includes 13 less homes than the proposed project, it would generate less demand for infrastructure and community services. The demand for sewer service would be less than the proposed plan. The requirement for water service associated with the proposed project would remain for this alternative, but would decrease due to reduced service demand. For these reasons, this alternative would have less impact on infrastructure and community services when compared to the proposed project.

Biological Resources

As shown in Figure 5-4, residential lots in this alternative would impact a greater area as compared to the proposed project. There would be a 38 percent increase in direct impacts with this alternative. A new wetland crossing would be required to provide access to the northern lots in Area A. These additional lots would also reduce connectivity through the site to adjoining grassland habitats. This alternative could result in decreased indirect biological resource impacts

as compared to the proposed project due to the reduced number of lots. The alternative would preserve Areas B and C in a similar manner as the proposed project; however, Area B is decreased by approximately 69 acres.

Cultural Resources

As in the proposed project, the alternative design would include roadways and residential lots located in areas of known cultural resource sensitivity. Direct impacts to cultural resources would increase due to the increase in residential areas and decrease in open space. The indirect impact to cultural resources would be less with this alternative as compared to the proposed project.

Noise

This alternative would place fewer lots in the area north of Highland Valley Road as compared to the proposed project. Under the proposed project, the majority of the noise impacts occur to residential lots along Highland Valley Road. Approximately 17 units, adjacent to the southern side of the Highland Valley Road would be affected; only 4 lots are affected on the north side. As shown in Figure 5-4 there are approximately 19 residential lots that would be affected on the south side of Highland Valley Road and 2 lots to the north. For both the proposed project and this alternative, 19 lots would be affected by traffic generated noise. This alternative would have the same traffic noise impacts when compared to the proposed project.

Hazards and Hazardous Materials

The General Plan Update Alternative would continue to result in a substantial interface with potential wildland fires with a similar type of residential design as the proposed project. The potential for wildfire hazards would be similar in nature to the proposed project.

Aesthetics and Visual Quality

The visual impact of this alternative would be similar to the proposed project as the homes would be located on large lots and native vegetation and landforms could be incorporated into the lots. The future homes would be more visible to motorists on SR 67 and Highland Valley Road as there are more homes located to the south of Highland Valley Road. Fewer homes would be located on the north side of Highland Valley Road but the central ridgeline would be part of the residential lots and not preserved as open space, resulting in increased visual impacts. In comparison to the proposed project, which would have more open space and fewer lots located

south of Highland Valley Road, the General Plan Update Alternative would have greater visual impacts.

Air Quality

This project would have a lower unit count and result in fewer air quality emissions from reduced traffic generation. Grading would be somewhat reduced due to the reduction in the number of lots, thus decreasing dust and other construction-related air emissions. Overall, the impacts resulting from this alternative would be generally less than the proposed project.

Global Climate Change

The General Plan Update Alterative would result in reduced short-term construction emissions due to the reduced number of lots. Emissions from vehicle trips and residential uses would be deceased due to the reduced unit count. However, in consideration of the overall cumulative nature of climate change, the slightly decreased emissions from the General Plan Update Alternative would not create a substantial difference relative to the proposed project. The cumulative climate change impact is considered to be similar for this alternative as compared to the proposed project.

Hydrology and Water Quality

The General Plan Update Alternative would result in a reduced amount of impervious surface due to the reduced number of homes as compared to the proposed project. Therefore, water quality impacts, such as runoff and sedimentation would be considered reduced when compared to the proposed project.

Soils and Geology

This alternative would accommodate a lower unit count as compared to the proposed project. However, because this alternative is designed in a minimalist manner and would not mass grade the project site, the soils and geology impacts are considered similar to the proposed project.

Agricultural Resources

This alternative would have agricultural impacts similar to the proposed project as the land uses for Areas A, B, and C are generally the same. Agricultural activities would cease on Area A and be dependent on future management plans for Area B.

Land Use and Planning

The General Plan Update Alternative would include the same residential land uses as the proposed project and in the same general areas. The large lot sizes would accommodate large animal keeping and would be consistent with the Ramona Community Plan and would meet the rural character goal of the plan. Some unique features, such as the knolls and stands of trees, would be within lots on the south side of Highland Valley Road. The proposed lot sizes would be compatible with surrounding residential land uses. Therefore, this alternative would be similar when considering land use and planning as compared to the proposed project.

5.6.3 Rationale for Preference of Proposed Project Design over the General Plan Update Alternative

The General Plan Update Alternative would generally accomplish the goals and objectives of the proposed project. However, the loss of open space on the main ridgeline and the additional lots in the north may result in reduced connectivity to the grasslands and the ability of the alternative to meet the project objective to design a seamless integration of the development portion of the project with the surrounding open space. Though the large lot sizes is consistent with the Ramona Community Plan and the typical development in the project area, the lots would encroach into the upland habitats of the main ridgeline in Area A and extend further northward than the proposed project. The loss of these unique features would be detrimental to both the visual quality of the project and biological function of the site. For these reasons, the proposed project is preferred over this alternative.

5.7 Summary of Project Alternatives and Comparative Impacts

This section provides a summary of the potential impacts that would result from implementation of each individual alternative considered in this evaluation in comparison with the impacts from the proposed project. Table S-2 is a matrix of the results of this alternative and proposed project comparison.

This EIR is required to identify the environmentally superior alternative among those alternatives considered. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives considered (Section 15126.6[e][2]).

As indicated in Table S-2, the No Project Alternative results in fewer impacts than the proposed project for most issue areas evaluated. However, because CEQA requires an alternative other

than the No Project Alternative to be identified, the Reduced Project Alternative is considered to be the environmentally superior alternative. The Reduced Project Alternative is identified over the other project alternatives as the environmentally superior alternative because this alternative reduces the highest number of environmental impacts when compared to the proposed project (prior to implementation of mitigation measures identified in this EIR). The significant traffic impact that would occur with the proposed project would be reduced with the smaller traffic volume associated with the Reduced Project Alternative. There would be no impact on sewer service as all development could use septic systems and fewer residential units would generate less demand on existing community and public services. Noise impacts from roadways to the residential receptors would be avoided and this would eliminate the potential need for noise barriers. This would reduce potential visual impacts from those barriers as compared to the proposed project. In addition, the reduced number of units would require less grading and creation of fugitive dust during construction and would generate less emissions due to reduced vehicle trips. The Reduced Project Alternative would create potentially greater impacts related to cultural and biological resources due greater exposure to indirect effects and also to hydrology and water quality due to the use of septic and potential encroachment into steep areas.

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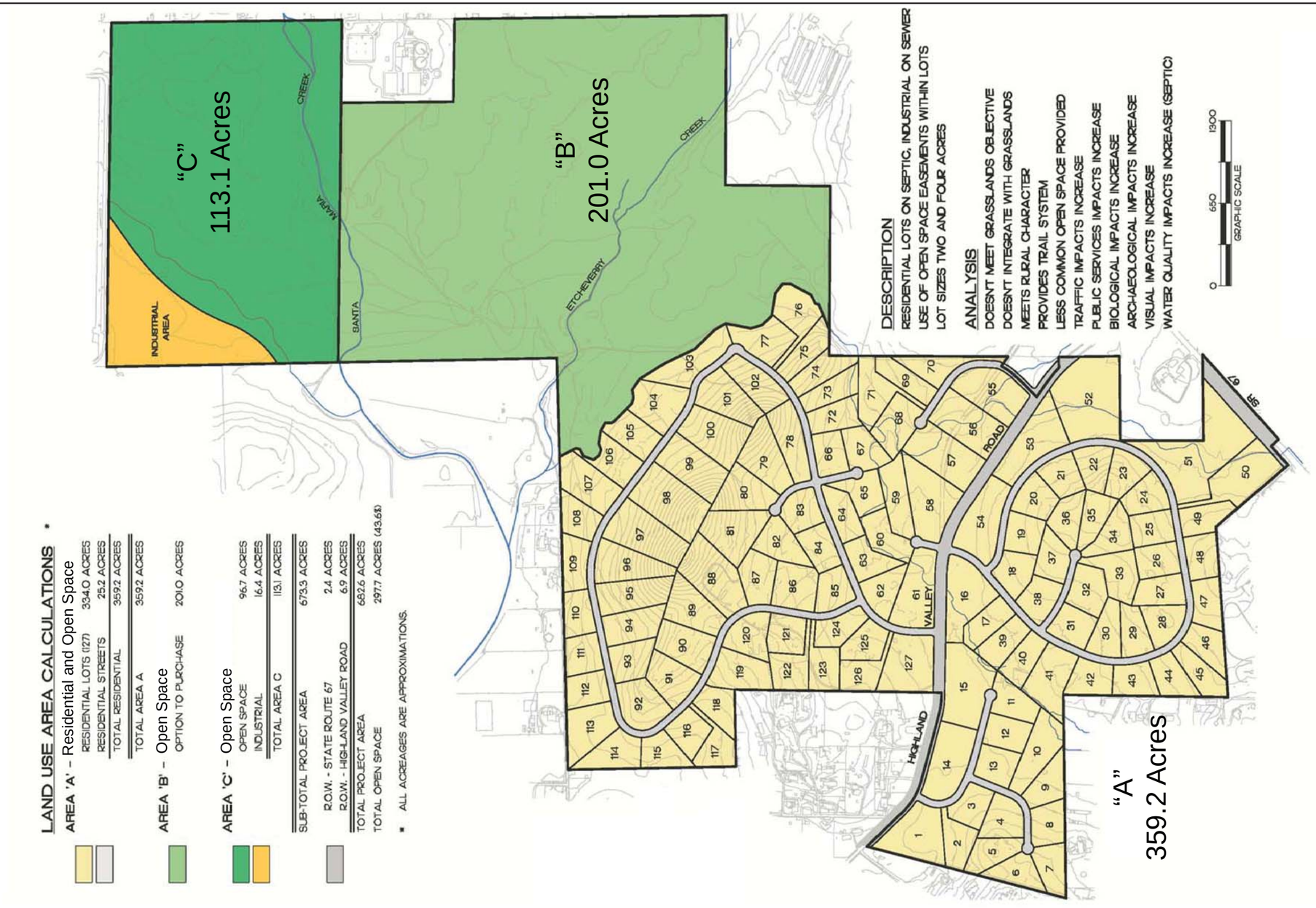

Figure 5-1
Existing Community Plan Alternative

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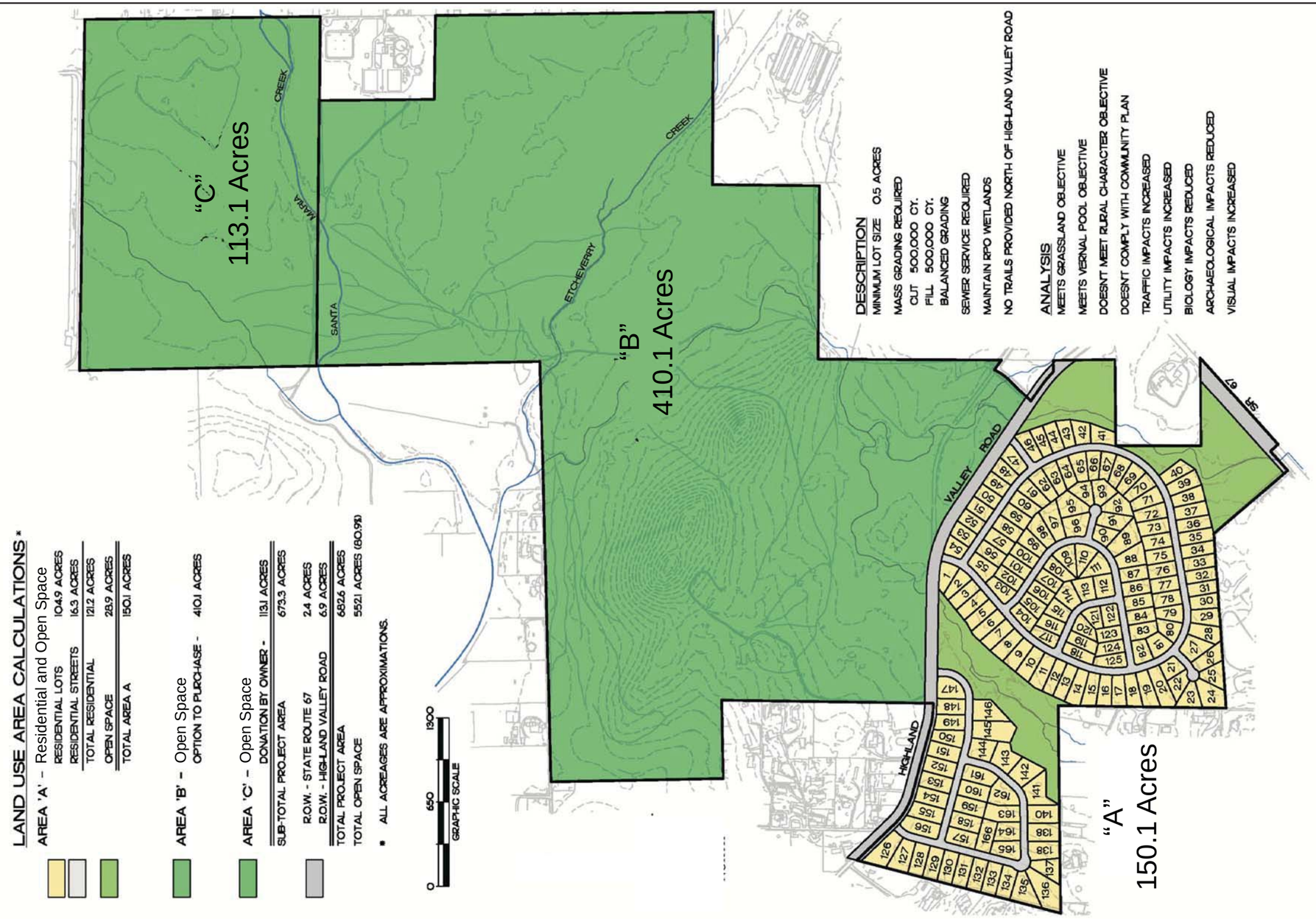

Figure 5-2
Clustered Development Alternative

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Figure 5-3
Reduced Project Alternative

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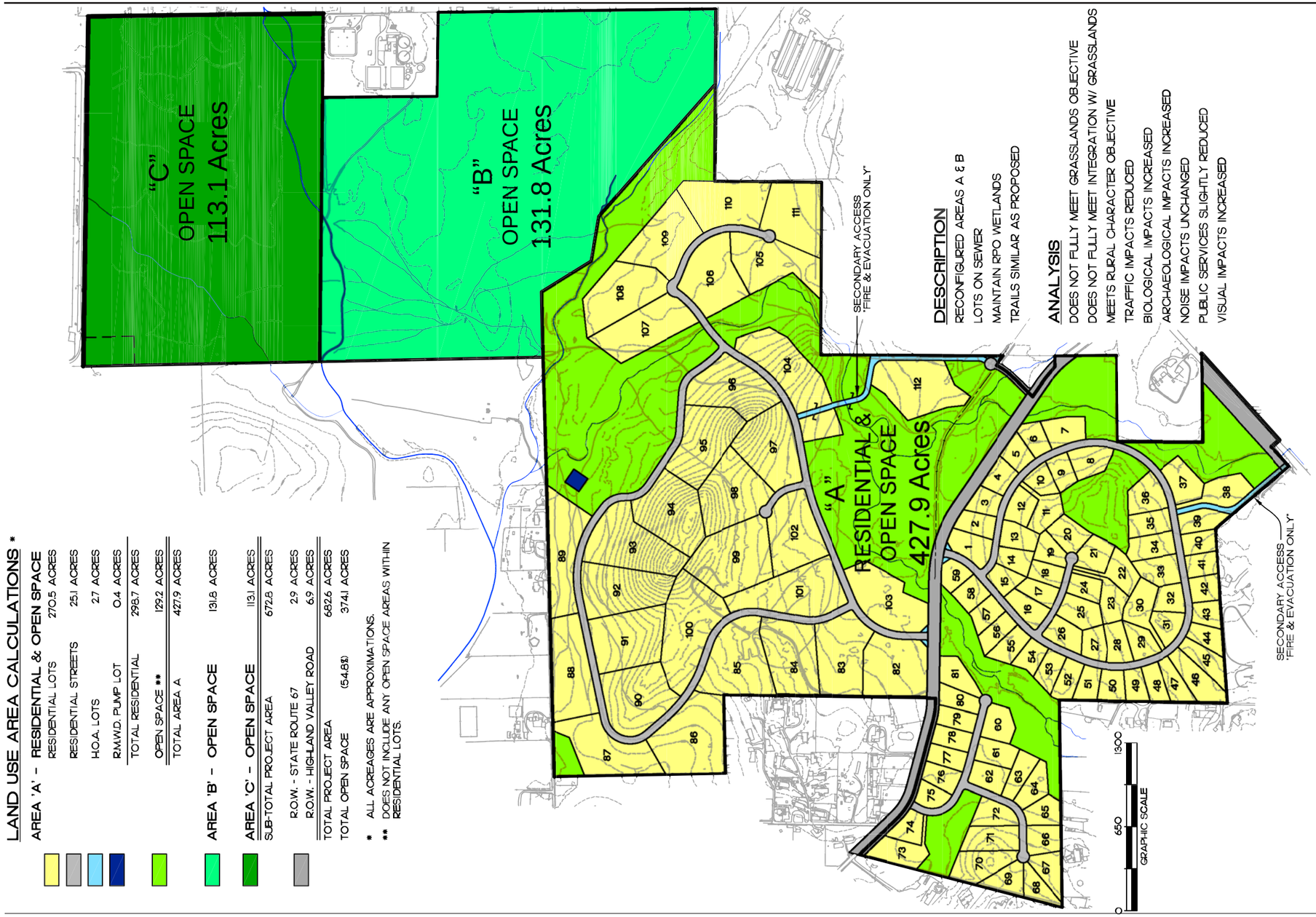

LAND USE AREA CALCULATIONS *

AREA 'A' - RESIDENTIAL & OPEN SPACE	
RESIDENTIAL LOTS	270.5 ACRES
RESIDENTIAL STREETS	25.1 ACRES
H.O.A. LOTS	2.7 ACRES
R.M.W.D. PUMP LOT	0.4 ACRES
TOTAL RESIDENTIAL	298.7 ACRES
OPEN SPACE **	129.2 ACRES
TOTAL AREA A	427.9 ACRES
AREA 'B' - OPEN SPACE	131.8 ACRES
AREA 'C' - OPEN SPACE	113.1 ACRES
SUB-TOTAL PROJECT AREA	672.8 ACRES
R.O.W. - STATE ROUTE 67	2.9 ACRES
R.O.W. - HIGHLAND VALLEY ROAD	6.9 ACRES
TOTAL PROJECT AREA	682.6 ACRES
TOTAL OPEN SPACE (54.8%)	374.1 ACRES

* ALL ACREAGES ARE APPROXIMATIONS.

** DOES NOT INCLUDE ANY OPEN SPACE AREAS WITHIN RESIDENTIAL LOTS.

NORTH

Figure 5-4
General Plan Update Alternative

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CHAPTER 6.0
LIST OF REFERENCES

AECOM (formerly EDAW, Inc.)

2010a Conceptual Revegetation Plan. Cumming Ranch, San Diego County, California. March 5.

2010b Visual Resources Analysis. Cumming Ranch, San Diego County, California. March 5.

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CHAPTER 7.0
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CHAPTER 8.0
LIST OF MITIGATION MEASURES AND ENVIRONMENTAL DESIGN CONSIDERATIONS

This chapter provides a comprehensive list in Table 8-1 of all mitigation measures included in the proposed project. Also provided in Table 8-1 is a list of project design measures that act to mitigate potentially significant impacts. See Chapter 1.0 for a complete description of all project design features, beyond those listed below, that have been incorporated into the Cumming Ranch project to develop the rural character and grasslands-based theme of the project and to ensure the project objectives are met.

Table 8-1
Mitigation Measures and Project Features

Mitigation Measures
Mitigation Measure M-TR-1a: SR 67 - Scripps Poway Parkway to Archie Moore Road. This segment is currently a two-lane roadway with passing lanes at various locations. It currently operates at LOS F according to the County of San Diego's capacity standards for a two-lane highway. This segment will need widening to a four-lane facility to bring it to an acceptable level of service. Requiring the proposed project to mitigate with this regional transportation improvement, would not be proportional to the project's contribution of impact. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.
Mitigation Measure M-TR-1b: Existing plus Project Conditions, SR67 Street Segments, Archie Moore Road to Pala Street. The roadway improvements as part of the project shall be implemented prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW (these improvements are illustrated in Figure 1-8 and described in Section 1.1.2) and include: a. Eastbound SR 67 – Widen eastbound SR 67 west of the Highland Valley Road intersection to provide two through lanes and storage in each lane. Widen east of the Highland Valley Road intersection to provide two through lanes for 400 feet and transition back to the existing roadway width within a 660-foot transition. b. Westbound SR 67 – Widen westbound SR 67 east of the Highland Valley Road intersection to provide two through lanes with storage in each lane with westbound right turn lane retained. Widen west of the Highland Valley Road intersection to provide two through lanes for 400 feet and transition back to the existing roadway width within a 660-foot transition. c. Highland Valley Road – Widen northbound Dye Road (Highland Valley Road) to provide duel left turn lanes at the intersection. d. Traffic Signal – The traffic signal at the SR 67/Highland Valley Road intersection would be modified to provide for the improvements described above. The construction of these improvements shall require additional ROW and the developer shall be responsible for funding the ROW acquisitions. In the event the developer is not able to acquire the necessary ROW from willing sellers during the final engineering process, the developer shall work with the County Real Property Department to acquire the ROW in accordance with County Board of Supervisors Policy J-33.
Mitigation Measure M-TR-2a: Existing plus Project Conditions, SR 67 and Highland Valley Road Intersection. The direct impacts to the SR 67 and Highland Valley Road intersection shall be mitigated with the

Mitigation Measures
widening of SR 67 in the westbound direction to two lanes to accommodate morning peak traffic. This improvement is included in the overall intersection mitigation measures proposed under Mitigation Measure M-TR-1b for the SR 67 and Highland Valley Road intersection to mitigate roadway segment direct impacts.
Mitigation Measure M-TR-2b: Existing plus Project Conditions, SR 67 and Archie Moore Road. A signal warrant analysis shall be conducted at this intersection prior to approval of the final map. If signal warrants are met, the developer shall restripe the intersection and install a three-way traffic signal within the existing right of way, to the satisfaction of Caltrans and the County of San Diego. If warrants are met, installation of the traffic signal will be required to be complete prior to occupancy of the first dwelling unit.
Mitigation Measure M-TR-3a: Cumulative Conditions, SR 67 - Scripps Poway Parkway to Archie Moore Road. Payment of TIF fees would partially mitigate the segment of SR 67 between Scripps Poway Parkway and Archie Moore Road. A portion of this segment is within the City of Poway. The cumulative impact at this segment is partially mitigated by payment of the County TIF for impacts within the jurisdictional boundaries of the County. To fully mitigate the impact at this segment, the mitigation would require additional travel lanes on the impacted portion of the segment within the jurisdictional limits of the City of Poway (between Poway Road and Cloudy Moon Drive), but this mitigation is not feasible and, therefore, is not proposed to address this Impact. Because there are no reasonable improvements that this project can propose to increase the segment's capacity to acceptable levels, this segment will remain significant and unmitigated with project implementation.
Mitigation Measure M-TR-3b: Cumulative Conditions, SR 67 Segments in County Jurisdiction. To mitigate the project's contribution to cumulative impacts along the three remaining SR 67 segments (Impact TR-3b) the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measure M-TR-4: Cumulative Conditions, Dye Road Segments. To mitigate the project's contribution to cumulative impacts along Dye Road segments (Impact TR-4), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measure M-TR-5: Cumulative Conditions, SR 67/Archie Moore Road Intersection. To mitigate the project's contribution to cumulative impacts at the SR 67/Archie Moore Road intersection (Impact TR-5), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measure M-TR-6: Cumulative Conditions, SR 67/Scripps Poway Parkway Intersection. To fully mitigate the project's contribution to cumulative impacts at the SR 67/ Scripps Poway Parkway intersection (Impact TR-6), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measure M-TR-7: Cumulative Conditions, SR 67/Highland Valley Road Intersection. To mitigate the project's contribution to cumulative impacts at the SR 67/Highland Valley Road intersection (Impact TR-7), the project applicant shall construct the intersection improvements outlined in Mitigation Measure M-TR-1b prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measure M-TR-8: Cumulative Conditions, SR 67/Montecito Road Intersection. To mitigate the project's contribution to cumulative impacts at the SR 67/Montecito Road intersection (Impact TR-8), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measure M-TR-9: Cumulative Conditions, SR 67/SR 78 Intersection. To mitigate the project's contribution to cumulative impacts at the SR 67/SR 78 intersection (Impact TR-9), the project applicant shall pay the appropriate TIF fees as determined by the County prior to issuance of the first occupancy permit on the site to the satisfaction of the County DPW.
Mitigation Measures BI-1 through M-BI-11: Impacts to Vegetation Communities. a. The primary mitigation acreage for the project would be located within Area A open space with additional mitigation acreage located within Area B and C. Open space lots C, E, and H in Area A) were not included as mitigation acreage as they are considered isolated and are impact neutral areas. Mitigation acreage shall be provided through the permanent dedication of open space land and the provision of an open space easement over this land according to the ratios provided in Table 3.1-5. The open space lots throughout Area A are shown on Figure 1-5 and open space easements are shown on Figure 1-16, Open Space Map.

Mitigation Measures
b. The RMP shall be approved and funded for the open space area and approved prior to the approval of a grading permit for the project. The RMP provides for the monitoring and management of habitats and species such as oak tree replacement, habitat creation, species surveys and monitoring and other efforts involved in the day-to-day management of the open space area (i.e., budget control and analysis, debris removal, exotic weed removal, general maintenance of any open space signage, etc.). The RMP includes performance standards to measure the success of mitigation (e.g., percent improvements over time, success rates, etc.). The monitoring and management of these lands shall be conducted in perpetuity.
Mitigation Measure M-BI-1: Direct Effects to Open Space Engelmann Oak Woodland. Impacts to 0.20 acre of open Engelmann oak woodland shall be mitigated through the in-kind preservation of existing Engelmann oak woodland onsite in Area A open space at a 3:1 ratio for a total of 0.60 acre (see Table 3.1-5). All necessary mitigation acreage is available on the project site.
Mitigation Measure M-BI-2: Direct Effects to Open Coast Live Oak Woodland. Impacts to 0.06 acre of open coast live oak woodland shall be mitigated through the preservation of existing Engelmann oak woodland onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 0.18 acre (see Table 3.1-5). All necessary mitigation acreage is available on the project site.
Mitigation Measure M-BI-3: Direct Effects to Southern Willow Scrub. Impacts to 0.05 acre of southern willow scrub shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 0.15 acre (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).
Mitigation Measure M-BI-4: Direct Effects to Mulefat Scrub. Impacts to 0.05 acre of mulefat scrub shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 0.15 acre (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be recontoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).
Mitigation Measure M-BI-5: Direct Effects to Cismontane Alkali Marsh. Impacts to 1.02 acres of cismontane alkali marsh shall be mitigated onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1) at a 3:1 ratio for a total of 3.06 acres (see Table 3.1-5). Of the 3:1 ratio, 1:1 shall include onsite restoration at impact locations where feasible. This shall entail the removal and stockpiling of topsoil during construction and then replacing it over the impact area after construction. The impact area shall be re-contoured to preconstruction grade and the impact area shall be seeded with appropriate wetland plants. The remaining 2:1 ratio shall include onsite creation or restoration of wetland habitat or at a 3:1 ratio if the impact area cannot be restored. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).
Mitigation Measure M-BI-6: Direct Effects to Nonvegetated Channel. Impacts to 0.03 acre of nonvegetated channel shall be mitigated onsite in Area A open space at a 3:1 ratio where the impact occurs (see Table 3.1-5) for a total of 0.09 acre. Creation and/or restoration mitigation shall occur where practicable onsite within Area A. The Revegetation Plan shall detail the performance measures for creation and restoration (see M-BI-12).
Mitigation Measure M-BI-7: Direct Effects to CSS (inland form). Impacts to 26.80 acres of CSS-inland form shall be mitigated through the preservation of existing CSS onsite in Areas A and B open space at a 2:1 ratio for a total of 53.60 acres of CSS mitigation (see Table 3.1-5). CSS inland form cannot be fully mitigated in-kind onsite. A total of 52.96 acres of CSS will be mitigated onsite. A remaining 0.64 acre of mitigation is required offsite. Prior to issuance of a grading permit, proof of acquisition and funding for management of 0.64 acre of like-functioning habitat in an offsite area approved by the DPLU shall be provided.
Mitigation Measure M-BI-8: Direct Effects to Granitic Southern Mixed Chaparral. Impacts to 19.55 acres of

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granitic southern mixed chaparral shall be mitigated through the preservation of existing granitic southern mixed chaparral onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 0.5:1 ratio for a total of 9.78 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.
Mitigation Measure M-BI-9: Direct Effects to Granitic Chamise Chaparral. Impacts to 4.05 acres of granitic chamise chaparral shall be mitigated through the preservation of existing granitic chamise chaparral onsite in Area A open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 0.5:1 ratio for a total of 2.03 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.
Mitigation Measure M-BI-10: Direct Effects to Nonnative Grassland. Impacts to 12.94acres of nonnative grassland shall be mitigated through the preservation of existing nonnative grassland onsite in Areas A, B, and C open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 1:1 ratio for a total of 12.94 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.
Mitigation Measure M-BI-11: Direct Effects to Field/Pasture. Impacts to 164.69 acres of field/pasture shall be mitigated through the preservation of existing nonnative grassland onsite in Areas A, B, and C open space (including acreage preservation and RMP requirements as detailed in Mitigation Measure M-BI-1). Mitigation shall be at a 0.5:1 ratio for a total of 82.35 acres (see Table 3.1-5). All necessary mitigation acreage is available on the project site.
Mitigation Measure M-BI-12: Direct Effects to Wetlands and Waters of the U.S. a. On and offsite impacts to 0.13 acre of ACOE waters and wetlands shall be mitigated onsite in open space easements at a 3:1 ratio. Proposed mitigation for wetlands shall consist of a 3:1 ratio where 1:1 shall include onsite restoration at impact locations and 2:1 shall include onsite creation or restoration of habitat. Creation and/or restoration mitigation shall occur as detailed in the Revegetation Plan. On and offsite impacts to 1.18 acres of CDFG wetlands and 1.18 acres of County RPO waters and wetlands shall be mitigated onsite in Area A open space at a 3:1 ratio. Proposed mitigation for wetlands shall consist of a 3:1 ratio where 1:1 will include onsite restoration at impact locations and 2:1 shall include onsite creation or restoration of habitat. Creation and/or restoration mitigation shall occur as detailed in the Revegetation Plan. Appropriate RPO wetland buffers will be incorporated and will be a minimum of 50 feet from the edge of the wetlands in accordance with the 2007 RPO. b. The Revegetation Plan will require approval by the appropriate agencies prior to issuance of grading permits for the project and details the performance measures for creation and restoration of wetlands and wetland habitats. The Revegetation Plan requires a bond be issued to the County to cover the full cost of the revegetation by the developer (to be released at the end of a successful monitoring period). Creation, restoration, and/or enhancement of wetland habitats shall occur throughout various sections of the unnamed drainages within the planned Area A open space area. In addition to the Revegetation Plan, the RMP developed for the open space area shall be approved and funded prior to the approval of a grading permit for the project (M-BI-1b through 11b). c. To address indirect impacts to RPO wetlands associated with maintenance activities, the RMP being prepared for this project requires installation, inspection, and maintenance of appropriate best management practices (BMPs). d. To address potential indirect impacts to vernal pools, the proposed trail alignment and trail staging area, as well as an adequate buffer area (to be determined by a qualified biologist in coordination with the County of San Diego) shall be surveyed for vernal pools and their watersheds, prior to final trail siting, to confirm absence. If surveys indicate vernal pools or their watersheds are in close proximity to trail alignments, the trail shall be realigned and the staging area grading modified to avoid all potential impacts to vernal pools. e. Prior to approval of a grading plan, evidence of applicable permits (or verification that permits are not required) shall be provided to the County. f. The Resource Manager under the RMP shall avoid wet season creek crossings where feasible, recommend and install preventative bio-engineered erosion control devices, repair erosion damage, and remove

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sediment as determined necessary and appropriate for both the safety of trail users and for protection of the earthen stability of the trails from damage during the wet season.
Mitigation Measure M-BI-13: Direct Effects to Individual Oaks. Direct impacts to Engelmann oaks and coast live oaks shall be mitigated at a 2:1 replacement ratio. The replacement of 22 Engelmann and 8 coast live oak trees shall occur within Area A open space lots. A Revegetation Plan with monitoring and success criteria has been prepared and shall be submitted for resource agency approval. The success of these trees shall be monitored for no less than 3 years in accordance with all Revegetation Plan requirements (M-BI-12a).
Mitigation Measure M-BI-14: Direct Effects to Southern Tarplant. a. Impacts to 3.7 acres of southern tarplant shall be mitigated with preservation and management of approximately 21 acres of the onsite population within Areas A and B open space. b. In addition, the revegetation plan shall be implemented to provide for an expansion of the population on 3.7 acres of suitable habitat in the managed open space. The revegetation plan shall include provisions for seed to be harvested from impact areas and distributed on approximately 3.7 acres onsite adjacent to areas known to support the species. The revegetation plan shall also include measures for the southern tarplant that will be directly affected by sewer line installation (0.2 acre) to be implemented to retain the topsoil and return it to the same location to allow for regrowth of this species.
Mitigation Measure M-BI-15: Direct Effects to Sensitive Animals. a. Direct impacts to sensitive herpetofaunal species habitat shall be mitigated with preservation of habitat onsite within Area A open space lots for Western spadefoot toad; arroyo toad; San Diego horned lizard; granite spiny lizard; granite night lizard; coastal California whiptail; and orange-throated whiptail as required under Mitigation Measure M-BI-1 through M-BI-12. To avoid impacts specific to the arroyo toad, the following measure shall be implemented and all grading permits, improvement plans, and the final map shall include the following notice: "Prior to any grading, pre-construction surveys (in accordance with USFWS protocol) shall be conducted. If surveys determine there are no toads present, no further action is necessary. If it is determined that toads are present, then an Endangered Species Take Permit shall be obtained." b. Direct impacts to sensitive mammalian species habitat shall be mitigated onsite within Area A open space lots for mountain lion; American badger; San Diego desert woodrat; San Diego black-tailed jackrabbit; and southern mule deer, as required under Mitigation Measure M-BI-1 through M-BI-12. Direct impacts to sensitive avian species habitat shall be mitigated onsite within Area A open space lots for Canada goose; turkey vulture; white-tailed kite; northern harrier; golden eagle; Cooper's hawk; red-shouldered hawk; ferruginous hawk; loggerhead shrike; great horned owl; burrowing owl; zone-tailed hawk; red-tail hawk; rough-legged hawk; American kestrel; and barn owl, as required under Mitigation Measure M-BI-1 through M-BI-12. c. To avoid impacts specific to burrowing owls, which use their burrows year-round, the following measure shall be implemented and all grading permits, improvement plans, and the final map shall include the following notice: "Restrict all brushing, clearing, and/or grading such that: (1) from February 1 to July 31, no grading or clearing will be allowed within 800 feet of an occupied burrow; and (2) from July 31 (or after young owls have fledged) no grading or clearing will be allowed within 800 feet of an occupied burrow until CDFG is consulted and passive nest exclusion has occurred. This measure may be waived if pre-grading surveys show that no burrowing owls are present." d. At the time of construction, tree nesting raptors could be present in the project area. The developer shall have raptor nest surveys conducted prior to tree cutting or grading near mature trees to ensure that active nests are not present. A qualified biologist shall conduct the surveys between February 1 and July 31 and prepare a survey report. If no raptor nests are discovered in the trees to be removed, no further mitigation is required. If any active raptor nests are discovered, the biologist shall mark all occupied trees and delineate a 500-foot buffer area around each occupied tree. No construction activity shall occur within the 500-foot

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buffer until the young have fledged, as determined by a qualified biologist. All brushing, clearing, and/or grading shall be restricted such that no grading or clearing will be allowed within 300 feet of occupied coastal sage scrub during the gnatcatcher breeding season (February 15 – August 31) This measure may be waived if pre-grading surveys show that no gnatcatchers are present in or within 300 feet of the area to be brushed, cleared or graded. If construction is halted for a period of fourteen days or more during the avian nesting season, a biological survey of the habitat within 500 feet of proposed construction sites shall be required prior to restarting construction. The above measures shall be noted on all grading and improvement plans.
Mitigation Measure M-BI-16: Indirect Effects of Project Construction. The following resource protection measures shall be implemented by the developer to ensure that indirect impacts to sensitive vegetation communities and sensitive plants do not occur: a. A DPLU-listed biological consultant shall supervise and monitor grading activities to ensure against damage to biological resources that are intended to be protected and preserved. The monitor shall be on site during all grading and clearing activities that are in or adjacent to any biological open space areas or sensitive habitats. If there are disturbances, the monitor must report them immediately to DPLU Permit Compliance Coordinator. Additionally, the biologist shall monitor fencing and erosion control measures, monitor equipment maintenance, staging, and fuel dispensing areas, stop or divert work when deficiencies require mediation, and attend construction meetings. When all grading activities have been completed, the biologist shall prepare and submit a final letter report. b. Prior to commencement of construction, the limits of each phase of project construction shall be clearly delineated with temporary fencing by a survey crew. Onsite, the temporary fencing shall be required when grading is proposed within 100 feet of open space. Offsite, temporary fencing shall be installed to indicate the allowable limits of grading, clearing, and staging areas. The limits shall be checked by the biological monitor before initiation of clearing or construction. The project biologist shall submit a letter to the County indicating that the limits of construction have been checked and work can commence. c. Activities, including staging areas, equipment access, and disposal or temporary placement of excess fill, shall be prohibited within drainages, sensitive habitats, or sensitive plant populations outside of the identified construction area. d. Erosion and siltation into offsite areas during construction shall be minimized through the implementation of an erosion control plan. The contractor shall prepare an erosion control plan for approval by the County. The contract supervisor shall be responsible for ensuring that the erosion control plan is developed and implemented. e. Construction access shall utilize existing developed areas or be within the identified construction area. Contractors shall clearly mark all access routes (i.e., flagged and/or staked) prior to the onset of construction. f. To avoid sensitive habitats, construction staging areas, equipment refueling areas, and other areas for equipment and materials storage shall be located within the identified construction area. To avoid inadvertent impacts to sensitive biological resources that may be present, storage and access areas shall be displayed on the approved project plans and specifications. g. Biological monitoring shall be required where impacts occur in proximity to proposed open space and other sensitive habitats and resources as determined by the project biologist. h. Biological monitoring shall be required along the alignment of the on and offsite infrastructure construction. i. To address potential indirect impacts to vernal pools, the proposed trail alignment and trail staging area, as well as an adequate buffer area (to be determined by a qualified biologist in coordination with the County of San Diego) shall be surveyed for vernal pools and their watersheds, prior to final trail siting, to confirm absence. If surveys indicate vernal pools or their watersheds are in close proximity to trail alignments, the

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trail shall be realigned and the staging area grading modified to avoid all potential impacts to vernal pools. j. The above measures shall be noted on all grading and improvement plans.
Mitigation Measure M-BI-17: Indirect Effects of Project Occupation. a. The dedicated LBZ easements on each lot shall prohibit: (1) animal keeping without effective restraints or fencing, (2) lighting, (3) exotic invasive landscaping, (4) focal use areas including arenas, pools, and patios, and (5) any other structures without approval of the County Fire Marshall and Ramona Fire Marshall. The LBZ easements would require large animals to be kept within fences. b. Open space signage, in accordance with County policy, shall be installed prior to grading activities and shall be maintained and replaced as needed under provisions within the RMP. Signs shall be located every 50 feet along all open space edges in conjunction with the Residential lot LBZ and where open space is adjacent to internal streets, pathways and trails. The signage shall have the following language or similar on it: **"Sensitive Environmental Resources** **Area Restricted by Easement** Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions contact the County of San Diego, Department of Planning and Land Use Ref: *(3810-03-005)*" Upon completion of the installation of the open space signage, the project engineer shall submit a signed statement to the County indicating that all signs are in place. c. The RMP Resource Manager will monitor and manage access and use of the open space easements and work with the HOA to educate residents and trail users about the prohibitions and the resource sensitivity of the area.
Mitigation Measure M-CR-1: All-Ground Disturbing Activities. a. A cultural resources monitoring program shall be implemented as summarized here and detailed in the Cultural Resources Report. The monitoring program shall include the observation of all grading by one or more Native American monitors and by an archaeological monitor or monitors (depending on the scale of grading going on at any one time). A preconstruction meeting to clarify procedures shall be held prior to the start of ground-disturbing activities. b. If cultural resources are identified during ground-disturbing activities, the following procedures shall be implemented: 1. Isolated artifacts and minor (non-significant) deposits shall be documented in the field, allowing grading to proceed. 2. Any potentially significant deposits or artifact concentrations shall be evaluated and the County Archaeologist shall be notified. A Research Design and Data Recovery Plan shall then be developed for any significant deposits and implemented. Grading in the vicinity of the deposits shall cease until the Data Recovery Plan is implemented to the satisfaction of the County Archaeologist. Standard County Procedures shall be followed in the case that human remains are inadvertently discovered. Material collected during the monitoring program shall be cataloged and analyzed and a report shall be prepared. This report shall address any data recovery that might be required during monitoring, as well as isolated artifacts found during the grading. Artifacts shall be curated at a qualified institution.
Mitigation Measure M-CR-2: Significant Cultural Resource Site CA-SDi-17,171. a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1. b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the

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significant portion of the site. c. A permanent fence shall be constructed between the road and the site. This shall be a rustic fence to blend with the nature of the proposed development and match fencing used in other areas of the development. d. Signs shall identify this as a sensitive area that is being preserved, but they shall not mention cultural resources or archaeological site. e. Site CA-SDi-17,171 shall be placed in an open space easement granted to the County of San Diego. f. The open space easement shall be managed in accordance with the RMP required for this project (the Conceptual Resource Management Plan is provided in Appendix C). Measures specific to management of cultural resources include: 1. A qualified Resource Manager, approved by the Director of Planning and Land Use and/or the County of San Diego Department of Parks and Recreation,shall take responsibility for the management of the open space lots. 2. At the time the Resource Manager assumes responsibility for the management of the lots, or just prior to this event, the condition of the sites in question shall be documented. This shall consist of establishment of permanent photography stations (either marked by permanent markers or by the designation of a recognizable and relocatable natural feature such as a rock as the station). These shall be identified on a map of the site. A series of panoramic photographs shall be taken from each photography station do record the condition of the site. Any disturbance or other pertinent conditions shall be photographed, as well, and noted on the site map. A copy of this base-line information shall be filed at the South Coastal Information Center. 3. Each year thereafter a site visit shall be made by a qualified archaeologist and a Native American Monitor. They shall check the condition of the site against the baseline data recorded in step 2. They shall note any problems and differences between the conditions as they exist on the ground and the conditions described in the baseline documentation. Reports of these visits shall be filed at the South Coastal Information Center. 4. If damage is noted to the archaeological sites, the archaeologist and Native American Monitor shall develop recommendations for preventing further damage. Such measures might include increased patrols, selected capping of site areas, posting of signs, or the formation of a neighborhood watch to monitor the sites and to report vandals.
Mitigation Measure M-CR-3: Significant Cultural Resource Site CA-SDi-17,177. a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1. b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site. c. A permanent fence and signage shall be constructed between the road and the site, as described in Mitigation Measure M-CR-2. d. Site CA-SDi-17,177 shall be placed in an open space easement granted to the County of San Diego. e. The open space easement shall be managed in accordance with the RMP required for this project and shall includes the management requirements outlined in Mitigation Measure M-CR-2.
Mitigation Measure M-CR-4: Significant Cultural Resource Site CA-SDi-17,178. a. The mitigation of impacts to CA-SDi-17,178 shall be through data recovery (refer to Cultural Resource Evaluation). A research design has been prepared for this project and is included in the Cultural Report which outlines data recovery mitigation for the proposed destruction of a portion of the archaeological site CA-SDi-17,178. The research design, subject to approval by the County shall include, but is not limited to the following performance standards: 1. All data recovery shall include a Native American monitor. The presence of a Native American

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monitor shall be required for the duration of the excavation portion of the project. 2. Phase 1 data recovery shall include mechanical trenching (optional) and a 5-15% hand excavated sample of the subsurface artifact concentrations for CA-SDi-17,178. During excavation, attention would given to the need for special studies such as pollen analysis, flotation samples and botanical analysis, and protein residue analysis. If so, appropriate samples would be taken and processed. Attention would be given to collecting, documenting, and processing material for radiocarbon dating and obsidian source and hydration analysis. Material recovered from these excavations would be cataloged and analyzed using standard procedures. All artifacts collected in the data recovery or in any other phase of this project would be curated at a facility acceptable to the County of San Diego. 3. At the completion of Phase 1, a letter report shall be submitted to the Director of the Department of Planning and Land Use. The letter report will evaluate the issues of site integrity, data redundancy, spatial and temporal patterning, features, and other relevant topics in order to assess the adequacy of the initial (2.5% is typical) percent sample. Based on this assessment, the letter report shall recommend the need for and scope of a second phase of field investigations, not to exceed a total site hand excavated sample of (5 is typical) % of the subsurface artifact concentration. 4. Implement Phase 2 of fieldwork, as necessary. 5. Conduct artifact analysis, including lithics analysis, ceramics analysis, faunal analysis, floral analysis, assemblage analysis, and radiocarbon dating, as detailed in Appendix 6 of the archaeological extended study, "*Cultural Resources Evaluation of Cumming Ranch, County of San Diego, California*" prepared by G. Timothy Gross. b. Prior to recordation of the Final Map the applicant shall: 1. Complete and submit the Final Technical Report from the Principal Investigator to the satisfaction of the Director of Planning and Land Use. 2. Provide evidence to the satisfaction of the Director of Planning and Land Use that all archaeological materials recovered during both the significance testing and data recovery phases have been curated at a San Diego facility that meets standards per 36 CFR 79, and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.
Mitigation Measure M-CR-5: Significant Cultural Resource Site CA-SDi-17,186. a. All ground-disturbing activities would be monitored as described in Mitigation Measure M-CR-1. b. Prior to the start of construction, temporary fencing shall be placed around the known significant portions of this site and shall remain in place until grading is complete to avoid inadvertent disturbance of the significant portion of the site. c. A permanent fence and signage shall be constructed between the road and the site, as described in Mitigation Measure M-CR-2. d. Site CA-SDi-17,186 shall be placed in an open space easement granted to the County of San Diego. The open space easement shall be managed in accordance with the RMP required for this project and shall includes the management requirements outlined in Mitigation Measure M-CR-2.
Mitigation Measure M-N-1: Construction Noise – Offsite Receptors. During construction of the internal street system south of Highland Valley Road, a 14 foot high inversed "L"-shaped temporary noise barrier 420 feet in length shall be constructed along the project boundary as shown in Figure 3.3-6.
Mitigation Measure M-N-2: Construction Noise – Onsite Receptors. When construction sites are located within 75 feet of an occupied residential property line, temporary noise barriers, with a minimum height of 8 feet, shall be required to block the line-of-sight from the occupied residence to the active construction site.
Mitigation Measure M-N-3: Rock Breaking and Material Handling. When rock breaking activities are located

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within 125 feet of an occupied residential property line, temporary noise barriers with a minimum height of 8 feet shall be required. The temporary barriers shall be constructed no more than 5 feet from the point of impact and to block the line of sight from the active rock breaking/material handling site to the occupied residence. The proposed barrier would provide approximately 18 dBA reduction from impact noise associated with rock breaking, which would reduce potential construction noise levels at future residential property lines to 73 dBA L_{eq}.
Mitigation Measure M-N-4: Noise Sensitive Avian Habitat. The following measures are required to reduce the short duration impact of construction-related noise on sensitive avian habitat. a. Where feasible, the project shall avoid construction within 500 feet of habitat for noise sensitive species, between February 1 and September 15. b. If the pre-construction biological surveys required under IMPACT BI-15 determine nests of noise sensitive avians are present in the habitat, or construction noise would have a significant impact on the species using the habitat, an acoustical study will be prepared to assess noise sources, determine noise levels in the habitat, and determine mitigation measures capable of reducing noise levels to 60 dBA L_{eq} or less. If noise levels from construction cannot be reduced below 60 dBA L_{eq}, construction shall not be allowed between February 1 and September 15.
Mitigation Measure M-N-5: Traffic Noise Levels and Land Use Compatibility. a. Prior to approval of the Final Map, (as required in the San Diego Code of Regulatory Ordinances, County of San Diego 1986a), the applicant shall dedicate to the County of San Diego "noise protection easements" on each of Lots 5 through 11, Lots 55 though 57, Lots 70 through 77, and Lots 98, and 99, over the area of the property from the lot line at the edge of Highland Valley Road to a line 300 feet from the centerline of Highland Valley Road. These easements are for the protection of NSLUs from traffic noise. The noise protection easements shall be shown on the Final Map Prior to approval of the Final Map, (as required in the San Diego Code of Regulatory Ordinances, County of San Diego 1986a), the applicant shall dedicate to the County of San Diego "noise protection easements" on each of Lots 39 through 41 from the lot line at the edge of SR 67 to a line 795 feet from the centerline of SR 67. These easements are for the protection of NSLUs from traffic noise. The noise protection easements shall be shown on the Final Map These noise protection easements shall require that prior to the issuance of a Building Permit for residences located within the noise protection easement, evidence shall be d to the satisfaction of the Planning Director that exterior (outdoor) noise levels comply with the applicable NSLU noise level limits and land use compatibility guidelines of the County. The NSLU area does not include the entire lot but includes an area of reasonable size that adjoins the home to allow exterior use by residents at noise levels of 55 dBA CNEL or below. If noise barriers are required for compliance with the noise easement, barriers could be made of masonry, wood, and transparent materials, such as glass or Lucite. Earthen berms or a combination of berms and walls would also provide noise attenuation. The noise protection easement language shall contain a restriction stating that the structure and the exterior living area will be placed such that a noise barrier will complement the residences architecture and will not incorporate a solid (opaque) wall in excess of six feet. Conceptual modeling was prepared and is provided in the noise study (Appendix F) to show feasibility of noise reduction for each impacted lot. The conceptual noise barrier locations are shown on Figure 3.3-7. b. Noise barriers, as described above, would not reduce noise levels to second story elevations. Where two-story homes would be built in the area of properties where future noise levels, without abatement, are forecast to approach or exceed 60 dBA CNEL, the Building Permit applicant shall demonstrate that interior noise levels due to exterior noise sources would not exceed 45 dBA CNEL. Compliance shall require the submittal of a report with the building plans identifying the noise attenuation features included in the project's design to maintain interior noise levels at or below 45 dBA CNEL. In these cases, it is anticipated that the typical method of compliance would be to provide the homes with air conditioning or equivalent forced air circulation in order to allow occupancy with closed windows which, for most residential construction, would provide sufficient exterior-to-interior noise reduction.
Mitigation Measure M-N-6: Stationary Noise Sources – Lift Station. Prior to the issuance of improvement plans

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or grading permits for the TM, the project applicant shall demonstrate that the sewer lift station noise will comply with the County Noise Ordinance. To verify noise compliance, a Minor Use Permit or Site Plan will be required to verify ongoing compliance. As part of the Minor Use Permit, the applicant will develop and submit site plans for the lift station and proposed enclosure and a noise study demonstration the lift station's compliance to the County Noise Ordinance, Section 36.404 regulations of 50 dBA L_{eq} during daytime hours at the lot line and provide any necessary abatement measures to achieve this noise level. Abatement measures required to reduce noise levels may include complete enclosure of the equipment, specific orientation of the noise generating equipment, noise barriers, or berms. Specifications and recommendation from this study shall be incorporated into the final site plans to the satisfaction of the Director of the Department of Planning and Land Use.
Mitigation Measure M-AE-1: Visual Appearance of Noise Barriers. The Noise Protection Easement shall require that the overall look of the required noise barriers at each of the 22 noise impacted residences adhere to the following design measures to ensure that the noise barriers complement the natural setting and overall design of the Cumming Ranch project and surrounding community character. Measures include: a. Barriers shall be constructed of natural looking materials that complement the surrounding rural landscape. Materials such as stone, stone veneer, boulders, and stucco are all acceptable materials. b. The use of plexi-glass or other translucent materials shall be allowed. c. The color palette for the barriers shall be consistent with the adjacent rural landscape and consist of earth-toned hues. d. A minimum of a 5-foot-wide landscape buffer shall be required along the exterior base of barriers. All landscape material in this area shall be native and as defined in the Conceptual Landscape Plan. e. Earth berms or earth berm/wall combination are other acceptable forms of noise mitigation. Berms shall have a maximum of 1.5:1 slope. If a berm is used, it will be natural in appearance and reflect the aesthetic of the surrounding rural landscape. Berm plantings shall be consistent with the Landscape Plan. f. Wall portion of the barriers shall not exceed 6 feet. The use of natural materials on the wall facades to complement the open rural setting would reduce the intrusiveness of the walls and unite the walls with the overall design of the proposed project. Landscaping along the exterior base of the walls would partially conceal the walls as well as blend and so often the hard lines of the walls with the open surroundings. The use of plexi-glass or other transparent material would reduce the visibility of the walls, while still maintaining the appropriate noise reduction. These measures will be imposed upon the project by the Noise Protection Easement.
Mitigation Measure M-CC-1: Reduce Project-Generated GHG Emissions Contributing to Climate Change. <u>Construction-Generated Emissions</u> – To be required on the grading and improvement plans: The grading and improvement plans shall specify that the contractor shall: a. Maintain construction equipment in good working order per the manufacturer's specifications; b. Limit idling time for construction equipment and vehicles to five minutes; <u>Operational Emissions</u> – The Site Plan shall require the project developer implement the following mitigation measures or other equivalent measures consistent with OPR guidance to meet the specified performance criteria deemed feasible by the County to reduce GHG emissions. c. Meet California Green Building Code standards for energy efficiency in all new residential units. Examples of these standards include use of Energy Star equipment, water conserving plumbing fixtures, use of regional materials and products with recycled content, etc.; d. Generate a minimum of 10 percent of the project's energy consumption from onsite renewable energy-generation sources (e.g., photovoltaic cells or other onsite energy generating technology). For example, the estimated roof size of the photovoltaic system required to generate 10 percent of the project's energy would be approximately 4,405 square feet; e. Reduce outdoor water consumption by a minimum of 50 percent (e.g., rainwater collection systems); and

Mitigation Measures
f. Install solar water heaters in all proposed units.
Mitigation Measure M-PS-1: Fire Protection Service. The Cumming Ranch project shall participate in a Community Facilities District as conditioned by the Ramona Fire Prevention Bureau. The project developer shall be required to pay all fees and meet all requirements of the Community Facilities District to the satisfaction of RMWD.
Mitigation Measure M-PS-2: Water Conveyance, Storage, and Treatment. County approval of building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of water supply to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.
Mitigation Measure M-PS-3: Sewer Service and Treatment. County approval of the building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of wastewater treatment capacity to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.
Mitigation Measure M-PS-4: Cumulative Fire Protection Service. The Cumming Ranch project shall participate in a Community Facilities District as conditioned by the Ramona Fire Prevention Bureau. The project developer shall be required to pay all fees and meet all requirements of the Community Facilities District to the satisfaction of RMWD.
Mitigation Measure M-PS-5: Cumulative Water Conveyance, Storage, and Treatment. County approval of building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of adequate water supply to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.
Mitigation Measure M-PS-6: Cumulative Sewer Service and Treatment. County approval of building permits for the Cumming Ranch project shall not occur until after RMWD has provided a commitment of adequate wastewater treatment capacity to serve the project. The project developer shall be required to pay all service fees as determined by RMWD.
Project Design Features
Residential lots would be sized to be compatible with existing surrounding residential development.
Pads would be designed to "fit-in" to the terrain, minimizing stair stepping of pads and retaining natural forms that complement natural landforms. Overall grading is expected to be less than 65 percent of typical grading operations where mass grading techniques are used.
The project's network of open space (457.4 acres equaling 67 percent of the total site) is intended to be consistent with the intent of the Ramona Grasslands Preserve and preserve the majority of the sensitive habitats, wildlife corridors, landforms, and drainages onsite.
Unique or interesting natural resources, such as biological resources, rock outcroppings, heavily wooded areas, or swales and streams, would be preserved within open space areas.
All of the major ridgelines would be preserved within open space areas.
Natural features, such as rock outcroppings and trees, have been incorporated into the individual lot designs.
A 3.40-mile community-level trail network including staging area has been incorporated into the project design. Trails would extend from the 2-acre staging area in Area C, south through a portion of Hardy Ranch and into Area A, eventually connecting to Highland Valley Road. Another trail would provide east-west connectivity along the south side of Santa Maria Creek through Area B and a portion of the Hardy Ranch. The community trails would be expected to interconnect and become part of a future regional trail system. Natural-colored decomposed granite would be installed in high use areas and compacted native material on the majority of the trail. The proposed alignments of the trails as part of the Cumming Ranch project are very similar to the location of the trails on the Trails and Pathways for Ramona map.
Pathways would be provided along one side of all internal streets. The pathways would not be paved but would be covered with decomposed granite or a similar material to maintain a rural and informal setting. These pathways would total approximately 3.65 miles. A community pathway would also be provided along the north side of Highland Valley Road, beginning at the westernmost entrance to the project site and continuing east to the intersection with SR 67.
Because the project would not be mass graded and contoured for complete gravity flow, the sewer lines have been located in low-lying areas throughout the project site.
Improvements to surrounding roadways are included in the project description to address future traffic circulation and roadway operations needs. These improvements would occur on Highland Valley Road and at the intersection of

Project Design Features
SR 67 and Highland Valley Road.
Educational information would be presented to home buyers and would include descriptions of wildlife and vegetation native to the area, explanations of local cultural resources, limitations on activities that may occur in community open space areas, restrictions on sensitive resources that may exist on individual properties, and legal implications of disturbing cultural resource sites.
Buffers and natural barriers would provide a natural separation between development and open space as an alternative to the use of fences, walls, or other physical barriers.
Where residential lots abut dedicated open space lots, the rear 100 feet of the lot adjacent to the open space would be established as an LBZ.
A minimum buffer of 50 feet would be provided within the dedicated open space lots between sensitive habitats and the adjacent residential lots.
The LBZs incorporated into the project would create a buffer to protect homes from potential wildfire in the adjacent open space.
Natural barriers to discourage infringement into the open space outside of trail areas would include materials such as impassible brush, mounding, rocks, and trees or shrubs at potential entry points.
Signage would be provided along key points between developed areas and open space areas to indicate that the area is a sensitive open space preserve and no entry except at designated trail areas is allowed.
Areas affected by trenching for utility lines would be reestablished with preconstruction contours and revegetated with a County-approved seed mix.
The project has been designed with minimal fencing. Fencing would be included in the project design only where necessary to enclose animals or special circumstances where natural barriers or buffer areas would not create an adequate physical separation.
Allowed fencing types would include strand wire, wooden rail, or other natural materials. No chain link or similar type of fencing would be allowed.
Large animal enclosures would be subject to specific guidelines for the type of fencing material that may be used.
Restrictions would be placed on the outdoor activity of domestic pets because of potential encroachment into the adjacent open space areas (restrictions may include leashing at all times, bells on cat collars, etc).
Animal keeping would be allowed per County of San Diego regulations.
No street lighting would be used within the proposed project site. Minimal light would be installed at project entries.
Homeowners could have exterior lighting within allowed parameters, such as motion lights, shutoff timers, and downshielding of lights.
Specific natural areas throughout the open space of Area A would be enhanced with compatible and appropriate plantings, such as the drainage corridors within Area A.
Project design allows for natural vegetation, open space areas, and the onsite drainage swales to serve as biofilters for runoff from the project.
Specific requirements would be designed to prevent runoff from stables and corral areas, such as removal of manure and other maintenance requirements.
Signage to accent the entry points would be crafted to match the rural character of the project and landscaped with subtle native plantings and rock outcroppings.
The landscape concept plan focuses on the use of native plant species appropriate to the individual area of the project.
The landscaping for the project would build a community theme focused on maintaining the existing natural and unique features of the site, specifically oak trees and rock outcroppings.
The design guidelines will encourage a transitional landscape approach with native and naturalized plant material suited for sustainable maintenance practices. All planting would be subject o the specific plant palette for each specific area.
Avigation Easements Dedications and Overflight Easement Dedications would be placed over areas required for airspace protection by the FAA.
The following measures would be incorporated into the project and specified on the grading plans to minimize the emissions of PM_{10}, and $PM_{2.5}$: • Minimize land disturbance;

Project Design Features
• Stabilize graded areas as quickly as possible to minimize fugitive dust; • Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry; • Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads; • Remove any visible track-out into traveled public streets within 30 minutes of occurrence; • Wet wash the construction access point at the end of each workday if vehicle travel on unpaved surfaces occurred; • Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads; • Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling; • Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph miles per hour; • Cover/water onsite stockpiles of excavated material; • Hydroseed, landscape, or develop disturbed areas as quickly as possible and as directed by the County to reduce dust generation; and • Enforce a 15 miles-per-hour speed limit on unpaved surfaces.
The following engineering measures would be implemented as part of the project: • Geotechnical engineer shall selectively test fill during site preparation and review any unusual or unexpected conditions and recommend measures if necessary; • During site preparation, soil removal shall include existing colluvium, alluvium, older alluvium, and highly weathered bedrock onsite. The exposed surface shall be reprocessed prior to the addition of fill; • If soil imports are required, samples of the soil shall be evaluated by a geotechnical engineer to ensure compatibility with onsite soils and the recommendations of the geotechnical report; • During remedial earthwork, including lot capping and cut/fill transitions, shall be implemented with further evaluation of conditions in the field as grading occurs; • Placement of an erosion control fabric, or similar protective system, shall be placed over graded slope faces in order to minimize erosion of the slope face until a suitable vegetation cover is established; • All cut slopes shall be mapped by the project engineering geologist during grading to allow amendments to mitigation as necessary; and • Additional or alternative measures may be required by the County Engineer to ensure soils are appropriately engineered and stabilized prior to development.