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DRAFT EIR

CITY OF MONTEREY
GENERAL PLAN UPDATE

State Clearinghouse # 2003081011

PREPARED FOR

City of Monterey

July 14, 2004

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CITY OF MONTEREY GENERAL PLAN UPDATE

Draft Environmental Impact Report
State Clearinghouse # 2003081011

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Summary

California Environmental Quality Act Guidelines section 15123 requires that an environmental impact report contain a brief summary of the proposed project and its consequences. The summary must identify each significant effect; proposed mitigation measures and alternatives that would reduce or avoid that effect; areas of controversy known to the lead agency; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the effects.

Project Description

The proposed project analyzed in this environmental impact report is the implementation of the 2003 City of Monterey General Plan Update. This environmental impact report provides a program-level assessment of the general environmental impacts resulting from the development of land and implementation of policies contained in the 2003 City of Monterey General Plan Update.

The 2003 City of Monterey General Plan Update is a comprehensive, long-term plan for physical development of the City of Monterey for the next 20 years. The document will act as a guide to future development by defining the location, intensity, and conditions under which future development is to take place. As a blueprint for development, the 2003 City of Monterey General Plan Update plays a major role in defining the character of the City of Monterey. A range of existing redevelopment plans, residential neighborhood plans, commercial area plans, and coastal plans also guide development in the City of Monterey. These plans provide more specific direction on how to implement general plan land use and policy in specific areas. The plans may modify the general direction given in the 2003 City of Monterey General Plan Update based on the specific needs of each area addressed in the plans.

In general, the 2003 City of Monterey General Plan Update does not substantially differ from the existing 1983 City of Monterey General Plan in terms of land use types or acreages proposed within each land use type. Exceptions include a new focus on concentrating new residential development within existing commercial areas per the mixed-use neighborhood growth scenario and designating 138 acres of land recently annexed to the City of Monterey for industrial and open space use. These land use changes and the policies that implement the City of Monterey's development direction for the next 20 years are articulated throughout the 2003 City of Monterey General Plan Update.

General Plan Update Elements

The 2003 City of Monterey General Plan Update consists of seven elements that fulfill the state law requirements for the content of a general plan. The elements include: land use, circulation, housing, conservation, open space, safety, and noise. The 2003 City of Monterey General Plan Update also includes optional Urban Design, Economic, Social, Historic Preservation, and Public Facilities elements.

Each element contains a set of goals that the City of Monterey seeks to achieve through guiding new development over the next 20 years. The policies provide more specific direction for how the goals are to be achieved. The 2003 City of Monterey General Plan Update also defines programs to implement many of the policies.

Land Use and Circulation Elements

Land Use and Circulation Elements of the 2003 City of Monterey General Plan Update can be considered the heart of the document. Policy direction included in these elements directly shapes the future character of the City of Monterey. Key features of each of these elements are summarized as follows.

Land Use Element

The key component of the Land Use Element is the Land Use Plan Map. The Land Use Plan Map is a visual summary of the proposed location, extent, and intensity of land uses. The proposed Land Use Plan Map is illustrated in Figure 4 of this environmental impact report. The following land use categories are proposed: Residential, including Very Low Density Residential (less than two dwelling units per acre), Low Density Residential (two to eight dwelling units per acre), and Medium Density Residential (eight to thirty dwelling units per acre); Public/Semi-Public; Parks Recreation and Open Space; Industrial; and Commercial.

The Public/Semi-Public designation applies to all publicly owned facilities and those private facilities operated to serve the general public, except for parks and recreation facilities, which have their own land use designation. Public and private schools, military facilities, cemetery, parking facilities, hospitals, museums, and historic buildings are the main uses within this category. The Defense Language Institute, Monterey Peninsula College, the Monterey Institute for International Studies and the Naval Post Graduate School are the most significant institutional uses within this designation. As a note, the military is an important component of the City of Monterey's economic and social fabric. As stated in the 2003 City of Monterey General Plan Update, the armed forces comprise 18 percent of the City of Monterey's labor force according to the 2000 Census. The three military institutions in the City of Monterey, the Defense Language Institute, the Naval Post Graduate School, and the Coast Guard Station comprise a significant percentage of the total acreage within the Public/Semi-Public land use designation.

The Park, Recreation and Open Space designation includes neighborhood, community and county parks, community centers, and greenbelts and other open space areas.

The Industrial designation includes uses consisting mostly of business parks. Business parks in the City of Monterey are typically comprised of office and light industrial uses. The Commercial category applies to all types of commercial areas and allows the full range of commercial uses, including retail, office, visitor commercial, and professional offices.

With one exception, the 2003 City of Monterey General Plan Update allows for similar uses within each land use designation as did the 1983 City of Monterey General Plan. The one major change is in the Commercial land use designation. In 1994, the City of Monterey modified its zoning standards to encourage the mixing of residential uses with commercial uses. The 2003 City of Monterey General Plan Update Land Use Element incorporates a mixed-use land use planning approach that was initiated by the 1994 zoning change.

The “mixed-use neighborhood” development scenario emphasizes the use of existing commercial areas for a mix of activities including residences, retail shops, services and jobs all in proximity to one another. These areas are designed to be well served by transit and bicycle routes and have a welcoming pedestrian environment. Four mixed-use commercial neighborhoods are defined. These include Downtown, East Downtown, Cannery Row/Lighthouse Avenue, and North Fremont. Each of these areas is discussed in more detail in Section 2.9, Land Use.

As discussed below, the bulk of new residential development potential is focused within the mixed-use neighborhoods. Capacity for approximately 61 percent of the total new residential dwelling units proposed in the 2003 City of Monterey General Plan Update is designated within the mixed-use commercial neighborhoods. Mixed-use neighborhood guidelines would be developed for each neighborhood that would facilitate development consistent with the context, needs, and character of each area.

The City of Monterey recently annexed an additional 138 acres of land within former Fort Ord. This “Fort Ord annexation area” has been designated for industrial use. This area represents the only substantial change (addition of new acreage) in land use between the existing general plan and the proposed 2003 City of Monterey General Plan Update. Consequently, from a pure land acreage perspective, the 2003 City of Monterey General Plan Update does not represent significant change relative to the 1983 City of Monterey General Plan.

Table S-1 below, Existing Conditions/General Plan Update Residential Development and Population Potential, provides a comparison of existing versus projected 2024 residential development and population conditions. Implementation of the 2003 City of Monterey General Plan Update could result in development of 2,131 new dwelling units and an increase in population of about 4,189 people over the next 20 years.

TABLE S-1
**Existing Conditions/General Plan Update Residential Development
 and Population Potential**

Land Use	Dwelling Units			Population		
	Existing	2003 General Plan Update	Change	Existing	2003 General Plan Update**	Change
Single Family	6,827	6,990	163	30,350***	14,893	348
Multi-Fam/ Mixed Use	6,593	8,395	1,802*		17,991	3,841
Military	--	166	166		45	0
Total	13,420	15,551	2,131	30,350	34,539	4,189

* Multi-Family total includes multiple-family housing units in the commercial land use category where mixed-use development is encouraged. A total of 1,302 mixed-use units are anticipated in the commercial districts. An additional 500 multi-family units are anticipated on other sites.

** General Plan Update population projections are based on the 2002 California Department of Finance (DOF) figure of 2.132 persons per household.

*** Existing population estimate from DOF 2003.

Source: City of Monterey Community Development Department and California Department of Finance.

The majority of new potential residential development shown in the table is within the areas designated as mixed-use commercial neighborhoods.

Circulation Element

As noted in the 2003 City of Monterey General Plan Update, a transportation system affects the growth patterns, environment, and quality of life in the City of Monterey. Transportation planning is therefore a critical component of a general plan. The Circulation Element contains direction for improving and operating the City of Monterey's existing circulation system to accommodate new growth in areas where public services and transit are already available, and to reduce existing and projected traffic congestion and parking problems without relying on major, costly infrastructure projects. While several specific roadway and intersection improvement projects are identified, implementation of transportation system management and travel demand management programs is planned, with emphasis placed on development of a robust transit system to support mixed-use neighborhood development and reduce vehicle trip generation and the length of vehicle trips. Bicycle and pedestrian circulation systems would be improved and extended as part of this focus.

Areas of Known Controversy

Water Supply

The availability of water on the Monterey Peninsula is limited and has been steadily declining in recent years. The City of Monterey is allocated water supply by the Monterey Peninsula Water Management District. The allocation currently available is not sufficient to support new development projected in the 2003 City of Monterey General Plan Update. Therefore, new development within the City of Monterey remains controversial due to the limited water resources available. The City of Monterey is considering developing its own source of water if additional supply is not made available through the Monterey Peninsula Water Management District to enable full implementation of the 2003 City of Monterey General Plan Update.

Traffic

A number of road segments and intersections are congested, especially during peak travel hours. Implementation of the 2003 City of Monterey General Plan Update could result in an increase in traffic generation, thereby increasing the number of congested road segments and intersections. The City of Monterey, Caltrans, and the Transportation Agency for Monterey County all plan roadway and intersection improvements on the local and regional roadway network that would help to mitigate existing and projected traffic impacts. Further, the Circulation Element contains a robust range of policies whose implementation is intended to reduce existing and future congestion while minimizing the need for physical roadway expansions that may be physically and/or financially infeasible.

Alternatives

The City of Monterey considered three conceptual alternative land use and policy scenarios as part of the 2003 City of Monterey General Plan Update process. The consideration of alternatives was driven by several factors including the City of Monterey's need to ensure capacity for its fair-share housing requirement of 1,302 units for the years 2002-2007 and by a desire to minimize the transportation and circulation impacts of new development.

The first alternative was a "market-rate growth" scenario where new residential and commercial growth would occur in response to market conditions in the absence of new City of Monterey defined specific policies or incentives for channeling that growth to specific areas. Given the lack of development capacity within much of the City of Monterey, the Special Study Area located along Highway 68 was contemplated as absorbing a significant percentage of the new residential development needed within the City of Monterey.

The second alternative was the “south of highway 1” scenario. New residential growth would be focused in the 134-acre Old Capitol site area located south of Highway 1 across from the Del Monte Shopping Center. A range of incentives and disincentives to be developed by the City of Monterey would be used for this purpose.

The third conceptual alternative focused on intensifying new development along existing transportation corridors that are and could continue to be served by shuttle and other transit services. The conceptual alternative evolved into the preferred “mixed-use neighborhood” model on which the 2003 City of Monterey General Plan Update has been based. This is the proposed project whose impacts and mitigations are discussed in this environmental impact report.

Today, and for the foreseeable future, transportation and water supply are arguably the greatest factors influencing development on the Monterey Peninsula and beyond. Alternatives that most readily overcome constraints created by these issues while still meeting the objectives of a project must be given significant weight. The relative environmental effects of each alternative are discussed in Section 3.5, Alternatives, of this environmental impact report. Based on this evaluation, the mixed-use neighborhood alternative on which the 2003 City of Monterey General Plan Update is based is considered to be the environmentally superior alternative.

Environmental Impacts and Mitigation Measures

The 2003 City of Monterey General Plan Update would result in several significant or potentially significant impacts that could be mitigated to a less than significant level through implementation of 2003 City of Monterey General Plan Update policies and additional mitigation measures identified in this environmental impact report. Significant and potentially significant impacts and mitigation measures are summarized in Table S-2. Refer to Section 2.0 Environmental Setting, Impacts, and Mitigation Measures for discussion of each impact and the policy mitigations or additional mitigations that would reduce impacts to a less than significant level.

Cumulative Impacts

Cumulative impacts of implementing the 2003 City of Monterey General Plan Update were evaluated using summaries of projections to forecast future development conditions in the region. The Fort Ord Reuse Plan environmental impact report, population projections made by the California Department of Finance, and employment projections made by the Association of Monterey Bay Area Governments were utilized for this purpose. The methodology used to assess cumulative impacts of the 2003 City of Monterey General Plan Update is discussed in Section 3.1, Cumulative Impacts.

TABLE S-2
Summary of Significant and Potentially Significant
General Plan Impacts and Mitigation

Impact Significance and Description	Mitigating Policies and/or New Mitigation Measures	Residual Impact
Aesthetics		
Potentially Significant: Adverse Effects on Scenic Vistas	Urban Design Element policies (a.6, a.7, a.9, and f.1 through f.7). Open Space Element policies (a.3, b.4, and c.2).	Less Than Significant
Potentially Significant: Substantial Degradation of Scenic Resources or Historic Resources within a State Scenic Highway	Urban Design Element (all policies).	Less Than Significant
Potentially Significant: Degradation of the Visual Character or Quality of the Area and its Surroundings	Land Use Element policy (b.1, b.2, b.3 and b.4). Public Facilities Element policy (a.3).	Less Than Significant
Biology		
Potentially Significant: Special-Status Species	Open Space Element policies (a.2, b.2, b.3, c.1, c.2, c.3, d.1, d.4, d.5, d.7, e.1, and e.2). Urban Design Element policies (a.1, a.7, a.8, b.1, b.3, b.5, c.1, d.1, d.3, g.2, g.3, g.5, and h.1). Conservation Element policies (b.1, d.1, d.2, d.3, d.4, d.5, and d.6).	Less Than Significant
Potentially Significant: Riparian Habitat and other Sensitive Natural Communities.	Open Space Element policies (a.2, b.2, b.3, c.1, c.2, c.3, d.1, d.4, d.5, d.7, e.1, and e.2). Urban Design Element policies (a.1, a.7, a.8, b.1, b.3, b.5, c.1, d.1, d.3, g.2, g.3, g.5, and h.1). Conservation Element policies (b.1, d.1, d.2, d.3, d.4, d.5, and d.6).	Less Than Significant
Potentially Significant: Federally Protected Wetlands.	Open Space Element policies (d.1, d.4, d.5, d.7, e.1, and e.2). Conservation Element policies (b.4, d.3, d.4, d.5, and d.6).	Less Than Significant

Impact Significance and Description	Mitigating Policies and/or New Mitigation Measures	Residual Impact
Potentially Significant: Wildlife Movement.	Open Space policies (a.2, b.2, b.3, c.1, c.2, c.3, d.1, d.4, d.5, d.7, e.1, and e.2). Urban Design policies (a.1, a.7, a.8, b.1, b.3, b.5, c.1, d.1, d.3, g.2, g.3, g.5, and h.1). Conservation policies (b.1, d.1, d.2, d.3, d.4, d.5, and d.6).	Less Than Significant
Potentially Significant: Local Policies or Ordinances Protecting Biological Resources.	Conservation Element policies (d.1, d.3, d.4, and d.5). Conformance with the City Tree Ordinance.	Less Than Significant
Potentially Significant: Archaeological Resources.	A mitigation measure is included in the EIR whose inclusion in the General Plan Update as new policy would mitigate this effect to a less than significant level: “Utilize the CEQA process for projects located in archaeologically sensitive areas to identify and mitigate potential impacts on archaeological resources.”	Less Than Significant
Potentially Significant: Historic Resources.	Historic Preservation Element policies (a.1 through a.3, and policy b.1).	Less Than Significant
Potentially Significant: Hazards from Seismic Ground Shaking, Seismic Related Ground Failure, Liquefaction, or Landslides and Construction on Unstable Soils or Geologic Units.	Safety Element policies (a.1 through a.7, and b.1 through b.6).	Less Than Significant
Potentially Significant: Soil Erosion and Expansiveness.	Safety Element policy (a.1 through a.7, and b.1 through b.6).	Less Than Significant

<p>Potentially Significant: Exposure to or Release of Hazardous Materials, Including within One-Quarter Mile of an Existing or Proposed School.</p>	<p>Mitigation measures are included in the EIR whose inclusion in the General Plan Update as new policy would mitigate this effect to a less than significant level:</p> <p>“Review all applications for discretionary projects to evaluate proposed uses of hazardous materials. Require that projects which propose the use, handling, storage, transportation, and/or disposal of hazardous materials incorporate actions to minimize hazards to public health and safety from such use.”</p> <p>“Ensure that new projects which propose the use, transport, storage, and/or disposal of hazardous materials conform to the County of Monterey Environmental Health Department requirements for reporting and management of such materials as required pursuant to State and Federal requirements.”</p> <p>“Modify Safety Element policy g.2 to incorporate language that emergency response plans for releases of hazardous materials to the environment will also continue to be developed.”</p>	<p>Less than Significant</p>
<p>Potentially Significant: Safety Hazards from Development Near an Airport.</p>	<p>Safety Element policies (e.1 through e.3)</p> <p>A mitigation measure is included in the EIR whose inclusion in the General Plan Update as new policy would mitigate this effect to a less than significant level:</p> <p>“In collaboration with the Monterey Peninsula Airport District, review projects that may pose risks to the safe operation of the Monterey Peninsula Airport and mitigate such impacts through the development review process.”</p>	<p>Less than Significant</p>

<p>Potentially Significant: Violation of Water Quality Standards, Creation of Substantial Additional Sources of Polluted Runoff and General Degradation of Water Quality.</p>	<p>Urban Design Element (d.1) Conservation Element policies (b.1 through b.4) Public Facilities Element policy (1.2) Implementation of the City Model Urban Runoff Program</p>	<p>Less Than Significant</p>
<p>Potentially Significant: Substantial Depletion of Groundwater Supplies.</p>	<p>Public Facilities policy (m.1)</p>	<p>Less Than Significant</p>
<p>Potentially Significant: Increase in Flood Hazard from Changes in Drainage Patterns or Insufficient Storm Drainage Infrastructure.</p>	<p>Safety Element policies (c.2 and c.4) Public Facilities (policy 1.1)</p>	<p>Less Than Significant</p>
<p>Potentially Significant: Placement of Housing or Other Improvements within a 100-Year Flood Hazard Zone.</p>	<p>A mitigation measure is included in the EIR whose inclusion in the General Plan Update as new policy would mitigate this effect to a less than significant level: “The City will review all development proposals planned for areas within a 100-year flood hazard zone consistent with FEMA National Flood Insurance Program (NFIP) standards. Development proposed within these areas must be mitigated as needed to ensure conformance with NFIP standards.”</p>	<p>Less Than Significant</p>
<p>Potentially Significant: Inundation by Tsunami.</p>	<p>Safety Element policy (c.1)</p>	<p>Less than Significant</p>
<p>Significant Impact: Increased Noise Exposure at Existing Noise Sensitive Land Uses.</p>	<p>Noise Element policies (a.1 through a.6). All Circulation Element policies that reduce the number of vehicle trips within the City.</p>	<p>Less Than Significant</p>
<p>Potentially Significant Impact: Exposure of New Development to Noise Levels that Exceed Standards.</p>	<p>Noise Element policies (b.5 and d.1)</p>	<p>Less Than Significant</p>

<p>Potentially Significant Impact: Exposure to Aircraft Noise that Exceeds Standards</p>	<p>Noise Element policies (b.1 through b.5 and d.1)</p>	<p>Less Than Significant</p>
<p>Potentially Significant Impact: Exposure to Construction Noise that Exceeds Standards</p>	<p>A mitigation measure is included in the EIR whose inclusion in the General Plan Update as new policy would mitigate this effect to a less than significant level: “Limit noise generating construction activities between 7:00 AM and 7:00 PM. Include this requirement as a condition of project approval.”</p>	
<p>Potentially Significant: Increase in Demand on Fire and Police Services Requiring New/Expanded Public Facility.</p>	<p>Public Facilities policy (a.4, a.5, b.1, b.3, c.2 through c.5) CEQA review would be required for all newly proposed public facilities or expansions. The environmental evaluation would identify whether significant adverse environmental effects may occur and require that those effects be mitigated to a less than significant level.</p>	<p>Less Than Significant</p>
<p>Potentially Significant: Environmental Effects of Constructing New Schools Required for Accommodating New Development.</p>	<p>Public Facilities policy (a.4, a.5, d.1 through d.6, CEQA review would be required for all newly proposed schools or expansions. The environmental evaluation would identify whether significant adverse environmental effects may occur and require that those effects be mitigated to a less than significant level.</p>	<p>Less Than Significant</p>
<p>Potentially Significant: Environmental Effects of Construction of New Park Facilities and Potential Deterioration of Existing or Future Facilities.</p>	<p>CEQA review would be required for all newly proposed parks or park expansions. The environmental evaluation would identify whether significant adverse environmental effects may occur and require that those effects be mitigated to a less than significant level.</p>	<p>Less Than Significant</p>

<p>Significant: Increased Congestion on City Roadway Segments and Intersections.</p>	<p>Circulation Element policy (a.1 through a.3, b.1 through b.5, c.3 and c.10 through c.14, d.1 through d.9, f.1 thorough f.8, h.1 and h.2, and j.1 through j.3)</p> <p>The following mitigation measures are included in the EIR. Their inclusion in the General Plan Update as new policy will supplement proposed policies to mitigate this effect to a less than significant level:</p> <p>“Utilize the City’s traffic monitoring program to identify roadway and intersection improvement projects that must be added to the City’s CIP and continually seek funding sources for implementing new improvement projects.”</p> <p>“In addition to implementing Circulation Element policy c.12 for Lighthouse Avenue, improve traffic flow on Lighthouse Avenue through implementation of a circulation improvement plan for this corridor. Develop alternative circulation plans that combine traffic rerouting, traffic control, lane configuration, directional, and other physical or operational changes with targeted transit service improvements such as increased service frequency and dedicated bus lanes. Implement the plan through initiating a CIP project to select a preferred alternative and design and construct improvements. Funding shall be through circulation impacts fees collected per Circulation Element Monitoring policy j.3. Implement the preferred plan as soon as possible.”</p> <p>“Integrate the transportation system management program, travel demand management program, transportation and land use, roads, bicycle and pedestrian, parking, and transit policies and programs to prioritize use and expansion of transit services and facilities on Del Monte Avenue.</p>	<p>Less Than Significant</p>
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	Lighthouse Avenue, Lighthouse Curve, or other arterials where level of service standards are not met under existing conditions or anticipated to be met over time as determined through the City’s traffic monitoring program and the Traffic Study. Prepare an integrated plan for transit services for this purpose. Implement the plan as soon as possible.”	
Significant: Increased Congestion on Regional Roadways and Intersections	All of the policies identified as mitigation for City roadway and intersection impacts noted above. The following mitigation measure is included in the EIR. Its inclusion in the General Plan Update as a new policy will supplement proposed policies to mitigate this effect to a less than significant level: “Continue to coordinate with Caltrans and TAMC to identify improvements and funding for improvements to Highway 1, Highway 68 and other locations within the City deemed important to the function of the regional transportation network so that level of service standards for such facilities are met.”	Less Than Significant
Potentially Significant: Parking Capacity	Circulation Element policies (a.3, e.1 through e.10) Circulation Element transit policies	Less Than Significant
Potentially Significant: Alternative Transportation	Circulation Element policy (a.1, d.1 through d.9, e.2 through e.5, f.1 and f.6 through f.8)	Less Than Significant
Potentially Significant: Increased Demand for Water that Would Require New Entitlements.	Public Facilities policy (a.6, m.1 through m.3)	Less Than Significant
Potentially Significant: Environmental Effects of Stormwater Facility Expansion.	Public Facilities Element policy a.3 and c.4) Safety Element policy (c.4) Conservation Element policy (b.3, and d.3)	Less Than Significant

Source: City of Monterey Planning Division and EMC Planning Group Inc.

Effects Found Not to Be Cumulatively Considerable

The 2003 City of Monterey General Plan Update will be the source of a small increment of projected future local and regional population growth. In combination with the fact that most new development will take place within existing developed areas of the City of Monterey, the potential for cumulatively considerable impacts is substantially reduced. With the exception of transportation effects, all cumulative effects of implementing the 2003 City of Monterey General Plan Update are considered to be less than cumulatively considerable.

Effects Found to Be Cumulatively Considerable

Implementation of the 2003 City of Monterey General Plan Update will result in an increase in traffic generation. As discussed in Section 2.12, Transportation, that traffic could have significant impacts on both the City of Monterey and regional traffic networks. Circulation conditions on road segments and at intersections that currently experience congested conditions could further deteriorate. Additional traffic could degrade operating conditions on road segments and intersections that now operate at acceptable levels.

The Circulation Element contains extensive policy direction for mitigating the effects of future traffic generation on the local and regional circulation network. In combination with circulation network improvements planned or anticipated by the City, TAMC, and Caltrans, implementation of the policies would substantially reduce the incremental cumulative impacts of the 2003 City of Monterey General Plan Update.

Significant Unavoidable Impacts

Provided policies included in the 2003 City of Monterey General Plan Update and additional mitigation measures included in this environmental impact report are implemented, significant, unavoidable impacts are not anticipated.

Beneficial Effects

The proposed project would enable the City of Monterey to meet its fair share housing requirements provided that adequate water supply is available to support projected residential development. The region is deficient in housing, and the development of new housing would be a beneficial effect.

The mixed-use neighborhood land use strategy employed in the 2003 City of Monterey General Plan Update could have beneficial effects. Mixed-use development has the potential to reduce traffic generation relative to more traditional forms of suburban development. Given that transportation is a critical concern within the City of Monterey, the vicinity, and the region, implementation of this land use planning strategy is considered a beneficial effect.

1.0 Introduction

1.1 Authorization and Purpose

Determination to Prepare an Environmental Impact Report

The City of Monterey (hereafter the “City), acting as the lead agency, has determined that the proposed *City of Monterey General Plan Update* (hereinafter “the proposed project or the General Plan Update”) may result in significant adverse environmental effects, as defined by the *California Environmental Quality Act (CEQA) Guidelines* section 15064. Therefore, the City is requiring the preparation of a program environmental impact report (EIR) to evaluate the potentially significant adverse environmental impacts of the proposed project.

Preparation Standards and Methods

A program EIR is one type of EIR that may be prepared for a proposed project. Program EIRs are typically prepared for a program, series of actions that are linked and/or in the same geographic area, or a plan or regulatory program whose implementation actions are being undertaken by the same regulatory agency, in this case, the City.

Program EIRs generally analyze broad environmental effects of the program or plan. This is done with the recognition that more detailed environmental review of specific projects or specific actions that take place as part of a plan or program will be necessary. The more detailed environmental review may take the form of a project EIR. Project EIRs examine the impacts of a specific project at a level of detail that is not practical in a program EIR. Individual projects or activities undertaken by the City or individual applicants based on guidance provided in the General Plan Update and this EIR may require project level EIRs.

This program EIR has been prepared by EMC Planning Group Inc. under contract to the City (lead agency) in accordance with CEQA and its implementing guidelines. This EIR has been prepared using available information from private and public sources noted herein, as well as information generated by EMC Planning Group Inc. through field investigation. This EIR will be used to inform public decision-makers and their constituents of the environmental impacts of the proposed project. In accordance with the CEQA Guidelines, this report describes both beneficial and adverse impacts generated by the proposed project and prescribes measures for mitigating significant adverse environmental impacts resulting from the proposed project.

If an EIR identifies a significant adverse impact, the lead agency may approve the project only if it finds that mitigation measures have been required to reduce the impact's significance, or that such mitigation is infeasible for specified social, economic, or other reasons (Public Resources Code section 21081). The lead agency may not exclude mitigation measures associated with significant impacts unless it makes specific findings regarding the omission.

This EIR is a factual, objective public disclosure document that takes no position on the merits of the proposed project. Thus, the findings of this EIR do not advocate a position "for" or "against" the proposed project. Instead, this EIR provides information on which decisions about the proposed project can be based. The EIR has been prepared according to the professional standards and practices of the EIR participants' individual disciplines and in conformance with the legal requirements and informational expectations of CEQA and its implementing guidelines.

EIR Content and Organization

This EIR describes and evaluates the existing environmental setting within the proposed project Planning Area, discusses the characteristics of the proposed project, identifies environmental impacts associated with the proposed project, and provides feasible mitigation measures that can be implemented to reduce or avoid identified adverse environmental impacts. This EIR also evaluates alternatives to the proposed project considered by the City in the course of preparing the General Plan Update.

The EIR is divided into three main sections. Section 1.0, Introduction, sets forth the purpose of the EIR, a description of the General Plan Update project including the content of the document, a description of the Planning Area, intended uses of the EIR, consistency with local and regional plans, and terminology used in the EIR. Section 2.0, Environmental Setting, Impacts, and Mitigation Measures includes topic specific impact evaluations and mitigation measures that consist of General Plan Update policies, and where appropriate, additional mitigation measures. Additional mitigation measures are generally proposed as additional policies to be added to the General Plan Update. The additional mitigation measures, in combination with policies contained in the General Plan Update, are intended to make the General Plan Update self mitigating. Section 3.0, Other CEQA Considerations, includes evaluations of cumulative impacts, significant unavoidable impacts, growth-inducing impacts, significant irreversible impacts, alternatives, and effects found not to be significant. Section 4.0, Report Documentation, includes references for the EIR as well as a list of preparers of the document.

Notice of Preparation

Based upon the decision to prepare an EIR, the City prepared and distributed a notice of preparation (NOP) in accordance with CEQA Guidelines section 15082. CEQA Guidelines section 15375 defines an NOP as:

...a brief notice sent by the lead agency to notify the responsible agencies, trustee agencies, and involved federal agencies that the lead agency plans to prepare an EIR for the project. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR.

The NOP review period ended on September 2, 2003. Responses to the NOP were received from Helping our Peninsula's Environment (HOPE), The League of Women's Voters, California Department of Transportation, Pacific Grove Community Development Department, and the Monterey Peninsula Water Management District. The NOP and responses to the NOP received from responsible agencies are contained in [Appendix A](#).

1.2 Project Setting and Planning Area

The City is situated on the Monterey Bay on the Monterey Peninsula in Monterey County. The regional location is illustrated in [Figure 1](#). The City is bordered by the cities of Seaside and Del Rey Oaks to the north and northeast; Pacific Grove to the northwest; and unincorporated Monterey County to the east and south. Physical, social, and economic characteristics of the City are described in Section 2.0, Environmental Setting, Impacts, and Mitigation Measures. The City covers 8.6 square miles of land area, or approximately 5,498 acres. Approximately 3.5 square miles of water area in the Monterey Bay is also within the City limits. The project vicinity is shown in [Figure 2](#).

The General Plan Update considers planning issues for areas located outside the current City limits that have a relationship to planning within the City. These areas are collectively described as the General Plan Study Area and include unincorporated lands within the County of Monterey that may ultimately be annexed to the City, unincorporated land not being considered for annexation but that may affect the City's planning, and incorporated areas of other cities that have a relationship to the City's planning. The total area addressed in the General Plan Update is comprised of areas within the City limits plus the General Plan Study Area. Collectively, both areas are called the Planning Area, which is illustrated in [Figure 3, City of Monterey General Plan Update Planning Area](#).

The current Planning Area is smaller than that defined in the existing City of Monterey General Plan (hereafter the "existing General Plan"), adopted in 1983. The existing General Plan included land located on the south side of State Highway 68 that extends east to Las Laureles Grade Road. The proposed Planning Area boundary does not extend as far to the east along the south side of the highway as it previously did. The proposed Planning Area boundary includes the City's Sphere of Influence boundary.

1.3 Project Description and Objectives

The proposed project analyzed in this EIR is the implementation of the General Plan Update. The General Plan Update is available for review at the City of Monterey Community Development Department. The General Plan Update would replace the existing General Plan. This EIR provides a program-level assessment of the general environmental impacts resulting from the development of land uses and implementation of policies contained in the General Plan Update.

The General Plan Update is a comprehensive, long-term plan for physical development of the City for the next 20 years. The California Supreme Court has declared a general plan to be the “constitution for all future developments.” As such the proposed project will act as a guide to future development by defining the location, intensity, and conditions under which future development is to take place. As a blueprint for development, the General Plan Update plays a major role in defining the character of the City. A range of existing redevelopment plans, residential neighborhood plans, commercial area plans, and coastal plans also guide development in the City. These plans provide more specific direction on how to implement general plan land use and policy in specific areas. The plans may modify specific plan direction based on the specific needs of each area or topics addressed in the plans.

The City evaluated three alternative scenarios for future development. The first was a baseline market rate growth. The second included larger areas located south of Highway 1 (especially the 134-acre “Old Capitol” site located south of the Del Monte Shopping Center) as the focus for new development. The third was a Mixed-Use Neighborhood scenario. The City has selected the latter as the preferred development approach alternative. The main variable in consideration of alternatives was how and where best to locate new housing needed to meet the City’s future housing requirements. This issue is discussed in Section 3.5, Alternatives.

The General Plan Update does not substantially differ from the existing General Plan in terms of land use types or acreages proposed within each land use type. The primary difference is the City’s new focus on concentrating new residential development within existing commercial areas per the Mixed-Use Neighborhood growth scenario. This land use change and the policies that implement the City’s development direction for the next 20 years are articulated throughout the General Plan Update and are described in subsequent sections of this EIR.

General Plan Update Elements

The General Plan Update consists of seven elements that fulfill the state law requirements for the content of a general plan. The elements include: land use, circulation, housing, conservation, open space, safety, and noise. The General Plan



Scale: 1" = 20 miles

Source: EMC Planning Group Inc.



Figure 1
Regional Location

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Figure 2 Project Vicinity

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Figure 3 City of Monterey General Plan Update Planning Area

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Update also includes several optional elements including: Urban Design, Economic, Social, Historic Preservation, and Public Facilities.

Each element contains a set of goals that the City seeks to achieve through guiding new development over the next 20 years. The policies provide more specific direction for how the goals are to be achieved. The General Plan Update also includes programs associated with many of the policies that define specific actions needed to implement policies. Each of the General Plan Update elements is briefly described below.

Land Use Element

The Land Use Element describes future land use in the City and includes goals, policies, and programs that will guide such development. Along with the Circulation Element, the Land Use Element is the heart of the General Plan Update. The Land Use Plan Map is a visual summary of the proposed location, extent, and intensity of land uses. The proposed [Land Use Plan Map is illustrated in Figure 4](#). The following land use categories are proposed: Residential, including Very Low Density Residential (less than two dwelling units per acre), Low Density Residential (two to eight dwelling units per acre), and Medium Density Residential (eight to thirty dwelling units per acre); Public/Semi-Public; Parks Recreation and Open Space; Industrial; and Commercial.

The Public/Semi-Public designation applies to all publicly owned facilities and those private facilities operated to serve the general public, except for parks and recreation facilities, which have their own land use designation. Public and private schools, military facilities, cemetery, parking facilities, hospitals, museums, and historic buildings are the main uses within this category. The Defense Language Institute, Monterey Peninsula College, the Monterey Institute for International Studies and the Naval Post Graduate School are the most significant institutional uses within this designation. As a note, the military is an important component of the City's economic and social fabric. As stated in the General Plan Update, the armed forces comprise 18 percent of the City's labor force according to the 2000 Census. The three military institutions in the City, the Defense Language Institute, the Naval Post Graduate School, and the Coast Guard Station comprise a significant percentage of the total acreage within the Public/Semi-Public land use designation as illustrated on the General Plan Update Land Use Map.

The Park, Recreation and Open Space designation includes neighborhood and community parks, community centers, and greenbelts and other open space areas. The Industrial designation includes uses consisting mostly business parks that have historically been dominated by office and lighter industrial uses. The Commercial category applies to all types of commercial areas and allows the full range of commercial uses, including retail, office, visitor commercial, and professional offices. The Special Planning Area designation applies to an area along Highway 68 that is addressed in the City's Highway 68 Area Plan, completed in 1984. The Special Planning Area designation is intended to serve as a placeholder until such time as the City proposes a specific development approach that may be similar to or different than that included in the Highway 68 Area Plan.

Changes in Use within Land Use Categories. With one exception, the General Plan Update allows for similar uses within each land use designation, as does the existing General Plan. The one major change is in the Commercial land use designation. In 1994, the City modified its zoning standards to encourage the mixing of residential uses with commercial uses. The General Plan Update Land Use Element incorporates a mixed-use land use planning approach for defined commercial areas that would facilitate mixed-use development consistent with the 1994 zoning change.

The “Mixed Use Neighborhood” development approach included in the General Plan Update emphasizes the use of commercial areas for a mix of activities including residences, retail shops, services and jobs all in proximity to one another. These areas are designed to be well served by transit and bicycle routes and have a welcoming pedestrian environment. Four mixed-use commercial neighborhoods are defined. These include Downtown and East Downtown, Cannery Row/Lighthouse Avenue, and North Fremont. Each of these areas is illustrated in [Figure 5, Mixed Use Commercial Neighborhoods](#), and discussed in more detail in Section 2.8, Land Use.

Capacity for approximately 60 percent of the total new residential dwelling units development potential proposed in the General Plan Update is designated for the mixed-use commercial neighborhoods. Mixed Use Neighborhood Guidelines for each neighborhood would be prepared to facilitate development consistent with the context, needs, and character of each area. Issues such as bulk, height, scale, landscaping, parking, setbacks, streetscapes, and alleys would, among other issues, be addressed in the development and design guidelines.

The mixed-use neighborhood concept reflects a cornerstone of the City’s land use and transportation strategy for the next 20 years. The City recognizes the need to concentrate development within the existing city limits. The City believes it is no longer practical or desirable to provide for much of its future development capacity by expanding the city limits (through annexation) or to accommodate all future increases in traffic by expanding the existing transportation network capacity. The General Plan Update includes a range of development incentives and policies that promote intensification of land use within designated commercial areas located within existing transit corridors. It also proposes to significantly enhance the use and capacity of alternative transportation modes to reduce traffic generation throughout the City, especially from growth within the mixed-use areas. Through these approaches, the City plans to accommodate new development will minimize its critical effects on the transportation network.

General Plan Update Development Potential. The evaluation of environmental impacts of the proposed General Plan Update can be aided by assessing proposed changes in acreages within each land use compared to the existing General Plan, the proposed dwelling unit development potential relative to existing conditions, and the anticipated change in population that would occur in 2024 at the end of the General

Figure 4 Land Use Plan Map

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Figure 5 Mixed Use Commercial Neighborhoods

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Plan Update planning period. The change in acreage per land use type relative to the existing General Plan gives an indication of the general development direction proposed in the General Plan Update. For residential development potential, existing conditions are considered the “baseline” from which the proposed General Plan Update may create change. The same is true for population growth. The physical changes that occur in the Planning Area to facilitate new development and population growth create potential for environmental impacts that are evaluated in this EIR.

Table 1, Existing General Plan/General Plan Update Land Use Comparison, illustrates the number of acres per land use type proposed in the General Plan Update relative to the same figures for the existing General Plan. As can be seen, there is no change in the types of land use designations proposed in the General Plan Update. Further, the City’s recent annexation of 138 acres that were part of the former Fort Ord (hereafter the “Fort Ord annexation area”) is the only significant land addition to the City that has taken place since the existing General Plan was completed in 1983 (acreage shown in parenthesis in Table 1). The existing General Plan did not consider planning issues for this site because it was not part of the City in 1983. The General Plan Update provides the City the opportunity to fully integrate this site into its comprehensive planning process for the next 20 years.

TABLE 1

Existing General Plan/General Plan Update Land Use Comparison

Land Use Designation	Existing General Plan (acres)	2003 General Plan Update (acres)	Change
Commercial	385	385	0
Industrial	262 (+113)	375	+113
Residential-Very Low Density (less than 2 du/acre)	70	70	0
Residential-Low Density (2-9 du/acre)	1,230	1,230	0
Residential-Medium Density (8-30 du/acre)	350	350	0
Parks, Recreation and Open Space	1,175 (+25)	1,200	+25
Public/Semi Public	800	800	0
Special Planning Area	150	150	0
Streets and Public ROW	800	800	0
Total	5,360 acres - 8.4 sq. miles	5,498 acres - 8.6 square miles	138 acres

Source: City of Monterey Community Development Department

Table 2, Existing Conditions/General Plan Update Residential Development and Population Potential, provides a comparison of existing versus projected 2024 conditions. As can be seen, implementation of the General Plan Update could result in development of 2,131 new dwelling units and an increase population of about 4,189 people over the next 20 years.

TABLE 2
Existing Conditions/General Plan Update
Residential Development and Population Potential

Land Use	Dwelling Units			Population		
	Existing	2003 General Plan Update	Change	Existing	2003 General Plan Update**	Change
Single Family	6,827	6,990	163	30,350***	14,893	348
Multi-Fam/ Mixed Use	6,593	8,395	1,802*		17,991	3,841
Military	--	166	166		45	0
Total	13,420	15,551	2,131	30,350	34,539	4,189

* Multi-Family total includes multiple-family housing units in the commercial land use category where mixed-use development is encouraged. A total of 1,302 mixed-use units are anticipated in the commercial districts. An additional 500 multi-family units are anticipated on other sites.

** General Plan Update population projections are based on the 2002 California Department of Finance (DOF) figure of 2.132 persons per household.

*** Existing population estimate from DOF 2003.

Source: City of Monterey Community Development Department and California Department of Finance.

There are few remaining vacant parcels of land within the City that are available for development. With the exception of the 138-acre Fort Ord annexation area, most remaining vacant parcels are small lots designated for single-family development. The City anticipates that the Fort Ord annexation area will develop in a manner similar to that of Ryan Ranch – a mix of office and lighter industrial uses, as permitted in the City’s Industrial, Administration, and Research (IR) zoning district. This zoning designation is applied to 113 of the total 138 acres, with the remaining 25 acres designated for open space use.

The majority of the residential development potential shown in Table 2 above is based on intensification of land use within existing mixed-use commercial neighborhoods and infill of existing, small vacant parcels that are scattered throughout the City. About 1,302 dwelling units, which equals the City’s fair share housing requirement for the 2002

to 2007 period as established by the Association of Monterey Bay Area Governments (AMBAG), would be located in the mixed-use commercial neighborhoods. This represents about 60 percent of the total residential development capacity of 2,131 units.

Circulation Element

As noted in the General Plan Update, a transportation system affects the growth patterns, environment, and quality of life in Monterey. Transportation planning is therefore a critical component of a general plan. The growth/transportation linkage is made obvious in the Land Use Element by the fact that growth, which exceeds 80 percent of the levels described in the Land Use Element, would require a review of consistency with the Circulation Element. Hence, the Land Use Map allows more development than is anticipated within the 20-year General Plan Update period given potential circulation constraints.

This element contains direction for improving and operating the City's existing circulation system in order to accommodate new growth in areas where public services and transit are already available, and to reduce existing and projected traffic congestion and parking problems without relying on major, costly infrastructure projects. Principles of transit oriented and pedestrian oriented development are utilized to enable new development, especially within mixed-use commercial neighborhoods. Hence, alternative modes or transportation receive significant attention.

Housing Element

The goals and policies of the housing element focus on two primary issues: facilitating the availability of owner occupied housing and meeting the City's obligations to provide a "fair share" of housing consistent with the housing allocations assigned to the City by AMBAG as required by state law. The lack of water availability is a key constraint to improving the supply of housing in Monterey. The Housing Element sets forth a plan to provide housing opportunities that address housing issues and goals assuming that the water constraint is relieved. The City's Housing Element has recently been updated and adopted by the City as a separate document. The State of California Housing and Community Development Department has certified the Housing Element. As part of the adoption process, the City also conducted and completed environmental review of the Housing Element per CEQA requirements.

Conservation Element

The Conservation Element provides direction regarding the conservation, development, and utilization of natural resources. It focuses on water supply, water quality, air quality, flora and fauna, marine resources, and energy conservation. Conservation of resources is also addressed in several other General Plan Update elements because conservation has important linkages to urban design, open space, safety, and land use.

Open Space Element

The Open Space Element guides the preservation and conservation of open space land. State law defines open space land as any land or water that is essentially unimproved and devoted to open space use. In the City, such land includes hillsides, the Monterey Bay, shorelines and beaches, greenbelts, lakes and streams, and parks.

Noise Element

The Noise Element provides the basis for local government to control and abate noise exposure, as required under the State of California's General Plan Guidelines. The fundamental goals of the Noise Element are to: provide sufficient information concerning the City so that noise may be effectively considered in the land use planning process; to develop strategies for abating excessive noise exposure through cost effective mitigating measures in combination with zoning, as appropriate to avoid incompatible land uses; to protect those existing areas where the noise environment is deemed acceptable and also those locations throughout the community deemed "noise sensitive"; to utilize the definition of the community noise environment in the form of CNEL or L_{dn} noise contours to help determine local compliance with the State Noise Insulation Standards; and protect the quality of life in neighborhoods by limiting intrusive noise.

Safety Element

The purpose of the Safety Element is to identify and describe the nature of potential hazards within the planning area, and to streamline the environmental review process by guiding the detail and types of environmental data needed to assess hazards associated with new development. Goals and policies address seismic, geologic, flood, fire, aircraft, criminal, and emergency preparedness issues.

Urban Design Element (Optional)

Monterey's unique and renowned physical environment is a critical foundation for the City's economic and social well being, and image. Preservation and maintenance of valuable environmental resources is therefore a key to the City's long-term health and vitality. The Urban Design Element provides needed guidance for preservation and maintenance of the City's diverse natural features and the human made features that enhance the natural environment. Goals and policies address each of the City's unique physiographic areas (i.e. shoreline and bay, wooded canyons, lakes, etc.) as well as areas where the built environment is integrated with the natural environment (i.e. marina, wharves, Cannery Row, historic buildings, etc.).

Economic Element (Optional)

The Economic Element is the framework for facilitating responsible and balanced economic development, with the outcome that a strong local economy is established.

Because economic conditions are dynamic, the Economic Element is typically updated more frequently than the normal 20-year general plan cycle. This Element addresses priority issues that include: maintaining fiscal responsibility, expanding the City economy by building on its strengths, maintaining the City as the business center of the Monterey Peninsula, and improving the jobs and housing mix.

Social Element (Optional)

The Social Element provides guidance for programs and services that improve the well being of the City's citizens. This element affords the City an opportunity to address and plan for actions that provide greater social benefit than does the traditional provision of public services such as police and fire protection and recreation programs. This element includes goals and policies that benefit families, seniors, special needs groups, and promote health and mental health, education, public safety, library services, cultural arts, and recreation and community services, public participation in government, and information on and coordination of social services.

Historic Preservation Element (Optional)

As stated in the General Plan Update, the City of Monterey is one of the most historic cities in the United States, and preservation of historic resources has long been a concern of Monterey citizens. The City now has a well-developed Historic Preservation Program that consists of several components including, but not limited to a Historic Preservation Element, Historic Master Plan, and citywide historic survey program. Other components address incentives for protection and preservation, etc. The policies of the Historic Preservation Element focus on protection and historic and cultural resources, and on coordination of historic activities and programs.

Public Facilities Element

The Public Facilities Element describes the general location, levels of service, and adequacy of existing and proposed public facilities which comprise approximately 46 percent of the City's land area. This element provides the roadmap for how existing and future development will be provided facilities and services that include police and fire, park and recreation, schools, military, cultural, wastewater treatment, and water supply. It also describes the City's Capital Improvement Program, which describes the timing, funding, and responsibilities for development of new services and facilities.

Project Objectives

The objective of the General Plan Update is to provide direction for future development within the City over the next 20 years. The General Plan Update will allow the City to comply with State general plan law, which requires a jurisdiction to periodically update its general plan to reflect current and projected development conditions.

1.4 Intended Uses of the Program EIR

This programmatic EIR serves two primary purposes. First, it evaluates potential impacts of implementing the General Plan Update and proposes mitigation measures, typically in the form of new or modified policies that reduce impacts to a less than significant level where possible. This evaluation is needed to ensure compliance with CEQA. The City may choose to incorporate new mitigation measures proposed in this EIR into the draft General Plan Update document to ensure that it is fully “self-mitigating”.

Second, this EIR will help to streamline the environmental review of new development projects. New projects will be evaluated for their consistency with this EIR. Where projects are consistent, the environmental review process may be streamlined. Projects found inconsistent may require additional environmental review, with informational and policy inputs that facilitate that review referenced from this EIR. The most common types of projects for which this EIR will be used include development applications such as use permits, subdivision (tentative) maps, variances, rezoning, and/or public infrastructure or service improvements or programs.

Public agencies other than the City, including Responsible and Trustee Agencies (as defined under CEQA) may use this EIR during their review of the General Plan Update. Although the City of Monterey has primary project approval authority for the project, Responsible Agencies may also have some discretion over elements of the project and/or over projects proposed by public agencies or private interests that implement the General Plan Update. The discretionary approval may include issuance of a permit or other required action. The following is a list of potential agencies that may use this EIR for such purposes.

- City of Monterey
- County of Monterey
- Association of Monterey Bay Area Governments
- California Department of Transportation
- California Department of Fish and Game
- California Department of Conservation
- United States Army Corps of Engineers
- United States Fish and Wildlife Service
- California Regional Water Quality Control Board
- California Regional Water Pollution Control Agency

- North Central Coast Air District
- Monterey County Local Agency Formation Commission
- Monterey County Airport Land Use Commission
- Monterey Peninsula Water Management District
- California American Water Company

1.5 Consistency with Local and Regional Plans

CEQA Guidelines section 15125(d), states that an EIR shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans. This section includes a discussion of the General Plan Update consistency with four significant regional plans. Discussions of related regulatory plans and guidelines are included in the relevant subsections of Section 2.0, Environmental Setting, Impacts, and Mitigation Measures.

Air Quality Management Plan

The *2000 Air Quality Management Plan* was adopted by the Monterey Bay Unified Air Pollution Control Board (MBUAPCD) in May of 2001. The plan was prepared pursuant to the California Clean Air Act of 1988, as amended. The Clean Air Act requires air districts that exceed State ozone standards to reduce pollutant emissions by five percent per year, or take all feasible measures to achieve emissions reductions. The AQMP identifies that the North Coast Air Basin, in which the City of Monterey is located, was borderline between attainment and non-attainment of State ozone standards due to the variable meteorological conditions occurring from year to year. However, the California Air Resources Board has designated this air basin as moderate non-attainment. Therefore, the AQMP requires measures to reduce ozone levels in the District.

The principal strategies for ozone reduction that are relevant to development with the City are the control of construction dust, the reduction of automobile trips and traffic congestion, the provision of transit and encouragement of bicycle and pedestrian travel.

For a plan level project such as a general plan, the MBUAPCD recommends that the population growth anticipated in the plan be evaluated for consistency with AMBAG population forecasts for the subject jurisdiction. The AMBAG population projections are used as a basis to determine the incremental cumulative contribution of activities in a jurisdiction to regional air emissions that may, if not mitigated, violate state standards for criteria air emissions. If a jurisdiction's projected population as anticipated in its general plan exceeds the AMBAG projections, implementation of the general plan is considered to be inconsistent with the AQMP.

At maximum buildout of the General Plan Update, a 2024 population of about 34,539 is projected. AMBAG's population projection for 2020 used in the AQMP is 33,148. Provided that population growth totaling no more than 33,148 occurs before 2020, the General Plan Update would be consistent with the AQMP. Approximately 1,391 of the total projected 2024 population increase would need to occur in the period 2020 to 2024 for the General Plan Update to be consistent with the AQMP (Todd Muck, AMBAG, pers. com., February 19, 2004).

2002 Monterey County Regional Transportation Plan (RTP)

The RTP was adopted by the Transportation Agency for Monterey County (TAMC) on February 27, 2002. The plan provides policy guidelines regarding the planning and programming of transportation related needs, analyzes alternative transportation possibilities, and identifies available funding for transportation projects and programs in the City. The plan identifies approximately 26 planned transportation improvements located within the City. These range from bicycle and pedestrian safety projects to road maintenance to new roadways. About 13 of the projects appear to be fully funded with existing or funding projected to be available over the next two to 20 years.

The land use and circulation goals, policies, and implementation programs contained in the General Plan Update do not appear to conflict with or preclude regional transportation improvements proposed within the City. In fact, the Land Use Element and Circulation Element were developed with consideration given to the opportunities afforded by these improvement projects

Section 2.12, Transportation, includes a general description of traffic and circulation plans and improvements described in the General Plan, along with an evaluation of their potential environmental effects. The General Plan Update project is considered to be consistent with the RTP.

Fort Ord Reuse Plan

The *Fort Ord Reuse Plan* (hereafter the "Reuse Plan") completed in 1997, guides the reuse of land that is designated for conveyance to the several jurisdictions that surround the former Fort Ord. The Reuse Plan contains a land use plan and extensive policies and programs for implementing actions that would facilitate conversion of much of the former Fort Ord to civilian use. Before land can be conveyed to a jurisdiction, that jurisdiction is required to amend its general plan to be consistent with the Reuse Plan land use designations and policies that apply to land being conveyed. The Reuse Authority would likely review the General Plan Update to assess its consistency with the Reuse Plan in the area annexed by the City.

The Reuse Plan designates that portion of the former Fort Ord that has been annexed by the City for Office Park/Research and Development and Community Park uses. The City annexed the subject area and zoned the land for industrial use (which includes office park and research and industrial uses as permitted uses) and open space consistent with the Reuse Plan land use designations. The General Plan Update land use

designations for the site are consistent with the zoning designations and by association the Fort Ord Reuse Plan land use designations.

Monterey County General Plan

The existing *Monterey County General Plan* was prepared in 1982. That plan is currently in the process of being updated as the *Draft Monterey County General Plan Update*. The update is not yet complete or adopted. Therefore, the existing *Monterey County General Plan* remains in force. This document does not have direct bearing on the General Plan Update process per se. The City has not designated land uses for unincorporated lands within its Planning Area that remain within the jurisdiction of the County. Further, the General Plan Update land use designations remain virtually the same as those contained in the City's existing General Plan. Land uses proposed in areas of the City that are contiguous to unincorporated areas remain compatible with County land use designations for those areas. Therefore, land use conflicts are not anticipated.

Implementation of the General Plan Update will generate new traffic. An incremental volume of that traffic will be distributed onto County roadways. The cumulative transportation impacts of the proposed project are considered to be considerable, as even incremental increases in traffic may exacerbate existing and future traffic impacts at intersections and on roadways within the County and other local jurisdictions.

Comprehensive Land Use Plan for Monterey Peninsula Airport

The *Comprehensive Land Use Plan for Monterey Peninsula Airport* (CLUP) was prepared by the Monterey County Airport Land Use Commission in 1987. The purpose of the CLUP is to promote the health and safety of residents living within the airport's area of influence. The CLUP provides land use and policy guidance intended to protect local residents from adverse effects of aircraft noise, from increased safety hazards resulting from concentrating people or structures in areas susceptible to aircraft accidents, and from safety hazards to residents and aircraft operators from locating structures in areas that adversely affect navigable airspace. To promote public safety and safe airport operations, the Monterey County Airport Land Use Commission may formulate land use direction, height restrictions on buildings, and building standards (especially for soundproofing) for areas located adjacent to the airport.

The CLUP incorporates the land use designations of the general plans for jurisdictions within the CLUP's primary and secondary planning areas, including the City of Monterey. Mechanisms are specified in the CLUP for addressing land use compatibility and development issues with local jurisdictions such that safety issues are collaboratively addressed. The General Plan Update contains a range of land use, airport safety, and noise compatibility policies. These policies direct development within the City, especially in areas located within flight paths and within areas affected by airport noise, to minimize conflicts with public health and safety and airport operations. Implementation of the policies should ensure that the General Plan Update is consistent with the CLUP.

1.6 Terminology Used in the EIR

This EIR uses the following terminology to denote the significance of environmental impacts:

- “no impact” means that no change from existing conditions is expected to occur;
- a “less than significant impact” would cause no substantial adverse change in the physical environment (no mitigation is recommended);
- a “significant impact” would cause a substantial or potentially substantial adverse change in the physical environment; and
- a “significant and unavoidable impact” is one that would cause a substantial adverse change in the physical environment and cannot be avoided if the project is implemented; mitigation measures may be recommended but will not reduce the impact to a less than significant level.

2.0 Environmental Setting, Impacts, and Mitigation Measures

This section describes the potential environmental impacts of implementing the proposed General Plan Update. Each impact issue is evaluated in its own subsection. Each subsection begins with an explanation or relevant regulatory issues, if any. The existing environmental setting is then described, a brief analysis of the relationship of the project to the impact issue is made, and environmental impacts and mitigation measures are defined. Each environmental effect is characterized as having either no impact, a beneficial impact, less than significant impact, significant (or potentially significant) impact, or significant and unavoidable impact.

Policies contained in the General Plan Update are utilized as mitigation measures wherever possible. Where General Plan Update policies do not adequately mitigate an impact, new mitigation measures are defined. It is left to the City's discretion whether or not the new mitigation measures are included in the General Plan Update as policy such that the document becomes self-mitigating for all identified impacts.

2.1 Aesthetics

Aesthetic quality is generally defined as those features of a landscape that attract a viewer's interest. Aesthetic quality can be considered subjective, with definitions of what is visually pleasing varying from individual to individual. This section addresses the impacts of the General Plan Update on the aesthetic character and visual quality within the Planning Area in a qualitative manner.

Regulatory Framework

California State Scenic Highway Program

In 1963, the State Legislature established the California Scenic Highways Program through Senate Bill 1467 (Farr). The bill declared: "The development of scenic highways will not only add to the pleasure of the residents of this State, but will also play an important role in encouraging the growth of the recreation and tourist industries upon which the economy of many area of the State depend." The goal of the California State Highway Program is to preserve and enhance the natural beauty of California. Therefore, the merits of a nominated highway are evaluated on how much of the natural landscape a passing motorist sees and the extent to which visual intrusions (e.g. buildings, unsightly land uses, noise barriers) affect the "scenic corridor." Visual intrusions are considered in the following manner:

- The more pristine and unaffected by intrusions, the more likely the nominated highway will qualify as scenic;
- Where intrusions have occurred, the less the impact on the area's natural beauty, the more likely the nominated highway will qualify as scenic; and
- The extent to which intrusions, rather than the natural landscape, dominate views from the highway determines the significance of their impact on the scenic corridor.

State highways nominated for scenic designation must be included on the list of highways eligible for scenic highway designation in the State Scenic Highway System. These highways are identified in Section 263 of the Street and Highways Code. After it is determined the proposed scenic highway satisfies the requirements, the local jurisdiction, with support of its citizens, must adopt a program to protect the scenic corridor. The zoning and land use along the highway must meet the State's minimum requirements for scenic highway corridor protection (Caltrans 1996).

Environmental Setting

Regional Setting

The City is located within the County of Monterey. The 3,324 square miles of land encompassing Monterey County can be divided into four prominent landscape types: the inland and coastal mountain ranges, the coastline and Monterey Bay, the Monterey Peninsula, and the Salinas and Carmel Valleys. The coastal and valley lands in the central portion of the County support most of the County's population and urban development, including the City. The relatively undeveloped South County coastal and inland areas remain largely in agricultural production and open space.

The Santa Lucia Mountain Range borders the coastline as far north as the Monterey Peninsula. The mountains rise abruptly from the Big Sur coastline to elevations as high as 5,800 feet, creating a dramatic scenic quality along SR 1. The Gabilan and Diablo Ranges form the eastern border of the County. They generally parallel each other, forming the sides of the Salinas Valley. These ranges form prominent visual features that frame scenic vistas, and contribute to the County's overall scenic character. The scenic environment of the City and the Peninsula stems from two dominant features: the coastline and the central ridge of wooded hills that forms the backdrop to the City. The wooded ridgeline runs through the heart of the Monterey Peninsula, separating the City of Monterey from Del Monte Forest, the City of Carmel, and Carmel Valley. This wooded ridgeline terminates in a hill covered with pines at the top of the Presidio of Monterey. Numerous fingers of open space extend outward from this ridge to the sea, helping to define the Peninsula communities.

Monterey Bay is the dominant feature of the County's northern coast and terminates in the south at the Monterey Peninsula. Within the northern portion of the County, rolling terrain with oak woodlands and steep slopes descend onto the Castroville area and

Elkhorn Slough. Along SR 1 in this area, the visual character appears rural with open expanses of agricultural land and wetlands with distant views of the Monterey Bay and Monterey Peninsula. The Monterey Peninsula is characterized by a rugged coastline of granite and coastal sand dunes, as well as pine-covered ridgelines that separate the Peninsula from Carmel and Carmel Valley.

The Salinas Valley is 130 miles long with a northwest-southeast axis, running from San Ardo in the south to Moss Landing and Monterey Bay to the north. The wedge-shaped valley is roughly three miles wide in the south and widens to approximately 15 miles in the north. The Salinas River runs the entire length of the Salinas Valley and empties into the Monterey Bay. Smaller than the Salinas Valley, the Carmel Valley extends 13 miles east from its mouth at Carmel Bay. Agricultural and open space uses establish a predominantly rural visual quality in these areas.

The Carmel River, with its headwaters in the Santa Lucia Mountains, runs the entire length of Carmel Valley and empties into Carmel Bay. The Carmel Valley viewshed is shaped by the ridges of the California coastal range that descend onto the valley floor. Existing vegetative cover along ridges and slopes is variable; slopes and ridgelines generally are undeveloped except in some scattered locations where development has become concentrated. Major public views are available primarily from the Carmel Valley Road and Laureles Grade corridors, with the quality of view determined principally by the interrelationship between landforms and vegetative masses.

Local Environmental Setting

The City is bounded on the south by pine-covered ridgelines and on the north by the crescent-shaped southerly end of Monterey Bay. The series of wooded canyons, which radiate from the ridge to the bay, are separated by a series of mesas. Each mesa is isolated from the others, allowing the natural separation of various types of land uses.

The Monterey Peninsula Airport is located on the most easterly mesa. On the next mesa to the west are the Josselyn Canyon and Fisherman's Flats, Deer Flats Park, and Aguajito Oaks residential subdivisions. Next is the Del Monte Golf Course. Isolated by canyon and wooded areas to the west is the higher-density Navy housing development called La Mesa Village. Monterey Peninsula College is next on its own mesa. Alta Mesa is an adjacent residential area bordered by two wooded greenbelts. The same pattern runs through Monterey Vista and Monte Regio areas to the Presidio, although this part of the City has been developed more homogeneously into single-family homes.

Many of the canyons act as the circulation links serving the mesas. State Route 68, Josselyn Canyon Road, Aguajito Road, Iris Canyon Drive, and Pacific Street all run through canyons, which connect with Fremont Street. Highway 68 (Monterey-Salinas Highway) stems from its location in a wooded canyon. These roads thus serve the mesas as wooded, park-like drives, and provide visually pleasing and environmentally sensitive open space within the City.

Development in the City has occurred in the most physically suitable areas and for the most part, in areas where damage to critical natural resources has been avoided to the extent possible. Downtown commercial development has occurred on the more flat old marsh areas, lighter commercial and medium-density residential has occurred on the slightly sloping mesas, neighborhoods have been developed buffered by the wooded canyons, and low-density residential has developed in the steep wooded foothills.

Monterey's image is that of a small-scale residential community beside the bay, framed by a forested hill backdrop and drawing its charm from a rich historical background and natural scenic beauty.

State Scenic Highways

There are two scenic highways in the Planning Area; one is adopted by the state and one is adopted by the County. Highway 1 is designated a state scenic highway from the Monterey-Salinas Highway (Highway 68) south to the Carmel River. Highway 68 from Highway 1 to the Salinas River of a State designed scenic highway.

Project Analysis

The proposed project could have significant environment impacts on aesthetic quality if it were to result in development or activities that substantially degrade scenic resources including open space, forested areas, surface water bodies, coastal beaches and dunes, or the Monterey Bay, or significant block or impair views of scenic resources from public viewing locations, including scenic highways. Actions that implement the General Plan Update such as new residential or commercial development or construction of public improvements or infrastructure that substantially change the City's existing small-town, aesthetic character through inappropriate design or scale or incompatibility with surrounding uses could also create adverse effects.

Character and Location of New Development

New residential and will take place largely within already developed neighborhoods and commercial areas. Of the total 2,131 new residential units anticipated, about 1,302 would be built within the existing commercial areas of the City in a mixed used context, with another 500 multiple-family units constructed in areas already zoned for such use. Only about 163 of the units would be built on vacant parcels and these are largely scattered throughout the developed areas of the City. Commercial development will continue to occur in the City's existing commercial areas including Cannery Row, Lighthouse Avenue, Downtown, East Downtown, North Fremont, and Del Monte Avenue. In short, new development is not likely to result in significant removal or alteration of existing natural features and resources that give the City its dominant aesthetic quality. Future industrial development within the Fort Ord annexation area could be an exception. This area is largely undeveloped and retains a natural open space feel, dominated by chaparral landscape. Development of the site would substantially

alter the open space, natural aesthetic character. The site is generally not highly visible for existing public viewing areas.

Policies located within several elements of the General Plan Update, especially the Urban Design, Land Use, Conservation, and Open Space Elements are designed to guide development in a manner that maximizes protection of natural resources whose conservation is important for retaining the City's aesthetic character.

Design of New Development

The City has a history of maintaining the quality and consistency of urban design through a structure of design guidelines that apply to residential, commercial and industrial development. Much of the planned new residential development would occur in defined mixed-use commercial areas. Ensuring that the design of mixed-use areas is sensitive to the existing character of surrounding development and with existing design themes in the City will be important to maintaining the visual integrity of these areas. The Land Use Element includes policies and programs to develop neighborhood guidelines for mixed-use areas that would address design issues for these areas. It is critical that the design guidelines ensure maintenance of neighborhood character and compatibility with neighborhood architecture. Specific issues such as height, bulk, scale, landscaping, parking, setbacks, and streetscapes will be addressed in the development and design guidelines.

Scenic Highways and Corridors

The General Plan Update does not propose significant development in locations that could affect viewsheds as seen from scenic highways and corridors or that has the potential to degrade visual quality along the margins of the highways and corridors. The Urban Design Element contains a variety of policies that address design and development issues that affect scenic entrances to the City and visual quality within scenic highway corridors.

Light and Glare

New development will inevitably incrementally increase the amount of ambient lighting and glare generated within the City. The increase is likely to be most intense in proposed mixed-use commercial areas where development intensification is likely to be greatest. These areas are already largely developed and light and glare from existing uses is already significant. New sources of light and glare would be of most concern in the Fort Ord annexation area where existing sources of light and glare are minimal.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the area and its surroundings; and/or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Potentially Significant Impact – Adverse Effects on Scenic Vistas. Intensification of development within already developed areas could result in an incremental loss of views to the Monterey Bay, the forested hillsides that form the backdrop to the City, or to other aesthetically valuable features within or adjacent to the City. This impact could be significant for individual projects that block such views, especially were development intensification facilitated by increases in building height, footprint, or mass.

Mitigation Measures. Several policies address the protection of existing scenic vistas in the Planning Area. Urban Design Element policies for Shoreline and Bay (policies a.6, a.7, and a.9) call for protection and enhancement of views to and from specific unique shoreline environments (i.e. San Carlos Beach and Cannery Row). Policies f.1 through f.7 under the Vistas section of the element call for maintaining and expanding existing views of vistas to Monterey Bay Park, the wharf and Cannery Row, Del Monte Lake and other visual features as seen from roadways such as Highway 1, Del Monte Avenue, Lighthouse curve, parks, and other public spaces. Open Space Element policies a.3 and b.4 address preservation of views into Monterey Bay and policy c.2 calls for preservation of greenbelts that form the visual backdrop to the City.

Use of these policies to guide and condition new development would reduce this impact to a less than significant level.

Potentially Significant Impact – Substantial Degradation of Scenic Resources or Historic Resources within a State Scenic Highway. New development has the potential to incrementally affect the quality of scenic resources within the viewshed of Highway 1 and Highway 68, both of which are State designated scenic highways. Given that much of the anticipated new development within the City will be within already developed areas, it is not expected that significant threats to scenic resources within a scenic highway corridor will be substantial. Nevertheless, new development must be appropriately conditioned to ensure that it is consistent with the design, mass, and scale of the existing urban form within scenic corridors and does not result in the loss or significant alteration of important natural features that contribute to the City's significant visual quality.

Mitigation Measures. The General Plan Update includes numerous policies that would ensure protection of scenic resources within a State Scenic Highway. Urban Design Element Scenic Entrances and Corridors policies h.1 through h.28 all address performance standards, design requirements, and development guidelines that protect

scenic corridors. Policies h.11 through h.15 specially address the Highway 1 State designated scenic highway corridor, calling for maintenance of vistas from the highway, prohibition of obtrusive signing, screening of industrial elements, improve native landscaping and encourage scenic highway designation for all of Highway 1, respectively.

Policies h.19 through h.22 address maintenance of forest resources, minimizing lighting and illumination, screening development with landscaping, and maintaining the Highway 68 scenic highway, respectively. Implementation of these specific policies as well as other Urban Design Element policies that guide preservation of natural scenic features throughout the Planning Area (all policies under goals “a” through “g”) would mitigate this impact to a less than significant level.

Potentially Significant Impact—Degradation of the Visual Character or Quality of the Area and its Surroundings. As has been discussed, the General Plan Update would allow limited development outside existing developed areas. Most existing developed areas do not contain natural features whose loss would otherwise impact visual quality. However, development intensification within existing developed areas, especially the designated mixed use neighborhoods, could adversely affect overall visual character and quality if design guidelines and development standards are not defined and implemented within these neighborhoods. Development of the Fort Ord annexation area could also result in significantly adverse visual impacts if development is not appropriately designed and existing natural features and resources are not conserved to the maximum extent possible.

Mitigation Measures. Several policies in the General Plan Update address development within mixed-use neighborhoods. Land Use Element policy b.1 requires that design concepts, development guidelines, and capital improvement programs be developed and implemented for mixed-use neighborhoods. Design concepts and development guidelines must be utilized to ensure new development blends with and enhances the visual quality of the neighborhoods. Land Use Element policy b.2 requires that if residential development is proposed south of Highway 1 that it follow the existing policy directions in the Highway 68 Plan and Old Capital Site Memorandum of Understanding for residential development, some of which could affect the visual quality of such development. Policies noted as mitigation for the prior two impacts described above also serve as mitigation for this impact. Use of the noted policies as guidelines and standards for new development would mitigate this impact to a less than significant level.

Less Than Significant Impact—Increased Light and Glare within the Planning Area. New development proposed within the Planning Area may introduce lighting and other reflective materials, which would increase the amount of light and glare in the City. However, since most new development will be located within already developed areas and concentrated within existing commercial areas where existing sources of light and glare are highest, new sources of light and glare would add only incrementally to existing sources. Further, new residential development is the primary type of development anticipated. Few if any new lighting intensive commercial uses are

anticipated. Light and glare from industrial development in the Fort Ord annexation area could be significant, especially given that there are currently no sources of light and glare at the site.

Mitigation Measures. Though significant light and glare impacts are not anticipated, review of individual projects for their light and glare effects is required. This review occurs through the City's Development Review and Architectural Review processes and performance standards contained in the Zoning Ordinance are used to condition new development to minimize its light and glare effects. Urban Design Element Policies f.9, h.4, and h.17 address minimization of light and glare in general and from specific sources such as street lighting and the Community Hospital of the Monterey Peninsula. With implementation of these policies the potential for increased light and glare would be further decreased to a less than significant level.

2.2 Air Quality

This section includes a summary of local and regional air quality conditions, and an analysis of potential air quality impacts associated with the project. Mitigation measures are recommended as necessary to reduce significant adverse air quality impacts.

The information contained in this section is based on documents prepared by the Monterey Bay Unified Air Pollution Control District (MBUAPCD), the U.S. Environmental Protection Agency (EPA), and the California Air Resources Board (CARB).

Regulatory Framework

Federal

The Federal Clean Air Act of 1970 required the EPA to set up national ambient air quality standards ("national air standards") for several air pollutants on the basis of human health and welfare criteria. The Federal Clean Air Act also set deadlines for the attainment of these standards.

The Federal Clean Air Act requires states to prepare an air quality control plan, also known as a State Implementation Plan (SIP). California's SIP contains the strategies and control measures California will use to attain the national air standards. The Federal Clean Air Act of 1990 require states containing areas that violate the national air standards to revise their SIPs for conformity with Federal Clean Air Act mandates. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan for the non-attainment area and may impose additional control measures.

State

CARB is the agency with the responsibility for coordination and oversight of state and local air pollution control programs in California and for implementing the requirements

of the California Clean Air Act of 1988. The California Clean Air Act requires that all air districts in the State endeavor to achieve and maintain California ambient air quality standards for ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen dioxide (NO₂) by the earliest practical date.

Regional

Air Quality Management Plan (AQMP). The Monterey Bay Unified Air Pollution Control District (MBUAPCD) is the agency with jurisdiction over the air quality regulation in the Northern Central Coast Air Basin (NCCAB). The MBUAPCD has adopted several plans in an attempt to achieve State and federal air quality standards.

As required by the California Clean Air Act, the District adopted the 1991 AQMP for the Monterey Bay region. The 1991 AQMP addressed planning requirements to meet the ozone standard mandated by California Clean Air Act and included measures to control emissions of volatile organic carbons (VOC) from stationary and mobile sources. Since the 1991 AQMP was adopted, control requirements have been reduced. The 1991 AQMP was most recently updated in 2000. The 2000 AQMP update included current air quality data related to ozone precursor emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x), which in the presence of sunlight combine in the atmosphere to form ozone; up-to-date population forecast; revisions to emission inventory; forecast and design value; changes to the emission reduction strategy; and progress report on implementation of the 1991 AQMP.

Environmental Setting

The NCCAB is comprised of Monterey, Santa Cruz and San Benito counties. The Santa Cruz Mountains dominate the northwest sector of the air basin. The Diablo range marks the northeastern boundary, and together with the southern extent of the Santa Cruz Mountains, forms the Santa Clara Valley, which extends into the northeastern tip of the air basin. Farther south, the Santa Clara Valley transitions into the San Benito Valley, which runs northwest to southeast and has the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas to the northwest end to south of King City. The western-side of the Salinas Valley is formed by the Sierra de Salinas, which also forms the eastern side of the smaller Carmel Valley. The eastern Santa Lucia Range defines the western side of the valley.

Air Pollution Properties, Effects, and Sources

The most common and widespread air pollutants of concern include ozone, carbon monoxide, nitrogen oxides, particulate matter, reactive organic gases, sulfur dioxide, and lead. The common properties, sources, and related health and environmental effects are summarized in [Table 3, Common Air Pollutants](#).

TABLE 3
Common Air Pollutants

Pollutant	Properties	Major Sources	Related Health & Environmental Effects
Ozone (O₃)	Ground level ozone is created by the chemical reaction between oxides of nitrogen (NO _x) and volatile organic compounds (VOC) in the presence of heat and sunlight. Ground level ozone is the principal component of smog.	<ul style="list-style-type: none"> • Motor vehicle exhaust, • Industrial emissions, • Gasoline vapors, and • Chemical solvents. 	Irritation of lung airways and inflammation; aggravated asthma; reduced lung capacity; and increased susceptibility to respiratory illnesses (i.e. bronchitis).
Suspended Particulate Matter	Suspended particulate matter is a term used to describe particles in the air, including dust, soot, smoke, and liquid droplets. Others are so small that they can only be detected with an electron microscope.	<ul style="list-style-type: none"> • Motor vehicles, • Factories, • Construction sites, • Tilled Agricultural fields, • Unpaved roads, and • Burning of Wood. 	Aggravated asthma; increases in respiratory symptoms; decreased lung function; premature death; and reduced visibility.
Carbon Monoxide (CO)	Carbon Monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely	<ul style="list-style-type: none"> • Fuel combustion; • Industrial processes, and • Areas of high traffic density during peak hour traffic (localized sources of concern) 	Chest pain for those that suffer from heart disease; vision problems; reduced mental alertness, and death (at high levels)
Nitrogen Oxides (NO_x)	Generic form for a group of highly organic gases, all of which contain nitrogen in varying amounts. Many of the nitrogen oxides are odorless and colorless.	<ul style="list-style-type: none"> • Motor vehicles, • Electric utilities, and • Industrial, commercial, and residential sources that burn fuel. 	Toxic to plants; reduced visibility, and respiratory irritant.
Sulfur Dioxides (SO_x)	Sulfur oxide gases are formed when fuel-containing sulfur such as coal and oil is burned and when gasoline is extracted from oil or metals are extracted from ore.	<ul style="list-style-type: none"> • Electric utilities (especially those that burn coal), and • Industrial facilities that derive their products from raw materials to produce process heat. 	Respiratory illness, particularly in children and the elderly and aggravates existing heart and lung diseases.
Reactive Organic Gases (ROG)	Precursor of ground-level ozone.	<ul style="list-style-type: none"> • Petroleum transfer and storage, • Mobile sources, and • Organic solvent use. 	Potential carcinogen (e.g. benzene) and toxic to plants and animals.

Source: Environmental Protection Agency

Air Quality Standards

Ambient air quality is described in terms of compliance with state and national standards. The Clean Air Act, which was last amended in 1990, requires EPA to set national air standards for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air standards.

Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings (U.S. EPA 2001). [Table 4, Federal and State Ambient Air Quality Standards](#), indicates both federal and state ambient air quality standards for criteria air pollutants.

The state standards are more stringent than the federal standards. The state standards are not to be equaled or exceeded. When standards are exceeded an "attainment plan" must be prepared which outlines how an air quality district would comply. Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods. California also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage or require the use of ridesharing, flexible work hours, or other measures that reduce the number or length of vehicle trips.

Pursuant to the California Clean Air Act, CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for any state standard. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data do not support either an attainment or nonattainment status. The California Clean Air Act divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category. [Table 5, Attainment Status of the North Central Coast Air Basin](#), illustrates the attainment status designations for the air basin.

The NCCAB is in an attainment designation according to the federal ozone standards. However, the NCCAB does not meet the far more stringent state standards for PM₁₀ and is in moderate non-attainment for ozone. The non-attainment status for ozone has been demonstrated to occur largely as a result of the transport of pollutants to the south from the San Francisco Bay area, which is located outside the NCCAB.

Air Quality Monitoring Locations

The MBUAPCD is responsible for monitoring air quality in the NCCAB. MBUAPCD samples ambient air quality at ten monitoring stations in the NCCAB. The monitoring locations are located at: Moss Landing, Salinas, Monterey, Carmel Valley, King City,

TABLE 4
Federal and State Ambient Air Quality Standards

Air Pollutant	California ¹		Federal ²	
	Averaging Time	Concentration	Primary	Secondary
Ozone	1 Hour	0.09 ppm (180 µg/m ³)	0.12 ppm (235 µg/m ³)	0.12 ppm
	8 Hour	—	0.08 ppm (157 µg/m ³)	0.08 ppm
Respirable Particulates (PM₁₀)	24 Hour	50.0 µg/m ³	150.0 µg/m ³	150.0 µg/m ³
	Annual Arithmetic Mean	20 µg/m ³	50.0 µg/m ³	50.0 µg/m ³
Fine Particulate Matter (PM_{2.5})	24 Hour	No Separate State Standard	65.0 µg/m ³	65.0 µg/m ³
	Annual Arithmetic Mean	12 µg/m ³	15.0 µg/m ³	15.0 µg/m ³
Carbon Monoxide (CO)	8 Hour	9.00 ppm (10 mg/m ³)	9.00 ppm (10 mg/m ³)	None
	1 Hour	20.0 ppm (23 mg/m ³)	35.00 ppm (35 mg/m ³)	None
	8 Hour (Lake Tahoe)	6.00 ppm (7 mg/m ³)	—	—
Nitrogen Dioxide (NO₂)	Annual Arithmetic Mean	—	.053 ppm (100 µg/m ³)	.053 ppm
	1 Hour	.25 ppm (470 µg/m ³)	—	—
Lead	30 day average	1.5 µg/m ³	—	—
	Calendar year	—	1.5 µg/m ³	1.5 µg/m ³
Sulfur Dioxide (SO₂)	Annual Arithmetic Mean	—	.030 ppm	—
	24 Hour	.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	—
	3 Hour	—	—	.5 ppm (1300 µg/m ³)
	1 Hour	.25 ppm (665 µg/m ³)	—	—

Air Pollutant	California ¹		Federal ²	
	Averaging Time	Concentration	Primary	Secondary
Visibility Reducing Particles	8 Hour (10 am to 6 pm PST)	Extinction coefficient of 0.23 per kilometer-visibility of 10 miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent.	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³	No Federal Standards	
Hydrogen Sulfide	1 Hour	.03 ppm (42 µg/m ³)	No Federal Standards	
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)	No Federal Standards	

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24hour), nitrogen dioxide, suspended particulate matter-PM10 , PM 2.5 and visibility reducing particulates, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

ppm = parts per million per volume

µg/m³ = micrograms per cubic meter

Source: California Air Resources Board

Pinnacles National Monument, Davenport, Santa Cruz, and Hollister. The closest air monitoring station within the Planning Area is the Monterey-Silver Cloud Court in the City of Monterey. Monitoring results indicate that over the period 1998 to 2001, ozone concentration exceeded the state standard on only one day. There were no ozone violations in the years 2002 and 2003 (Janet Brennan, MBUAPCD, telephone conversation with Consultant, February 20, 2004).

TABLE 5

Attainment Status of the North Central Coast Air Basin

Pollutant	Federal	State
Ozone (O ₃)	Maintenance/Attainment	Moderate Non-attainment
Carbon Monoxide (CO)	Unclassified/Attainment	Monterey Co.-Attainment San Benito Co.-Unclassified Santa Cruz Co.-Unclassified
Nitrogen Dioxide (NO ₂)	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO ₂)	Unclassified	Attainment
Inhalable Particulates (PM ₁₀)	Unclassified	Non-attainment

Source: MBUAPCD

Project Analysis

As described in Section 2.12, Transportation, implementation of the General Plan Update will result in an increase in traffic generation. Increases in traffic will result in an increase in air emissions in the City. However, the General Plan Update also focuses new development in existing transportation corridors that can be served by alternative forms of transportation and emphasizes development in mixed-use commercial areas where transit service exists (and can be expanded), and where the number of vehicle trips can be reduced by promoting walkable environments where access to services does not require use of vehicles. The land use and transportation planning approach taken in the General Plan Update will, for the given level of future development proposed, reduce the volume of air emissions that otherwise would be produced through more traditional suburban development. Nevertheless, as described below, significant air quality impacts are still anticipated.

Short-term Construction Operations

Emissions generated during construction are considered “short-term” in the sense that they would be limited to actual periods of site development and construction of the project. Short-term construction emissions are generated by the use of heavy equipment, the transport of materials, and during construction employee commute trips. Construction-related emissions consist primarily of NO_x, PM₁₀, and CO. Emissions of ROG, NO_x and CO are generated primarily during operation of gas-and diesel-powered motor vehicles, asphalt paving activities, and the application of architectural coatings.

Long-term Operations – Cumulative Air Quality

New development proposed within the Planning Area under the General Plan Update would result in increased long-term, cumulative air emissions. Cumulative long-term air quality impacts are determined on the basis of a project's consistency with the growth assumptions made in preparing the Air Quality Management Plan (AQMP).

The General Plan Update is a 20-year plan for development within the City. That development will consist of numerous individual projects, the air quality effects of which cannot be precisely identified at this time. Therefore, as discussed in Section 1.5, Consistency with Local and Regional Plans, for evaluating air quality impacts in a general plan programmatic EIR, the MBUAPCD uses the general plan buildout population projection as a proxy for determining the types and significance of air emissions that would result from new development over the 20 year development timeframe.

AMBAG is responsible for performing a consistency determination with the AQMP for the General Plan Update. AMBAG's 2020 population projection for the City is 33,148 people. The General Plan Update is projected to result in a 2024 City population of about 34,539. Provided that population growth in the City does not exceed the AMBAG projection for 2020 (some of the General Plan Update population growth must be deferred to the period 2020 to 2024), the General Plan Update will be consistent with the AQMP (Todd Muck, AMBAG, pers. com., February 19, 2004)

Local Emissions – Sensitive Receptors

The primary mobile source pollutant of local concern is CO. Localized concentrations of CO are a direct function of vehicle idling time and thus, traffic flow conditions. CO concentrations close to congested roadways or intersections may reach unhealthful levels, affecting local sensitive receptors (e.g. residents, school children, hospital patients, the elderly). Under normal meteorological conditions, CO transport is extremely limited and disperses rapidly from the source.

For a general plan EIR, the MBUAPCD criteria for determining the significance of localized emissions of CO is based on *potential deterioration* in cumulative traffic conditions at intersections or road segments. If under post mitigation implementation conditions, operations of an intersection or road segment would decline from LOS D or better to LOS E or LOS F, CO emissions could be of concern. Carbon monoxide modeling can be undertaken to verify whether CO emissions exceed state or national standards. If standards were exceeded, the cumulative impact would be considered significant.

Section 2.12, Transportation, includes a summary of changes in level of service anticipated with buildout of the City per the General Plan Update. The level of service at several intersections and along a number of roadways would significantly degrade with implementation of the General Plan Update. As the efficiency with which these intersection and road segments operate decreases, vehicle idling times will increase and

travel speeds will decrease. These changes could result in an increase in the volume of vehicle emissions generated at these locations, including the potential for creation of CO “hotspots”.

The Traffic Study discussed in Section 2.12 describes mitigations needed to avoid significant degradation of the level of service at all intersections and road segments where such degradation would occur with General Plan Update buildout. The City’s intention is to focus circulation mitigation efforts on transportation management and travel demand management programs (especially transit and pedestrian access and promotion of mixed-use development) rather than major infrastructure projects that increase circulation network capacity. The combination of physical improvements and circulation management actions proposed should reduce local emissions impacts to a less than significant level.

Odors

The General Plan Update does not create development potential for commercial or industrial activities known to be odor producing. The inventory of land for industrial use remains low and development within commercial areas will be focused on promoting residential development in a mixed-use context.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- conflict with or obstruct implementation of the applicable air quality plan;
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- expose sensitive receptors to substantial pollutant concentrations; and/or
- create objectionable odors affecting a substantial number of people.

Less than Significant Impact – Conflict with the Applicable Air Quality Plan, Contribute Substantially to Air Quality Violations, and Cumulative Considerable Net Increase in Criteria Pollutants. The population projection resulting from implementing the General Plan Update is 34,539 persons in the year 2024. AMBAG’s population used in the AQMP is 33,148 for the year 2020. Provided that implementation of the General Plan Update does not result in a population increase that

exceeds the AMBAG projection for 2020, the project will not conflict with the AQMP. No mitigation for this effect is required.

Policies c.1 through c.3 of the Conservation Element recommend actions to reduce air emissions. These include encouraging use of transit and other alternative forms of transportation, utilizing the CEQA process to identify and mitigate air quality impacts for individual projects, and cooperating with local and State agencies on air emissions reduction programs. In addition to these, essentially every policy and program contained in the Circulation Element will serve to reduce air emissions by promoting a more efficient transportation system and by promoting alternative transportation. Implementation of the policies would serve to reduce vehicle trip numbers and trip lengths, as well improve traffic flow such that emission reductions are realized.

Potentially Significant Impact – Exposure to Localized Emissions of Carbon Monoxide. Implementation of the General Plan Update will result in degradation of the level of service at a number of intersections and road segments to levels at which local carbon monoxide emissions could exceed acceptable standards.

Mitigation Measures. The full range of Circulation Element policies are, either directly or indirectly, targeted at maximizing the efficiency of the transportation network such that level of service standards are met. A transportation management system, travel demand management system, parking strategy, roadway improvements, bicycle and pedestrian system expansion, and expansion and prioritization of transit use are among the strategies to be employed for this purpose. Please refer to Section 2.12, Transportation, for a summary of the Circulation Element policies whose implementation would reduce this effect to a less than significant level.

Less than Significant Impact – Generation of Objectionable Odors. Based on the Land Use Element of the General Plan Update, it is not anticipated that commercial or industrial uses within the City will be of a character than generate objectionable odors. Within commercial areas, the focus of new development going forward will be on integrating residential uses. New industrial development in the Fort Ord annexation area is not likely to generate significant odors as permitted uses are not of a type that are typically considered to produce odors. No mitigation measures are required.

2.3 Terrestrial and Marine Biological Resources

This section is based in part on a peer review of a technical support document, *Biological Assessment for the City of Monterey* (Denise Duffy & Associates 2003), which was prepared for the City of Monterey as part of its General Plan Update process. EMC Planning Group Inc.'s staff biologist reviewed the biological assessment for adequacy, methodology, and consistency with existing technical information. A range of additional documents, listed in Section 4, Report Documentation, was also independently reviewed. The Biological Assessment Report is on file with the City and could be consulted for detailed information.

Regulatory Framework

Federal and State

Threatened and Endangered Species. State and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as species of special concern by the CDFG. The California Native Plant Society (CNPS) has developed its own list of native plants considered rare, threatened or endangered (CNPS 2001). Collectively, these plants and animals are referred to as special status species.

Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the “take” of a listed species. Both agencies may review CEQA documents for impacts to sensitive species and to make project-specific recommendations for their conservation.

Migratory Birds and Birds of Prey. State and federal law protects most birds through the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., sec. 703, Supp. I, 1989) and the State protects birds of prey (hawks, falcons, etc.) under provisions of the California Fish and Game Code, section 3503.5, 1992.

Wetlands and Other Jurisdictional Waters. Natural drainage channels and wetlands are considered Waters of the United States (hereafter referred to as jurisdictional waters). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters by authority of section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE.

CDFG has jurisdiction over the bed and bank of natural drainages according to provisions of section 1601 and 1603 of the California Fish and Game Code. Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement.

Environmental Setting

Physical Characteristics

Due to the nature and diversity of the soils and specific climactic factors within the Planning Area, the inland habitats support a large number of rare and endemic special-status plant and wildlife species. In addition, the region is the southern and

northernmost range for many of the state's flora and fauna, creating a diverse and complex mosaic of biotic communities.

Soils types. A relatively large percentage of the Planning Area contains soil series that display similar characteristics. These include the Arnold Series, the Santa Ynez, Santa Lucia, and Reliz Series, and the Narlon Series. These soils, in combination with local microclimate conditions, are selective factors that affect the upland plant and animal associations present in the Planning Area. More information on each soil type can be found in Section 2.6, Geology and Soils.

Climate. Most of the habitats located in the Planning Area are within, and affected by summer fog. The summer fog zone results from a marine influence consisting of regular summer fog and associated cool temperatures, high winds and mild winter temperatures, with very few frosts. This combination of physical and climatological conditions provides for diverse and unique flora and fauna.

Natural Terrestrial Communities and Habitats

Habitat types within the Planning Area include Monterey pine forest, oak woodland, urban forest, grassland, chaparral and scrub, coastal fore dune, and central dune scrub. Each of the habitat types and associated subtypes is discussed in detail below. [Figure 6, Vegetation Types](#) and [Figure 7, Special Status Species Occurrences](#), are the City's representation of locations where special care will be needed to avoid impacts on important habitat areas.

Monterey Pine Forest. Monterey pine (*Pinus radiata*) forests are recognized as a unique and dominant feature within the Planning Area. It exists in only three native stands in California: Point Año Nuevo, Cambria, and the Monterey Peninsula. There are three relatively large and healthy stands of Monterey pine forest in the Planning Area: Huckleberry Hill Nature Preserve, the Old Capitol Site (adjacent to the southern side of Highway 1 south of El Estero Lake), and along the ridge that forms the southern boundary of the Study Area (from Highway 1 to the eastern side of Jack's Peak Regional Park). This species also occurs in mixed stands through the Planning Area. The understory of the Monterey pine forest can support a diverse group of flowering plants and ferns. These are discussed in the *Biological Assessment for the City of Monterey* (Denise Duffy & Associates 2003).

Relatively undisturbed Monterey pine forests provide roosting sites, nesting sites, escape cover, migration and dispersion corridors, and foraging habitat for wildlife species. Much of the Monterey pine forest has been urbanized. Urbanization has resulted in a low native species population and diversity, and a high population of species able to adapt to the urban environment. These species are described in the biological assessment report. A fungal pathogen called pine pitch canker (*Fusarium moniliforme subglutinans*) is a disease that currently threatens the existing Monterey pine forest.

Oak woodland. Oak woodland is the most abundant habitat type within the Planning Area. Oak woodland habitats within the Planning Area consist almost entirely of coast

live oak (*Quercus agrifolia*). This is a widespread species, occurring in a fifty-mile swath inland. Species that exist as understory in the woodland type are described in the biological assessment report.

Oak woodlands provide important nesting, roosting, and foraging habitat for a large number of small birds, and raptors and bats, as well as a variety of common mammals, and several species of reptiles and amphibians.

Much of California's oak woodlands have been removed and the remaining stands are under pressure from development and agriculture. In recent years a large numbers of coast live oaks in several coastal counties of California and southern Oregon have been dying from a pathogen referred to as sudden oak death syndrome. However, there have been no confirmed cases within the City of Monterey.

Urban Forests. An urban forest stand is a former natural forest stand that is now adjacent to or in association with developed areas. Urban forest stands can also occur in vacant lots, greenbelts, and city parks. These stands are generally one to 20 acres in size, and represent fragmented forest areas. Dominant native tree species within the urban forest habitat are coast live oak, Monterey cypress (*Cupressus macrocarpa*) and Monterey pine. California buckeye (*Aesculus californica*), eucalyptus (*Eucalyptus* sp.), and acacia (*Acacia* sp.) are less dominant. The understories in the centers of urban forests or in well-managed, relatively undisturbed urban forests are often more similar to the natural forest understory. Common wildlife species that occur within the urban forests are those that are adapted to heavily disturbed and developed areas, including striped skunk (*Mephitis mephitis*), raccoons (*Procyon lotor*), western scrub jay (*Aphelocoma californica*), Pacific chorus frogs (*Pseudachris regilla*), and black-tailed deer (*Odocoileus hemionus columbianus*).

Grasslands. The majority of the grasslands found within the Planning Area are dominated by annual invasive species. Grasslands provides marginal habitat for a variety of birds, small mammals, predatory animals such as foxes, reptiles, and raptors.

Both the valley needlegrass grassland and the coastal prairie occur within the Planning Area. Some types of grasslands may occur adjacent to each other and share common species. In the eastern portion of the Planning Area, south of Highway 68, large areas of native perennial grassland have existed historically.

Chaparral. Moderate to low growing evergreen and drought resistant shrubs with scattered trees and patchy herbaceous communities characterizes chaparral. Maritime chaparral occurs in areas where coastal fog and moderate temperatures effectively improves available moisture. Soft-leafed, drought deciduous shrubs dominate coastal sage scrub. Chaparral typically requires more moisture than coastal sage scrub. Chaparral and coastal sage scrub typically form on shallow soils, along dry rocky slopes and ridges or relic sand dunes.

Chaparral supports a great diversity of wildlife species. Examples include birds, small mammals, and predators such as gray fox (*Urocyon cinereoargenteus*).

Figure 6 Major Habitat Types

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Figure 7 Special Status Species Occurrences

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Maritime chaparral is very limited in its distribution within the Planning Area and occurs primarily in the Highway 68 and Fort Ord annexation area.

Natural Marine Communities and Habitats

Monterey Bay. The Monterey Bay is one of the widest bays on the Pacific coast of the United States and contains one of the largest major dune systems on the California coast. Approximately 3.5 miles of coastline falls within the City limits of Monterey, which comprise a small portion of the 360 mile-long coastline of the Monterey Bay National Marine Sanctuary.

The shoreline up to the mean high tide line and marine environment is protected as part of the Monterey Bay National Marine Sanctuary. In addition, the National Marine Fisheries Service designates the Monterey Bay as Essential Fish Habitat. The coastal marine environment of the shoreline between the Coast Guard Breakwater and Point Piños has been found to have high diversity and abundance of marine life in an accessible and protected coastal environment. The coastal fore dune and central dune scrub habitats within the coastal dunes are listed as having high priority for inventory in the California Natural Diversity Data Base.

Coastal Fore Dunes. The coastal fore dune habitat occupies the active sands between the mean high tide and the more stabilized back dunes. It contains variable associations of low-growing herbaceous species and grasses in moving and recently stabilized dunes near the shoreline. Plant cover is less than ten percent. Generally, there are only five or so plant species that occupy this habitat, and usually only one or two are dominant. Few animals rely completely on the coastal dunes for their survival, but many species utilize them. Wildlife species in the coastal fore dune habitat include a variety of shorebirds and invertebrates - many of the same species, which occur in the sandy beach intertidal habitat. The City has recently worked with the Navy and the California Parks and Recreation Department on dune restoration on the Naval Post Graduate School and Del Monte Beach.

Central Dune Scrub. The central dune scrub is densely vegetated habitat consisting of low or erect woody shrubs on stable dunes with herbaceous species in the open areas. The central dune scrub has greater plant density, more cover, more species, and woodier species when compared to coastal fore dunes. The central dune scrub habitat is listed as high priority for inventory in the California Natural Diversity Data Base.

A variety of species commonly occur within this habitat, including several special-status species. The variety of wildlife species in the central dune scrub is relatively low, but include special-status wildlife species. The central dune scrub is also listed as a high priority habitat for inventory in the CNDDDB by CDFG.

Sandy Beach Intertidal. The sandy beach is the dominant intertidal habitat in the Monterey Bay. This habitat is found in sandy substrate between high and low tide. The sandy beach intertidal is highly active with constantly shifting sands caused by wave

action and the longshore transport of sand, creating a very harsh habitat for plants and wildlife.

This habitat supports a minimal number of plant and wildlife species due to the difficulty in adapting to wave action; the overall productivity of this habitat is lower than the rocky shore intertidal habitat. The range of organisms and animals that this habitat type supports are found in the Biological Assessment Report. California sea lions and harbor seals, which are protected under the Marine Mammal Act, are often observed feeding in the surf zone or laying out on the sand.

Rocky Intertidal. The rocky intertidal habitat is found on rocky substrate between high and low tide, and is often referred to as “tidepools.” The rocky intertidal habitat contains extensive biological diversity. Hundreds of different species of algae and invertebrates are present. Special-status species common in the rocky intertidal habitat are the California brown pelican (*Pelecanus occidentalis californicus*) and the southern sea otter (*Enhydra lutris nereis*).

Subtidal. The subtidal habitat is found in the nearshore waters of the continental shelf just beyond the surf to a depth of about 150 feet. The subtidal seafloor is comprised of unconsolidated sand deposits and rocky substrates of granitic and Monterey shale origins. The sandy bottom areas support two major groups of invertebrates, those that burrow into the sediment, and those that move over the bottom. The shallower regions are dominated by highly mobile crustaceans, most of which live close to the sediment surface and do not burrow deeply.

The kelp forest is the most diverse and productive of the subtidal habitats. The giant kelp (*Macrocystis pyrifera*) and bull kelp (*Nereocystis luetkeana*) are the dominant kelps in this region. The kelp forest provides habitat for numerous species of invertebrates, fish, birds, and mammals.

The Monterey shale outcrops support a variety of species. The granite reefs located farther offshore at depths of 80 feet and greater, limit light and restrict the growth of kelp. Many of the plant and animal species that occur in the deeper reefs also occur in the shallower rocky substrates of the kelp forest.

Many special-status species, in addition to the protected marine mammals and birds, occur within the subtidal habitat, including southern sea otters and Double-crested cormorant (*Phalacrocorax auritus*). Special-status anadromous fish species such as winter and spring-run Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead trout (*Oncorhynchus mykiss*) are also present.

Wharf and Harbor. This habitat is located within the Monterey harbor area where wharf pilings, breakwaters, and other man-made structures create an unnatural habitat. The wood and concrete pilings supporting the wharves and harbors offer substrate like a natural reef. Like the rocky intertidal habitat, the pilings are subject to tidal activity. However, due to the lack of light and cracks and crevices found in natural rock, a few

organisms tend to dominate these artificial reefs rather than finding the species diversity as observed in natural reef habitats.

Water Resources and Aquatic Habitats

Storm Water. The Planning Area can be divided into six watershed areas. All streams and water bodies in the Planning Area drain to the Pacific Ocean through storm drain improvements. Urbanization within the Planning Area has increased the amount of impervious surface, which has resulted in increased storm flow to stream channels and reducing the groundwater recharge. More information on this issue can be found in Section 2.7, Hydrology and Water Quality.

Wetland and Riparian. The majority of the lower riparian corridors within the Planning Area are willow riparian scrub with non-native understory vegetation. This habitat is associated with the intermittent stream channels common to the Planning Area and is typically dominated by small, seasonally saturated emergent marsh and arroyo willow riparian corridors. This habitat type typically occurs along perennial and intermittent stream and alluvial washes in lower elevations of the central coast. Wet meadows, seasonal wetlands, and potential vernal pools appear limited in the Planning Area due to previous development of flat terrain, and the steep slopes in the Monterey pine forest habitat.

Estuaries. Two modified estuaries (Del Monte Lake and Lake El Estero) are within the Planning Area, while Laguna Grande and Roberts Lake, located in the City of Seaside, border the northern Planning Area boundary. Historically these estuary systems varied from a tidally influenced marine system to a brackish water lake. By 1948, Lake El Estero had been converted to a freshwater lake and stocked with various species of fish.

Surface Water Resources. All freshwater runoff in the Planning Area ultimately flows through numerous culverts, storm drains, modified estuaries, tide gates, and/or pump stations. Urban development has resulted in decreased groundwater recharge, increased erosion and sediment transport, and desiccation of alluvial and former wetland soils.

Fisheries Resources. Fishery resources in the Planning Area are limited to the modified estuary systems, now freshwater lakes, at El Estero Lake, and Del Monte Lake. Due to insufficient flows and both natural and human caused barriers, no anadromous salmonids or tidewater gobies are known to currently exist in the Planning Area streams or wetlands. Numerous species of freshwater fish have been introduced into these open water habitats.

Special-Status Plant Species

The CDFG Natural Diversity Database (Monterey and Seaside quadrangles 2002) reports 20 special-status native plant species that have been documented within the Planning Area. A list of these special status plant species is found in [Table 6, Special Status Plant Species](#), along with their legal status and number of documented occurrences. Details about each species can be found in the biological resources

assessment report on file with the City. The biological and physical characteristics of the Planning Area provide a possibility for the presence of other special status plant species that have been documented within the region. Much of the Planning Area has not been surveyed.

Special Status Animal Species

The CDFG Natural Diversity Database (Monterey and Seaside quadrangle, 2002) reports four special-status animal species that have been documented on, or within, the vicinity of the Planning Area. A list of these special status animal species, as well as other species with the potential to occur in the Planning Area is included in [Table 7, Special Status Animal Species](#), along with their legal status and number of documented occurrences. An expanded description of each species is included in the biological assessment report.

Project Analysis

The General Plan Update identifies that the bulk of the new development potential is focused within areas that are already developed. Intensification of use in four mixed-use neighborhoods and infill development on existing small vacant lots scattered throughout the City comprises much of the development potential. New development located in these areas is not likely to have significant impacts on biological resources, as these areas do not generally contain sensitive biotic resources or provide habitat for special status species or more common plant or animal species. Nevertheless, there is some potential that vacant infill parcels located in less intensely developed portions of the City (i.e. forested hillsides) may have the potential to contain protected trees, wetlands, sensitive habitats, and/or special status species.

The 138-acre Fort Ord annexation area is by far the most significant, vacant land within the City proposed for development in the General Plan Update. Approximately 113 acres are proposed for industrial use, with the remainder designated as open space. This area has a significantly higher likelihood of containing sensitive or protected biological resources when compared to the infill development areas and the development intensification areas identified in the General Plan Update.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

TABLE 6

**Special-Status Plant Species Initially Judged to Potentially Occur
Within the Planning Area**

Species	Federal Status	State Status	CNPS	Observed or Known Occurrence within the Planning Area
Hickman's onion (<i>Allium hickmanii</i>)	FSC	--	1B	Four documented occurrences.
Hooker's manzanita (<i>Arctostaphylos hookeri</i>)	--	--	1B	Two documented occurrences.
Toro manzanita (<i>Arctostaphylos montereyensis</i>)	FSC	--	1B	One documented occurrence.
Sandmat manzanita (<i>Arctostaphylos pumila</i>)	FSC	--	1B	Three documented occurrences.
Coastal dunes milk-vetch (<i>Astragalus tener titi</i>)	FE	CE	1B	No documented occurrences. Known to occur in region.
Congdon's tarplant (<i>Centomadia parryi</i> spp. <i>parryi</i>)	--	--	1B	No documented occurrences. Known to occur in the region.
Monterey spineflower (<i>Chorizanthe pungens</i> var. <i>pungens</i>)	FT	--	1B	Two documented occurrences.
Robust spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	FE	--	1B	One documented occurrence.
Seaside birds-beak (<i>Cordylanthus rigidus</i> var. <i>robusta</i>)	FSC	CE	1B	One documented occurrence.
Eastwood's goldenbush (<i>Ericameria fasciculata</i>)	FSC	--	1B	One documented occurrence.
Coast wallflower (<i>Erysimum ammophilum</i>)	FSC	--	1B	One documented occurrence.
Menzie's wallflower (<i>Erysimum menziesii</i> spp. <i>menziesii</i>)	FE	CE	1B	No documented occurrences. Known to occur in region.
Yadon's wallflower (<i>Erysimum menziesii</i> spp. <i>yadonii</i>)	FE	CE	1B	No documented occurrences. Known to occur in region.

Species	Federal Status	State Status	CNPS	Observed or Known Occurrence within the Planning Area
Sand gilia (<i>Gilia tenuiflora ssp. arenaria</i>)	FE	CE	1B	One documented occurrence.
Kellogg's horkelia (<i>Horkelia cuneata ssp. sericea</i>)	FSC	--	1B	One documented occurrence.
Beach layia (<i>Layia carnosa</i>)	FE	CE	1B	No documented occurrences. Known to occur in region.
Tidestrom's lupine (<i>Lupinus tidestromii</i>)	FE	CE	1B	No documented occurrences. Known to occur in region.
Carmel Valley bush mallow (<i>Malacothamnus palmeri var. involucratus</i>)	FSC	--	1B	One documented occurrence.
Monterey pine (<i>Pinus radiata</i>)	FSC	--	1B	Frequently throughout the Planning Area.
Yadons' rein orchid (<i>Piperia yadonii</i>)	FE	--	1B	Seven documented occurrences.
Hickman's cinquefoil (<i>Potentilla hickmanii</i>)	FE	CE	1B	One documented occurrence.
Pine rose (<i>Rosa pinetorum</i>)	--	--	1B	One documented occurrence.
Santa Cruz Microseris (<i>Stebbinsoseris decpiens</i>)	FSC	--	1B	One documented occurrence.
Santa Cruz clover (<i>Trifolium buckwestriorum</i>)	--	--	1B	Two documented occurrences.
Pacific Grove Clover (<i>Trifolium polyodon</i>)	FSC	--	1B	Two documented occurrences.
Monterey Clover (<i>Trifolium trichocalyx</i>)	FE	CE	1B	No documented occurrences. Known to occur region.

STATUS CODES

FE: Listed as "endangered" under the federal Endangered Species Act.

FT: Listed as "threatened" under the federal Endangered Species Act.

FSC: USFWS "Species of Concern." Prior to February 1996, USFWS identified these species as "Category 2" candidates for listing (taxa for which information in the possession of USFWS indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threat were not currently available to support

proposed rules). The designation of Category 2 species as candidates resulted in confusion about the conservation status of these taxa. To reduce that confusion, and to clarify that USFWS does not regard these species as candidates for listing, USFWS has discontinued the designation of Category 2 species as candidates. USFWS remains concerned about these species, but further biological research and field study are needed to resolve the conservation status of these taxa.

CE: Listed as “endangered” under California Endangered Species Act.

CSC: CDFG "Species of Special Concern". No federal or state protection is provided by this designation. This designation indicates that the population may face extirpation in California and special consideration should be taken when decisions are made regarding the future of an area containing the species.

1B: Plants considered by CNPS to be rare, threatened, or endangered in California and elsewhere due to their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited number of populations.

Sources: CDFG Natural Diversity Database (CDFG 2002), Biological Assessment for the City of Monterey (Denise Duffy & Associates 2003), Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001).

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (i.e., City of Monterey General Plan, Skyline Local Coastal Program, and City of Monterey Tree Ordinance); and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

TABLE 7

Special-Status Animals Species Initially Judged to Potentially Occur within the Planning Area

Species	Federal Status	State Status	Observed or Known Occurrence within the Planning Area
Invertebrates			
Globose dune beetle <i>Coelus globosus</i>	FSC	--	No documented occurrences. Known to occur within the region.
Monarch butterfly <i>Danaus plexippus</i>	--	--	One documented occurrence.
Smith’s blue butterfly <i>Euphilotes enoptes butterfly</i>	FE	--	Two documented occurrences.
Amphibians and Reptiles			
California tiger salamander <i>Ambystoma californiense</i>	FP	CSC	Three documented occurrences.
Black legless lizard <i>Anniella puchra nigra</i>	--	CSC	One documented occurrence.
California red-legged frog <i>Ambystoma californiense</i>	FT	CSC	No documented occurrences. Known to occur within the region.
Birds			
Marbled murrelet <i>Brachyramphus marmoratus</i>	FT	CE	No documented occurrences. Known to occur within the region.
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT	CSC	No documented occurrences. Known to occur within the region.
Common loon <i>Gavia immer</i>	--	CSC	No documented occurrences. Known to occur within the region.
Harlequin duck <i>Histrionicus histrionicus</i>	FSC	CSC	No documented occurrences. Known to occur within the region.
California gull <i>Larus coniformicus</i>	--	CSC	No documented occurrences. Known to occur within the region.
Osprey <i>Pandion haliaetus</i>	--	CSC	No documented occurrences. Known to occur within the region.

Species	Federal Status	State Status	Observed or Known Occurrence within the Planning Area
California brown pelican <i>Pelecanus occidentalis californicus</i>	FE	CE	No documented occurrences. Known to occur within the region.
Double-crested cormorant <i>Phalacrocorax aurits</i>	--	CSC	No documented occurrences. Known to occur within the region.
California least tern <i>Sterna anitllarum browni</i>	FE	CE	No documented occurrences. Known to occur within the region.
Elegant tern <i>Sterna elegans</i>	FSC	CSC	No documented occurrences. Known to occur within the region.
Nesting raptors	--	CSC	No documented occurrences. Known to occur within the region.
Anadromous fish			
Coho salmon <i>Oncorhynchus kisutch</i>	FT	CE	No documented occurrences. Known to occur within the region.
Steelhead-central California coast <i>Oncorhynchus mykiss irideus</i>	FT	CSC	No documented occurrences. Known to occur within the region.
Winter-run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FE	CE	No documented occurrences. Known to occur within the region.
Spring-run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FT	ST	No documented occurrences. Known to occur within the region.
Marine Mammals			
Guadalupe fur seal <i>Arctocephalus townsendii</i>	FT	CT	No documented occurrences. Known to occur within the region.
Sei whale <i>Balaenoptera borealis</i>	FE	--	No documented occurrences. Not expected to occur within the region.
Blue whale <i>Balaenoptera musculus</i>	FE	--	No documented occurrences. Known to occur within the region.
Finback whale <i>Balaenoptera physalus</i>	FE	--	No documented occurrences. Known to occur within the region.

Species	Federal Status	State Status	Observed or Known Occurrence within the Planning Area
Southern sea otter <i>Enhydra lutris</i>	FT	--	No documented occurrences. Known to occur within the region.
Pacific right whale <i>Eublaena glacialis</i>	FE	--	No documented occurrences. Not expected to occur within the region.
Steller (northern) sea lion <i>Eumetopias jubatus</i>	FT	--	No documented occurrences. Known to occur within the region.
Humpback whale <i>Megaptera novaeangliae</i>	FE	--	No documented occurrences. Known to occur within the region.
Sperm whale <i>Physeter macrocephalus</i>	FE	--	No documented occurrences. Known to occur within the region.

STATUS CODES

- FE: Listed as “endangered” under the federal Endangered Species Act.
- FT: Listed as “threatened” under the federal Endangered Species Act.
- FPT: Proposed for listing as threatened or endangered by the USFWS.
- FSC: USFWS “Species of Concern.” Prior to February 1996, USFWS identified these species as "Category 2" candidates for listing (taxa for which information in the possession of USFWS indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threat were not currently available to support proposed rules). The designation of Category 2 species as candidates resulted in confusion about the conservation status of these taxa. To reduce that confusion, and to clarify that USFWS does not regard these species as candidates for listing, USFWS has discontinued the designation of Category 2 species as candidates. USFWS remains concerned about these species, but further biological research and field study are needed to resolve the conservation status of these taxa.
- CE: Listed as “endangered” under California Endangered Species Act.
- CT: Listed as “threatened” under California Endangered Species Act.
- CSC: CDFG "Species of Special Concern". No federal or state protection is provided by this designation. This designation indicates that the population may face extirpation in California and special consideration should be taken when decisions are made regarding the future of an area containing the species.
- CP: CDFG “Protected.” Pursuant to the California Code of Regulations, Title 14, Division 1, Chapter 5, section 40, it is unlawful to capture, collect, intentionally kill or injure, possess, purchase, propagate, sell, transport, import or export any native reptile or amphibian, or part thereof. “Intentionally kill or injure” does not include death or injury that occurs incidental to an otherwise lawful activity.

Sources: CDFG Natural Diversity Database (CDFG 2002), Biological Assessment for the City of Monterey (Denise Duffy & Associates 2003).

Potentially Significant Impact – Special-Status Species. Numerous special status species have been documented within the Planning Area and others known within the region could occur in the Planning Area. Intensification of development within designated mixed-use neighborhoods and on infill parcels located within existing developed areas has a low likelihood of adversely impacting habitat for special status species. The Fort Ord annexation area has a significantly higher likelihood of supporting habitat for special status species. However, new development on former Fort Ord land must be consistent with the Fort Ord Habitat Management Plan (HMP). The HMP includes standards that must be followed by all new development on former Fort Ord lands, including the City's Fort Ord annexation area, to mitigate impacts on special status species. The Fort Ord Reuse Authority Board would assess new development proposals within the Fort Ord annexation area for consistency with the HMP to ensure potential impacts on special status species are mitigated to a less than significant level.

Given the above considerations, implementation of the General Plan Update is expected to have a less than significant impact on special status species.

Mitigation Measures. The General Plan Update includes numerous policies that were created to preserve, protect and enhance special status species habitat within the Planning Area. Policies a.2, b.2, b.3, c.1, c.2, c.3, d.1, d.4, d.5, d.7, e.1, and e.2 included in the Open Space Element, policies a.1, a.7, a.8, b.1, b.3, b.5, c.1, d.1, d.3, g.2, g.3, g.5, and h.1 in the Urban Design Element, and policies b.1, d.1, d.2, d.3, d.4, d.5, and d.6 in the Conservation Element function to preserve and protect the Monterey Bay, Shoreline, Beaches, Wooded Skyline, Foothills, Wooded Canyons, Lakes, Streams, Waterways, Greenbelts, and the Flora, Fauna and Marine Resources within the Planning Area. Of particular interest are Conservation Element Flora and Fauna and Marine Resources policies d.3 through d.6, which specifically address protection of sensitive biotic resources and require mitigation of potential impacts to a less than significant level. Biotic reports for projects proposed in areas of moderate to high biological resource value as defined by the City are required for this purpose.

Implementation of these policies would reduce impacts to special status species to a less than significant level.

Potentially Significant Impact – Riparian Habitat and other Sensitive Natural Communities. The Planning Area has documented riparian habitat and other sensitive natural communities such as Monterey pine forest, oak woodland, grasslands, chaparral, coastal fore dunes, coastal dune scrub, as well as several natural marine habitats. The infill and intensification development areas have a low likelihood of supporting quality riparian habitat and other sensitive natural communities. The recently annexed 138-acre site may support sensitive natural communities that could be significantly impacted by new industrial and other development without implementation of mitigation measures.

Mitigation Measures. The General Plan Update includes many policies that were created to preserve, protect and enhance riparian habitat and other sensitive natural communities. These include Open Space policies a.2, b.2, b.3, c.1, c.2, c.3, d.1, d.4, d.5, d.7, e.1, and e.2, Urban Design Element policies a.1, a.7, a.8, b.1, b.3, b.5, c.1, d.1, d.3,

g.2, g.3, g.5, and h.1, and Conservation Element policies b.1, d.1, d.2, d.3, d.4, d.5, and d.6. Implementation of these policies would reduce impacts on riparian habitat and other sensitive natural communities. As noted previously, Conservation Element Flora and Fauna and Marine Resources policies d.3 through d.6 specifically address protection of sensitive biotic resources and require mitigation of potential impacts to a less than significant level.

Potentially Significant Impact – Federally Protected Wetlands. The Planning Area has several documented wetlands. Development within the Planning Area could have a substantial adverse effect on protected wetlands. This is most likely to be the case for infill development on vacant parcels located near seasonal streams or ponds, if any such parcels exist, or in the Fort Ord annexation area.

Mitigation Measures. The General Plan Update includes policies that protect wetlands, and require a wetland delineation, when appropriate, to be prepared as part of the permit process for development projects within the City. If a wetland is determined to be on a site proposed for development, the project proponent would be required to consult with the U.S. Army Corps of Engineers for appropriate permits and mitigation if warranted.

Specific General Plan Update policies designed to preserve, protect and enhance riparian habitat and other sensitive natural communities, as well as wetlands, include Open Space Element policies d.1, d.4, d.5, d.7, e.1, and e.2 and Conservation Element policies b.4, d.3, d.4, d.5, and d.6. Implementation of these policies would reduce potential impacts on protected wetlands to a less than significant level.

Potentially Significant Impact – Wildlife Movement. The Planning Area contains movement habitat for various species of wildlife. The most notable movement habitat is the relatively undisturbed Monterey pine forest, oak woodlands, chaparral, and riparian areas. New development within designated mixed-use neighborhoods and infill development on small vacant parcels likely has a low probability of adversely affecting wildlife movement habitat. The Fort Ord annexation area has a high likelihood of containing movement habitat for wildlife. New development in this area may result in disturbance to these movement habitats, causing fragmentation or elimination of wildlife movement corridors. Additionally, increased human presence would result in increased nighttime lighting or human and domestic pet disturbance in areas that serve as wildlife movement areas. This could reduce, or restrict the movement or activity of, or disturb or increase mortality of wildlife species.

Mitigation Measures. The General Plan Update includes many policies that function to preserve and protect movement habitat located in the Monterey Bay, Shoreline, Beaches, Wooded Skyline, Foothills, Wooded Canyons, Lakes, Streams, Waterways, and Greenbelts within the Planning Area. These include Open Space policies (a.2, b.2, b.3, c.1, c.2, c.3, d.1, d.4, d.5, d.7, e.1, and e.2), Urban Design policies (a.1, a.7, a.8, b.1, b.3, b.5, c.1, d.1, d.3, g.2, g.3, g.5, and h.1), and Conservation policies (b.1, d.1, d.2, d.3, d.4, d.5, and d.6), which specifically address protection of sensitive habitat.

Implementation of these policies would reduce impacts on wildlife movement to a less than significant level.

Potentially Significant Impact – Local Policies or Ordinances Protecting Biological Resources. Construction activities within the Planning Area would likely result in direct and indirect impacts to trees and shrubs including oaks and pines that are protected by Chapter 37 of the Monterey Municipal Code. This code requires property owners to obtain a permit from the City Forester prior to tree removal unless the tree removal is specifically exempt from the code. Through the permit process the impacted trees are identified and the City Forester imposes conditions on the project. Conditions vary on a case-by-case basis, but generally they include avoidance measures and tree replacement measures. In certain instances the conditions may include transplanting certain trees to other areas. Consistency with the City Tree Ordinance would ensure that impacts to trees are reduced to a less than significant level.

Mitigation Measures. Urban Design policy g.5 requires protection of significant trees in urban and historic contexts, and Conservation Element policies d.5 addresses the need for new development to conform to the City Tree Ordinance. Future project conformance with the City Tree Ordinance and these policies would ensure that this impact is reduced to a less than significant level.

Less than Significant Impact – Habitat Conservation Plan, Natural Community Conservation Plan, or other Approved Conservation Plan. Implementation of the General Plan Update would not be inconsistent with the Fort Ord HMP provided that new development proposed within the Fort Ord annexation area is consistent with the HMP. The Fort Ord Reuse Authority Board would review any new development proposed in this area to ensure it is consistent with the HMP and mitigates potential impacts on special status species. The oceanic portion of the planning area is a federally protected national marine sanctuary. However, the oceanic portion of the planning area would not be impacted by the General Plan Update.

2.4 Cultural Resources

Given the City's major role in the history of California and its effort to preserve the historical resources that represent that role, the Historic Resources Element is an important component of the General Plan Update. This section includes a review of historic resources and the extent to which General Plan Update policies provide for their maintenance and protection. Much of the information was provided by the City.

Regulatory Background

The National Register of Historic Places

The National Register Criteria and associated definitions are outlined in National Register *Bulletin Number 15: How to Apply the National Register Criteria for Evaluation*. The

National Register is the nation's master inventory of known historic resources. The National Register is administered by the National Park Service (NPS) and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

Resources (structures, sites, buildings, historic district, and objects) over 50 years of age can be listed on the National Register. In addition, properties under 50 years of age that are of exceptional importance or are contributors to an historic district can also be included on the National Register.

The following definitions are relevant to any discussion of the National Register:

- Buildings are defined as structures created to shelter human activity. Buildings must be considered in their entirety. A building that is lost to its basic structural elements is usually considered a "ruin" and is categorized as a site.
- A structure is a man-made feature made of independent and interrelated parts in a definite pattern of organization. Generally constructed by man, structures are often an engineering object large in scale.
- A site is defined as the location of a structural event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or varnished, where the location itself maintains historical or archaeological value regardless of the value of any existing structures or remains.
- An object is a material thing of functional, aesthetic, cultural, historical, or scientific value that may be, by nature or design, moveable yet related to a specific setting or environment such as an historic vessel.
- An historic district is a geographically definable area-urban or rural, small or large possessing a significant concentration, linkage, or continuity of sites, buildings, structures, and/or objects united by past events or aesthetically by plan or physical geographically but linked by association or history.

Quality of significance in American history, architecture, archaeology, engineering and culture is present in resources that possess integrity of location, design, setting, materials, workmanship, feeling and association, and meet at least one of the following criteria:

- a) are associated with events that have made a significant contribution to the broad patterns of history;
- b) are associated with the lives of persons significant in our past;
- c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and

- d) Yielded, or are likely to yield, information important in prehistory or history.

A resource can be considered significant in national, state or local history, architecture, archaeology, engineering, and culture. Historical resources can be individually eligible for listing on the National Register for any of the above four reasons. Additionally, a resource can be identified as contributing to a group of resources that are listed on the National Register – a historic district. As is noted above, districts possess a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. Districts have defined boundaries and are comprised of individual resources identified as contributing and non-contributing to the district.

Contributing resources add to the historic association, historic architectural qualities, or archaeological values for which the district is significant because the resource was present during the period of significance, relates to the documented significant contexts, and possess integrity.

Non-contributing resources do not add to the historic associations, historic architectural qualities, or archaeological values for which the district is significant because the resource was not present during the period of significance, does not relate to the documented significant contexts, and does not possess integrity.

The California Register of Historical Resources

The California Register of Historical Resources (California Register) criteria are modeled after National Register criteria; however the California Register focuses more closely on resources that have contributed to the development of California.

All resources listed in or formally determined eligible for the National Register are eligible for the California Register. In addition, properties designated under municipal or County ordinances are also eligible for listing in the California Register, however it offers a lower level of integrity. An historical resource must be significant at the local, state, or national level under one or more of the following criteria that are defined in the California Code of Regulations Title 14, Chapter 11.5, Section 4850:

- 1) Association with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- 2) Associated with the lives of persons important to local, California, or national history; or
- 3) Embodying the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
- 4) Has yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the National Register, California Register resources can be individually significant and they can be identified as part of a historic district.

Historical Integrity. Once a resource has been identified as significant and potentially eligible for both the National and California Registers, its historic integrity must be evaluated. Integrity is the authenticity of an historic resource's physical identity evidenced by the survival of characteristics that existed during the resources period of significance. Integrity involves several aspects including location, design, setting, materials, workmanship, feeling and association. These aspects closely relate to the resource's significance and must be primarily intact for eligibility in the California Register. Integrity must also be judged with reference to the particular criteria under which a resource is proposed for eligibility.

Historical integrity is defined in *Bulletin 15: How to Apply the National Register Criteria for Evaluation* (U.S. Department of Interior, National Park Service 1982) as:

The authenticity of a project's historical identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period. If a property retains the physical characteristics it possessed in the past then it has the capacity to convey the association with historical patterns or persons, architectural or engineering design and technology, or information about a culture or peoples.

Monterey Historic Preservation Ordinance

The City of Monterey updated its Historic Preservation Ordinance in March 2000. Historic zoning within the City is defined as follows:

- **Landmark Zoning (H-1)** may be applied to properties which meet the National Register criteria defined in National Register Bulletin 15 and the property is the first, last, only, rare, or most significant resource of its type in the region. Notwithstanding the foregoing, the H-1 Landmark zoning district may be applied to adobe resources built prior to 1879 and other previously "H" zoned resources as of the date of the ordinance adoption which may not meet National Register integrity standards.
- **City Historic Resource Zoning (H-2)** may be applied to properties that meet National Register criteria defined in National Register Bulletin 15 and to properties that meet the criteria for listing on the California Register that would be recognized as resources with local historic importance and their historic importance would not generally be recognized outside the immediate area of the Monterey Peninsula. This designation requires the owner's consent. The criteria are presumed to be met unless there is substantial evidence to the contrary.

Environmental Setting

Archaeological Resources

The Planning Area falls within the contact-period lands of at least two aboriginal tribal groups. These groups are known ethnographically as Costanoan and Esselen, which are the names given to their language or language family. Ethnographic and ethnohistoric information regarding Costanoan and Esselen speakers comes from the records of early Spanish explorers, mission documents, the works of ethnographers and linguists, and from Native American descendents.

The cultural history of the Central California coast and inland region area has, until recently, been poorly documented. Since 1970, however, hundreds of surveys have been conducted and more than 60 archaeological sites have been excavated in Monterey and San Luis Obispo counties, with more than 200 radiocarbon dates reported. Most of this work was undertaken to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Investigations of 19 sites along the northern shore of Monterey Peninsula confirmed the existence of two archaeological “populations” in the area of ethnographic Rumsen Costanoans.

Over time, archeological investigations within the Planning Area have resulted in the recording of approximately 29 prehistoric archeological sites. [Figure 8, Archaeological Sensitivity Map](#), shows locations where the probability of uncovering prehistoric archaeological resources is considered to be moderate to high.

Historic Resources

The City of Monterey is one of the most historic cities in the United States, and preservation of historic resources has long been a concern of Monterey citizens. As early as the 1880's, the Native Sons of the Golden West first attempted to have the Monterey Custom House designated as an historic landmark. In June 1932, it became California's first State Historic Landmark. The City's first Master Plan and Zoning Ordinance, adopted in 1939 and 1940, emphasized historic preservation and included historic overlay zoning for 40 buildings.

Most of Monterey's economic activity takes place in historic areas or areas with a significant number of historic buildings, including downtown, Cannery Row, Wharf 1, the Presidio of Monterey, Naval Postgraduate School, and Custom House Plaza. Much of the City's economic activity is based on an active re-use of these historic resources and areas.

The City of Monterey owns and maintains 12 historic buildings built between the 1840s to 1937. In addition, Monterey has leased the Lower Presidio of Monterey as a historic park and has developed a museum and master plan for that park.

The City has historic resources with international, national, and statewide significance. The Monterey State Historic Park preserves several unique adobe buildings in

downtown Monterey. The downtown is a National Historic Landmark District and the Royal Presidio Chapel is a National Historic Landmark – the highest level of National recognition. At the Presidio of Monterey, there is a National Register Historic District and a National Register eligible Historic District. On the campus of the Naval Postgraduate School, there is a Historic District and Historic Landscaped Grounds eligible for the National Register.

The City has developed a comprehensive Historic Preservation Program for the protection of its historic resources. The program consists of:

- City of Monterey General Plan Historic Preservation Element
- Historic Master Plan
- Citywide historic survey program
- CEQA historic review
- Historic Preservation Ordinance
- Incentives for historic property owners
- City ownership and maintenance of historic buildings
- Coordination with other historic property owners
- Maintenance of historic records in the Monterey Public Library.

A major part of this program was adopted by the City Council in March 2000, with a Historic Master Plan, revised Historic Preservation Ordinance, and Cannery Row Survey. The Historic Master Plan is an implementation plan with detailed programs to implement Historic Preservation element goals. The Historic Master Plan (March 2000) identified a historic context as a basis for evaluating historic resources and identified two primary goals for preservation in Monterey: (a) preservation of historic resources and (b) coordination of preservation efforts among historic property owners.

Project Analysis

Archaeological Resources

New development within the City will involve construction on the limited number of remaining vacant parcels and the intensification of development in existing developed areas, especially existing commercial areas. Nearly all areas of the City where development intensification is proposed are located in archaeologically sensitive areas. In either case, construction activities are likely to involve alteration of the ground surface through trenching, grading, excavations for utility infrastructure and foundations, etc.

Figure 8 Archaeological Sensitivity Map

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Historic Resources

Growth in the City of Monterey in accordance with the General Plan Update has the potential to affect historic resources either through direct impacts to resources or indirectly through changes to the historic settings in which resources are located. Specific impacts to historic resources may result from development projects that would physically alter historic structures or would alter the unique character of the physical environment or setting in which historic resources are located.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- cause a substantial adverse change in the significance of an archaeological or historic resource pursuant to section 15064.5;
- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- disturb any human remains, including those interred outside of formal cemeteries.

Potentially Significant Impact - Archaeological Resources. New development within the City has the potential to damage or alter known or unknown prehistoric archaeological sites. The General Plan Update does not include specific policies to protect archaeological resources during development activities.

Mitigation Measures. At a minimum, the following mitigation measure should be added as policy language to the General Plan Update:

1. Require archaeology studies for projects proposed in areas with a high probability of containing archaeological resources.

Provided that new development is conditioned to be consistent with this mitigation measure, potentially significant impacts would be reduced to a less than significant level.

Potentially Significant Impact—Historic Resources. Growth in the City of Monterey in accordance with the General Plan Update has the potential to affect historic resources either through direct impacts to resources or to their surroundings. Development intensification within existing developed areas may involve demolition or alternation of existing structures. Significant impacts would occur if historic structures are removed or altered, or the unique character of the setting in which historic resources is located is substantially altered.

Mitigation Measures. The General Plan Update Historic Preservation Element contains a range of policies and programs for the protection of historic resources within the Planning Area. The City's Historic Preservation Program provides the overall structure for policy and protection programs. Policies a.1 (which includes eight implementing programs) through a.3 promote maintenance of a preservation program, encourage collection and preservation of historic artifacts, and require maintenance of City-owned historic building consistent with Federal standards. Policy b.1 and its 12 implementing programs call for the coordination of historic preservation activities among all involved agencies. Implementation of new development consistent with these policies would reduce impacts on historic resources to a less than significant level. Restoration and protection of historic buildings is also promoted through General Plan Update Urban Design Element policies e.1 through e.3 which seek to protect and enhance the setting of historic buildings, address consistency of design of new development with existing historic buildings, and maintain existing and develop new paths of history.

2.5 Geology and Soils

Geologic and soils hazards to public safety are the issues of primary concern. Related hazards are a function of the unique geologic and soils conditions found within the Planning Area as well as on local and regional seismic characteristics. The magnitude of hazards typically is dependent on the location of new development in relationship to geologic and soils hazard areas and on the degree to which new development is engineered to address hazards.

Regulatory Framework

Alquist-Priolo Special Studies Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This state law was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures.

The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate

most development projects within the zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. A licensed geologist must prepare an evaluation and written report of a specific site. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet).

Seismic Hazards Mapping Act

Public Resources Code Section 2699 directs cities and counties to "take into account the information provided in available seismic hazard maps" when it adopts or revises the safety element of the general plan and any land-use planning or permitting ordinances. Cities and counties should consider the information presented in these guidelines when adopting or revising these plans and ordinances.

The Seismic Hazards Mapping Program, developed by the California Geologic Survey uses geologic maps to help account for the effect earth materials have on damaging ground shaking and ground failure to structures during an earthquake. In the Seismic Hazards Mapping Program, earth materials are classified according to their adverse effects on buildings and other man-made structures. Development in seismic hazard areas is subject to policies and criteria established by the California Geologic Survey. Approval of development on a site within a seismic hazard area requires the preparation of a geotechnical report and local agency consideration of the policies and criteria set forth by the California Geologic Survey.

Environmental Setting

Local Geology and Soils

The City of Monterey is underlain by a major geologic feature, the Salinian Block, which in turn is underlain by granitic basement rock. The Salinian Block is bounded on the northeast by the San Andreas Fault and on the southwest by the Palo Colorado-San Gregorio Fault. The block is approximately 50 miles wide and 300 miles long. The types of soils and geologic formations that underlie the City are varied, ranging from unconsolidated dune sands along the Monterey Bay to exposed granite and sandstone.

Seismic Setting

California is one of the most active seismic regions in the United States. The City lies adjacent to the boundary zone between the North American and Pacific tectonic plates. The faults associated with this zone are predominantly northwest-trending strike-slip faults that have a right-lateral slip. [Figure 9](#) shows the location of the Chupines Fault, the Navy Fault, and the Berwick Fault, the three local faults inferred to traverse the Planning Area. Information available on the activity of these faults is generally not conclusive, but each is assumed to be potentially active.

There are no known active faults, faults on which movement has occurred within the last 11,000 years, within the Planning Area and no Alquist-Priolo Special Studies Zones. Therefore there is minimal potential for surface rupture in any location within the Planning Area. The most significant fault in the region is the San Andreas Fault, located in eastern Monterey County. Earthquakes on any of the local faults or on other faults located in the vicinity or region could produce significant seismic shaking within the Planning Area.

Liquefaction, seismic settling and landsliding are secondary seismic hazards worth note. Liquefaction is a phenomenon in which a sudden increase in pore fluid pressure causes relatively loose, cohesionless soil beneath the water table to undergo temporary and essentially total loss of shear resistance. Cohesionless soils tend to be those with a higher sand content. Differential settling can occur during seismic groundshaking events when loosely consolidated soil settles, often in an uneven manner. Both liquefaction and differential settling have the potential to cause damage to infrastructure and building foundations. As discussed below, a number of areas within the City have slopes of greater than 25 percent. Slope failure can also occur during seismic shaking events.

Topography and Slopes

Topography and slope within the City is quite variable. Lands along the margin on Monterey Bay tend to be relative flat, but sloped towards the bay. Much of the upland portion of the City is incised by a series of intermittent stream channels that have cut into surface soil and subsurface geologic formations, leaving a series of mesas that trend towards the bay. Much of the City is built on these mesas and on the more level margins of the bay. The northern terminus of the Santa Lucia Mountains is the major regional landform that forms the backdrop to the City. Due to slope and access constraints, development within this area tends to be less dense.

Steep slopes within the Planning Area tend to be located along stream channels and within the hillside areas. [Figure 10, Slope Map](#), illustrates areas of the City where slope exceeds 25 percent.

Soils Issues

Numerous soil types are located within the Planning Area. Each has unique characteristics and potential development limitations and erosion characteristics. Generally, the erosion potential of soils and their expansion properties (soil expansion and contraction can result in damage to building foundations, roads, etc.) are of greatest interest from a development impact perspective. The types of soils that comprise the Planning Area, along with their basic development related characteristics are as follows:

Narlon Series. Soils of the Narlon Series (2 to 30 percent slope) dominate the soil types located in the more western, gently sloping parts of the City and in steeper hillside areas. These soils formed on uplands in soft marine sediments. They generally have moderate to high erosion potential, depending on slope. These soils are moderately expansive.

Figure 9 Local Faults

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Figure 10 Slopes Greater Than 25 Percent

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Baywood Series. The more gently sloping soils located east of El Estero Lake are largely comprised of Baywood Sand soils with 2 to 9 percent slope. These are well drained soils that have formed on stabilized sand dunes. Erosion hazard is slight to moderate.

Sheridan Series. Soils of the Sheridan Series (2 to 30 percent slope) are also common in locations along Del Monte Avenue and on hilly portions of the City. These soils formed in material underlain by granitic and schistose (a metamorphic rock). Erosion potential ranges from slight to high, depending on slope. These soils exhibit low expansiveness.

Santa Lucia Series. In more steeply sloped areas on the east side of Highway 1, Soils of the Santa Lucia Series (15 to 50 percent slope) are prevalent. These are well drained upland soils that are underlain by hard shale bedrock. These soils have low potential for expansion.

Dune Land. In the Del Monte Beach area, the dune formations located along the margin of the Monterey Bay are classified as Dune Land. These areas are comprised of loose wind deposited quartz and feldspar sand on hummocks, mounds, and hills. Some of the dune areas are stabilized by vegetation, others migrate and shift. The wind erosion hazard is high to very high and expansion potential is low.

Coastal Erosion

Coastal areas along Monterey Bay, especially dune deposits, are highly susceptible to coastal erosion from waves and tidal events. Erosion potential varies along the length of the coast. Variability in erosion rates is caused by several factors including sea level, wave patterns influenced by the form of the ocean floor, storm patterns, and the structure and character of dunes in localized areas. Historic average coastal bluff retreat rates have been highest in the former Fort Ord area, averaging up to eight feet per year. Average erosion rates decrease downcoast to about three to five feet per year in Sand City. Further south, within the City, average erosion rates are believed to be about one to two feet per year (PMC 2003). Coastal erosion would be a significant factor for any development proposed along the margin of Monterey Bay.

Project Analysis

Seismic Hazards

With increased development, the number of people and buildings exposed to all forms of seismic hazards will increase. Increased exposure to seismic shaking is considered the most significant hazard, as it is a hazard across the entire City. Hazards from liquefaction, differential settlement, and slope failure are anticipated to be much less widespread as the surface and subsurface conditions that give rise to these hazards during a seismic shaking event is geographically limited.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving;
 - ◇ rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - ◇ strong seismic ground shaking;
 - ◇ seismic -related ground failure including liquefaction; or
 - ◇ landslides.
- Result in a substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or
- Be located on an expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Potentially Significant Impact – Hazards from Seismic Ground Shaking, Seismic Related Ground Failure, Liquefaction, or Landslides and Construction on Unstable Soils or Geologic Units. Over the course of the 20-year General Plan Update, it is quite possible that the City will experience significant seismic shaking as a result of movement on one or more local or regional faults. As the local population is anticipated to grow to 34,539 persons by 2024, a greater number of people will be exposed to such hazards. Unreinforced masonry buildings are very susceptible to damage from ground shaking. Failure of such structures is a source of threat to public safety from earthquake events.

Seismic induced ground failure could occur in limited locations where unconsolidated soils underlie new development projects, namely in areas underlain by sandy soils and/or areas where the ground water table elevation is high. These conditions may occur in limited locations within the City. Hazards from landslides are possible as well, but this hazard is not considered to be substantial.

Mitigation Measures. The most widespread mitigation for protecting public safety in the event of a seismic shaking event is to build new structures to conform to the latest edition of the Uniform Building Code. This is a legal requirement that must be implemented by any City and is a standard condition of development approval.

A number of policies contained within the Safety Element of the General Plan Update would serve to mitigate seismic related hazards to a less than significant level. Seismic hazard policies a.1 through a.7 address actions needed to minimize hazards from fault rupture and seismic shaking that could compromise the integrity and safety of buildings. Of particular importance, policy a.2 requires the preparation of engineering and geologic investigations for proposed projects within high and moderate seismic hazard zones prior to project approval. Since the City is located in such zones, these studies are required for almost all new construction. The studies would identify potential seismic hazards and typically would review soils engineering conditions and recommend actions needed to reduce hazards to an acceptable level. Policy a.6 calls for continued seismic retrofit of existing unreinforced masonry buildings, including historic adobe structures. Continued implementation of this policy would address hazards from existing structures most susceptible to damage during a seismic event.

Geological Hazards policies b.1 through b.6 are designed to minimize hazards from landslides. Among other topics, the policies prohibit development on slopes greater than 25 percent, manage grading to minimize slope instability and vegetation removal, require slope stabilization plans, and minimize exposure of soils and slopes to the erosive effects of storm water runoff.

Implementation of the proposed Safety Element policies is expected to reduce hazards from geologic and seismic hazards to a less than significant level.

Potentially Significant Impact – Soil Erosion and Expansiveness. Depending on soil type and slope, new development could create minimal to significant potential erosion hazards. The susceptibility of new development to potential damage from expansive soils also is variable, depending on soil type. However, it can be generally stated that in locations of existing commercial neighborhoods where new residential development is likely to be concentrated, soils do not generally exhibit extreme erosion potential or expansion potential. Nevertheless, new development proposals must be reviewed to determine the potential intensity of these hazards and new projects conditioned to mitigate hazards as necessary.

Mitigation Measures. Soil erosion and expansiveness hazard would be evaluated in geologic investigations for new development. Per Safety Element policy a.2, engineering and geologic investigations are required for most new construction at any location within the City. Provided that such studies include evaluation of soils related hazards, this impact would be reduced to a less than significant level.

2.6 Hazards and Hazardous Materials

This section of the EIR evaluates the potential effects on human health and safety of several hazards. These include the use, storage, handling and transport of hazardous waste; wildland fire; and operations at the Monterey Peninsula Airport. The extent to which the General Plan Update may result in increased exposure of the public to hazards or activities that could exacerbate existing hazard conditions is discussed.

Regulatory Framework

The Monterey County Environmental Health Division is designated by the State of California as the local Certified Unified Program Agency (CUPA) for managing the use, transport, storage, and/or disposal of hazardous wastes that exceed volumes defined by the State and Federal Governments. Projects that propose the use of such materials in amount that exceed thresholds established by the State and Federal governments must acknowledge this to the CUPA. Businesses are required to prepare and submit a business risk management plan to the CUPA. The plan must include emergency response procedures to be used if a hazardous material is accidentally released to the environment and an inventory of the hazardous materials planned for or being utilized. Local jurisdictions such as the City play an important role in ensuring that projects proposing the use of hazardous materials have business risk management plan submitted to and approved by the CUPA.

Environmental Setting

Hazardous Materials

Concerns related to hazardous materials include the extent to which the General Plan Update would enable uses that use, store, or transport hazardous wastes; expose people to known hazardous waste sites; and/or enable construction near such sites.

In terms of hazardous materials usage, many types of hazardous wastes are used throughout the City in residential, commercial and industrial applications. The Monterey County Environmental Health Division is responsible for managing the use, storage, and disposal of hazardous materials in amounts over a specific threshold (the threshold varies among uses and types of materials). The Environmental Health Division keeps an inventory of hazardous materials users and is responsible for working with users to development plans that ensure the materials are safely used, stored, transported, and disposed.

The State Department of Toxic Substances (DTSC) maintains a Hazardous Waste and Substances List (also known as the “Cortese List”), in accordance with California Government Code Section 65962.5. The Cortese List includes data from the Calsites database of hazardous waste sites, the leaking underground storage tank database and the California Integrated Waste Management Board database of sanitary landfills with evidence of groundwater contamination. There are no sites within the City on the Cortese list.

The Monterey County Health Department Hazardous Materials Branch maintains a database of sites in the City on which contamination caused by leakage of underground storage tanks has been detected. At present, there are about 37 such sites in the City that all are in the process of being remediated. Many of the sites are existing or former gas stations. Others are existing or former commercial or industrial sites. Petroleum hydrocarbons, most commonly gasoline, are the primary contaminants (Cory Welch, Monterey County Health Division, pers. com., February 10, 2004).

The City, the County and the U.S. Army Corps of Engineers have been working since 1999 to further characterize and mitigate contamination of groundwater in the Monterey Area Airport/Casanova/Oak Knoll neighborhood area. Trichloroethylene was detected both on the airport property and off site on the north side of the airport in groundwater in 1999. The source was activities associated with the former Naval Air Station Monterey located on the current airport property. Remediation efforts are underway. The Army Corps has installed two treatment systems in the area to treat groundwater. The County now prohibits drilling of private wells in the area of contamination. (Jennifer Gonzales, City of Monterey Public Works Department, pers. com., February 12, 2004)

The main location for disposal of hazardous wastes in the County is the Monterey Regional Waste Management District's Monterey Peninsula Landfill and Recycling Facility. This facility includes a specialized unit where household hazardous wastes can be disposed of. Several businesses located on the Monterey Peninsula accept used motor oil for recycling.

Fire

Fire hazards can generally be divided into two main types: 1) fires within urban areas that primarily involve specific sites and structures; and 2) fires within undeveloped or minimally developed areas, commonly called wildland fires. Most of the land within the present city limits is developed with urban uses. Fire hazard within these areas is not considered to be high as shown in [Figure 11, Fire Hazard Zones](#), because the City's fire response capability is substantial and access to incident sites is not significantly constrained.

High fire hazard areas in the Planning Area can be correlated with areas considered to be wildlands or areas with wildland type vegetation that are generally not intensely developed. Wildland type vegetation considered to have high fire potential includes native Monterey pine forests and native chaparral. The high fire hazard in these areas is generally attributable to factors that include: vegetation type, the type and intensity of land use, summer climate conditions (namely lack of rainfall), and prevailing slope. Access, or lack thereof, may also play an important role.

The high fire hazard areas within the Planning Area are generally sparsely populated, contain forest and chaparral vegetation that is highly flammable, are of moderate to steep slope, and become extremely dry during the summer months. Forested areas are predominant, comprising nearly the entire high fire hazard area. Chaparral is dominant in areas east of the Monterey Peninsula Airport.

The City of Monterey Fire Department responds to both structure and wildland fires within the Planning Area. The City of Monterey Fire Department maintains three stations and operates several fire prevention programs. In the event that the City does not have the capacity to safely handle a structural or wildland fire, it can request additional firefighting resources through the Monterey County Mutual Aid Plan. The Monterey County Mutual Aid Plan enables any jurisdiction that participates in the plan

to receive support from fire protection services of other jurisdictions that participate in implementing the plan.

Response times to nearly all areas of the City are within the Department's recommended range of five to seven minutes. Response time to Ryan Ranch is on the threshold of being longer than seven minutes. The same would be true for the Fort Ord annexation area (Rick Rodewald, City of Monterey Fire Department, pers. com., February 4, 2004).

Airport Safety

Monterey Peninsula Airport operations have the potential to create hazards in two ways. The first is related to safe operation of approaching and departing aircraft. The second is related to noise impacts. This section focuses on safety issues. Airport related noise issues are discussed in Section 2.9, Noise.

The Monterey Peninsula Airport District's 1992 *Monterey Peninsula Airport Master Plan Update* shows "runway protection zones" at each end of the main airport runway. These zones are areas 2,500 feet wide and 5,000 feet long. Within these areas, land use controls are exercised to minimize potential safety conflicts with activities that take place within the zones. Such controls and guidelines include the prohibition or limitation of uses that involve large assemblages of people, limitations on building heights and heights of other potential obstructions, and prohibition of new structures. Existing land uses that are within the western approach safety zone include much of the U.S. Navy Golf Course, the Monterey County Fairgrounds, and a small section of residential development. Uses within the eastern protection zone include commercial residential development at the Highway 218/Highway 68 intersection. Smaller additional safety areas extend beyond the primary protection zone wherein specific development standards apply in order to minimize conflicts with airport operations.

Emergency Preparedness/Emergency Response

The City of Monterey Fire Department and City of Monterey Police Department coordinate emergency response within the City. The City operates its Emergency Operations Center (EOC) as the nucleus of emergency response coordination and actions. During an emergency, all response activities are managed by the EOC, including information, equipment, volunteers, and other resources. Plans for responses to emergency situations are formulated by fire and police officials and actions to implement those plans are communicated to emergency response teams that operate out of the EOC and throughout the City. The self-contained, 1,300-foot facility is located behind the Police Department.

The City also operates the Neighborhood Emergency Response Training (NERT). The main goal of the NERT program is to help the citizens of Monterey to be self-sufficient in a major disaster by developing multi-functional teams that are cross-trained in basic skills. Graduates of the program are able to serve as a member or leader of volunteer teams that assist the City in emergency response situations. Quarterly drills are coordinated by fire department personnel to maintain and improve NERT skills.

Figure 11 Fire Hazard Zones

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The City's emergency response efforts are coordinated under the broader umbrella of the State of California Office of Emergency Services. The County of Monterey also has an emergency response office, but the City is not a participating jurisdiction in the County's response program.

Emergency evacuation routes within the Planning Area are shown in [Figure 12](#). In the event of a disaster or other major incident, these routes would be utilized by departing residents.

In the event of a release of hazardous materials to the environment, the City would direct a response as the "first responder". The County Environmental Health Division Hazardous Materials Branch and the City of Seaside Hazardous Materials Team would likely be the first agencies to provide support to the City in the event that the City does not have the capacity or capability to fully address the hazard. Both agencies are fully trained and equipped to respond to a variety of hazardous materials related incidents.

Project Analysis

Hazardous Materials

New residential and commercial activities could involve the use of common hazardous materials that are already in widespread use throughout the City and that may be regulated by the Monterey County Environmental Health Division. Additionally, development of new commercial and/or industrial projects on land already designated for such use could involve the use or storage, possibly in underground storage tanks, of larger volumes or a greater diversity of hazardous materials than occurs under existing conditions. The City's annexation of about 138 acres of land, 113 of which are designated for industrial use, could result in activities that do involve significant use of hazardous materials. In all cases where hazardous materials use, storage, or disposal is proposed by new development, such use will be regulated by either the City and/or the Monterey County Environmental Health Division.

Development proposed in the General Plan Update would not increase public health hazards from soil and/or groundwater contamination at the Monterey Peninsula Airport as it affects the Casanova/Oak Knoll neighborhood. No intensification of land use is proposed within the affected area and development potential remains largely the same as under the 1983 City of Monterey General Plan.

Fire

Within an increase in population and an increase in development intensity, especially in areas designated for commercial mixed-use and potential new industrial development in the Ryan Ranch area, the threat of urban fire hazards will rise. As the population concentrates in built up areas, the potential for fires increases, as does the potential for fire to spread more rapidly.

The most significant factor affecting wildland fire risk is human proximity. Approximately 90 percent of all wildland fires are caused by people, with the remaining 10 percent caused by lightning. The majority of new development potential proposed in the General Plan Update is within already developed areas that are not located within or directly adjacent to areas of high fire hazard. However, incremental development of vacant parcels designated for residential uses that are located within or adjacent to forested hillsides or chaparral-covered areas could occur, as would industrial development within the Ryan Ranch annexation area. This would introduce human activity into areas where fire hazard is of significant concern.

Airport

The General Plan Update Land Use Map does not indicate a change in land use or intensification of land use within airport protection approach or departure zones. Aircraft overflights do pass over the heart of the City. Under General Plan Update buildout conditions, a greater number of people are likely to reside within parts of the City over which planes do pass. As the City population increases, so too will the number of people living in the Airport flight paths and hence, the number of people who could be affected in the event that an aircraft fails to land safely at the airport.

Emergency Preparedness

Future development within the City consistent with the General Plan Update will not conflict with the City's emergency response planning or with implementation of emergency response plans. Existing plans and implementation responses may need to be modified or expanded over time as the City's population grows. However, it is not expected that the General Plan Update would result in development conditions that are not already assumed or can be accommodated in emergency response plans of the City and of supporting agencies, including the County and the City of Seaside through its Hazardous Materials Team.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

Figure 12 Emergency Evacuation Routes

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- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- For a project located within an airport land-use plan, or where such a plan has not been adopted, within two miles of a public airport or a public-use airport, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to significant risk of loss, injury.

Potentially Significant Impact – Exposure to or Release of Hazardous Materials, Including within One-Quarter Mile of an Existing or Proposed School. The General Plan Update could result in an increase in the volume, frequency, and diversity of hazardous materials used, handled, stored, transported, and disposed of within the City. The use of such materials is managed by both the City and the Monterey County Environmental Health Division. Standard conditions of approval for such use are typically applied to a proposed project through the project review process. It is possible that the number of incidences in which hazardous materials are released to the environment could increase if their frequency of use or volume of use increases.

The General Plan Update does not contain specific policies for protecting public health from hazards related to use, storage, handling, transport, or disposal of hazardous materials through the project review process or other means. Nor does the General Plan Update contain specific policies related to emergency preparedness response in the event of a release of hazardous materials. It is likely that the use of hazardous materials within one-quarter mile of a proposed or existing school site already occurs within the City and that such use could intensify if additional commercial and/or industrial projects are approved over the next 20 years.

Mitigation Measures

The following mitigations should be added to the General Plan Update Safety Element as policies or modifications made to proposed policies as noted in order to mitigate potentially significant impacts to public health and safety to a less than significant level:

2. Review all applications for discretionary projects to evaluate proposed uses of hazardous materials. Require that projects which propose the use, handling, storage, transportation, and/or disposal of hazardous materials incorporate actions to minimize hazards to public health and safety from such use and conform to the County of Monterey Environmental Health Division requirements for reporting and management of such materials.

3. Modify Safety Element policy g.2 to incorporate language that emergency response plans for releases of hazardous materials to the environment will also continue to be developed.

Implementation of the proposed mitigation measures would reduce hazardous materials related impacts of the General Plan Update to a less than significant level.

Less than Significant Impact – Development on a Site Included on a List of Hazardous Materials Sites. The General Plan Update does not propose development on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. Therefore, the General Plan Update would not create a significant safety hazard to the public or the environment in this regard.

The Safety Element does include a policy that targets cleanup of groundwater contamination at the Monterey Peninsula Airport. Policy e.3 states that clean up of groundwater contamination from Airport properties is required.

Potentially Significant Impact – Safety Hazards from Development Near an Airport. The General Plan Update does not result in a substantial change in development potential or intensity on land located with runway protection zones as defined by the Airport District. Nevertheless, unless the City, in collaboration with the Monterey Peninsula Airport District, properly conditions new development within these zones to be consistent with development standards established by the Airport District, significant safety hazards could arise. Conditions for such projects would be reviewed by the Airport District acting as a responsible agency as defined in the CEQA Guidelines.

Mitigation Measures. Safety Element policies e.1 through e.3 address airport safety issues. Policy e.1 requires the City's continued support of safety improvements to the Monterey Peninsula Airport, policy e.2 notes the need to work with the Airport District through a fire mutual aid agreement, and policy e.3 requires clean up of groundwater contamination from Airport properties. While these policies do address key safety issues related to the airport, the following policy mitigation should be added to the Safety Element to more closely link the City's review of projects that could affect airport operations:

4. In collaboration with the Monterey Peninsula Airport District, the City will review projects that may pose risks to the safe operation of the Monterey Peninsula Airport and mitigate such impacts through the development review process.

Implementation of the above-noted policies and the proposed mitigation measure would reduce this impact to a less than significant level.

Less than Significant Impact – Impair an Emergency Response Plan. The General Plan Update would not have an adverse impact on the ability of the City or other supporting emergency response agencies to implement emergency response plans. Proposed improvements to circulation systems and implementation of Safety Element Emergency Preparedness Policies g.1 through g.6 would benefit emergency response in

event of a natural or man-made disaster. No impact on the ability of other adjacent jurisdictions, including Pacific Grove, to maintain and safely utilize their established emergency evacuation routes is anticipated. No additional mitigation measures are required.

2.7 Hydrology and Water Quality

Hydrology and water quality issues for the General Plan Update are primarily related to the extent to which new development creates new demand for limited water supply, has the potential to degrade surface water and/or groundwater quality, results in an increase in flood hazard potential, or creates public safety concerns by exposing people to tsunamis.

Regulatory Framework

National Pollutant Discharge Elimination System

Water quality degradation is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Program, which was established by the Clean Water Act. The NPDES controls and reduces pollutants to water bodies from point and non-point discharges. In California, the several California Regional Water Quality Control Boards (RWQCB) administer the NPDES Program. Projects disturbing more than one acre of land during construction are required to file a notice of intent to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activities. The applicant must propose control measures that are consistent with the State NPDES General Construction Permit and consistent with recommendations and policies of the local agency and the RWQCB.

The State NPDES General Construction Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that uses storm water “Best Management Practices” to control runoff, erosion and sedimentation from the site both during and after construction. The SWPPP has two major objectives: (1) to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges; and (2) to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges.

City of Monterey Model Water Quality Program

The Model Urban Runoff Program is a how-to-guide developed for local governments to address the issues of polluted runoff in urban areas. This guide incorporates the essential elements of a strong urban runoff program with examples of ordinances, best management practices and reporting forms from existing programs. The Model Urban Runoff Program was developed by a team of representatives from municipal and state government in cooperation with Woodward-Clyde Consultants and was funded by the State Water Resources Control Board.

The Model Urban Runoff Program incorporates a watershed management strategy with the requirements that small municipalities will face through the NPDES Phase II process mandated under the Clean Water Act. Some of the management topics covered in this document include: management structure, legal authority, fiscal resources and funding mechanisms, institutional arrangements and coordination, and implementation. The implementation topics covered include: public involvement and participation, public education and outreach, illicit connections and discharges, municipal operations, construction site, new development and redevelopment, commercial facilities, and industrial facilities.

Monterey Bay Sanctuary Water Quality Protection Program

The Monterey Bay National Marine Sanctuary's Water Quality Protection Program includes educational, monitoring, and development actions to protect the water quality of Monterey Bay and its tributary waters. This program operates under the umbrella of the Coastal Commission's Critical Coastal Areas Program, which coordinates local water quality efforts. Reduction of non-point source pollution, such as urban run-off, is an important component of these programs (Monterey Bay National Marine Sanctuary, 1996).

Environmental Setting

Surface Water Hydrology

The Planning Area is dissected by a number of small creeks and streams that flow directly or indirectly to the Monterey Bay. Lake El Estero and Del Monte Lake are the two largest surface water bodies in the City. They are receiving bodies for several of the streams that flow through the City. Discharge in the streams is seasonal, with nearly all of it occurring during the winter rainy season.

The City owns and maintains a storm drainage system that collects and transports storm water to the Monterey Bay. The system includes over 10 miles of pipelines and drainage channels. Storm water runoff is collected through catch basins and storm water inlets that direct runoff into the pipelines and channels. A series of stormwater outfalls are located along the margin of the Bay through which storm water is discharged.

Sources of Water Quality Degradation

Sedimentation. Sedimentation, or siltation, of water bodies is caused when fine particulate soil matter from upland areas becomes waterborne and then settles in a downstream body of water. Sedimentation is the downstream consequence of erosion, and is a natural geological process common during storm events, but sedimentation in excess of that which would naturally occur is considered environmentally harmful. Sediment has adverse effects both while waterborne (carrier of other pollutants such as nutrients and metals, turbidity and reduced light penetration, declines in some fish species) and after settling (reduced survival of fish eggs, reduced quality of bottom

habitat, reduced channel capacity and increased need for dredging costs). Erosion is discussed in Section 2.5 Geology and Soils. The biological effects of sedimentation are discussed in Section 2.3, Biological and Marine Resources.

Urban Pollutants. A variety of contaminants are common to urban area storm water and irrigation runoff. These contaminants include sediment, pathogens, organic chemicals, nutrients and pesticides, fuel constituents, heavy metals, oil, and grease. These contaminants can be transported into the drainage system, polluting downstream water systems. Urban runoff is a major source of pollutants in coastal estuaries.

Pathogens are commonly contributed by septic systems and improperly disposed of pet waste. Pet waste contains bacteria, viruses, and parasites that can endanger humans and degrade terrestrial and marine habitat and directly impact wildlife and marine organisms. Nutrients found in garden fertilizers and pet waste can rob receiving water of oxygen as can organic waste, killing fish and other marine species. Automobiles are also believed to be the leading source of heavy metals in urban run-off, with copper, lead, and zinc the most prevalent. Metals are toxic to aquatic life, and can contaminate groundwater supplies.

Surface Water Quality

Lakes. The quality of water in the City's two main lakes can be expected to be marginal. Much of the storm water runoff from the most intensely developed portions of the City flows to these lakes. Therefore, they are likely to receive high concentrations of urban pollutants. Pollutant concentrations are likely to be highest at the beginning of the rainy season when pollutants that have accumulated on impervious surfaces such as parking lots, driveways, and roofs, as well as in the City's storm drainage systems (pipes, swales, etc.) are washed into the lakes.

Monterey Bay. Monterey Bay is designated a national marine sanctuary. It is home to one of the most diverse marine ecosystems in the world, including 33 species of marine mammals, 94 species of seabirds, 345 species of fishes, and numerous invertebrates and plants. Water pollution can harm habitat value and aquatic life, restrict fish and shellfish consumption, and limit recreational water contact. Therefore, the transport of pollutants to the Bay in storm water runoff is of significant concern.

Since the Monterey Bay receives essentially all stormwater runoff that is generated within the City, all urban pollutants contained in that stormwater are delivered to the Bay. As noted previously, the Monterey Bay National Marine Sanctuary and the City have developed model urban water quality programs that are intended to substantially reduce the concentration of pollutants delivered to the Bay.

Water Supply and Groundwater

The Monterey Peninsula Water Management District (MPWMD) regulates and manages water supplies for the area within its boundaries, which extend from Seaside to Carmel River and easterly covering the Carmel Valley watershed. The City is serviced

by the California-American Water Company (Cal-Am), a privately owned, franchised water purveyor.

Cal-Am is the largest purveyor within the MPWMD boundaries. Cal-Am draws water from surface water and from wells in Carmel Valley alluvial aquifer and the Seaside coastal groundwater sub-basin. Surface water sources have historically included the San Clemente Dam and the Los Padres Dam. The San Clemente dam was built in 1921 and the Los Padres Dam was constructed in 1948. Over time, the storage capacity in both facilities has largely been lost due to siltation of their reservoirs.

In 1995, Cal-Am delivered approximately 4,539 acre-feet (AF) of water to the City, and approximately 13,392 acre-feet of water to its entire service area. However, in July 1995, the State Water Resources Control Board (SWRCB) found that Cal-Am did not have rights for its current diversion from the Carmel River, and ordered Cal-Am to reduce its diversion from the Carmel River to no more than 14,106 acre feet per year and to implement a water conservation plan to further reduce the amount of diversion by 15 percent during 1996, and an additional five percent thereafter.

To date, the MPWMD has not been successful in developing a new source of water to replace the reduced supply available from the Carmel River or in enhancing groundwater supply. As a result of a significant drop in total available supply, the allocation to the City is not sufficient to meet the City's current housing, economic, and public facility goals.

The Ryan Ranch industrial business park is supplied with water from wells located within the local area. Groundwater withdraw is capped through a permit with Cal-Am. Supply from the wells has not reached the permitted volume to date (Henrietta Stern, MPWMD, pers. com., February 17, 2004).

Water supply would be supplied to new development in the Fort Ord annexation area through a water allocation available through the Fort Ord Reuse Authority. The allocation is from existing available supplies provided in part by groundwater. No new groundwater supply would be required to meet demands of industrial development at the site.

Flooding and Tsunami

Localized flooding has occurred within the City at a number of locations over time. Other areas, due to topography, soil type, and vegetative cover, are subject to flash flooding during high intensity rainfall events. [Figure 13, Flood Hazard Zones](#), shows the 100-year and the 500-year flood zones within the Planning Area based on Federal Emergency Management Agency (FEMA) flood hazard mapping information. These are the areas that are projected to experience flooding during storm events that are expected to occur once every 100 years and once every 500 years, respectively.

Due to the absence of rivers or streams with significant discharge volume within the Planning Area, the area of the City subject to flood hazard is relatively restricted. The

Figure 13 Flood Hazard Zones

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main 100-year flood hazard areas are located at the margins of El Estero Lake and Del Monte Lake. A segment of Del Monte Avenue located largely between the two lakes also carries this designation, because stormwater overflow from the lakes may flood this segment of the roadway. Narrow flood hazard zones are shown along portions of the segment of Canyon Del Rey Creek that is located within the Planning Area. Narrow 100-year flood zones are also shown along the margin of Monterey Bay based on the potential for coastal flooding from wave run up events (a combination of high tide and storm events).

Proposed development within 100-year flood hazard zones would be subject to development standards set forth by FEMA and implemented by the City. Primary standards require that the finished floor elevation of habitable structures be a minimum of one foot above the flood hazard elevation and that any improvements placed in a flood hazard zone not affect downstream flood elevations or restrict flood flows.

Both the City and the Monterey County Water Resources Agency (MCWRA) are responsible for flood control within the City and Planning Area. These agencies will continue to manage flood hazards and monitor development that may be proposed in flood hazard areas and will continue to manage flood control infrastructure to minimize flood hazards.

Tsunamis or “tidal waves” are not identified as a hazard within the City based on information contained within the City’s local coastal program. Tsunamis are seismic waves created when displacement of a large volume of seawater occurs as a result of movement on seafloor faults. Tsunami hazards on the Central Coast had not been extensively studied to date. However, the National Oceanic and Atmospheric Association (NOAA), through its National Tsunami Hazard Mitigation Program, has initiated studies for the Monterey Bay area through the California Office of Emergency Services. Through this program tsunami inundation maps have been developed and provided to the County Office of Emergency Services. The maps illustrate a potential high water line for wave run up and tsunami hazard that has been produced through extensive modeling. The inundation maps still need to be validated through field verification. Local topographic or other physical features could affect the high water line elevation assumed through the modeling process. The program has also funded a study on land use planning for tsunami hazards (Rich Eisner, California Office of Emergency Services, pers., com., February 12, 2004).

Project Analysis

Water Supply/Groundwater

New residential, commercial, and industrial development and the accompanying anticipated growth in population within the Planning Area over the next 20 years will result in an increase in demand for domestic water supply. Lack of water will be a constraint to meeting the City’s development goals over the life of the General Plan Update unless new sources of water are developed.

Implementation of the General Plan Update would result in an increase in demand for water and its full implementation would be possible if additional water is allocated by the MPWMD. The MPWMD has the discretion to increase groundwater withdraw or surface water diversions and to develop new water supplies through dams or desalination pursuant to applicable federal and state laws, to support new development in the City or elsewhere within the MPWMD boundaries. The MPWMD closely manages the availability and allocation of water based on historic use and safe yield studies and provides environmental review of the allocation and use of water from the sources it has chosen. The need to minimize significant impacts on environmental resources is already the primary factor in the MPWMD's limited ability to provide additional water supply to the City.

The General Plan Update contains a policy (Public Facilities policy m.1) that encourages the City to create alternative water sources as necessary to implement the General Plan Update. If the City were to act to implement this policy, any new water development project proposed would be subject to a specific environmental review process. That process would identify the potential adverse environmental impacts of the water supply project and mitigation measures required to reduce impacts on water supply and groundwater to a less than significant level would be identified and implemented.

Water Quality

New development within the Planning Area would have several effects on storm drainage and water quality. First, new development will increase the percentage of the Planning Area covered with impermeable surfaces. This will result in an incremental increase in stormwater volumes that are delivered to the City's storm drainage system and ultimately to the Monterey Bay. The ability of the City's storm drainage facilities to accommodate increases on storm drainage will need to be evaluated. Improvements may be needed to ensure that the capacity of the system is sufficient to avoid failure and localized flooding. Costs for required improvements, if any, must be assigned as appropriate.

Second, the volume of urban pollutants, including sediment, generated within the Planning Areas is likely to increase due to an anticipated increase in population of about 4,000 people and an increase in new residential, commercial and industrial development. Grading of development sites may result in an increase in sediment loads in storm water runoff. Urban pollutants that collect on new and existing impervious surfaces will be washed into the natural surface drainage system (streams and swales) and into the City's storm drainage system to be delivered to local lakes and ultimately to the Monterey Bay. Water quality in surface waters could be substantially degraded unless adequate measures are taken to reduce runoff volumes and urban pollutant concentrations contained in that runoff. Conformance of new development with the City's Model Water Quality Program and conduction of existing urban activities consistent with the Program should help to reduce this potential.

Flooding and Tsunami Hazards

The General Plan Update will allow new development that will be primarily directed to existing developed areas. Increased exposure to hazards from a 500-year flood may occur in the Downtown/East Downtown mixed-use commercial area if land use intensifies as would be permitted. Increased exposure to a 100-year flood can also be expected along the segment of Del Monte Avenue that is located within the flood hazard zone, as traffic volumes on the roadway under General Plan Update buildout will rise. Minor hazards could exist for new development within the Highway 68 corridor portion of the Planning Area, especially at the Highway 68/Highway 218 intersection. However, development potential in this area is not significant. It is not expected that new development would be located within existing flood hazard areas to the extent that down stream flood elevations or flood flows would be increased or redirected.

To the extent that buildout of the few remaining vacant parcels located along the margin of Monterey Bay occurs, wave run up hazards to new development on those parcels would be of concern and require appropriate analysis and mitigation. The same is true in terms of tsunami hazard. The City may wish to utilize information provided to the County Office of Emergency Services on tsunami hazard and land use planning recommendations as a basis for conditioning new development in tsunami hazard areas along the City's coastline.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. would the production rate of preexisting nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner, which would result in flooding on- or off-site;
- Create or contribute run-off water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off; or

- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or
- Cause inundation by seiche, tsunami, or mudflow.

Less than Significant Impact – Creation of Substantial Additional Sources of Polluted Runoff and General Degradation of Water Quality. New development within the City, especially the intensification of use in mixed use commercial areas and new industrial development in the Fort Ord annexation area, could introduce elevated levels of urban pollutants. Those pollutants could be carried in storm water runoff to drainage courses, lakes, and ultimately to the Monterey Bay. Surface and groundwater quality degradation could be significant unless actions are taken to reduce the volume of pollutants generated and/or to adequately remove pollutants from storm water.

Mitigation Measures. The volume of urban pollutants produced, prevented from entering storm water runoff, and/or filtered from storm water will be reduced through implementation of a number of policies in the General Plan Update. Urban Design Element d.1 discourages the proliferation of parking and other hard surfaces at Lake El Estero. Implementation of all policies in the Transportation Element that result in increased transit use, increased pedestrian access, and in general, a reduction in vehicle trips and vehicle miles traveled in the City will help reduce the volume of oil and grease contained in urban runoff. Conservation Element Water Quality policies b.1 through b.4 focus on maintaining and improving surface water quality. Policy b.1 calls for public education to eliminate use of storm drains for disposal of hazardous substances or inappropriate wastes; policy b.2. requires appropriate implementation of erosion and sediment control and regular street sweeping to reduce particulate matter loads in storm water, policy b.3 requires that removal of vegetation and development in erosion prone areas be minimized, and policy b.4 calls for retaining and remediating wetlands, riparian areas, and other habitats that serve to filter degraded water. The City will also continue to implement its Model Urban Runoff Program for the specific purpose of minimizing water quality degradation.

The City's stormwater system is already permitted under the NPDES and the City already implements best management practices to reduce pollutants. The City will continue to implement the Storm Water Quality Program elements from the Model Urban Runoff Program as required by the State's NPDES General Permit for Storm Water Discharges from Small Municipal Storm Sewer Systems as directed in Public Facilities Element policy 1.2.

Implementation of the above referenced policies and programs would reduce water quality impacts from implementing the General Plan Update to a less than significant level.

Potentially Significant Impact – Substantial Depletion of Groundwater Supplies. As has been discussed, water is a constraint to development potential in the City. The need to avoid significant impacts on groundwater supply and quality has resulted in a regulatory cap on the volume of groundwater that can be utilized by the MPWMD for domestic water supply established by the State. It appears that a substantial depletion of groundwater supply is being adequately avoided through the monitoring and regulatory actions of all responsible agencies, including the MPWMD. Nevertheless, the increase in demand for domestic water supply from implementing the General Plan Update, including that derived from groundwater, will continue to put pressure on a limited environmental resource. The MPWMD will continue to have discretion over whether additional supply can be provided to meet the City's needs while minimizing potential impacts on the resource.

The City imposes a standard condition of approval that requires submittal of documentation that a water allocation has been secured by the applicant. No Building Permit is issued by the City unless water is available and allocated to the project. Therefore, development of projects that implement the General Plan Update would be monitored to ensure that they will not contribute to direct or cumulative impact on water supply.

Water demand from new development within the Fort Ord annexation area will be supplied with existing sources of water through the Fort Ord Reuse Authority. New supply would not be required to support development at this location.

Implementation of the General Plan Update is not expected to directly result in a substantial decrease in groundwater recharge potential. With the exception of new industrial development within the Fort Ord annexation area, new development will be focused within already developed commercial areas. Relative to the amount of development potential described in the General Plan Update, the increase in impervious surface area needed to support that development is considered to be insignificant.

Mitigation Measures. Public Facilities policy m.1 and its eight implementation programs are intended to both encourage the creation of alternative sources of water and to minimize demand for domestic water supply within the City. Programs m.1.5 through m.1.8 focus on conservation measures to reduce water demand. Implementation of this policy and its related conservation measures would reduce demand for new water supply, including the supply currently derived from groundwater.

Any actions by the MPWMD to increase surface water supply, increase the volume of groundwater it withdraws from local groundwater aquifers, or generate new supply through other water supply projects to facilitate growth in the City, or any actions taken by the City to secure its own water must be assessed through a CEQA process for their potential to adversely affect groundwater availability and quality. Withdrawal that would result in significant impacts must be mitigated to a less than significant level.

Potentially Significant Impact – Increase in Flood Hazard from Changes in Drainage Patterns or Insufficient Storm Drainage Infrastructure. With the exception of development potential within the Fort Ord annexation area, implementation of the General Plan Update is not expected to result in significant changes in drainage patterns or an increase in storm water volumes that exceed storm drainage infrastructure capacity. Generation of additional storm drainage will be moderated by the fact that most development potential will be directed to locations already developed with impervious surfaces, namely existing commercial areas. Changes in storm drainage runoff volume from intensification of land use in these areas are not expected to be substantial. Existing storm drainage infrastructure may be sufficient to convey increases in runoff, but further analysis would be needed to make specific determinations.

Development of vacant infill parcels and the Fort Ord annexation area will result in an increase in storm drainage volumes. To accommodate new development on remaining small, infill parcels, expansion of existing storm drainage infrastructure may be necessary if existing infrastructure has not already been sized to accommodate buildout of such parcels. A complete storm drainage plan will be needed before development of the Fort Ord annexation area occurs. The plan will include determination of projected stormwater runoff volumes and required improvements to ensure that storm drainage is adequately managed to minimize erosion and localized flooding potential.

Mitigation Measures. Safety Element Flood Hazards policies c.2 and c.4. provide mitigation for this impact. Policy c.2. requires that storm drainage systems be designed to accommodate projected uses before those uses are developed. Policy c.4. requires that projects be designed to maximum natural percolation of rainfall; minimize direct overlay runoff onto adjoining properties, water courses, and streets; and minimize impervious surface cover, as well as incorporate ponding and siltation basins as needed. Public Facilities Storm Drain policy 1.1 states that storm drainage fees be set at a rate sufficient to ensure maintenance, replacement, and/or upgrades to the system as needed.

Implementation of these policies through the development review process would minimize related flooding impacts to a less than significant level.

Potentially Significant Impact - Placement of Housing or Other Improvements within a 100-Year Flood Hazard Zone. The General Plan Update Land Use Map does not enable development within flood hazard zones at a level above that permitted in the existing 1983 City of Monterey General Plan. Therefore, the General Plan Update should not result in a significant increase in exposure of the public to flood hazards defined by FEMA. Any development proposed within a 100-year flood hazard zone must, nevertheless, comply with FEMA standards to mitigate direct impacts to that development and/or to mitigate downstream from a reduction in their ability of the floodplain to convey flood water.

Mitigation Measures. General Plan Update policies noted for the previous impact will help reduce flood hazard potential in the City. However, the General Plan Update does not contain explicit policy language requiring mitigation of hazards from development

within a 100-year flood plain. Therefore, the following should be added to the Safety Element Flood policies:

5. The City will review all development proposals planned for areas within a 100-year flood hazard zone consistent with FEMA National Flood Insurance Program standards. Development proposed within these areas must be mitigated as needed to ensure conformance with National Flood Insurance Program standards.

Potentially Significant Impact – Inundation by Tsunami. Tsunami and wave run up may present a hazard for development of any remaining vacant parcels located along the margin of the Monterey Bay. NOAA is conducting a study of tsunami hazard that may provide more information on the extent of the hazard within the City. Existing information, results of the study, and the mitigation recommendations for tsunami hazards forwarded by NOAA can be used to help guide development decisions as they may be affected by this hazard.

Mitigation Measures. Safety Goal Flood policy c.1 directly addresses tsunami and storm wave run up hazard. The policy states that the potential hazards from storm waves, tsunami, high tidal conditions and flooding for projects along the bay shoreline be considered and mitigated.

Implementation of this policy through the project consideration and review process would reduce this impact to a less than significant level.

2.8 Land Use and Planning

Environmental Setting

Over time, the City has managed to largely retain its image as a small-scale community that is largely residential and visitor serving in nature. Consistent efforts to protect and maintain the wide range of aesthetic physical attributes, namely forested ridges, scenic creek corridors, beach shoreline and rocky coast, and the Monterey Bay have resulted in the City retaining much of its aesthetic appeal. The City's key historical resources and character have also been maintained, giving the City a rich historic feel.

The majority of land in the City already contains some development. Primary land uses include residential development at low to moderate density and visitor-serving, professional office, and retail commercial uses. Commercial uses are predominant in the downtown area, along Lighthouse Avenue, the Cannery Row area, and along North Fremont Street. The City's industrial activity is focused in the existing 300-acre Ryan Ranch area and along the northern side of Highway 68. Industrial uses do not occur in any other parts of the City.

A number of small, vacant parcels do exist within the City. Most are designated for single-family residential development. Approximately 138 acres of land located east of

the Ryan Ranch industrial park that were part of the former Fort Ord have been recently annexed to the City. This area represents the most significant vacant land resource in the City.

Project Analysis

Implementation of the General Plan Update would not result in a substantial change in land use relative to existing conditions per se. Therefore, within the exception of industrial development potential on the recently annexed Fort Ord annexation area, substantial changes in commercial and/or industrial development potential are not anticipated.

Residential development would be the primary form of new growth in the City. The City is required to designate sufficient capacity for residential development consistent with the Regional Housings Needs Assessment prepared by AMBAG. The Regional Housings Needs Assessment identified a future housing need in the City of Monterey of 1,302 new dwelling units for the years 2000 through 2007. The General Plan Update is required to show adequate sites for the 1,302 units to be in compliance with State Law. The General Plan Update proposes to accommodate this housing within its mixed use neighborhoods, which can accommodate higher density housing, due to the existing infrastructure, including available transit, recreation, and commercial opportunities. [Table 8, General Plan Update Residential Development Potential](#), shows that the number of dwelling units that could be constructed within the City 20 years, including the 2002-2007 supply to be accommodated in mixed use neighborhoods.

TABLE 8

General Plan Update Residential Development Potential

Development Area	Number of Units
R-1 District	163
R-3 District	500
Commercial/Industrial District (Residential)	1,302
Defense Language Institute (Residential)	132
Naval Post Graduate School (Residential)	34
Total	2,131

Source: City of Monterey Community Development Department

The mixed use neighborhood developments within the city limits include: Downtown/East Downtown, Cannery Row, Lighthouse Avenue, and the North Fremont neighborhood. [Table 9, Residential Development Potential within Mixed-Use Neighborhoods](#), summarizes the distribution of the 1,302 units within these neighborhoods. Each of these neighborhood areas is described below.

TABLE 9

Residential Development Potential within Mixed-Use Neighborhoods

Proposed Mixed Use Developments	Dwelling Units with Mixed Use Neighborhood Incentives
Downtown	456
East Downtown	456
Cannery Row/Lighthouse	260
North Fremont	130
Total	1,302

Source: City of Monterey Community Development Department

Downtown/East Downtown Mixed Use Neighborhood

Approximately 70 percent of the new residential development was assigned to the Downtown/East Downtown Mixed Use Neighborhood because it is currently well served by transit and contains a variety of commercial and recreation opportunities.

Cannery Row/Lighthouse Mixed Use Neighborhood

Approximately 20 percent of new residential development was assigned to the Cannery Row/Lighthouse neighborhood. The Cannery Row/Lighthouse Mixed Use Neighborhood is within the current WAVE Shuttle area.

North Fremont Mixed Use Neighborhood

Approximately 10 percent of new residential development was assigned to the North Fremont neighborhood. The North Fremont Mixed Use Neighborhood is well served by transit and contains a variety of commercial and recreational uses. The Commercial (C-2) zone currently allows residential uses with a use permit.

Mixed Use Land Use Compatibility

The mixed-use commercial approach to meeting the City’s future housing needs will result in the introduction of housing units within areas that significant numbers of

residences generally do not currently exist. In general, uses that are located adjacent to the designated mixed-use commercial neighborhoods are residential. There are no known industrial uses located adjacent to the mixed-use commercial neighborhoods. Therefore, placement of new residential uses in the neighborhoods should not conflict with surrounding uses from a land use compatibility standpoint. Compatibility issues could arise in terms of traffic circulation and parking demand.

The City has assigned residential development to each mixed-use neighborhood in proportion to the ability of each neighborhood to absorb residential development based, among other factors, on land use compatibility. Because the Downtown/East Downtown neighborhood is believed to have the fewest constraints and greatest opportunities for supporting residential development, about 70 percent of the 1,302 total mixed-use residential unit development capacity is assigned to this area. Due to several potential development restrictions, the Cannery Row/Lighthouse Avenue neighborhood was assigned only 20 percent of the 1,302 units. The North Fremont neighborhood was assigned only 10 percent due to the significant private sector investment needed to facilitate mixed-use development in the area.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and/or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Less than Significant Impact – Physically Divide an Established Community.

Implementation of the General Plan Update would not result in a physical division of an existing community. There are no major infrastructure projects enabled that would disrupt an existing community nor are there significant changes in land use that could allow new development projects that have this effect. No mitigation measures are required.

Impact – Conflict with any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project. As discussed in Section 1.6, Consistency with Local and Regional Plans, the General Plan Update would not conflict with regional plans for air quality management or transportation planning, or with the Fort Ord Reuse Plan for use of former Fort Ord land recently annexed to the City.

Less than Significant Impact – Conflict Habitat Management Plan or Natural Community Conservation Plan. The General Plan Update proposes approximately 113 acres of industrial development in the Fort Ord annexation area. Development of land within the former Fort Ord must be consistent with the Fort Ord Land Use Plan and Habitat Management Plan. Therefore, implementation of the General Plan Update should not conflict with these plans. No mitigation measures are required.

2.9 Noise

Noise generation and exposure to noise is generally of greatest concern for residential land uses, schools, libraries, hospitals, and other uses of land that are highly sensitive to disturbance from noise. Within the Planning Area noise from motor vehicles, as well as aircraft is at issue. Potential long-term and short-term noise concerns are discussed in this section based on information obtained from the General Plan Update Noise Element, *Noise Contour Study* (Edward L. Pack Associates, Inc. 2004), the *Monterey Peninsula Airport Master Plan Update* (P&D Technologies 1992), and the *FAR Part 150 Airport Noise Exposure Map Report for the Monterey Peninsula Airport* (P&D Aviation 1997).

Regulatory Framework

State Standards

State noise standards are identified in Title 24 of the State of California Administrative Code. These standards are known as the “State Insulation Standards”, which require noise levels inside newly constructed residential dwelling units to not exceed a day/night average level of 45 dB.

City of Monterey Standards

The City of Monterey General Plan Update Noise Element utilizes the Community Noise Equivalent Level (CNEL) noise descriptor and specifies an exterior noise exposure limit of 60 dB CNEL for residential land use and other sensitive land uses and 65 dB CNEL for commercial land use. Actions to mitigate noise levels are required if exterior noise levels exceed these standards. The interior noise exposure level for residences, schools, and other noise sensitive development is limited to 45 dBA., consistent with State noise standards. Actions that ensure interior noise levels do not exceed 45 dBA must be taken if exterior noise exposure exceeds the stated standards. Table 10, Noise Exposure Standards, provides the City’s noise standards.

TABLE 10
Noise Exposure Standards

Noise Exposure	Land Use Standard
Above 75 CNEL	All land in this category should be under airport ownership and control.
CNEL 65-74	a. Soundproof (insulate) existing residences, schools, and other noise sensitive development to achieve interior noise levels of CNEL 45 or below. b. Require adequate sound insulation for all new residential and other noise sensitive development in areas exposed to noise levels from CNEL 65-69. c. Avoid areas exposed to noise levels above CNEL 70 for new residential or noise sensitive development unless abated.
CNEL 60-64	Require acoustical studies of proposed new residential and other noise sensitive development. Require sound insulation as necessary to achieve interior noise levels of CNEL 45 or below.

Source: Draft City of Monterey General Plan Update (2003)

Environmental Setting

Vehicular Traffic Noise. The 1982 *City of Monterey General Plan* identifies the major noise sources in the City as motor vehicles and aircraft. At that time, it was estimated that over 4,300 residents were moderately affected by motor vehicle noise. The document noted that noise levels from these sources are expected to decrease over time due to more stringent vehicle noise standards.

Since 1982, traffic volumes on local highways that traverse through the City and on local roadways within the City have increased. It is generally acknowledged that the increase in traffic has brought a corresponding increase in vehicle related noise and an increase in exposure of noise sensitive land uses to elevated noise levels. The General Plan Update Noise Element notes that residential areas currently affected by high noise levels are along Highway 1, David Avenue, and Pacific Street. San Carlos School is identified as a sensitive use that is affected by motor vehicle noise. Commercial areas along Lighthouse Avenue, Del Monte Avenue, and Franklin Street are recognized as being affected by traffic noise on these roadways.

Events held at the Monterey County Fairgrounds do periodically create high noise levels. No other stationary sources of noise (i.e. industrial facilities) exist within the Planning area, which create unacceptable noise levels.

As a basis for projecting future noise levels with buildout of the General Plan Update, a number of noise level measures were made at locations throughout the City as part of the noise study conducted by Edward L. Pack Associates. [Table 11, Existing Noise Level Measurements](#), shows the measurement locations and the corresponding noise level at specific distances from the centerline of the roadways where equipment was placed. The noise study describes the times and dates of the measurements. Equipment was placed in locations where there were no obstructions between the roadway and the equipment. The table also shows average daily traffic (ADT) volumes and average vehicle speeds for the road segments where measurements were taken.

Aircraft Noise. The second significant source of noise is aircraft flights and operations at the Monterey Peninsula Airport, which is located immediately adjacent to the eastern city limits. The Monterey Peninsula Airport is approximately 600 acres and is owned and operated by the Monterey Peninsula Airport District (MPAD). The airport has two runways and flight paths pass over existing development such as the Casanova Oak Knoll neighborhood, Ryan Ranch office park, Garden Road office park, the U.S. Navy Golf Course, and the Monterey County Fairgrounds.

The 1982 *City of Monterey General Plan* noted that at that time, approximately 2,300 residents were moderately affected by aircraft noise (residents living within areas where noise levels exceeded outdoor noise exposure standard). The *Monterey Peninsula Airport Master Plan* (P&D Technologies 1992) indicates that the total yearly passenger count at the Monterey Peninsula Airport had not met forecasts. The lower than anticipated passenger counts over the prior several years has resulted in fewer flights and lower amounts of aircraft noise. The *FAR Part 150 Airport Noise Exposure Map* study prepared in 1997 indicated that approximately 55 acres of the Planning Area were affected by aircraft noise. Approximately 302 single-family homes, 53 multi-family units and two schools (Naval Postgraduate School and Santa Catalina elementary and high schools) were located within the area of impact. Approximately 795 people were estimated to be affected by aircraft noise at that time.

[Figure 14, 2002 Airport Noise Contours](#), presents the noise contours for the Monterey Peninsula Airport for the year 2002 as identified in the *FAR Part 150 Airport Noise Exposure Map* study. As indicated in the figure, the 65 dBA noise contour on the west end of the airport extends approximately 6,000 feet from the runway. The easterly portion of the Naval Postgraduate School, single-family residential, multiple-family residential, and the northerly portion of Santa Catalina elementary and high schools are located within this contour. The 70 dBA noise contour extends approximately 2,500 feet from the west end of the runway. A portion of the Monterey County Fairgrounds, the Navy golf course, and single-family residential uses are located within this contour. The 75 dBA noise contour extends approximately 500 feet from the west end of the runway. A small number of single-family residences within the Oak Knoll neighborhood are located within the 75 dBA noise contour. To the east of the runway, there are no sensitive uses located the 65 dBA or higher noise contour areas. However, several existing commercial uses located at the Highway 68/Highway 218 intersection are within the 65 dBA contour.

TABLE 11
Existing Noise Level Measurements

Road/Source	Between	Speed	Existing		Distance (Feet)
			ADT	CNEL	
Del Monte Ave.	Highway 1/Sloat Ave.	44	42,000	74	40
Del Monte Ave.	Highway 1/Sloat Ave.	44	42,000	64	200
Del Monte Ave.	Camino Estero/ Lighthouse Ave.	44	42,565	64	200
Del Monte Ave.	Sloat Ave./Camino Estero	44	40,962	66	160
Lighthouse Ave.	Del Monte Ave./McClellan Ave.	30	44,000	69	40
Lighthouse Ave.	McClellan Ave./David Ave.	24	29,572	66	35
Fremont St.	Del Rey Oaks Dr./Highway 68	45	23,968	69	75
Fremont St.	Camino Aguajito/Abrego St.	42	34,000	69	72
Pacific St.	Presidio/City Hall	30	13,108	68	30
Pacific St.	City Hall/Munras Ave.	33	9,950	64	42
Munras Ave.	Fremont Ave./Pacific St.	35	24,617	65	72
Munras Ave./ Alvarado St.	Del Monte Ave./Fremont Ave.	35	10,314	65	40
Highway 1	Fremont Ave./Camino Aguajito	64	66,242	73	240
Highway 1	Camino Aguajito/Carmel St.	65	63,323	75	145
Highway 1	Hwy. 218/Dela Vina Ave.	65	73,233	73	100
Highway 1	Dela Vina Ave./Fremont Ave.	65	73,233	63	600
Highway 68	Fremont Ave./Hwy 218	55	18,668	74	50
Highway 68	Hwy 218/York Rd.	50	13,000	74	30
Highway 68	Pacific Grove/Carmel	47	24,880	64	180
David Ave.	Devisadero St./Lighthouse Ave.	33	10,184	68	22

Source: Edward Pack Associates (2004)

Figure 14 Airport Noise Contours

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The Fort Ord annexation area located to the east of the airport is proposed for industrial use. It is located outside the 2002 65 dBA noise contour. The City's land use and noise compatibility standards included in the General Plan Update indicate that exterior noise levels of up to 70 dBA for office buildings and business commercial uses and up to 75 dBA for industrial manufacturing uses are normally acceptable. A combination of these types of uses is likely to occur within the annexation area. Exterior noise levels of up to 80 dBA are conditionally permitted for both types of uses.

Construction Noise. Construction noise is a temporary noise source that is generated from a variety of construction activities that occur both on-site and off-site. These activities can include demolition, hauling of materials, grading, building construction, and construction traffic. Generally, construction equipment can generate noise levels in the range of 70 to 90 decibels at a distance of 50 feet. However, construction noise is generally not constant during the daytime hours and stops toward the evening when construction crews complete their daily work.

Fundamentals of Noise Evaluation

Acoustics. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds we hear in our normal environment do not consist of a single frequency, but rather a broad range of frequencies. As humans do not have perfect hearing, environmental sound measuring instruments have an electrical filter built in so that the instrument's detector replicates human hearing. This filter is called the "A-weighting" network and filters out low and very high frequencies. All environmental noise is reported in terms of A-weighted decibels, notated as "dBA."

Ambient Noise. Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived. Outside of the laboratory, a 3 dB change is considered a just-perceptible difference. A change in level of at least 5 dB is required before any noticeable change in community response would be expected. A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

The effects of noise on people can be listed in three general categories: (1) subjective effects of annoyance, nuisance, and dissatisfaction; (2) interference with activities such as speech, sleep, learning and, relaxing; and (3) physiological effects such as startling, and hearing loss. The levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants, airports, etc., can experience noise in the last category. There is, as yet, no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily due to the wide variation in individual thresholds of annoyance and differing individual past experiences with noise.

Thus, an important way to determine a person's subjective reaction to a new noise is to compare it to the existing environment to which one has adapted. This is called the "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the hearers. Table 12, The A-Weighted Decibel Scale, Human Response, and Common Noise Sources, below, shows the typical human response and noise sources for different noise levels.

TABLE 12
The A-Weighted Decibel Scale, Human Response,
and Common Noise Sources

Noise Level, dBA	Human Response	Noise Source
120-150+	Painfully Loud	<ul style="list-style-type: none"> • Sonic Boom (140 dBA)
100-120	Physical Discomfort	<ul style="list-style-type: none"> • Discotheque (115 dBA) • Motorcycle at 20 ft. (110 dBA) • Power Mower (100 dBA)
70-100	Annoying	<ul style="list-style-type: none"> • Diesel Pump at 100 ft. (95 dBA) • Freight Train at 50 ft. (90 dBA) • Food Blender (90 dBA) • Jet Plane at 1000 ft. (85 dBA) • Freeway at 50 ft. (80 dBA) • Alarm Clock (80 dBA)
50-70	Intrusive	<ul style="list-style-type: none"> Average Traffic at 100 ft. (70 dBA) • Vacuum Cleaner (70 dBA) • Typewriter (65 dBA)
0-50	Quiet	<ul style="list-style-type: none"> • Normal Conversation (50 dBA) • Light Traffic at 100 ft. (45 dBA) • Refrigerator (45 dBA) • Whispering (35 dBA) • Leaves Rustling (10 dBA) • Threshold of Hearing (0 dBA)

Source: Edward L. Pack Associates, Inc.

It is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Furthermore, most people sleep at night and are very sensitive to noise intrusion.

To account for human sensitivity to nighttime noise levels, the Community Noise Equivalent Level (CNEL) noise descriptor was developed. The CNEL divides the 24-hour day into the daytime period of 7:00 a.m. to 10:00 p.m. and the nighttime period of 10:00 p.m. to 7:00 a.m. The nighttime noise levels are reduced by 10 dB to account for the greater sensitivity to noise at night. Additionally, the CNEL is an average noise calculation that takes into consideration both, extreme increases in noise levels, such as vehicle horns, load motorcycles, etc., and extreme decreases in decibel levels, generally during times with decreased numbers of vehicles on the road. A CNEL level that is below the noise standard does not mean that the decibel level at any given time is not higher than or lower than the standard. It is merely a representative calculation of the average decibel level during the daytime and nighttime.

Project Analysis

Motor Vehicle Noise

Future noise levels in the Planning Area will rise due to projected increases in traffic levels that would occur with General Plan Update buildout. This means that higher noise levels will occur further from the centerlines of existing roadways as traffic volumes rise. [Table 13, Projected Year 2020 General Plan Buildout Noise Levels](#), shows the distance (in feet) from the study roadway centerlines at which various noise contours would be located. [Figure 15, 2020 Projected Noise Levels](#), illustrates anticipated vehicle related noise levels along major roadway corridors.

The distance at which various noise intensities are expected, are calculated with the assumption that there are no man-made or natural obstructions that block transmission of noise created along the roadways. Along many of the road segments analyzed, obstructions in the form of buildings or natural features do exist along the margins of the roads. These obstructions act to screen or block some of the vehicle noise from being transmitted farther away from the roadway. Therefore, in many cases, the distance from the roadways at which various noise intensities are experienced may actually be less than indicated in the table or on the noise contour maps.

As can be seen from the table and figure, noise levels are anticipated to be highest along roadways with the highest traffic volumes. These include Highway 1, Highway 68, and Del Monte Avenue.

Under General Plan Update buildout conditions, the distance to the 60 dBA CNEL noise contour will generally increase relative to existing conditions. As a result, it is likely that a greater number of existing noise sensitive uses located along the subject roadways will be exposed to noise levels that exceed City exterior noise exposure standards. Noise levels at existing noise sensitive uses located along these roadways that are already affected by noise will further intensify.

TABLE 13

Projected Year 2020 General Plan Buildout Noise Levels

Road/Source	Between	Future ADT	Distance of Future Noise Contours from Roadway Centerline (feet)					
			80dba	75dba	70dba	65dba	60dba	55dba
Del Monte Ave.	Highway 1/Sloat Ave.	50,000	18	39	83	179	385	830
Del Monte Ave.	Sloat Ave./Camino Estero	50,000	19	42	89	193	415	894
Del Monte Ave.	Camino Estero/Lighthouse Ave.	54,554	20	44	94	202	436	939
Del Monte Ave.	Sloat Ave./Camino Estero	47,838	21	45	96	207	446	960
Lighthouse Ave.	Del Monte Ave./McClellan Ave.	52,500	8	18	39	83	179	386
Lighthouse Ave.	McClellan Ave./David Ave.	34,027	4	10	21	45	97	208
Fremont St.	Del Rey Oaks Dr/Highway 68	21,140	13	27	59	127	275	592
Fremont St.	Camino Aguajito/Abrego St.	45,000	16	35	74	160	346	744
Pacific St.	Presidio/City Hall	17,417	6	12	27	57	124	267
Pacific St.	City Hall/Munras Ave.	12,227	4	9	19	41	89	192
Munras Ave.	Fremont Ave./Pacific St.	29,823	8	18	38	82	176	380
Munras Ave./Alvarado St.	Del Monte Ave./Fremont Ave.	14,848	5	11	24	51	110	237
Highway 1	Fremont Ave./Camino Aguajito	107,250	113	243	524	1,130	2,434	5,245
Highway 1	Camino Aguajito/Carmel St.	77,253	77	166	357	768	1,656	3,567
Highway 1	Hwy. 218/Dela Vina Ave.	87,965	39	83	179	386	831	1,791
Highway 1	Dela Vina Ave./Fremont Ave.	87,965	50	107	232	499	1,075	2,315

Road/Source	Between	Future ADT	Distance of Future Noise Contours from Roadway Centerline (feet)					
			23	51	109	235	505	1,089
Highway 68	Fremont Ave./ Hwy 218	23,877	23	51	109	235	505	1,089
Highway 68	Hwy 218/ York Rd.	16,250	14	30	64	139	299	643
Highway 68	Pacific Grove/ Carmel	27,741	17	36	77	166	358	771
David Ave.	Devisadero St./ Lighthouse Ave.	12,461	4	9	19	40	86	185

Source: Edward L. Pack Associates, Inc.

Rising noise levels along major roadways will affect new development proposed within mixed-use neighborhoods. Construction of noise sensitive residential uses along major transit corridors in the City such as Lighthouse Avenue or Fremont Boulevard could occur. Noise exposure at these uses may well exceed exterior noise exposure standards, thereby triggering the need for mitigation to reduce interior noise levels to 45 dBA or less. Any future development that is located within areas where exterior noise exposure will exceed 60 dBA is required to have a project specific noise study prepared by an acoustical engineer.

Aircraft Noise

Noise forecasts presented in *Far Part 150 Airport Noise Exposure Map Report* (P&D Aviation, Inc. 1997) show that between 1989 and 2002 the total area within the City affected by aircraft noise declined. This is due to an overall decrease in the number of large air carrier and military aircraft that use the Monterey Peninsula Airport. However, a slight increase in the number of flights is expected over the next ten years. An increase in the number of future flights as projected would result in increased noise levels that affect a greater number of people.

The General Plan Update would permit intensification of development within the proposed North Fremont mixed-use neighborhood. A portion of this neighborhood is located within the existing (2002) 65dBA noise contour for the airport. Therefore, its implementation would increase the number of people exposed to airport related noise that exceeds exterior exposure standards. The Fort Ord annexation area is located outside the existing 65 dBA airport noise contour.

As previously noted, commercial and/or private aircraft flights at the airport could increase in the future. If this does occur, a greater area of the city may be exposed to airport related noise than under current conditions. However, the increase could be offset by technological changes to aircraft engines that result in reduced noise generation. The Monterey Peninsula Airport District would need to evaluate the

potential effects of increased noise as part of actions it might take to permit a greater number of aircraft flights into the airport.

Construction Noise

Short-term noise could occur from construction activities within the Planning Area. Existing sensitive uses could experience temporary elevated noise levels during construction activities. New development related construction activities associated with General Plan Update buildout are not expected to create significant sources of groundborne vibrations or other excessive noise events.

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G states that a project would normally have a significant effect on the environment if it would result in:

- exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; or
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; and
- for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Significant Impact – Increased Noise Exposure at Existing Noise Sensitive Land Uses. Implementation of the General Plan Update will result in increased vehicle traffic related noise levels along major roads throughout the City. A limited number of existing noise sensitive uses located along particular road segments will be exposed to higher noise levels.

Mitigation Measures. The General Plan Update Noise Element includes numerous policies that were created to reduce noise exposure within the Planning Area. Policies a.1 and a.2 function to minimize noise generated from truck traffic by limiting trucks to designated truck routes. Policies a.3 and a.4 function to manage traffic flow on the City

Figure 15 2020 Projected Noise Levels

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roadways and State Highways to control noise levels. Policy a.5 requires buffer areas adjacent to roadways and freeways. Policy a.6 encourages the use of alternative modes of transportation to reduce the traffic-generated noise in the City. Policy b.5 requires the City to implement its noise standards, which include a requirement for acoustical studies of proposed new development. An acoustical study will indicate existing and projected exterior noise levels and recommend sound attenuation and insulation measures needed to meet the City's exterior and/or interior noise exposure standards. Implementation of these policies as well as a range of Circulation Element policies designed to reduce the number of vehicle trips within the City would incrementally reduce noise exposure at residential and other sensitive land uses.

Potentially Significant Impact – Exposure of New Development to Noise Levels that Exceed Standards. Future development located along major roadways may be exposed to exterior noise levels that exceed acceptable standards. This is most likely to occur in the proposed mixed-use neighborhoods where residential uses would be constructed within existing transit corridors such as Lighthouse Avenue and Fremont Boulevard.

Mitigation Measures. Mitigations for this impact are largely the same as noted for impacts on existing noise sensitive uses. The focus of mitigation for future uses will be on evaluation of exposure of these uses to noise levels that exceed standards. This is the focus of Policy b.5, which requires performance of acoustical studies for new development proposed in areas where noise exposure may exceed recommended standards and of Policy d.1, which requires implementation of noise mitigations to reduce interior noise levels to an acceptable level. An acoustical study will indicate existing and projected exterior noise exposure levels and describe mitigations needed to reduce exterior exposure levels and/or to ensure that interior noise levels meet acceptable standards. Implementation of the Noise Element policies would reduce this impact to a less than significant level.

Potentially Significant Impact – Exposure to Aircraft Noise that Exceeds Standards: Implementation of the General Plan Update would result in a greater number of people living within areas where airport related noise levels exceed acceptable exterior noise exposure standards. This is primarily the case for the North Fremont mixed-use neighborhood where up to about 10 percent or approximately 130 of the 1,302 total new dwelling units planned within all mixed-use neighborhoods would be located. Residential infill on small parcels located within the immediate vicinity of the airport could also result in an incremental increase in exposure of people to elevated noise levels.

Mitigation Measures. The General Plan Update Noise Element includes several policies that were created to facilitate reduced aircraft noise exposure within the Planning Area. Policies b.1 through b.4 promote a working relationship between the City and the Monterey Peninsula Airport District to ensure that aircraft noise exposure is reduced and/or limited to certain hours. Policies b.5 and d.1 are the most significant related policy mitigations. Policy b.5 requires the City to evaluate land use decisions in the airport area based on its noise exposure standards. Policy d.1 states that the City can require noise mitigations to reduce interior noise levels to an acceptable level based on

its land use compatibility standards. Implementation of these policies would ensure that noise exposure from airport related operations at residential and other sensitive land uses is reduced to a less than significant level.

Potentially Significant Impact - Exposure to Construction Noise that Exceeds Standards: Noise sensitive uses located adjacent to sites where new development takes place could be exposed to temporary, intermittent noise levels of 70 to 90 dBA.

Mitigation Measures. The General Plan Update does not include policy related to construction noise. Construction activities can be limited to normal business hours so that the temporary exposure is eliminated during the most sensitive morning, evening, and nighttime hours. Implementation of the following standard mitigation measure would reduce the impact to a less than significant level:

6. Limit noise generating construction activities between 7:00 AM and 7:00 PM. Include this requirement as a condition of project approval.

2.10 Population and Housing

Environmental Setting

The City of Monterey's population grew steadily between 1890 and 1990 with the most significant increases in 1910, 1930, and 1950. In 2000, the City experienced its first decline in population in over a century. The Census reported a population of 29,674 persons in 2000, representing a seven percent decrease in population between 1990 through the year 2000.

According to the California Department of Finance, the City of Monterey grew from 29,800 to 30,350 persons from January 2002 to January 2003, which represents a 1.8 percent increase in the population (Department of Finance 2003). The 2000 Census reports that 12,600 households exist in the City, which is an approximately one percent decrease since 1990.

As has been discussed in Section 1.3, Project Description and in Section 2.9, Land Use, the General Plan Update provides for the potential development of approximately 2,131 dwelling units over the next 20 years, with 1,302 units of that capacity to be made available during the period from 2003 to 2007. AMBAG's Regional Housing Needs Assessment specifies the number and character of housing that the City must provide in order to meet its regional fair share requirements. The General Plan Update residential development capacity meets AMBAG's fair share housing requirements.

Project Analysis

Implementation of the proposed General Plan Update would result in an increase in the number of residential dwelling units within the Planning Area consistent with AMBAG

regional fair share housing requirements. Given that minimal vacant developable land exists within the City, the General Plan Update proposes to accommodate much of the residential housing development potential within mixed-use commercial neighborhoods. The City does not plan to annex significant new unincorporated areas for the purpose of providing housing. The 20 year residential development capacity of 2,131 units and the five-year (2003-2007) residential development capacity of 1,302 units are sufficient to meet AMBAG requirements.

The estimated population increase at General Plan Update buildout is approximately 4,189. This is an increase of nearly 14 percent over existing conditions (based on an existing population of 30,350 per the California Department of Finance). New residential development capacity will be sufficient to provide for the housing needs of new residents over the 20-year General Plan Update planning period.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Less than Significant Impact – Increase in Population Growth. The General Plan Update will result in an increase in the population of the Planning Area at buildout. However, much of that increase is anticipated in response to availability of additional housing the City will strive to provide to meet its regional fair share housing needs. As was discussed in Section 2.14, Transportation, and 2.15, Utilities and Service Systems, the General Plan Update is not anticipated to require significant expansions of existing roadways or infrastructure, or construction of new roadways or infrastructure that would indirectly induce substantial growth. This issue is also discussed in Section 3.3, Growth Inducing Impacts. No mitigation measures are required.

Less than Significant Impact – Displacement of Housing or People. Implementation of the General Plan Update would not result in the displacement of housing. It would result in an increase in housing stock through intensifying residential development in existing developed commercial areas and enable housing development on the remaining vacant parcels in the City designated for such use. The same can be said for displacement of people. The City is seeking to expand its housing supply rather than reduce existing housing stock. Therefore, it is not anticipated that conversion of existing

housing stock to non-residential uses will take place. No mitigation measures are required.

2.11 Public Services

Residential and industrial uses represent the primary development potential in the City over the next 20 years. The General Plan Update provides development capacity for approximately 2,131 dwelling units to the year 2024. The City has approximately 113 acres of vacant land that is designated for industrial use. With the exception of a limited number of generally small, vacant parcels designated for residential use, most of the remainder of the City is built out.

New residential and industrial development, as well as intensification of commercial or other uses where permitted, will create an incremental increase in demand for public services. CEQA requires the environmental impacts associated with providing new or altered public facilities to meet increased demand for public services to be evaluated. This section of the EIR includes a review of the various public services provided by the City and other agencies and an assessment of if and how an increase in demand for services may have adverse environmental effects.

Environmental Setting

Fire Protection

The City of Monterey Fire Department provides fire protection service to all areas within the city limits except the Naval Postgraduate School facilities and housing areas. Fire protection is also provided to the Presidio of Monterey, Defense Language Institute and to the city of Sand City. The City's fire protection service is designed to resolve fire occurrences in structures less than 5,000 square feet in area, as well as small open range fires of brush, trees, and grass. The Fire Department is also the first responder to incidences involving the release of hazardous materials to the environment. Information on the Department's role in this regard is included in Section 2.6, Hazards and Hazardous Materials.

To achieve additional fire protection for those small percentages of emergencies that require greater resources, the City has entered into reciprocal mutual aid agreements. A number of fire departments within the County are part of the Monterey County Mutual Aid Plan. The City can call for assistance from other fire departments through this plan. The fire departments of the cities of Pacific Grove and Carmel, the U.S. Naval Post Graduate School, the Monterey Peninsula Airport, and the California Division of Forestry are available to provide assistance through this plan or on their own.

The City of Monterey operates three fire stations: Fire Station #1 located at Pacific and Madison Street (the main station); Fire Station #2 located at 582 Hawthorne Street; and Fire Station #3 located at Montecito and Dela Vina avenues. The Department has a

response time standard of five to seven minutes for any location within the City. Currently, the Department is able to meet this standard, though response times to the Ryan Ranch industrial area are close to exceeding the standard.

Police Protection

The City of Monterey Police Department provides all police protection services to the City. The Police Department is located at 351 Madison Street across from City Hall in Downtown Monterey. The Department is staffed by 56 sworn officers and 26 non-sworn personnel. Currently, the Department has about 1.8 sworn officers per 1000 population.

Response times to the scene of an incident vary with the priority placed on the type of incident or activity. Four priority ratings are used. Emergency or life threatening incidents are considered priority one calls. Priority four response is given to administrative or common issues such as animal calls or counter reports.

The Police Department contracts with the County of Monterey to provide dispatch services. Calls are routed from Salinas to officers on patrol on one of three “beats” in the City.

The current Police Department facility located at the Pacific Street/Madison Street intersection, is shared with the Fire Department. The facility was constructed in the 1950s. Though it is still functional, the City recognizes the need to provide more space to both the Police and Fire Departments (Tim Shelby, City of Monterey Police Department, pers. com., February 9, 2004).

Schools

The Monterey Bay Unified School District (MPUSD) provides public school service to the City of Monterey, as well as to the cities of Seaside, Del Rey Oaks, Sand City, Marina, and some unincorporated areas of the County. Schools located in the City of Monterey are listed in [Table 14, MPUSD Schools Attended by Monterey Residents](#). District wide enrollment in the 2002/2003 school year was about 11,329 students, with 5,908 of these in grades K-5; 2,524 in grades 6-8, and 2,897 in grades 9-12 (Colette McLaughlin, MPUSD, pers. com., February 11, 2004).

In general, most Monterey resident students attend schools in the City of Monterey. However, middle school children in the Del Monte and Casa Verde/Oak Knoll neighborhoods are assigned to attend King Middle School in Seaside. Conversely, children in one Seaside neighborhood are assigned to attend Colton in Monterey.

Due to State budget cuts and financial difficulties, the MPUSD Board of Trustees decided to close one elementary school (Monte Vista Elementary) and subsequently convert Colton Middle School to a K-8 and add 6th grade to Bayview Elementary School, La Mesa Elementary School, and Foothill Elementary School. With these new configurations, each school in Monterey is expected to be at or near capacity. The MPUSD also has a high school, Monterey High School, within the city limits.

TABLE 14

MPUSD Schools Attended by Monterey Residents

Monterey Schools	Location
Bayview Elementary (K-6)	680 Belden St.
La Mesa Elementary (K-6)	1 La Mesa Way
Foothill Elementary (K-6)	1700 Via Casoli
Colton School (K-8)	100 Toda Vista
Monterey High School (9-12)	101 Hermann Dr.
Seaside Schools	
King Middle School (6-8)	1713 Broadway Ave.

Source: Monterey Peninsula Unified School District

Parks and Recreation

The City’s park and recreation facility planning is guided through its Parks and Recreation Master Plan, which was last amended in 2000. The Park and Recreation Department, through the Public Works Department, plans for and maintains a wide range of parks and recreation facilities, while Parks and Community Services manages recreation programs and services. Significant recreation facilities include the recently expanded Monterey Sports Center, community centers, neighborhood park facilities, and beach parks. The City of Monterey also operates a number of community centers, including Hilltop Park Center, Archer Park Center, Monterey Senior Center, and Oak Knoll Park Center. [Table 15, City Parks and Recreation Resources](#), includes an inventory of the more significant City’s parks and public facility resources. [Figure 16, Park, Recreation, and Open Space Resources](#), illustrates the location of the City’s park and recreation resources, as well as open space.

A parks and recreation master plan often includes goals for maintaining a specific ratio of parkland acreage to population. At the year 2000 City population of 31,954 people used in the Master Plan, the ratio of active, improved park acreage per 1000 population is about 3.98 acres. Because the City has few remaining vacant parcels, this quantitative approach to planning for new park facilities is less viable. Rather, the City continues to look for all opportunities to expand park and recreation resources within fiscal and land availability constraints.

TABLE 15

City Parks and Recreation Resources

Park	Location	Acres
Mini-Parks		
Lagunita Mirada	Fremont and Iris Canyon	2.2
Neighborhood Parks		
Hilltop Park/Hilltop Park Center	Devisadero Street and David Avenue	2.8
Oak Newton Park	Oak Street and Newton Street	2.5
Laguna Grande Park	Montecito and Virgin	3.5
Larkin Park	Monroe Street and Clay Street	1.4
Via Paraiso Park	Via Paraiso	10.6
Montecito Park	Montecito and Dela Vina	1.0
Fisherman's Flat Park	Via Isola and San Vito Circle	1.5
Deer Flat's Park	Deer Forest Road	1.0
Cypress Park	Cypress and Hoffman	1.0
Community Parks and Centers		
Hoffman/Archer Park Center	542 Archer Street	1.6
Scholze Park/Senior Center	280 Dickman Street	1.2
San Carlos Beach Park	Cannery Row and Reeside Avenue	2.9
Fisherman's Shoreline Park	Fisherman's Wharf/Coast Guard Pier	5.0
Huckleberry Hill Nature Preserve	Skyline Drive and Jefferson	81.0
Veterans Memorial Park	Skyline Drive and Jefferson	62.5
Casanova/Oak Knoll Park/Center	Ramona Avenue/Euclid Avenue	1.3
Whispering Pines Park	Pacific and Alameda	3.1
Monterey Bay Waterfront Park/Window on the Bay	Del Monte Blvd.	9.3
Monterey Sports Center	Washington and Franklin	3.4
Friendly Plaza	Jefferson and Pacific	2.0
Quarry Park	Via Gayuba/Via Del Pinar	10.0
Regional Parks		
Laguna Grande Park	City of Monterey/City of Seaside	34.8
Special Recreation Areas		
Jacks Ballpark	Franklin and Figueroa Streets	3.7
Monterey Tennis Center	401 Pearl Street	N/A

El Estero Park Complex	Del Monte Avenue	45.0
Recreation Trail A	-----	20.20
Recreation Trail B	-----	4.0
Skyline Greenbelt	-----	43.0
Don Dahvee Greenbelt	Munras Avenue	35.8
Iris Canyon Greenbelt	Fremont and Iris Canyon Road	32.1
Peter J. Ferrante Park	Encina/Palo Verde off Casa Verde W	1.1
Soldier Field		9.5

Source: City of Monterey Recreation and Community Services Department

At present, the two main park resource development opportunities and priorities are completion of the Window on the Bay Park and possible park and recreation development on a 75-acre parcel that is part of Ryan Ranch. The Window on the Bay project is partially complete. The City is currently seeking to add two additional properties to the park to complete Phase I of this project. Phase II park development is pending. While the Ryan Ranch parcel represents an open space and recreation development opportunity, that opportunity is constrained by lack of financial resources. There is no specific timeframe in the Master Plan for developing this site.

The Parks and Recreation Master Plan also identifies two small vacant parcels for possible neighborhood park development. The City is currently investigating opportunities to obtain these parcels for future park development.

Joint use of school facilities is also a mechanism for expanding recreational opportunities available in the City.

Project Analysis

Fire Protection

Implementation of the General Plan Update would result in an 4,183-person increase in population as well as the potential for about 113 acres of new industrial development on the Fort Ord Annexation area. New housing development will be concentrated within existing developed areas such that Fire Department response times should not increase. New residential development is not expected to create demand for additional firefighting equipment, as it is likely to be of a character similar to existing conditions. Given that response times to Ryan Ranch are nearly above the Department’s maximum response time standard, addition of significant new industrial development in the Fort Ord annexation area could stress the Department’s ability to respond in a timely manner.

New development is likely to result in an increase in the frequency of calls to which the Fire Department must respond. This too could stress the ability of the Fire Department to respond at its current staffing and equipment levels.

Figure 16, Park, Recreation, and Open Space Resources

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The City has conducted a space analysis study for the Fire and Police Department facility located at the Pacific Street/Madison Street intersection. The conclusion is that the facility is inadequate to meet the needs of each department based on each department's projection of needs to the year 2020. The City plans to construct a new Public Safety Facility at the existing facility site in order to provide more space and capacity to meet each department's long-term service response needs. Funding for the facility is not likely to be available for a minimum of five years, with actual construction not anticipated for another five to ten years (Carl Anderson, City of Monterey Public Facilities Department, February 16, 2004).

Police Protection

An increase in population and development in the City will place an increased demand on police protection services. At a projected 2024 population of 34,549 (DOF 2003 estimate plus 4,189 enabled by residential buildout), the ratio of sworn personnel/1,000 population would decline from 1.85 at present to about 1.6 in 2024. An increase in call frequency would also be expected, creating increased pressure on Police Department personnel to adequately respond to police service needs.

As noted in the prior section on Fire Protection, the City is planning to construct a new Public Safety Facility in the next five to ten years to provide the Police Department with sufficient space and capacity to meet its projected needs to the year 2020.

Schools

As the population of the City increases, so too are demands on the MPUSD's ability to provide educational opportunities for school-age children. The MPUSD uses a factor of 0.7 students per household to estimate increase in demand for school capacity from new residential development. With a residential development capacity of 1,302 by the year 2007 (AMBAG forecasts), an increase of approximately 911 school-age children can be anticipated. With a residential development capacity of 2,131 dwelling units anticipated by the General Plan Update buildout year 2024, a total increase of approximately 1,492 school-age children can be anticipated. It is expected that the existing facilities will be sufficient to accommodate the increase in children; however, if future enrollment does exceed capacity, MPUSD can reopen up facilities that have been closed, but that remain the MPUSD's property.

School districts have the ability to and do collect impact fees and to request dedication of new school sites from private development interests as a condition of approval of new projects. Senate Bill 50 establishes the level of impact fees and the conditions under which land dedication for new schools can be exacted from new development. Meeting impact fee or dedication requirements is the primary method by which new development is acknowledged as having mitigated its cumulative impact on schools.

The MPUSD currently collects \$2.14 per square foot for residential development and \$0.34 per square foot for commercial and industrial development, as allowed by State

law. The MPUSD expects to approve an incremental increase in impact fee rates in the near future.

Parks and Recreation

Demand for parks and recreation resources and facilities will increase through 2024 as the City's population grows. The City currently provides a significant range of active and passive park and recreation resources. The Parks and Recreation Master Plan calls for continued improvements to and expansion of park and recreation opportunities throughout the City.

The City requires the payment of a park and recreation impact fee from new development. The fees are used to support the acquisition and maintenance of park facilities. Though opportunities for parkland dedication as part of new developments is limited due to the limited remaining inventory of vacant developable land in the City, this option can be exercised by the City.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:
 - ◇ Fire protection;
 - ◇ Police protection;
 - ◇ Schools;
 - ◇ Parks; and/or
 - ◇ Other public facilities; or
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and/or

Potentially Significant Impact – Increase in Demand on Fire and Police Services Requiring New/Expanded Public Facility. Implementation of the General Plan Update would result in an increase in demand for Fire Department and Police Department personnel, equipment, and other resources. The City plans to construct a new public safety facility on the site of the existing combined police and fire facility to accommodate the needs of these two departments. The facility would be designed to

meet each department's projected needs to the year 2020. Construction could take place in five to ten years. Construction and operation of the new facility may have significant environmental effects that require mitigation. The City is also monitoring the need to construct a new fire station to enable more efficient response to calls in the Ryan Ranch area. Construction of a new facility also has the potential to create significant environmental impacts.

Mitigation Measures. Public Facilities Policy a.4. requires that major new development must generate enough revenue to pay for the public services it demands. Policy a.5 requires that adequate space in new development be reserved for public facilities, including fire and/or police facilities. Public Facilities Fire Policies c.2 through c.5. address potential needs for expanded fire facilities. Public Facilities Police Policies b.1 and b.3. address needs for additional police facilities. Implementation of these policies will facilitate development of new facilities needed to keep pace with demand on each protection service.

Construction of a new public safety facility and/or a new independent fire station would be considered a "project" that is subject to environmental review pursuant to CEQA. When the City, acting as the project applicant and lead agency, prepares a formal application for either project, the projects will undergo environmental review. Significant adverse effects of the projects would be required to be mitigated to a less than significant level to the extent feasible. The City would be required to identify and make findings of overriding consideration for any significant unavoidable adverse environmental impact. Completion of the environmental review processes and mitigation of adverse environmental impacts will serve as the primary mitigation measure for this impact. No additional mitigation measures are required.

Less than Significant Impact – Physical Impacts Associated with Providing Public School Facilities. Implementation of the General Plan Update would result in the generation of about 911 new school-age children by the year 2007 and a total of 1,492 new school-age children by the year 2024. Based upon existing and projected population increases, the MPUSD currently has sufficient school facilities and capacity within the City to accommodate future growth. Should MPUSD decide to close more schools in Monterey, capacity is available in the Seaside and Marina schools. No physical environmental impacts are anticipated.

Decisions made regarding the public school system serving the City of Monterey is not within the purview of the City of Monterey. The MPUSD is the governmental body with sole discretion regarding school facilities. The General Plan Update does, however, include many policies on continuing a collaborative relationship with MPUSD. Public Facilities Policy a.4. requires that major new development must generate enough revenue to pay for the public services it demands. For school facilities this revenue is generated through impact fees governed by SB 50 (previously discussed). Policy a.5 requires that adequate space in new development be reserved for public facilities, including school facilities. Public Facilities Schools policies d.1 through d.6 also address school issues. Policy d.1. facilitates collaboration with the MPUSD for school site planning; policy d.2 address reuse of MPUSD school sites no longer in use;

policy d.3. encourages collaboration between the City and other institutional uses in the City, including the MPUSD on school planning; policy d.4. Encourages shared use of facilities and resources among the City, military, and schools; policy d.5 supports joint use agreements to enable investment in school district facilities; and policy d.6. encourages retaining Monterey High School in the downtown City core. Implementation of the above referenced policies should mitigate impacts on school facilities.

Potentially Significant Impact – Environmental Effects of Construction of New Park Facilities and Potential Deterioration of Existing or Future Facilities. To ensure that adequate park and recreational facility capacity and services keep pace with increased demand to the year 2024 and existing facilities are appropriately maintained, the General Plan Update includes several policies with implementation that will adequately address these issues. Public Facilities policy a.4. requires that major new development must generate enough revenue to pay for the public services they demand. Policy a.5 requires that adequate space in new development be reserved for public facilities, including parks. Public Facility Park and Recreation Policy j.1 calls for continuous evaluation of where to provide park services as the City grows over time, policy j.4 calls for adequate maintenance of existing park and recreation facilities, policy j.5. requires that new park and recreation facilities be provided for through capital funding, and policy j.6. requires that new development pay its fair share for expanded park and recreation facilities and maintenance of such facilities.

Expansion of existing or construction of new park and recreation facilities will undergo a project level environmental review as part of the CEQA process at the time new projects are proposed by the City. That review will evaluate whether significant adverse environmental effects may occur and require that those effects be mitigated to a less than significant level. No additional mitigation measures are required.

2.12 Transportation/Traffic

The General Plan Update would facilitate an increase in traffic generation that will affect circulation conditions on the local and regional roadway network. The General Plan Update Circulation Element includes a broad range of policies for managing and optimizing the function of the transportation system to accommodate additional traffic. These policies address transportation and parking management (which encompasses transportation systems management, travel demand management, and master parking plan programs); management of land use; roadway operations, improvements; alternative transportation, including bicycle and pedestrian circulation as well as a detailed plan for operations and expansion of transit, parking; and monitoring of the roadway network to ensure that roadway operations remain within acceptable thresholds identified by the city.

The *City of Monterey General Plan Update Traffic Study* (Higgins Associates Inc. 2004, hereafter “Traffic Study”) presents a complete analysis of existing conditions and effects of General Plan Update implementation on the circulation system. The entire report is

available for review at the City of Monterey Planning Division located in Colton Hall. This section summarizes key elements of the Traffic Study as well as key city transportation and circulation policies whose implementation will promote long-term efficient circulation operations.

Environmental Setting

Study Intersections and Road Segments

The Traffic Study was prepared following the standards of the City of Monterey. Synchro 5 software was utilized in evaluating the operational levels of service at the study intersections. Planning level analysis was performed to determine the level of service for the study segments. This level of analysis uses the 2000 Highway Capacity Manual volume thresholds to determine the levels of service on segments. Intersections and roadway segment operations were evaluated under Existing and General Plan Update Buildout (2020) conditions.

Roadway Classification

The City has a roadway classification system, which includes the following:

- Freeways;
- Major Arterials;
- Minor Arterials;
- Collectors; and
- Local Streets

Level of Service Standards and Study Road Segment/Intersection Operations

The level of service is a standard used to describe the operating conditions on a roadway segment or at an intersection.

Level of service A represents free-flow un-congested traffic conditions, while level of service F represents highly congested traffic conditions with unacceptable delay to vehicles at the intersections and on the road segments. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes.

Factors that may affect traffic flow conditions on roadway segments include intersection channelization design, type of traffic control devices, bicycle and pedestrian volumes, driveway activities, and on-street parking activities. Furthermore, urban street levels of service are based on through-vehicle travel speed for the segment or for the entire street under consideration. Travel speed is the basic service measure for urban streets.

Intersection operations level of service is based upon the average vehicular delay at the intersection. The average delay is then correlated to a level of service. For two-way stop controlled intersections, the vehicle delay for side street traffic is analyzed. Level of service for each side street movement is based on the distribution of gaps in the major street traffic stream and driver judgment in selecting gaps.

The City of Monterey operational standard varies by type and classification of roadways. The level of service standard is D for roadways that do not provide alternative modes of transportation. The level of service standard is E and F for roadways that do provide alternative modes of transportation. [Table 16, City Level of Service Standard Criteria](#), includes the City’s standards. [Table 17, Level of Service Standards for Specific Roadway Segments](#), shows a list of the roadway segments evaluated in the Traffic Study along with the level of service standard for each segment. [Table 18, Level of Service Standards for Intersections](#), lists the intersections evaluated along with the existing level of service standard for each.

Highway 1 and the intersections along Highway 68 (Holman Highway and Highway 1 Southbound Off Ramp, Ragsdale Drive and Highway 68, York Road and Highway 68, and Olmsted Road and Highway 68) fall under Caltrans jurisdiction and thus Caltrans level of service standards apply. The existing standard for Caltrans facilities is level of service C.

TABLE 16

City Level of Service Standard Criteria

Roadway Segment	Roadway has a Class I/II bike route connecting to the Recreation Trail	Road has transit service with headway of less than 20 minutes and operates year round during the AM/PM peak hours.	LOS Standard
1. Auto Corridor	No	No	D
2. Bicycle Corridor	Yes	No	E
3. Transit Corridor	No	Yes	E
4. Multimodal Corridor	Yes	Yes	F-2*

*Note: F-2 denotes that level of service F conditions are not exceeded two consecutive hours at any time during the day under typical weekday conditions. Based on the above table, the following segment level of service standards would apply to the analysis in this study.

Source: Higgins Associates

TABLE 17

Level of Service Standards for Specific Roadway Segments

Roadway Segment Number	Roadway Segment	LOS Standard
1	Abrego Street	D
2	Airport Road	D
3	Camino Aguajito	D
4	Camino El Estero	D
5	Casa Verde Way	D
6	David Avenue	D
7	Del Monte Avenue	D
8	El Dorado Street	D
9	Foam Street	D
10	Franklin Avenue	D
11	Garden Road	D
12	General Jim Moore	D
13	Hawthorne Street	D
14	Hawthorne Street	D
15	Highway 1	C
16	Highway 218	C
17	Highway 68	C
18	Josselyn Canyon Road	D
19	Lighthouse Avenue	D
20	Mar Vista Drive	D
21	Mark Thomas Drive	D
22	Munras Avenue	D
23	North Fremont Street	E
24	Olmstead Road	C
25	Pacific Street	D
26	Pearl Street	D
27	Pine Avenue	D
28	Prescott Avenue	D
29	Ragsdale Drive	C

Roadway Segment Number	Roadway Segment	LOS Standard
30	Reeside Avenue	D
31	Ryan Ranch	D
32	Skyline Drive	D
33	Skyline Forest	D
34	Sloat Avenue	D
35	Soledad Drive	D
36	Tyler Street	D
37	Washington Street	D
38	Wave Street	D

Source: Higgins Associates

Existing Traffic Conditions

The City provided the majority of the intersection turning volume count information for both the AM and PM peak periods. Higgins Associates counted the intersections of Munras/Soledad and Highway 1 Southbound Off Ramp/Holman Highway. Recent traffic studies were conducted at the Highway 68/Ragsdale Drive and Highway 68/Olmsted Road intersections and the available count data was used for the existing analysis. All the counts were conducted between June 2002 and December 2003. Signal timing plan information was also obtained from the City for the AM and PM peak hours.

Existing Roadway Segment Analysis. Planning level analysis was performed to determine the level of service for the roadway study segments. This level of analysis uses the 2000 Highway Capacity Manual volume thresholds to determine the levels of service on segments. The level of service results are based on Average Daily Traffic (ADT). The ADT volumes were obtained from the base year model (Year 2000) for the City of Monterey. [Table 19, Roadway Segments Currently Requiring Mitigation](#), indicates the roadway segments that are operating at an unacceptable level of service under existing conditions. All other roadways are operating at acceptable levels of service. Roadways are defined as being under either City or Caltrans jurisdiction. Table 19 also shows the theoretical number of lanes that would be needed to ensure adequate levels of service on all roadways. It also shows a range of mitigation options that could be employed to improve existing levels of service to acceptable standards. As stated in the Traffic Study, lane widening, planned projects, and/or alternative transportation management options can be employed to mitigate traffic impacts on the impacted segments to a less than significant level. The General Plan Update contains numerous policies that direct the City to implement physical roadway improvements, roadway operations improvements, and expand alternative transit systems such that adequate levels of service will be achieved.

TABLE 18

Level of Service Standards for Intersections

Intersection Number	Intersection	LOS Standard
1	Lighthouse Avenue/David Avenue	D
2	Foam Street/Reeside Avenue	D
3	Pacific Street/Franklin Street	D
4	Del Monte Avenue/Washington Street	D
5	Lighthouse Avenue/Reeside Avenue	D
6	Del Monte Avenue/Camino El Estero	D
7	Del Monte Avenue/Camino Aguajito	D
8	Del Monte Avenue/Sloat Avenue	D
9	Fremont Street/Abrego Street	D
10	Fremont Street/Camino Aguajito	D
11	Munras Avenue/Soledad Drive	D
12	Lighthouse Avenue/Hoffman Avenue	D
13	Highway 68/Ragsdale Drive (unsignalized)	C (E on worst approach)
14	Highway 68/York Road	C
15	Highway 1 SB Off Ramp/Holman Highway	C
16	Lighthouse Avenue/Prescott Avenue	D
17	Del Monte Avenue/Figueroa Street	D
18	Fremont Street/Casanova Avenue	D
19	Highway 68/Olmstead Road	C

Source: Higgins Associates

Existing Intersection Analysis. Study intersections were analyzed during the AM and PM peak hour. Intersection operations and their consistency with City and Caltrans level of service standards are as follows:

The Lighthouse Avenue/David Avenue signalized intersection operates at level of service B during the AM peak hour and level of service D during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

The Foam Street/Reeside Avenue signalized intersection operates at level of service A during the AM peak hour and level of service B during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

TABLE 19

Roadway Segments Currently Requiring Mitigation

Roadway	From/To	LOS*	Theoretical Mitigation	Proposed Mitigation	Result
			Widen (# Lanes)	Trans. Mngmnt Options	
City Roadways					
Del Monte Ave	Camino Aguajito/ Camino El Estero	F	6	TDM*	Mitigated
Del Monte Ave	Naval Post Gate/Sloat	F	6	ITS*	
Del Monte Ave	Casa Verde/Palo Verde	F	6	Expanded Transit	
Del Monte Ave	Casa Verde/Hwy 1	E	6		
Lighthouse Ave	Prescott/David	E	6		
Lighthouse Ave	Foam/Reeside	F	6		
Lighthouse Curve	Foam/Pacific	F	8		
Caltrans Roadways					
Highway 1	Soledad/Camino Aguajito	D	6	TDM	Mitigated
Highway 1	Fremont/Highway 68	F	6	ITS	
Highway 1	Highway 218/Fremont	E	6	Expanded Transit	
Highway 1	Del Monte/Hwy 218	F	6		
Highway 68	Highway 1/ CHOMP Driveway	E	4		
Highway 68	Garden/Josselyn Canyon	E	4	TAMC Regional	
Highway 68	York/Ragsdale	E	4	Impact Fee**	

* LOS-Level of Service, TDM-Travel Demand Management, ITS-Intelligent Transit System

** TAMC (Transportation Agency of Monterey County) is currently proposing a regional transportation impact fee that would be levied against new residential, commercial and industrial development. The fee would finance regional transportation network improvements.

Source: Higgins Associates

The Pacific Street/Franklin Street signalized intersection operates at level of service B during both the AM and the PM peak hours. The level of service standard for this intersection is D; therefore no mitigation is required.

The Del Monte Avenue/Washington Street signalized intersection operates at level of service D during the AM peak hour and level of service E during the PM peak hours. The level of service standard for this intersection is D; therefore *mitigation is required*.

The Lighthouse Avenue/Reeside Avenue signalized intersection operates at level of service D during the AM peak hour and level of service C during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

The Del Monte Avenue/Camino El Estero signalized intersection operates at level of service C during the AM peak hour and level of service D during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

The Del Monte Avenue/Camino Aguajito signalized intersection operates at level of service A during the AM peak hour and level of service D during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

The Del Monte Avenue/Sloat Avenue signalized intersection operates at level of service A during the AM peak hour and level of service B during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

The Fremont Street/Abrego Street signalized intersection operates at level of service B during the AM peak hour and level of service B during the PM peak hour. The level of service standard for this intersection is D; therefore no mitigation is required.

The Fremont Street/Camino Aguajito signalized intersection operates at level of service D during the AM peak hour and level of service F during the PM peak hour; therefore *mitigation is required*.

The Munras Avenue/Soledad Drive signalized intersection operates at level of service C during the AM peak hour and level of service F during the PM peak hour; therefore *mitigation is required*.

The Lighthouse Avenue/Hoffman Avenue signalized intersection operates at level of service A during both the AM and the PM peak hours. The level of service standard for this intersection is D; therefore no mitigation is required.

The Highway 68/Ragsdale Drive unsignalized intersection operates at level of service E during the AM peak hour and level of service F during the PM peak hour on the worst approaches; therefore *mitigation is required*.

The Highway 68/York Road signalized intersection operates at level of service B during the AM peak hour and level of service C during the PM peak hour; therefore no mitigation is required.

The Highway 1 SB Off Ramp/Holman Highway signalized intersection operates at level of service F during both the AM and the PM peak hours; therefore *mitigation is required*.

The Lighthouse Avenue/Prescott Avenue signalized intersection operates at level of service B during the AM peak hour and level of service B during the PM peak hour; therefore no mitigation is required.

The Del Monte Avenue/Figueroa Street signalized intersection operates at level of service B during the AM peak hour and level of service B during the PM peak hour; therefore no mitigation is required.

The Fremont Street/Casanova Avenue signalized intersection operates at level of service D during the AM peak hour and level of service D during the PM peak hour; therefore no mitigation is required.

The Highway 68/Olmsted Road signalized intersection operates at level of service C during the AM peak hour and level of service C during the PM peak hour; therefore no mitigation is required.

[Table 20, Intersections Currently Requiring Mitigation](#), summarizes the study area intersections that require mitigation and projects that are approved or planned to ensure the levels of service for existing conditions meet City and/or Caltrans standards.

Transit Service

The Monterey-Salinas Transit District (MST) is the principal transit service for the City of Monterey and the surrounding communities. MST is a joint powers agency with a board of directors that includes a representative from the City of Monterey. Thirteen MST routes currently serve the citizens of the community. The Simoneau Plaza located in downtown Monterey is the transfer center for all routes serving the City. Senior and disabled citizens can use the MST fixed-route and Direct Area Response Transit (DART). MST also operates the RIDES program for disabled citizens. These routes operate on weekdays and Saturdays from approximately 7:00 AM to 11:00 PM and from approximately 7:30 AM to 5:30 PM on Sundays and holidays.

Existing Bikeway and Pedestrian Facilities

The City of Monterey maintains an extensive network of Class 1, 2, and 3 bicycle paths and pedestrian sidewalks. The most notable bicycle and pedestrian path is the City's Recreational Trail that is located along the coastal side of the City. The Recreational Trail is a dual use facility that offers people destination opportunities, such as the restaurants or retail stores along Cannery Row or Fisherman's Wharf, or one of many

parks for relaxing or wildlife viewing and sightseeing. The City maintains sidewalks on almost all City roadways and some roadways have bicycle lanes.

TABLE 20

Intersections Currently Requiring Mitigation

Intersection	Existing Worst Case LOS	Mitigation Required (Planned or Approved)	Mitigated LOS
City Intersections			
Fremont/Aguajito	F	2 nd Southbound Left Turn Lane	D Meets Standard
Munras/Soledad	F	New Signal Timing	D Meets Standard
Washington/Del Monte	E	Planned City Improvement Project	D Meets Standard
Caltrans Intersections			
Highway 68/Ragsdale	F	Funded Caltrans Project	A Meets Standard
Highway 1 Southbound Off Ramp/Holman Hwy.	F	Lane addition/signal timing	B Meets Standard

Source: Higgins Associates

Parking

Parking conditions throughout the City vary greatly. Some areas, mostly in the residential neighborhoods, have on-site and street parking, while much of the retail areas, such as Cannery Row, have street parking and public garages available and a minimal amount of on-site parking. The City’s goal is to fully utilize the valuable commercial land opportunities throughout the City by implementing a variety of parking programs. Some programs include shared parking, which provides users with different peak parking requirements to share the same parking facilities. Also, the City provides bicycle and pedestrian infrastructure throughout the City as an incentive to walk or ride a bike rather than drive. The available incentives help to reduce the demands on parking throughout the City.

Project Analysis

General Plan Update Buildout (2020) Traffic Conditions

For purposes of the Traffic Study, it was anticipated that the growth projected in the General Plan Update would be realized by 2020. The 2020 traffic volumes are the

maximum traffic that would be expected on the City of Monterey road network based on the assumptions for development within the next 20 years. The percentage change in traffic volumes on road segments and intersections conditions created by implementation of the General Plan Update would vary across the City based on existing traffic levels and the anticipated distribution of new trips. Increases on some roadway segments range to as high as 50 to 60 percent, while on other segments, traffic volumes would actually decrease. Exhibit 11 of the Traffic Study, Year 2020 Travel Forecast, is included in this EIR as [Appendix B](#). It shows the anticipated percentage change in traffic volumes on selected road segments under 2020 conditions. In a number of cases, the changes will cause a decrease in levels of service. Such changes are considered to be significant impacts.

It should be noted that the focus of the land use and transportation strategy in the General Plan Update is based on implications of future development on traffic and circulation conditions. The majority of new residential development is planned within commercial mixed-use neighborhoods. This strategy should result in reduced daily vehicle trip generation, as residents would have immediate access to shops, services, and jobs in proximity to one another. Transit use should also be better supported because population density within existing transit corridors areas will make transit more commercially viable. It is estimated that the new development within the mixed-use neighborhoods would generate a minimum of thirty percent fewer automobile trips than traditional suburban development.

2020 Regional Road Network Improvements. The City is not expected to experience significant growth over the next 20 years and as such the local street network is not expected to undergo significant improvements either. The *2002 Monterey County Regional Transportation Plan (RTP)* of the Transportation Agency for Monterey County (TAMC) was adopted in February 2002. This report contains roadway improvement projects in and around the City of Monterey. Staff members from AMBAG, TAMC and the City of Monterey identified these projects, together with some unfunded projects to be analyzed in the City's traffic model for the future year traffic analysis. The following projects are located within the City of Monterey:

1. Holman Highway (State Route 68) widening from Highway 1 to CHOMP (Community Hospital of the Monterey Peninsula);
2. Construction of a connector road between Upper Ragsdale Drive and South Boundary Road;
3. Widening of Del Monte Avenue between Camino El Estero and Sloat Avenue;
4. Fremont Street/Camino Aguajito improvements;
5. Del Monte Avenue/Figueroa Street improvements; and
6. Lighthouse Avenue/David Avenue improvements.

2020 City of Monterey Road Network Improvements. The following Capital Improvement Program (CIP) projects for the City have been included in the 2020 scenario. These are included in the City of Monterey Model Network for 2020. Specific information on these improvements can be found in the Traffic Study.

1. Del Monte Avenue widening (Camino El Estero – Sloat Avenue). The project includes the widening of the roadway and the addition of lanes at the intersections along Del Monte Avenue between Camino El Estero and Sloat Avenue.
2. Fremont Street/Camino Aguajito intersection improvements. The project includes modifying lane and turning configurations.
3. Del Monte Avenue/Figueroa Street intersection improvements. This project includes improved lane configurations.
4. Lighthouse Avenue/David Avenue intersection improvements. This project also includes a variety of lane and turning configuration changes.

General Plan Update Buildout (2020) Segment Analysis. Planning level analysis was performed to determine the level of service for the roadway study segments under the General Plan Update Buildout scenario. This level of analysis uses the 2000 Highway Capacity Manual volume thresholds to determine the levels of service on segments. The level of service results are based on Average Daily Traffic (ADT). [Table 21, Roadway Segments Requiring Mitigation – General Plan Buildout Conditions](#), shows segments that would not meet the City or Caltrans level of service standards described previously. Mitigation would be required for each segment in order to bring the segment into conformance with the applicable level of service standard. Mitigations include implementation of a range of policies contained in the General Plan Update, planned City and Caltrans/TAMC improvements, and a range of possible transportation management options discussed previously. General Plan Update policies that serve as mitigation are noted in the Impacts and Mitigation Measures section.

General Plan Update Buildout (2020) Intersection Analysis. Study intersections were analyzed during the AM and PM peak hour. Under buildout conditions, the following intersections would not meet applicable City or Caltrans level of service standards. All other intersections would meet the standards. Mitigation at the following intersections would be required to improve the level of service consistent with the appropriate standard:

The Lighthouse Avenue/Reeside Avenue signalized intersection would operate at level of service F during both the AM peak and the PM peak hours; therefore, *mitigation is required*. General Plan Update Circulation Element policy c.12 directs the City to maintain two-way traffic on Lighthouse Avenue and a mitigation measure has been developed (mitigation measure 8) which describes actions to be taken by the City to address circulation concerns on Lighthouse Avenue. Additional mitigation measures are proposed whose inclusion in the General Plan Update as new policies should reduce impacts at this intersection to a less than significant level.

TABLE 21

Roadway Segments Requiring Mitigation – General Plan Buildout Conditions

Roadway	From/To	LOS	Theoretical (Widen - # lanes)	Proposed Mitigation		Result
				General Plan* and Planned Projects	General Plan and Trans. Mngmt.	
City Roadways						
Del Monte Ave	Camino Aguajito/ Camino El Estero	E	8	General Plan Policies/ Planned Widening Project	General Plan Policies for TDM** ITS**	Mitigated
Del Monte Ave	Naval Post Gate/Sloat	F				
Del Monte Ave	Casa Verde/Palo Verde	F				
Del Monte Ave	Casa Verde/Hwy 1	F				
Fremont Ave	Camino Aguajito/ Hwy 1	E	6	General Plan Policies/ Planned Project	Transit/ Mitigation Measures 7 and 9	
Lighthouse Ave	Prescott/David	F	6	General Plan Policies/ Mitigation Measure 8		
Lighthouse Ave	Foam/Reeside	F				
Lighthouse Curve	Foam/Pacific	F				
Pacific Street	Franklin/Del Monte	E	4	General Plan Policies/ Planned Project		
Caltrans Roadways						
Highway 1	Soledad/Camino Aguajito	E	6	General Plan Policies/ Caltrans & TAMC Projects/ TAMC Impact Fee/ Mitigation Measure 10	General Plan Policies for TDM ITS Transit/ Mitigation Measures 7, 9 & 10	Mitigated
Highway 1	Highway 218/Fremont	D	8			
Highway 1	Del Monte/Hwy 218	F	8			
Highway 68	Garden/Josselyn Canyon	E	4			
Highway 68	York/Ragsdale	E	4			

* General Plan policies that mitigate impacts are described in the Impacts and Mitigations section.

** TDM-Travel Demand Management, ITS–Intelligent Transportation Systems

Source: Higgins Associates

The Fremont Street/Camino Aguajito signalized intersection would operate at level of service E during the AM peak hour and level of service F during the PM peak hour; therefore, *mitigation is required*. The CIP improvements proposed for this intersection are not likely to fully mitigate impacts to achieve an acceptable level of service. The Traffic Study recommends a reconfiguration of the intersection that is different than included in the CIP. The configuration is included in the Traffic Study. Even with implementation of the recommended mitigation, the level of service would improve only from F to E, which remains below the acceptable threshold for this intersection. The Traffic Study includes a recommendation that the City change its acceptable level of service standard for this intersection from D to E such that the proposed improvements would be sufficient to meet the revised City standard. General Plan Update Circulation Element Policy c.14 and Program c.14.1 direct the City to address mitigation of future circulation conditions at this intersection. In combination with other General Plan Update circulation policies and additional mitigation measures included in this section of the EIR, future circulation conditions at this intersection should be adequately mitigated.

The Fremont Street/Casanova Avenue signalized intersection would operate at level of service B during the AM peak hour and level of service E during the PM peak hour; therefore, *mitigation is required*. Recommended mitigation is a modification of the signal timing to optimize flow. This improvement would improve the level of service to an acceptable C.

The Highway 68/York Road signalized intersection would operate at level of service C during the AM peak hour and level of service E during the PM peak hour; therefore, *mitigation is required*. Recommended mitigation includes a reconfiguration of the intersection. General Plan Update Circulation Element Policy c.13 directs the City to support capacity improvements on State highways, including Highway 68. The City would cooperate with TAMC and/or Caltrans to facilitate such improvements. A mitigation measure included in this section of the EIR also addresses this issue.

The Highway 68/Olmsted Road signalized intersection would operate at level of service E during the AM peak hour and level of service E during the PM peak hour; therefore, *mitigation is required*. Recommended mitigation includes restriping to enable protected left turn lanes, a change in signal timing, and construction of two through lanes on the eastbound and westbound approaches. The level of service would be mitigated to an acceptable C. General Plan Update Circulation Element Policy c.13 directs the City to support capacity improvements on State highways, including Highway 68. The City would cooperate with TAMC and/or Caltrans to facilitate such improvements. A mitigation measure included in this section of the EIR also addresses this issue.

[Table 22, Intersections Requiring Mitigation, General Plan Buildout Conditions](#), summarizes the types of mitigations planned and/or needed to mitigate future impacts at the subject intersections. As summarized above and described in the Traffic Study, year 2020 physical improvements needed on road segments and at intersections whose operations are the responsibility of the City, are either already programmed in the City's CIP, planned by the City, or need to be added to the City's CIP over time with funds continually sought for their implementation.

TABLE 22

Intersections Requiring Mitigation – General Plan Buildout Conditions

Intersection	Existing Worst Case LOS	Mitigation Required	Mitigated LOS
City Intersections			
Lighthouse Ave/Reeside	F	Geometric Layout Changes Planned	D Meets Standard
Fremont/Camino Aguajito	F	Planned Geometric Changes with Additional Required	D Meets Standard
Fremont/Cassanova Ave.	E	Signal Timing	C Meets Standard
Caltrans Intersections			
Highway 68/York	E	Add Lane and Change Signal Operation	C Meets Standard
Highway 68/Omstead	E	Restriping and Widen Hwy 68 to four lanes	C Meets Standard

Source: Higgins Associates

The Lighthouse Avenue corridor will require specific attention in the future. It is not feasible to mitigate impacts in this corridor through roadway expansion. It is possible that a combination of physical changes, operational changes, and alternative transportation management measures, especially expanded transit service, can be employed to reduce impacts to an acceptable level. The need to implement such changes is defined in a mitigation measure included in this section of the EIR. Implementation of Circulation Element policy c.12 will also serve to improve circulation conditions in the Lighthouse Avenue corridor.

Incremental growth in the City will have incremental effects on the regional roadway network whose operations are under the jurisdiction of Caltrans. The City’s continued cooperation with Caltrans and TAMC to facilitate funding and construction of improvements by these agencies will be important to mitigating impacts on regional circulation facilities.

Transit Service

The majority of the development potential identified in the General Plan Update is areas of existing development, as well as infill areas scattered throughout the City. The exception 138-acre area Fort Ord annexation area. MST maintains transit service and infrastructure in most of these areas; however, new development would increase the

number of housing units and commercial space available in the City, both of which would result in an increased number of people in the City. Additional demand for transit services would result from the increased number of people in the City. The Fort Ord annexation area is located near Ryan Ranch. Any new development in this area would require that the City provide for transit infrastructure and arrange for service to the area.

WAVE is likely to also see an increase in demand, as it may provide service for new residents living in the Downtown/East Downtown and Cannery Row/Lighthouse Avenue mixed-use neighborhoods during the months that the shuttle service operates. The General Plan Update assumes that it is possible to operate the shuttle year-round in order to improve public access to transit.

Many policies of the Circulation Element focus on and promote transit as a key tool for mitigating future circulation impacts. This is consistent with the City's land use and transportation strategy which seeks to reduce major investments in roadway and intersection improvement projects where possible so that funding for such projects can be redirected to promoting and implementing alternative transportation strategies and projects.

Bikeway and Pedestrian Facilities

As a result of population growth over time, increased demand will be placed on existing bikeway and pedestrian facilities. The City's land use and circulation strategy for the General Plan Update calls for increasing opportunities for alternative transportation use, including bicycle and pedestrian facilities. One of the main goals of the Circulation Element is to promote a pedestrian and bicycle friendly environment throughout the City. This goal would be implemented through a series of policies that promote the improvement of existing and creation of new bikeway and pedestrian facilities. Programs of incentives for encouraging the use of these facilities are also included. Hence, while demand for facilities will increase, the General Plan Update indicates that the City will respond by enhancing facilities at a level that supports its transportation emphasis on providing alternative transportation options.

Parking

The General Plan Update would result in a population increase of about 4,189 people over the next 20 years. This population increase, as well as future tourist visitation to the City, will increase demand for parking facilities within the City. One of the goals of the General Plan Update is to provide adequate parking, while not underutilizing valuable land resources for commercial and residential development. Most of the new development potential is located within areas that have existing development and existing parking. The potential for increasing the number of parking spaces is quite limited. In this context, the City must maximize the efficient use of existing parking facilities to accommodate increases in parking demand to the maximum extent possible. The City also acknowledges that future demand for parking may not be readily met by supply. This fact will make the use and promotion of alternative transportation options all the more critical.

Construction Traffic

Construction of projects within the Planning Area will be phased over time. Construction would generate truck and worker automobile trips. Construction traffic volumes would be much less than operational volumes, and are not expected to result in significant traffic impacts.

Impacts and Mitigation Measures

Thresholds of Significance. City of Monterey traffic impact thresholds indicate that a project may have a significant effect on the environment if it will:

- Exceed level of service standards as summarized in the following table:

Roadway Segment	Roadway has a Class I/II bike route connecting to the Recreation Trail	Road has transit service with headway of less than 20 minutes and operates year round during the AM/PM peak hours.	LOS Standard
1. Auto Corridor	No	No	D
2. Bicycle Corridor	Yes	No	E
3. Transit Corridor	No	Yes	E
4. Multimodal Corridor	Yes	Yes	F-2*

*Note: F-2 denotes that level of service F conditions are not exceeded two consecutive hours at any time during the day under typical weekday conditions.

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Significant Impact – 2020 City Roadway Segment and Intersection Operations. A number of roadway segments and intersections would operate at levels of service that do not meet City level of service standards. As a result, traffic congestion would increase in some portions of the City - travel times may increase and travel speeds may decrease. This is a concern, especially for Lighthouse Avenue, where roadway improvements such as widening are infeasible due to physical constraints.

Mitigation Measures. A combination of physical and operational improvements and transportation management strategies are planned and can be employed in the future to mitigate impacts on City roadways and intersections to a less than significant level. The Circulation Element contains comprehensive policies that address physical and operational improvements.

Circulation Element Roads policies c.3 and c.10 through c.14 call for direct physical improvements to the roadway network to improve circulation conditions. Several of the policies target specific road segments and intersections for improvements. For example, policy c.10 addresses widening of Del Monte Avenue, policy C.11 addresses improvement of traffic flow on Del Monte Avenue at Washing Street, and policy c.12 addresses improvements to Lighthouse Avenue. Policy j.3 requires new development to fund or build improvements needed to mitigate significant traffic impacts. As described previously and noted in the Traffic Study, the City continues to plan and fund roadway and intersection improvements to address long-term circulation needs. Several of these are approved and/or programmed in the City's CIP. Others are planned, but not yet programmed. Additional improvements must be added to the CIP and funded over time. This need is identified below as a mitigation measure.

In addition to physical improvements proposed by the City, a series of regional network improvements proposed by TAMC would help mitigate future traffic impacts within the City. Specific projects were listed previously in the 2020 Regional Road Network Improvements section.

Consistent with the City's land use strategy, Circulation Element policies focus on improving infrastructure for alternative modes of transportation, rather than implementing major roadway improvements. The purpose of these policies is to improve the efficiency with which existing roadways operate. Improved efficiencies would be achieved through a variety of transportation and parking management strategies, which collectively are included in the City's proposed Transportation and Parking Management Program. This program includes transportation system management, travel demand management, and parking management policies a.1 through a.3. The travel demand management component also focuses on programs that improve and expand the transit system as an incentive to increase ridership by local residents and visitors. Implementation of the policies would reduce vehicle trip generation and reduce trip lengths, which in turn, would maintain or improve levels of service on roadway segments and at intersections.

Transportation and Land Use policies b.1 through b.5 are also critical to reduce vehicle trip generation and trip lengths. These policies support mixed-use development, funding of alternative transportation, and expansion of the City's WAVE shuttle system.

Bicycle and Pedestrian Circulation policies d.1 through d.9, f.1 through f.8, and h.1 through h.2 focus on expanding and improving pedestrian and bicycle circulation, transit access and service, and expansion of the WAVE tourist transportation system, respectively.

Though policies, which promote and facilitate funding of public transit are interspersed throughout the Circulation Element, policies f.1 through f.8 of the Transit policy section target transit system expansion actions and development of financial incentives as mechanisms to improve transit ridership. Policy f.5 is of particular relevance. It states that transit vehicles be given priority over other vehicles. Improved transit opportunities and ridership would also be improved through policy h.1, which calls for actions to make the use of the City's WAVE shuttle more attractive to tourists. Monitoring policy j.3 would promote funding of the WAVE shuttle by new development. Though policies to promote transit are robust, a mitigation measure has been proposed below to ensure that transit policy prioritizes expanding service to transportation corridors most likely to experience unacceptable levels of service under 2020 conditions.

Several Rail and Air Transportation policies would also serve to reduce congestion and improve access to alternative transportation. Promotion of rail transit, shuttle service to the airport, and planning for a multi-modal facility that links long-range bus services, airport shuttles, and local transit are representative.

Circulation Element Monitoring policies j.1 through j.3 will serve as critical mitigation to transportation impacts. Policy j.1 requires the City to monitor changes in traffic volumes and mobility choices to assure that degradation of levels of service on roadways and at intersections is identified. This is prerequisite to developing physical improvement plans and transportation system management responses that reduce circulation impacts to acceptable levels. Policy j.2 requires that new development projects be evaluated for their traffic impacts and that mitigation measures be implemented to reduce impacts on the circulation system. Policy j.3 requires the City to adopt a traffic impact fee mechanism to support future transportation system improvements and transportation management program improvements.

Though policies contained in the General Plan Update largely serve to mitigate circulation impacts to a less than significant level, the following additional mitigation measures are proposed as additional policies/programs to the Circulation Element to ensure impacts are reduced to a less than significant level:

7. Utilize the City's traffic monitoring program as described in Circulation Element policies j.1 through j.4, to identify roadway and intersection improvement projects that must be added to the City's CIP and continually seek funding sources for implementing new improvement projects.
8. In addition to implementing Circulation Element policy c.12 for Lighthouse Avenue, improve traffic flow on Lighthouse Avenue through implementation of a circulation improvement plan for this corridor. Develop alternative circulation plans that combine traffic rerouting, traffic control, lane configuration, directional, and other physical or operational changes with targeted transit service improvements such as increased service frequency and dedicated bus lanes. Implement the plan through initiating a CIP project to select a preferred alternative and design and construct improvements. Funding shall be through

- circulation impacts fees collected per Circulation Element Monitoring policy j.3. Implement the preferred plan as soon as possible.
9. Integrate the policies contained in the General Plan Update regarding transportation system management and travel demand management (Circulation Element policies a.1 and a.2), transportation and land use (Circulation Element policies b.1 through b.6), roads (Circulation Element policies c.1 through c.14), bicycles and pedestrians (Circulation Element policies d.1 through d.9), parking (Circulation Element Policies e.1 through e.10), and transit (Circulation Element policies f.1 through f.8 and h.1 through h.2) to prioritize use and expansion of transit services and facilities on Del Monte Avenue, Lighthouse Avenue, Lighthouse Curve, or other arterials where level of service standards are not met under existing conditions or anticipated to be met over time as determined through the City's traffic monitoring program and the Traffic Study. Prepare an integrated plan for transit services for this purpose. Implement the plan as soon as possible.

Significant Impact – Regional Roadway and Intersection Operations.

Implementation of the General Plan Update will have incremental impacts on regional roadways under Caltrans jurisdiction that are located within the City limits. Acceptable level of service standards on roadways and intersections would be exceeded.

Mitigation Measures. All of the policies identified as mitigation for 2020 City roadway and intersection impacts discussed above will serve to reduce impacts on regional roadway and intersection operations, especially those that would reduce traffic generation. In addition to those policy mitigations, the following mitigation should be added as a policy to the General Plan Update to facilitate cooperation between the City and Caltrans and TAMC on improvements needed for the regional roadway network:

10. Continue to coordinate with Caltrans and TAMC to identify improvements and funding for improvements to Highway 1, Highway 68 and other locations within the City deemed important to the function of the regional transportation network so that level of service standards for such facilities are met.

Less than Significant Impact – Air Traffic. Buildout of the General Plan Update would result in an increase in the population within the City. The increased number of people may result in a slight increase in demand for air services at the Monterey Peninsula Airport. This increase is not anticipated to require a substantial rise in air traffic levels or require modification of air traffic approach or departure patterns. Therefore, increases in safety risks from changes in airport operations are not expected.

No Impact – Hazardous Design Features. Future roadways and related infrastructure would be required to meet accepted roadway design manual standards. The City would review each project to ensure that there are no hazardous roadway features and that roadway designs are consistent with the adopted standards. Implementation of the General Plan Update would have a less than significant impact on roadway design hazards. Mitigation measures in addition to standard conditions of project approval required by the City are not necessary.

Potentially Significant Impact – Parking Capacity. Implementation of the General Plan Update would increase the demand for parking facilities within the City. The degree of this increase cannot be assessed with accuracy. However, given that significant expansion of parking capacity may not be consistent with the City’s interest in utilizing valuable land resources for more productive commercial and residential uses and avoiding impacts on historic and non-historic structures and sites in some infill areas, it would appear that parking availability will become more constrained over time.

Mitigation Measures. The General Plan Update includes numerous policies that seek to optimize the use of the City’s existing parking supply for citizens and visitors. Circulation policy a.3 calls for the adoption of a Parking Master Plan to maximize occupancy of public parking spaces. Circulation Element policies e.1 through e.4 provide direction to explore opportunities for additional parking and funding for parking solutions and alternative modes of transportation. Policies e.6 through e.10 focus on managing parking for employees, students, and major events located in the City. Each of these policies include several program measures that bring the City closer to their goal of optimizing the use of the existing parking supply. Additionally, the Circulation Element in general is aimed at improving alternative modes of transportation which can help reduce pressure on parking capacity throughout the City. Implementation of the Circulation Element policies and programs is expected to reduce impacts on parking capacity to a less than significant level.

Potentially Significant Impact – Alternative Modes of Transportation (Transit, and Bicycle and Pedestrian Paths). New development in the City would increase demand for MST service and for WAVE service. The majority of the development potential identified in the General Plan Update is in infill areas and in areas designated as mixed-use neighborhoods. These areas generally have established bicycle and pedestrian paths and much of the infrastructure needed for transit services. A main focus of the City’s future transportation strategy is to promote the use of alternative transportation as an option to expanding capacity of the transportation network.

Mitigation Measures. The General Plan Update includes numerous policies that are aimed at expanding access to and use of alternative modes of transportation throughout the City. Circulation Element policy f.1 provides direction to work with MST to maintain convenient transit service along the City’s main arterial roadways. Policies e.2 through e.5 provide incentives for people to use transit regularly. Policies f.6 through f.8 focus on improving the transit infrastructure services in the City. Policies d.1 and d.2 provide direction to improve the success of the Recreation Trail. Policies d.3 and d.4 require the installation of sidewalks and paths to link residential uses with schools, commercial centers and transit areas. Policies d.5 through d.9 provide direction to ensure that pedestrian facilities are safe, attractive, and link with other regional bicycle and pedestrian systems.

As stated previously, Circulation Element policy a.1 calls for adoption of Travel Demand Management program. Program a.2.3 under this policy calls for the identification of funding for local transit system service with dedicated revenue sources such as citywide traffic impact fees. Payment of impact fees for improving transit service

would substantially improve the likelihood that improvements in alternative transportation systems can be made to meet future demand.

Implementation of the Circulation Element (policies and programs) combined with the City's strategy to focus new residential development areas in mixed-use neighborhoods within existing transit corridors (such that transit service becomes increasingly economically viable) is anticipated to reduce impacts on alternative modes of transportation to a less than significant level.

2.13 Utilities and Service Systems

Wastewater

Environmental Setting

Wastewater collection and treatment responsibilities are split between the City of Monterey and the Monterey Regional Water Pollution Control Agency (MRWPCA), respectively. As stated in the General Plan Update, the existing sewer collection system is operated by the City of Monterey. It consists of approximately 102 miles of sewer lines, five sewer lift stations, and a series of other structures including manholes and ancillary facilities. The costs for maintenance and replacement of sewer pipes and pump stations are recovered through a sewer surcharge fee that is added to the MRWPCA monthly fees for wastewater treatment, then returned to the City.

Given that most of the City is built out, wastewater infrastructure activities are focused on maintaining and replacing existing lines and improvements, rather than constructing new facilities. In 1999, the City evaluated the condition of the sewer collection system by using in line video monitoring equipment. Based on the findings of the sewer assessment, the City has started a multi-million dollar capital replacement program. City personnel conduct annual inspections of the sewer pipe system to adjust the maintenance and capital replacement programs (Tom Reeves, City of Monterey Public Works Department, pers. com., February 16, 2004).

The MRWPCA operates its regional wastewater treatment facility near the City of Marina. The capacity of the regional wastewater treatment plant is about 29 million gallons per day (mgd). Current flows are approximately 21 mgd. The plant does have existing capacity to serve new development at present, but remaining capacity will likely be utilized incrementally over the short to mid-term as new development within the MRWPCA's service area occurs.

Wastewater Project Analysis

New development in the City will result in an increase in wastewater generation. While existing wastewater collection facilities have typically been sized to accommodate projected increases in flow from new development, implementation of the General Plan

Update could result in the need to construct new or replace existing facilities to ensure sufficient collection capacity is available.

It is unknown whether adequate wastewater treatment capacity will be available for new development until individual project applicants formally apply for a wastewater permit from the MRWPCA, as use of existing remaining capacity is on a first come, first served basis. The MRWPCA uses connection fees to fund future expansions. The MRWPCA does not anticipate any problems in funding future expansions of the plant when they become necessary. As a result, the MRWPCA should be able to provide wastewater treatment for new development within the City consistent with Regional Water Quality Control Board standards.

Should the MRWPCA need to expand its facilities in the future to meet cumulative treatment demand in its service area, an environmental review process will be undertaken for such expansion. Adverse environmental impacts would be identified and mitigation measures to reduce adverse environmental effects to an acceptable level would be defined and implemented.

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it will:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new wastewater treatment facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact – Exceeding Wastewater Treatment Requirements, Environmental Effects of Constructing New Treatment Capacity, and Effects on Treatment Capacity. The MRWPCA is the lead agency for ensuring that the regional wastewater treatment plant meets Regional Water Quality Control Board water quality discharge requirements. The MRWPCA continually monitors its operations to ensure that standards are being met and to evaluate operational needs as well as need for expansion. If expansion of the plant were needed, the MRWPCA would likely be the lead agency in conducting an environmental review per CEQA of the potential impacts of an expansion. The project specific environmental review would be used to identify means to mitigate potentially significant impacts. The MRWPCA would be required to make findings that all potentially significant impacts have been mitigated to a less than significant level. In cases where significant impacts cannot be avoided, the MRWPCA

would be required to determine that other factors override the unavoidable adverse effects.

Implementation of the General Plan Update would result in a decrease in available treatment capacity at the regional plant. In combination with other cumulative development within the MRWPCA's service area, the need for an expansion of treatment capacity could be triggered. Fees paid by new development within the City to the MRWPCA would serve as mitigation for its incremental impact on reducing treatment capacity. No additional mitigation measures are required.

Water Supply

Environmental Setting

The General Plan Update includes a summary of the water supply situation on the Monterey Peninsula and the City in particular. Much of the following information is derived from the General Plan Update text.

Lack of available water is a primary obstacle to meeting General Plan goals; therefore, it is the goal of the City of Monterey and the General Plan Update to obtain a long-term, sustainable water supply, including evaluation of water supply options outside the present Monterey Peninsula Water Management District (MPWMD) framework. Water is supplied to most of the Monterey Peninsula by the California American Water Company (Cal Am) through wells in Carmel Valley, dams on the Carmel River, and a well on the Seaside Aquifer. With the exception of the Ryan Ranch area and the Fort Ord annexation area, the remainder of the City is wholly within the MPWMD, which is responsible for developing long-term water supply for the Monterey Peninsula cities in the District. Most cities in the Cal Am service area have approached or reached the limit of available water. Monterey has reached the limits of its allocation and has very little water available to meet housing, economic, and public facility goals.

The MPWMD has not yet been able to provide a stable, long-term source of water. Many of the alternatives proposed by the District have focused on improving water supply for short-term needs. The MPWMD and Cal-Am have now begun to focus on seawater desalinization as an alternative approach to increasing water supply. The MPWMD projects that water from a desalinization plant it is proposing in Sand City could be available in 2007 and that the proposed Cal-Am project could be complete in 2008. Cal-Am also had applied to the California Public Utilities Commission for approval of a request to build a new dam on the Carmel River. The request was denied in 2003. Use of reclaimed water to replace domestic supply is also a option that continues to be utilized, with efforts planned to expand such use.

Prior to 1995, Cal Am water production was based in major part on a historic pumping of approximately 14,106-acre feet of water from the Carmel River. The State Water Resources Control Board determined in 1995 that Cal Am has the legal right to 3,376-acre feet of Carmel River aquifer water and ordered Cal Am to ultimately reduce its pumping to 3,376 acre feet. Cal Am may pump 11,285-acre feet of Carmel River water

on an interim basis as long as there is a diligent effort by Cal Am and by the District to find water sources to replace the shortfall. The State Board also ordered that any water supply developed in the Cal Am service area must first replace the 10,730 acre-feet shortfall before more water could be allocated to cities for use.

The MPWMD has established water allocations for cities and jurisdictions within its district, but these allegations are superceded by the State Water Resources Board interim limit of 11,285 acre feet. Combined with the currently allowed pumping limit set by the MPWMD of 4,000 feet from the Seaside Aquifer, information contained in the General Plan Update notes that in 2003, water available for use stood at 15,285 acre feet.

As of late 2003, the MPWMD/Cal Am water allocation to the City was about 129.525 acre-feet per year. The City of Monterey has established an internal allocation system, whereby water allotments are established for residential, commercial and industrial uses. It also maintains a portion of the total allocation as a citywide reserve. As of November 2003, the City's reserve of 6.050 acre-feet has been conditionally reserved for several public and private projects. Thus, the entire allocation to the City is either being used or has been reserved for identified uses.

It should be noted that water supply to industrial development within Ryan Ranch is provided by individual wells located within the Ryan Ranch area. Production from these wells is capped through a Cal-Am permit.

Water would be supplied to new development in the Fort Ord annexation area through a water allocation system administered by the Fort Ord Reuse Authority (FORA). FORA has a portion of the water supply formerly used by the U.S. Army at Fort Ord to jurisdictions to which former Fort Ord lands have been conveyed. The water is intended to facilitate development of those lands consistent with the Fort Ord Reuse Plan. Consequently, development of the Fort Ord annexation area does not appear to be constrained by the limited water supply available from the MPWMD and Cal-Am.

Project Analysis

Demand for water is already a constraint to development in the City. The City currently does not have water available for commercial and residential development. Applicants for new commercial and residential (or other projects) are placed on a water waiting list. While there may be some additional water available in the future for projects on the waiting list, the timing for and amount of any additional water is unknown at this time.

Demand for water managed by the MPWMD and supplied by Cal-Am would increase with implementation of the General Plan Update as a result of new residential and commercial development. Anticipated water demand from residential uses can be quantified using MPWMD water demand factors and making assumptions about water demand from military related housing. The MPWMD uses a demand factor of .286 acre-feet per year for single-family dwellings and .134 acre-feet per year for multiple family dwellings (Henrietta Stern, MPWMD, pers. com., February 16, 2004). It is assumed that military housing consists of bachelor's quarters and that such quarters

contain a shower, toilet, and sink. Using water fixture factors for residential units developed by the MPWMD, each of these units would demand approximately .047 acre-feet of water per year. [Table 23, Projected 2020 Residential Water Demand](#), shows the increase in residential water demand General Plan Update implementation.

TABLE 23
Projected 2020 Residential Water Demand

Residential Unit Type	# Units	Water Use Factor (acre-feet/yr/unit)	Water Demand (acre-feet)
Single-Family	163	.286	46.6
Multiple Family (incl. Mixed Use)	1,802	.134	241.5
Military (bachelor quarters)	166	.047	7.8
Total	2,131		295.9

Source: MPWMD and City of Monterey

Water demand from commercial uses within the mixed-use commercial neighborhoods or other commercial areas will increase over time. Most commercial developments within the mixed-use commercial neighborhoods areas are built to or near the maximum site coverage permitted by the City, so significant expansion of these uses is not expected. The City estimates future commercial water use to be approximately 60 acre-feet per year.

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it will:

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact – Increased Demand for Water that Would Require New Entitlements. Implementation of the General Plan Update would require additional water supply. The City does not currently have water supply to meet new residential and/or commercial demand. It is uncertain when additional supply would be made available through the MPWMD or other sources. The development potential identified in the General Plan Update will not be realized until supplemental water supply is available.

Mitigation Measures. Policies contained in the General Plan Update that manage growth to meet available water supply, promote development of additional water supplies, and/or conserve water would serve to mitigate impacts from insufficient water supply.

Public Facilities Growth Management Policy 1.6 states that the rate of development is to be controlled to ensure that proposed projects can be adequately served with public facilities. Public Facilities Water Policies m.1 through m.3 address the need to increase supply both within or outside of the MPWMD framework, encourage Cal-Am to maintain to water supply system in good condition to avoid water loses, and encourage adoption of standards for allocating water, respectively. Policy m.1 is accompanied by eight implementation actions for developing alternative water supplies to meet future demand.

Implementation of the above referenced policies should prevent approval of development without assurance of adequate water supply and would promote development of supplemental or additional water to attain sufficient supply to meet General Plan Update development goals.

Stormwater

Environmental Setting

The City of Monterey storm drain system is a separate system that collects surface runoff and conveys it to the ocean. The U.S. Environmental Protection Agency (EPA) has identified urban runoff as a significant cause of water pollution in the United States. Surface runoff water may contain a number of pollutants picked up as water flows across the surface of the land. Common pollutants include oil and automotive fluids, refuse, pesticides, fertilizers, waste products, and heavy metals such as copper, chromium, lead, cadmium, and other toxics produced by vehicle wear and weathered paint. Storm drain management and maintenance is mandatory to preserve the Monterey Bay National Marine Sanctuary and other water bodies as required by the Federal Clean Water Act.

The City's storm drainage system currently consists of ten miles of pipelines and drainage channels which discharge urban runoff into the Monterey Bay. City personnel maintain the lines by cleaning the catch basins and the storm inlets. A portion of the cost for the maintenance and capital replacement of the storm drain system is recovered through a storm water utility fee. The City will comply with requirements of the National Pollution Discharge Elimination System (NPDES) by complying with its Phase II Storm Water permit.

Stormwater Project Analysis

As discussed in Section 2.7, Hydrology and Water Quality, with the exception of development potential within the Fort Ord annexation area, implementation of the General Plan Update is not expected to result in a substantial increase in storm water volumes. Much of the anticipated residential and commercial development potential will occur in existing developed locations where a substantial increase in impervious cover is not likely with intensification of land use. Existing storm drainage infrastructure may be sufficient to convey increases in runoff, but further analysis would be needed to make specific determinations. If improvements or expansions were needed, they would

likely be in locations that are not environmentally sensitive and construction activities would likely be of short duration.

Development of vacant infill parcels and the Fort Ord annexation area will result in an increase in storm water volumes. To accommodate new development on remaining small, infill parcels, expansion of existing storm drainage infrastructure may be necessary if existing infrastructure has not already been sized to accommodate buildout of such parcels. A complete storm drainage plan will be needed before development of the Fort Ord annexation area occurs. The plan will include determination of projected stormwater runoff volumes and required improvements to ensure that storm drainage is adequately managed to minimize erosion and localized flooding potential. In these two cases, storm infrastructure improvements could be required in areas that may be considered environmental sensitive. Environmental effects related to construction activities would be short-term in nature.

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it will:

- Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects;

Potentially Significant Impact – Environmental Effects of Stormwater Facility Expansion. New development made possible through implementation of the General Plan Update may result in the need for improvements to existing stormwater infrastructure or construction of new infrastructure. In the case of the Fort Ord annexation area, new infrastructure may be planned in areas considered to be environmentally sensitive. Improvements to existing or construction of new infrastructure could cause short-term environmental impacts during the construction phase.

Improvements to or construction of new storm drainage infrastructure would require environmental review through the CEQA process as part of a project specific review or an infrastructure improvement program. That process would be used to identify specific potentially significant impacts and mitigation measures needed to reduce impacts to a less than significant level.

Mitigation Measures. Public Facilities Growth Management Policy a.3 encourages infill development to minimize the need for new or expanded public facilities and utilities. Safety Element Flood Hazards Policy c.4 requires that projects be designed to maximize natural percolation of rainfall; minimize direct overland runoff onto adjoining properties, water courses, and streets; and minimize impervious surface cover, as well as incorporate ponding and siltation basins as needed. This would help to reduce the need for storm drainage infrastructure development and the environmental effects related to that development. A number of other policies in the General Plan Update would

regulate development of any kind, including storm drainage infrastructure, to minimize its environmental impacts. One example is Conservation Element Flora and Fauna and Marine Resources Policy d.3., which requires protection of sensitive habitat and avoidance or mitigation of potential impacts in areas of moderate or high biological value. Conservation Element Water Quality Policy b.3 is another example. It requires that erosion potential at construction sites be minimized by avoid development on steep slopes, minimizing vegetation removal, etc.

Implementation of the above-referenced policies and others that regulate the effects construction projects on the environment would reduce this impact to a less than significant level. No additional mitigation measures are required.

Solid Waste

Environmental Setting

Solid waste disposal in the City is provided on a contract basis through the Monterey Disposal Service. The City of Monterey is a member of the Monterey Regional Waste Management District (MRWMD). The MRWMD is a Special District of the State of California, established to serve the local governments of the Central Coast of Monterey County. It is governed by nine local government agency members including the cities of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City and Seaside as well as Monterey County (Unincorporated) and the Pebble Beach Community Services District. The service area is 853 square miles, and the service population is 170,000.

The MRWMD's primary purpose is to dispose of the Monterey Peninsula area's solid waste. In recent years, the MRWMD's role has expanded to include the recovery of recyclable materials in the waste stream, including cardboard, paper, glass, wood, yard waste, plastics, metals, concrete, asphalt, reusable building materials, and resale items. The MRWMD is also the recipient of most of Monterey County's sewage sludge. The first landfill gas-to-electrical energy system in Central California was installed at the disposal site in 1983. The MRWMD also accepts and safely recycles or disposes of household hazardous waste.

The District's landfill has a total capacity of 32 million tons, with an available capacity of about 26 million tons. Capacity is sufficient to accommodate development in the MRWMD service area for approximately 85 years. The District is currently considering changes to landfill operations that would further increase disposal capacity and efficiency.

Assembly Bill 939, the California Integrated Waste Management Act of 1989, sets a goal of 50 percent waste stream diversion (for recycling, reuse, etc.) for all municipalities by the year 2000. The City operates a curbside recycling program to serve all properties in an effort to achieve this goal. . As noted in the General Plan Update, the City is currently diverting as much as 65 percent of its waste.

Solid Waste Project Analysis

According to the MRWMD, the per capita solid waste generation rate is about 3.5 pounds per day per person. This figure includes all commercial waste, construction debris, yard waste, and household garbage. With a projected population increase of about 4,189 persons with implementation of the General Plan Update, solid waste generation could increase by 14,660 lbs/day relative to existing conditions. Given the significant remaining capacity at the MRWMD's regional landfill facility, this increase in solid waste is not expected to be of significance.

The City would continue to strive to meet the standards set forth in the California Integrated Waste Management Act to divert 50 percent of the City's solid waste

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it will:

- Be serviced by a landfill with insufficient capacity to accommodate the project's solid waste disposal needs.
- Not comply with federal, state, and local statutes and regulations related to solid waste.

Less than Significant Impact – Sufficient Landfill Capacity and Compliance with Applicable Solid Waste Management Law. The additional volume of solid waste that would be generated with implementation of the General Plan Update is not considered to be significant. The MRWMD landfill has substantial remaining capacity and current studies are in progress to further increase capacity. The City currently conducts a range of programs to reduce waste generation and to divert waste, including through significant recycling as required by state law.

Public Facilities Reduction and Recycling of Waste Policies n.1 and n.3 focus on actions to maximize waste reduction and recycling and encourage commercial composting and waste minimization public education programs, respectively. Implementation of these policies and continuation of the City's extensive curbside recycling program will help to minimize the impact of future development on landfill capacity and ensure conformity with applicable waste management law. No further mitigations are required.

Energy

Environmental Setting

The Pacific Gas and Electric Company (PG&E) is the main provider of natural gas in the Central Coast region of California and to the Monterey Peninsula and City of Monterey in particular. PG&E provides electric service to about 4.5 million customers and natural gas to about 3.5 million customers throughout most of California. Its

service areas covers about 70,000 square miles. The company is regulated by the California Public Utilities Commission. There are no major electric or natural gas infrastructure facilities within the City. PG&E does own and operate a portion of the street lighting system within the City. PG&E operates a number of programs that facilitate energy savings and provide rebates for installation of equipment that reduces energy consumption. A number of these are available in the City.

The California Administrative Code Title 24 sets forth energy conservation standards that must be met in new development. The standards address wall and ceiling insulation, infiltration control, space conditioning and hot water equipment, setback thermostats, switching devices, etc. Local jurisdictions, including the City, require compliance with these standards through the development planning and approval process.

Project Analysis

New development within the City will increase the demand for electric and gas service from PG&E. In some cases, new development will require the modification, expansion, or installation of new electrical or gas supply lines and ancillary improvements. While the General Plan Update does provide for additional development potential relative to the 1983 City of Monterey General Plan, new development will not be of a scale or intensity that would require excessive use of energy. With the exception of new development in the Fort Ord annexation area, much of the new development under the General Plan Update would occur in existing developed areas where electric and gas infrastructure already exists. Therefore, the need for installation of significant new energy supply infrastructure whose construction could have substantial impacts is likely to be minimal.

The City's Utility Users Tax is assessed against all commercial, industrial and residential users of water, telephone, gas, and electric service within the City of Monterey. The tax is used to support expansion or extension of utilities as required.

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it will:

- Results in excessive or substantial volume of energy.

Less than Significant Impact – Excessive Use of Energy. As noted, implementation of the General Plan Update is not expected to enable new development of a type or scale that demands excessive use of energy. Most new development will be residential, with an incremental increase in commercial development intensity within existing developed areas, and new commercial/light industrial development within the Fort Ord annexation area.

The Conservation Element includes several energy related policies and programs. In general, it is the City's intent to encourage effective and efficient use of energy. One method by which the City achieves this goal is through land use planning. A key General Plan Update focus is on encouraging mixed use commercial and residential development. This land planning approach will result in a reduction in vehicle miles and vehicle trips, thereby creating significant reduction in fuel consumption. Enhancement of public transit services to and through mixed-use commercial areas will promote use of alternative transportation, which further reduces vehicle use. Conservation Element Energy policy e.1 encourages alternative energy forms to supply energy to public and private buildings, policy e.2 calls for educating the public about energy conservation, and policy e.3 encourages collaboration between the City and a range of agencies, utilities, community groups, etc., to implement energy conservation and renewable energy development programs.

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3.0 Other CEQA Considerations

3.1 Cumulative Impacts

CEQA Requirements

CEQA Guidelines section 15130 requires a discussion of the significant cumulative impacts associated with the proposed project. A cumulative impact is an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.

CEQA requires a cumulative development scenario to consist of either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or, a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact. The geographic area affected by the identified cumulative impacts, and an explanation of the basis of the geographic scope used in analyzing cumulative impacts, must be presented.

Summaries of Plan Projections

The assessment of cumulative impacts made in this EIR is based on the summary of projections approach. Given the City's location on the Monterey Peninsula and the projection that the project would create an increase in population of only 4,189 people, the cumulative effects of the proposed project are assumed to be limited to Monterey County, and even more specifically to the Monterey Peninsula and immediate surrounding areas.

The *1982 County of Monterey General Plan* and the *1997 Fort Ord Reuse Plan* would be the most appropriate adopted areawide planning documents from which projections of area-wide conditions could be extracted. The County has been working on its Draft General Plan Update for several years. The Update is not completed and adopted (pending environmental review). The CEQA Guidelines note that summaries of projections can be taken only from adopted plans. Therefore, the County Draft General Plan Update cannot be used as a source for such projects. The County's 1982 General Plan is therefore the relevant document. However, since it is over 20 years old, its summary of projections does not provide a useful context for assessing cumulative impacts under current conditions. In lieu of its projections, general growth trends in the County can be summarized based on population and employment changes over time. California Department of Finance 2001 data indicates that by 2020, the County population is

expected to grow to 590,700 people from its 2000 population of 408,700 or an increase of about 182,000 people. New 2004 data from AMBAG indicates that year 2000 employment in the County was 222,441 jobs. In the year 2020, that figure is expected to rise to about 293,381, an increase of 70,940 jobs.

The *Fort Ord Reuse Plan* contains relevant projections of future development within the range of the proposed project's cumulative effects. It projects development potential on lands contained within the former Fort Ord. Much of that land is currently being or will be reused for other purposes by surrounding jurisdictions including the cities of Marina, Seaside, Del Rey Oaks, Monterey, and the County, as well as by the University of California. The reuse plan projects the following:

- An increase in population of 37,000 people by 2015;
- 18,400 new jobs created by 2015;
- 18,000 acres preserved for endangered species;
- 4,000 acres for park and open space, visitor serving, and public facilities use;
- 2,300 acres for educational or research use;
- 2,000 acres for new and remodeled residential units (over 22,000 dwelling units);
- 1,500 acres for business development and retail use;
- 1,100 acres for infrastructure use and development; and
- 800 acres to be retained by the U.S. Army.

Today, population and job creation projections for the year 2015 have been scaled back due to market conditions and other extenuating circumstances. Nonetheless, it is clear that the reuse plan will facilitate significant development locally and regionally over the next 20 years. All jurisdictions to which Fort Ord lands are to be conveyed have already or are in the process of updating their general plans to incorporate lands conveyed to them.

Cumulative development potential facilitated by the reuse of Fort Ord does not represent the only cumulative development in the local/regional area. Additional development projects within individual jurisdictions that are independent of former Fort Ord development potential have been approved in the past five years. Others are planned. None of these projects approach the development potential described in the reuse plan, but do incrementally add to the effects of cumulative development within the local/regional area.

General Plan Update Projections Comparison

The projected growth in City population of 4,189 people to a total of about 34,539 represents less than three percent of the anticipated countywide population growth in the year 2020. AMBAG projects the number of jobs in the City in the year 2020 at 51,934 compared to 42,488 in 2000, an increase of 9,446 jobs. This represents about 13 percent of the projected increase in countywide jobs in the year 2020. The 2,131 residential unit development potential is also a fraction of both the countywide residential growth projected by the DOF and the local residential growth projected in the reuse plan. The only significant vacant land designated for development within the City (113 acres that are part of the 138 acre Fort Ord annexation area) is part of the future growth already projected in the *Fort Ord Reuse Plan*. The fact that much of the future development within the City will take place within already developed areas (intensification of residential use in mixed-use commercial neighborhoods, possible increase in square footage of commercial uses, and infill on small, vacant parcels) further reduces cumulative effects and further localizes the impacts of implementing the General Plan Update to the City.

With the area-wide cumulative development projections established, CEQA Guidelines section 15130 gives guidance on discussion of the cumulative impacts of a project as follows:

An EIR shall discuss cumulative impacts of a project when the project's cumulative incremental effect is cumulative considerable as defined in section 15065(c). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable", a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

Section 15065(c) states:

"Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probably future projects as defined in Section 15130.

Effects Not Considered to Be Cumulatively Considerable

The proposed project will be the source of a small increment of anticipated local and regional population growth as described above. Therefore, with the exception of transportation, cumulative impacts that are population related should be less than cumulatively considerable. The population growth in the City will be consistent with the AMBAG projection for the year 2020 used to assess consistency with the local air quality management plan, provided that a small percentage of that growth occurs in the

period 2020 to 2024. Therefore, the General Plan Update would not have a cumulatively considerable impact on long-term air quality.

Most new development will take place within existing developed areas of the City on land that is already developed or on small, infill parcels. This substantially reduces potential for cumulatively substantial impacts on aesthetic resources, biotic resources, and hydrological resources, and limits potential cumulative impacts associated with construction of new public facilities or infrastructure. Exposure to and hazards created by new development are of a similar character to new development projected within the remainder of the County and local area – this effect of the General Plan Update is not considered cumulatively substantial.

Section 2.0, Environmental Setting, Impacts and Mitigation Measures summarizes the anticipated impacts of the proposed project. In general, with the implementation of the proposed General Plan Update policies, along with the additional recommended mitigation measures, all significant impacts of the project should be reduced to a less than significant level. This fact too reduces the likelihood that project impacts will be cumulatively considerable.

Effects Found to Be Cumulatively Considerable

Transportation

Implementation of the General Plan Update will result in an increase in traffic generation. As discussed in Section 2.12, Transportation, that traffic could have significant impacts within the City. New traffic will also have effects on the regional roadway network. Highway 68 between Monterey and Salinas, Highway 1 from Carmel to Santa Cruz, Highway 101 from south Monterey County north to Gilroy, and Highway 156 between Castroville and Highway 101 are the most notable highway related examples.

TAMC's 2002 Regional Transportation Plan as well as a number of plan level studies conducted for several local recently completed general plan updates (cities of Marina, Seaside, and Salinas), for general plans currently in process (Monterey County), and for the reuse plan indicate that many of the arterials and highways onto which additional traffic generated from within the City would be distributed, currently operate at unacceptable levels of service. TAMC and local jurisdictions, FORA, and Caltrans have identified a wide range of transportation network improvements needed over the next 20 years to address long-term circulation network impacts.

Funding of regional circulation improvements identified by TAMC in collaboration with local jurisdictions and FORA may get a boost if TAMC's current effort to design and implement a regional traffic impact fee is successful. Funds generated by the fee would be sufficient to fund a subset of the total number and cost of local and regional improvements needed. In addition, TAMC is in the process of investigating a Local Transportation Sales Tax Ballot Measure to assist with implementation of regional transportation improvements.

Implementation of the General Plan Update would incrementally impact transportation systems by creating new traffic that will, in combination with traffic generated by other regional development, impact the local and regional transportation network, both in the short term and the long term. The incremental effects of the General Plan Update on circulation would be mitigated by the range of Circulation Element policies contained in the General Plan Update and by circulation system projects that are planned or proposed by the City, TAMC, and Caltrans.

3.2 Significant Unavoidable Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project. Based on the analysis in Section 2.0, Environmental Setting, Impacts, and Mitigation Measures, implementation of the General Plan Update is not expected to create significant and unavoidable impacts.

3.3 Growth Inducing Impacts

Growth inducement refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth. In the context of growth in the City of Monterey, the most relevant potential obstacle to growth would be extension or expansion of infrastructure or development of a new water supply source.

CEQA Guidelines section 15126.2(d) requires a discussion of the growth-inducing impacts of a proposed project. Potential growth-inducing impacts must be discussed in relation to both the potential impacts on existing community service facilities and the way a project may encourage and facilitate other activities that could significantly affect the environment. It must not be assumed that growth in any area is necessarily beneficial, detrimental or of little significance to the environment.

Implementation of the General Plan Update is not expected either directly or indirectly to foster significant population or economic growth. As has been discussed throughout this EIR, with one exception, the development potential described in the General Plan Update is focused within existing developed areas. Intensification of use within designated mixed-use neighborhoods and residential development on limited remaining small parcels are the main forms of development anticipated. The exception is potential industrial development on 113 vacant acres recently annexed to the City.

Intensification of use in existing commercial neighborhood areas and infill development on small vacant parcels within developed areas will not require significant, if any, expansions or extensions of utilities or infrastructure or changes to plans that enable

significant additional growth. Infrastructure needed to serve such development is largely already in place. And since the City is nearly built out, no benefit would accrue from extending or expanding infrastructure at levels above that required for meeting General Plan Update buildout needs.

Increased residential development is the main projected form of growth in the City. That growth is largely driven by AMBAG's regional housing needs assessment, which mandates that the City provide sites for and facilitate development of about 1,302 dwelling units over the 2002 to 2007 period. The General Plan Update shows adequate sites for meeting this requirement.

New infrastructure will be required to serve the 113-acre industrial site in the Fort Ord annexation area. Planning for infrastructure extensions has not yet been undertaken at a meaningful level of detail. The annexation area is essentially surrounded by land within other jurisdictions and by land within the City (primarily Ryan Ranch) for which infrastructure extensions have already been made. Therefore, little if any benefit would accrue to extending infrastructure to the site that meets more than the site specific development needs.

The General Plan Update does not define a specific mechanism or action by which the current development constraint posed by limited water supply can be overcome. Several policies stress the need to expand water supply, but implementation of the General Plan itself would not inherently assure a new source of supplemental water for the City.

3.4 Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines section 15126(2)(c), this section discusses the irreversible adverse changes to the environment that could occur during the construction and implementation of the proposed project. Examples of irreversible environmental changes, as set forth in the CEQA Guidelines, include the following: projects that would involve a large commitment of nonrenewable resources such that removal or non-use after implementation is unlikely; the primary and secondary impacts of a project that would generally commit future generations to similar uses; and/or irreversible damage that could result from any potential environmental accidents associated with the proposed project. A proposed project would result in significant irreversible effects if it is determined that key resources would be degraded or destroyed to the extent that there is little possibility of restoring them.

Implementation of the General Plan Update is not expected to result in significant irreversible environmental effects. Commitments of non-renewable resources will be required, especially petroleum based products and fuels. Additional resources such as timber, mineral resources, and construction materials including gravel, metals, etc., will be required. For all practical purposes, these materials cannot be reused and their use will incrementally reduce the availability of finite resources.

Intensification of development in existing developed areas and development of vacant areas will essentially limit the City's flexibility for making alternative future decisions about the use of land. The City is already near buildout. Implementation of the General Plan will further reduce any options the City may currently have for meeting its future social, economic, and environmental goals.

3.5 Alternatives

CEQA Guidelines section 15126.6(a) requires a description of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. CEQA Guidelines section 15126.6(b) further requires that the discussion of alternatives focus on those alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a less than significant level, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

The CEQA Guidelines section 15126.6(e)(1)(2) states that an EIR must also consider a "no project" alternative as a basis for enabling decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the project. The no project alternative is to be based on conditions at the time a Notice of Preparation was published, which occurred in July, 2003.

Alternatives Considered

The alternatives evaluated in this section are the land use/policy alternatives considered by the City in the course of its General Plan Update process. The City considered three conceptual alternative land use and policy scenarios. The consideration of alternatives was driven by several factors including the City's need to ensure capacity for its fair-share housing requirement of 1,302 units for the years 2002-2007 and by a desire to minimize the transportation and circulation impacts of new development.

The first alternative was a "Market-Rate Growth" scenario where new residential and commercial growth would occur in response to market conditions in the absence of new City defined specific policies or incentives for channeling that growth to specific areas. Given the lack of development capacity within much of the City, the Special Study Area located along Highway 68 was contemplated as absorbing a significant percentage of the new residential development needed within the City.

The second alternative was the "South of Highway 1" scenario. New residential growth was to be focused in the 134-acre Old Capitol site area located south of Highway 1

across from the Del Monte Shopping Center. A range of incentives and disincentives to be developed by the City would be used for this purpose.

The third conceptual alternative focused on intensifying new development along existing transportation corridors that are and could continue to be served by shuttle and other transit services. The conceptual alternative evolved into the preferred “mixed-use neighborhood” model on which the General Plan Update has been based. This is the proposed project whose impacts and mitigations are discussed in Section 2.0, Environmental Setting, Impacts, and Mitigation Measures.

At a conceptual level, both the Market Rate Growth alternative and the South of Highway 1 alternatives are capable of meeting the City’s objectives for updating its general plan as briefly described in Section 1.3, Project Description and Objectives. The No Project Alternative would also meet the City’s objectives as it has the potential to provide capacity for meeting the City’s future housing needs.

Comparison of Alternatives

This section includes a brief comparison of the No Project, Market Rate Growth, and South of Highway 1 alternatives to the proposed project. The results of the comparison provide an indication as to whether or not any of the alternatives are environmentally superior to the proposed project.

No Project Alternative

The No Project Alternative represents continuation of the status quo. That is, the existing General Plan would remain in effect and development for the next 20 years would continue to be guided by the existing land use plan and policies contained in the plan. The existing General Plan would likely enable a similar level of development as does the General Plan Update. A significant percentage of that development potential is on undeveloped and underdeveloped land located on the south side of Highway 68 in the Highway 68 corridor that is within the City. The Old Capitol site noted previously also has significant development potential area under the existing General Plan. Either or both of these areas could be used to accommodate the level of new residential growth projected in the General Plan Update.

In general, the potential environmental impacts of the No Project alternative would appear to be similar to those of the proposed project. However, development in either the Highway 68 corridor or the Old Capitol site could have greater impacts than would a similar level of development proposed in the General Plan Update. This is especially true for traffic and air quality as described in the following impact comparison.

Aesthetics. Impacts are anticipated to be as or more significant relative to the General Plan Update. New development in areas that are currently in a natural or largely undisturbed state and are visually sensitive would affect viewsheds within scenic highway corridors. New development proposed in the General Plan Update would be focused in existing developed areas that are much less visually sensitive.

Air Quality. Air quality impacts would be similar or possibly greater than for the General Plan Update. The General Plan Update proposes intensification of land use in transit corridors that can readily be served by public transit or other alternative transit facilities. This fact could help to reduce the total number of vehicle trips generated within the City and could also reduce trip lengths relative to the No Project Alternative. New development under the No Project alternative would be located at greater distance from most existing commercial services and would not likely be at densities that support public transit use. Therefore, a greater number and length of vehicle trips are likely to result, with a corresponding relative increase in vehicular air emissions.

Terrestrial and Marine Resources. Greater impacts are anticipated. New development could occur in areas that are largely undeveloped or underdeveloped. Valuable biological resources in these areas would be lost or degraded. Policies of the General Plan Update also provide more thorough and comprehensive protection to sensitive habitat and special status species that do those of the existing General Plan.

Cultural Resources. Impacts are considered to be similar. The General Plan Update calls for intensification of use in existing commercial areas where potential impacts on historic resources would correspondingly increase. However, the No Project alternative would likely result greater potential for disturbance of subsurface archaeological resources, as new development would occur in areas where significant grading and excavations would be needed to accommodate new development.

Geology and Soils. Impacts are anticipated to be slightly greater. A similar number of people would be exposed to geologic hazards including seismic shaking, ground failure, and/or slope failure/landsliding. However, new development would occur in largely undeveloped areas where the potential for grading and soil erosion impacts are greater than for intensification of uses in already developed areas as is proposed in the General Plan Update.

Hazards and Hazardous Materials. The No Project alternative may have greater impacts in terms of exposure to fire hazards, as it would enable development in currently undeveloped or underdeveloped areas with a significant fire hazard potential. Effects related to hazardous materials are likely to be similar as most new development would also be residential in nature.

Hydrology and Water Quality. Urban pollutant generation and degradation of surface water quality in local streams, lakes, and the Monterey Bay is expected to be similar or greater. The area of impervious surfaces created could be greater under this alternative as new development would occur in locations that remain largely in a natural state – stormwater runoff volumes would likely increase, as would the potential for erosion and downstream sedimentation. Flood hazards may be slightly lower as new development would be located further from known flood hazard areas within the City. Under the General Plan Update, development would be focused in areas already covered with impervious surfaces, so the net change in storm water runoff volumes would be less than for the No Project alternative.

Land Use. The No Project alternative may have greater overall land use impacts than the proposed project. This alternative would not enable a mixed-use approach to improving development capacity that is needed to meet the City's fair share housing requirement of 1,302 units by 2007. The mixed-use approach has the potential to reduce a range of potential impacts (i.e. aesthetics, biological resources, circulation, air quality, services, etc.) impacts relative to the No Project alternative by focusing new development within existing developed transit corridors rather than on marginally or undeveloped land at the periphery of the City.

Noise. Noise impacts may be similar. New development in areas that are largely undeveloped would introduce new noise sources to those areas (especially vehicular noise). However, the General Plan Update would locate new development along corridors where vehicular noise generation is already significant. The incremental increase in noise created by traffic from new mixed-use development would incrementally add to impacts on existing noise sensitive uses located along major roadways.

Population and Housing. This alternative would enable a similar increase in population, but the increase under either alternative is not considered to be significant. Neither would displace existing housing or people.

Public Services. Demand on and for public services under this alternative would likely be greater than the proposed project. Service infrastructure would need to be extended to serve new development and police and fire services would be required to provide service at a greater level of intensity to areas that create little demand under existing conditions. This would not occur with the proposed project as new development would occur within already developed areas where services infrastructure already exists and police and fire service coverage is already provided.

Transportation. The No Project Alternative would have similar or greater impacts than the General Plan Update. It may result in greater traffic generation because trip generation reductions expected from implementing the mixed-use land use strategy as proposed in the General Plan Update would not be realized. The distribution of circulation impacts under the No Project alternative would be different than for the proposed project. Nevertheless, significant impacts on local and regional roadways and intersections would still occur.

Utilities and Services. This alternative would likely have greater environmental impacts than the proposed project. It would create a similar level of demand for utilities and utility infrastructure. However, it is likely that new infrastructure would need to be extended through undeveloped or marginally developed areas in order to serve new [development](#). The potential environmental effects of such extensions on biological resources, soils, water quality, etc. would likely be greater than those for the proposed project. Utility infrastructure expansions needed for the proposed project would likely occur in developed areas unlikely to contain sensitive environmental resources.

Market Rate Growth Alternative

The “Market-Rate Growth” alternative is assumed to have a similar level of development potential as does the proposed project. It differs from the proposed project by providing fewer incentives for channeling new growth, especially residential development, to specific areas. However, it does assume that a significant percentage of the 1,302 units of residential development capacity needed by the City would be targeted for the Special Planning Area located along Highway 68. This would result in less intense residential development in the remaining part of the City. It would also fail to capture traffic generation reductions made possible through the mixed-use development strategy, a cornerstone of the General Plan Update.

Aesthetics. This alternative could have more significant aesthetic impacts than the proposed project. Significant new development would be located within a scenic highway corridor in a location that remains largely in a natural, highly aesthetically valuable state. New development could cause a more significant degradation of natural environmental amenities than would the proposed project, which locates all 1,302 units of residential development capacity within already developed areas where loss of natural aesthetic features would be minimized.

Air Quality. This alternative would likely have greater overall air quality impacts than the proposed project. It would not capture the benefits of reduced traffic generation (up to 30 percent fewer trips as estimated by the City) through promotion of mixed-use development that would occur with the proposed project. Distribution of traffic would be substantially different. While exceedences of carbon monoxide standards at the intersections and road segments defined for the proposed project may be reduced, these exceedences may simply be displaced to other intersections that are equally or more significantly impacted by this alternative. Its greater total trip generation could actually result in greater local air emissions impacts than the proposed project.

Terrestrial and Marine Resources. Greater impacts are expected from this alternative than from the proposed project. Significant more development would be located in areas that are currently in their natural state and may contain sensitive biological resources and/or special status species. Impacts on marine resources, which are most likely to be through water quality degradation, would likely be similar to the proposed project as storm water from development in the Highway 68 corridor will also drain to the Monterey Bay.

Cultural Resources. Impacts on historic resources may be less than the proposed project. Much less intensification of development within existing developed areas of the City that may contain historic resources would occur. Less potential for direct modification of historic resources or changes in historic resource settings would result. This alternative could have greater impacts on archaeological resources as it would result in a greater amount of ground disturbance than the proposed project.

Geology and Soils. Similar geologic and soils impacts are anticipated. This alternative would result in a similar growth in future population – exposure to seismic hazards,

especially groundshaking, is likely to be similar. This alternative has greater potential to create soil erosion as it would involve greater ground disturbance than the proposed project.

Hazards and Hazardous Materials. Slightly greater levels of impact are expected under this alternative. This is primarily due to the fact that this alternative would place a significant amount of development in closer proximity to areas of high fire hazard than would the proposed project. Hazardous materials hazards are expected to be similar as for the proposed project as are hazards from airport operations.

Hydrology and Water Quality. This alternative would have a similar, if not slightly greater impact than the proposed project. It would result in a greater increase in impervious surface area as significant development would occur in currently undeveloped areas. A greater volume of surface runoff would be created, creating higher potential for localized flooding and need for expansion or construction of storm drainage facilities. Flood hazards may also be slightly greater given the proximity of the Special Study Area to the 100-year flood hazard zones located in the Highway 68 corridor.

Land Use. Impacts are anticipated to be similar as for the proposed project. This alternative would result in a similar level of population growth and would not, like the proposed project, result in the displacement of people or housing, or divide an established community. This alternative would not afford the benefits of a reduction of traffic generation and air emissions that would accrue due to the mixed-use land use approach proposed in the General Plan Update.

Noise. Noise impacts for this alternative are expected to be similar to or greater than the proposed project. This alternative would result in greater traffic generation and traffic related noise. However, this traffic may be distributed along roadways, namely Highway 68, where there are fewer noise sensitive uses that would be affected by traffic generated from intensification of residential use within existing commercial neighborhoods. New development in the Special Study Area, which is in close proximity to the Monterey Peninsula Airport, could expose a greater number of future residents to elevated aircraft noise levels than is likely to occur for the proposed project.

Population and Housing. This alternative would result in a similar level of population growth and would provide a similar level of total housing development capacity as would the proposed project. Effects of this alternative are expected to be similar to those of the proposed project.

Public Services. Impacts on public services may be slightly greater than for the proposed project. Significant demand for fire and police services may be created in an area where response times are greater than would be the case for new development in the commercial cores of the City. This may exacerbate the need for new facilities that are closer to the Highway 68 corridor in order to reduce response times. Construction of such facilities could be the source of environmental impacts that might not otherwise occur. Impacts on other services are expected to be similar as those for the proposed project.

Transportation. This alternative is expected to have greater impacts than the proposed project. Without the benefit of traffic trip reduction through the use of a mixed-use development approach, a greater volume of traffic would be generated. Many major roadways and intersections in the City and in surrounding jurisdictions as well as most local and State highways onto which traffic would be distributed would experience a greater incremental increase in the degradation of operational capacity given this alternative's generation of a greater volume of traffic.

Utilities and Services. Impacts on utilities are expected to be slightly greater than those created by the proposed project. Significant new development would occur in a currently undeveloped area. Extension of utility infrastructure (i.e. wastewater collection, water supply, etc.) may be needed through areas that could be environmentally sensitive.

South of Highway 1 Alternative

This alternative is similar to the proposed project in that it would provide for new housing capacity consistent with AMBAG requirements. However, instead of providing development capacity within existing commercial neighborhoods, much of the capacity would be target to the 134-acre Old Capitol site area located south of Highway 1 across from the Del Monte Shopping Center. This alternative would result in a similar level of population growth and traffic generation as would the proposed project. But like the Market Rate Growth Alternative, this alternative would focus the population growth and traffic generation from development of the City's fair share housing requirement of 1,302 units in a different location than is proposed in the General Plan Update. The Old Capitol site area is largely undeveloped and remains largely in a natural state.

Aesthetics. Like the Market Rate Growth alternative, this alternative could have more significant aesthetic impacts than the proposed project. Significant new development would be located adjacent to the Highway 1 scenic corridor in a location is still largely in an natural state and retains a high aesthetic value. Relative to the proposed project, greater degradation of natural environmental amenities would occur.

Air Quality. This alternative would not capture the benefits of reduced traffic generation (up to 30 percent fewer trips as estimated by the City) through promotion of mixed-use development as would the proposed project. Air pollutant generation would increase relative to the proposed project. Exceedences of carbon monoxide standards at the intersections and road segments defined for the proposed project may be reduced, but these exceedences may simply displaced to other intersections or road segments that are impacted by project trips. Therefore, this alternative would have greater overall air quality impacts than the proposed project.

Terrestrial and Marine Resources. Significant more development would be located in an area that is largely undeveloped an that retains much of its natural biological value. The Old Capitol site area may contain sensitive biological resources and/or special status species. Impacts on marine resources, which are most likely to be through water

quality degradation, would likely be similar to the proposed project as storm water from development in this area will also drain to the Monterey Bay.

Cultural Resources. Impacts on historic resources may be less than the proposed project as less development would occur in portions of the City that contain historic resources. Portions of the Old Capitol site area are within an archaeologically sensitive area. Therefore, this alternative could have greater impacts on archaeological resources since it would result in a greater amount of ground disturbance than the proposed project.

Geology and Soils. Similar geologic and soils impacts are anticipated. This alternative would result in a similar growth in future population – exposure to seismic hazards, especially groundshaking, is likely to be similar. This alternative has greater potential to create soil erosion as it would involve greater ground disturbance than the proposed project and may create greater exposure landslide hazards as more development would be located in hillside areas than with the proposed project.

Hazards and Hazardous Materials. Slightly greater levels of impact are expected under this alternative. This is primarily due to the fact that this alternative would place a significant amount of development in closer proximity to areas of high fire hazard than would the proposed project. Hazardous materials hazards are expected to be similar as for the proposed project as are hazards from airport operations.

Hydrology and Water Quality. This alternative would have a similar, if not slightly greater impact than the proposed project. It would result in a greater increase in impervious surface area as significant development would occur in currently undeveloped areas. A greater volume of surface runoff would be created, creating higher potential for localized flooding and need for expansion or construction of storm drainage facilities. Flood hazards would be reduced as the Old Capitol site area is not within or immediately adjacent to a 100-year flood hazard zone.

Land Use. This alternative would result in a similar level of population growth as the proposed project. It would not result in the displacement of people or housing, or divide an established community. Therefore, land use impacts are anticipated to be similar as for the proposed project. This alternative would not afford the benefits of a reduction of traffic generation and air emissions that would accrue due to the mixed-use land use approach proposed in the General Plan Update.

Noise. Noise impacts for this alternative are expected to be similar to the proposed project. This alternative would result in greater traffic generation and traffic related noise. Impacts on noise sensitive uses would likely be similar, though the Old Capitol site's proximity to Highway 1 may result in fewer trips being distributed onto local roadways bordered by noise sensitive land uses. Exposure of future residents to airport related noise may be lower than for the proposed project as fewer people would reside directly under aircraft overflights paths.

Population and Housing. This alternative would result in a similar level of population growth and would provide a similar level of total housing development capacity as would the proposed project. Effects of this alternative are expected to be similar to those of the proposed project.

Public Services. Impacts on public services are expected to be similar to those for the proposed project as demand for fire and police services should be similar, as should demand for education facility capacity and parks and recreation resources.

Transportation. As with the Market Rate Growth alternative, this alternative is expected to have greater impacts than the proposed project. Without the benefit of traffic trip reduction through the use of a mixed-use development approach, a greater volume of traffic would be generated. The distribution of that traffic onto the roadway network will be different than for the proposed project. Many major roadways and intersections in the City and in surrounding jurisdictions as well as most local and State highways onto which traffic would be distributed function at or below recommended operational thresholds. This alternative would add a greater incremental volume of traffic to the network, resulting in greater project specific and cumulative impacts.

Utilities and Services. Impacts on utilities are expected to be slightly greater than those created by the proposed project. Significant new development would occur in a largely undeveloped area. Extension of utility infrastructure (i.e. wastewater collection, water supply, etc.) may be needed through areas that could be environmentally sensitive.

Environmentally Superior Alternative

Today, and for the foreseeable future, transportation and water supply are arguably the greatest factors influencing development on the Monterey Peninsula and beyond. Alternatives that most readily overcome constraints created by these issues while still meeting the objectives of a project must be given significant weight. The No Project alternative is unlikely to meet the objectives of the proposed project and is likely to have similar or greater impacts than the proposed project. It is therefore eliminated as the environmentally superior alternative.

The Market Rate Growth and the South of Highway 1 alternatives do have some advantages relative to the proposed project. However, both would likely generate more traffic and have greater impacts on the existing and future road network than would the proposed project. Along with their traffic impacts, each would likely create greater air quality impacts due to increases in traffic generation. Both would also result in greater impacts on aesthetic resources, terrestrial resources, and hydrology and water quality, increase traffic related noise levels that could adversely affect noise sensitive uses, and have greater environmental impacts resulting from the need to construct new or expand existing infrastructure systems.

The proposed project is considered to be the environmentally superior alternative.

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4.0 Report Documentation

4.1 Persons Contacted

Bill Fell	City of Monterey Planning Division
Kimberly Cole	City of Monterey Planning Division
Carl Andersen	City of Monterey Public Facilities Director
Doug Stafford	City of Monterey Public Works Department
Jennifer Gonzales	City of Monterey Public Works Department
Tom Reeves	City of Monterey Public Works Department
Rick Rodewald	City of Monterey Fire Department
Tim Shelby	City of Monterey Police Department
Colette McLaughlin	Monterey Peninsula Unified School District
Cory Welch	Monterey County Environment Health Division, Hazardous Materials Unit
Rich Eisner	California Office of Emergency Services
Todd Muck	Association of Monterey Bay Area Governments
Todd Bennett	City of Monterey Planning Division
Janet Brennan	Monterey Bay Unified Air Pollution Control District
Henrietta Stern	Monterey Peninsula Water Management District

4.2 Literature Cited

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4.3 Report Preparers

EMC Planning Group Inc.

Teri Wissler Adam, Principal
Principal in Charge and Editing

Ron Sissem, Principal Planner
Project Management and Report Preparation

Erika Spencer, Senior Planner
Report Preparation

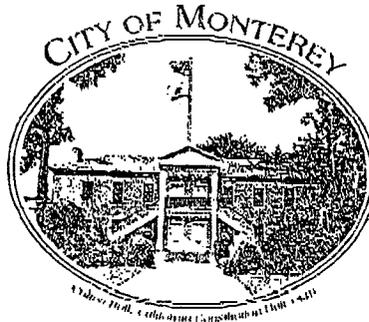
Steve McMurtry, Associate Planner/Biologist
Biological Report Peer Review and Report Preparation

E. J. Kim, Desktop Publishing Specialist
Report Production and Graphics

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Appendix A

Notice of Preparation and Responses



Post-It	Date	# of pages
Fax Note R7673		
To	Ron Sisseem	
Fax#	649-8399	
From	Kim Cole	
Phone#	646-3759	

July 31, 2003

To Whom It May Concern,

The City of Monterey is coordinating the preparation of an Environmental Impact Report for the new City of Monterey General Plan. The Plan contains several elements including Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, Economic, Historic Preservation, Urban Design, Social and Public Facilities.

We need to know the views of your organization as to the scope and content of the environmental information that is germane to your organization's area of interest.

The EIR will examine the full range of environmental issues including: aesthetics, air quality, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality, land use planning, noise, population/housing, public services, recreation, transportation, and utilities and service systems.

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but no later than 30 days after receipt of this notice.

Please send your response to: Bill Fell, Chief of Planning
City of Monterey
Community Development Department
City Hall
Monterey, CA 93940

Please include the name of a contact person in your organization.

Sincerely,

Bill Fell
Chief of Planning

BF:KC

Attachments: Initial Study

c: City Council
Planning Commission

Architectural Review Committee
Historic Preservation Commission
POST (Outside City Clerk's Office)
AMBAG, P. O. Box 809, Marina, CA 93933-0809
State Clearing House (15 copies), Office of Planning and Research, P.O. Box 3044,
Sacramento, CA 95812-3044
County Clerk, 240 Church Street, Salinas, CA 93901
California Native Plant Society, Mary Ann Matthews, P. O. Box 381, Carmel Valley, CA
93924
Sierra Club, Ventana Chapter, Rita Dalessio, 16 Via Las Encinas, Carmel Valley, CA
93924
League of Women Voters, Jean Esary, 4078 El Bosque Drive, Pebble Beach, CA
93953
Department of Fish and Game, 20 Lower Ragsdale Drive, Suite 100, Monterey, CA
93940
Calif. Regional Water Quality Control, 81 Higuera Street, Suite 200, San Luis Obispo,
CA 93401-5427
Monterey Bay National Marine Sanctuary, c/o National Oceanic & Atmospheric, 299
Foam Street, Monterey, CA 93940
City of Seaside, 440 Harcourt Avenue, P.O. Box 810, Seaside, CA 93955-0810
City of Sand City, One Sylvan Park, Sand City, CA 93955
City of Del Rey Oaks, 650 Canyon Del Rey, Del Rey Oaks, CA 93940
City of Pacific Grove, 300 Forest Avenue, Pacific Grove, CA 93950
City of Marina, 211 Hillcrest Avenue, Marina, CA 93933
Monterey County Planning, P.O. Box 1208, Salinas, CA 93902
Susan Craig, Coastal Commission, Central Coast District Office, 725 Front Street,
Suite 300, Santa Cruz, CA 95060
Molly Erickson, P.O. Box 2448, Monterey CA 93942-2448
Monterey District Superintendent, Department of Parks and Recreation, 2211 Garden
Road, Monterey, CA 93940
Monterey Bay Unified Air Pollution Control District, 24580 Silver Cloud Court,
Monterey, CA 93940
Neighborhood / Business Associations
Monterey Peninsula Water Management District, P.O. Box 85; Monterey, CA 93942
Gary Patton, LandWatch of Monterey County, P.O. Box 1876, Salinas, CA 93902
Teri Wissler, EMC Planning Group, 301 Lighthouse Avenue, Suite C, Monterey, CA
93940

City of Monterey Environmental Checklist Form

- 1. **Project title:** City of Monterey General Plan Update
- 2. **Lead agency name and address:** City of Monterey, Planning Division, Monterey, CA 93940
- 3. **Contact person and phone number:** Bill Fell (831) 646-3885
- 4. **Project location:** City of Monterey
- 5. **Project sponsor's name and address:** City of Monterey, Planning Division, Monterey, CA 93940
- 6. **General plan designation:** N/A
- 7. **Zoning:** N/A
- 8. **Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

The City of Monterey proposes a new City General Plan to guide future development. The Plan contains several chapters or "elements" including Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, Economic, Historic Preservation, Urban Design, Social, and Public Facilities.

- 9. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

The City of Monterey is surrounded by the cities of Seaside, Del Rey Oaks, and Pacific Grove and Monterey County. The Pacific Ocean creates the City's northeastern border and is recognized as the Monterey Bay National Marine Sanctuary.

- 10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

-XAesthetics
-Agriculture Resources
-XAir Quality
-XBiological Resources
-XCultural Resources
-XGeology /Soils
-XHazards & Hazardous Materials
-XHydrology / Water Quality
-XLand Use Planning
-Mineral Resources
-XNoise
-XPopulation / Housing
-XPublic Services
-XRecreation
-XTransportation/Traffic

-X.....Utilities / Service Systems
-X.....Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

..... I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

..... I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

..... **XX**..... I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

..... I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

..... I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Public Review Period

Begins: July 31, 2003
Ends: August 31, 2003

Public Meeting

Date: August 12, 2003
Time: 7:00 pm
Location: Few Memorial Hall of Records (City Hall Council Chambers)
Reviewing Body: Planning Commission

Anyone interested in this matter is invited to comment on the document by written response or by personal appearance at the hearing.

Signature Bill Fell Date: 8.11.03

Printed name **Bill Fell**

Title **Chief of Planning**

Address: City of Monterey, Community Development Department, Monterey, CA 93940

Phone Number: (831) 646-3885

Fax Number: 831-646-3408

- c: City Council
- Planning Commission
- Architectural Review Committee
- Historic Preservation Commission
- POST** (Outside City Clerk's Office)
- AMBAG, P. O. Box 809, Marina, CA 93933-0809
- State Clearing House (15 copies), Office of Planning and Research, P.O. Box 3044, Sacramento, CA 95812-3044
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Sierra Club, Ventana Chapter, Rita Dalessio, 16 Via Las Encinas, Monterey, CA 93924
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Monterey, CA 93940
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Santa Cruz, CA 95060
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Monterey District Superintendent, Department of Parks and Recreation, 2211 Garden Road,
Monterey, CA 93940
Monterey Bay Unified Air Pollution Control District, 24580 Silver Cloud Court, Monterey, CA 93940
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Gary Patton, LandWatch of Monterey County, P.O. Box 1876, Salinas, CA 93902
Teri Wissler, EMC Planning Group, 301 Lighthouse Avenue, Suite C, Monterey, CA 93940

FILENAME: s:\data\planning\initial studies\2003\0730 general plan initial study

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
I. AESTHETICS – Would the project:					
a) Have a substantial adverse effect on a scenic vista?	X				City of Monterey Community Development Department
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	X				City of Monterey Community Development Department
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	X				City of Monterey Community Development Department
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	X				City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impact on aesthetics should be analyzed in an EIR.					
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X	City of Monterey Community Development Department
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X	City of Monterey Community Development Department
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X	City of Monterey Community Development Department
Discussion, where applicable: a-c) There are no agricultural resources in the General Plan Study Area.					
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	X				City of Monterey Community Development Department; 1997 Air Quality Management Plan for the Monterey Bay Region; 1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region; and the District's CEQA Air Quality Guidelines

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X				City of Monterey Community Development Department; 1997 Air Quality Management Plan for the Monterey Bay Region; 1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region; and the District's CEQA Air Quality Guidelines
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	X				City of Monterey Community Development Department; 1997 Air Quality Management Plan for the Monterey Bay Region; 1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region; and the District's CEQA Air Quality Guidelines
d) Expose sensitive receptors to substantial pollutant concentrations?	X				City of Monterey Community Development Department; 1997 Air Quality Management Plan for the Monterey Bay Region; 1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region; and the District's CEQA Air Quality Guidelines
e) Create objectionable odors affecting a substantial number of people?	X				City of Monterey Community Development Department; 1997 Air Quality Management Plan for the Monterey Bay Region; 1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region; and the District's CEQA Air Quality Guidelines
Discussion, where applicable: The General Plan's impacts on air quality should be analyzed in an EIR.					
IV. BIOLOGICAL RESOURCES -- Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	X				City of Monterey Community Development Department
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	X				City of Monterey Community Development Department
c) Have a substantial adverse effect on federally protected	X				City of Monterey Community Development Department

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X				City of Monterey Community Development Department
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X				City of Monterey, Zoning Ordinance, Chapter 37, Preservation of Trees and Shrubs
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	X				City of Monterey Community Development Department
g) Will the project remove skyline vegetation?	X				Flora and Fauna Resources Map 7 of Flora and Fauna Resources Technical Study; November 1975 (Background Report for City of Monterey 1983 General Plan)
h) Will the project remove cultural value flora?	X				Flora and Fauna Resources Map 7 of Flora and Fauna Resources Technical Study; November 1975 (Background Report for City of Monterey 1983 General Plan)
i) Will the project remove significant trees or significant groups of trees?	X				City of Monterey Community Development Department
j) Will the project threaten rare and endangered species of marine animals?	X				City of Monterey Community Development Department.
Discussion, where applicable :					
The General Plan's impacts on biological resources should be analyzed in an EIR.					
V. CULTURAL RESOURCES - Would the project::					
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5? (Intent is to address impact to onsite historic resources and adjacent historic resources.)	X				City of Monterey, Comprehensive Survey of Historic Resources in Monterey
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	X				City of Monterey Community Development Department
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X				City of Monterey Community Development Department

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
d) Disturb any human remains, including those interred outside of formal cemeteries?	X				City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on cultural resources should be analyzed in an EIR.					
VI. GEOLOGY AND SOILS -- Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	X				City of Monterey Community Development Department
i) Strong seismic ground shaking?	X				City of Monterey Community Development Department
iii) Seismic-related ground failure, including liquefaction?	X				City of Monterey Community Development Department
iv) Landslides?	X				City of Monterey Community Development Department
b) Result in substantial soil erosion or the loss of topsoil?	X				City of Monterey Community Development Department
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X				City of Monterey Community Development Department
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	X				City of Monterey Community Development Department
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	X				City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on geology and soils should be analyzed in an EIR.					
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use,	X				City of Monterey Community Development Department

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
or disposal of hazardous materials?					
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	X				City of Monterey Community Development Department
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	X				City of Monterey Community Development Department
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	X				City of Monterey Fire Department
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	X				City of Monterey Community Development Department
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	X				City of Monterey Community Development Department
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X				City of Monterey Police and Fire Departments
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or when residences are intermixed with wildlands?	X				City of Monterey Community Development Department
Discussion, where applicable:					
The General Plan's policies in relation to various hazards should be analyzed in an EIR.					
VIII. HYDROLOGY AND WATER QUALITY -- Would the project::					
a) Violate any water quality standards or waste discharge requirements?	X				City of Monterey Public Works Department
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be	X				City of Monterey Public Works Department

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?					
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	X				City of Monterey Public Works Department
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	X				City of Monterey Public Works Department
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	X				City of Monterey Public Works Department
f) Otherwise substantially degrade water quality?	X				City of Monterey Public Works Department
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	X				Flood Insurance Rate Map
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	X				Flood Insurance Rate Map
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	X				City of Monterey Public Works Department
j) Cause inundation by seiche, tsunami, or mudflow?	X				City of Monterey Community Development Department
Discussion, where applicable :					
The General Plan's impacts on hydrology and water quality should be analyzed in an EIR.					
IX. LAND USE AND PLANNING - Would the project:					
a) Physically divide an established community?			X		City of Monterey Community Development Department
b) Conflict with any applicable land use plan, policy, or regulation	X				City of Monterey General Plan ; Neighborhood Plans, Coastal Plans,

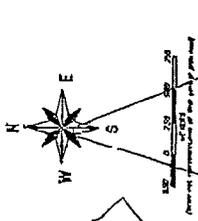
SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?					City of Monterey Zoning Ordinance
c) Conflict with any applicable habitat conservation or natural community conservation plan?				X	City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on land use planning should be analyzed in an EIR.					
X. MINERAL RESOURCES -- Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X	City of Monterey Community Development Department
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X	City of Monterey Community Development Department
Discussion, where applicable: No mineral resources exist in the City of Monterey.					
XI. NOISE -- Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X				City of Monterey Community Development Department
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X				City of Monterey Community Development Department
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X				City of Monterey Community Development Department
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X				City of Monterey Community Development Department
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	X				Monterey Peninsula Airport, FAR Part 150 Airport Noise Exposure Map, Figure 4-3, Page 4-13 (November 21, 1997)
f) For a project within the vicinity of a private airstrip, would the project expose people residing or	X				City of Monterey, Community Development Department

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
working in the project area to excessive noise levels?					
Discussion, where applicable: The General Plan's noise impacts should be analyzed in an EIR.					
XII. POPULATION AND HOUSING -- Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	X				City of Monterey Community Development Department
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	X				City of Monterey Community Development Department
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	X				City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on population and housing should be analyzed in an EIR.					
XIII. PUBLIC SERVICES					
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
a) Fire protection?	X				City of Monterey Fire Department
b) Police protection?	X				City of Monterey Police Department
c) Schools?	X				City of Monterey Community Development Department
d) Parks?	X				City of Monterey Parks and Recreation Division
e) Other public facilities?	X				City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on public services should be analyzed in an EIR.					
XIV. RECREATION --					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	X				City of Monterey, Community Development Department
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	X				City of Monterey, Community Development Department
Discussion, where applicable: The General Plan's impacts on recreation should be analyzed in an EIR.					

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
XV. TRANSPORTATION / TRAFFIC -- Would the project:					
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	X				City of Monterey Public Works Department, Traffic Division
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	X				City of Monterey Public Works Department, Traffic Division
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	X				City of Monterey
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X				City of Monterey Public Works Department, Traffic Division
e) Result in inadequate emergency access?	X				City of Monterey Fire and Police Departments
f) Result in inadequate parking capacity?	X				City of Monterey Community Development Department and Public Facilities Department
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	X				City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on circulation and traffic should be analyzed in an EIR.					
XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	X				City of Monterey Public Works Department
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X				City of Monterey Public Works Department
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X				City of Monterey Public Works Department

SUBJECT AREA:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	SUPPORTING INFORMATION
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	X				City of Monterey Community Development Department
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	X				City of Monterey Public Works Department
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	X				City of Monterey Community Development Department
g) Comply with federal, state, and local statutes and regulations related to solid waste?					City of Monterey Community Development Department
Discussion, where applicable: The General Plan's impacts on utilities and service systems should be analyzed in an EIR.					
XVII. MANDATORY FINDING OF SIGNIFICANCE --					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X				City of Monterey Community Development Department
b) Does the project have impacts that are individually limited, but cumulatively considerable? Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	X				City of Monterey Community Development Department
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X				City of Monterey Community Development
Discussion, where applicable: The General Plan's impacts should be analyzed in an EIR.					

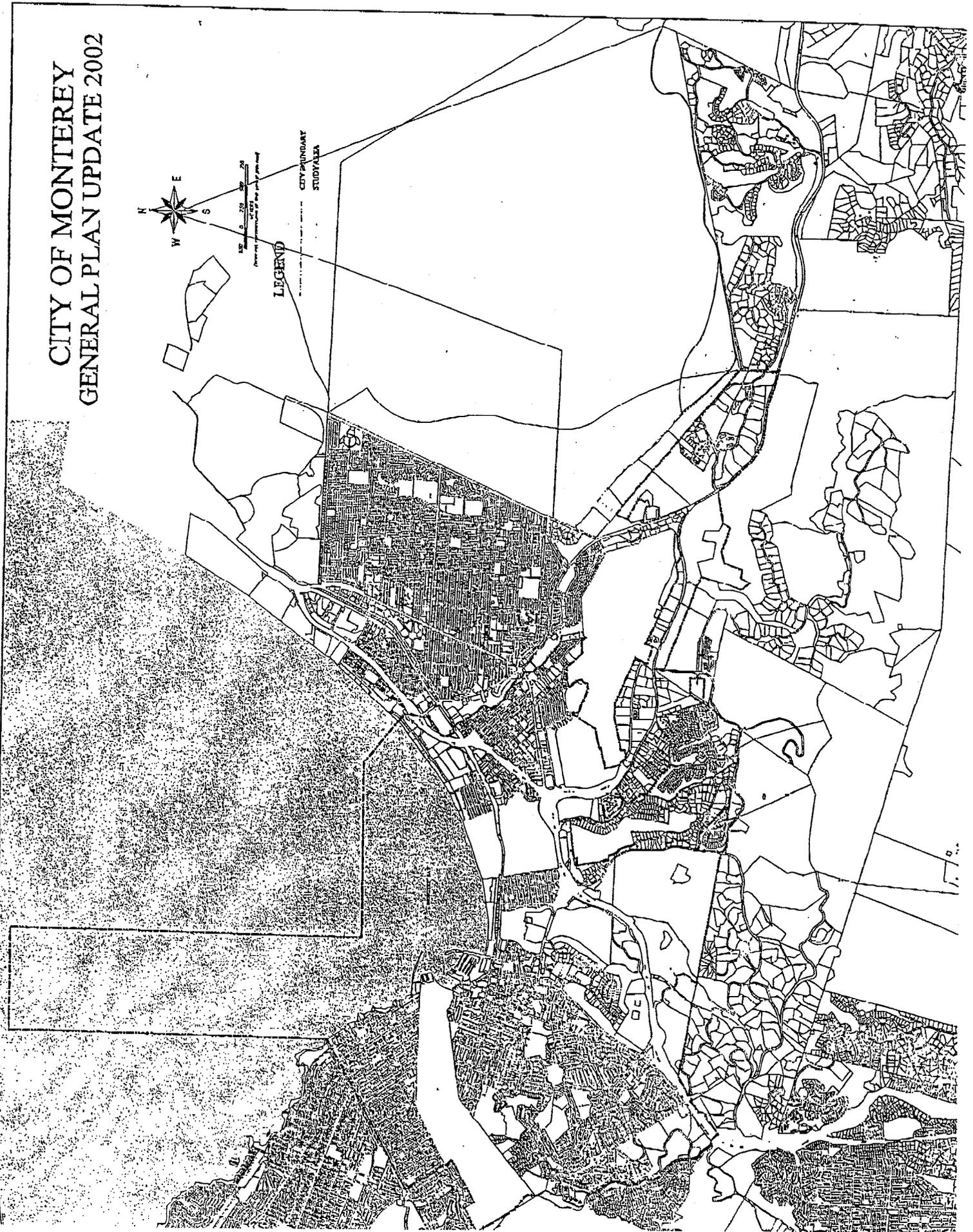
CITY OF MONTEREY GENERAL PLAN UPDATE 2002



0 100 200 300
Feet
Scale of 1" = 100'

LEGEND

CITY BOUNDARY
STUDY AREA



THE LEAGUE
OF WOMEN VOTERS
OF THE MONTEREY PENINSULA

August 26, 2003

Bill Fell, Chief of Planning
Community Development Department
City of Monterey
City Hall
Monterey CA 93940

Dear Mr. Fell,

Thank you for sending us a Notice of Preparation of an Environmental Impact Report for Monterey's General Plan Update.

The Environmental Checklist has already noted that there may be impacts in nearly all areas required to be considered, and we agree that a comprehensive analysis is needed. We submit the following recommendations:

Land Use. The Plan is commendable for its inclusion of specific land use policies and programs that would not only allow construction of Monterey's "fair share" of new housing units but would encourage such development to the extent possible over the next twenty years. The creation of "Mixed Use Neighborhoods:" in three major commercial areas of the City is noted in the Land Use Element (Sec.b, p.5) as one of three alternatives for managing future population growth that were evaluated. The EIR should analyze these alternatives in terms of their relative impacts on traffic, jobs/housing balance, and overall quality of life for all residents.

Public Facilities. The amount of additional water that would be needed to serve required new housing units should be estimated as accurately as possible. The agencies responsible for the Peninsula's water supply, whether public or private, should have updated water demand estimates for each jurisdiction's General Plan to aid in their planning.

As noted in the Public Facilities Element, new development will have to be gradual, with assurance of funding for additional public facilities and services as needed. Several strategies are suggested in the Growth Management Goals and Policies; more specific mitigations should be prescribed in the EIR.

Please keep the League of Women Voters of the Monterey Peninsula on the distribution list for this project. The contact person will be: Jean Esary, 4078 El Bosque Dr., Pebble Beach 93953.

Sincerely,



Beverly G. Bean, VMD
President

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AUG 27 2003

CITY OF MONTEREY
PLANNING DIVISION

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93403-8114
TELEPHONE: (805) 549-3111
TDD (805) 549-3259



September 2, 2003

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SCH# 2003081011

SEP 04 2003

Bill Fell
Chief of Planning
City of Monterey
Madison and Pacific Streets
Monterey, CA 93940

CITY OF MONTEREY
PLANNING DIVISION

SUBJECT: City of Monterey General Plan Update NOP Comments

Dear Mr. Fell:

The California Department of Transportation (Department) District 5 has reviewed the Notice of Preparation (NOP) for the Draft Environmental Impact Report (EIR) on the City of Monterey General Plan Update. The City of Monterey is located on the Monterey Peninsula on both sides of Route 1. District 5 staff offers the following comments for your consideration:

- 1) Traffic Study Area - The traffic analysis in the Draft EIR should have a clearly defined study area, which should include roadways outside of the city limits. Since regional access to the City of Monterey will be provided from Route 1, Route 68, and Route 218, District 5 suggests that the study area for the traffic analysis include: A) the Route 1 segments and interchanges/intersections between Carmel Valley Road and Light Fighter Drive; B) the Route 68 segments and intersections west of Route 1 and the Route 68 segments and intersections between Route 1 and Laureles Grade; and C) the Route 218 segments and intersections between Route 1 and Route 68.
- 2) LOS Policies - The Department is responsible for the safety, operations, and maintenance of the state highway system pursuant to the California Streets and Highways Code. Therefore, the Department's level of service (LOS) policies should be used in the traffic analysis to determine the significance of any project's impact to the state highway system. The Department endeavors to maintain a target LOS at the transition between LOS C and LOS D (i.e. not worse than LOS C) on state highway facilities.
- 3) LOS Methodologies - The methodologies used to calculate the LOS for the state highway system should be consistent with the methods in the current version of the Highway Capacity Manual (HCM). All LOS calculations should be included in the Draft EIR as an appendix and made available for review.
- 4) Existing Conditions - The traffic analysis in the Draft EIR should include information on existing traffic volumes within the study area, including the state highway system. This information should be based upon recent traffic counts. Information on existing traffic levels can be obtained from other recent traffic studies (i.e. not more than two years old) and may also be obtained from District 5. The LOS for the segments, interchanges, and intersections on the state highway system under existing conditions should be identified.
- 5) Cumulative Conditions - The traffic analysis in the Draft EIR should include information on cumulative traffic volumes within the study area, including the state highway system. The cumulative analysis should be based upon a 20-year timeframe or General Plan buildout forecasts. The cumulative analysis should include a discussion of the land use and roadway network assumptions used in the traffic forecasts. The LOS for the segments, interchanges, and intersections on the state highway system under cumulative conditions should be identified.

- 6) Cumulative Mitigation - The planned development in the General Plan should be responsible for mitigating any cumulative traffic impacts to the state highway system in accordance with the California Environmental Quality Act (CEQA). The planned development should contribute a pro rata share towards the cost of any state highway improvements identified by our Department and the City. The payment of a pro rata share towards these state highway improvements is consistent with Section 15064 and Section 15130 of the CEQA Guidelines. The Draft EIR should include a discussion on the Fort Ord Reuse Authority (FORA) traffic mitigation program and the regional traffic impact fee program currently under study by the Transportation Agency for Monterey County (TAMC). The City may also want to consider its own traffic fee program in order to fund any local or regional circulation improvements.
- 7) Future Traffic Studies - To ensure that the traffic impacts of future General Plan development upon the state highway system are properly evaluated, it is recommended that future development be required to prepare updated traffic studies in accordance with the Department's recently updated "Guide for the Preparation of Traffic Impact Studies". This requirement should be identified as a mitigation measure in the Draft EIR and/or as a policy in the General Plan Circulation Element.
- 8) Encroachment Permit Requirements - An encroachment permit must be obtained from our Department before any work or improvements can be conducted within the State's right-of-way. Any work or improvements will be subject to the Department's standards and specifications. This requirement should be identified as a mitigation measure in the Draft EIR and/or as a policy in the General Plan Circulation Element.
- 9) Trip Reduction Measures - The traffic analysis in the Draft EIR should include a discussion of any General Plan policies that promote trip reduction measures.
- 10) Route 1 and Route 68 PSRs - Our Department has recently approved Project Study Reports (PSRs) for improvements to Route 1 in the Carmel and Sand City/Seaside areas. In addition, PSRs have been approved or are nearly completed for Route 68 widening near the Community Hospital of the Monterey Peninsula (CHOMP) and for Route 68 intersection improvements east of Route 218. City staff may already have copies of the approved PSRs. The Draft EIR and/or the General Plan Circulation Element should include a discussion on these PSRs.
- 11) Route 1 TCR - District 5 is currently preparing a Transportation Concept Report (TCR) for Route 1 through Monterey County. The TCR is a long-term planning document that establishes a twenty-year planning vision or concept and recommends long-term improvements to achieve the concept. The Draft EIR and/or the General Plan Circulation Element should include a discussion on this TCR.

District 5 would like to request copies of the Draft General Plan and the Draft EIR for review when they become available. We are also available to meet with City staff to provide early input into the Circulation Element and the traffic analysis for the Draft EIR. If you have any questions, please call me at (805) 542-4751.

Sincerely



Mike Galizio

District 5 Development Review Branch

cc: Bill Wojtkowski, City of Monterey; Rich Deal, City of Monterey; David Murray, District 5 Planning; Roger Barnes, District 5 Traffic Operations



JON M. BIGGS
COMMUNITY DEVELOPMENT DIRECTOR

CITY OF PACIFIC GROVE
COMMUNITY DEVELOPMENT DEPARTMENT

500 FOREST AVENUE
PACIFIC GROVE, CALIFORNIA 93950
TELEPHONE (831) 648-3190
FAX (831) 648-3184

BUILDING INSPECTION
(831) 648-3183
HOUSING PROGRAMS
(831) 648-3190
PLANNING/ZONING
(831) 648-3190

September 3, 2003

Mr. Bill Fell, Chief of Planning
City of Monterey
Community Development Department
City Hall
Monterey, CA 93940

Dear Mr. Fell,

We appreciate the opportunity to provide input as to the scope and content of the Environmental Impact Report (EIR) for the new City of Monterey General Plan. We request that the EIR include an evaluation of the goals, policies, and programs of the new Monterey General Plan in the following areas:

TRAFFIC / TRANSPORTATION

Lighthouse and Central Avenue corridors between Pacific Grove and Monterey.

Highway 68, Holman Highway.

Emergency evacuation routes from Pacific Grove, map attached.

LAND USE

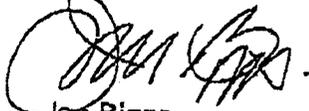
Changes to permitted land uses and compatibility of those land uses with adjacent land uses in the City of Pacific Grove.

We look forward to continued coordination and cooperation with the City of Monterey during its preparation of the new general plan. Further information regarding the new general plan can be sent to my attention at the following address:

Jon Biggs, Community Development Director
City of Pacific Grove, Community Development Department
300 Forest Avenue
Pacific Grove, CA 93950

Please contact me if you need additional information. I can be reached by phone
at (831) 648-3190.

Sincerely,

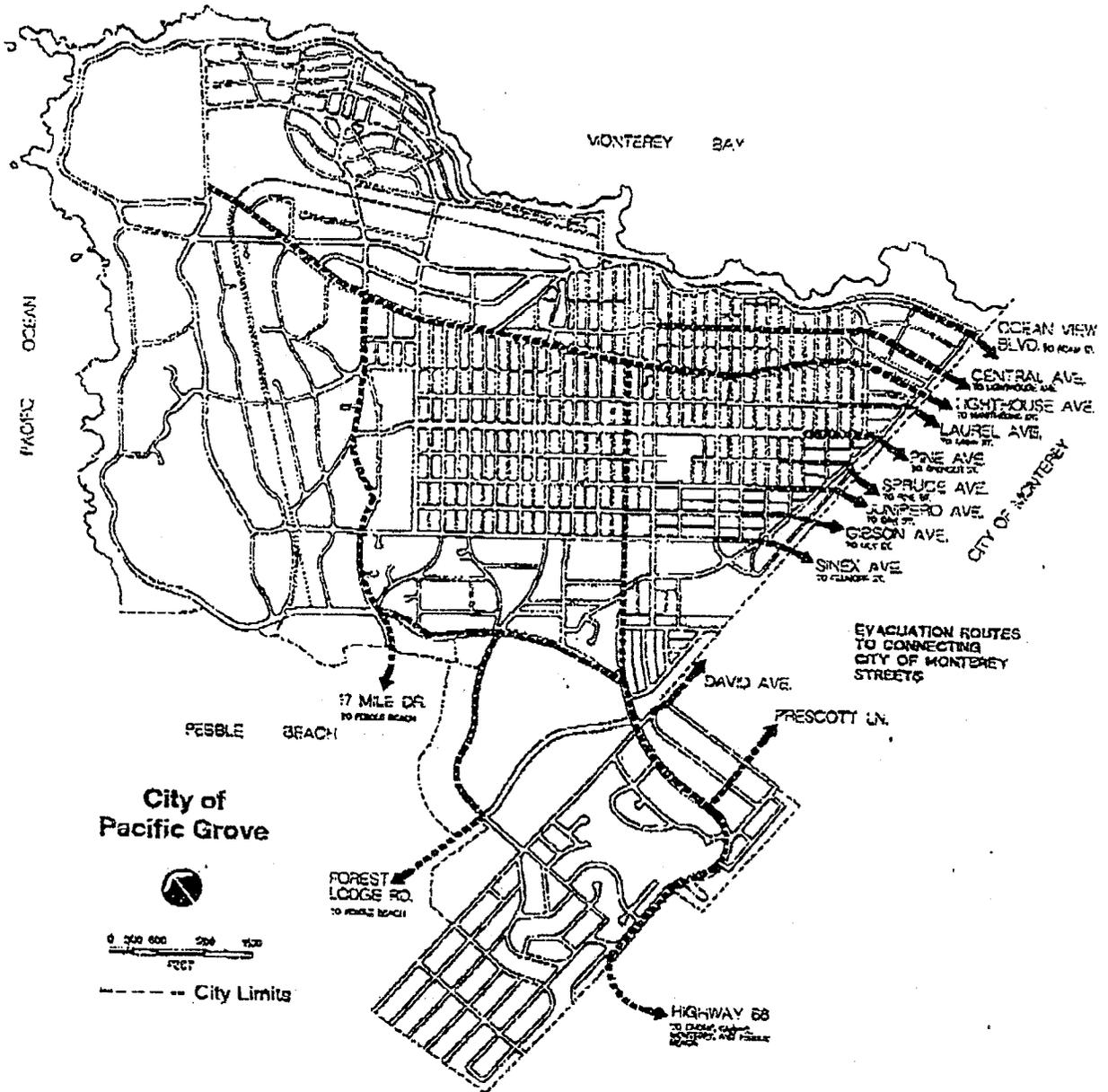


Jon Biggs
Community Development Director

- cc: City Council
- City Manager
- Planning Commission
- Chief Planner

Health and Safety, Chapter 10

Figure 10-2
Evacuation Routes





MONTEREY BAY

Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

August 6, 2003

Bill Fell
Chief of Planning
City of Monterey
Community Development Department
City Hall
Monterey, CA 93940

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AUG 08 2003

CITY OF MONTEREY
PLANNING DIVISION

SUBJECT: NOP OF EIR FOR MONTEREY GENERAL PLAN

Dear Mr. Fell:

Staff has reviewed the referenced document and has the following recommendations for the scope of work for the air quality analysis:

1. The District uses consistency with the Air Quality Management Plan for the Monterey Bay Region (AQMP) to determine a general plan's impact on regional air quality (ozone levels). The project level impact should be assessed by comparing the project's population with forecasts in the 2000 AQMP. The cumulative impact should be assessed by comparing population for all general plans within Monterey County with the population forecasts. The following data are needed to prepare this assessment: population at buildout of the general plan, estimate for time of buildout, and population forecasts in five year increments. AMBAG should be contacted to prepare the consistency determination.
2. If project or cumulative traffic would cause LOS to decline from D or better to E or F, dispersion modeling should be undertaken to determine if carbon monoxide concentrations would violate ambient air quality standards at sensitive receptor locations. *not in scope of work*
3. If the project might expose sensitive receptors in adjacent land uses to air quality problems such as odors or toxic air contaminants (e.g., diesel exhaust), the DEIR should include an assessment of these impacts.
4. Mitigation measures should be identified for any significant impacts on air quality. The EIR should quantify the emission reduction effectiveness of each measure, identify agencies responsible for implementation and monitoring, and conclude whether mitigation measures would reduce impacts below significance levels.

DISTRICT
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County

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Arturo Medina
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Bautista

John Myers
King City

5. The DEIR should indicate that projects constructed pursuant to the General Plan could have impacts on air quality which will be addressed when projects are proposed. The District has established the following thresholds of significance for individual projects: 137 lb/day of VOC or NO_x, 82 lb/day of PM₁₀, 150 lb/day of SO_x, a significant decline in LOS, and a cancer risk greater than 10 incident per one million population.

The District's CEQA Air Quality Guidelines can be used to help prepare the air quality analysis. The Guidelines were recently amended, and an updated copy is available at the District's website - www.mbuapcd.org. Please do not hesitate to call if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Janet Brennan". The signature is written in black ink and is positioned above the printed name and title.

Janet Brennan
Supervising Planner
Planning and Air Monitoring Division



MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

5 HARRIS COURT, BLDG. G
POST OFFICE BOX 85
MONTEREY, CA 93942-0085 • (831) 658-5600
FAX (831) 644-9560 • <http://www.mpwmd.dst.ca.us>

August 29, 2003

Bill Fell, Chief of Planning
Community Development Department
City Hall
Monterey, CA 93940

Subject: MPWMD Comments on Notice by City of Monterey on Notice of Preparation of Environmental Impact Report on New General Plan

Dear Mr. Fell:

The Monterey Peninsula Water Management District (MPWMD or District) appreciates this opportunity to comment on the above referenced Notice dated July 31, 2003, and received on August 1, 2003. The District is responsible for management of water resources within its boundaries, which include the City of Monterey. The project location area falls within the jurisdiction of the District and potentially affects the Seaside Basin. Please note that any water distribution system or project within the District boundaries must comply with applicable MPWMD Rules and Regulations.

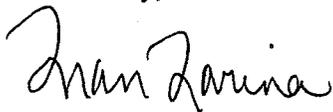
The District concurs with the "potentially significant" impacts identified in the environmental checklist, and concurs that the City's EIR should address these issues. Please also note the points raised in our comment letter dated July 3, 2003 regarding Fort Ord annexation (enclosed).

The District supports and encourages all jurisdictions to employ innovative use of wastewater reclamation, storm water reuse and conservation in their General Plans, as well as impose conditions of approval for projects that require irrigation systems to be able to receive reclaimed water when it becomes available. We support measures designed to reduce impacts to water resources and avoid water waste.

Our staff is available to assist you with technical information on pertinent water resources issues. The technical contacts are Joe Oliver at 831/658-5640, or Darby Fuerst at 658/5652.

Thank you for your consideration of these comments. Please contact me at 831/658-5650 if you have questions.

Sincerely,



Fran Farina
Acting General Manager

cc: MPWMD Board
Henrietta Stern, MPWMD Project Manager
Joe Oliver, MPWMD Water Resources Manager
Darby Fuerst, Senior Hydrologist

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SEP 2 2003

CITY OF MONTEREY
PLANNING DIVISION



MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

5 HARRIS COURT, BLDG. G
POST OFFICE BOX 85
MONTEREY, CA 93942-0085 • (831) 658-5600
FAX (831) 644-9560 • <http://www.mpwmd.dst.ca.us>

July 3, 2003

Bill Fell, Chief of Planning
City Hall
Monterey, CA 93940

Subject: MPWMD Comments on Notice of City of Monterey Establishing a Sphere of Influence and Annexing Acreage on the Former Fort Ord

Dear Mr. Fell:

The Monterey Peninsula Water Management District (MPWMD or District) appreciates this opportunity to comment on the above referenced Notice received on June 4, 2003. The District is responsible for management of water resources within its boundaries, which include the Seaside Groundwater Basin (Seaside Basin). The project location area falls within the jurisdiction of the District and potentially affects the Seaside Basin. Any water distribution system or project within the District boundaries must comply with applicable MPWMD Rules and Regulations.

The District supports and encourages all jurisdictions to employ innovative use of wastewater reclamation, storm water reuse and conservation in their redevelopment plans. The District encourages the City of Monterey (City) to impose conditions of approval for projects that require irrigation systems to be able to receive reclaimed water when it becomes available. We support measures designed to reduce impacts to Seaside Basin water quality and avoid water waste.

Hydrology and Water Quality

It should be noted that groundwater levels in the Seaside Basin have been steadily declining in locations influenced by major production wells since 1995. Production from the Coastal Subareas of the Seaside Basin has exceeded or been within 95% of the estimated long-term yield in each of the last seven years. Existing water production from the Laguna Seca Subarea of the Seaside Basin exceeds the reliable safe yield, based on findings of the Phase III Hydrogeologic Report, which has been previously provided to the City. Due to the limited availability of water from California-American Water Company (Cal-Am), the primary water purveyor on the

Monterey Peninsula, more property owners are considering construction of new wells in the Seaside Basin as the source of supply for proposed development projects. The District recently began preparing a comprehensive Seaside Basin Groundwater Management Plan to address current problems facing the Seaside Basin. In May 2003, MPWMD issued a Notice of Preparation for an EIR on two conceptual interim ordinances for management of the Basin until the comprehensive plan can be completed.

Given the current situation in the Seaside Basin, the City of Monterey should prepare the appropriate environmental document, presumably an Environmental Impact Report (EIR), on its plans for annexation and expanded Sphere of Influence. The EIR should address the hydrologic setting in the Seaside Basin and MPWMD efforts to address current problems. The EIR should confirm whether or not new construction or redevelopment projects will use water sources from the Seaside Basin. If the water sources are to be derived from the Seaside Basin, the EIR should carefully evaluate the potential impacts, including cumulative impacts, and identify mitigation measures to address adverse impacts. If the water source is to be derived from the Salinas Groundwater Basin and delivered by Marina Coast Water District (MCWD), the EIR should confirm whether there is an adequate water supply for the City's needs, given that information in the EIR for the Fort Ord Reuse Plan may be outdated. The EIR should address the question of the source of supply if there were an interruption of service. Would a back-up supply be derived from the Seaside Basin?

Water Services

District concurs with the "Water Services" section (pages 5-6 of the notice), keeping in mind the concerns described above in this letter. Please note that Cal-Am owns the main Carmel River-based Cal-Am system as well as the water system serving Ryan Ranch Business Park. However, the Ryan Ranch Unit is operated as a separate unit independent from the main system.

Thank you for your consideration of these comments. Please contact me at 831/658-5650 or Joe Oliver at 831/658-5640 if you have questions.

Sincerely,



Fran Farina
Acting General Manager

cc: MPWMD Board
Henrietta Stern, MPWMD Project Manager
Joe Oliver, MPWMD Water Resources Manager

U:\Henri\wp\ceqa\2003\montereyford070303.doc reviewed by AB

HOPE - Helping Our Peninsula's Environment

Box 1495, Carmel, CA 93921
831/ 624-6500

Info@1Hope.org
www.1hope.org

Bill Fell, Planning Director
City Council
Planning Commission
General Plan Update Committee
Monterey, CA

August 7, 2003

Hearing Damage and Noise Pollution - Maximum Noise vs CNEL For the General Plan Update & DEIR

Dear Bill (and City Officials),

We do appreciate the amount of work so many citizens and public officials and especially you, your staff and have put into our General Plan Update, but we remain seriously concerned about the General Plan's lack of peak noise recognition as this is a very important health and quality of life issue.

Specifically this letter responds to the latest General Plan Draft requiring only average noise levels (Community Noise Equivalent Levels or "CNEL" or Level Day/Night or "Ldn") and ignoring our reasonable request of our March 7, 2003 letter respectfully requesting the incorporation of peak or maximum noise levels (Lmax).

Providing you with the world's best advice - for free.

These comments are offered by HOPE with concurrence by our Science Advisor on Noise - one of the world's most highly qualified acousticians, Dr. Herman Medwin of Pebble Beach. Dr. Medwin, is a Fellow, Gold Medalist, and Past President of the Acoustical Society of America. He is also a co-author of two graduate textbooks on acoustics, one of which sold over 10,000 copies. As a retired Professor of the Naval Postgraduate School, Medwin continues to run a successful business as a world-renowned consultant in acoustics. He is a resident of Pebble Beach who has assisted the Monterey County Planning Department and other government agencies of the Monterey Peninsula on noise and sound issues, *pro-bono*, for the past 30 years.

Dr. Medwin, is a member of the Institute of Noise Control Engineering, INCE, the world-wide professional organization with head offices in the USA, whose members deal specifically with noise problems. Membership in INCE is awarded only after passing a professional test, and after submitting evidence of competence and experience in noise control.

Consultant Qualifications Important

We urge you to only use noise consultants who are members of the professional organization that deals specifically with problems in noise - INCE the Institute of Noise Control Engineering. Membership in INCE is gained by passing the written examination and submitting evidence of education and experience in the field.

Membership is important because INCE consultants would receive copies of the international publication "Noise Control Engineering Journal" which contains current information about the field.

Founded in 1998, *H.O.P.E.* is a non-profit, tax deductible, public interest group teaching environmental science and law and public participation to citizens and advocating for protection of our Monterey Peninsula's natural land, air and water ecosystems.

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David Dilworth

Science Advisors

Dr. Hank Medwin, Phd
- Acoustics
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Dr. Arthur Partridge, Phd
- Forest Ecology

While I do not make my living purely as a noise consultant, in the course of compiling and editing for publication the world's largest database of quantified environmental impacts, I have access to, understand and can apply the best available science studies and world experts in many fields - specifically including noise.

The points we raise here are simply standard noise science, with which any member of Institute of Noise Control Engineering would be comfortably familiar.

Mark Twain On Averages

The renowned humorist and riverboat pilot Mark Twain once observed --

"I never cross a river when I only know its average depth is six inches."

Twain's comment vividly illustrates how the use of a bald average can drown you.

Annoyance is Not about Average Noise

- People do not often complain about noise at CNEL or Ldn levels as measured and mapped for General Plans.
- People specifically complain about the loudest or "peak" noises -- those which significantly exceed CNEL and Ldn levels.
- Why? Because CNEL and Ldn are average noise levels - not peak levels.

An analogy using traffic flow goes like this - The "CNEL or Ldn" of traffic on Highway 1 past Carmel is about 20,000 cars per day. What is missing from this is that in late night only 5 to 10 cars travel this road per hour, while **rush hour traffic is 200 to 400 times as busy** and includes a proportional increase in air pollution.

This is why Traffic engineers use Peak Traffic Volumes to determine thresholds of traffic impact significance. Peak traffic volume is analogous to peak or maximum noise levels.

Hearing Damage

Noise is now recognized as a "serious health hazard" - not merely a nuisance (World Health Organization Feb 2001).

- It is the loudest noises - the maximum noise levels, which do the most irreversible hearing damage.

Maximum Noise (Lmax)

Instead of measuring averages, **Maximum Noise Level (Lmax) measures maximum noise levels - the noise levels that people do complain about and which cause the most hearing damage.**

Single Event Noise Exposure Levels (SENEL)

Instead of measuring day-long noise averages, **Single Event Noise Exposure Levels (SENEL) measures the average noise level of a single aircraft overflight.**

Ldn and CNEL cannot distinguish between two otherwise similar neighborhoods where one endures short term loud ("impulse") noises such as dog barking, gunfire or car horns. This can also be due to using CNEL or Ldn instruments (i.e. analog) which cannot respond rapidly enough to detect short term noises.

We further assert that **CNEL and Ldn will not adequately recognize harmful and disturbing regular, predictable leaf blower, lawnmower or chainsaw noise** - in part because those noises will most often occur when there is no CNEL or Ldn monitoring.

GENERAL PLAN LAW REQUIRES MINIMUMS - NOT MAXIMUMS

State General Plan Guidelines require "Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn)."

The legislature intended this to require some minimal recognition of noise problems. They did not need to anticipate recognition of an array of noise impact facets (i.e. maximum-noise or noise spectrum) **because that is covered by CEQA and responsible professionals.**

- **The legislature clearly did not intend that other noise impacts and measurements be ignored.**

CEQA REQUIRES GREATER NOISE IMPACT RECOGNITION THAN GENERAL PLAN LAW

CEQA mandates the recognition of all noise problems most particularly those which generate complaints. There is a valid litigation risk if the EIR and General Plan do not address maximum noise problems. A recent court case found the use of CNEL alone "inappropriately excluded consideration of [noise] impacts."

In *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners of the City of Oakland*, 91 Cal.App.4th 1344 (2001), the First District Court of Appeal invalidated the Port of Oakland's certification of an EIR for the Airport Development Plan.

"The court found that the EIR had failed to adequately address the noise impacts from nighttime air cargo operations. Specifically, the court made clear that **the EIR's reliance on the CNEL metric as the sole criterion to evaluate the significance of the project's noise impacts inappropriately excluded consideration of the potential sleep disturbance impacts on area residents resulting from nighttime flights.** In reaching this conclusion, the court acknowledged the expert opinion that supported the need for this noise analysis, public concern about nighttime noise impacts, and the CEQA standards of significance, which recognize a site-sensitive threshold for evaluating noise impacts."

While an agency might legally ignore maximum noise problems in the General Plan, **the CEQA document for the General Plan may not ignore maximum noise problems.** Having expert advice showing the significant difference between the two noise contours should impel you as a professional to add the better method in the General Plan.

Include Maximum Noise Level (Lmax) Contour Maps along with CNEL

We respectfully request you include noise contour maps of **Lmax** exceeding 45 dBA in the General Plan (along with CNEL maps) **so the EIR tail does not have to wag the General Plan dog.**
Include SENEL Contour Maps along with Lmax Contour Maps and CNEL

We also respectfully request you include noise contour maps of Single Event Noise Exposure Levels (SENEL) exceeding 45 dBA in the General Plan (along with Lmax and CNEL maps) so the EIR tail does not have to wag the General Plan dog.

Please include these comments in the administrative record for the EIR & General Plan.

Of course we are always ready to help with any questions you have.

Sincerely,



David Dilworth, Executive Director

cc: Supervisor David Potter
Assemblyman John Laird
Senator Bruce McPherson
Monterey County Herald
Institute of Noise Control Engineering

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AUG 07 2003

CITY OF MONTEREY
PLANNING DIVISION

Appendix B

Year 2020 Travel Forecast Table

**YEAR 2020 TRAVEL FORECAST - CITY OF MONTEREY GENERAL PLAN UPDATE
TRAFFIC VOLUMES & LEVEL OF SERVICE ON SELECTED ROADS AND HIGHWAYS**

Seg. No. Street	From:	To:	Roadway Description	No. of Lanes	1-Way 2000 Model Volume	2-Way 2000 Model Volume	2-Way 2020 Model Volume	Percent Growth from 2000	1-Way 2020 PMA-Peak Volume	PM V/C Ratio	1-Way 2020 AM-Peak Volume	AM V/C Ratio	Level of Service	Mitigated No. of Lanes
Abrego St	El Dorado	Fremont	Undivided Roadway	4	8932	9247			991	0.95	855	0.23		
Abrego St	Fremont	El Dorado	Collector	2	7975	6477	16,907	7.5%	732	0.26	685	0.24	A	
Aliport Rd	Fairground	Euclid	Fairground	2	2782	2126	3,727	4.25%	330	0.47	186	0.27		
Aliport Rd	Euclid	Fairground	Arterial	2	935	2127	4,253	-12.4%	87	0.12	92	0.13	A	
Camino Aguajito	Second	Third	Arterial	2	7707	3275	11,588	54.2%	702	0.84	708	0.64		
Camino Aguajito	Third	Second	Arterial	2	3881	4240	11,588	54.2%	421	0.38	274	0.25	B	
Camino Aguajito	Fremont	Via Lavandera	Undivided Roadway	4	7613	6993	15,026	6.8%	793	0.28	575	0.21		
Camino Aguajito	Via Lavandera	Fremont	Arterial	2	7413	7103	15,026	6.8%	687	0.24	673	0.24	A	
Camino El Estero	Franklin	Del Monte	Arterial	2	954	5061			73	0.07	157	0.14		
Camino El Estero	Del Monte	Franklin	Arterial	2	11361	8833	12,315	-11.4%	1,200	1.09	669	0.61	B	
Camino El Estero	Fremont	Webster	Arterial	2	5076	5113	9,901	-15.8%	487	0.44	431	0.39		
Camino El Estero	Webster	Fremont	Arterial	2	4825	6842	7,885	1.0%	367	0.33	352	0.32		
Casa Verde	Encina	Hwy 1	Arterial	2	3953	4054	7,806	1.0%	528	0.48	283	0.26	A	
Casa Verde	Hwy 1	Encina	Arterial	2	3932	3752	7,885	1.0%	501	0.46	631	0.57		
David Ave	Filmore	Cypress	Arterial	2	5684	5723	12,461	7.3%	764	0.69	461	0.42	B	
David Ave	Cypress	Filmore	Arterial	2	6577	5889	12,461	7.3%	1,185	0.83	711	0.51		
David Ave	Foam	Dickman	Arterial	2	11348	9897	12,782	14.5%	123	0.09	133	0.09	C	
David Ave	Dickman	Foam	Arterial	2	1494	1468	12,782	14.5%	519	0.47	649	0.59		
David Ave	Hawthorne	Pine	Arterial	2	6070	4900	12,581	24.6%	709	0.64	448	0.41	B	
David Ave	Pine	Hawthorne	Arterial	2	8511	5200	12,581	24.6%	641	0.15	647	0.15		
David Ave	Parking Garage	Tyler	Divided Roadway	3	7194	5394	7,154	32.6%					A	
Del Monte	Del Monte	Washington	Divided Roadway	8	27194	21135	50,311	16.2%	2,673	0.48	2,519	0.45		
Del Monte	Washington	Figueroa	Divided Roadway	6	23117	22158	49,283	16.2%	2,193	0.39	1,889	0.34	C	
Del Monte	Camino El Estero	Camino Aguajito	Divided Roadway	6	23356	20521	54,554	36.7%	2,112	0.50	2,371	0.56		
Del Monte	Camino Aguajito	Camino El Estero	Divided Roadway	4	31198	19393	54,554	36.7%	3,161	0.75	2,242	0.58	E	C
Del Monte	Sloat	Naval Post Gate	Divided Roadway	4	21646	20775	47,122	16.1%	1,883	0.67	2,317	0.83		
Del Monte	Naval Post Gate	Sloat	Divided Roadway	4	25478	19810	47,122	16.1%	2,662	0.95	1,679	0.60	F	B
Del Monte	Palo Verde	Casa Verde	Divided Roadway	4	24134	20863	52,127	28.0%	2,044	0.73	2,667	0.95		
Del Monte	Casa Verde	Palo Verde	Divided Roadway	4	27993	19851	52,127	28.0%	3,002	1.07	1,795	0.84	F	C
Del Monte	Hwy 1	Casa Verde	Divided Roadway	5	27307	21713	50,606	13.6%	2,828	0.67	1,745	0.42	F	C
Del Monte	Casa Verde	Hwy 1	Collector	2	23299	22899	50,606	13.6%	1,954	0.70	2,621	0.94	F	C
El Dorado	Cass	Munras Ave	Collector	2	3542	2974	7,124	6.078	373	0.53	241	0.34		
El Dorado	Cass	Munras Ave	Collector	2	3582	3104	7,124	6.078	318	0.45	315	0.45	B	
Foam	Drake	Dickman	One-Way Street	2	9753	7984	8,753	7.984	883	0.40	736	0.33		
Foam	Drake	Dickman	One-Way Street	2	9753	7984	8,753	7.984	-	0.00	-	0.00	A	

Seg. No.	Street	From:	To:	Roadway Description	No. of Lanes	1-Way 2020 Model Volume	1-Way 2000 Model Volume	2-Way 2020 Model Volume	2-Way 2000 Model Volume	Percent Growth from 2000	1-Way PM-Peak Volume	PM V/C Ratio	1-Way AM-Peak Volume	AM V/C Ratio	Level of Service	Mitigated No. of Lanes
Foam		Reeside	Lighthouse	One-Way Street	2	17040	15603	17,040	15,803	7.8%	1,460	0.86	1,493	0.88		
Foam		McClellan	Hoffman	One-Way Street	2	16936	14875	16,936	14,875	13.9%	1,476	0.67	1,392	0.83	D	
Franklin		Monroe	Clay	Arterial	2	4236	5230				551	0.50	313	0.28		
Franklin		Clay	Monroe			5103	5088	9,339	10,318	-9.5%	378	0.34	623	0.57	A	
Franklin		Alvarado	Tyler	One-Way Street	2	16366	13821				1,879	0.85	1,071	0.49		
Franklin		Van Buren	Pacific	Arterial	2	3949	4875				512	0.47	297	0.27		
Franklin		Pacific	Van Buren			5442	4746	9,391	9,621	-2.4%	401	0.36	617	0.56	A	
Fremont		Ramona	Airport Rd.	Divided Roadway	4	10889	12569				1,594	0.57	690	0.25		
Fremont		Airport Rd.	Ramona			10251	11936	21,140	24,505	-13.7%	854	0.31	1,163	0.42	A	
Fremont		Hwy 1	Camino Aguajito	Divided Roadway	5	21605	19000				2,563	0.73	1,497	0.43		6
Fremont		Camino Aguajito	Hwy 1			23844	18677	45,249	37,677	20.1%	1,858	0.35	2,527	0.48	E	
Garden Rd		Sky Park Way	Henderson	Collector	2	3090	2847				324	0.46	221	0.32		
Garden Rd		Henderson	Sky Park Way			2766	2493	5,856	5,340	9.7%	240	0.34	263	0.38	A	
General Jim Moore		S. Boundary Road	Canyon Del Rey	Arterial	2	2446	2050				327	0.30	164	0.15		
General Jim Moore		S. Boundary Road	S. Boundary Road			2762	2150	5,208	4,200	24.0%	230	0.21	328	0.30	A	
Hawthorne		David	Prescott	Collector	2	4350	4821				408	0.19	332	0.15		
Hawthorne		Prescott	David			2907	2476	7,257	7,297	-0.5%	266	0.12	238	0.11	B	
Hawthorne		Prescott	Hoffman	Collector	2	991	1091				100	0.09	89	0.08		
Hawthorne		Hoffman	Prescott			6717	5249	7,708	6,340	21.6%	597	0.54	647	0.59	C	
Hawthorne		Reeside	Dickman	Collector	2	6221	4733				520	0.74	572	0.82		
Hawthorne		Dickman	Reeside			1679	1762	8,100	6,515	24.3%	228	0.33	128	0.18	C	
Highway 1		Hwy 68 (Holman)	Munras Ave	Freeway	5	38352	30700				3,697	0.62	3,284	0.55		
Highway 1		Munras Ave	Hwy 68 (Holman)			39586	33000	77,938	63,700	22.4%	3,766	0.94	3,313	0.83	D	
Highway 1		Aguajito	Soledad	Freeway	4	36050	27950				3,689	0.92	2,786	0.70		6
Highway 1		Soledad	Aguajito			35132	31500	71,182	59,450	19.7%	3,240	0.81	3,297	0.82	E	
Highway 1		Highway 66	Fremont Avenue	Freeway	8	54076	41674				4,555	0.57	5,499	0.69		
Highway 1		Fremont Avenue	Highway 66			53174	45091	107,250	88,765	23.8%	5,874	0.73	3,814	0.48	C	
Highway 1		Fremont Ave.	Highway 218	Freeway	6	44851	36200				4,809	0.80	3,024	0.51		8
Highway 1		Highway 218	Fremont Ave.			43114	36800	87,965	73,000	20.5%	3,531	0.59	4,516	0.75	D	
Highway 1		Hwy 218	Del Monte	Freeway	4	43718	38367				3,432	0.86	3,850	0.96		8
Highway 1		Del Monte	Hwy 218			45172	36899	88,890	75,266	18.1%	4,219	1.05	3,303	0.83	F	
Highway 218		Hwy 68	General Jim Moore Bl.	Rural Highway	2	8968	8100				807	0.58	928	0.66		4
Highway 218		General Jim Moore Bl.	Hwy 68			8952	8321	17,920	16,421	9.1%	992	0.71	696	0.50	D	
Highway 218		Fremont	N Street	Divided Roadway	4	10364	9900				1,008	0.36	846	0.32		A
Highway 218		Fremont	N Street			10819	9820	21,183	19,720	7.4%	1,062	0.38	906	0.30	A	
Highway 68		Chomp Driveway	Highway 1	Freeway	4	14536	13889				1,506	0.43	1,174	0.34		
Highway 68		Highway 1	Chomp Driveway			13205	13334	27,741	27,223	1.9%	1,318	0.38	1,181	0.34	B	
Highway 68		Joselyn Cyn	Garden Rd.	Rural Highway	2	11575	10003				1,038	0.59	1,120	0.64		4
Highway 68		Garden Rd.	Joselyn Cyn			12302	9603	23,877	19,606	21.8%	1,200	0.69	975	0.56	E	A

Seg. No. Street	From:	To:	Roadway Description	No. of Lanes	1-Way 2000 Model Volume	1-Way 2000 Model Volume	2-Way 2000 Model Volume	2-Way 2000 Count Volume	Percent Growth from 2000	1-Way 2020 PM-Peak Volume	PM V/C Ratio	1-Way 2020 AM-Peak Volume	AM V/C Ratio	Level of Service	Mitigated No. of Lanes
Highway 68	Ragsdale	York Rd.	Rural Highway	2	14558	13201				1,576	1.13	1,010	0.72		4
Highway 68	York Rd.	Ragsdale	Collector	2	13479	12601	28,037	25,802	8.7%	1,089	0.78	1,503	1.07	E	B
Josseyln Cyn	Hwy 68	Mark Thomas Dr.	Collector	2	1543	1311				180	0.26	173	0.25	A	
Josseyln Cyn	Mark Thomas Dr.	Hwy 68	Undivided Roadway	4	21255	19288	3,088	2,815	9.7%	1,827	0.85	1,990	0.71		6
Lighthouse	David	Prescott	Undivided Roadway	4	13372	12300	34,627	31,588	9.8%	1,437	0.51	1,000	0.36	F	B
Lighthouse	Prescott	David	Undivided Roadway	4	35292	29988				3,187	1.14	3,069	1.10	F	8
Lighthouse	Reeside	Foam	Undivided Roadway	4	17882	15563	53,174	45,581	16.7%	2,001	0.71	1,324	0.47	F	C
Lighthouse	Foam	Reeside	Divided Roadway	4	34924	28456				3,461	1.24	2,818	1.01	F	8
Lighthouse Curve	Pacific	Foam	Divided Roadway	4	36027	31106	70,951	59,582	19.1%	3,276	1.17	3,049	1.09	F	C
Lighthouse Curve	Foam	Pacific	Collector	2	861	916				87	0.12	84	0.12		
Mar Vista	Skyline	Soledad	Collector	2	964	1137	1,825	2,053	-11.1%	97	0.14	88	0.13	A	
Mar Vista	Soledad	Skyline	Collector	2	5019	5223				501	0.72	449	0.64		
Mark Thomas	Josseyln Cyn	Old Salinas Rd.	Collector	2	5346	4276	10,365	9,499	9.1%	580	0.80	438	0.63	D	
Mark Thomas	Old Salinas Rd.	Josseyln Cyn	Collector	2	5338	4582				509	0.73	506	0.72	E	2
Mark Thomas Dr.	Sloat	Sylvan	Collector	2	5759	5353	11,097	9,915	11.9%	625	0.89	446	0.64	E	A
Mark Thomas Dr.	Sylvan	Sloat	Arterial	2	6439	4378				688	0.48	407	0.29	C	
Munras	Webster	Fremont	Arterial	2	8209	6400	14,648	10,778	35.9%	782	0.56	689	0.49	C	
Munras	Fremont	Webster	Divided Roadway	4	15208	12005				1,600	0.87	902	0.32		
Munras	Soledad Dr	Del Monte Shopping Ctr.	Divided Roadway	4	14615	12080	29,823	24,085	23.8%	1,226	0.44	1,365	0.49	C	
Munras	Del Monte Shopping Ctr.	Soledad Dr	Divided Roadway	4	17418	15515				1,500	0.54	1,860	0.67	D	
N Fremont	Ramona	Casanova	Collector	2	18035	15216	36,453	30,731	15.4%	2,388	0.85	1,182	0.42		
N Fremont	Casanova	Ramona	Collector	2	3310	2700				407	0.58	187	0.27	B	
Olmstead Rd.	Garden Road	Hwy 68	Arterial	2	3344	2700	6,654	5,400	23.2%	238	0.34	401	0.57	B	
Olmstead Rd.	Hwy 68	Garden Road	Arterial	2	5573	4938				519	0.47	415	0.38	B	
Pacific Street	Alameda	Soledad	Arterial	2	6482	3939	12,055	8,877	35.8%	468	0.43	582	0.53	B	
Pacific Street	Soledad	Alameda	Arterial	2	5798	4275				534	0.49	442	0.40		
Pacific Street	Grove	Alameda	Arterial	2	6478	4692	12,277	8,967	36.9%	471	0.43	578	0.53	B	
Pacific Street	Alameda	Grove	Arterial	2	7430	5804				583	0.53	629	0.57	C	
Pacific Street	Madison	Jefferson	Arterial	2	7463	6283	14,893	12,087	23.2%	704	0.84	586	0.51	C	
Pacific Street	Jefferson	Madison	Arterial	2	10635	9488				925	0.84	884	0.80	E	4
Pacific Street	Del Monte	Franklin	Collector	2	6782	4560	17,417	14,048	24.0%	578	0.53	535	0.49	E	A
Pacific Street	Franklin	Del Monte	Collector	2	598	1750				80	0.09	51	0.07		
Pearl	Tyler	Abrego	Collector	2	3009	1750	3,607	3,500	3.1%	292	0.42	285	0.38	A	
Pearl	Abrego	Tyler	Collector	2	340	501				39	0.06	23	0.03	A	
Pine	living	David	Collector	2	721	601	1,061	1,102	-3.7%	133	0.19	55	0.08	A	
Pine	David	living	Collector	2	1438	2105				147	0.13	121	0.11		
Prescott	Pine	Oak	Collector	2	3061	2578	4,497	4,683	-4.0%	394	0.56	217	0.31	A	
Prescott	Oak	Pine	Collector	2	4515	5769				384	0.35	493	0.45		
Prescott	Tyler	Lotte	Collector	2	4285	4652	8,780	10,421	-15.7%	549	0.50	283	0.26	C	
Prescott	Lotte	Tyler	Collector	2	2762	3400				202	0.29	343	0.49	A	
Ragsdale	Lower Ragsdale	Hwy 68	Collector	2	2890	3400	5,652	6,800	-16.9%	358	0.51	159	0.23	A	
Ragsdale	Hwy 68	Lower Ragsdale													

Seg. No.	Street	From:	To:	Roadway Description	No. of Lanes	1-Way 2020 Model Volume	1-Way 2000 Model Volume	2-Way 2020 Model Volume	2-Way 2000 Model Volume	Percent Growth from 2000	1-Way 2020 PM-Peak Volume	PM V/C Ratio	1-Way 2020 AM-Peak Volume	AM V/C Ratio	Level of Service	Mitigated No. of Lanes
	Reeside	Foam	Lighthouse	Collector	2	4045	2956				421	0.15	272	0.10	A	
	Reeside							4,045	2,956	36.8%						
	Ryan Ranch	Hwy 68	Park Rd.	Collector	2	3681	3100				498	0.71	193	0.28		
	Ryan Ranch	Park Rd.	Hwy 68			3433	3100	7,114	6,200	14.7%	230	0.33	481	0.69	B	
	Skyline Dr	Vets Park	Mar Vista	Collector	2	891	841				87	0.12	130	0.19		
	Skyline Dr	Mar Vista	Vets Park			1111	838	2,002	1,779	12.5%	142	0.20	70	0.10	A	
	Skyline Forest	Skyline Dr.	Holman Hwy	Collector	2	1718	2371				209	0.30	230	0.33		
	Skyline Forest	Holman Hwy	Skyline Dr.			2350	2150	4,068	4,521	-10.0%	301	0.43	183	0.26	A	
	Sloat	Third	Fifth	Collector	2	3739	3121				428	0.61	281	0.40		
	Sloat	Fifth	Third			3168	3234	6,907	6,355	8.7%	282	0.40	319	0.46	B	
	Sloat	Del Monte	Pearl	Collector	2	1734	1925				183	0.26	119	0.17		
	Sloat	Pearl	Del Monte			1945	2025	3,679	3,950	-6.9%	189	0.24	200	0.29	A	
	Soledad	Pacific	Munras Ave	Arterial	2	8951	8941				859	0.78	772	0.70		4
	Soledad	Munras Ave	Pacific			9857	7719	18,808	16,660	12.9%	851	0.77	850	0.77	E	
	Tyler	Franklin	Bonifacio	Arterial	2	4587	1822				377	0.54	391	0.56		
	Tyler	Bonifacio	Franklin			2181	2310	6,768	4,132	63.8%	192	0.27	175	0.25	A	
	Washington	Franklin	Del Monte	One-Way Street	2	125	5198				13	0.01	8	0.00		
	Washington							125	5,198	-97.6%					A	
	Wave	Drake	McClellan	Collector	2	375	601				84	0.12	10	0.01		
	Wave	McClellan	Drake			3266	1942	3,641	2,543	43.2%	493	0.70	181	0.23	A	