5.10 - UTILITIES: WATER, WASTEWATER, ELECTRICITY, NATURAL GAS, WASTE MANAGEMENT

5.10.1 - Water Service

Introduction

Information in this section is based upon the following documents:

- NMC Final EIR, City of Ontario, October 1997. This document is incorporated by reference.
- Initial Study/Mitigated Negative Declaration, NMC Infrastructure Master Plans, City of Ontario, August 2002. This document is incorporated by reference.
- Water Master Plan, City of Ontario, August 2000. This document is incorporated by reference.
- Water Supply Assessment and Written Verification of Sufficient Water Supply for the NMC, Albert A. Webb Associates, October 2004. This document is incorporated by reference.

The NMC Final EIR evaluated potential impacts to the increased demand for water that would result from development of the NMC. The NMC Final EIR stated that build-out of the NMC would increase the demand for additional water by approximately 31,000 acre-feet per year (AFY) and further stated that if the water-related policies contained in the NMC General Plan were implemented, the City would have the ability to develop a water supply in excess of the anticipated demand. These policies are related to the provision of water supply sources; storage; transmission and distribution mains; water infrastructure maintenance; and to ensure the costs of water infrastructure improvements are borne by those who benefit.

Subsequent to the preparation of the NMC Final EIR, the City prepared an Initial Study/Mitigated Negative Declaration for water, wastewater, and drainage infrastructure plans (Infrastructure Plans IS/MND) for the NMC in order to identify potential impacts associated with implementing these master plans. The Infrastructure Plans IS/MND reflected the statements in the NMC Final EIR regarding water supply and indicated that through the implementation of the water source related policies contained in the NMC General Plan in conjunction with the implementation of the Water Master Plan, which include the recommendations of the Optimum Basin Management Program prepared by the Chino Basin Watermaster, no significant environmental impacts would result from implementation of the Water Master Plan.

The Water Master Plan recommended expanding groundwater production from the Chino Groundwater Basin that would be supplemented by other sources of water. Other water sources include the following: obtaining San Antonio Company Shares; obtain an increased share of the

Water Facilities Authority (WFA) plant; obtain first-phase OBMP desalter water; obtain recycled water from the Inland Empire Utilities Agency Regional Plant No. 1; and obtain water from the Bunker Hill groundwater basin. An additional contingency option was identified that reactivated the Galvin Plant.

The Infrastructure Plans IS/MND also recommended a mitigation measure to ensure coordination between the City and adjacent jurisdictions for regional infrastructure improvements. Implementation of this mitigation measure would eliminate potentially significant impacts related to water infrastructure.

The Infrastructure Plans IS/MND also stated that additional environmental review would need to be completed at the time individual specific plans in the NMC are proposed for development. The Infrastructure Plans IS/MND stated that development projects that propose large residential components would be required to verify the availability of a supply of water in order to serve the proposed development.

Existing Conditions

The Utilities Department of the City Public Works Agency is the water supplier for the entire City, which includes the NMC and, therefore, the project site. Water is derived from a combination of imported surface water and City-owned and operated groundwater extraction wells. Surface water imported into the City is from the Metropolitan Water District of Southern California (MWD) and the Inland Empire Utilities Agency. Groundwater is extracted from the Chino Groundwater Basin. This groundwater basin is an adjudicated basin and water rights are managed by the Chino Basin Watermaster (Watermaster), which was created on January 27, 1978, by the San Bernardino County Superior Court. The Watermaster is the entity charged with administering adjudicated water rights and managing groundwater resources within the Chino Groundwater Basin. The water rights, or production allocations, are divided among three interest groups referred to as "pools." These pools are the Overlying Agricultural Pool, the Overlying Non-Agricultural Pool, and the Appropriative Pool.

Water Supply and Distribution

According to the Infrastructure Plans IS/MND, current City water use in the pre-NMC portion of the City is estimated at approximately 24,000 AFY. Ultimate water demand for the entire City, which includes the pre-NMC portion of the City and the NMC, is estimated to be approximately 82,000 AFY by the year 2030. The build-out of the NMC represents approximately 31,000 AFY of this ultimate demand. Table 5.10-1 provides a summary of the existing and proposed demand within the City.

Table 5.10-1: Summary of Existing and Proposed AFY Water Demands in the City

Pre-NMC	Existing	Proposed	Increase
Pre-NMC	24,000	51,000	27,000
NMC	19,000	31,000	12,000
Total	**24,000**	**82,000**	**39,000**

Pre-NMC refers to that portion of the City that existed prior to the annexation of the area covered by the NMC.
AFY = Acre feet-per-year
One acre-foot equals 325,829 gallons.
Source: Table 8, Water Supply Assessment and Written Verification of Sufficient Water Supply for the NMC, Albert A. Webb Associates, October 2004.

The NMC does not have a domestic water supply system. All domestic water is supplied by on-site wells in various locations throughout the NMC. The Water Master Plan estimates existing water use within the NMC at approximately 19,000 AFY. The NMC does not have a reclaimed water system.

Pressure Zones

The Water Master Plan identifies several pressure zones within the City; only a small portion of the NMC is served by the Phillips Street Pressure Zone. According to the Water Master Plan, the project site is not located within one of the existing pressure zones. The development of the NMC would require a new pressure zone to be created, which the project site would be located within, that is identified as the Francis Street Pressure Zone. This zone will be supplied by a combination of seven new groundwater extraction wells and additional imported water.

Water Mains

An existing 12-inch water main is located in Riverside Drive adjacent to the project site. This water main is part of the existing Phillips Street Pressure Zone and would not supply water to the new Francis Street Pressure Zone. According to the Water Master Plan, future 24-inch water mains are proposed in Riverside Drive and Mill Creek Avenue, both adjacent to the project site. The Edenglen Project proposes a 12-inch water main adjacent in Chino Avenue.

Recent Governing Legislation

In January 2002, two Senate Bills became effective that require cities or counties to evaluate water supplies when considering approval of specified large-scale development projects. Generally, Senate Bill 221 (SB 221) prohibits cities or counties from approving a tentative tract map, parcel map, or development agreement for a residential development project of greater than 500 dwelling units without a written verification of a sufficient water supply. Generally, Senate Bill 610 (SB 610) requires cities or counties to prepare a water supply assessment report as part of an environmental review process for any project approval that is subject to the provisions of the California

Environmental Quality Act and which meets the statutory definition of a project contained in California Water Code Section 10912.

The following types of projects, as defined in Water Code Section 10912, are subject to the preparation of a water supply assessment:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 sq ft of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 sq ft of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sq ft of floor area;
- A mixed-use project that includes one or more of the projects previously identified; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

SB 221 requires cities or counties to condition the approval of every tentative map subdivision based upon the applicant's ability to demonstrate a sufficient water supply is available to serve the proposed project.

A sufficient water supply means the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection horizon that will meet the projected demand associated with the proposed project, in addition to existing and planned uses, including but not limited to, agricultural and industrial uses. Factors to be considered when determining whether a sufficient water supply is available include information that if the identified water supply includes groundwater, the water supplier must evaluate the extent to which it or the landowner is entitled to extract that groundwater.

This verification of the projected water supplies should be based upon the following:

- Written contracts or other or other proof of valid rights to the identified water supply that identify the terms and conditions under which the water will be available to serve the proposed subdivision;

- Copies of a capital outlay program for financing the delivery of a sufficient water supply that has been adopted by the applicable governing body;
- Securing of applicable federal, state, and local permits for construction of necessary infrastructure associated with supplying a sufficient water supply; and
- Any necessary regulatory approvals that are required in order to be able to convey or deliver a sufficient water supply to the subdivision.

SB 610 would exempt from its requirements any proposed project whose water demand has been included in a recently adopted Urban Water Management Plan (UWMP). If the water supplier determines that the project demand was accounted for in its most recent UWMP, it may rely on the information contained in the UWMP to prepare the water supply assessment. If the proposed water supply includes the use of groundwater, the water supply assessment must include the following:

- A review of any information in the supplier's current UWMP relevant to the water supply;
- A description of the groundwater basin to be used;
- A copy of any court order or decree adjudicating the rights to pump water from the basin;
- For basins that have not been adjudicated, information as to whether the Department of Water Resources has determined that the basin is or will be over-drafted under current management conditions;
- A detailed description of efforts by the supplier to eliminate the overdraft condition; and
- A detailed description and analysis of the amount and location of groundwater the supplier has pumped from the basin during the last five years and of any other amounts the supplier plans to pump from the basin.

Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, a project would normally have a significant effect on the environment if it would have insufficient water supplies available to serve the project from existing entitlements or if new or expanded entitlements would be needed.

The NMC Final EIR stated that an insufficient water supply would occur if build-out of the NMC would increase the demand for water in excess of the amount the City can obtain from water imported from the MWD and from groundwater extracted from the Chino Groundwater Basin.

Project Impacts

The Edenglen Project would convert the project site from agricultural uses to urban uses that would result in an additional demand for domestic water in excess of the existing agricultural consumption rate. Because no data are available that quantifies the existing consumption rate on the project site, this consumption rate has been estimated.

Because no precise consumption rates on the project site are known, two multipliers were developed that would provide an estimate of the water consumption rate, which could then be used to compare the existing to proposed demand for water. Section 4.0 of the NMC General Plan stated that as land is converted from agricultural production to the urban-type uses proposed for the NMC, the City would be credited with an additional 1.3 AFY per acre from the Overlying Agricultural Pool. Using this transfer rate, existing water consumption on the project site would then be calculated at 1.3 AFY per acre. The second method of estimating water consumption on the project site is by using the existing estimated consumption rate of 19,000 AFY for the entire NMC, as stated in the Water Master Plan, divided by the total of 8,200 acres contained in the NMC, which yields 2.3 AFY per acre.

Because water consumption on the project site is used for the single-family residence, dairy operations, row crops, and the nursery, water consumption is likely to vary significantly throughout the year. For purposes of this evaluation, it is assumed that the entire project site, representing 160 acres, is used in the calculations. Therefore, based on the foregoing, it is estimated that existing water consumption on the project site ranges between 208 AFY and 368 AFY.

Table 5.10-2 provides an estimate of the projected daily water service demands that would be required by the proposed project at full build-out.

Table 5.10-2: Estimated Domestic and Reclaimed Water Service Demands

Land Use	Area*	Generation Factor**	Total Demand (AFY)
Domestic Water			
Residential	61.9 AC	2,232 GPD / AC	154.77
Community Commercial	14.5 AC	3,100 GPD / AC	50.35
Lt. Ind./Business Park	42.4 AC	4,500 GPD / AC	213.70
Domestic Sub-Total	**123.55 AC**	**—**	**418.82**
Reclaimed Water			
Central Park	2.3 AC	4,000 GPD / AC	10.31
Landscaped Buffers	12.5 AC (est.)	4,000 GPD / AC	22.40
SCE Corridor Trail	0.75 AC	4,000 GPD / AC	3.36
Reclaimed Sub-Total	**15.55 AC**	**—**	**36.07**
Grand Total	**139.10 AC**	**—**	**454.89**

* Excludes roadways and open space that would not generate a demand for water supply.
** City of Ontario, NMC Final EIR, 1997.
AC = Acre
GPD = gallons-per-day
AFY = acre feet-per-year
One acre-foot equals 325,829 gallons.
Source: Michael Brandman Associates, January 2005.

Development of the proposed project at full build-out would result in an increase in domestic water consumption over the existing consumption rate on the project site. Because the domestic water supply to the project site would convert from using the existing on-site groundwater extraction well to the City's water distribution system, the increase in water demand from the existing conditions, for purposes of this evaluation, is assumed to be approximately 455 AFY as identified in Table 5.10-2. This is because the transfer of water credits from the Overlying Agricultural Pool to the City does not apply specifically to the project site, but rather to the entire NMC. As previously stated, buildout of the entire NMC would result in an increase in consumption of domestic water of approximately 31,000 AFY. The Edenglen Project represents approximately one percent of the overall projected demand.

Domestic Water Supply

As previously discussed in this section, the Edenglen Project is required to comply with the provisions of SB 221 and SB 610. Because the NMC is proposed for development of the types of projects subject to Water Code Section 10912, the City prepared a Water Supply Assessment and Written Verification of Sufficient Water Supply for the NMC (WSA) in 2004, which includes the project site, in conformance with the provisions of these two Senate Bills. The WSA stated the City's intent that the WSA would serve as written verification for all developments within the NMC.

The City Council adopted the Urban Water Management Plan Year 2000 Update (Urban Water Management Plan), which was prepared by the Inland Empire Utilities Agency, on November 20, 2001 (Ordinance No. 2500). The Urban Water Management Plan is consistent with the City's Water Master Plan. In addition, the Urban Water Management Plan is consistent with and supports the implementation of the Watermaster's Optimum Basin Management Program. The projected water demand associated with the full build-out of the NMC, projected at 31,000 AFY, out of the total projected demand of 82,000 AFY, was accounted for in the Urban Water Management Plan, which was incorporated into the WSA.

The Urban Water Management Plan identified the following sources of water: groundwater extracted from the Chino Basin; recycled water from the Inland Empire Utilities Agency; and imported water from the Metropolitan Water District of Southern California, which obtains water from the Colorado River and from Northern California via the State Water Project.

If a project meets all three of the following criteria, Water Code Section 10910(h) allows the City to rely upon a previously prepared WSA:

- The project is part of a larger project for which an assessment was prepared;
- The data used to create the assessment is still accurate; and
- The assessment found sufficient water for the project.

The WSA determined the following:

- The City is the identified public water supplier for the NMC and, therefore, the project site;
- The projected water demand for the NMC is 31,000 AFY;
- The water demand for the NMC was included in the Urban Water Management Plan prepared by the Inland Empire Utilities Agency, which was adopted by the City;
- The City's existing water supply in 2004 is 71.6 MGD while the maximum demand is 64.2 MGD. The projected water supply is 166.1 MGD and the maximum demand is projected to be 100.9 MGD; and
- The City has water rights to the Chino Groundwater Basin and capacity rights of 25 MGD in the WFA Treatment Plant. The City has also contracted for 5,000 AFY from the Chino Desalter Authority. The projected reclaimed water use is 7.4 MGD by the year 2025.

The City has sufficient water supply to provide water to the proposed project during normal, single dry, and multiple dry years during a 20-year projection, in addition to meeting the City's existing and

planned future uses. Therefore, because the WSA prepared by the City found that a sufficient water supply is available to support the proposed development of the subareas within the NMC, which includes the project site, less than significant impacts to water supply would result from implementation of the proposed project.

Reclaimed Water Supply

Development of the project site would result in an increase in the use of reclaimed water because no reclaimed water is currently used on the project site. Table 5.10-2 identifies the estimated demand for reclaimed water. Section 4.0 of the NMC General Plan identifies an existing excess of reclaimed water production from wastewater treatment plants. Therefore, less than significant impacts would result from the proposed demand for reclaimed water use on the project site.

Domestic Water Infrastructure

As described in Section 3.3.3 of the DEIR, new water mains will be installed as part of the overall project. As previously described in this section, a new pressure zone, the Francis Street Pressure Zone, will be created for the majority of the NMC. According to Table 6-9 of the Water Master Plan, the new Francis Street Pressure Zone would be balanced whereby demands from the system would equal supplies to the system. Therefore, with the installation of the NMC-programmed infrastructure and the infrastructure included with the proposed project, less than significant impacts to domestic water conveyance would result from project implementation.

Reclaimed Water Infrastructure

As described in Section 3.3.3 of the DEIR, new reclaimed water mains will be installed as part of the proposed project. Because these reclaimed water mains are part of the NMC-programmed infrastructure identified for the ultimate build-out of the NMC, no additional facilities are required beyond those previously identified.

Fire Flow Requirements

Because the project site would be developed with urban uses, the potential increase for fire-related water supply would be required. The Water Master Plan evaluated fire flow requirements in the NMC and determined, according to Figure 6-5 in the Water Master Plan, that the three test locations adjacent to the project site passed the fire flow status requirements. Passing is defined in the Water Master Plan as the available supply for water for fire flow requirements is greater than the maximum required. Therefore, no impacts would result from the increased demand for water related fire flow requirements resulting from project implementation.

Cumulative Impacts

The City's domestic water supply comes from two major sources (2002): local groundwater (79%) and imported surface water (21%). At build out of the NMC, municipal water supply sources will consist predominantly of groundwater wells through direct use or treatment and use, and imported surface water from MWD supplies. Other sources of domestic water are the result of institutional agreements such as water that is supplied through water transfers, deals, and agreements. The City has two connections to the MWD import water delivery system. In addition to sources of water supply, the NMC includes intergovernmental water agency coordination. These include the MWD, the Santa Ana Watershed Project Authority, the Chino Basin Watermaster, the Chino Basin Water Conservation District, and the Santa Ana Regional Water Quality Control Board. The MWD is a public agency that provides supplemental water from Northern California via the State Water Project. The Santa Ana Watershed Project Authority is a joint powers agency that coordinates regional planning within the boundaries of the Santa Ana River Watershed to address water quality and water supply improvements. The Chino Basin Watermaster, established by a Superior Court judgment in 1978, developed an Optimum Basin Management Plan, which describes nine program elements that address groundwater production and quality objectives. The Chino Basin Water Conservation District, a special district, replenishes the Chino Groundwater Basin with surface runoff from the San Gabriel Mountains. The Santa Ana Regional Water Quality Control Board, of the State Water Resources Control Board, develops and enforces water quality objectives in conformance with the federal Clean Water Act, the federal National Pollution Discharge Elimination System, and the California Porter-Cologne Act.

Implementation of the proposed project in addition to all other related projects would increase the requirements for domestic and reclaimed water supply. However, the requirements for water supply have been adequately evaluated in the WSA prepared for the NMC. Therefore, the project's contribution to cumulative impacts would be less than significant because the proposed project would not generate the need for excess additional water supply or facilities that are not already planned for.

Implementation of the mitigation measure identified in the Infrastructure Plans IS/MND would reduce potentially significant impacts related to coordination of regional infrastructure below the level of significance.

Mitigation Measures

The Utilities Section of the NMC Final EIR included a single mitigation measure that stated the City has the ability to develop water sources in excess of the current demand and further stated the NMC General Plan contains policies for water resources that, if implemented, would not require any additional mitigation measures.

No additional mitigation measures are required.

Level of Significance After Mitigation

Impacts to domestic water services would be less than significant.

5.10.2 - Wastewater Service

Introduction

Information in this section is based upon the following documents:

- NMC Final EIR, City of Ontario, October 1997. This document is incorporated by reference.
- Initial Study/Mitigated Negative Declaration, NMC Infrastructure Master Plans, City of Ontario, August 2002. This document is incorporated by reference.
- Sewer Master Plan, City of Ontario, January 2001. This document is incorporated by reference.

The NMC Final EIR evaluated potential impacts related to the increased demand for wastewater treatment that would result from build-out of the NMC. The NMC Final EIR stated that the existing contractual arrangement between the City and the Chino Basin Municipal Water District (CBMWD) to provide wastewater treatment services would be amended to include the NMC. In addition, the NMC identified several potential options for providing wastewater treatment for the NMC, which included combinations of conveyance facilities and treatment plants. Potential entities identified were the CBMWD, the Los Angeles County Sanitation Districts, the Orange County Sanitation District, and the Western Riverside County Wastewater Authority.

The NMC Final EIR identified the CBMWD's planned wastewater Regional Treatment Plant RP-5 (RP-5) as the preferred option. This treatment plant is planned to replace Regional Treatment Plant RP-2 and would have sufficient capacity for the entire NMC. In addition, a planned Kimball Avenue Interceptor would convey wastewater flows from the NMC to RP-5. The NMC Final EIR further stated that until RP-5 is completed, there is sufficient capacity in the existing wastewater treatment system to accept the wastewater that would be generated by the NMC.

Subsequent to the preparation of the NMC Final EIR, the City prepared an Initial Study/Mitigated Negative Declaration for water, wastewater, and drainage infrastructure plans (Infrastructure Plans IS/MND) for the NMC in order to identify potential impacts associated with implementing these master plans. The Infrastructure Plans IS/MND reflected the statements in the NMC Final EIR

regarding the provision of wastewater service and indicated that with the completion of RP-5, adequate wastewater treatment capacity for the NMC would exist.

The Infrastructure Plans IS/MND also recommended a mitigation measure to ensure coordination between the City and adjacent jurisdictions for regional infrastructure improvements. Implementation of this mitigation measure would eliminate potentially significant impacts related to infrastructure.

The NMC Sewer Master Plan estimated the average wastewater dry weather flow generated by the development of the NMC would be 13.11 million gallons-per-day (MGD).

Existing Conditions

The NMC does not have a system in place for the collection, treatment, and disposal of wastewater. Currently, wastewater treatment is accomplished through septic tanks and subsurface disposal fields. The proposed wastewater treatment system for the NMC is in various stages of development. In addition, sewer and trunk line alignments in conformance with the Sewer Master Plan are in various stages of development and funding.

Wastewater treatment on the project site is accomplished through a septic system and a subsurface disposal field. Existing wastewater facilities in the vicinity of the project site include an existing 10-inch sewer main located in Riverside Drive. In addition, Colony High School, located west of the project site, has an on-site wastewater treatment system, which drains to the southerly end of the school site and is pumped up to the 8-inch main in Riverside Drive. An existing 12-inch Jurupa Community Service District (JCSD) main is located in Milliken Avenue and serves the industrial uses located east of the project site, which are located in Riverside County.

Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, a project would have a significant impact on wastewater service if existing or planned facilities and supplies are not adequate to serve proposed land uses or existing wastewater service is significantly disrupted.

The NMC Final EIR stated that a significant impact would occur if the build-out of the NMC would increase the demand for wastewater treatment beyond the levels anticipated by the CBMWD.

Project Impacts

The Edenglen Project would convert the project site from agricultural uses to urban uses that would result in additional demand and a different method for wastewater treatment.

Because wastewater treatment on the project site is accomplished through septic systems, no data on wastewater flows is known. For purposes of this evaluation, the increase in wastewater treatment demands above the existing conditions is determined to be the total estimated demand identified in Table 5.10-3, following. This is because the on-site septic system would be removed and none of the capacity in this system would be available for the proposed project.

Based upon recommendations contained in Section 4-7 of the NMC Sewer Master Plan, generation rates from Table 4-1 of the NMC Sewer Master Plan were used to calculate the projected demand for wastewater treatment. However, because the generation rate for commercial land uses identified in the NMC Final EIR represents a greater demand than those identified in Table 4-1, they were used instead.

Table 5.10-3 provides an estimate of the total wastewater treatment demands required by the proposed project at full buildout.

Table 5.10-3: Estimated Wastewater Service Demands

Land Use	Units/Area*	Generation Factor	Total Demand (GPD)
Residential	584 DU	270 GPD/DU	157,680
Community Commercial	14.5 AC	3,000 GPD/AC	43,500
Lt. Ind./Business Park	42.4 AC	4,700 GPD/AC	199,280
Total			**400,460 GPD**

* Excludes land uses that would not generate wastewater.
GPD = gallons-per-day
AC = Acre
DU = Dwelling Unit
Source: NMC Sewer Master Plan, Table 4-1 and NMC Final EIR, Section 5.13.2.3.

Wastewater Treatment Demand

Development of the proposed project at full build-out would result in an estimated demand for wastewater treatment of 400,460 GPD, as shown on Table 5.10-3. This demand represents 146,967,900 millions gallons-per-year, or 0.40 million gallons-per-day (MGD).

Wastewater Treatment Supply

The proposed NMC sewer system will consist of gravity sewers in a configuration that generally drains from the north to the south. Sewage will be conveyed to the south to the Inland Empire Utilities Agency Kimball Interceptor in Kimball Avenue. The Kimball Interceptor will transport the wastewater flows west to RP-5. Phase 1 of RP-5 was recently completed with a current capacity of

15 MGD. A Phase 2 expansion is anticipated within the next 3-4 years and, when completed, RP-5 will have a total capacity of 48 MGD.

The Kimball Interceptor has been designed to accept 26.46 MGD at Baker Avenue, and 35.05 MGD at Euclid Avenue. These capacities are adequate for the wastewater generated by the NMC, and those that are recommended for diversion from five existing City pump stations.

Because the existing wastewater treatment system has capacity to accept the projected wastewater flows from the entire NMC and because RP-5 would also have the capacity to accept flows from the entire NMC, which includes the project site, less than significant impacts to wastewater treatment capacity would result from project implementation.

Wastewater Conveyance Facilities

An interim 10-inch wastewater main would be installed in the Chino Avenue right-of-way between the southwest corner of the project site and Haven Avenue to the west. Upon completion of permanent NMC-programmed wastewater lines, this interim connection would be abandoned. For both the interim and permanent water lines, wastewater is conveyed on-site to the southwest corner of the project site via 8-inch lines.

These lines have been sized with sufficient capacity to accept the wastewater flows from the project site. Therefore, less than significant impacts to wastewater conveyance facilities would result from project implementation.

Cumulative Impacts

Implementation of the proposed project in addition to all other related projects would increase the demand for wastewater treatment. According to Section 1-5 of the Sewer Master Plan, the planned facilities would adequately serve the planned growth in the NMC region. The project's contribution of an estimated 0.40 MGD is not considered cumulatively considerable. Therefore, implementation of the proposed project, together with cumulative development and growth that is in accordance with the approved Sewer Master Plan, would not have a significant impact on planned wastewater services or facilities.

Implementation of the mitigation measure identified in the Infrastructure Plans IS/MND would reduce potentially significant impacts related to coordination of regional infrastructure below the level of significance.

Mitigation Measures

The Utilities Section of the NMC Final EIR included a single mitigation measure that stated implementation of the wastewater-related policies contained in the NMC General Plan are anticipated to mitigate potential wastewater impacts, The mitigation measure further stated that with implementation of these policies, additional mitigation measures would not be required.

No additional mitigation measures are required.

Level of Significance After Mitigation

Impacts to wastewater treatment services would be less than significant.

5.10.3 - Electricity

Introduction

Information in this section is based upon the following documents:

- NMC Final EIR, City of Ontario, October 1997. This document is incorporated by reference.

The NMC Final EIR evaluated potential impacts to the increased demand for electricity that would result from development of the NMC. The NMC Final EIR stated that build-out of the NMC would result in a demand for 303,564 megawatt hours-per-year of electricity. Of this total demand, residential land uses would account for approximately 28 percent, commercial and industrial land uses would account for approximately 24 percent, and the remainder for public and other land uses.

The NMC Final EIR stated that four electrical substations that serve the NMC were designed in a manner that could accept a future increase in demand without the requirement to expand any of the substations or construct new substations.

Statements from Southern California Edison (SCE) contained in the NMC Final EIR stated that existing distribution systems are adequate to accept the increased demand that would result from build-out of the NMC and that an excess supply of electricity was available. Subsequent to the publication of the NMC Final EIR, the State began experiencing shortages in energy supply. However, based on current supply and demand assessments, the California Energy Commission has indicated that the supply of energy has improved for the near-term, and during this time long-term policy decisions will be made to address energy demands throughout the state (California Energy Commission 2002).

Existing Conditions

Electricity is one of two major types of energy consumed in the City. Electrical power is provided by SCE, which is generated from a combination of oil, natural gas, hydroelectric, nuclear, and renewable sources such as wind and solar energy. Most of the City's energy is consumed by residential, commercial, industrial, agricultural, and transportation uses.

Electrical power in the vicinity of the NMC is delivered to SCE's bulk power station located in the City of Chino, located south of the NMC, and distributed through the electrical substations by a network of 12kV power lines. The Mira Loma substation, located south of the project site, is planned to be converted to a bulk power station.

Table 5.10-4 provides an estimate of the existing daily electrical demand on the project site.

Table 5.10-4: Existing Daily Electrical Demand

Land Use	Units/Area	Generation Factor	Total Demand (million KWH/YR)
Residence	1 DU	5,526.50 KWH/DU/YR	0.01
Dairy	10,000 SF (est.)	10.50 KWH/SF/YR	0.11
Nursery	2,000 SF (est.)	10.50 KWH/SF/YR	0.02
Total			**0.14**

KWH/SF/YR = kilowatts hours per square foot per year
KWH/DU/YR = kilowatts per dwelling unit per year
SF = square feet
DU = Dwelling Unit
est. = estimate
Source: Table A9-11-A, South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1997.

Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, a project is considered to have a significant impact on electrical service if existing or future planned facilities and supplies are not adequate to serve proposed land uses or existing electrical service is notably disrupted.

The NMC Final EIR stated that s significant impact would occur if the demand for electricity resulting from the development of the NMC cannot be adequately accommodated.

Project Impacts

The Edenglen Project would convert the project site from predominantly agricultural uses to urban uses that would result in an increased demand for electricity in excess of the existing demand estimated in Table 5.10-4.

Table 5.10-5 provides an estimate of the projected electrical demand from build-out of the proposed project.

Table 5.10-5: Projected Annual Electrical Demand

Land Use	Units/Area	Electrical Demand Factors	Annual Demand (million KWH/YR)
Residential	584 DU	5,526.50 KWH/DU/YR	3.3
Community Commercial	217,520 SF	13.55 KWH/SF/YR	2.9
Lt. Ind./Business Park	550,000 SF	10.50 KWH/SF/TY	5.8
Total			**12.0**

KWH/SF/YR = kilowatts hours per square foot per year
KWH/DU/YR = kilowatts per dwelling unit per year
SF = square feet
DU = Dwelling Unit
est. = estimate
Source: NMC Final EIR, Table E-1.

Development of the proposed project at full build-out would result in an increase in demand for electrical service over the existing conditions of 12 million kilowatts hours-per-year.

The energy demands of the project have been factored in service plans by SCE who would serve the site. SCE has ongoing plans which analyze electrical demands on a yearly basis to plan for improvements as needed.

SCE is required to provide service to the proposed project and coordination is typical between the applicant/developer and SCE to avoid any notable service disruptions during extension and upgrading of services and facilities. This typical coordination would also ensure that the nature, design, and timing of electrical system improvements are adequate to serve the project. Written correspondence received from SCE (Southern California Edison 2004) did not indicate that the proposed project would result in any impacts to existing facilities or the provision of service. Therefore, less than significant impacts related to the provision of electrical service would result from implementation of the proposed project.

Cumulative Impacts

Electrical power is provided to the NMC by SCE through a power grid that bisects the NMC. This grid consists of the following components; high-voltage electrical transmission lines; bulk power, and distribution. The 500 and 220 kilovolt (kV) transmission lines, in combination with the 500 kV Mira Loma bulk power sub-station are part of SCE's backbone power transmission system that import electricity from Northern California and Arizona into SCE's service territory, which includes the NMC. SCE operates six electrical sub-stations. Electricity from this transmission system is delivered to the Chino bulk power sub-station, which then distributes the electricity to the NMC. The Mira Loma sub-station, located south pf the project site, is planned to be upgraded to a bulk power sub-station, which will then be interconnected with the other sub-stations and provide additional electrical service to the NMC.

The existing and planned facilities owned and operated by SCE usage are projected to adequately serve planned growth in the area. These facilities would be constructed with fees collected by the utility providers. No significant cumulative impacts on future electricity facilities would occur from the development of the proposed project and future developments. Project development will require underground extensions of electrical facilities. These future extensions would be coordinated with SCE to avoid any notable disruptions to existing services.

Mitigation Measures

The Utilities Section of the NMC Final EIR did not identify any mitigation measures related to the provision of electricity.

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be less than significant.

5.10.4 - Natural Gas

Introduction

Information in this section is based upon the following documents:

- NMC Final EIR, City of Ontario, October 1997. This document is incorporated by reference.

The NMC evaluated impacts to the increased demand for natural gas that would result from development of the NMC. The NMC Final EIR stated that build-out of the NMC would result in a

total demand for approximately 7.1 million cubic feet-per-day of natural gas. Of this demand, residential land uses would account for 83.3 percent, commercial and industrial land uses would account for approximately 16.2 percent, and the remainder for public and other land uses.

The NMC Final EIR stated that the major feeder lines and high-pressure gas lines that are already in place are adequate to serve the increased demand and that no major modifications to these facilities would be required.

Statements from the Southern California Gas Company (SCGC) contained in the NMC Final EIR indicated that sufficient excess supplies of natural gas are available to meet the proposed demand that would result from build-out of the NMC.

Existing Conditions

In addition to electricity, natural gas is the second major type of energy consumed in the City. The primary natural gas provider in the City is the SCGC. Current estimates of overall energy consumption indicate that natural gas is consumed primarily by the City's residential land uses.

SCGC operates a local natural gas distribution network, which is supplied by a high-pressure regional transmission system. Two underground transmission pipelines bisect the NMC. One of these is located in the Riverside Drive right-of-way adjacent to the northern portion of the project site. However, this pipeline does not provide natural gas to the NMC. The second transmission pipeline that bisects the NMC in an east-west alignment would provide natural gas to the NMC through four regulating stations.

Table 5.10-6 provides an estimate of the existing daily natural gas demand on the project site.

Table 5.10-6: Existing Annual Natural Gas Demand

Land Use	Units/Area	Generation Factor	Total Demand (MCF/YR)
Residence	1 DU	219.1 CF/day/DU	0.08
Dairy	10,000 SF*	110.0 CF/day/1,000 sq. ft.	0.40
Nursery	2,000 SF*	110.0 CF/day/1,000 sq. ft.	0.08
Total			**0.56**

DU = dwelling unit
SF = square feet
MCF/YR = million cubic feet per square foot per year
CF = cubic feet
YR = year
* For purposes of this evaluation, building sizes have been estimated.
Source: NMC Final EIR, Table E-2.

Thresholds of Significance

A project is considered to have a significant impact on natural gas service if existing or future planned facilities and supplies are not adequate to serve proposed land uses or existing natural gas service is noticeably disrupted.

The NMC Final EIR stated that a significant impact would occur if the demand for natural gas resulting from the development of the NMC cannot be adequately accommodated.

Project Impacts

The Edenglen Project would convert the project site from predominantly agricultural uses to urban uses that would result in an increased demand for natural gas as estimated in Table 5.10-6. Table 5.10-7 provides an estimate of the projected natural gas demand for build-out of the proposed project.

Table 5.10-7: Projected Annual Natural Gas Demand

Land Use	Units/Area	Natural Gas Demand Factors	Total Demand (MCF/YR)
Residential	584 DU	219.1 CF/day/DU	46.68
Community Commercial	217,520 SF	110.0 CF/day/1,000 SF	8.73
Lt. Ind./Business Park	550,000 SF	110.0 CF/day/1,000 SF	22.08
Total			**77.49**

DU = dwelling unit
SF = square feet
MCF/YR = million cubic feet per square foot per year
CF = cubic feet
YR = year
* For purposes of this evaluation, building sizes have been estimated.
Source: NMC Final EIR, Table E-2.

Development of the proposed project would result in an increase in natural gas consumption over the existing estimate by an estimated 76.93 mcf/yr.

SCGC is required to provide service to the proposed project and coordination is typical between the applicant/developer and SCGC to avoid any notable service disruptions during extension and upgrading of services and facilities (Southern California Gas Company 2004). This typical coordination would also ensure that the nature, design, and timing of natural gas system improvements are adequate to serve the project. Because the requirements for natural gas demand for the NMC, which include the project site, were evaluated in the NMC Final EIR, implementation of the proposed project would not result in a significant impact on natural gas services or facilities.

Cumulative Impacts

The existing and planned facilities owned and operated by SCGC are projected to adequately serve planned growth within the service area. These facilities would be constructed with fees collected by the utility providers. No significant cumulative impacts on future natural gas supplies or facilities would occur from the development of the proposed project. As individual developments within the project site are phased and other offsite developments are implemented, these developments will require extensions of natural gas facilities. These future extensions would be coordinated with SCGC to avoid any notable disruptions to existing services.

Mitigation Measures

The Utilities Section of the NMC Final EIR did not identify any mitigation measures related to the provision of natural gas.

No mitigation measures are required.

Level of Significance After Mitigation

Impacts on natural gas services would be less than significant.

5.10.5 - Solid Waste

Introduction

Information in this section is based upon the following documents:

- NMC Final EIR, City of Ontario, October 1997. This document is incorporated by reference.

The NMC Final EIR evaluated potential impacts to the increased need for solid waste services that would result from development of the NMC. The NMC Final EIR stated that build-out of the NMC would result in the generation of approximately 398 tons-per-day of solid waste.

The NMC Final EIR stated that the amount of solid waste generated from the build-out of the NMC would exceed the existing capacity of area landfills and therefore result in significant impacts to solid waste facilities.

Existing Conditions

Solid waste generated within the City, including the NMC and therefore the project site, is collected by the City's Public Works Agency using City crews and equipment. The solid waste collected is then taken to the West Valley Material Recovery Facility (West Valley MRF), which is owned and operated by Burrtec Waste Industries. Burrtec Waste Industries, a private company, and the City have entered in long-term contractual arrangements for the transfer of solid waste to permitted landfills for all solid waste collected in the City. Currently, Burrtec Waste Industries transfers solid waste to the El Sobrante Landfill located in the City of Corona, which is owned and operated by the Riverside County Solid Waste Management Department. The landfill has a total estimated permitted capacity of 185 million cubic yards and currently has a remaining capacity of 3.6 million cubic yards. However, an expansion project is currently underway to provide additional capacity at this landfill facility. Moreover, depending on contractual arrangements between Burrtec Waste Industries and various other landfills, solid waste collected at the project site and transferred to the West Valley MRF may be transferred to a landfill other than El Sobrante.

Table 5.10-8 provides an estimate of existing solid waste generation on the project site.

Table 5.10-8: Existing Daily Solid Waste Generation

Land Use	Units/Area	Generation Factor	Total Demand (TPD)
Residence	1 DU	12.23 lbs./DU/day	0.01
Dairy	10,000 SF	5 lb./1,000 SF/day	0.03
Nursery	2,000 SF	5 lb./1,000 SF/day	0.01
Total			**0.05**

SF = square feet
DU = dwelling unit
lbs. = pounds
lbs./SF/day = pounds per square feet per day
TPD = tons-per-day
Source: California Integrated Waste Management Board, Residential and Industrial Solid Waste Generation Rates.

Thresholds of Significance

A project is considered to have a significant impact on waste disposal if it could not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

The NMC Final EIR stated that a significant impact would occur if the solid waste generated contributes to the exceedance of capacity at the designated landfill(s).

Project Impacts

The Edenglen Project would convert the project site from predominantly agricultural uses to urban uses that would result in increased demand for solid waste services as estimated in Table 5.10-8. Table 5.10-9 provides an estimate of the projected demand for solid waste services at build-out of the proposed project.

Table 5.10-9: Projected Daily Solid Waste Generation

Land Use	Units/Area	Generation Factor	Total Demand (TPD)
Residential	584 DU	12.23 lbs./DU/day	3.57
Community Commercial	217,520 SF	5 lb./1,000 SF/day	0.55
Lt. Ind./Business Park	550,000 SF	5 lb./1,000 SF/day	1.38
Total			**5.50**

DU = dwelling unit
lbs. = pounds
lbs./SF/day = pounds per square feet per day
TPD = tons-per-day
Source: California Integrated Waste Management Board, Residential and Industrial Solid Waste Generation Rates.

Compared with the existing waste generation estimate on the project site, the proposed project would generate an approximate 5.5 TPD, which is 5.45 TPD is more than the existing use.

Written correspondence received from the City (City of Ontario) indicated that the West Valley MRF is a fully permitted 5,000 ton-per-day facility. Based upon the estimated 398 tons-per-day that would result from the build-out of the NMC, combined with the existing solid waste generated in the pre-NMC portion of the City, sufficient excess capacity exists at the West Valley MRF to accept the solid waste generated by the proposed project. In addition, state law requires a minimum of 15-years' aggregate disposal capacity be maintained in a regional landfill system, such as Riverside County or San Bernardino County. Therefore, because the El Sobrante has sufficient capacity with the planned expansion, and the regional landfill systems that have the potential to receive solid waste generated from the project site must maintain sufficient excess disposal capacity, less than significant impacts to landfill capacity would result from project implementation. In addition, because the West Valley

MRF has excess processing capacity, less than significant impacts to solid waste transfer facilities would result from implementation of the proposed project.

In addition to the estimated solid waste that would be generated from the proposed project, it is anticipated that existing improvements on the project site would be removed. It is not known at this time if the residence, dairy-related strictures, and nursery related structures would disassembled and transported off-site and re-used elsewhere, or if they would be razed on-site, or some combination thereof. As a result, exact quantities of demolition debris cannot be calculated. Demolition waste debris has been specifically targeted by the State of California for diversion from the waste stream. Mandatory compliance with Section 12.63 of the City's Municipal Code and with the City's Inert Recycling Program identified in the City's Source Reduction and Recycling Element would conform to State diversion laws and reduce the amount of demolition waste entering landfills. Therefore, conformance with the City's recycling program would not contribute excessive amounts of inert wastes to landfills and would therefore result in less than significant impacts.

Cumulative Impacts

Implementation of the proposed project in addition to the other related projects would increase the amount of solid waste generated. Countywide, representing incorporated cities and unincorporated county areas, waste disposal increased slightly over 8 percent during the period 1995 to 2000. During this same period, the City increased its disposal tonnage from 222,595 tons in Year 1995 to 239,147 tons in Year 2000, representing an approximate 7 percent increase, slightly less than the countywide average. Provisions of the Integrated Waste Management Act of 1989, also known as Assembly Bill 939, require the preparation of an Integrated Waste Management Plan (IWMP) that includes documentation of the state-mandated minimum 15-year aggregate disposal capacity for a landfill system. Currently, the countywide disposal system exceeds the required minimum 15-year aggregate disposal capacity with a permitted and planned life of 29 years and a disposal capacity of 48 million tons. In addition, the City's current diversion rate is 37 percent and the majority of the jurisdictions within San Bernardino County are below the State-mandated diversion requirement of 50 percent. If all jurisdictions in San Bernardino County achieve the mandated diversion rate of 50 percent, the amount of solid waste disposed of in landfills will decrease. However, it is not certain that all jurisdictions will achieve this mandated diversion rate. Moreover, jurisdictions that achieve the mandated diversion rate would have to maintain this diversion rate indefinitely into the future. Therefore, the anticipated solid waste generated in the NMC and the related projects is considered to be cumulatively considerable.

Mitigation Measures

The Utilities Section of the NMC Final EIR stated that the proposed plan reduces solid waste impacts to the maximum extent feasible and further stated that no feasible mitigations can be proposed at this time.

No feasible mitigation measures exist that would eliminate or substantially lessen the cumulative impacts to solid waste facilities.

Level of Significance After Mitigation

The proposed project would result in a cumulatively considerable significant impact on solid waste facilities.