

### 3.1.8 Water Supply

#### 3.1.8.1 Existing Conditions

The project site currently receives water from two sources, the Rainbow Municipal Water District (RMWD) and on-site wells. An existing RMWD pipeline currently provides service to the site. The RMWD has provided a water availability letter indicating the project site is located within RMWD and has adequate water to serve the project.

There are five existing wells on the project site that have been used to provide water for the ongoing agricultural operations (Figure 3.1.8-1). Four of these wells (future Lots 2, 5, 15, and 16) have been in operation for a number of years and a fifth well (future Lot 4) has recently been brought into operation. Well records for the four wells indicate they have consistently produced 161 acre-feet of water annually over the four year period from January 2005 through the end of December 2008. All five of these wells will be in an easement and operated for agricultural use of the project site under the Agricultural Open Space Maintenance Agreement, described in page 2.2-17 of the Environmental Impact Report (EIR). The well water will be used, first, to provide water for the 22.6-acre Agricultural Open Space easement on-site. Water from the five wells beyond that needed for the Agricultural Open Space easement will be used as a source of water for agricultural areas retained on-site outside the easement. The Covenants, Conditions, and Restrictions (CC&Rs) for the project, if in force, will also include requirements that wells be used first to water the 22.6-acre Agricultural Open Space Easement and then for other agricultural uses on site. Water from the RMWD will be used for residential needs and for agricultural areas that are not using well water.

A nitrate assessment completed for the project in July 2003 determined that nitrate concentrations in the wells complied with Department of Health Services (DHS) drinking water standards for nitrate and with the California Regional Water Quality Control Board (RWQCB) Basin Plan groundwater quality objectives for nitrates.

#### San Diego County Water Authority Water Supply and Demand

The San Diego County Water Authority (SDCWA) is the regional supplier of water in San Diego County to its member agencies. On November 17, 2005, the SDCWA adopted its most recent Urban Water Management Plan (UWMP) evaluating both water supply and water demand for the San Diego region. The adopted 2005 UWMP projects both water demands for the San Diego region and water supplies through 2020 and identifies existing and projected supplies to meet those demands in average, single-dry and multi-dry years.

In 2008, the SDCWA adopted a Model Drought Response ordinance. On April 23, 2009, the SDCWA adopted Level 2 Drought Conditions. This will result in an 8 percent cut-back in existing water usage for member agencies.

Historically, the SDCWA purchased all of its water from the Metropolitan Water District (MWD) for distribution to its member agencies. However, the SDCWA began aggressive steps to diversify the region's water sources and reduced dependence on the MWD in the early 1990s. In 2004, the SDCWA completed a Regional Water Facilities Master Plan defining the regional facilities needed to meet water demands within its service area through 2030. As a result, the SDCWA more than doubled its capital improvement plan from more than \$1.3 billion to more than \$3.19 billion dollars for projects ranging from seawater desalinization to new pipelines and pump stations, a water treatment facility,

improvements to the existing water delivery system, the All-American and Coachella Canal Lining Projects, and projects to increase storage capacity throughout San Diego County.

The SDCWA's 2005 UWMP indicates that the San Diego Region has conserved an average of 40,500 acre-feet per year of water over the last 5 years. Sections 4 and 5 of the SDCWA's 2005 UWMP evaluate both existing and projected water supply sources available for the San Diego Region. Section 8 of the SDCWA 2005 UWMP evaluates water supply reliability in average, single-dry and multiple-dry years. Based on the SDCWA's water supply reliability assessment, the SDCWA concludes that if the SDCWA and member agency water supplies are developed as planned, no water shortages are anticipated within the SDCWA service area under average, single-dry or multiple-dry years through 2030. The UWMP also notes that the SDCWA is pursuing development of additional storage programs, additional seawater desalinization, conservation programs and groundwater sources. According to the SDCWA, a combination of storage and new supplies will provide a reliable solution to potential water supply risks associated with dry periods.

### Rainbow Municipal Water District Water Supply and Demand

The water supply for the project is provided by RMWD. In 2005, RMWD completed its UWMP which remains the effective UWMP evaluating both water supply and demand within RMWD's jurisdictional boundaries. The RMWD serves the unincorporated communities of Rainbow, Bonsall and a portion of Fallbrook, covering approximately 49,800 acres. RMWD receives water from the SDCWA through nine aqueduct connections located throughout RMWD's service area. RMWD has also entered into a contract with Poseidon Resources to purchase 7,500 acre-feet per year of water from their desalinization plant being constructed in the City of Carlsbad. This contract will provide the RMWD with approximately 29 percent of its peak water demand need of 25,849 acre-feet.

In 2004, approximately 72 percent of the RMWD water demand was used for agriculture. The remaining supply was used for domestic purposes. RMWD's projections indicate a steady reduction of agricultural water used and a steady increase in domestic water use.

During normal water supply years, the RMWD UWMP projects water demand within the District with conservation ranging from 25,849 acre-feet in 2010 to 17,506 acre-feet in 2030. Table 13 of the RMWD UWMP indicates the supply available to RMWD will meet this demand for each of the five year periods to 2030. During single dry years, RMWD projects water demands ranging from 27,735 acre-feet in 2010 to 18,646 acre-feet in 2030. Table 14 of the RMWD 2005 UWMP indicates the supply available to RMWD can meet these demands for each of the five year periods measured. During multiple dry years, RMWD demand ranges from 24,664 acre-feet in 2008 to 19,558 acre-feet in 2028. Table 15 of the RMWD UWMP indicates that the supply available to RMWD is adequate to meet this demand for each of the years shown from 2006 through 2028.

### RMWD Ordinance 08-01

At their April 2009 Board Meeting, RMWD declared a Drought Response Level 2 in accordance with Ordinance 08-01. During a Drought Response Level 2 Condition or higher, the water conservation measures and water use restrictions established by Ordinance 08-01 are mandatory and violations are subject to criminal, civil, and administrative penalties. Level 2 restrictions include limiting irrigation to more than three days per week, watering no more than 10 minutes per day, and repairing leaky irrigation systems. Additionally, the Ordinance states that upon the declaration of a Drought Response Level 2 condition, no new potable water service shall be provided, no new temporary meters or

permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, will serve letters, certificates, or letters of availability) shall be issued, except under the following circumstances: (1) a valid, unexpired building permit has already been issued for the project; or (2) in the opinion of the RMWD Board of Directors the project is necessary to protect the public's health, safety, and welfare; or (3) the applicant provides substantial evidence of an enforceable binding commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of RMWD.

Existing RMWD policies under its Drought Response Ordinance permit the exchange or swapping of existing agricultural meters with domestic meters of similar capacity. The project site presently includes two agricultural meters, a 3-inch meter and a 4-inch meter. A written communication with Brian Lee, RMWD Engineer, on October 27, 2009 indicates RMWD will allow the project's two agricultural meters to be swapped for twenty-nine 1-inch meters, since a 3-inch meter is equivalent to nine 1-inch meters and a 4-inch meter is equivalent to twenty 1-inch meters. These twenty-nine 1-inch meters will be adequate to serve the 28 residential home sites and will provide one additional meter for the common area landscaping. This meter swap will provide adequate water service from RMWD to serve the project.

### Project Water Demand

At present the project site is being used for agricultural operations consisting principally of citrus, avocado, and cut flower products. Historical water usage for these agricultural operations has been maintained for both well water and water use from the RMWD. Water used for these agricultural operations from January 2005 through December 2008 from both the RMWD and the on-site wells is shown on Table 3.1.8-1 in both gallons per year and acre-feet per year (AFY).

As Table 3.1.8-1 indicates, historic agricultural water used for the project both from wells and RMWD water has been relatively consistent on a yearly basis for the years 2005 through 2008. Approximately 318.2 acre-feet of water were used in 2005, 317.1 acre-feet in 2006, 320.6 acre-feet in 2007 and 278.5 acre-feet in 2008. The reduced water demand in 2008 reflects the greater conservation efforts undertaken on the project site and a cut back in agricultural water mandated by the RMWD in 2008.

As Table 3.1.8-1 indicates, historic water use on the project site for agricultural operations has averaged 308.6 acre-feet per year. During the period from 2005 through 2008, the average acres on-site in agricultural production have included approximately 86.9 acres of the 92.8-acre site. This results in an average water usage per acre for on-site agricultural operations from 2005 through 2008 of 3.55 acre-feet per acre.

The project will result in the development of 28 single-family homes on parcels ranging in size from 2.1 to 5.9 acres. Data maintained over a number of years for residential water use have established that a family of four typically uses one acre-foot of water per year. This results in the use of 28 acre-feet of water per year for the 28 residential home sites proposed as part of the project. The project will also maintain up to 58.5 acres of existing agricultural production on-site. The 58.5 acres includes 22.6 acres preserved within the Agricultural Open Space and an additional 35.9 acres of agriculture that will not be removed during project construction. Based on the average use of 3.55 acre-feet of water for agricultural operations on-site for the 4 years from 2005 through 2008, this will result in an additional 208 acre-feet of water use per year for the potential 58.5 acres of agricultural uses (3.55 acre-feet of water per acre x 58.5 acres = 208 acre-feet of water used for agricultural operations as part of the project). Collectively, the total estimated water demand for the project is 236 acre-feet per year.

Implementation of the project will, therefore, reduce the overall water demand when compared with existing water usage for agricultural operations on-site. Over the 4 years from 2005 through December 2008, the project site has used on average 308.6 acre-feet of water whereas the project is not expected to use more than 236 acre-feet of water per year, a reduction of 72.6 acre-feet per year. Since each acre-foot equates to 325,850 gallons of water, the project will reduce the existing water demand on-site by approximately 23,656,710 gallons per year when compared to the existing agricultural operations.

As indicated in Table 3.1.8-1, for the period from January 2005 through December 2008, the existing agricultural operations on-site have used an average of 147.6 acre-feet of water per year from the RMWD. However, this average understates the existing on-site water demands from RMWD since RMWD curtailed the availability of agricultural water in 2008 causing a substantial reduction in that year of available water to serve the existing agricultural uses. During more normal times when the RMWD has not restricted water usage for agricultural operations, on-site water use from RMWD has averaged 157.6 acre-feet per year for the 3 years from January 2005 through December 2007. This is more representative of historic on-site water usage from the RMWD.

The five existing on-site wells will be used to water the 22.6 acres of agricultural area associated with the Agricultural Open Space. Additional available water from the on-site wells will be used to irrigate remaining agricultural uses on-site to the extent of remaining supply. To the extent that water from the wells is insufficient to water the remaining agricultural uses on-site, water for these agricultural operations would be provided by the RMWD. However, in order to evaluate a worst-case use of RMWD water for the agricultural operations remaining as part of the project, it has been assumed that water from the RMWD will serve the remaining 35.9 acres of agricultural uses outside the agricultural preserve area. Under this worst case scenario, based on the historic use of 3.55 acre-feet of water for each acre of agricultural operations shown on Table 3.1.8-1, 127.4 acre-feet of water would be needed from RMWD to serve uses outside of the Agricultural Open Space that are likely to continue in agricultural production (35.9 acres x 3.55 acre-feet of water per acre = 127.4 acre-feet). The 28 proposed home sites will use 28 acre-feet of water per year resulting in total project demand from the RMWD of 155.4 acre-feet per year. Accordingly, under a worst case analysis, the project will result in a slight reduction in water usage from the RMWD when compared to the existing agricultural operations on-site. Historical water use for the project site from the RMWD for the period from January 2005 through 2007 has averaged 157.6 acre-feet per year. The project will use 155.4 acre-feet of water from the RMWD per year or a reduction of approximately 2 acre-feet per year. As previously noted, the RMWD has provided a water availability letter indicating the project site is located within the RMWD and it has adequate water to serve the project and has recently indicated it will allow a swap of the two existing agricultural meters for twenty-nine 1-inch meters, which will be adequate to serve the project.

The five existing wells on-site have the capacity to produce approximately 201 acre-feet of well water per year. Based on the use of 3.55 acre-feet of water for each acre of agricultural operations on-site, these 201 acre feet of water would have the capacity to accommodate approximately 56.6 acres of agricultural uses on-site. Under this scenario, approximately 1.9 acre feet of RMWD water per year would be needed to water the remaining 58.5 acres of agricultural uses not disturbed by project construction (58.5 acres - 56.6 acres = 1.9 acres). When added to the use of 28 acre-feet of water per year for the 28 home sites, this results in total project demand from the RMWD under this scenario of 29.9 acre-feet per year which is well below the historic use of water from the RMWD on-site which is averaged to 157.6 acre-feet per year for the 3 years from January 2005 through December 2007. Under this scenario, the project would use approximately 127.7 acre-feet less per year than historic water use from the RMWD on-site. Under this scenario, there would be a substantial decrease in the amount of water needed from the RMWD on a yearly basis.

### ***3.1.8.2 Analysis of Project Impacts and Determination of Significance***

#### Guideline for the Determination of Significance

The project would result in a significant water supply impact if the RMWD determined it did not have adequate water to serve the project or the project results in a significant increase in demand for water service that cannot be satisfied from on-site wells and the RMWD. This guideline is taken from the State *California Environmental Quality Act (CEQA) Guidelines*, Appendix G.

#### Analysis

As noted in Section 3.1.8.1, the most recent UWMP completed by both the SDCWA and RMWD indicate they have adequate supplies to meet future demands for water service in both the San Diego region and in the Rainbow service area. As discussed in more detail in Section 3.1.8.1, the existing agricultural uses on the project site have used approximately 308.6 acre-feet of water per year on average for the periods from 2005 through 2008. The project will use a maximum of 236 acre-feet of water per year for the 28 home sites and the maximum 58.5 acres of agricultural production on-site resulting in a reduction of the existing on-site water demand from all sources by 72.6 acre-feet per year. This translates into a saving of approximately 23,656,710 gallons of water per year when compared to the existing water demand on the project site from all sources.

The project's water usage from the RMWD will also be less than the amount of water being used from the RMWD for the existing agricultural operations on-site. During normal times when the RMWD has not restricted water usage for agricultural operations, on-site water use from the RMWD has averaged 157.6 acre-feet per year for the 3 years from January 2005 through December 2007. Under the worst case scenario, the project will use approximately 155.4 acre-feet of water each year from the RMWD or a reduction of approximately 2 acre-feet per year. Assuming production capability of the five wells is used for agricultural areas on-site outside the agricultural preserve area, the project will use approximately 127.7 acre-feet less of water from the RMWD than the historic RMWD water use. The RMWD has determined that it has adequate water to serve the project and has agreed to swap the two existing agricultural meters for 29 one-inch meters which are adequate to serve the 28 residential home sites and the 35.9 acres of agricultural uses that are likely to remain in agricultural production that will not be served by on-site wells (RMWD 2009b). Accordingly, the project is projected to have no impact on water supply impact and no mitigation is required.

### ***3.1.8.3 Cumulative Impact Analysis***

As discussed in Section 3.1.8.2, the project will reduce the overall water demand when compared with the existing water usage for agricultural operations on the 92.8-acre project site. For the 4 years from 2005 through December 2008, the project site has used an average of 308.6 acre-feet of water, whereas the project will use a maximum estimated 208 acre-feet of water per year, a reduction of 72.6 acre-feet per year. Since each acre-foot equates to 325,850 gallons of water, the project will reduce the existing water demand on-site from all sources by approximately 23,656,710 gallons per year, when compared to the existing on-site condition. Under the worst case scenario project, water usage from the RMWD will also be reduced by approximately 2 acre-feet per year, when compared to the existing agricultural operations. Since the project is expected to reduce the water supply needs on-site when compared to the existing agricultural operations, it cannot contribute to cumulative water supply impacts. Accordingly, the cumulative water supply impacts are not significant and no mitigation is required.

Cumulative water supply impacts of the project in combination with existing and future water users are analyzed as part of the UWMP prepared by the SDCWA and the RMWD. The RMWD UWMP indicates that RMWD has adequate water supply during normal, single dry, and multiple dry years to accommodate all of its present and future users through the year 2030. The SDCWA UWMP also indicates it has adequate water to serve the San Diego region through the year 2030 even during multiple dry years. The RMWD is a signatory to the Poseidon contract which will provide RMWD with 7,500 acre-feet of water from the Poseidon desalinization plant. The contract will provide RMWD with approximately 29 percent of their peak water demand need of 25,846 acre-feet. By the year 2030, this contract will provide RMWD with approximately 40.2 percent of its anticipated demand need of 18,646 acre-feet even in the dry years. Permits for the Poseidon project have been recently approved by the State Lands Commission and the California Coastal Commission. In addition overall water usage for the project is substantially less than the existing agricultural water demand on-site so the project does not create any cumulatively considerable water supply impacts. Accordingly, no cumulatively significant water supply impact is expected and no mitigation is required.

The Accretive Plan Amendment (PAA09-007) was submitted on November 2, 2009 requesting permission to process a general plan amendment and specific plan for a master planned community in the Valley Center Community Planning Area. The plan consisted of a maximum of 1,746 dwelling units, a school, a neighborhood-serving commercial village center with retail uses and an active park on 416 acres. This PAA request was approved by the Planning Commission on December 17, 2010. As proposed, the project would require approval of an amendment to the County General Plan and approval of a specific plan, and a tentative and final subdivision map. The action makes no judgment on the project, but simply clears the way for it to be considered by the County. The project would still require public hearings, environmental review and eventually consideration and approval by the County Board of Supervisors. At this juncture, no applications have been submitted to the County of San Diego on the Accretive project and no environmental review has been commenced. Accordingly, the Accretive project is not a probable future project at this time.

Nonetheless, the Accretive project has been analyzed in this EIR based upon the limited information currently available to determine if it would alter any of the cumulative water supply impact analysis. The Accretive project consists of approximately 416 acres of land located approximately 3,000 feet east of I-15 with the northern portion of this land transecting West Lilac Road and Valley Center. The project is located approximately one mile east of the project site in the Valley Center Community Planning Area and is separated from the project site by both Old Highway 395 and I-15.

Water service for the proposed project will be provided by the Rainbow Municipal Water District (RMWD). Water service for the Accretive project will be provided by the Valley Center Municipal Water District (VCMWD). Since water service for the two projects are being provided by two separate water districts, the Accretive project does not have the potential to create any cumulatively significant water supply impacts to the RMWD when considered in combination with the project. In addition, the VCMWD has adopted a drought ordinance that will require Accretive to implement other sources of water to replace whatever water it uses so as to achieve a net zero loss of water within the VCMWD. Since the Accretive project will be required to implement new sources of water equal to its water demand, the Accretive project does not have the potential to create any cumulatively significant water supply impacts. No cumulatively significant water supply impacts are therefore anticipated from any future development of the Accretive site.

### *3.1.8.4 Significance of Impacts Prior to Mitigation*

Based upon the analysis presented in Section 3.1.8.2 and 3.1.8.4, the project will not impact water supply or demand either individually or cumulatively and no mitigation is required.

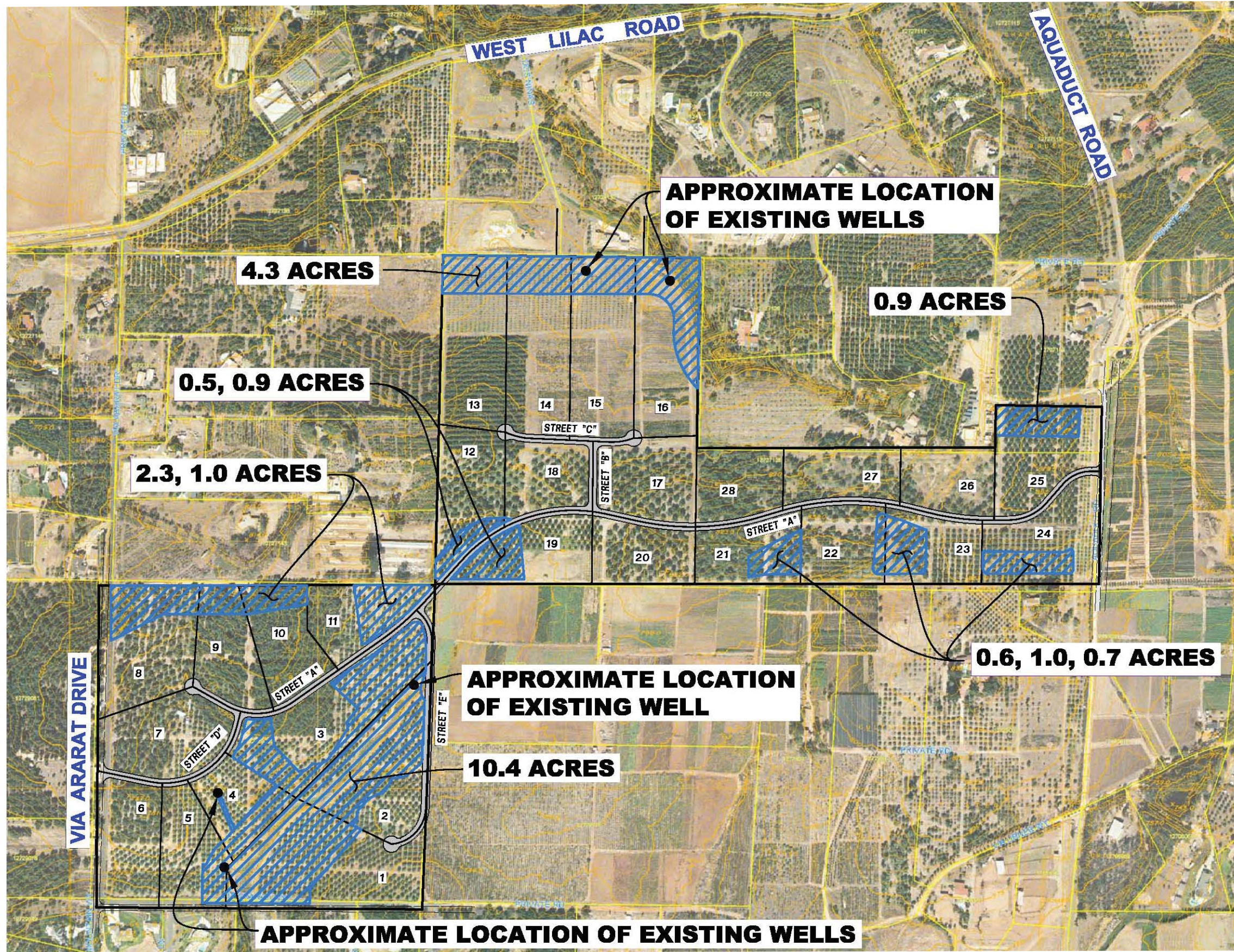
### *3.1.8.5 Conclusion*

The project will not impact water supply or demand either individually or cumulatively and no mitigation is required.

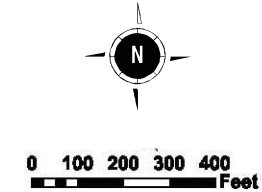
**This page intentionally left blank.**



Source: Walsh Engineering | G:\Projects\43161\_West\_Lilac\_Subdivision\graphics\docs\Figure3.1.8-1\_Wells\_and\_Agriculture\_Exhibit.ai | Last Updated: 02-02-10



Additional agricultural areas may receive well water through HOA agreement.



**LEGEND:**  
 PROPOSED AGRICULTURAL OPEN SPACE EASEMENT

**AG AREA SERVED BY WELLS (ACRES):**

4.3
0.9
0.5
0.9
0.6
1.0
0.7
2.3
1.0
10.4
<b>TOTAL: 22.6</b>





**TABLE 3.1.8-1  
Historic Annual Water Usage  
Project Site (gallons/AFY)**

Water Type	2005		2006		2007		2008	
	Gallons	AFY	Gallons	AFY	Gallons	AFY	Gallons	AFY
Well Water	52,462,080	161.0	52,462,080	161.0	52,468,080	161.0	52,462,080	161.0
District Water	51,234,260	157.2	50,856,520	156.1	52,009,936	159.6	38,279,648	117.5
<b>Total Water</b>	<b>103,696,340</b>	<b>318.2</b>	<b>103,318,600</b>	<b>317.1</b>	<b>104,472,016</b>	<b>320.6</b>	<b>90,741,728</b>	<b>278.5</b>

**Source:** RMWD and well records for project site 2005-2008

Average acre-feet year: 308.6

Average acres production 2005-2008: 86.9

Average Water Usage Per Acre: 3.55 acre-feet per acre

Average RMWD Water Use: 147.6 acre-feet per year

Average RMWD Water Usage 2005-2007:157.6 acre-feet per year.

AFY = Acre Feet per Year

**This page intentionally left blank.**