

## APPENDIX 11

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# WATER SUPPLY ASSESSMENT & WATER SUPPLY VERIFICATION



# Water Supply Assessment & Water Supply Verification

## El Monte Transit Village Development

*for the:*

City of El Monte

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*Prepared by:*



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**FIGURE 1: PROJECT LOCATION**

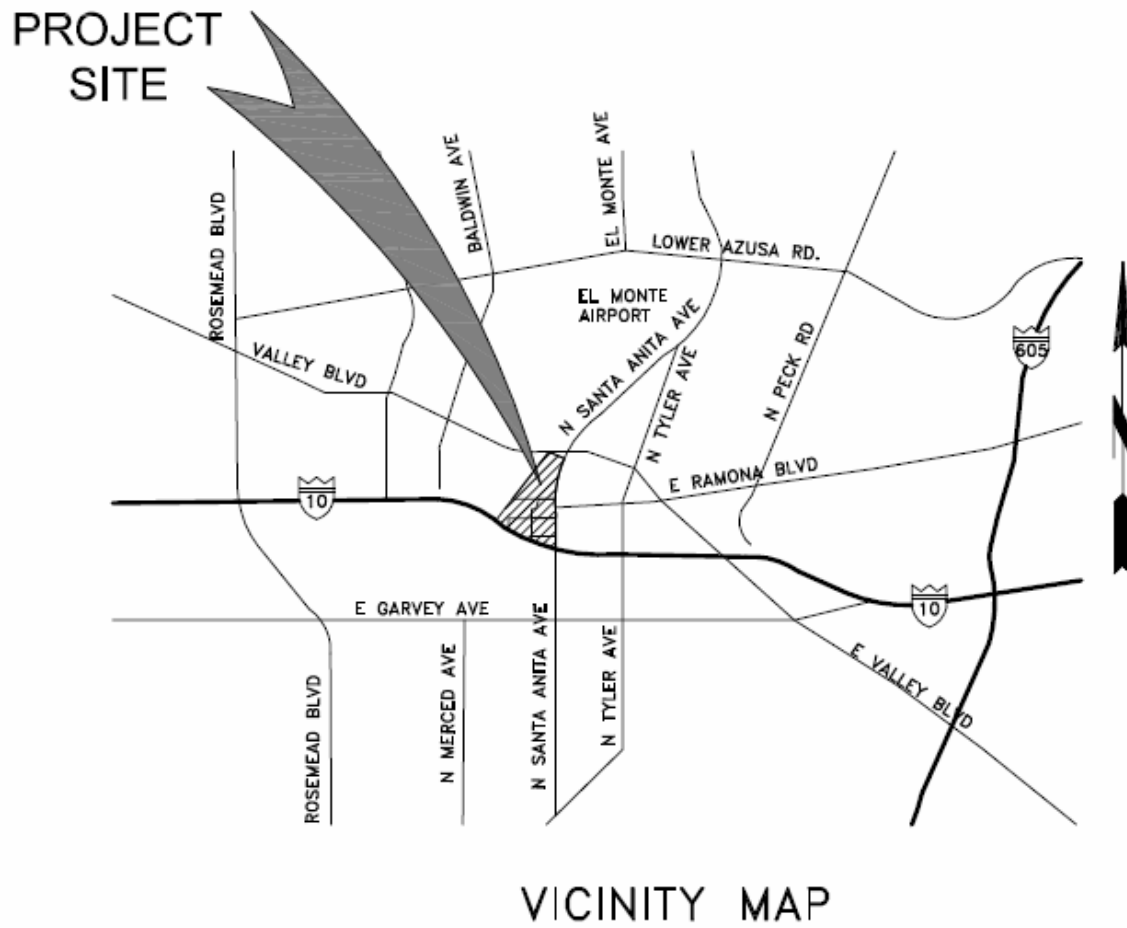


FIGURE 2: PROJECT SITE



## **1.0 EXECUTIVE SUMMARY**

This Project is subject to a Water Supply Assessment (Senate Bill 610) and a Water Supply Verification (Senate Bill 221). This document examines the current condition of the San Gabriel Main Basin and finds the Basin adequate to supply the Project in accordance with California Water Code Section 1910 et seq. This document also verifies the ability of the Basin to serve the Project in accordance with the California Government Code Section 66473.7.

## **2.0 INTRODUCTION**

### **2.1 BACKGROUND**

Since this Project is subject to the California Environmental Quality Act process (CEQA) and is a subdivision as defined by the California Government Code Section 66473.7, the City of El Monte Water Department (sub-agency to the Upper San Gabriel Municipal Water District), the Public Water System (PWS) for the Project, has determined that a Water Supply Assessment (WSA) is necessary to complete the Project's CEQA process and that a written Water Supply Verification (WSV) is needed to approve the Project.

### **2.2 Purpose of Document**

Upon request of local government, a PWS is required by law to provide documentation regarding the water supply for new projects. This information is included in the CEQA documentation and it becomes evidence used in the approval process.

#### **2.2.1 Water Supply Assessment**

Senate Bill 610 (SB610) was enacted in 2001 and became effective in January 1, 2002. SB610 amended Section 21151.9 of the Public Resources Code. SB 610 also amended Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Section 10913, and added and amended Section 10657 of the California Water Code. It requires cities and counties to request specific information on water supplies from the PWS that would serve any project that is subject to CEQA and is defined as a "Project" in Water Code Section 10912. This information is to be included into environmental review documents prepared pursuant to CEQA.

#### **2.2.2 Water Supply Verification**

Senate Bill 221 (SB221) was enacted in 2001 and became effective as of January 1, 2002. SB221 amends Section 11010 of the Business and Professional Code, and Sections 66455.3 and 66473.7 and Section 65867.5 of the Government Code. SB221 establishes the relationship between the WSA prepared for a project and the project approval under the Subdivision Map Act. Pursuant to California Government Code Section 66473.7, the PWS must provide written verification of sufficient water supply prior to the approval of a new subdivision.

## **2.3 PROJECT DESCRIPTION**

The proposed El Monte Transit Village Project is located on Santa Anita Avenue between Valley Boulevard and Interstate 10 and borders the Rio Hondo Channel, in the City of El Monte. The project takes up 51.26 acres of an existing site. Land use includes approximately 1850 residential units, mixed use retail/restaurants/entertainment, commercial, and public parks.

### **2.3.1 Application of WSA**

A WSA is required since the Project has over 500 housing units and is a “Project” as defined by Water Code Section 10912.

### **2.3.2 Application of WSV**

A WSV is required since the Project has over 500 housing units and is a “Subdivision” as defined by Government Code Section 66473.7.

## **2.4 PUBLIC WATER SUPPLY**

### **2.4.1 General**

The Main San Gabriel Basin serves the City of El Monte Water Department. This Project is located in the central district of the city’s service area. The El Monte City Water Department is the PWS for this location. The City Water Department service area encompasses roughly 1,142 acres, providing water to the central business district and to the northwest and southern portions of the city. The City Water Department provides services for domestic water, irrigation water, sanitation collection and stormwater protection.

The City Water Department currently has approximately 3,342 domestic water connections serving a population of approximately 16,353 and has a groundwater production capacity of 2.7 million gallons per day (MGD) from five active city wells whose combined pumping capacity is 8,700 gallons per minute (GPM) or 12.5 MGD. The City Water Department also has emergency interconnections with three water agencies; San Gabriel Valley Water Company; California-American Water Company; and Southern California Water Company with a combined supply of 5,200 GPM or 7.5 MGD. (connections & population referenced from 2002 City of El Monte Water Master Plan)

## **2.5 EXISTING WATER MANAGEMENT PLANS**

### **2.5.1 Background**

The Urban Water Management Plan for the City of El Monte was prepared as part of the California Urban Water Management Planning Act of 1985. The act requires that an UWMP be adopted by suppliers supplying more than 3,000 ac-ft/yr of water or supplying water to more than 3,000 customers. The Act also requires the suppliers every five years to review and update their UWMP. The reason for the review process is to ensure sufficient water supplies for future use by demonstrating efficient and conservative use of urban water supplies.

The City of El Monte completed an update of the 2000 UWMP in 2005 as required by the California water code. Much of the data in the UWMP is based on information from the City of El Monte 2002 Water Master Plan

### **2.5.2 Reliance on El Monte WMP and UWMP**

A WSA is required to document the water demand for City of El Monte Water Department and planned future uses for this Project. Water Code Section 10910(c)(3) states that if demand from the potential future growth is not accounted for in the most recently adopted UWMP, the WSA shall include a section describing the city’s projected water supplies for a normal year, single dry year, and multiple dry years for a 20 year cycle and whether the city’s supply will meet the

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demand of the proposed Project, as well as the city’s existing and planned future uses. The Proposed Project was not addressed in the City’s UWMP and Water Code Section 10910(c)(3) requires that this additional analysis be performed.

### 3.0 Water Demands

#### 3.1 Project Demands

The Project planning area includes a total of 51.26 acres. Based on the specific plan for the proposed project land use and water consumption factors from the 2002 City of El Monte Water Master Plan, the project demand is approximately 403 ac-ft/yr or about 359,408 GPD. Below is Table 3.1-1 showing the project demand subtracting the existing site demand.

**Table 3.1-1  
Estimated Project Water Service Demands**

Land use	Units	Quantity	Demand (gpd)	Demand (ac-ft/yr)
Residential (apartments/condominiums)	Dwellings	1,850	285,360	320
Retail Shopping Centers <sup>1</sup>	SF	491,000	23,073	26
Conference Center	SF	42,000	1,950	2
Business Offices	SF	500,000	23,496	26
Theater	SF	70,000	3,759	4
Hotel	Rooms	200	24,000	27
Child Development Center	SF	20,000	940	1
3629 Building	SF	32,000	1,504	2
Public Parks <sup>2</sup>	Acre	14.5	2,800	3
Irrigation			24,609	28
<b>Sub Total:</b>			391,491	439
Existing Site Demand			14,100	16
Existing Site Irrigation			17,983	20
<b>Sub Total:</b>			32,083	36
<b>Difference Total:</b>			359,408	403

1. Includes a 50,000 square foot grocery store

2. Demand is based on natural turf. Use of artificial turf will greatly reduce the demand

\* Project description and quantities are referenced from the specific plan.

\* Figures used to calculate demand are referenced from the 2002 City of El Monte Water Master Plan

## **4.0 WATER SUPPLY ASSESSMENT (WSA)**

### **4.1 GENERAL**

Having established that the City of El Monte UWMP did not address this Project, the requirement of a WSA is to not only identify and describe the water supply sources of the PWS that will serve the Project, but whether the PWS's total projected water supplies available during normal, single dry, and multiple dry years during a 20 year cycle will meet the demand of the project. Water Code Section 10910(d) requires a WSA to include identification of any existing water supply amounts, water rights, or water service contracts relevant to the identified water supply for the proposed Project, and a description of the quantities of water received in prior years by the PWS.

### **4.2 IDENTIFICATION OF WATER SOURCES**

#### **4.2.1 Primary Water Sources**

The Project's proponents have indicated that primary water supply will be groundwater from the San Gabriel Main Basin. A description and assessment of the Main Basin is provided in the Analysis of Water Supply section 4.3.

#### **4.2.2 Additional Water Sources**

The City of El Monte relies on the Main Basin for ground water as its primary source of domestic water for current and projected use. A description of additional water sources is provided in the Analysis of Water Supply section 4.3.

### **4.3 ANALYSIS OF WATER SUPPLY**

#### **4.3.1 Groundwater**

In the early part of this century, the San Gabriel Valley was dependent primarily on groundwater as a source of domestic water supply, but also to supply agricultural lands which occupied more area than residential and commercial. After WWII, industries grew and the agricultural lands decreased. Now groundwater from the Main Basin within the San Gabriel Valley primarily serves residential and commercial areas.

Water Code Section 10910 (f) requires additional information when a groundwater basin is cited as the water supply source for a project. The additional information includes a description of the basin, the rights of the PWS to use the basin, the overdraft status of the basin, any past or planned overdraft mitigation efforts, historical use of the basin by the PWS, projected use of the basin by the Project and a sufficiency analysis of the basin to supply the Project.

##### 4.3.1.1 Description of the Main Basin

The Main Basin can be described as a bowl-shaped depression in bedrock. The depression is fairly deep with a groundwater base elevation at 800 feet above the mean

sea level in the northeast part of the San Gabriel Valley, and declines to 2,200 feet below the mean sea level in the area of South El Monte.

The main basin lies beneath the San Gabriel Valley floor located in southeastern Los Angeles County. The valley is bounded by the San Gabriel Mountains in the north; the lower divide between the San Gabriel River and Upper Santa Ana River systems to the east; the Puente Hills and San Jose Hills to the south; and the San Rafael Hill and Merced Hills to the west.

The Main Basin takes up most of the valley floor except for the Puente and Raymond Basins. The bounds of the Main Basin are the base of the San Gabriel Mountains to the north; the Raymond Basin to the northwest; the boundaries between the Central Basin Municipal and Upper District through Whittier Narrows to the southeast; and the Puente Basin to the east.

In the central part of the San Gabriel Valley, the thickness of the soil layer over top of the Main Basin averages about six feet. The soil layer thickness increases as you approach the perimeter of the valley.

The groundwater in the Main Basin is replenished by rainfall on the valley floor, stream runoff from local mountains and hills, inflow from the Puente and Raymond Basins, and return flow. The Main Basin is also recharged from percolation through imported water.

Through groundwater modeling, the city's UWMP estimates that the Main Basin stores approximately 9.5 million ac-ft of water of which 1.1 million ac-ft has been used in operations of the Main Basin.

#### 4.3.1.2 Main Basin Adjudication

Groundwater in the Main Basin has been adjudicated. There is no limit to the amount of water pumped out of the Main Basin by parties like the City of El Monte, but water in excess of the pumper's water rights or pumper's share of the Basin's Operating Safe Yield (OSY) will require recharge of the Main Basin through purchase of imported water. The City of El Monte's share of pumper's rights available to serve the proposed project is 1.40878 percent of the OSY, in which the OSY changes from year to year. Each PWS is notified of the OSY value prior to each fiscal year.

Additional to the PWS's adjudicated right is carryover from the proceeding year which depends on the production right for the specific year and what is actually produced. If what is produced is less than the production right, then the remaining is carried over to the following year and is drawn before current year production is tapped. On average the PWS looks to carryover 20% of adjudicated rights from one year to the next. Whatever is not used is also leased to other agencies for revenue. Below is Table 4.3.1.2-2 showing the volume of water rights, production, and transaction for prior years.

**Table 4.3.1.2-2  
Volume of Water Rights, Production, and Transactions  
(all volumes in acre-feet)**

Fiscal Year	Basin OSY	Adjudicated Right*	+	Carryover from Previous FY	+	Transactions	=	Production Right	Actual Production	Lost Carry-over	Carryover to next FY
1997-1998	220,000	3,099.32		1,142.12		- 500.00		3,741.44	2,850.73	-	890.71
1998-1999	230,000	3,240.19		890.71		0.00		4,130.90	2,834.03	-	1,296.87
1999-2000	220,000	3,099.32		1,296.87		0.00		4,396.19	2,913.77	-	1,482.42
2000-2001	220,000	3,099.32		1,482.42		- 740.00		3,841.74	2,913.32	-	928.42

\* Adjudicated Right = 1.40878%

\* Table is from the City of El Monte 2002 Water Master Plan.

**4.3.1.3 Overdraft Status of the Main Basin**

Prior to 1965, the San Gabriel Valley Water Company along with 24 other groundwater producers including the City of El Monte used the San Gabriel River System to meet supply needs upstream of Whittier Narrows (Upper Area). The producers extracted enough water that the Lower Area downstream of Whittier Narrows was not left with a sufficient quantity of usable water. The Board of Water Commissioners of the City of Long Beach, Central Basin Municipal Water District, and the City of Compton filed action against groundwater producers. The final decision known as the Long Beach Judgment (adjudication) required that the management of water resources would be overseen by the San Gabriel River Watermaster. The Judgment stipulated that the supply of the river system be divided at Whittier Narrows. The Lower Area would receive usable water from the San Gabriel River System as well as Make-up water imported from the Upper Area. Make-up water is imported water purchased from the Main San Gabriel Basin. This increased the demand on the Main Basin’s storage.

**4.3.1.4 Overdraft Mitigation Efforts**

The Long Beach Judgment required the Main Basin to meet its obligation of supplying water downstream to the Lower Area in order to be free to manage its own water resources. The Long Beach Judgment was followed by the Main Basin Judgment.

With increased demand on the Main Basin, the Upper Area developed a resource management plan to conserve its supplies. The Upper Area then sought adjudication of water rights for the Main Basin. In 1973, the Main Basin Judgment was adopted in

which rights to divert production groundwater and surface water in the Basin were adjudicated. The San Gabriel Main Basin Watermaster was the watermaster service put in place to manage the resources of the Main Basin. The Judgment established pumping rights in the form of specific percentages of available water for each party. If the party extracts more than their allocated right, then the party will have a Supplemental Imported Water Supply Charge (SIWSC) to replace water in the Main Basin. The OSY for each year is then established by the Main Basin Watermaster which is used to allocate each party's portion.

“Through the Long Beach Judgment and the Main Basin Judgment, operations of the Main Basin are optimized to conserve local water to meet the needs of the parties of the Main Basin Judgment” (2005 El Monte UWMP).

Also part of the Main Basin Judgment is a Cyclic Storage Agreement with three municipal water districts through the Main Basin Watermaster. Metropolitan & Upper San Gabriel Valley Municipal Water District, San Gabriel Valley Municipal Water District and Three Valleys Municipal Water District are permitted to import no greater than (100,000 ac-ft), (40,000 ac-ft) and (40,000 ac-ft) of water respectively. The purpose is for future Replacement Water in the Main Basin.

#### 4.3.1.5 Historical Groundwater Use

The historic groundwater use within the PWS's service area since 1975-76 has averaged about 3,000 ac-ft/yr. Below is Table 4.3.1.5-3 showing the historic water supply and demand for the city service area.

**Table 4.3.1.5-3  
Historic and Current Water Supply & Demand by Customer Type  
(in acre-feet)**

Fiscal Year	Supply	Total Metered Demand <sup>1</sup>	Demand				
			Multi-Family Residential <sup>2</sup>	Single-Family Residential <sup>2</sup>	Commercial <sup>2</sup>	Industrial <sup>2</sup>	Irrigation <sup>2</sup>
1975-76	3,230	3,068.00	1,380.60	337.50	981.80	306.80	61.40
1976-77	2,732	2,595.00	1,167.80	285.50	830.40	259.50	51.90
1977-78	2,498	2,373.00	1,067.90	261.00	759.40	237.30	47.50
1978-79	2,914	2,768.00	1,245.60	304.50	885.80	276.80	55.40
1979-80	2,865	2,722.00	1,224.90	299.40	871.00	272.20	54.40
1980-81	3,046	2,894.00	1,302.30	318.30	926.10	289.40	57.90
1981-82	2,858	2,715.00	1,221.80	298.70	868.80	271.50	54.30
1982-83	2,959	2,811.00	1,265.00	309.20	899.50	281.10	56.20
1983-84	3,146	2,989.00	1,345.10	328.80	956.50	298.90	59.80
1984-85	3,139	2,982.00	1,341.90	328.00	954.20	298.20	59.60
1985-86	3,381	3,212.00	1,445.40	353.30	1,027.80	321.20	64.20
1986-87	3,990	3,790.00	1,705.50	416.90	1,212.80	379.00	75.80
1987-88	3,229	3,068.00	1,380.60	337.50	981.80	306.80	61.40
1988-89	3,111	2,955.00	1,329.80	325.10	945.60	295.50	59.10
1989-90	3,055	2,902.00	1,305.90	319.20	928.60	290.20	58.00
1990-91	3,054	2,901.00	1,305.50	319.10	928.30	290.10	58.00
1991-92	2,707	2,572.00	1,157.40	282.90	823.00	257.20	51.40
1992-93	2,465	2,342.00	1,053.90	257.60	749.40	234.20	46.80
1993-94	2,729	2,593.00	1,166.90	285.20	829.80	259.30	51.90
1994-95	2,724	2,588.00	1,164.60	284.70	828.20	258.80	51.80
1995-96	2,828	2,687.00	1,209.20	295.60	859.80	268.70	53.70
1996-97	2,723	2,587.00	1,164.20	284.60	827.80	258.70	51.70
1997-98	2,851	2,708.00	1,218.60	297.90	866.60	270.80	54.20
1998-99	2,834	2,692.00	1,211.40	296.10	861.40	269.20	53.80
1999-00	2,914	2,768.00	1,245.60	304.50	885.80	276.80	55.40
2000-01	2,913	2,767.00	1,245.20	304.40	885.40	276.70	55.30
2001-02	2,935	2,788.00	1,254.60	306.70	892.20	278.80	55.80
2002-03	2,879	2,735.00	1,230.75	300.85	875.20	273.50	54.70
2003-04	2,785	2,646.00	1,190.70	291.06	846.72	264.60	52.92

1. Historic water use records were not available. Total water demand was calculated assuming unaccounted water loss is 5 percent.  
 2. Water use based on customer type is estimated based on the City's 2002 Water Master Plan.  
 \*Modified table of figures is from the 2005 City of El Monte Urban Water Management Plan.

**4.3.1.6 Past & Current Groundwater Sufficiency Analysis**

Historically the San Gabriel Valley has experienced varying rainfall from year to year. The average rainfall accumulation is 17.6 in/yr. As stated before, the main sources of

recharge for the Main Basin are surface percolation from rainfall and runoff from the mountains.

The record high groundwater elevation was in 1916 at 392.1 ft, which was an estimated 8,700,000 ac-ft of storage in the Main Basin. The record low groundwater elevation was measured in 2004 at 195.5 ft. This resulted in an estimated 7,600,000 ac-ft of storage in the Main Basin. As a representative change in groundwater elevation in the Main Basin, when the groundwater elevation in the Baldwin Park Key Well changes by one foot in elevation, the result is about 8,000 ac-ft of storage.

As part of the Main Basin Judgment, the Main Basin Watermaster regulates the water level of the Key Well. When the water elevation exceeds 250 ft, the Watermaster shall not spread Replacement Water. When the water elevation approaches 200 ft, the Watermaster will spread Replacement Water to maintain a Key Well level above 200 ft. The criteria is found in Section 42 of the Main Basin Judgment (Basin Operating Criteria).

Due to the management under the Main Basin Judgment, the Main Basin has maintained its water levels during periods of drought from 1969 to 1977, 1983 to 1991, and 1998 to 2004. Table 4.3.1.6-4 below shows historic reliability of supply during normal, single dry, and multiple dry years for the PWS. The minimum supply of water during this multiple dry period was 3,099 ac-ft.

**Table 4.3.1.6-4**

**Historic Reliability of Supply  
(in acre-feet)**

	<u>Average Normal Year</u>	<u>Single Dry Year</u>	<u>Multiple Dry Years</u>		
Fiscal Year	1996-97	1998-99	1999-00	2000-01	2001-02
Water Demand	2,723	2,834	2,914	2,913	2,935
Total Well Capacity	5,414 <sup>2</sup>	9756 <sup>3</sup>	9756 <sup>3</sup>	9756 <sup>3</sup>	9756 <sup>3</sup>

1. The total well capacity of the wells the City was using during each fiscal year.
2. Total capacity of Well No. 2A and Well No. 13.
3. In fiscal year 1998-99, the City was producing water from Wells No. 4, No. 12, and No. 13

\*Table is from the 2005 City of El Monte Urban Water Management Plan.

**4.3.1.7 Future Groundwater Sufficiency Analysis**

The expected population growth within the city of El Monte’s service area is about one percent a year from about 2010 to 2025. The city expects to be built out by 2015 allowing little room for commercial, industrial, and residential development. Large developments would have to replace existing structures. The estimated rate of water to be pumped from the Main Basin by the PWS is the same as the estimated increase in population. Over the next 20 years, the projected amount of water to be pumped by the PWS that serves the Proposed Project is not expected to exceed 3,700 ac-ft/yr. As discussed above, over the last 30 years there have been three different multiple dry periods the Main Basin has gone through. Based on rainfall measurements from the last 46 years found in the city’s UWMP, the Main Basin has the ability to recharge itself during wet periods. Therefore, the Main Basin will continue to have adequate groundwater to supply the PWS over the next 20 years during future dry year cycles.

Also discussed in the UWMP is the city’s a six-stage plan to ration water supply up to 50 percent during severe drought cycles.

Below are two tables: Table 4.3.1.7-5 shows projected water demand and supply by customer sector which includes the Proposed Project. Table 4.3.1.7-6 shows the projected reliability of supply which also incorporates the Proposed Project.

**Table 4.3.1.7-5**

**Projected Water Supply & Demand By Customer Sector  
(in acre-feet)**

Projection Including Project					
Demand Customer Sector	Fiscal Year				
	2005	2010	2015	2020	2025
Multi-Family Residential	1,245	1,461	1,498	1,536	1,571
Single-Family Residential	304	357	366	375	384
Commercial	885	1,039	1,066	1,092	1,117
Industrial	277	325	333	341	349
Irrigation	55	65	67	68	70
Unaccounted	146	171	175	180	184
<b>Supply</b>	2,912	3,417	3,505	3,592	3,675

1. Total projected demand based on the projected water supply assuming unaccounted water loss is 5 percent.
2. Proposed Project increases supply 403 ac-ft starting 2010.
3. Modified projected values taken from 2005 City of El Monte Urban Water Management Plan

**Table 4.3.1.7-6  
Reliability of Supply  
(in Acre-Feet)**

Fiscal Year	Average Year	Dry Year	Multiple Dry Year Sequence		
			Year 1	Year 2	Year 3
2009-10					
Demand <sup>1</sup>	3,014	3,137	3,225	3,224	3,248
Demand + Project	3,265	3,388	3,476	3,475	3,499
Well Capacity	14,011	14,011	14,011	14,011	14,011
Surplus	10,746	10,623	10,535	10,536	10,512

Fiscal Year	Average Year	Dry Year	Multiple Dry Year Sequence		
			Year 1	Year 2	Year 3
2014-15					
Demand <sup>1</sup>	3,102	3,228	3,319	3,318	3,343
Demand + Project	3,350	3,476	3,567	3,566	3,591
Well Capacity	14,011	14,011	14,011	14,011	14,011
Surplus	10,661	10,535	10,444	10,445	10,420

Fiscal Year	Average Year	Dry Year	Multiple Dry Year Sequence		
			Year 1	Year 2	Year 3
2019-20					
Demand <sup>1</sup>	3,189	3,319	3,413	3,411	3,437
Demand + Project	3,434	3,564	3,658	3,656	3,682
Well Capacity	14,011	14,011	14,011	14,011	14,011
Surplus	10,577	10,447	10,353	10,355	10,329

Fiscal Year	Average Year	Dry Year	Multiple Dry Year Sequence		
			Year 1	Year 2	Year 3
2024-25					
Demand <sup>1</sup>	3,272	3,405	3,501	3,500	3,527
Demand + Project	3,512	3,645	3,741	3,740	3,767
Well Capacity	14,011	14,011	14,011	14,011	14,011
Surplus	10,499	10,366	10,270	10,271	10,244

1. Original projected demand with project not accounted for.
2. Modified table is based on values from 2005 City of El Monte Urban Water Management Plan.

**4.3.2 Additional Water Sources**

As stated in Section 4.2 of this report, the Main Basin is the primary supply for the Project and this WSA focuses on the adequacy of the Main Basin to supply sufficient amounts of water to meet the water demands of this Project. Additional water sources for

the PWS service area are not used. While there is a significant surplus of recycled water being produced by the Whittier Narrows Treatment Plant, the PWS of El Monte currently does not use recycled water as an additional water source because of the high cost of construction for a line to be built from the Whittier Narrows Treatment Plant. The use of reclaimed water in the Main Basin has been studied and concluded that the PWS could receive benefits from a recycling plant to reduce groundwater pumping from the Main Basin but cost was a key factor and therefore it is not currently used. The various water districts including the Upper San Gabriel MWD, are currently seeking funding for the construction of additional recycled water pipelines to serve El Monte.

### **4.3.3 Conclusions**

Based on the information and findings documented in this WSA, there is substantial evidence to support a determination that there will be sufficient water supplies to meet the demands of the Project. This is based on the volume of water available in the Main Basin and the fact that the City of El Monte Water Department has existing water amounts, rights and contracts to meet future demand as needed over time, and has committed sufficient resources to implement the water management programs developed by the Long Beach Judgment and Main Basin Judgment. The projected demand for this Project will account for only 14% of the total projected demands of the City of El Monte Water Department in 2010 and 13% in 2025. No shortages are anticipated within the City of El Monte Water Department service area in average/normal year, single dry year and multiple dry year scenarios for the next 20 years.

## **5.0 Water Supply verification (WSV)**

### **5.1 GENERAL**

As discussed previously, this Project is subject to a Water Supply Verification (WSV) as outlined in Government Code Section 66473.7.

### **5.2 WATER SOURCE**

The water supply for this Project is the groundwater from city wells which pump out of the San Gabriel Main Basin.

### **5.3 SUPPORTING DOCUMENTATION**

Government Code Section 66473.7 (c) permits the use of an UWMP, the Project's WSA, and other acceptable water supply reliability information.

This WSV relies on City of El Monte 2002 Water Master Plan, and City of El Monte 2005 Urban Water Management Plan.

## **5.4 FACTORS OF RELIABILITY**

### **5.4.1 General**

Government Code Section 66473.7(a) requires that all of the following factors be considered: (1) The availability of the supply over the last 20 years; (2) the applicability

of an urban water shortage contingency found in the UWMP; (3) the reduction of water supply to a specific user by ordinance or resolution; and (4) the reasonable amount of water that can be relied upon from specified supply projects such as the State Water Project (SWP) and Colorado River agreements.

#### **5.4.2 Historical Availability of Supply**

The El Monte UWMP reviews the historical use of the groundwater from 1975 to 2004. The historical groundwater use by the PWS had averaged about 3,000 ac-ft/yr. Historically the PWS has always had enough groundwater to supply the service area demand. The demand of this project is not expected to exceed the current supply.

#### **5.4.3 Water Shortage Contingency**

The El Monte WMP and El Monte UWMP determined that there is no need for a water shortage contingency in the foreseeable future.

#### **5.4.4 Reduction of Water Supply**

There will not be a reduction of water supply to any user due to this Project.

#### **5.4.5 SWP and Colorado River Water**

The Quantification Settlement Agreement (QSA) and other agreements have been signed that will provide additional Colorado River and SWP water to the valley through the Metropolitan Water District of Southern California's supplemental water facilities. The City Water Department is a sub-agency to the Upper San Gabriel Municipal Water District, which is a member of MWD. Although this imported water may not directly affect this Project, it will be used to recharge the Main Basin. Bolstered by the recently signed agreements, the Main Basin has sufficient storage to meet future demands.

### **5.5 IMPACTS ON OTHER PROJECTS**

This Project is not within the scope and range of the 2005 El Monte UWMP, but based on the WSA in section 4.0 of this report, this Project will not have an impact on residential, commercial or industrial users. In addition, this Project will not affect the water supply for any lower-income housing projects.

### **5.6 RIGHTS TO GROUNDWATER**

As stated in the WSA, the Main Basin has been adjudicated. The City of El Monte Water Department has the right to extract the groundwater as required to supply this Project.

### **5.7 VERIFICATION**

This document verifies the water supply for the Project as required by California Government Code 66473.7

**List of acronyms**

AC-FT	Acre Feet
AC-FT/YR	Acre-Feet per Year
CEQA	California Environmental Quality Act
DWR	California Department of Water Resources
WMP	Water Master Plan
GPD	Gallons per Day
GPM	Gallons per Minute
MGD	Million Gallons per Day
MWD	Metropolitan Water District of Southern California
PWS	Public Water System
QSA	Quantification Settlement Agreement
SIWSC	Supplemental Imported Water Supply Charge
SWP	State Water Project
USGMWD	Upper San Gabriel Municipal Water District
UWMP	Urban Water Management Plan
WSA	Water Supply Assessment
WSV	Water Supply Verification