

4.6.3 Solid Waste

SUMMARY

There are a number of regulations, policies and programs in place within the City of Elk Grove and Sacramento County to reduce solid waste generation and increase diversion of wastes from landfills. After diversion, waste from single-family residential uses is disposed of at the Kiefer Road Landfill, which has 30 to 40 years of remaining capacity. Almost all commercial, multi-family and industrial waste is transported outside of the County for disposal. The project would generate solid waste that would require disposal at a landfill. However, due to the existing requirements for diversion, and the remaining capacity of the Kiefer Road Landfill, the project would not result in any significant impacts.

INTRODUCTION

The information contained within this section includes communication with the Sacramento County Waste Management and Recycling Division, information from the Source Reduction and Recycling Element (SRRE) for the Unincorporated Area of Sacramento County (September 1991), and information from the Household Hazardous Waste Element (1995). The City of Elk Grove has adopted these documents.

EXISTING CONDITIONS

Sacramento County Waste Diversion

The City of Elk Grove has the responsibility to develop plans and strategies to manage solid waste generated within its jurisdiction. These plans are articulated in the City's Source Reduction and Recycling Element. The Sacramento Regional County Solid Waste Authority (SWA) has the responsibility to develop plans and strategies to manage and coordinate the solid waste generated (including hazardous waste) in the County unincorporated areas and address the disposal needs of Sacramento County as a whole. Each City within the County submits their individual Source Reduction and Recycling Elements to the County which incorporates them into a single Countywide Integrated Waste Management Plan.

Currently, most solid waste is disposed of in local landfills. In 1998, an estimated 37.7 percent of the County's waste from unincorporated areas was diverted through various source reduction, recycling and re-use efforts. In order to achieve 50 percent diversion, the Sacramento County Waste Management and

Recycling Division (WMRD) has converted its existing recycling collection program to a co-mingled program and completed the implementation of greenwaste collection for residents in the Regional Agency service area. The Regional Agency expects to be achieving 50 percent diversion in the residential section upon full implementation of these two major collection programs.

In order to achieve 50 percent diversion overall by the year 2000, the WMRD is relying on private refuse haulers (commercial permittees) and local solid waste facilities, to comply with "Solid Waste Authority Ordinance No. 2" and "Resolution 96-01." (Please see discussion of these solid waste ordinances and resolutions below). This ordinance mandates refuse haulers, as a condition of their refuse hauling permit, to divert 30 percent of the waste they currently collect from commercial and multi-family accounts in the unincorporated area, the City of Citrus Heights and the City of Sacramento. WMRD staff estimates that compliance with this ordinance, combined with existing diversion by private recycling companies, would increase overall diversion rates in the commercial/multi-family and self-haul sectors (and for the Regional Agency) to 50 percent.¹²

Plans and Policies for Solid Waste Disposal

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the State to prepare a SRRE to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory State waste diversion goals of 25 percent by 1995 and 50 percent by 2000. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible."

The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows:

- Source Reduction;
- Recycling;
- Composting;
- Transformation; and
- Disposal.

¹² *Reduction and Recycling Element and Household Hazardous Waste Element Report for 1998 for the Unincorporated Area of Sacramento County and the City of Citrus Heights, August 1999.*

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a “model ordinance” (which Sacramento County has adopted) relating to adequate areas for collecting and loading recyclable materials in development projects.

The model ordinance is used by the County as the basis for imposing recycling conditions on new development projects and on existing projects that add 30 percent or more to their existing floor area. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include “adequate, accessible, and convenient areas for collecting and loading recyclable materials.” For subdivisions of single family detached homes, recycling areas are required to serve only the needs of the home within that subdivision. The model ordinance also provides standards for recycling areas.

City of Elk Grove Source Reduction and Recycling Element

The City of Elk Grove SRRE was prepared in response to AB 939. It describes policies and programs that will be implemented by the City to achieve the State waste reduction mandates. Per AB 939, the SRRE projects disposal capacity needs for a fifteen-year period. The current SRRE fifteen-year period ends in 2006.

City of Elk Grove Household Hazardous Waste Element (HHWE)

AB 939 requires every city and county within the State to prepare an HHWE and to provide for management of household hazardous waste generated by the residents within its jurisdiction. The City household hazardous waste management program, consisting of collection and public education/information services, has been formulated to serve residents in a convenient and cost-effective manner. In addition to reducing the amount of waste that might otherwise be sent to a landfill as required by AB 939, these programs are important facets in the City’s effort to clean up the solid waste stream.

Existing Solid Waste Generation

Solid Waste Generation

Approximately 1,223,261 tons of solid waste were generated by uses in the County of Sacramento in 1998.¹³ Substantial progress in diverting this waste from landfills has been made. For example, in 1990 approximately 18.3 percent of the solid waste stream was diverted from landfills through various source reduction, recycling and re-use efforts.¹⁴ In 1998, the County of Sacramento achieved a 37.7 percent waste diversion. Specific information on the City of Elk Grove is unavailable at the present time; the City's incorporation is too recent to compile City data.

Site-Specific Solid Waste Generation

The project site currently supports limited residential uses and agricultural activities. Neither the residential nor the agricultural activities contribute substantial amounts of solid waste to the area's waste stream. Dried and dead grasses are disced and then tied into bundles for hay and are not disposed of at landfills. Residential solid waste is collected by a private hauler.

Existing Solid Waste Collection and Disposal

As a condition of incorporation, Sacramento County has negotiated for solid waste collection services in the new City of Elk Grove until 2004. The following discussion is based on services currently provided by the County.

Solid Waste Collection

Commercial, multi-family residential and industrial waste is collected through open competition. The SWA approves a list of haulers with whom businesses can contract for waste collection services. At present, the list maintained by the SWA includes 15 haulers. Each of these haulers must receive a permit from the SWA prior to operating. As with residential collection, commercial and industrial collectors must divert 30 percent of the collected waste prior to disposal. The waste can be taken to any landfill that is willing to accept it and that provides the greatest economic advantages to the hauler, based on location and disposal fees.

¹³ Ibid.

¹⁴ County of Sacramento Source Reduction and Recycling Element (SRRE), September 1991.

The largest commercial, multi-family and industrial haulers in unincorporated Sacramento County are BFI and Waste Management Inc. Both BFI and Waste Management Inc. take waste to their own transfer facilities and transport the remaining unrecyclable wastes to landfills outside of the County. The specific receiving landfill varies dependent upon tipping fees and transportation costs. BFI completed its transfer facility in May 2000 and stopped hauling refuse to the Kiefer Road Landfill at that time.¹⁵ Waste Management Inc. stopped hauling refuse to the Kiefer Road Landfill approximately one year ago. It is likely, however, that the other private waste haulers in the County haul waste to the Kiefer Road Landfill, given its proximity.

Currently, much of the solid waste collected within Sacramento County by private haulers is disposed of within the County. However, solid waste has become a commodity and has supported the growth of the private solid waste handling industry. In this free-enterprise system, private industries now compete to collect and dispose of solid waste. Private solid waste haulers dispose of their loads at landfills which provide the greatest economic advantage (considering location, transportation cost, and disposal tipping fees).

Landfill Capacity

At present, the Kiefer Road Landfill is the only landfill within the jurisdiction of Sacramento County that is permitted to accept solid waste for disposal. The Dixon Pit Landfill, located south of Calvine Road on Elk Grove-Florin Road, is expected to close later this year (2000). Given the anticipated closing of this landfill, this analysis of landfill capacity will assume that all project generated solid waste will be disposed of at the Kiefer Road Landfill. **Figure 4.6.3-1, Kiefer Road Landfill**, illustrates that the landfill is approximately 13.25 miles northeast of the Lent Ranch Marketplace site.

The maximum tons per day (tpd) allowed at the Kiefer Road Landfill is 10,815 tpd, with an average intake of 6,362 tpd. The landfill has a total capacity of 117.0 million cubic yards (58 million tons).¹⁶ The Kiefer Road Landfill is classified as a major landfill, which is defined as a facility that receives more than 50,000 tons of solid waste per year. Currently, the Kiefer Road landfill is operating below permitted capacity and will have capacity for the next 30 to 40 years based on current disposal rates.¹⁷

¹⁵ Telecommunication with Kevin Basso, BFI, June 8, 2000.

¹⁶ Sacramento County Department of Environmental Review and Assessment, *East Franklin Specific Plan Final EIR (SCH# 19997112030)*, February 2000.

¹⁷ Telecommunication with John Feb, Sacramento County Waste Management and Recycling Division, May 2000.

PROJECT IMPACTS

The project would generate solid waste (including hazardous waste) during its construction and operational stages of development. Where the solid wastes are disposed of and how they are recycled are driven by economics and adopted City of Elk Grove and State regulations. Furthermore, the amount of solid waste entering landfills versus the amount generated would be based on a number of variables, including market demand for recyclables.

Thresholds of Significance

According to Appendix G of the CEQA *Guidelines* (Environmental Checklist Form), a project could have a significant effect on the environment if it would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs, or if it would violate federal, state, or local standards relating to solid waste.

Solid waste collection service and landfill capacity already exist in the project area. Therefore, for the purpose of this EIR, the project would cause a significant solid waste (including hazardous waste) impact if:

- it does not implement measures to reduce the amount of solid waste entering landfills in accordance with State and County standards and/or if future capacity at existing landfills would be inadequate to serve the project.

Analysis

Construction-

On-Site Impacts

Site preparation (vegetation removal, demolition and grading activities) and construction activities would generate a total of approximately 90 tons of construction wastes assuming no recycling, or approximately 45 total tons using recycling practices in effect today, such as the use of on-site recycling bins during construction, reuse of scrap lumber, and use of construction material made from recycled products.¹⁸ These waste materials are expected to be typical construction debris, including wood,

¹⁸ Assumes a generation rate of 90 tons per acre of construction waste, with one acre of the project site developed with existing structures. This generation rate is based on standard factors used in Ventura County. Sacramento County does not have a construction waste generation factor.

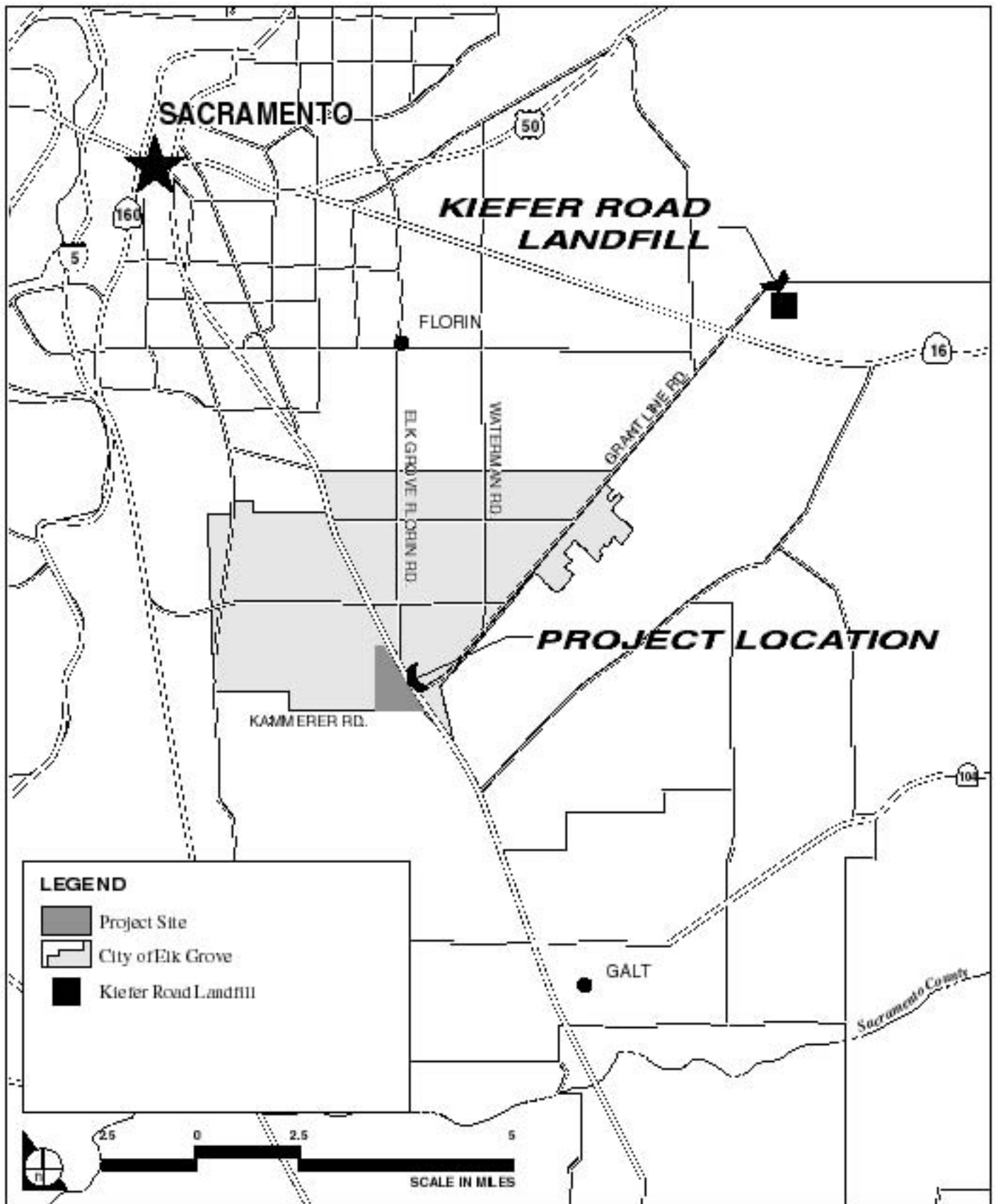


FIGURE 4.6.3-1

Kiefer Road Landfill

paper, glass, plastic, metals, cardboard and green wastes. Cleared and grubbed materials would normally be disced into the site soils, and would not be hauled to the landfill. Construction activities could also generate hazardous waste products. The wastes generated would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities.

Generally, typical construction-related solid waste is composed of small scrap materials and construction employee food waste. The waste generation typically occurs over short time periods and ceases following completion of the construction stage; in the case of the proposed project, construction would occur intermittently over project buildout. As discussed above, the Kiefer Landfill is presently operating below capacity and is permitted to intake 10,815 tpd of waste. Average daily flows are approximately 6,362 tpd. The introduction of 90 tons of waste over project buildout represents an incremental increase in the volume of solid waste disposed at this landfill and can easily be accommodated at the landfill under existing permit conditions. Further, all construction activity is required to implement recycling programs. Based on the above, no significant construction impacts relative to solid waste are anticipated.

Off-site Impacts

No off-site impacts are associated with construction of the proposed project. As indicated above, the existing Kiefer Road landfill has capacity to accept all construction waste generated by the project as well as cumulative development within the watershed. Consequently, no expansion to this landfill is necessary as a result of project construction.

Operational

On-site Impacts

At buildout, the project would generate approximately 42,400 pounds of solid waste per day, or approximately 7,700 tons per year, as shown in **Table 4.6.3-1, Daily Project Solid Waste Generation (No Recycling)**. This quantity represents the project's solid waste generation under a worst-case scenario without any recycling activities in place. Under the City Model Ordinance, however, the uses within the project would be required to provide adequate areas for collecting and loading recyclable materials in concert with Countywide efforts and programs to reduce the volume of solid waste entering landfills. Therefore, it can be assumed that the project would meet the current recycling goals of the community and in actuality only generate approximately 5,400 (or fewer) tons per year for disposal, because of current County diversion rates and the requirement for haulers to recycle 30 percent of waste generated.

**Table 4.6.3-1
Daily Project Solid Waste Generation (No Recycling)**

Land Use	Units	Generation Factor (pounds/day) ¹	Total Waste Generation (pounds/day)	Total Waste Generation (tons/year)
Residential- Multi-Family	280	6.4110	1,795	328
General Retail ²	3,091,000	0.0132	40,649	7,418
Total:			42,444	7,746

Source: Impact Sciences, Inc. (June 2000).

du- dwelling unit; sf = square feet

¹ The solid waste generation rates are derived from the Ventura County Solid Waste Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts. The Sacramento County Solid Waste Authority does not have representative waste generation factors; therefore those used by Ventura County which are fairly standard and are representative of actual usage amounts were utilized.

² There are many uses proposed in each of the different commercial planning areas, with a great deal of flexibility allowed by the SPA. At this time, it is impossible to know exactly how many types of commercial uses are proposed for the site. Therefore, all of the commercial uses were analyzed under the General Retail usage amounts.

As discussed above, the Kiefer Road Landfill has a permitted capacity of 10,815 tpd, with at least 30 to 40 years of operating capacity. At project buildout, approximately 42,400 pounds (21.2 tons) of solid waste would be generated on a daily basis. Assuming that all waste is disposed at the Kiefer Landfill (unlikely based on economic forces discussed above) project operation would result in an average daily disposal rate of 6,383 tpd, which is still well within the permitted capacity of the landfill. The project's contribution to the waste stream represents a 0.3 percent increase over the present daily intake at this landfill. Consequently, project generated solid waste can be accommodated at the Kiefer Landfill without significantly impacting the lifespan of the landfill.

Off-site Impacts

No off-site impacts are associated with project generated solid waste disposal. As indicated above, the existing Kiefer Road landfill has capacity to accept all waste generated by the project as well as all cumulative development within the service area of the landfill. Consequently, no expansion to this landfill or siting of new landfills is necessary as a result of project operation.

PROJECT MITIGATION MEASURES

Mitigation Measures Already Incorporated into the Project

The project does not incorporate any specific measures to reduce solid waste impacts.

Mitigation Measures Recommended by the EIR

No mitigation is required.

CONSISTENCY WITH GENERAL PLAN POLICIES

The following are policies from the City of Elk Grove General Plan that apply to solid waste disposal. These policies are general in nature and are subject to interpretation. The City Council has the authority to decide whether the project is consistent with applicable policies.

**Table 4.6.3-2
General Plan Policy Consistency - Solid Waste**

General Plan Policies	Consistency with General Plan	Analysis
<p>Policy LU-8: Infrastructure financing plans which specify the extent, timing and estimated cost of all necessary infrastructure shall be approved by the County together with the approval of zoning for any urban uses in urban growth areas. The resulting financing mechanisms shall be implemented prior to the approval of all entitlements in urban growth areas.</p>	Yes	<p>The Lent Ranch Public Facilities Draft (the "Financing Plan"), identifying major infrastructure improvement costs and likely funding sources, has been prepared for the project. The Draft Financing Plan includes detailed descriptions and construction costs of the infrastructure necessary to provide adequate serve to the project, as well as specific information with respect to funding. The financing mechanisms would be in place prior to the approval of building permits for the project.</p>
<p>Policy LU-51: Assure service availability, adequacy and funding at each stage of the development process for all public services for the life of the project consistent with the intent of this policy.</p>	Yes	<p>The ultimate funding mechanisms and a funding implementation strategy, as identified in the Draft Financing Plan approved for the project, would be in place prior to project development. This would assure service availability and adequacy at each stage of the development process for all public services. In addition, taxes generated by the project would assure the availability and adequacy of public services.</p>
<p>Policy LU-57: The City shall not provide urban services beyond the Urban Policy Area, except when the City determines the need for health and safety purposes.</p>	Yes	<p>The project site is within the Urban Policy Area (UPA), an area where urban services are planned within the twenty year planning period of the General Plan. Approval of the project would result in the development of lands within the UPA for urban uses and the provision of urban levels of public infrastructure and services to areas within the limits of the UPA.</p>
<p>Policy LU-58: The City shall maintain an Urban Service Boundary that defines the long-range plans (beyond twenty years) for urbanization and extension of public infrastructure and services, and defines important areas for protecting as open space and agriculture.</p>	Yes	<p>The Urban Service Boundary (USB) at Kammerer Road forms the southern boundary of the project site. The USB indicates the ultimate boundary of the urban area and for the provision of public infrastructure and services. The project is situated within the limits of the USB.</p>

CUMULATIVE IMPACTS

Sacramento County (wasteshed of Kiefer Landfill) is anticipated to undergo sustained growth through the year 2022. During this period, a net population increase of 506,783 persons is anticipated in the County.¹⁹ Many of these people would reside in recently approved or planned projects located near the project site such as the East Franklin Specific Plan Area, Laguna Ridge Specific Plan area, and the South Pointe planning area. Implementation of the proposed project in conjunction with related and approved projects throughout Sacramento County would increase solid waste generation over the existing Countywide levels. It is noted that each individual project would be required to comply with all pertinent citywide and/or countywide recycling programs, including AB 939 compliance. All new development would be conditioned to meet the requirements of all-applicable solid waste diversion, storage, and disposal regulations that are in effect at the time of development.

Based on per capita solid waste generation rates identified in City of Elk Grove Source Reduction and Recycling Element (September 1991), and assuming implementation of mandatory diversion programs, cumulative development within the Kiefer Landfill wasteshed would generate an additional 744,900 tons of waste annually by the year 2022 (506,783 people x 1.47 tons/person /year = 744,900 tons/year). When added to the project generated waste of 5,400 tons, an additional 750,300 tons of solid waste would be generated on an annual basis by that time. This represents a net increase in daily intake of approximately 2,056 tpd (750,300 tons/year ÷ 365 days = 2,056 tpd). When added to the existing average daily intake at the landfill of 6,362 tpd, the total daily intake at the landfill in the year 2022 is predicted to be 8,418, which is substantially below the maximum permitted daily intake total of 10,815 tpd. Based on the fact that Kiefer landfill has adequate capacity to accommodate the proposed project as well as buildout of all uses in the service area through the year 2022, and that all uses are subject to mandatory source reduction and recycling efforts, no significant cumulative impact to landfill disposal facilities are anticipated.

CUMULATIVE MITIGATION MEASURES

No measures are required.

UNAVOIDABLE SIGNIFICANT IMPACTS

Given that there is adequate capacity at the Kiefer Road Landfill, project-specific and cumulative solid waste impacts can be considered less than significant.

¹⁹ Sacramento Area Council of Governments, 1999 Metropolitan Transportation Plan (July 1999).