

**5.16 UTILITIES AND SERVICE SYSTEMS**

The Torrance General Plan update was evaluated for its potential impacts on utilities and service systems serving the City. The potential for adverse impacts on public services was evaluated based on information concerning current service levels and the ability of service providers to accommodate the increased demand that would be created by the general plan update. Service correspondence is in Appendix B of this DEIR.

**5.16.1 Water Services**

**5.16.1.1 Environmental Setting**

**Water Supply and Distribution Systems**

The Torrance Municipal Water Department (TMWD) and the Rancho Dominguez and Hermosa-Redondo Districts of the California Water Service Company (CWS) provide potable water to the City of Torrance; the agencies' service areas are shown on Figure 5.16-1, *Water Provider Service Areas*. These water agencies prepare urban water management plans (UWMP) every five years that identify historical and projected water usage and existing and future water supply sources, describe the agencies' demand management programs, and set forth a program to meet water demands during normal, dry, and multiple dry years.

TMWD's water service area is approximately 10,350 acres and comprises about 78 percent of the land within City limits, covering most of the northern, eastern, and southern parts of the City. CWS provides water service to the remaining portions of the City. The City overlies the West Coast Groundwater (WCG) Basin, which consists of four main water-bearing formations in the vicinity of Torrance, the Gage, Gardena, Lynwood, and Silverado aquifers.

In 2005, TMWD received approximately 65 percent of its total water supply from the Metropolitan Water District of Southern California (MWDSC), and 35 percent from local supplies. Local sources include groundwater, desalinated groundwater, and recycled water. Recycled water comprises approximately 23 percent of TMWD's water supply, while groundwater supplies (including desalinated groundwater) comprise approximately 12 percent. Table 5.16-1 shows the current and projected water supplies for the TMWD. The MWDSC obtains imported water from two sources: the State Water Project that conveys water from northern California, and the Colorado River.



**Table 5.16-1  
Current and Future Water Supplies for TMWD**

<b>Source</b>	<b>Percentage of 2005 Water Supply</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Imported Water	65%	19,370	25,920	20,190	21,500	20,440	19,430
Local Supply (Groundwater)	4%	1,114	1,600	5,640	5,640	5,640	5,640
Local Supply (Desalter)	8%	2,542	2,400	2,400	2,400	2,400	2,400
Recycled Water	23%	7,044	7,100	7,250	7,250	7,250	7,250
<b>Total Water Supply</b>	<b>100%</b>	<b>30,070</b>	<b>37,020</b>	<b>35,480</b>	<b>36,790</b>	<b>35,730</b>	<b>34,720</b>

Source: TMWD 2005 UWMP

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#### Existing Water Demands

Current and projected demands for TMWD water are shown in Table 5.16-2.

**Table 5.16-2**  
**Current and Projected Demands for TMWD Water, Normal Water Year**  
**(acre-feet)**

Source	2010	2015	2020	2025	2030
Imported	19,820	15,950	16,120	16,290	16,470
Local Groundwater	1,600	5,640	5,640	5,640	5,640
Local Desalter	2,400	2,400	2,400	2,400	2,400
<b>Total Potable Water Demand</b>	<b>23,820</b>	<b>23,990</b>	<b>24,160</b>	<b>24,330</b>	<b>24,510</b>
Recycled	7,100	7,250	7,250	7,250	7,250
<b>Total Water Demand</b>	<b>30,920</b>	<b>31,240</b>	<b>31,410</b>	<b>31,580</b>	<b>31,760</b>

As shown in Table 5.16-2, between 2010 and 2030 demand for TMWD potable water is forecast to increase from 23,820 afy to 24,510 afy (acre-feet per year), or about 2.9 percent, while total demands for TMWD water are forecast to increase from 30,920 afy to 31,760 afy or about 2.7 percent. Projected supplies and demands for TMWD water between 2010 and 2030 are compared in Table 5.16-3.

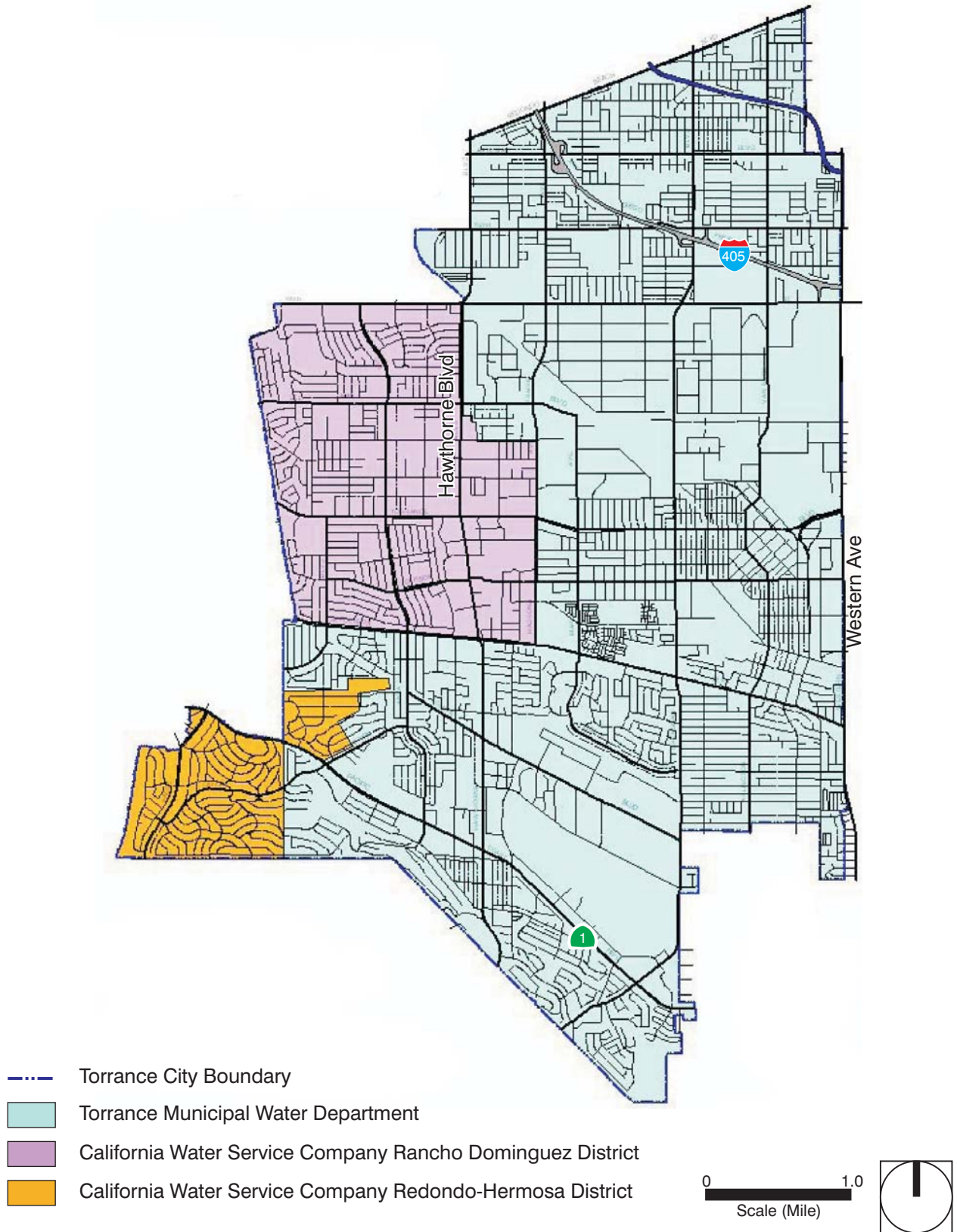
**Table 5.16-3**  
**Current and Forecast Supplies versus Demands for TMWD Water, Normal Water Year**  
**(acre-feet)**

Source	2010	2015	2020	2025	2030
<b>Potable Water</b>					
Total Supplies	29,920	28,230	29,540	28,480	27,470
Total Demands	23,820	23,990	24,160	24,330	24,510
Surplus (Supplies less Demands)	6,100	4,240	5,380	4,150	2,960
<b>Recycled Water</b>					
Supplies	7,100	7,250	7,250	7,250	7,250
Demands	7,100	7,250	7,250	7,250	7,250
Surplus (Supplies less Demands)	0	0	0	0	0
<b>Total</b>					
Supplies	37,020	35,480	36,790	35,730	34,720
Demands	30,920	31,240	31,410	31,580	31,760
Surplus (Supplies less Demands)	6,100	4,240	5,380	4,150	2,960

Source: TMWD 2005

As shown in Table 5.16-3, over the 2010 to 2030 period, TMWD estimates that it will have a surplus of water supplies over water demands ranging from 6,100 af in 2010 to 2,960 AF in 2030.

# Water Provider Service Areas



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#### Groundwater

The City retains groundwater pumping rights to 5,640 afy in the WCG Basin, which is managed by the Water Replenishment District of Southern California (WRDSC). Torrance has not been able to fully utilize its groundwater allocation because of seawater intrusion into the aquifer and the deteriorating condition of the City's groundwater wells; however, because the City hasn't used its full entitlement, it can lease its groundwater rights to other purveyors.

The WRDSC has monitored groundwater withdrawals from the WCG Basin and has developed a water replenishment plan for the basin. Sources of groundwater replenishment water to WRD include recycled water; imported water, and natural runoff, which is captured in the regional spreading grounds.

The City obtains groundwater from the West Coast Groundwater Basin via Well #6, the only active well in the City. The other well, Well #7, is an inactive standby well. The total capacity of Well #6 is 950 gallons per minute (gpm). The conditions of the well have deteriorated through the years and rehabilitation efforts are expected to increase the capacity of the well to 1,240 gpm. Between 2000 and 2005, the amount of water pumped from Well #6 decreased from 1,969 afy to 1,114 afy. TMWD is in the process of completing construction of a new Well #9, which will replace Well #6. The new well is projected to be in operation by 2010 and to produce approximately 2,500 acre feet of groundwater per year.

Desalinated groundwater is not pumped from wells in Torrance and is instead purchased from the WRD. Desalinated water comes from the Goldsworthy Groundwater Desalter Project in the City of Torrance. Groundwater obtained from wells in the City is projected to increase throughout year 2030 with the use of additional wells in North Torrance, as indicated in Table 5.16-4.

TMWD recently developed a business plan to address infrastructure and water resources needs over the next 20 years. The plan calls for reducing the current dependence on imported water supplies obtained from MWDSC. TMWD expects to be able to reduce imported water supplies from 70 percent of total demand to less than 40 percent over the next five years by developing local water resources, including construction of additional groundwater wells, increased use of recycled water, and expansion of a groundwater desalination facility.



**Table 5.16-4  
Groundwater Use in City of Torrance  
(afy)**

<i>Well Number</i>	<i>2010</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
<b>Groundwater from Torrance</b>					
Well # 6 (Active)	1,600	0	0	0	0
Well #7 (Inactive, Standby)	0	0	0	0	0
Well #8 (Not Equipped)	0	0	0	0	0
North Torrance Wells	0	5,640	5,640	5,640	5,640
<b>Subtotal</b>	<b>1,600</b>	<b>5,640</b>	<b>5,640</b>	<b>5,640</b>	<b>5,640</b>
<b>Groundwater from elsewhere in the West Coast Groundwater Basin</b>					
Goldsworthy Desalinated Water	2,400	2,400	2,400	2,400	2,400
<b>Total</b>	<b>4,000</b>	<b>8,040</b>	<b>8,040</b>	<b>8,040</b>	<b>8,040</b>

Source: TMWD 2005 UWMP

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#### Nonpotable/Recycled Water Use

In order to reduce reliance on imported water supplies and guard against projected future water rate increases, the City uses locally recycled water for nonpotable purposes such as irrigation and some industrial uses. Recycled water that has undergone secondary treatment at the City of Los Angeles' Hyperion Wastewater Treatment Plant is obtained by the West Basin Municipal Water District (WBMWD), which processes the water further at its West Basin Water Recycling Plant (WBWRP) in El Segundo. The City of Torrance then procures recycled water from WBMWD. WBMWD also owns, operates, and maintains all recycled water mains and laterals in Torrance. Current recycled water users are listed in Table 5.16-5.

**Table 5.16-5  
Current Recycled Water Users in Torrance**

<b>User</b>	<b>Irrigation Demand (afy)</b>	<b>Industrial Demand (afy)</b>	<b>Annual Demand (afy)</b>
Arlington Elementary	7	-	7
Casimir Middle School	3	-	3
Columbia Park	24	-	24
Descanso Park	7	-	7
ExxonMobil	---	6,750	6,750
Guesner Park	23	-	23
MacGruder Park	12	-	12
McMaster Park	12	-	12
Sunny Glen Park	13	-	13
Toyota Motors-Gramercy	12	23	35
<b>Total</b>	<b>113</b>	<b>6,773</b>	<b>6,886</b>

As shown in Table 5.16-4, total annual recycled water demand in the City of Torrance is about 6,886 afy, with the vast majority of that being industrial demand by the ExxonMobil refinery, which uses between 6,000 – 6,200 afy.

#### 5.16.1.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- U-4 Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

#### 5.16.1.3 Environmental Impact

The following impact analysis addresses thresholds of significance for which the initial study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

**IMPACT 5.16-1: WATER SUPPLY AND DELIVERY SYSTEMS ARE ADEQUATE TO MEET PROJECT REQUIREMENTS. [THRESHOLDS U-2 (PART) AND U-4]**

**Impact Analysis:**

**Water Demands**

The changes in the amounts of various classes of land use in the City that would result from implementation of the general plan update, and resulting projections for changes in water demand, are shown in Table 5.16-6.

**Table 5.16-6  
Forecast Project-Related Water Demand, gallons per day  
(gpd)**

Land Use	Existing	General Plan Update	Difference	Water Demand (Net Change)	
				Per Unit <sup>1</sup>	Total
Residential Units	53,147	57,536	4,389	325 per unit <sup>2</sup>	1,426,100
Commercial (Square Feet)	19,752,000	19,585,000	(167,000)	406 per 1,000 SF <sup>3</sup>	(67,802)
Office/Industrial (Square Feet)	31,757,000	31,791,000	34,000	250 per 1,000 SF <sup>4</sup>	8,500
Public/Quasi-Public/Open Space	8,194,000	7,960,000	(234,000)	250 per 1,000 SF <sup>5</sup>	(58,500)
Hospital	0	2,692,000	2,692,000	375 per 1,000 SF <sup>6</sup>	1,009,500
Airport	124	136	12	250 per 1,000 SF <sup>7</sup>	3,000
<b>Total</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	<b>2,320,798</b>

<sup>1</sup> Estimated as 125 percent of wastewater generation factors from the Sanitation Districts of Los Angeles County.

<sup>2</sup> Demand factor for single-family home; demands per unit for multifamily homes are lower.

<sup>3</sup> Demand factor for shopping center. This is a conservative estimate, as factors for most other retail uses are lower.

<sup>4</sup> The generation factors for office building and manufacturing uses are each 200 gpd per 1,000 SF.

<sup>5</sup> Using the generation factor for private school: 200 gpd per 1,000 SF.

<sup>6</sup> Using the generation factor for professional building: 300 gpd per 1,000 SF.

<sup>7</sup> Using the generation factor for office building: 200 gpd per 1,000 SF.



As shown in Table 5.16-6, implementation of the proposed general plan update is forecast to result in an increase in water demand of about 2,320,798 gpd, or roughly 2,599 afy year.

**Water Supplies**

TMWD forecasts that in normal water years it will have a surplus of water supplies over demands ranging from about 6,100 afy in 2010 to 2,960 afy in 2030. Projections of supplies of and demands for TMWD water in single dry year conditions and multiple dry year conditions are in TMWD's UWMP, included as Appendix K. In single dry year conditions between 2010 and 2030, TMWD would have sufficient water supplies to meet water demands that would be generated by development according to the proposed general plan update. For multiple dry year conditions, five sequences of five years each were evaluated, for a total of 25 years. For only three of those years (2025, 2028, and 2030) would the surplus of TMWD supplies over anticipated demands be less than the forecast increase in water demand that would result from development in conformance with the proposed general plan update. The surplus in 2025 would be 2,550 afy, 1,500 afy in

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2028, and 1,330 afy in 2030. There are sufficient existing and projected water supplies available in the City of Torrance to meet the demands of the proposed project.

#### **5.16.1.4 Relevant General Plan Update Policies**

##### **Circulation and Infrastructure Element**

- Require that developers, prior to issuance of building permits, demonstrate that adequate infrastructure exists or will be provided to serve proposed development and not diminish services to existing uses. (Policy CI.9.1)
- Evaluate the capacity and condition of the water, sewer, and storm drainage systems on a regular basis to assess each system's ability to meet changes in demand and to determine system deficiencies. (Policy CI.9.2)
- Ensure that public infrastructure is upgraded and installed in a timely manner to meet usage requirements, maximize cost efficiency, and minimize construction impacts on the community. (Policy CI.9.3)
- Require that new development assume the full fair-share costs of construction and expansion of water, sewer, and storm drain system improvements necessitated by that development. (Policy CI.9.4)
- Require that private infrastructure be built to public standards, including water lines, sewers, storm drains, and paving materials, and that private maintenance programs comply with City standards and schedules. (Policy CI.9.5)

##### **Community Resources Element**

- Continue to cooperate with and support regional programs that protect water resources in Torrance. (Policy CR.15.1)
- Promote continued research and programs by the Metropolitan Water District, the Water Replenishment District, the West Basin Municipal Water District, and county and state agencies regarding water recycling and desalination of groundwater for domestic use. (Policy CR.15.2)
- Maximize the use of local water resources to reduce imported water supplies. (Policy CR.15.3)
- Encourage residents and businesses in Torrance to practice water conservation through incentive programs and where necessary, programs that penalize wasteful practices. (Policy CR.15.4)
- Reduce the amount of water used for landscaping through such practices as the planting of native and drought-tolerant plants, use of efficient irrigation systems, and collection and recycling of runoff. (Policy CR.15.6)
- Implement the water conservation projects set forth in the City's Urban Water Management Plan. (Policy CR.15.7)
- Expand the use of recycled water at schools, parks, and all City facilities. (Policy CR.15.8)



- Identify opportunities for increased use of reclaimed water. (Policy CR.15.9)

### **5.16.1.5 Existing Regulations and Standard Conditions**

#### **State**

- California Assembly Bill 1420
- California Assembly Bill 1881, Chapter 559, Statutes of 2006, Model Landscape Ordinance
- California Code of Regulations, Title 22, Chapter 15: Water Quality General Requirements
- California Senate Bill 610, Chapter 643, Statutes of 2001
- California Senate Bill 221, Chapter 642, Statutes of 2001
- Water Code Sections 10610–10656: In accordance with the Urban Water Management Planning Act, the City of Ontario shall prepare an updated Urban Water Management Plan which demonstrates an appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years.

#### **City of Torrance Municipal Code**

City ordinances mandating water conservation measures in the event of a water shortage are contained in Torrance Municipal Code Division 7, Public Works and Property, Article 4, Water Conservation.



### **5.16.1.6 Level of Significance Before Mitigation**

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-1.

### **5.16.1.7 Mitigation Measures**

No mitigation measures are required.

### **5.16.1.8 Level of Significance After Mitigation**

No significant impacts have been identified.

## **5.16.2 Wastewater Services**

### **5.16.2.1 Environmental Setting**

#### **Wastewater Treatment and Collection**

The Public Works Department of the City of Torrance maintains local sewer and storm drainage systems. The Sanitation Districts of Los Angeles County (LACSD) is the regional agency responsible for the collection and treatment of wastewater. This includes the construction, operation, and maintenance of sanitation facilities used to collect, treat, recycle, and dispose of wastewater. Torrance lies within Sanitation Districts No. 5 and 30. The nearest wastewater treatment facility to Torrance is the Joint Water Pollution Control Plant (JWPCP)

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in Carson. The 220-acre JWPCP is one of the largest wastewater treatment facilities in the world, and currently provides primary and secondary treatment for approximately 320 million gallons per day (mgd) of wastewater. The maximum design flow of the JWPCP is 385 mgd and the maximum design peak flow is 540 MGD. About five million gallons of the treated water is reused for irrigation purposes. The remainder of the treated water is disinfected and then discharged into the Pacific Ocean through a network of outfalls, which extend two miles off of the Palos Verdes Peninsula to a depth of 200 feet.

Torrance maintains 287 miles of sewer lines and 9 sewer lift stations. The City cleans all City-owned sewers yearly. The City also implements a sewer spill procedure to contain and recover spills, thereby reducing environmental impacts.

#### **Storm Drainage Systems**

Stormwater runoff flows directly into the City's storm drain system via street gutters, catch basins, and other inlets, and this flow in turn discharges into the Pacific Ocean, City-maintained sumps, or County flood control channels, which ultimately drain to the Pacific Ocean. With no natural drainage systems, the City manages 51.25 miles of closed storm drains and one mile of open channel. To inform the public of the adverse impacts of disposing of items in the storm drains, the City marked all 1,236 storm drain inlets and posted signs at 66 public access points to creeks, channels, and other water bodies with a "no dumping" message.

Three stormwater retention basins and fourteen detention basins throughout Torrance serve the primary purpose of controlling stormwater runoff and preventing localized ponding and flooding. The Dominguez Flood Control Channel cuts through the northeastern section of the City. This channel is controlled by the County of Los Angeles and, although it has never overflowed in the past, it has the potential to flood during excessive rain events. Development is limited near the Dominguez Channel. Localized flooding due to excessive rain has occurred throughout the City.

#### **5.16.2.2 Threshold of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-1            Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- U-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.
- U-5            Would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

#### **5.16.2.3 Environmental Impact**

The following impact analysis addresses thresholds of significance for which the initial study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**IMPACT 5.16-2: BUILDOUT OF THE TORRANCE GENERAL PLAN UPDATE WOULD GENERATE ADDITIONAL WASTEWATER, WHICH WOULD BE ADEQUATELY TREATED IN ACCORDANCE WITH THE REGIONAL WATER QUALITY CONTROL BOARD AND CALIFORNIA DEPARTMENT OF PUBLIC HEALTH REQUIREMENTS. [THRESHOLDS U-1 (PART), U-3, AND U-4]**

**Impact Analysis:** The buildout of Torrance in accordance to the proposed general plan update would potentially increase the number of dwelling units in the City by 4,389 and the amount of nonresidential square feet in the City by roughly 2,337,000 square feet over the existing land use conditions. This would increase the amount of wastewater generated by the City of Torrance as it continues to build out.

#### Wastewater Generation

The amount of wastewater that would be generated by buildout of the proposed General Plan Update is shown in Table 5.16-7.

**Table 5.16-7  
Forecast Project-Related Wastewater Generation  
(gpd)**

Land Use	Existing	General Plan Update	Difference	Water Demand (Net Change)	
				Per Unit <sup>1</sup>	Total
Residential Units	53,147	57,536	4,389	260 per unit <sup>2</sup>	1,140,880
Commercial (Square Feet)	19,752,000	19,585,000	(167,000)	325 per 1,000 SF <sup>3</sup>	(54,242)
Office/Industrial (Square Feet)	31,757,000	31,791,000	34,000	200 per 1,000 SF <sup>4</sup>	6,800
Public/Quasi-Public/Open Space	8,194,000	7,960,000	(234,000)	200 per 1,000 SF <sup>5</sup>	(46,800)
Hospital	0	2,692,000	2,692,000	300 per 1,000 SF <sup>6</sup>	807,600
Airport	124,000	136,000	12,000	200 per 1,000 SF <sup>7</sup>	2,400
<b>Total</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	<b>1,856,638</b>

<sup>1</sup> Estimated as 125 percent of wastewater generation factors from the Sanitation Districts of Los Angeles County.

<sup>2</sup> Demand factor for single-family home; demands per unit by multifamily homes are lower.

<sup>3</sup> Demand factor for shopping center. This is a conservative estimate, as factors for most other retail uses are lower.

<sup>4</sup> The generation factors for office building and manufacturing uses are each 200 gpd per 1,000 SF.

<sup>5</sup> Using the generation factor for private school: 200 gpd per 1,000 SF.

<sup>6</sup> Using the generation factor for professional building: 300 gpd per 1,000 SF.

<sup>7</sup> Using the generation factor for office building: 200 gpd per 1,000 SF.

As shown in Table 5.16-7, buildout according with the proposed general plan update would result in an increase in wastewater generation of about 1,856,638 gpd compared to current conditions. Wastewater generated in the City is transported to the JWPCP in Carson, which has current wastewater flows of about 320 MGD, a maximum design flow of 385 mgd (431,255 afy), and a maximum design peak flow of 540 mgd (604,878 afy). The design capacity of the JWPCP is thus about 65 mgd greater than the facility's current wastewater flows. There is sufficient wastewater treatment capacity in the region for the increase in wastewater that the project would generate.



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#### **Water Quality Permitting and Stormwater Quality**

In Torrance, National Pollutant Discharge Elimination System (NPDES) permits are issued by the Los Angeles Regional Water Quality Control Board as part of its stormwater program. The City has obtained funding for an upgrade to the storm drain master plan to coordinate future drainage improvements with recent NPDES requirements.

In support of the permit (NPDES No. CAS004001) and the obligation to keep waterways clean by reducing or eliminating contaminants from stormwater and dry-weather runoff, the City complies with the Los Angeles Regional Water Quality Control Board's Monitoring and Reporting Program. The City has a stormwater education program, an inspection team that issues citations for water quality violations, and requires the use of best management practices in many residential, commercial, and development-related activities to reduce runoff.

**IMPACT 5.16-3: UPON BUILDOUT OF THE GENERAL PLAN UPDATE, EXISTING AND/OR PROPOSED STORM DRAINAGE SYSTEMS WOULD BE ADEQUATE TO SERVE THE DRAINAGE REQUIREMENTS OF THE PROPOSED PROJECT. [THRESHOLD U-3]**

**Impact Analysis:** The City of Torrance would be adding additional residences and nonresidential development to the existing urban setting. Upgrades to existing public storm drains or on-site detention of stormwater may be necessary as undeveloped parcels are converted to urban uses, particularly in areas where flood-related problems occur. Since the City of Torrance has a high percentage of impermeable surfaces, the risk of urban flooding can be high during periods of intense precipitation. However, since the City is almost entirely built out, there would be few instances where undeveloped parcels of land are developed. New construction would mostly consist of the replacement of existing buildings. There would be few areas that would require the development of new stormwater drainage infrastructure. Therefore, construction of stormwater drainage systems would mostly be in the form of enhancing and updating the existing infrastructure.

The payment of development impact fees (DIF) by developers would help to fund storm drain enhancement projects that would help resolve any existing system deficiencies. The Department of Public Works of the City of Torrance maintains a master plan of drainage, last updated in 1997, that identifies system deficiencies. The City does not maintain a storm drain capital improvements program but has identified priority improvements:

- Vista Montana storm drain replacement from Via Tortugas to Via Mesa
- Yukon Pump Station rehabilitation
- Maple Avenue/235th Street Storm Drain: rehabilitate existing corrugated metal pipes from Sepulveda Boulevard to Benner Avenue
- Alley south of 182nd Street: install new storm drain from Hawthorne Boulevard to Regina Avenue
- Redondo Beach Service Road east of Crenshaw Boulevard: install new storm drain

The City would not experience significant amounts of damage to property or loss of life in the event of high intensity rainfall events (City of Torrance 2008). In addition to the priority improvements listed above, the City has a number of mitigation efforts listed in their Natural Hazards Mitigation Plan to reduce the impacts of flooding of stormwater systems and reservoir (or dam) failure. Stormwater flooding presents a minimal risk to

the City because of the flood control systems operated by the City. Impacts to stormwater infrastructure would be less than significant.

#### **5.16.2.4 Relevant General Plan Update Policies**

##### **Circulation and Infrastructure Element, Utilities Objectives and Policies**

- Require that developers, prior to issuance of building permits, demonstrate that adequate infrastructure exists or will be provided to serve proposed development and not diminish services to existing uses. (Policy CI.9.1)
- Evaluate the capacity and condition of the water, sewer, and storm drainage systems on a regular basis to assess each system's ability to meet changes in demand and to determine system deficiencies. (Policy CI.9.2)
- Ensure that public infrastructure is upgraded and installed in a timely manner to meet usage requirements, maximize cost efficiency, and minimize construction impacts on the community. (Policy CI.9.3)
- Require that new development assume the full fair-share costs of construction and expansion of water, sewer, and storm drain system improvements necessitated by that development. (Policy CI.9.4)
- Require that private infrastructure be built to public standards, including water lines, sewers, storm drains, and paving materials, and that private maintenance programs comply with City standards and schedules. (Policy CI.9.5)



##### **Community Resources Element**

- Expand the use of recycled water at schools, parks, and all City facilities. (Policy CR.15.8)
- Identify opportunities for increased use of reclaimed water. (CR.15.9)

#### **5.16.2.5 Existing Regulations and Standard Conditions**

##### **State**

- California Code of Regulations. Title 22, Chapter 15: Water Quality General Requirements

#### **5.16.2.6 Level of Significance Before Mitigation**

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-2 and 5.16-3.

#### **5.16.2.7 Mitigation Measures**

No significant impacts have been identified, and no mitigation is needed.

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#### 5.16.2.8 Level of Significance After Mitigation

No significant impacts have been identified.

#### 5.16.3 Solid Waste

##### 5.16.3.1 Environmental Setting

#### Waste and Recycling Services in Torrance

The City of Torrance Sanitation Division handles residential refuse and recycling collection as well as collection for the City Hall complex, City parks, fire stations, and the police department. The City is a member of the Los Angeles Regional Agency (LARA), which is a consortium of 16 member cities in Los Angeles County. In 2004, the California Integrated Waste Management Board (CIWMB) approved the formation of LARA as a regional agency whose mission is to assist members in meeting and exceeding the 50 percent waste diversion mandates of SB 939. As a member city, Torrance receives programmatic and technical assistance to meet its obligations. LARA submits a collective annual report directly to the CIWMB for AB 939 compliance.

Since LARA became recognized by the CIWMB, the agency as a whole has achieved an estimated waste diversion rate of 67 percent. The City of Torrance has reached the 50 percent diversion mandate for 2008, however it has not been officially verified by CIWMB.

The City administers recycling efforts, including residential curbside recycling for single-family homes and duplexes, educational programs in elementary and middle schools, and providing recycling containers at city parks and special events. Over 25 private refuse haulers provide recycling and refuse service to the commercial and multifamily sector, and are required to divert 50 percent of their tonnage annually. Torrance also enforces an ordinance that requires all demolition, construction, and remodeling projects valued over \$100,000 to recycle or reuse at least 50 percent of the materials that leave the project site. A pilot green waste recycling program was started in June 2007. The purpose of this program is to reduce the amount of green waste being discarded in landfills. The program is expected to be expanded in the summer of 2009.

The City also promotes county-run programs for hazardous waste and electronics recycling and composting workshops. The county's sanitation district owns and operates the Palos Verdes recycling center, located at the Palos Verdes Landfill in Rancho Palos Verdes. The City expects to increase its waste diversion rate by implementing programs targeting multifamily residential areas and small- and medium-sized businesses.

#### Landfills

During calendar year 2008 roughly 166,000 tons of solid waste from the City of Torrance was disposed of at landfills. An additional estimated 150,000 tons of solid waste were recycled, reused, or transformed.<sup>1</sup>

During 2008, each of the landfills listed in Table 5.16-8 received at least 1 percent of the solid waste from the City that was landfilled that year.

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<sup>1</sup> Transformation of solid waste is burning the waste to produce heat or electricity (CIWMB 2009).

**Table 5.16-8  
Solid Waste Disposal Sites Receiving Solid Waste from Torrance**

<i>Landfill'</i>	<i>Location</i>	<i>Permitted Throughput, Tons/Day</i>	<i>Remaining Capacity</i>	<i>Closing Date</i>
Chiquita Canyon	Valencia	6,000	35,800,000 cubic yards (19,814,000 tons)	2019
Lancaster	Lancaster	1,700	19,088,739 cubic yards (10,174,298 tons)	2012
Puente Hills	Whittier	13,200	49,348,500 cubic yards (26,302,751 tons)	2013
Southeast Resource Recovery Facility	Long Beach	2,240	Not available	Not available
Sunshine Canyon City/County Landfill	Sylmar	12,100	111,200,000 cubic yards (59,269,600 tons)	2037

Source: Los Angeles County Public Works Department 2009.

<sup>1</sup> These solid waste facilities each received at least 1 percent of the solid waste disposed of by Torrance during 2008. Remaining solid waste facilities that received solid waste from Torrance in 2008 are: Antelope Valley Public Landfill, Palmdale; Azusa Land Reclamation, Azusa; Commerce Refuse-to-Energy Facility, Commerce; and Peck Road Gravel Pit, Monrovia.

As shown in Table 5.16-7, the five solid waste facilities that each received at least 1 percent of the solid waste disposed of by Torrance in 2008 have a combined permitted daily throughput of 35,240 tons per day and remaining capacity of about 115,560,650 tons. The Puente Hills Landfill will close by 2013; a waste-by-rail project will transport waste from near the Puente Hills Landfill to a landfill in Imperial County and is scheduled to begin operation in 2012.



**5.16.3.2 Threshold of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

**5.16.3.3 Environmental Impact**

The following impact analysis addresses thresholds of significance for which the INITIAL STUDY disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

**IMPACT 5.16-4: BUILDOUT OF THE GENERAL PLAN WOULD BE SERVED BY LANDFILLS WITH SUFFICIENT CAPACITY FOR PROJECT-GENERATED SOLID WASTE.[THRESHOLDS U-6 AND U-7]**

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#### Impact Analysis:

#### Solid Waste Generation

The estimated increase in solid waste generation that would result from buildout of the proposed general plan update is shown below in Table 5.16-9.

**Table 5.16-9  
Forecast Project-Related Solid Waste Generation**

Land Use	Existing	Proposed General Plan	Difference	Solid Waste Generation (Net Change), pounds per day	
				Per Unit	Total
Residential Units	53,147	57,536	4,389	12.23	53,665
Commercial (Square Feet)	19,752,000	19,585,000	(167,000)	13 per 1,000 SF	(2,171)
Office/Industrial (Square Feet)	31,757,000	31,791,000	34,000	6 per 1,000 SF	204
Public/Quasi-Public/Open Space	8,194,000	7,960,000	(234,000)	6 per 1,000 SF <sup>1</sup>	(1,404)
Hospital	0	2,692,000	2,692,000	59 per 1,000 SF	158,828
Airport	124,000	136,000	12,000	6 per 1,000 SF <sup>2</sup>	72
<b>Total</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	<b>209,194</b>

Source: Los Angeles County Sanitation Districts

<sup>1</sup> Generation factor for Office use

<sup>2</sup> Generation factor for Office use

As shown in Table 5.16-9, buildout of the proposed general plan would result in an increase in solid waste generation of roughly 209,194 pounds, or about 104.6 tons, per day.

#### Landfill Capacity

The five solid waste facilities accepting the vast majority of solid waste from Torrance have a combined permitted throughput of about 35,240 tons per day, remaining capacity of some 115,560,000 tons, and closure dates as late as 2037. There is sufficient landfill capacity in the region for solid waste that would be generated by buildout according with the proposed general plan update.

#### **IMPACT 5.16-5 THE PROPOSED GENERAL PLAN UPDATE WOULD COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS RELATED TO SOLID WASTE.**

The City of Torrance is a member of the LARA, whose mission is to assist members in meeting and exceeding the 50 percent waste diversion mandates of SB 939. LARA's members collectively divert roughly 67 percent of their solid waste. The City of Torrance has reached the 50 percent diversion mandate for 2008, however it has not been officially verified by CIWMB.

The City administers recycling efforts, including residential curbside recycling for single-family homes and duplexes, educational programs in elementary and middle schools, and providing recycling containers at city parks and special events. Over 25 private refuse haulers provide recycling and refuse service to the commercial and multifamily sector, and are required to divert 50 percent of their tonnage annually. Torrance also enforces an ordinance that requires all demolition, construction, and remodeling projects valued over \$100,000 to recycle or reuse at least 50 percent of the materials that leave the project site. A waste management plan is required in order to obtain a permit for demolition, remodeling, or construction valued at over \$100,000. The City provides lists of facilities and organizations accepting construction and demolition



debris. A pilot green waste recycling program was started in June 2007. The purpose of this program is to reduce the amount of green waste being discarded in landfills. The City plans to expand the program in the summer of 2009 to provide service to 8,000 homes. Any new developments within the City would be required to comply with existing City programs, which in turn comply with the requirements of the California Integrated Waste Management Act of 1898 and any related amendments.

#### **5.16.3.4 Relevant General Plan Update Policies**

##### **Community Resources Element**

- Provide residents and businesses with comprehensive and efficient solid recycling services that, at a minimum, meet state diversion mandates. (Policy CR.23.1)
- Implement the policies and programs in the Source Reduction and Recycling Element. (Policy CR.23.2)
- Implement the policies and programs in the Household Hazardous Waste Element submitted by Los Angeles Area Integrated Waste Management Authority, in which Torrance is a member, to provide for the proper treatment and disposal of household hazardous wastes. (Policy CR.23.3)
- Establish a construction waste recycling program that mandates the recycling of a high percentage of construction and demolition waste. (Policy CR.23.4)
- Maximize composting opportunities for Torrance residents and businesses. (Policy CR.23.5)
- Work with Los Angeles County and private businesses to continue programs that encourage the recycling of electronics, tires, and motor oil. (Policy CR.23.6)
- Establish permanent collection centers within the City to meet the recycling and hazardous materials disposal needs of residents, businesses, and City government. (Policy CR.23.7)



#### **5.16.3.5 Existing Regulations and Standard Conditions**

##### **State**

- California Assembly Bill 939, Chapter 1095, Statutes of 1989.

##### **City of Torrance Municipal Code**

- Division 4: Public Health and Welfare; Chapter 3: Solid Waste

#### **5.16.3.6 Level of Significance Before Mitigation**

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-4, 5.16-5.

#### **5.16.3.7 Mitigation Measures**

No significant impacts have been identified, and no mitigation measures are required.

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#### 5.16.3.8 Level of Significance After Mitigation

No significant impacts have been identified.

#### 5.16.4 Other Utilities

##### 5.16.4.1 Environmental Setting

###### Electricity

Southern California Edison provides electricity to the citizens and businesses of Torrance. Electricity is transmitted through high-voltage power lines and step-down transformers.

###### Natural Gas

The Southern California Gas Company (SCGC) provides natural gas service to Torrance's citizens and businesses. The availability of natural gas service is based upon present conditions of gas supply and regulatory policies. As a public utility, SCGC is under the jurisdiction of the Public Utilities Commission and federal regulatory agencies. Should these agencies take any action that affects natural gas supply, or the conditions under which service is available, gas service would be provided in accordance with the revised conditions.

###### Telecommunications

Telecommunications includes media and technologies: radio, fiber optics, television, telephone, data communication, and computer networking. Telecommunications service to Torrance is provided by private companies such as Verizon, Time Warner Cable, and various cell phone providers. Often, undergrounding of these telecommunication systems can be coordinated with Southern California Edison undergrounding activities. The City utilizes residential and nonresidential undergrounding impact fees to further this goal.

##### 5.16.4.2 Thresholds of Significance

Although not specifically in Appendix G of the CEQA Guidelines, the following additional threshold is also addressed in the impact analysis

U- 8            Would increase demand for other public services and utilities.

##### 5.16.4.3 Environmental Impacts

**IMPACT 5.16-6:            EXISTING AND/OR PROPOSED FACILITIES WOULD BE ABLE TO ACCOMMODATE PROJECT-GENERATED UTILITY DEMANDS. [U-8]**

**Impact Analysis:** Growth in the City of Torrance would result in additional demand for utilities such as electric, gas, and communication services. Private utility companies are regulated by the California Public Utilities Commission. The following describes other private utilities in the City that would have an increased demand for services as a result of buildout of the proposed general plan update.

###### Electricity and Gas

Growth in the City of Torrance would result in additional demand for electricity service. The City of Torrance obtains electricity from SCE. Based on energy rates from the United States Energy Information

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Administration for land uses in the City, existing energy demand is approximately 3.1 million gigawatt hours (Gwh) per year. Future growth in accordance with the proposed land use plan would generate a demand of approximately 8.0 million Gwh per year. The City of Torrance does not have control over installation of new overhead transmission lines. Buildout in accordance with the Torrance General Plan Update would also result in additional need for natural gas service in the City by SCGC. Demand for electricity and natural gas services would be accommodated by the service providers. New facilities to support the demand for natural gas and electric service in the City of Torrance would be constructed by SCE and SCGC in accordance with the demand for new service. Because developments that would be considered for approval under the proposed general plan update have not yet been designed or proposed, the specific electricity and gas facilities that would need to be installed to serve those developments are unknown, as are the environmental impacts of such installations. Such impacts would be evaluated on a project-by-project basis.

#### **Communication – Telephone, Mobile Phone, Cable, and Internet Service**

Buildout of the City in accordance with the Torrance General Plan Update would result in additional demand for communication facilities. Traditionally these facilities are installed or upgraded by private service providers as new subdivisions are built, and installation is supported by service fees. Torrance receives land-line telephone service from Verizon, Sprint, Vonage, AT&T, and other phone companies.

In addition, cell towers are increasingly needed to ensure adequate coverage in the service boundaries of the City. The City provides entitlements for installation of these private services, and service providers base the need for such facilities on market demand. While traditional phone lines only require installation of wire facilities along city streets, mobile facilities require more detailed strategic planning, as reception quality for the cell phone towers is dependent on the topography, height of the communication facility, and so on. Installation of these communication structures are studied by the Federal Aviation Administration and installations are registered with the Federal Communications Commission. Under the Federal Communications Act of 1996, no laws or actions by any local government or planning or zoning board may prohibit, or have the effect of prohibiting, the placement, construction, or modification of communication towers, antennas, or other wireless facilities in any particular geographic area (No. 47 USC. Section 332 [c]). To ensure compatibility of these towers with adjacent land uses, Title 9, Development Code, Section 9-1.3289, Antennas and Wireless Telecommunications Facilities, of the Torrance Municipal Code provides regulations for the siting of telecommunication facilities, including cell phone towers.

Cable service is provided to the City by local cable franchises, including Time Warner Cable, Comcast Cable, Cox Cable, and Charter Cable. Installation of cable services is provided by these private companies and supported by service fees.

For Internet service, transmission can be obtained through the phone lines for dial-up coverage or by broadband providers. Most Internet service providers are regulated by the California Public Utilities Commission. Broadband providers supply Internet services through cable lines or through Ethernet, a bundling of local area networks that are transmitted by fiber optics (DSL). Like cell phones, the Internet can also be provided through wireless connections. Infrastructure to support these services is therefore run over the associated local telephone and cable service provider lines.

Growth in the City of Torrance would necessitate the construction or expansion of these types of communication facilities; however, installation of communication infrastructure is implemented by private companies who base service needs on customer demand. The City of Torrance Development Director, or designee, who has purview over design review, is required to approve new private infrastructure facilities prior to their placement, as regulated by the California Public Utilities Commission.



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### UTILITIES AND SERVICE SYSTEMS

#### **5.16.4.4 Relevant General Plan Update Policies**

There are no relevant policies for these utilities.

#### **5.16.4.5 Existing Regulations and Standard Conditions**

Federal

- Federal Communications Act

#### **5.16.4.6 Level of Significance Before Mitigation**

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-6.

#### **5.16.4.7 Mitigation Measures**

No significant impacts have been identified and no mitigation is required.

#### **5.16.4.8 Level of Significance After Mitigation**

No significant impacts have been identified.