

Chapter 3. Environmental Effects of Minor Modifications to the Project

INTRODUCTION

This chapter discusses the environmental effects of new information and minor modifications to the project on land use, groundwater hydrology and water supply and demand, vegetation and wildlife, fisheries, aesthetics, traffic, climate and air quality, cultural resources, and cumulative and growth-related impacts. The deletion of lots not considered clustered would not result in any new impacts, and the impacts previously identified in the final EIR would not occur. Therefore, the deletion of these lots is not analyzed in this addendum.

LAND USE

Measure M prevents rezoning of a portion of the project site, and the zoning reverts to the original RC-D zoning; the Comprehensive Development Plan required by the Monterey County Board of Supervisors' Resolution No. 93-115 remains in place, and uses must be consistent with that plan. The single-family residential uses, employee housing proposed for the ranch center (lot 258) and other lots, and the uses proposed at the sporting center (lot 259), employee recreation center (lot 262), and ranch operation center (lot 263) are allowable under the current RC-D zoning designation and are still components of the revised project. The less-than-significant impact of potential incompatibility of proposed land uses with existing or proposed land uses onsite, as reported in the final EIR, remains unchanged.

Uses proposed for lots 255, 256, and a portion of 258 (lodge, expansion of the hacienda, and commercial development associated with the ranch center) are not allowable under the current RC-D zoning designation and have been eliminated in the revised project. The impacts identified in the final EIR are no longer applicable.

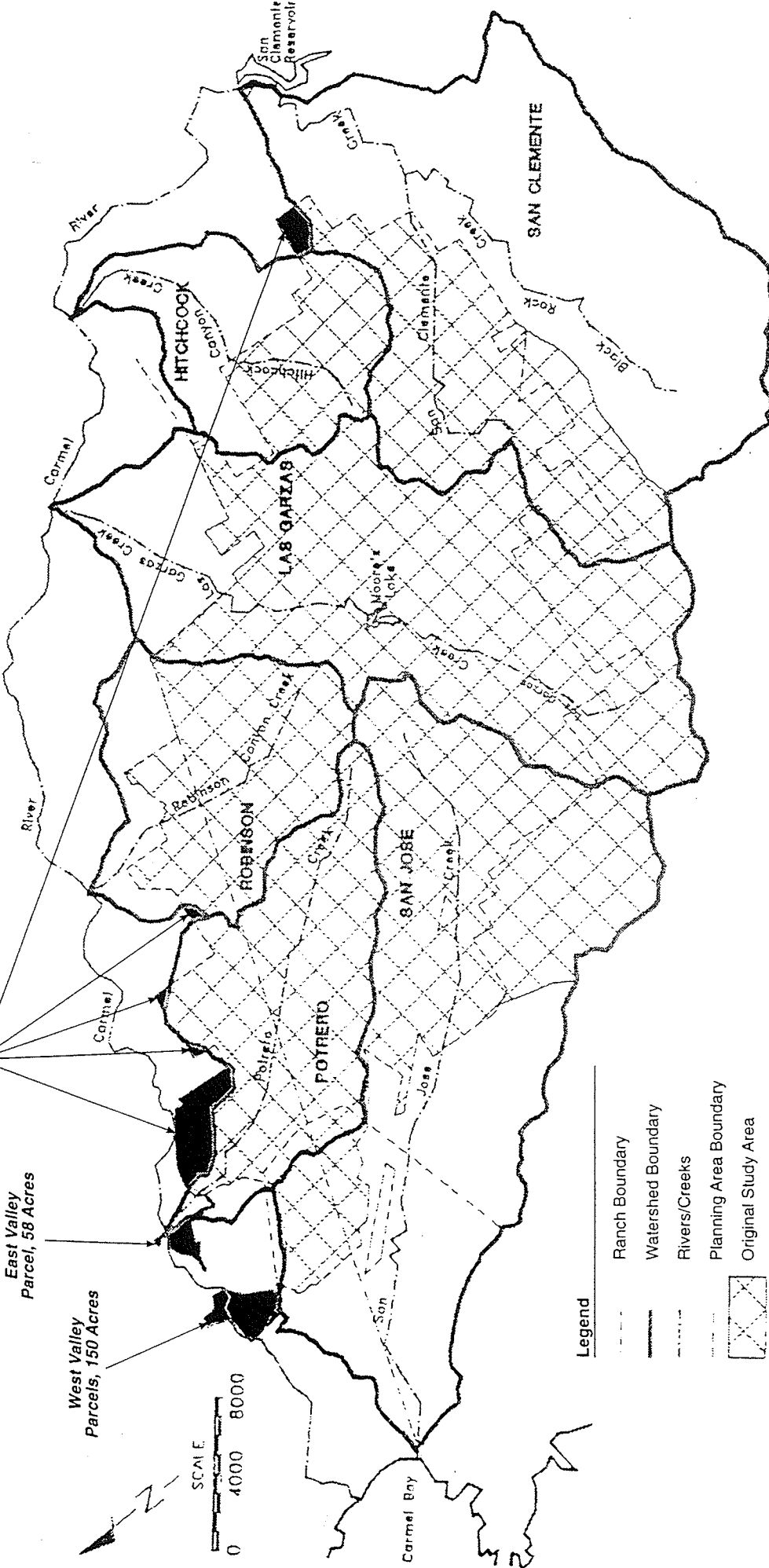
GROUNDWATER HYDROLOGY AND WATER SUPPLY AND DEMAND

The change in water demand and consumptive use of groundwater related to deletion of the water use associated with the visitor accommodations, portion of the ranch center, and the conservancy was calculated by Camp Dresser & McKee and Luhdorff and Scalmanini Consulting

Additional Carmel Valley Areas, 358 Acres

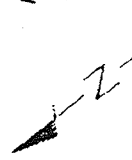
East Valley Parcel, 58 Acres

West Valley Parcels, 150 Acres



Legend

- Ranch Boundary
- Watershed Boundary
- Rivers/Creeks
- Planning Area Boundary
- Original Study Area
- Areas Added to Original Study Area per Statement of Decision for Case 106800



SOURCE:
CDM Camp Dresser & McKee Inc.



Jones & Stokes Associates, Inc.

Figure 3-1
Santa Lucia Preserve
Revised Study Area

Engineers (Boissevain and Scalmanini pers. comms.). Hydrogeologic conditions and groundwater use in the Carmel Valley parcels were studied and documented by Camp Dresser & McKee and David Keith Todd Consulting Engineers (1997). The latter report was peer-reviewed for the Monterey County Division of Environmental Health by Jay Jones of Environmental and Geotechnical Consulting Services (Jones pers. comm.). The information in these reports was reviewed for this addendum, and the data, assumptions, and methods were found to be consistent with the final EIR and prior technical reports on hydrology and water supply and demand. Information from these reports was used to evaluate changes in environmental impacts using the methods described in Chapter 8 of the final EIR.

Change in Water Demand and Consumptive Use of Groundwater

Deletion of the aforementioned water uses would result in a slight decrease in projected groundwater use for the revised project. The water demand factors presented in Table 8-1 of the final EIR indicated that the combined net groundwater demand for those facilities is approximately 49 acre-feet per year (af/yr). However, the facilities would have generated approximately 32 af/yr of wastewater, which would have been used for irrigation of the golf course. Without this source of reclaimed water, an equivalent amount of irrigation water would need to be pumped directly from groundwater. Thus, the decrease in net consumptive use of groundwater for the project is only about 17 af/yr, or 6% of the original total. This slight decrease in net consumptive use would have the beneficial effect of increasing the reliability of the water system and decreasing impacts on stream base flow, groundwater levels, subsurface outflow, and riparian and wetland vegetation. However, the decrease in impacts would not be large enough to change any of the impacts to less-than-significant levels or eliminate the need for the mitigation measures recommended in the final EIR.

Results of Addition of Carmel Valley Parcels and Wells to Hydrologic Analysis

Rancho San Carlos includes several parcels totaling 600 acres of land in the Carmel Valley that were not included in the study area for the hydrologic analysis in the final EIR. These parcels were not included in the original evaluation because the project did not propose to change water use on those parcels, the parcels are downstream and downslope of the main project area, and wells on those parcels would not be used to supply water to new development in the Santa Lucia Preserve. This latter use was explicitly prohibited in the Board's approval of the project (Condition No. 190). Including the Carmel Valley parcels in the hydrologic analysis increases the estimates of total recharge and groundwater use but does not alter the analysis or conclusions related to impacts.

The Carmel Valley parcels total 566 acres and include three large areas and several small areas near Potrero Creek and one area between Hitchcock Canyon and the San Clemente Creek drainage (Figure 3-1). Of the total area, 128 acres overlie Carmel Valley alluvium, with the remainder underlain by bedrock uplands geologically similar to bedrock materials found throughout the rest of Rancho San Carlos. Irrigation of row crops and part of a golf course occurs on 93 of the

alluvial acres. The agricultural activities are limited to the three westernmost parcels, each of which has a well that draws from the Carmel Valley groundwater basin. The parcel owned by Rancho San Carlos east of Val Verde Drive in Carmel Valley (the Rio Road Parcel) and listed as APN 015-021-005 is not included in this evaluation because it is outside the comprehensive development plan area.

Including the Carmel Valley parcels in the analysis increases the total area by 2.5%, to 24,200 acres. Groundwater recharge from rainfall for the upland and valley floor parts of the Carmel Valley parcels was calculated by Camp Dresser & McKee and David Keith Todd Consulting Engineers (1997). On a long-term average basis, the uplands parts of the parcels generate approximately 64 af/yr of surface runoff and 139 af/yr of groundwater recharge. The alluvial areas generate minimal surface runoff and approximately 66 af/yr of groundwater recharge. Estimated consumptive use of groundwater is 46 af/yr of evapotranspiration on 26 acres of phreatophytic riparian vegetation and 145 af/yr of consumptive water use by crops and turf. The balance of the consumptive use is supplied by a net inflow of 125 af/yr of groundwater from surrounding areas in the Carmel Valley groundwater basin.

Adding these flows to the terms of the average annual water balance depicted in Figure 8-2 of the final EIR slightly increases the totals of several flow terms used in the evaluation of hydrologic impacts. Streamflow increases by 0.5% to 12,164 af/yr, with all of the increase in the direct runoff component. Phreatophyte groundwater use increases by 1.5% to 3,146 af/yr. Evapotranspiration of crops and natural vegetation increases by 1.7% to 33,877 af/yr. Subsurface outflow increases by 10.7% to 1,439 af/yr, reflecting outflow from the uplands parts of the parcels to the Carmel Valley groundwater basin. A new term consisting of net groundwater inflow to the alluvial parcel areas amounts to 125 af/yr. These changes essentially represent a modification in the definition of the existing condition. None of the changes affect the magnitude or significance of impacts identified in the final EIR, nor do they render unnecessary any of the recommended mitigation measures.

The Carmel Valley parcels would not create any hydrologic impacts because water use on those parcels would not change. Although a total of 69 residences could potentially be built on the Carmel Valley parcels, the water demand for those residences would be supplied by the same upland well network that would supply the rest of the project, and the water demand was included in the total demand evaluated in the final EIR. Because of their location and because their existing water supply comes from the Carmel Valley groundwater basin, the Carmel Valley parcels are among the "existing users in the Carmel Valley" considered in the section on "Impacts on Offsite Water Users" on page 8-58 of the final EIR. The final EIR did not identify significant hydrologic impacts on offsite water users. Thus, the Carmel Valley parcels neither cause nor are affected by hydrologic impacts from the project. Including them in the study area description of existing conditions does not alter any of the impacts or recommended mitigation measures in the final EIR.

The historical use of the wells on the Carmel Valley parcels is recognized by Decision 1632 of the California State Water Resources Control Board (SWRCB). This decision approved issuance of a water right permit to the Monterey Peninsula Water Management District (MPWMD) for the new Los Padres Reservoir project. Table 13 of the decision identifies those parties having a water rights priority senior to MPWMD and includes the Rancho San Carlos Partnership's applications for

the three wells described above and the Rio Road parcel. The water rights applications for these wells specify the purpose, the places of use, and diversion season for the wells. The specific quantities of water that have been set aside by the SWRCB for future appropriation in Table 13 are for in-basin use only (i.e., within the Carmel River Basin). Should the Rancho San Carlos partnership contemplate expanding the use outside existing uses, the water rights applications would need to be amended and would be subject to review under CEQA and approval of the SWRCB.

VEGETATION AND WILDLIFE

For this addendum, all special-status plant and wildlife species addressed in the final EIR were evaluated to determine whether their legal status had changed under the federal or state ESAs and if the change would alter the assessment of impact significance in the final EIR. All special-status species also were evaluated for changes in their potential to occur in the revised project area by comparing the footprint of affected project facilities to biological resource maps of the project area.

Change in Status of the California Red-Legged Frog

As stated in Chapter 2, "Revised Project Description", the USFWS placed additional regulatory conditions on the project to protect the red-legged frog. These conditions are listed in Appendix A. This new information does not result in the identification of new significant effects because the applicant has agreed to implement the additional conditions to ensure impacts on red-legged frogs are less than significant. The additional conditions placed on the project will afford the red-legged frog greater protection commensurate with its change in status under the ESA.

Changes in Legal Status for Other Special-Status Species

Since publication of the final EIR, the legal status of many species addressed in the document has changed. In all cases (other than for the California red-legged frog), these changes are attributable to implementation of the U.S. Department of the Interior's Proposed Rule on Endangered and Threatened Species, Plant and Animal Taxa, which was published in the Federal Register on February 28, 1996 (61 FR 7596 February 28, 1996). Under this rule, Category 1 and 2 classifications for federal candidate species were removed and species are identified either as candidate species with a listing priority status or as U.S. Fish and Wildlife Service (USFWS) species of concern. Designation as a USFWS species of concern is generally believed to provide lesser protection to a listed species than status as a Category 1 and 2 candidate.

Although the legal status has changed for many special-status plant and wildlife species addressed in the final EIR, these changes will not alter the impact analysis or conclusions described in the final EIR.

Biological Communities and Associated Special-Status Wildlife Species

Because development of the ranch center, lodge, and guest portion of the hacienda was not approved for the proposed project, the biological communities and associated special-status species existing within these facility footprints would be retained. These include biological communities such as oak woodland, oak savanna, and coastal terrace prairie and special-status species such as Cooper's hawk, golden eagle, and Monterey dusky-footed woodrat. Although impacts under the revised project description would be less than under the original project, the reduction in impacts would be minor and would not change the assessments of significance or conclusions in the final EIR.

FISHERIES AND AQUATIC LIFE

As stated previously, since the certification of the final EIR, the southcentral coast steelhead was listed as threatened under the ESA. The species was not a species of special concern at the time the final EIR was written (Moyle et al. 1995). However, the steelhead run in the Carmel River has declined over the last 20 years, and a mitigation program targeting steelhead was implemented in 1990 (MPWMD 1994). Most of the mitigation efforts are focused on improving migration and rearing conditions downstream from San Clemente Dam. The significance criteria and monitoring procedures used in the final EIR have been evaluated to determine if the change in circumstances would change the conclusions reached in the EIR.

Effect of Proposed Project Changes

Based on the information described below, fisheries impacts will not be substantially different from those previously identified in the final EIR. Under the revised project description, fewer facilities have been approved, thereby resulting in fewer construction activities and related impacts compared to the original plan. Implementation of appropriate construction, erosion control, and sedimentation control practices at the remaining construction sites will not change. The timing and quantity of groundwater extraction will remain unchanged, as should the effect of groundwater extraction on fish habitat.

Effect of Proposed Federal Listing of Steelhead

The proposed federal listing of steelhead does not change the significance criteria used in the final EIR because the EIR already identified impacts on an endangered species or the interference with the movement of migratory fish as a significant impact. The EIR concluded that impacts on fisheries (including steelhead) would be significant; however, implementing appropriate construction practices, drainage plans, erosion control plans, stormwater pollution prevention plans, sediment control plans, and riparian habitat enhancement plans; delaying pumping near baseflow reaches; monitoring baseflow reaches; and augmenting base flows, as necessary, would protect the fisheries and reduce impacts to less-than-significant levels. Thus, the change in the status of the steelhead does not change the impact conclusions or mitigation measures in the EIR because the significance criteria, impact analysis, and mitigation measures addressed this species.

The National Marine Fisheries Service (NMFS), in a letter to Mike Dormody (Appendix B), raised concern with the project and EIR, stating that NMFS did not have the opportunity to comment on the EIR, that potential impacts on steelhead were not adequately addressed, and that the proposed mitigation measures may not be adequate (Mobly pers. comm.). An EIR is intended to satisfy CEQA, a state law, and federal agencies do not typically review and comment on state or local environmental documents. The EIR was not intended to satisfy federal permitting or consultation requirements, and thus there was no requirement to circulate the EIR to NMFS. The potential impacts on steelhead were considered significant in the EIR, and, as stated previously, several mitigation measures were provided to reduce the impacts to less-than-significant levels under CEQA. The NMFS letter does not raise any new information that changes the conclusions in the EIR. In light of the recent listing of southcentral coast run of steelhead, NMFS should be consulted in accordance with the ESA before the project proceeds.

AESTHETICS

Rezoning of lots 28, 29, 30, 31, 65, 77, 83, 84, 224, 225, 226, 251, 253, and 254 identified in the final EIR was eliminated for the revised project, and therefore the minimum height limit to comply with the proposed zoning requirements no longer applies. However, because these lots will revert to RC-D, Monterey County will maintain comprehensive design approval for all structures and measures specified by the design control district (Monterey County Zoning Ordinance 21.44). Additionally, development of these lots will be subject to covenants, codes, and restrictions (CCRs). Impacts identified in the final EIR associated with the change in views from Robinson Canyon Road, the intersection of Robinson Canyon Road and Rancho San Carlos Road, and private residences related to the lodge, ranch commercial development of the ranch center, and expansion of the hacienda will not occur because these features are not included in the revised project.

TRAFFIC

The number of trips generated by the revised project was compared to the number of trips generated by the project analyzed in the final EIR using a trip generation analysis prepared by Dowling Associates (Dowling pers. comm.) (Table 3-1). Analysis of the revised project assumes that a higher percentage of the residential trips would be external because the project no longer includes commercial uses. Ninety percent of the residential trips were assumed to be external, compared to 70% assumed in the final EIR. Additionally, because fewer employment opportunities are available within the Santa Lucia Preserve, only 50% of the inclusionary/employee housing residents were assumed to work onsite and the remaining 50% were assumed to be employed outside the preserve.

As shown in Table 3-1, the revised project would generate fewer daily and peak-hour trips because of the elimination of the hotel, expanded hacienda, and neighborhood commercial uses. The disproportionate effect of the lack of visitor lodging and a commercial center on p.m. peak-hour traffic would result in a net reduction of 14 vehicle trips off ranch for the CDP-GMPAP project and 9 for buildout. The net effect is a reduction of about 335 daily off-ranch vehicle trips for the CDP-GMPAP project and 285 for buildout. Because the revised project generates fewer daily and a.m. peak-hour trips and the same number of p.m. peak-hour trips, no new impacts would occur and the same project impacts discussed in the final EIR would result from the revised project.

The final EIR stated that the original CDP-GMPAP project would have added 17 peak-hour vehicle trips to Robinson Canyon Road. Total buildout would have added an additional 2 peak-hour vehicle trips to Robinson Canyon Road.

The county's Carmel Valley Master Plan Model was used to determine the percent of project trips going to the Mid-Valley Shopping Center and points east. The ranch was divided into zones. The final EIR analysis then compared the travel times from each zone to reach Carmel Valley Road via either Rancho San Carlos Road or Robinson Canyon Road. California Department of Transportation diversions curves were then applied to trips made from each zone to determine what percent of the resident and commercial trips would use each road for each direction of travel.

Homes and commercial development along or east of Robinson Canyon Road were determined to use Robinson Canyon Road for all of their trips to the Mid-Valley Shopping Center, Salinas, and other points east. Homes and commercial development west of Robinson Canyon, but within the San Francisquito Flats area of the ranch, were determined to use Robinson Canyon Road for 58% of their off-ranch trips to Mid-Valley Shopping Center and points east. This area is where the visitor lodge and neighborhood commercial center would have been located. All zones of the ranch (except seven residential lots at the north end of the ranch on Robinson Canyon Road) would find it faster and more convenient to use Rancho San Carlos Road to go to Carmel Rancho, Carmel, and Monterey.

Because the location of the homes is not being changed as part of the post-measure "M" plan, the split of off-ranch residential trips between Rancho San Carlos Road and Robinson Canyon Road

Table 3-1. Summary of Trip Generation Analysis

Land Uses	Factors for Calculating Trip Generation	Daily Rate	%Off-Ranch	Daily Trips Off-Ranch	%A.M. Peak Hour	%P.M. Peak Hour	A.M. Peak-Hour Trips		P.M. Peak-Hour Trips	
							In	Out	In	Out
PROJECT ANALYZED IN THE FINAL EIR										
Project Application (CDP-GMPAP)										
Market rate homes	239 du*	6.7	70	1,121	7	10	21	56	77	77
Inclusionary/employee units	44 du	5.0	28	58	8	10	1	4	5	4
Visitor accommodations	150 rooms	5.8	80	696	7	7	25	24	49	25
Golf course/clubhouse	37.4 rounds/weekday	2.4	39	35	34	15	6	6	12	3
Neighborhood commercial	20 employees	1.7	50	17	25	25	2	2	4	2
Recreational facilities	10 employees	1.7	50	9	25	25	1	1	2	1
Service/operations	5 employees	1.7	50	4	25	25	0	1	1	1
Subtotal CDP-GMPAP Project Application				1,944			56	94	150	113
Buildout Uses										
In Carmel Valley Master Plan area										
Market rate homes	53 du	6.7	80	284	7	10	5	15	20	19
Inclusionary multifamily	9 du	5.0	32	14	8	10	0	1	1	0
In Carmel area Coastal Zone area										
Market rate homes	5 du	6.7	75	25	7	10	0	1	2	2
Total Ranch Buildout (excludes existing uses)				2,267			61	111	172	134
REVISED PROJECT										
Project Application (CDP-GMPAP)										
Market rate homes	239 du*	6.7	90	1,441	7	10	28	73	101	99
Inclusionary/employee units (residents working onsite)	22 du	5.0	50	55	8	10	1	3	4	4
Inclusionary units (residents working offsite)	22 du	6.7	90	133	8	10	3	8	11	9
Golf course/clubhouse	37.4 rounds/weekday	2.4	50	45	34	15	8	7	15	4
Recreational facilities	10 employees	1.7	50	9	25	25	1	1	2	1
Service/operations	5 employees	1.7	50	4	25	25	0	1	1	1
Subtotal CDP-GMPAP Project Application				1,687			41	93	134	118
Buildout Uses										
In Carmel Valley Master Plan area										
Market rate homes	53 du	6.7	90	320	7	10	6	16	22	22
Inclusionary multifamily (residents working onsite)	5 du	5.0	50	13	8	10	0	1	1	0
Inclusionary multifamily (residents working offsite)	4 du	6.7	90	24	8	10	1	1	2	1
In Carmel area Coastal Zone area										
Market rate homes	5 du	6.7	90	30	7	10	1	1	2	2
Total Ranch Buildout (excludes existing uses)				2,074			49	112	161	143
Difference (CDP - GMPAP)				-257			-15	-1	-16	5
Difference (Buildout)				-193			-12	1	-11	9

du = dwelling units.

will not change significantly. The total number of trips leaving the ranch to go to shopping centers will change, and this effect was already accounted for in the previous section's computations.

The percent of resident trips leaving the ranch to shop at Carmel Rancho and at the Mid-Valley shopping center will increase from 70% to 90%. However, dropping the on-ranch visitor lodging significantly reduces the total number of off-ranch trips generated by the project. The net effect is no increase in Robinson Canyon Road traffic beyond that cited in the final EIR for the pre-measure "M" CDP-GMPAP project and buildout.

CLIMATE AND AIR QUALITY

Construction Emissions

The construction emissions analysis in the final EIR was based on expected maximum construction activities. The revised project is expected to result in decreased construction activity and fewer vehicle trips, and overall construction emissions would be the same or slightly less than the project analyzed in the final EIR. Construction emissions were determined to be less than significant after mitigation for the original project and are therefore considered to be less than significant for the revised project with the same mitigation measures.

Carbon Monoxide Emissions

The revised project would result in a slight decrease in traffic volumes and corresponding reduced carbon monoxide (CO) concentrations compared to the original project. CO concentrations were determined to be less than significant for the original project and are therefore considered to be less than significant for the revised project.

Ozone Precursor and PM10 Emissions

The revised project would result in fewer vehicle trips than the original project. Emissions resulting from the original project and the revised project are shown in Table 3-2. The revised project is expected to result in a reduction of emissions equal to 3.4 parts per day (ppd) of reactive organic gases (ROG), 16.7 ppd of oxides of nitrogen (NO_x), and 1.3 ppd of PM10 (particulate matter equal to or less than 10 microns in diameter) compared to the original project. Ozone precursor and PM10 emissions were determined to be less than significant for the original project and are therefore considered to be less than significant for the revised project.

Table 3-2. Emissions from Santa Lucia FEIR Uses

Land Use	Daily Trips	Trip Length	Emission Rate (grams/mile)			Emissions (pounds/day)		
			ROG	NOx	PM10	ROG	NOx	PM10
PROJECT ANALYZED IN THE FINAL EIR								
CDP-GMPAP								
Market rate homes	1601	10	0.18	0.88	0.07	6.3	31.0	2.5
Inclusionary homes	220	10	0.18	0.88	0.07	0.9	4.3	0.3
Visitor accommodations	870	10	0.18	0.88	0.07	3.4	16.9	1.3
Golf course	90	10	0.18	0.88	0.07	0.4	1.7	0.1
Commercial	34	10	0.18	0.88	0.07	0.1	0.7	0.1
Recreational operations	17	10	0.18	0.88	0.07	0.1	0.3	0.0
Service operations	9	10	0.18	0.88	0.07	0.0	0.2	0.0
Subtotal						11.3	55.1	4.4
Buildout								
Market rate homes	389	10	0.18	0.88	0.07	1.5	7.5	0.6
Inclusionary homes	45	10	0.18	0.88	0.07	0.2	0.9	0.1
Subtotal						1.7	8.4	0.7
Total						13.0	63.5	5.1
REVISED PROJECT								
CDP-GMPAP								
Market rate homes	1601	10	0.18	0.88	0.07	6.3	31.0	2.5
Inclusionary homes (onsite workers)	110	10	0.18	0.88	0.07	0.4	2.1	0.2
Inclusionary homes (offsite workers)	147	10	0.18	0.88	0.07	0.6	2.8	0.2
Golf course	90	10	0.18	0.88	0.07	0.4	1.7	0.1
Commercial	0	10	0.18	0.88	0.07	0.0	0.0	0.0
Recreational operations	17	10	0.18	0.88	0.07	0.1	0.3	0.0
Service operations	9	10	0.18	0.88	0.07	0.0	0.2	0.0
Subtotal						7.8	38.3	3.0
Buildout								
Market rate homes	389	10	0.18	0.88	0.07	1.5	7.5	0.6
Inclusionary homes (onsite workers)	25	10	0.18	0.88	0.07	0.1	0.5	0.0
Inclusionary homes (offsite workers)	27	10	0.18	0.88	0.07	0.1	0.5	0.0
Subtotal						1.7	8.5	0.7
Total						9.6	47.8	3.7

CULTURAL RESOURCES

The revised project will not result in any new impacts on cultural resources. The final EIR indicated that Site CA-MNT-1481 would be affected by construction in the area of the hacienda. Because the hacienda will not be expanded for the revised project and construction of the ranch center has been reduced to only inclusionary housing, cultural resources impacts associated with Site CA-MNT-1481 will be reduced.

Additionally, the final EIR identified the impact of damage to the Rancho San Carlos historic district from the placement of new buildings in proximity to the original buildings. Mitigation for this impact included augmenting existing documentation of the buildings prior to new construction in San Francisquito Flat area. Because some project features that were once proposed for construction in the San Francisquito Flat area are no longer proposed, the severity of this impact is reduced.

CUMULATIVE AND GROWTH-RELATED IMPACTS

No changes would occur as a result of the revised project to the cumulative and growth-related impacts identified in the final EIR. Although the effects of the revised project for hydrology, vegetation and wildlife, fisheries, land use, aesthetics, and traffic are less than those identified for the project analyzed in the final EIR, the change is not substantial enough to alter the conclusions and significance determinations identified in the final EIR.

CONCLUSIONS

The project changes as result of Measure M, the Superior Court decision, and the listing of the steelhead and the red-legged frog do not result in any new significant environmental effects beyond those evaluated in the final EIR.