5.13 PUBLIC SERVICES AND UTILITIES

POLICE PROTECTION

ENVIRONMENTAL SETTING

The City of Moreno Valley contracts police services from the Riverside County Sheriff's Department. As **Figure 5.13-1** depicts, the department is located in the Public Safety Building at 22850 Calle San Juan de Los Lagos in the City of Moreno Valley's Civic Center. The department also uses satellite offices in strategic locations throughout the City. These offices provide a place for officers to write reports, make phone calls and tend to other responsibilities without leaving the field.

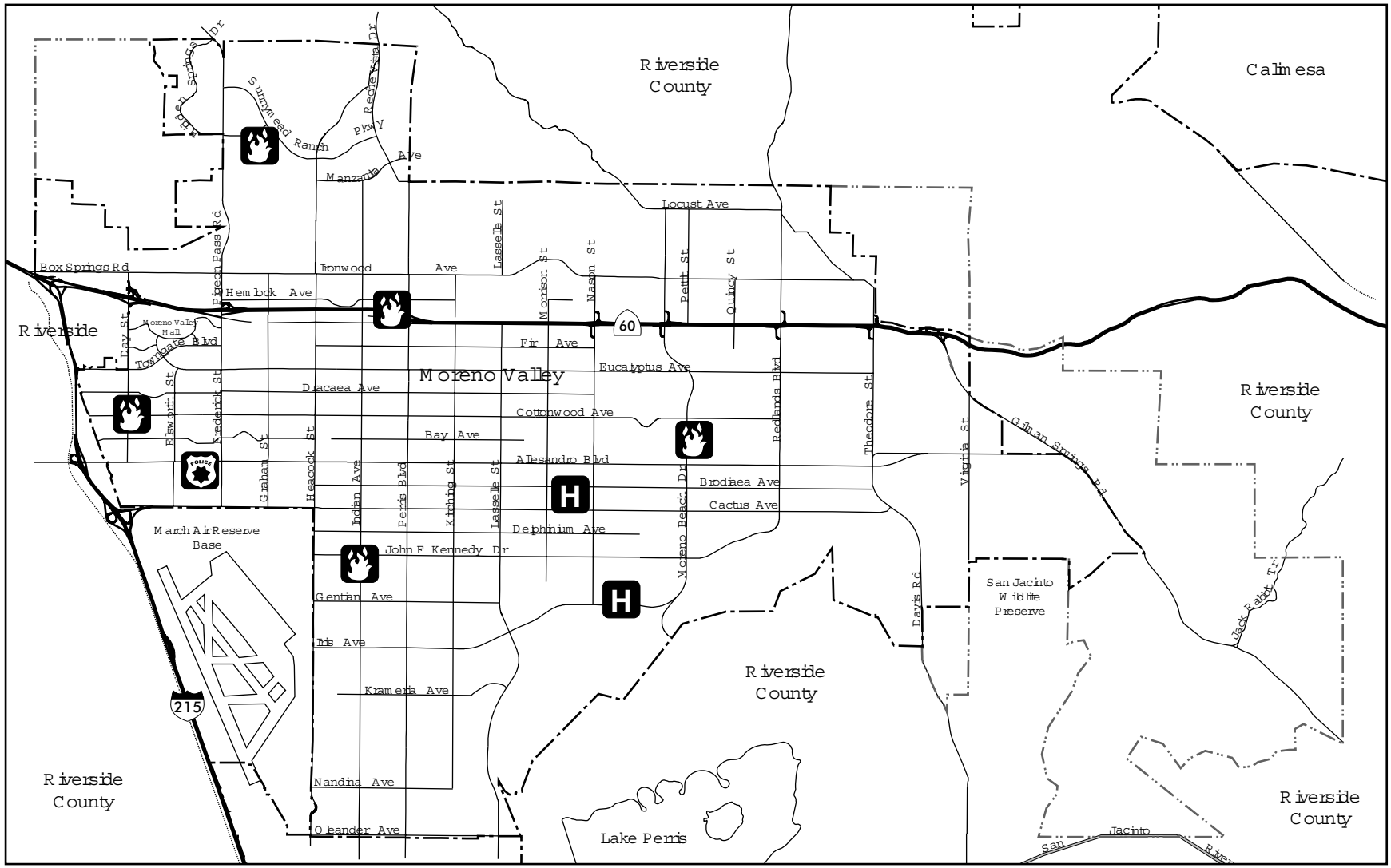
The department has 143 authorized sworn personnel and 45.5 authorized civilian personnel. Using the City's year 2003 population of about 150,200 and 143 sworn officers, the City provides a ratio of 0.95 officers per 1,000 residents.

Moreno Valley has a relatively low crime rate based on the number of serious crimes per 1,000 residents. Larceny/Theft was the most frequent reported in the City according to the 2000 Department of Justice/Uniform Crime Report (UCR), comprising 42 percent of all crimes. Burglary was the second most frequent crime, accounting for approximately 27 percent of all crimes. Only 18 percent of all crimes were against individuals, while the remaining crimes were directed against property.

The MVPD tracks response times for Priority 1, Priority 2, and Priority 3 calls. A Priority 1 call is an emergency call which requires immediate response where there is reason to believe that a continuing serious threat to life exists. The average response time to Priority 1 calls in Moreno Valley in 2002 was seven minutes.

A Priority 2 call is defined as a call reporting a situation that is urgent, but not life threatening. The average response time to a Priority 2 call in Moreno Valley in 2002 was 16.2 minutes.

A Priority 3 call is a call reporting a crime that is neither urgent or life threatening. The average response time to a Priority 3 call in Moreno Valley in 2002 was 38.2 minutes.



Sources: City of Moreno Valley, December 2003

City Boundary

Sphere of Influence

Fire Station

Police Station

Hospital

North 0 6,000 12,000 ft

Figure 5.13-1
Locations of Public Facilities

Moreno Valley General Plan

Safety Element Objective 6.8 is to strive for police staffing of at least 1 officer per 1,000 residents, as feasible given budget constraints. Objective 6.9 and the associated policies encourage neighborhood watch programs, require security lighting in new developments and require defensible space concepts to be incorporated in the design of new developments.

Existing Regulations and Practices

The City did a development impact fee study (1999) that concluded that the existing Police Building and the planned expansion of the facility would serve the needs of the City through buildout. Each new development is assessed a fee to cover its fair share of the cost of the expanded police facility. All new development is reviewed by the Police Department to identify risks to security and ways to minimize those risks.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for police protection services, the construction of which could cause significant environmental impacts.*

ENVIRONMENTAL IMPACT

Alternatives 1, 2, and 3

The MVPD does not have established response time standards. The Department's aim is to provide service as fast as possible under all circumstances depending on availability of officers in the field and type of calls for service on hand. The MVPD's objective is to respond within six minutes or less for Priority 1 calls. The MVPD prepares a quarterly report and reviews calls for service and response times to ensure the department is deployed efficiently and adequately.

Implementation of any of the General Plan Land Use Alternatives will result in increased population and new development. With the increase in population and new development, additional police services, and expanded facilities will be required to provide acceptable service levels. The existing police building is 43,700 square feet in area and the planned expansion is for an additional 36,300 square feet in the civic center complex. The need

for additional police facilities would not differ substantially between the three land use alternatives.

The specific environmental impact of expanding the police station cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as a police station, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new police facilities.

IMPACT AFTER MITIGATION

Less than significant**.**

NOTES AND REFERENCES

1. Bill Di Yorio, Chief of Police. Electronic communication to Rick Brady, P&D Consultants, 7/11/03.

2. DMG-Maximus, City of Moreno Valley Development Impact Fee Study, 1999

FIRE PROTECTION AND EMERGENCY SERVICES

ENVIRONMENTAL SETTING

The City of Moreno Valley contracts with the Riverside County Fire Department to provide fire protection, fire prevention and emergency services to its residents. The Riverside County Fire Department is administered and operated by the California Department of Forestry and Fire Protection. As **Figure 5.13-1** depicts, the Department consists of a Fire Prevention and Administration Bureau located in the Public Safety Building at 22850 Calle San Juan de Los Lagos in the City of Moreno Valley's Civic Center and six fire stations throughout the community. **Table 5.13-1** displays the addresses and summarizes the equipment and staff located at each station.

TABLE 5.13-1
MORENO VALLEY FIRE STATIONS

Fire Station	Address	Personnel	Equipment
Station 2 (Sunnymead)	24935 Hemlock Avenue	7 firefighters	1 engine 1 ladder truck (100') 1 rescue squad
Station 6 (Towngate)	22250 Eucalyptus	3 firefighters	1 engine 1 rescue squad
Station 48 (Sunnymead Ranch)	10511 Village Road	6 firefighters	2 engines 1 rescue squad
Station 65 (Kennedy Park)	15111 Indian	6 firefighters	2 engines 1 rescue squad
Station 58 (Moreno)	Intersection of Bay Ave and Moreno Beach	3 firefighters	1 engine 1 brush engine 1 rescue squad
Station 91 (College Park)	16110 Lasselle Street	4 firefighters	1 engine 1 breathing support unit 1ladder truck (75')

Source: Moreno Valley Fire Department, 2003.

The goal of the department is to arrive on the scene of emergencies within five minutes of notification, 90 percent of the time. In 2002, the department met this goal by arriving at the scene of emergencies within five minutes of notification 94.3 percent of the time. Response time is defined as the period of time that elapses from the moment the fire station is notified, until that unit's arrival at the location of the incident.

The City requires adequate fire suppression water flows be provided to new development projects. The Eastern Municipal Water District (EMWD) stores water in several million gallon tanks throughout their service area to ensure continued pressure and supplies in an emergency. The Box Springs Mutual Water Company, however, is unable to provide the rate of flow that is recommended for fire suppression.

The Fire Department responds to medical aid calls with basic life support services. Private sector paramedics provide advanced life support services. Currently, American Medical Response handles medical emergencies that require paramedic assistance and/or ambulance transportation under contract with the County of Riverside.

Moreno Valley General Plan

Safety Element Objectives 6.11 through 6.16 and the associated policies provide direction for to ensure adequate protection from fire hazards, in terms of both fire prevention and suppression. The policies address a range of policies and programs, including fire education programs, building codes, fuel modification along the wildland-urban interface and requirements for smoke detectors, automatic fire sprinklers, emergency water supply and emergency access.

Existing Regulations and Practices

All new development must comply with existing fire codes, including, but not limited to, emergency access requirements and fire flow requirements for fire suppression.

The City did a development impact fee study in 1999. The study concluded that the former Sunnymead (Station No. 2) and Moreno station (Station No. 58) needed to be replaced and three new stations would be needed through buildout of the City. Since the time of the study, the Sunnymead Station has since been relocated on Hemlock Avenue, west of Perris Boulevard and one new station (College Park) has been constructed on Lasselle Street, south of Iris Avenue. Each new development is assessed a fee to cover its fair share of the cost of new fire facilities.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services, the construction of which could cause significant environmental impacts.*

ENVIRONMENTAL IMPACT

Implementation of any of the General Plan Land Use Alternatives will result in increased population and new development. This increase in development and population generated by the proposed land uses will require additional fire stations, personnel, and equipment over time to ensure adequate fire and emergency service capabilities. The need for fire facilities would not differ substantially between the three General Plan land use alternatives.

The Fire Department anticipates the need to relocate one fire station and add two additional fire stations to meet the need posed by new development allowed under each of the Alternatives. Specifically, the Department plans to relocate the Moreno Beach Fire Station #58. In addition, the Department will need to construct a fire station in the northeast portion of Moreno Valley and an additional station in the southeast portion. Each new fire station would also require additional staffing (3-4 firefighters per engine company).

The specific environmental impact of expanding fire protection and emergency service facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as fire stations, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new fire facilities.

IMPACT AFTER MITIGATION

Less than significant.

NOTES AND REFERENCES

1. Andrew Bennett, Fire Marshal. Letter to Rick Brady, P&D Consultants, 7/23/03.

2. DMG-Maximus, City of Moreno Valley Development Impact Fee Study, 1999

EDUCATION

ENVIRONMENTAL SETTING

Children who reside in the City of Moreno Valley attend schools within two different school districts. In addition, the City is home to the Moreno Valley campus of Riverside Community College. Educational facilities in Moreno Valley are depicted in **Figure 5.13-1**. The two school districts serving the planning area are described below.

Moreno Valley Unified School District

The Moreno Valley Unified School District (MVUSD) operates 19 elementary, six middle, and four high schools. The District also operates three learning centers. As depicted in **Table 5.13-2**, the 2003-04 capacity exceeds the school district's projected enrollment by 4,839 students. Landmark Elementary and Midland Middle are the only schools in MVUSD where projected enrollment is greater than existing capacity.

TABLE 5.13-2
MORENO VALLEY UNIFIED SCHOOL DISTRICT SCHOOLS

School	Location	Capacity 2003-04	Projected Enrollment 2003-04
Elementary		*17,830*	*16,116*
Armada	25201 John F. Kennedy Drive	1,069	1,006
Bear Valley	26125 Fir Avenue	1,008	811
Box Springs	11900 Athens Drive	618	540
Butterfield	13400 Kitching Street	1,253	976
Cloverdale	12050 Kitching Street	1,093	881
Creekside	13563 Heacock Street	1,236	1,144
Edgemont	21790 Eucalyptus Avenue	929	874
Hendrick Ranch	25570 Brodiaea Avenue	1,054	981
Hidden Springs	9801 Hidden Springs Drive	594	463
Honey Hollow	11765 Honey Hollow Drive	1,043	898
Midland	11440 Davis Street	878	954
Moreno	26700 Cottonwood Avenue	690	576
North Ridge	25101 Kalmia Avenue	936	779
Ridge Crest	28500 John F. Kennedy Drive	682	654
Seneca	11615 Wordsworth Road	634	517
Serrano	24100 Delphinium Avenue	1,116	1,066
Sugar Hill	2455 Old Country Road	996	887
Sunnymead	12875 Heacock Street	949	835
Sunnymeadows	23200 Eucalyptus Avenue	1,052	1,274
Middle		*9,987*	*8,507*
Badger Springs	24750 Delphinium Avenue	1,854	1,499
Landmark	15261 Legendary Drive	1,392	1,396
Palm	11900 Slawson Avenue	1,890	1,587
Mountain View	13130 Morrison Street	1,811	1,568
Sunnymead	23996 Eucalyptus Avenue	1,215	968
Vista Heights	23049 Old Lake Drive	1,825	1,489
High		*11,184*	*9,539*
Canyon Springs	23100 Cougar Canyon Drive	2,958	2,728
Moreno Valley	23300 Cottonwood Avenue	2,970	2,292
Valley View	13135 Nason Street	2,976	2,587
Vista del Lago	15150 Lasselle Street	2,280	1,932
TOTAL		**39,001**	**34,162**

Source: Moreno Valley Unified School District, 2003.

The Moreno Valley Unified School District is adding three relocatables at Ridge Crest elementary and will be adding more to other schools in 2004-05 to accommodate anticipated growth in student population. In addition, the District opened the Towngate Elementary School (designed for 800 students) at 22480 Dracaea Ave. in September 2004. The District was also planning to build another school (La Jolla Elementary School at Iris Ave. and J.F. Kennedy Drive) in September 2005.

Val Verde Unified School District

In 2002/2003 residents in Moreno Valley attended four elementary, one middle, and one high school in the Val Verde Unified School District. With the exception of Rainbow Ridge Elementary, enrollment at all these schools exceeded the district capacity standard (see **Table 5.13-3**).

TABLE 5.13-3
VAL VERDE UNIFIED SCHOOL DISTRICT SCHOOLS

School	Location	Capacity 2002-03	Enrollment 2002-03
Elementary		*2,600*	*3,280*
El Portero	16820 Via Pamplona Drive	650	728
Mary McLeod Bethune	25390 Krameria Street	650	1,031
Rainbow Ridge	15950 Indian Avenue	650	590
Victoriano	25650 Los Cabos Drive	650	931
Middle School		*1,250*	*1,580*
Vista Verde	28777 Krameria Street	1,250	1,580
High School		*2,500*	*2,538*
Rancho Verde	17750 Lasselle Street	2,500	2,538
TOTAL		**6,350**	**7,398**

Source: Val Verde Unified School District, 2003.

In August of 2004, the Val Verde School District opened the Red Maple Elementary School on Red Maple Ave., east of Perris Blvd. with a capacity 850 students. As of March of 2005, two additional elementary schools were under construction: the Lasselle Elementary School (950 student capacity) on Krameria Ave., east of Lasselle St. and an expansion of the Rainbow Ridge Elementary School (300 student capacity). The District also plans to construct the Indian Middle School (1,250 student capacity) adjacent to the Rainbow Ridge Elementary School.

Continuation, Adult, and Vocational Schools

The Moreno Valley Unified School District operates three learning centers that provide independent study, adult, and/or vocational services. Bayside Community and Charter School serves 147 at-risk students in grades 9-12. March Valley Academic Center consists of two alternative schools, March Mountain and March Valley. March Valley serves approximately 300 students in grades 1-12, while March Mountain is a small continuation high school of approximately 650 students.

Riverside Community College – Moreno Valley

The Moreno Valley branch of the Riverside Community College District provides transfer programs paralleling the first two years of university offerings, pre-professional,

career preparation, and occupational and technical programs leading to an associate of arts degree, an associate of science degree, and a variety of certificates. Riverside Community College had 7,500 students enrolled as of the fall of 2002.

Existing Regulations

State law requires that no building permit may be issued without certification that school fees have been paid.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities to maintain acceptable service ratios or other performance objectives for public school facilities, the construction of which could cause significant environmental impacts.*

ENVIRONMENTAL IMPACT

Implementation any of the General Plan Land Use Alternatives will result in increased population and new development, generating a need for expansion of existing school facilities or construction of new schools within the affected school districts. Some of these facilities will be constructed or expanded within the planning area. Several future school sites are designated for public uses on all three General Plan alternative land use plans. The environmental impact of school facility construction on those sites is addressed in this EIR. The impact of school construction on unknown sites is a matter of speculation. No further discussion is included here pursuant to Section 15145 of the CEQA Guidelines.

The subject of mitigation for impacts on school facilities has been impacted by the passing of the Leroy F. Green School Facilities Act of 1998 (SB 50). The law limits the impact fees and site dedication that school districts can require of developers to off-set the impact of new development on the school system. In passing SB 50, the California legislature declared it has exclusive jurisdiction on the subject of the need for and mitigation of impacts related to school facilities.

The specific environmental impact of expanding educational facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as school facilities, may result in potentially significant

environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

No mitigation beyond the payment of school fees is required according to State law. Additionally, mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new school facilities.

IMPACT AFTER MITIGATION

Less than significant.

NOTES AND REFERENCES

1. Moreno Valley Unified School District, *School Capacity and Enrollment Projection 2003-2004*, June 2003.

2. Paul Baird, Moreno Valley Unified School District. Electronic communication to Rick Brady, P&D Consultants, 7/16/03.

3. Val Verde Unified School District, *2003 Needs Analysis Report*, April 2003.

4. Val Verde Unified School District, *Facilities Department Presentation of Future School Sites*, April 2003.

LIBRARIES

ENVIRONMENTAL SETTING

The Moreno Valley Public Library is located on the site of the old Midland Middle School at 25480 Alessandro Boulevard. The 16,000 square foot library, which opened to the public in 1986, was originally part of the Riverside County library system but in 1998 the City assumed sole operation and responsibility over the facility. It is funded by tax revenue generated by the residents of Moreno Valley through property assessments, various State and federal grants, and support by the Moreno Valley Friends of the Library.

The library holds an estimated 98,000 volumes, exceeding its original design capacity of 50,000 volumes. With a population of 165,328 in January of 2002 (per Department of

Finance), Moreno Valley's library contained 0.1 square feet per capita. The City standard is 0.5 gross square feet per capita of library space and 1.2 volumes per capita.

A development impact fee study was conducted in 1999. The study concluded that an additional 51,166 square feet of library space would be needed to serve the projected population at buildout. New residential development is assessed a fee to cover its fair share of the cost of the new facilities. The new library is planned for the existing civic center at the southwest corner of Frederick Street and Alessandro Boulevard.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities to maintain acceptable service ratios or other performance objectives for public libraries, the construction of which could cause significant environmental impacts.*

ENVIRONMENTAL IMPACT

Implementation of any of the General Plan Land Use Alternatives will result in increased population and increased demand for library services. The need for additional library facilities would not differ substantially between the three land use alternatives.

The City has approved plans for a 69,000 to 70,000 square foot library The specific environmental impact of constructing the new library has already been evaluated and a Negative Declaration, dated March 19, 2003 has been adopted. No further analysis of impacts associated with constructing and operating the new library is needed.

The Library Advisory Board also recommended building three branch libraries, each encompassing a least 20,000 square feet in floor area. The specific environmental impact of building branch libraries cannot be determined at this General Plan level of analysis; however, development of branch libraries may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing new library facilities.

IMPACT AFTER MITIGATION

Less than significant.

NOTES AND REFERENCES

DMG-Maximus, City of Moreno Valley Development Impact Fee Study, 1999.

PARKS AND RECREATION

ENVIRONMENTAL SETTING

Parklands

The Moreno Valley parks and recreation system exists within the context of the City's existing development pattern. **Table 5.13-4** identifies 335 acres of existing public parks in Moreno Valley and describes amenities found at these park sites. **Table 5.13-5** identifies the City's existing recreational facilities that complement its designated parkland. Existing public parks and other recreation facilities in the community are depicted on **Figure 5.13-1**.

TABLE 5.13-4
EXISTING PARKS AND RECREATIONAL FACILITIES

Facility	Address	Size (acres)	Features
Sunnymead Park	12655 Perris Blvd	15.53	lighted softball/baseball field, restroom, snack bar, tot lot, sheltered picnic tables, barbeques
Moreno Valley Community Park	13380 Frederick St	15.58	lighted soccer field, snack bar, restroom, tot lot, sheltered picnic tables, barbeques,
John F. Kennedy Park	15115 Indian St	7.69	lighted softball/baseball field, lighted tennis courts, restroom, tot lot, sheltered picnic tables, barbeques
Weston Park	13170 Lasselle St	4.14	softball/baseball field, multi-use athletic field, restroom, tot lot, sheltered picnic tables, barbeques
Gateway Park	23975 Manzanita Ave	7.67	restroom, tot lot, sheltered picnic tables, barbeques
Westbluff Park	10750 Pigeon Pass Rd	5.00	basketball court, restroom, tot lot, sheltered picnic tables, barbeques
Woodland Park	25705 Cactus Ave	9.11	lighted tennis courts, lighted softball/baseball field, lighted basketball courts, multi-use athletic field, restroom, tot lot, barbeques, covered shelter

TABLE 5.13-4
EXISTING PARKS AND RECREATIONAL FACILITIES

Facility	Address	Size (acres)	Features
Morrison Park	26667 Dracaea Ave	14.01	lighted softball/baseball fields, multi-use athletic field, restroom, snack bar, sheltered picnic tables, barbeques
Bethune Park	25450 Lurin Ave	6.00	tennis court, softball/baseball field, snack bar, water feature, restroom, tot lot, picnic tables, barbeques, covered shelter
Moreno Valley Equestrian Park & Nature Center	11150 Redlands Blvd	45.00	horse arena
Sunnymead Ranch Linear Park Site	Village Rd & Old Lake Rd	5.50	multi-purpose trail
California Aqueduct Linear Park Site	Kitching St & Krameria (South)	5.00	multi-purpose trail
California Aqueduct Linear Park Site	Balboa St & Dracaea Ave	4.50	multi-purpose trail
California Aqueduct	Kitching St & Krameria (North)	4.00	multi-purpose trail
Ridge Crest Park	28506 John F. Kennedy Dr	5.00	soccer field, volleyball court, multi-use athletic field, restroom, tot lot, sheltered picnic tables, barbeques
Fairway Park	27891 John F. Kennedy Dr	5.50	soccer field, volleyball court, multi-use athletic field, restroom, tot lot, sheltered picnic tables, barbeques
Victoriano Park	25730 Los Cabo Dr	5.00	basketball court, restroom, sheltered picnic tables, barbeques
Pedrorena Park	16009 Rancho Del Lago	5.50	tennis courts, basketball court, multi-use athletic field, restroom, tot lot, sheltered picnic tables, barbeques
El Potrero Park	16901 Lasselle St	15.00	soccer fields, multi-use athletic field, restroom, tot lot, sheltered picnic tables, barbeques, covered shelter
TownGate Memorial Park	13501 Elsworth St	16.97	lighted softball/baseball field, multi-use athletic field, restroom, tot lot, sheltered picnic tables, barbeques
Bayside Park	24435 Bay Ave	2.04	basketball court, tot lot, picnic tables, barbeques, covered shelter, horseshoe pits
Adrienne Mitchell Memorial Park	22631 Bay Ave	4.43	basketball court, multi-purpose trail, tot lot, picnic tables, barbeques, covered shelter, horseshoe pits

TABLE 5.13-4
EXISTING PARKS AND RECREATIONAL FACILITIES

Facility	Address	Size (acres)	Features
Hidden Springs Park – Phase 1	9675 Hidden Springs Dr	7.00	open space, tot lot, sheltered picnic tables
March Field Park and Valley Skate Park	6th St	70.00	lighted softball/baseball fields, skate park, roller hockey rink, restroom, snack bar, picnic tables, covered shelter
Parque Amistad	26160 Gentian Ave	4.24	softball/baseball fields, basketball court, multi-use athletic field, tot lot, picnic tables, barbeques, covered shelter
Vista Lomas Park	26700 Iris Ave	4.0	basketball court, tot lot, picnic tables, barbeques
College Park	16100 Lasselle St	25.0	multi-use athletic field, restroom, picnic tables, tot lot
Shadow Mountain Park	23239 Presidio Hills Dr	10.0	softball/baseball field, tot lot, sheltered picnic tables, barbeques
Celebration Park	14875 Caliente Dr	6.46	open space, restroom, tot lot, picnic tables, barbeques, water feature, covered shelter
	Total	**334.87**	

Source: City of Moreno Valley, 2005.

TABLE 5.13-5
RECREATION FACILITIES

Recreation Facility	Address	Features
Conference and Recreation Center	14075 Frederick St	gymnasium, banquet facilities, meeting rooms, class rooms, department offices
Senior Community Center	25075 Fir Ave	game tables, banquet facilities, horseshoe pits
TownGate Community Center	13100 Arbor Park Ln	banquet facilities, class room
Alessandro Gymnasium	23301 Dracaea Ave	basketball court, volleyball court
March Mountain High School Gymnasium	24551 Dracaea Ave	basketball court, volleyball court
Moreno Valley Recreation Center	13671 Frederick St	basketball court, recreation hall
Cottonwood Golf Center	13671 Frederick St	golf course, snack bar
Canyon Springs High School Swimming Pool	32100 Cougar Canyon Dr	swimming pool
Moreno Valley High School Swimming Pool	23300 Cottonwood Ave	swimming pool
Valley View High School Swimming Pool	13135 Nason St	swimming pool

Source: City of Moreno Valley, 2005.

Moreno Valley residents also have access to two regional parks: Box Springs Mountain Park (1,555 acres) located approximately five miles northeast of the planning area; and

Lake Perris State Recreation Area (8,300 acres) located about one mile south of the planning area. While the Lake Perris State Recreation Area is maintained by the State of California and the Box Springs Mountain Park is maintained by the Riverside County Parks Department.

Joint-use agreements with local school districts supplement the City's recreation facilities. Through the agreements, the City has access to all school facilities including gymnasiums, pavilions, swimming pools, and athletic fields to provide programs to the community. According to the Parks and Recreation Department, the joint-use agreements with the Moreno Valley and Val Verde Unified School District are in effect until terminated by either party.

Multi-use Trails

Moreno Valley has an extensive planned trails network traversing much of the planning area.

Moreno Valley General Plan

The Parks, Recreation and Open Space Element of the General Plan has identified portions of the planning area for future parkland acquisition. Most of these areas are located north of Highway 60, with a portion extending south from Highway 60 to Cactus Avenue on either side of Moreno Beach Drive. Additionally, the General Plan includes policies and programs that deal with parks and recreation. Program 4-1 directs the City to develop a parks and recreation facilities master plan. Program 4-9 requires that the City acquire land and develop neighborhood and community parks in the "Recommended Future Parkland Acquisition Areas" shown in Figure 4-4 of the Parks, Recreation and Open Space Element. Policy 4.2.7 establishes the 3-acre per 1,000 residents level of service standard and Policy 4.2.17 requires new development to contribute to the park needs of the City.

Existing Regulations

The City's development impact fee ordinance requires new development to dedicate parkland and/or pay in-lieu fees to provide 3 acres of parkland per 1,000 new residents.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Increases 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; or*

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered recreation facilities, or the need for new or physically altered recreation facilities to maintain acceptable service ratios or other performance objectives for park and recreational facilities, the construction of which could cause significant environmental impacts.*

ENVIRONMENTAL IMPACT

As shown in **Table 5.13-6**, there is an existing deficiency of approximately 161 acres of parklands within the City when compared to the 496 acres that would be required to provide three acres of developed parkland per 1,000 residents. Currently, about 2 acres of parkland are provided per 1,000 residents. As shown in **Table 5.13-6**, the estimated increase in population at the time of buildout according to each Alternative will require additional parkland within the planning area. Based on the expected populations of the three alternatives, Alternative 1 will result in a demand for 839 acres, Alternative 2 – 915 acres, and Alternative 3 – 908 acres. Because each Alternative assumes the same level of parkland development will occur, the impacts to parkland increase the greater the population. This Alternative 1 has the least impact to parks while Alternative 2 has the greatest.

TABLE 5.13-6
EXISTING AND FUTURE PARK ACREAGE NEEDS

	Population*	Park Acreage Required**	Available Acreage from Existing and Planned Parkland[1]	Surplus/ (Shortfall)
Existing	165,328	496	335 (Existing)	(161)
Alternative 1	279,697	839	610	(229)
Alternative 2	304,966	915	610	(305)
Alternative 3	302,785	908	610	(298)

Notes:
*Existing population based on January 2005 Department of Finance estimate. Alternatives 1 to 3 as listed in Table 3-1 in the *Project Description* of this EIR.
**Based on standard of three acres per 1,000 people.
1 – Does not include regional parkland available at Box Springs Regional Park.

Table 5.13-7 identifies new planned parks. The planned parks remain static throughout the three alternatives.

TABLE 5.13-7
PLANNED PARKS

Year	Site	Acres
2005	Rancho Verde Equestrian Staging Area, SEC or Lasselle St. and Kentucky Derby Dr.	1.45
2005	Ranch Verde Park, NEC of Lasselle St. and Cremello Way, on the California Aqueduct	3.00
2005	Lasselle Sports Park PA 4C	12.00
		0
NA	Festival Project, Ironwood and Davis St	12.90
NA	Hidden Springs, Sycamore Canyon and Hidden Springs Rd	17.00
NA	Cactus Corridor PA 5, Brodiaea and Redlands	10.00
NA	Cactus Corridor PA 8, Brodiaea between Sinclair and Theodore	8.00
NA	Elder Retention Basin, Elder Ave	10.00
NA	Morrison Park Extension, Cottonwood Ave and Morrison	9.00
NA	California Aqueduct Linear Park, between Indian Avenue and Perris Blvd. at Gentian Ave.	5.50
		0
NA	Rainbow Ridge School Park, Iris east of Indian	10.00
	Moreno Valley Field Station Specific Plan	0
NA	PA 3 next to elementary school	5.00
NA	PA 16 next to elementary school	5.00
NA	PA 10 next to middle and high school	15.20
NA	PA 19 community park, JFK and Nason St.	25.90
	Moreno Highlands Specific Plan	0
NA	PA 58 Cottonwood Ave and Redlands Blvd	8.00
NA	PA 59 Cottonwood Ave and Theodore St	39.00
NA	PA 60 Alessandro Blvd and Village Center Blvd	29.00
NA	PA 61 Alessandro Blvd west of Cracaea Ave	22.00
NA	PA 62 south of Fir Ave, west of Gilman Springs Rd	27.00
Total		274.95

With only the construction of the currently planned parks identified in **Table 5.13-7**, the existing shortfall of parkland would be improved for Alternative 1 and worsened with Alternatives 2 and 3. With the decreased parkland ratios for Alternatives 2 and 3, new development may 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, resulting in a significant project level impact.

However, State law allows cities to impose parkland dedication and/or in-lieu fees on new development equal to three acres of parkland per 1,000 residents. Therefore, although specific parks may not be planned at this time, new development allowed under the general plan will be required to provide parkland or fees equal to three acres per

1,000 residents. Because the City imposes this parkland requirement on all new developments, the existing parkland deficiency would not be worsened under any of the alternatives, and no significant parks and recreation impact would occur.

The specific environmental impact of expanding parks and recreational facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as parks, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR. Additionally, future parks and recreational development will undergo project-specific environmental review per CEQA.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new parks and recreational facilities.

IMPACT AFTER MITIGATION

Less than significant.

NOTES AND REFERENCES

1. City of Moreno Valley, *Master Plan of Trails Map,* n.d.
2. *Moreno Valley Recreation Guide & City Newsline, Web Edition*, Summer 2003.
3. DMG-Maximus, City of Moreno Valley Development Impact Fee Study, 1999
4. City of Moreno Valley, Department of Parks and Recreation, 2005

WATER SERVICE

ENVIRONMENTAL SETTING

The City of Moreno Valley is served by two water purveyors: Eastern Municipal Water District, and the Box Springs Mutual Water Company. Eastern Municipal Water District is the primary water purveyor, serving approximately 85 percent of the planning area. The Box Springs Mutual Water Company is the water purveyor for the area that lies between Old Highway 215 and Elsworth Street and between Alessandro Boulevard and the north side of Eucalyptus Avenue.

Most of the City's water is imported via the California Aqueduct from northern and central California. This water is managed by the Metropolitan Water District of Southern California (MWDSC). It is MWDSC's policy to provide its service area with adequate

supplies of water to meet expanding and increasing needs in the years ahead. MWDSC currently maintains that successful implementation of its Integrated Resources Plan (IRP) will provide sufficient water to supply all projected imported water demands for the next 20 years. When additional water is required to meet the water district's increasing needs for domestic, industrial, and municipal water, MWDSC will be prepared to deliver such supplies.

The Metropolitan Water District recently constructed a major reservoir, the Diamond Valley Lake, in the Domenigoni Valley area south of Hemet. The reservoir, intended to hold about 800,000 acre-feet of water, began filling in November of 1999. The water in Diamond Valley Lake will improve the reliability of the water supply. It will store water that is available during wet years for use during periods of drought.

A secondary source of imported water is available to the City from the Colorado River Aqueduct. However, the long-term viability of this water source is questionable given California's historical overdraft of the Colorado River. In addition to imported water, groundwater is also used. Portions of the Perris Basin and the San Jacinto Basin (hydrological groundwater basins) are located beneath the City.

According to EMWD, water demand in the Moreno Valley area has ranged from 22,000 acre feet per year (afy) to 25,000 afy. Development in the planning area is adequately served by existing EMWD infrastructure.

Most of the Box Springs Mutual Water Company distribution system facilities are undersized, aged, and deteriorated, which limits its ability to deliver adequate water flow for new development. Approximately 75 percent of water supplied by the Box Springs Mutual Water Company is groundwater. The remaining supply consists of imported water purchased from the Western Municipal Water District.

Existing Regulations

Development within the service area of the Box Springs Water Company is severely restricted because the existing distribution system cannot provide sufficient flow to satisfy the requirements of the Uniform Fire Code. New development cannot not take place within the Box Springs Mutual Water Company service area until adequate water flow is made available.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in the demand for water that exceeds the capacity of the existing entitlements and resources; or*

- *Require or results in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

ENVIRONMENTAL IMPACT

Water Supply

EMWD estimates that each of the three General Plan Land Use Alternatives will generate approximately the same water demand, ranging from 40,375 afy to 42,187 afy. Build-out according to each of the alternatives will increase existing domestic water demand by approximately 85 percent. **Table 5.13-8** displays details of the water demand estimates derived from a summary of the proposed land use alternatives provided to EMWD.

TABLE 5.13-8
ESTIMATED WATER DEMAND TABLE

Land Use	Factor (Acres/ Units)	Alternative 1		Alternative 2		Alternative 3	
		Quantity	Demand	Quantity	Demand	Quantity	Demand
Single Family	0.5	61,758	30,879	62,922	31,461	63,004	31,502
Multifamily	0.25	14,662	3,666	20,402	5,101	19,724	4,931
Commercial	3.6	1,209	2,176	993	1,788	967	1,741
Industrial Uses	1.25	919	1,149	1,065	1,332	927	1,159
Parkland	2.4	1,044	2,506	1,044	2,506	1,044	2,506
Open Space	0	3,927	-	3,922	-	3,922	-
Total Demand			40,375 afy		42,187 afy		41,839 afy

Source: EMWD, 2003.
Notes: 1. Parkland demand estimates are based upon the assumption that 60% of the acreage is irrigated at a duty of 4 feet per acre per year.
2. Open space is considered non-irrigated.
3. Parkland acreage includes box springs regional park.
5. afy = acre feet per year.

Future additional water demand will be met with local groundwater and imported water provided by the Metropolitan Water District of Southern California (MWDSC). The ability of MWDSC to meet projected water demands is documented in MWDSC's Integrated Resources Plan, Regional Urban Water Management Plan and the March 25, 2003, Report on Metropolitan's Water Supplies. These plans are based upon demand estimates submitted by member agencies; therefore, the City of Moreno Valley's projected water demand is included in MWD's regional water demand estimate. EMWD works closely with MWDSC and member agencies to ensure that the Integrated Resources Plan (IRP) will be fully implemented. According to EMWD, existing water supply should be considered adequate to meet projected water demands in the planning area (EMWD Year 2000 Urban Water Management Plan). The impact to water supply is less than significant.

EMWD has several programs in place to conserve water. For example, prior to issuance of landscape irrigation meters, new public and private developments must install landscaping and irrigation systems that operate at high levels of water use efficiency. In addition, increasing amounts of water reclaimed from sewage treatment plants is being used for landscape irrigation and agriculture. EMWD is also recharging groundwater basins and desalinating saline groundwater to protect and increase the supply of water.

Moreno Valley General Plan

Conservation Element Program 7-3, states that the City will maintain a close working relationship Eastern Municipal Water District (EMWD) to ensure that it plans for and is aware of the opportunities to use reclaimed water in Moreno Valley. Additionally, Conservation Element Program 7-4 directs the City to provide guidelines for preferred planting schemes and specific species to encourage aesthetically pleasing landscape statements that minimize water use. Policy 7.3.1 requires water conserving landscaping and irrigation systems. Policy 7.3.2 encourages the use of reclaimed water and other legally acceptable sources of irrigation water.

Water Infrastructure

Implementation of any of the General Plan Land Use Alternatives will result in new development that will require additional domestic water service. This increase in development is expected to result in incremental increased demand for services that exceeds the capabilities of existing infrastructure serving the planning area. These improvements would include, but not be limited to:

- Construction of major transmission and distribution pipelines;
- Construction of new storage reservoirs; and/or
- Expansion of existing and construction of new pumping stations.

The water system improvements that would be needed would not differ substantially between the three General Plan alternatives. Eastern Municipal Water District prepared a Water Facilities Master Plan in 2003 describing water facilities to be constructed through 2025. The Master Plan calls for a new water storage tank in the hills north of Kalmia between Perris Boulevard and Nason Street, another on Moreno Peak, north of Cottonwood Avenue and west of Moreno Beach Drive and a third new tank in the hills north of the city limits, west of Redlands Boulevard. Build out of the city would require additional storage tanks, including several in the hills along the eastern edge of the planning area.

The specific environmental impact of expanding water facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as pipelines and reservoirs, may result in potentially significant

environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

Construction of new water tanks has the greatest potential to create environmental effects. The areas around the tanks are designed to safely convey flows in the event of tank rupture. As such, flood hazards are minimal. The primary potential effects would involve aesthetics and biological resources because the tanks are typically located in hillside areas. Water tanks create visual effects, but the impact is less than significant.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new water facilities.

IMPACT AFTER MITIGATION

Less than significant**.**

NOTES AND REFERENCES

1. Michael Garner, Resource Development Administrator, Eastern Municipal Water District. Letter to Rick Brady, P&D Consultants, 7/30/03.

2. Henry Johnson, Superintendent, Box Springs Mutual Water Company. Letter to Rick Brady, P&D Consultants, 8/7/03.

3. Eastern Municipal Water District, "Year 2000 Urban Water Management Plan"

4. Metropolitan Water District, "Report on Metropolitan's Water Supplies, A Blueprint for Water Reliability," March 25, 2003

5. Eastern Municipal Water District, "Water Facilities Master Plan," 2003

SEWER SERVICE

ENVIRONMENTAL SETTING

Wastewater service in Moreno Valley is provided by the Eastern Municipal Water District (EMWD), which serves most of the City and surrounding areas, and the Edgemont Community Services District, which provides service to a small area in southwestern Moreno Valley. As of the year 2003, sewer lines do not exist within most of the eastern side of Moreno Valley.

EMWD operates over 356 miles of sewer mains (12" and above) and six sewage lift stations to provide wastewater collection services within the planning area. All wastewater is collected and conveyed to the Moreno Valley Regional Water Reclamation Facility (MVRWRF) located in the southwestern portion of the City and has a capacity to treat 16 million gallons of wastewater per day (mgd) and a capacity to expand to 41 mgd. The utilization in the year 2002 was approximately 11 mgd.

Sewer services for the southwestern Moreno Valley is provided by the Edgemont Community Services District. The District provides wastewater treatment under contract with the City of Riverside. According to the District, the pipes that transmit sewage to the City of Riverside Water Quality Control Plant are over 50 years old and are in need of repair. Current flow treatment at the facility is approximately 30 mgd.

Sewage treatment facilities must obtain permits from the Regional Water Quality Control Board. The water discharged from the facilities meets the water quality standards established by the Board. Some of the treated water is recycled for landscaping and agricultural uses.

Moreno Valley General Plan

General Plan Policy 2.12.1 requires that adequate septic or sewer service capacity will be available in a timely manner prior to approval of any development application. Policy 2.13.3 requires each project to provide the infrastructure needed to support that project at the time it is needed. Program 2-3 calls for the City to work with Eastern Municipal Water District and the Edgemont Community Services District and the Regional Water Quality Control Board to prepare a wastewater master plan for southwest Moreno Valley that addresses the need for sewer services and the timing for facility improvements.

Existing Regulations

Discharges from sewage treatment facilities must comply with the water quality standards established by the Regional Water Quality Control Board. Air emissions from sewage treatment facilities must also comply with air quality standards established by the Air Quality Management District.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or*

- *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.*

ENVIRONMENTAL IMPACT

The three General Plan Land Use Alternatives analyzed in this EIR will generate roughly equivalent amounts of wastewater. Wastewater flow will increase in proportion to the increase in water use. Therefore, wastewater generated within the planning area is expected to increase by up to 85 percent as the planning area approaches build-out. Existing wastewater collection infrastructure (e.g., pipes) operated by EMWD and the Edgemont Community Services District is not adequate to meet the anticipated increase in wastewater generated within the planning area.

The City of Riverside Water Quality Control Plant has a design capacity of 40 mgd and a wet weather capacity of 50 mgd. The Edgemont Community Services District provides wastewater services to a small, mostly developed portion of the planning area. Given the current average daily flow of 30 mgd at the Water Quality Control Plant, development according to either of the Land Use Alternatives within the limited portions of the planning area served by the Edgemont Community Services District will not significantly impact the Plant's ability to provide wastewater treatment consistent with Regional Water Quality Control Board standards.

However, without expansion of the Moreno Valley Water Reclamation Facility (MVRWRF), development according to any of the three General Plan Land Use Alternatives would exceed the existing capacity of the facility. Necessary improvements to the MVRWRF resulting from implementation of any of the three General Plan Alternatives would include, but not be limited to:

- Construction of new and expansion of existing (paralleling) transmission sewers;
- Construction of new and expansion of existing lift stations; and/or
- Expansion of the MVRWRF.

Eastern Municipal Water District has prepared a wastewater facilities master plan for its service area and levies connection charges on new development to finance the construction of the necessary facilities. Most of the facilities consist of pipelines that are buried under area roadways. As such, the environmental impacts of constructing sewer pipelines would be minimal.

Expansion of the Moreno Valley Water Reclamation Facility is planned in and around the northern portion of the existing facility. It is a highly disturbed site that substantially consists of structures, pavement and bare soil. Discharges from the expanded facility must comply with the water quality regulations established by the Regional Water Quality Control Board. Similarly, air emissions must also comply with Air Quality Management District regulations. Therefore, expansion of the facility does not have the potential to cause a significant effect on the environment.

The specific environmental impact of expanding pipelines and lift stations cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as pipelines and lift stations, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new sewer facilities.

IMPACT AFTER MITIGATION

Less than significant.

NOTES AND REFERENCES

1. Michael Garner, Resource Development Administrator, Eastern Municipal Water District. Letter to Rick Brady, P&D Consultants, 7/30/03.

FLOOD CONTROL SYSTEM

ENVIRONMENTAL SETTING

Regional flood control planning and facilities are under the jurisdiction of the Riverside County Flood Control and Water Conservation District (RCFCWCD). The City of

Moreno Valley, however, has the responsibility for design, construction, and maintenance of local drainage facilities. Road curb and gutter and roadside ditches supplement the flood control system.

Several portions of the planning area are subject to a 100-year flood, meaning a flood with a one percent chance of occurring in any given year. The Moreno Valley area has experienced serious flooding problems in the past and a drainage system is required to convey storm runoff safely through the area. The flood prone areas are depicted in **Figure 5.5-2** in Section *5.5 Hazards* of this EIR.

RCFCWCD prepared five "Master Drainage Plans" for the planning area. The master plans call for a system of open channels and underground storm drains, which in conjunction with streets, will allow for the safe passage of storm flows through developed areas.

No master drainage plan has been completed for the area that lies generally east of Theodore Street. Development in this area should be coordinated with RCFCWCD.

Moreno Valley General Plan

General Plan Conservation Element Policy 7.4.4 calls for preservation of drainage courses in a natural state when retaining natural habitat does not threaten public safety.

Existing Laws and Regulations

Flood control improvements in stream channels require permits from the California Department of Fish and Game and the Army Corps of Engineers. Such permits normally include conditions for the mitigation of impacts to biological resources. A Section 401 Water Quality Certification from the State Water Resources Control Board may also be required for flood control improvements in stream channels.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *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.*

ENVIRONMENTAL IMPACT

Implementation any of the proposed General Plan Alternatives will result in increased development and additional demand for flood control and drainage services. The alternatives would require flood control and drainage systems that are roughly equivalent. The specific environmental impact of expanding flood control facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as flood controls, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

However, development and operation of storm drains would result in removal or disturbance of plants and animals that inhabit stream channels. This impact on biological resources is discussed in Section 5.9 of this environmental impact report. The impact on biological resources is potentially significant.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new flood control facilities. See Section 5.9 of this report concerning mitigation for impacts on biological resources.

IMPACT AFTER MITIGATION

Less than significant, except for biological impacts. See Section 5.9 of this report regarding biological resources. Implementation of the mitigation measures discussed in Section 5.9 will reduce impacts related to biological resources to below a level of significance.

NOTES AND REFERENCES

None.

ENERGY

ENVIRONMENTAL SETTING

Electrical service is currently provided to the planning area by Southern California Edison and natural gas service is provided by the Southern California Gas Company. Moreno Valley formed a municipal utility that will deliver electricity to future customers

in developing portions of the City beginning in 2004. Electricity that is provided throughout California, is generated by numerous power plants that are located within and outside the State.

Electrical Facilities

Electricity is delivered to the planning area is received at both the Maxwell Substation located at Ironwood Avenue and Heacock Street, the Alessandro Substation located near John F. Kennedy Boulevard and Kitching Street, and the Bunker Substation northeast of the intersection of Ironwood Avenue and Pettit Street. SCE's 115 KV transmission lines bring power into these substations, where it is stepped down to 33 KV for distribution to its customers through a local service network emanating from the two substations.

Currently there are several major 115 KV transmission lines within the planning area. These transmission lines have rights-of-way of varying widths between 20 to 50 feet with most of them being 30 feet in width. In addition to the major transmission lines, there is also an extensive local service network of overhead and underground service lines. These service lines carry electricity from the substations to each SCE customer. There are no existing local electrical generation facilities.

Table 5.13-9 identifies monthly average peak loads for electricity in the State of California between 1998 and 2002, based on various assumptions of weather conditions and economic and demographic growth in a California Independent System Operator (ISO) Control Area, which comprises the bulk of California's transmission system. The State of California experienced energy shortages during the past few years, with peak demand approaching or reaching daily load supply. During the power shortage, rolling, or rotating blackouts were ordered to avoid widespread blackouts.

Consumers substantially reduced peak demand in response to the shortage and skyrocketing electricity prices. The state streamlined the procedures for constructing new power plants. More than 9,500 megawatts of capacity were added over three years. The electricity market has stabilized . The State has initiated new efficiency standards and programs.

TABLE 5.13-9
HISTORICAL MONTHLY AVERAGE PEAK ELECTRICAL LOADS (MW)
CALIFORNIA ISO CONTROL AREA

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
1998	N/A	N/A	N/A	N/A	N/A	33,688	43,394	45,811	44,442	31,208	30,846	33,264
1999	31,419	31,532	31,146	31,174	34,698	40,937	45,884	44,005	40,188	36,772	32,860	34,432
2000	32,744	32,394	32,552	33,911	39,808	43,630	45,245	45,494	43,740	35,712	33,338	34,115
2001	32,623	30,683	29,778	31,770	37,808	39,762	41,192	41,419	37,993	38,805	32,138	33,347
2002	33,488	31,854	31,033	31,460	38,165	41,146	42,441	40,803	41,358	35,269	31,770	32,307

Source: CAISO 2003 Summer Assessment, California Independent Operating System, 2003.

Moreno Valley General Plan

General Plan Objective 7.5 and associated policies encourage the efficient use of energy, including passive cooling with landscaping and the use of solar power.

Existing Laws and Regulations

The California Building Code (Title 24) requires new buildings to be constructed in an energy efficient manner. Additions and alterations must also conform to the energy efficiency standards. The standards are updated periodically to incorporate the latest technologies and methods.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of General Plan Alternatives 1, 2, or 3 would:

- *Result in the use of substantial amounts of fuel and/or energy; or*

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered energy transmission facilities, need for new or physically altered energy transmission facilities, the construction of which could cause significant environmental impacts, to maintain acceptable levels of service.*

ENVIRONMENTAL IMPACT

Electricity Supply

Table 5.13-10 depicts the monthly instantaneous peak load forecast for years 2003 through 2013 for the CAISO control area. The table shows that in 2013, monthly peak electrical loads are anticipated to range from a low of approximately 38,000 megawatts (MW) in the late winter months to a high of approximately 52,600 MW in August.

New development within the planning area resulting from the implementation of any of the three General Plan Land Use Alternatives will result in an additional demand for electricity. **Tables 5.13-11, 5.13-12,** and **5.13-13** depict the anticipated increase in demand for electricity. The anticipated demand for electricity varies for each Alternative. The anticipated increase in demand for electricity when compared to existing conditions is approximately 180.1-megawatt hours (mwh) per month for Alternative 1 (77% increase), 209.3 mwh/month for Alternative 2 (88% increase), and 205.9 mwh/month for Alternative 3 (87% increase).

TABLE 5.13-10
MONTHLY INSTANTANEOUS PEAK ELECTRICAL LOAD FORECAST (MW)
CAISO CONTROL AREA 2003-2013

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
2003	32,519	31,529	30,830	32,188	37,386	39,577	41,477	42,894	38,708	35,132	32,037	32,995
2004	34,867	32,786	32,541	33,481	38,338	42,184	43,637	45,794	40,501	35,661	33,843	34,855
2005	35,578	33,472	33,230	34,165	39,040	42,875	44,289	46,477	41,144	36,328	35,524	35,528
2006	36,304	34,173	33,933	34,863	39,756	43,578	44,951	47,171	41,796	37,007	35,218	36,213
2007	37,044	34,888	34,651	35,575	40,485	44,293	45,623	47,875	42,459	37,699	35,927	36,912
2008	37,799	35,618	35,385	36,302	41,227	45,019	46,305	48,589	43,132	38,404	36,649	37,624
2009	38,570	36,363	36,134	37,044	41,982	45,757	46,998	49,314	43,816	39,123	37,386	38,350
2010	39,356	37,124	36,898	37,801	42,752	46,507	47,700	50,049	44,510	39,854	38,138	39,090
2011	40,158	37,900	37,679	38,574	43,535	47,270	48,413	50,796	45,216	40,600	38,905	39,845
2012	40,977	38,694	38,477	39,362	44,333	48,044	49,137	51,554	45,933	41,359	39,688	40,614
2013	41,813	39,483	39,261	40,165	45,237	49,024	50,139	52,605	46,870	42,202	40,497	41,442

Source: CAISO 2003 Summer Assessment, California Independent Operating System, 2003.

TABLE 5.13-11
ESTIMATED CURRENT AND FUTURE ELECTRICITY DEMAND
ALTERNATIVE 1

Land Use	Usage Factor (kwh/month)	Existing du/ksf	Estimated Existing Annual Usage (mwh/month)	Increase in du/ksf	Estimated Usage at Buildout (mwh/month)	Change in Usage (mwh/month)
Single-Family Residential	5,700/du	37,116 dus	211.6	24,642 dus	352.1	140.5
Multi-Family Residential	3,940/du	4,929 dus	19.4	9,733 dus	57.7	38.3
Commercial	20/ksf	9,234 ksf	0.2	20,443 ksf	0.6	0.4
Office/Business Park	17/ksf	3,562 ksf	0.1	57,982 ksf	1.0	0.9
Public	8/ksf	7,998 ksf	0.1	1,217 ksf	0.1	0.0
TOTAL			**231.4 mwh**		**411.5 mwh**	**180.1 mwh**

Sources: South Coast Air Quality Management District and P&D Consultants.
Notes:
kwh = kilowatt hours, mwh = megawatt hours, du = dwelling unit, sf = square feet, ksf = thousand square feet

Although the State of California recently experienced energy shortages, the increased electricity demand will not place a significant increase in demand upon the State electricity supply system. Buildout of each alternative will use approximately 0.5 percent of the total electrical use in the California ISO control area (using the lowest monthly estimated demand for 2013). However, this assumes buildout of each General Plan Alternative compared to the available data for 2013. While it is unknown when buildout of any of the General Plan Alternatives will occur, it can be assumed the planning area will reach buildout well beyond 2013. No significant impact associated with the use of substantial amounts of electricity will occur.

TABLE 5.13-12
ESTIMATED CURRENT AND FUTURE ELECTRICITY DEMAND
ALTERNATIVE 2

Land Use	Usage Factor (kwh/month/ du or ksf)	Existing du/ksf	Estimated Existing Annual Usage (mwh/month)	Increase in du/ksf	Estimated Usage at Buildout (mwh/month)	Change in Usage (mwh/month)
Single-Family Residential	5,700/du	37,116 dus	211.6	25,806 dus	358.7	147.1
Multi-Family Residential	3,940/du	4,929 dus	19.4	15,472 dus	80.4	61.0
Commercial	20/ksf	9,234 ksf	0.2	12,674 ksf	0.4	0.2
Office/Business Park	17/ksf	3,562 ksf	0.1	62,724 ksf	1.1	1.0
Public	8/ksf	7,998 ksf	0.1	1,217 ksf	0.1	0.0
TOTAL			**231.4 mwh**		**440.7 mwh**	**209.3 mwh**

Sources: South Coast Air Quality Management District and P&D Consultants.
Notes:
kwh = kilowatt hours, mwh = megawatt hours, du = dwelling unit, sf = square feet, ksf = thousand square feet

TABLE 5.13-13
ESTIMATED CURRENT AND FUTURE ELECTRICITY DEMAND
ALTERNATIVE 3

Land Use	Usage Factor (kwh/month/ du or ksf)	Existing du/ksf	Estimated Existing Annual Usage (mwh/month)	Increase in du/ksf	Estimated Usage at Buildout (mwh/month)	Change in Usage (mwh/month)
Single-Family Residential	5,700/du	37,116 dus	211.6	25,888 dus	359.2	147.6
Multi-Family Residential	3,940/du	4,929 dus	19.4	14,795 dus	77.7	58.3
Commercial	20/ksf	9,234 ksf	0.2	10,490 ksf	0.4	0.2
Office/Business Park	17/ksf	3,562 ksf	0.1	62,724 ksf	1.1	1.0
Public	8/ksf	7,998 ksf	0.1	1,217 ksf	0.1	0.0
TOTAL			**231.4 mwh**		**438.5 mwh**	**205.9 mwh**

Sources: South Coast Air Quality Management District and P&D Consultants.
Notes:
kwh = kilowatt hours, mwh = megawatt hours, du = dwelling unit, sf = square feet, ksf = thousand square feet

Natural Gas Supply

In addition to increased electricity demand, each General Plan Alternative would result in additional demand for natural gas. **Tables 5.13-14, 5.13-15,** and **5.13-16** depict the anticipated increase in demand for natural gas. Natural gas demand generated by each Alternative would increase in comparison to existing conditions. The increase in natural gas demand is approximately 203.4 million cubic feet (mcf) per month for Alternative 1 (80% increase), 234.3 mcf/month for Alternative 2 (85% increase), and 232.1 mcf/month for Alternative 3 (84% increase).

None of the General Plan Alternatives propose uses considered to use excessive amounts of natural gas or waste with respect to natural gas use. No significant impact associated with the use of substantial amounts of natural gas will occur.

TABLE 5.13-14
ESTIMATED CURRENT AND FUTURE NATURAL GAS DEMAND
ALTERNATIVE 1

Land Use	Usage Factor (cf/month)	Existing du/ksf	Estimated Existing Annual Usage (mcf/month)	Increase in du/ksf	Estimated Usage at Buildout (mcf/month)	Change in Usage (mcf/month)
Single-Family Residential	6,665.0/du	37,116 dus	247.4	24,642 dus	411.6	164.2
Multi-Family Residential	4,011.5/du	4,929 dus	19.8	9,733 dus	58.8	39.0
Commercial	2.9/ksf	9,234 ksf	0.0	20,443 ksf	0.1	0.1
Office/Business Park	2.0/ksf	3,562 ksf	0.0	57,982 ksf	0.1	0.1
Public	2.0/ksf	7,998 ksf	0.0	1,217 ksf	0.0	0.0
TOTAL			**267.2 mcf/mo**		**471.6 mcf/mo**	**203.4 mcf/mo**

Sources: South Coast Air Quality Management District and P&D Consultants.
Notes:
cf = cubic feet, du = dwelling unit, sf = square feet, mcf = million cubic feet, ksf = thousand square feet

TABLE 5.13-15
ESTIMATED CURRENT AND FUTURE NATURAL GAS DEMAND
ALTERNATIVE 2

Land Use	Usage Factor (cf/month)	Existing du/ksf	Estimated Existing Annual Usage (mcf/month)	Increase in du/ksf	Estimated Usage at Buildout (mcf/month)	Change in Usage (mcf/month)
Single-Family Residential	6,665.0/du	37,116 dus	247.4	25,806 dus	419.4	172.0
Multi-Family Residential	4,011.5/du	4,929 dus	19.8	15,472 dus	81.9	62.1
Commercial	2.9/ksf	9,234 ksf	0.0	12,674 ksf	0.1	0.1
Office/Business Park	2.0/ksf	3,562 ksf	0.0	62,724 ksf	0.1	0.1
Public	2.0/ksf	7,998 ksf	0.0	1,217 ksf	0.0	0.0
TOTAL			**267.2 mcf/mo**		**501.5 mcf/mo**	**234.3 mcf/mo**

Sources: South Coast Air Quality Management District and P&D Consultants.
Notes:
cf = cubic feet, du = dwelling unit, sf = square feet, mcf = million cubic feet, ksf = thousand square feet

TABLE 5.13-16
ESTIMATED CURRENT AND FUTURE NATURAL GAS DEMAND
ALTERNATIVE 3

Land Use	Usage Factor (cf/month)	Existing du/ksf	Estimated Existing Annual Usage (mcf/month)	Increase in du/ksf	Estimated Usage at Buildout (mcf/month)	Change in Usage (mcf/month)
Single-Family Residential	6,665.0/du	37,116 dus	247.4	25,888 dus	419.9	172.5
Multi-Family Residential	4,011.5/du	4,929 dus	19.8	14,795 dus	79.2	59.4
Commercial	2.9/ksf	9,234 ksf	0.0	10,490 ksf	0.1	0.1
Office/Business Park	2.0/ksf	3,562 ksf	0.0	62,724 ksf	0.1	0.1
Public	2.0/ksf	7,998 ksf	0.0	1,217 ksf	0.0	0.0
TOTAL			**267.2 mcf/mo**		**499.3 mcf/mo**	**232.1 mcf/mo**

Sources: South Coast Air Quality Management District and P&D Consultants.
Notes:
cf = cubic feet, du = dwelling unit, sf = square feet, mcf = million cubic feet, ksf = thousand square feet

Electricity and Natural Gas Infrastructure and Facilities

Implementation of any of the three proposed General Plan Alternatives may require additions and improvements to the facilities that supply new development. Expansion of distribution and transmission lines and related facilities to provide adequate capacity is a necessary consequence of growth and development. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate growth may include upgrading existing substation and transmission line equipment, expanding existing substations to their ultimate buildout capacity, and building new substations and interconnecting transmission lines. Comparable upgrades or additions needed to accommodate additional load on the gas system could include facilities such as regulator stations, odorizer stations, valve lots, and distribution and transmission lines.

The specific environmental impact of expanding electricity and natural gas facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as electricity and natural gas facilities, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new electrical facilities.

IMPACT AFTER MITIGATION

Less than significant

NOTES AND REFERENCES

1. California Energy Commission, "2003 Integrated Energy Policy Report," November 12, 2003.

SOLID WASTE

ENVIRONMENTAL SETTING

Solid waste generated within the planning area is primarily deposited in the Riverside County Waste Management Department's (RCWMD) Badlands Landfill, located approximately 1.5 miles north of SR-60 near Ironwood Avenue and Theodore Street. However, the City's trash hauler can also use other County landfills in the area such as the Lamb Canyon Landfill and El Sobrante landfill. All Riverside County landfills are Class III disposal sites permitted to receive non-hazardous municipal solid waste. Waste Management of Inland Empire currently provides waste pickup in Moreno Valley.

Badlands Landfill: The Badlands landfill encompasses 1,093 acres, of which 150 acres are permitted for landfilling and another 70 acres are permitted for excavation and stockpiling cover material and other ancillary activities. The landfill is currently permitted to receive 4,000 tons per day and has an overall remaining disposal capacity of approximately 9,804,704.62 tons as of January 1, 2003. During the year 2002, the landfill received 469,705.38 tons of solid waste for disposal, an average of 1,520 tons per day. The Badlands Landfill is expected to reach capacity between 2018 and 2020; however, the landfill site has potential for further expansion.

El Sobrante Landfill: The El Sobrante Landfill is located east of Interstate 15 and Temescal Canyon Road to the South of the City of Corona and Cajalco Road at 10910 Dawson Canyon Road. The existing landfill encompasses 1,322 acres, of which 645 acres are permitted for landfilling. The El Sobrante Landfill is currently permitted to receive 10,000 tons of refuse per day (tpd), of which 4,000 tpd is reserved for refuse generated within Riverside County. The landfill has a total capacity of approximately 109 million tons or 184.93 million cubic yards, of which approximately 68 million tons are reserved for in-County waste. As of June 30, 2003, the landfills remaining capacity is approximately 98 million tons. From July 1, 2002 through June 30, 2003, the El Sobrante Landfill accepted a total of approximately 2.125 million tons of waste, of which 800,000 were generated within Riverside County. The landfill is expected to continue receiving solid waste for approximately 30 years.

Lamb Canyon Landfill: The Lamb Canyon Landfill is located between the City of Beaumont and the City of San Jacinto at 16411 Lamb Canyon Road (State Route 79). The landfill encompasses approximately 1,109 acres, of which 138 acres are permitted landfill acreage. The landfill is currently permitted to receive 1,900 tpd for disposal and has a remaining disposal capacity of approximately 5,235,043 tons, as of January 1, 2003. During the year 2002, the landfill received 178,509.18 tons of solid waste, averaging 560 tons per day. A proposal to expand the Lamb Canyon Landfill footprint to encompass and additional 144.6 acres and increase its maximum daily disposal capacity to 3,000 tons is currently under review. The expansion proposal would result in a total landfill capacity of 16.2 million tons, which would extend the use of facility to approximately 2023. The site has further potential for expansion beyond 2023.

The RCWMD operates a Hazardous Waste Program that provides pickup of motor oil, antifreeze, car batteries, latex paint, gasoline, solvents, aerosol cans, cleaners, household batteries, pool and spa chemicals, oil based paint, pesticides and fertilizers at no cost to residents.

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) revised the focus of solid waste management from landfill to diversion strategies such as source reduction, recycling, and composting. The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 included a number of components including those related to the Waste Management Board and Waste Management Plans; permitting and enforcement; financing and a requirement for reducing solid waste by 50 percent after the year 2000.

The City Council adopted a "Source Reduction and Recycling Element" in 1992, describing how Moreno Valley plans to meet the goals mandated by AB939. The element includes strategies to address various components of the solid waste challenge, including the character of the waste stream, source reduction, recycling, composting, special waste (e.g. construction debris, auto bodies, medical waste, tires and appliances), education and public information, disposal facility capacity, funding and integration of the various components.

Currently, Moreno Valley works in concert with the local waste hauling company to meet its waste diversion requirements. Residential customers place recyclable materials at the curb for collection by the waste hauler, Waste Management of the Inland Empire. The waste hauler separates and markets the recyclable materials, including cardboard, paper, tin/metal, aluminum cans, plastics and glass. The City is currently in compliance with AB 939, having diverted 50 percent of its solid waste from local landfills in 2002.

Moreno Valley General Plan

General Plan Policy 7.8.1 encourages recycling projects by individuals, organizations, businesses and government agencies.

THRESHOLD FOR DETERMINING SIGNIFICANCE

For the purpose of this EIR, a significant impact would occur if the proposed project:

- *Is served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs; or*

- *Does not comply with federal, state, and local statutes and regulations related to solid waste.*

ENVIRONMENTAL IMPACT

Implementation of the General Plan will result in new residential and non-residential development. This new development will generate an increased demand for solid waste collection and disposal capacity. As shown in **Tables 5.13-17, 5.13-18,** and **5.13-19** it is estimated that the generation of solid waste is anticipated to increase by about 396 tons per day for Alternative 1, 413 tons per day for Alternative 2, and 405 tons per day for Alternative 3.

TABLE 5.13-17
ESTIMATED CURRENT AND FUTURE SOLID WASTE GENERATION
ALTERNATIVE 1

Land Use	Generation Factor (lbs/day)	Estimated Existing Development	Increase in Development	Estimated Increase in Solid Waste Generation at buildout (tons/day)
Single-Family Residential	10/du	37,116 dus	24, 642 dus	123.2
Multi-Family Residential	7/du	4,929 dus	9,733 dus	34.1
Commercial	6/ksf	9,234 ksf	20,443 ksf	61.3
Office/Business Park	6/ksf	3,562 ksf	57,982 ksf	173.9
Public	6/ksf	7,998 ksf	1,217 ksf	3.7
TOTAL				**396.2 tons/day**

Source: Modified by P&D Consultants from Orange County Sanitation Department
Notes: du = dwelling units; ksf = thousand square feet; lbs = pounds

TABLE 5.13-18
ESTIMATED CURRENT AND FUTURE SOLID WASTE GENERATION
ALTERNATIVE 2

Land Use	Generation Factor (lbs/day)	Estimated Existing Development	Increase in Development	Estimated Increase in Solid Waste Generation at buildout (tons/day)
Single-Family Residential	10/du	37,116 dus	25,806 dus	129.0
Multi-Family Residential	7/du	4,929 dus	15,472 dus	54.2
Commercial	6/ksf	9,234 ksf	12,674 ksf	38.0
Office/Business Park	6/ksf	3,562 ksf	62,724 ksf	188.2
Public	6/ksf	7,998 ksf	1,217 ksf	3.7
TOTAL				**413.1 tons/day**

Source: Modified by P&D Consultants from Orange County Sanitation Department
Notes: du = dwelling units; ksf = thousand square feet; lbs = pounds

TABLE 5.13-19
ESTIMATED CURRENT AND FUTURE SOLID WASTE GENERATION
ALTERNATIVE 3

Land Use	Generation Factor (lbs/day)	Estimated Existing Development	Increase in Development	Estimated Increase in Solid Waste Generation at buildout (tons/day)
Single-Family Residential	10/du	37,116 dus	25,888 dus	129.4
Multi-Family Residential	7/du	4,929 dus	14,795 dus	51.8
Commercial	6/ksf	9,234 ksf	10,490 ksf	31.5
Office/Business Park	6/ksf	3,562 ksf	62,724 ksf	188.2
Public	6/ksf	7,998 ksf	1,217 ksf	3.7
TOTAL				**404.6 tons/day**

Source: Modified by P&D Consultants from Orange County Sanitation Department
Notes: du = dwelling units; ksf = thousand square feet; lbs = pounds

Currently, the planning area is served by Waste Management of Inland Empire, a City of Moreno Valley solid waste franchise hauler. With the growth in demand for collection services resulting from development under any one of the General Plan Alternatives, Waste Management's existing capacity may be exceeded; however, this impact is less than significant as it can be expected that existing waste haulers would either increase their services to meet the additional demand, or services would be contracted to an additional hauler as needed.

According to the Riverside County Waste Management District, although implementation of any of the three General Plan Alternatives will exceed the existing permitted capacity of its facilities, there is considerable expansion potential on these sites.

The specific environmental impact of expanding solid waste facilities cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as solid waste facilities, may result in potentially significant environmental impacts that are addressed by various City policies and mitigation measures included in other sections of this EIR.

MITIGATION MEASURES

Mitigation measures in other sections of this EIR address the potential environmental impacts of constructing or expanding new solid waste facilities.

IMPACT AFTER MITIGATION

Less than significant.

NOTES AND REFERENCES

1. Sung Key Ma, Planner, Riverside County Waste Management Department. Letter to Rick Brady, P&D Consultants, 7/14/03.

2. Sung Key Ma, Planner, Riverside County Waste Management Department. Email message to Eliza Echevarria, Senior Management Analyst, City of Moreno Valley, 11/24/03.

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