



Appendix H

SB 610 Water Supply Assessment

CITY OF EL PASO DE ROBLES
ASSESSMENT OF WATER SUPPLY

Water Code §10910 et seq.

To: City of El Paso de Robles
1000 Spring Street
Paso Robles, CA 93446

Project Information

Project Title: Chandler Ranch Area Specific Plan

- Residential: accommodates up to 1,439 new dwelling units
- Commercial/Business: anticipates up to 280,500 Square Feet

Assessment of Availability of Water Supply

The following determination has been made regarding the above-described project:

- The projected water demand for the project was included in the City's most recently adopted urban water management plan.
- Based on additional sources of information, a sufficient water supply is available for the project. The total water supplies available to the City during normal, single-dry, and multiple-dry years within a 20-year projection will meet the projected water demand under the project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural uses.
- A sufficient water supply is not available for the project. *[Plan for acquiring and developing sufficient supply attached. Water Code § 10911 (a)].*

The foregoing determination is based on the following Water Supply Assessment Information and supporting information in the records of the City of Paso Robles.

Signature

Date

Title

WATER SUPPLY ASSESSMENT INFORMATION

This water supply assessment is provided for the proposed Chandler Ranch Specific Plan in the City of Paso Robles, pursuant to the requirements of Section 10910 of the State Water Code, as amended by Senate Bill No. 610, Chapter 643 (2001).

BACKGROUND

Senate Bill No. 610 (Costa) became effective January 1, 2002. The bill requires a city or county which determines that a “project” (as defined in Water Code § 10912) is subject to the California Environmental Quality Act (CEQA) to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment. The assessment is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts. The assessment must be approved by the governing body of the public water system supplying water to the project. If the projected water demand associated with the project was included as part of the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in the water supply assessment. The bill requires the city or county, if it is not able to identify any public water system that may supply water for the project, to prepare the water supply assessment after a prescribed consultation.

If the public water system concludes that water supplies are, or will be, insufficient, plans for acquiring additional water supplies are required to be submitted to the city or county. The city or county must include the water supply assessment in any environmental document prepared for the project pursuant to the act. It also requires the city or county to determine whether project water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

PROJECT SUMMARY

The proposed project, known as the Chandler Ranch Area Specific Plan (hereafter referred to as the “Specific Plan”), is a specific plan that gives detailed guidelines for the development of the Chandler Ranch Area. The City’s General Plan requires that a specific plan be adopted for the area before any portion can be developed. The main features of the Specific Plan include hillside and open space areas, single and multi-family residential neighborhoods, trails providing pedestrian and bicycle access to the neighboring Barney Schwartz Park, and areas designated for commercial use.

The Chandler Ranch Area Specific Plan provides policies and programs that will guide future annexation and development of the area. The Specific Plan designates open space, residential, mixed/commercial uses, school site, roads, and pedestrian and bike paths. The proposed Specific Plan would include Table 1 below. It should be emphasized that the buildout information is not a development plan, but is to illustrate the long-term development potential of the site.

Table 1. Specific Plan Land Use Designations and Buildout Summary

Subarea	Acres	Land Use Designations	Maximum Dwellings ⁸	Maximum Floor Area
1	64.0	RSF-1	50	-
2a	26.9	RSF-3	37	-
2b	4.0	RSF-6	24	-
3a	29.5	RSF-6	138	-
3b	30.0	RSF-2	50	-
4	30.0	POS	-	-
5	46.5	POS	-	-
6	33.7	RMF-8	222	-
7	54.5	RSF-4	141	-
8	46.2	RSF-3	100	-
9	42.3	RSF-4	95	-
10	18.2	PF	note 2	-
11	7.7	RSF-4	31	-
12	30.6	RSF-6	122	-
13	20.6	RSF-4	82	-
14	25.2	RSF-6 / NC ³	150	19,000
15	0.7	RMF-9 or NC ⁴	note 4	14,000
16	12.3	RMF-9	139	-
17	9.0	RSF-6	90	-
18a	4.0	CS	-	46,000
18b	7.0	CS	-	104,000
18c	4.0	POS	-	-
19a	3.1	CS	-	20,000
19b	3.5	CS	-	62,500
19c	3.4	CS	-	15,000
19d	3.1	POS	-	-
20	220.3	POS	-	-
Summary and Total				
Residential	429.9	-	1,439	-
Commercial	24.3	-	-	280,500
Public Facility	18.2	-	-	-
Open Space ⁵	303.9	-	-	-
ROW ⁶	50.4	-	-	-
TOTAL ⁷	826.7	-	1,439	280,500

1. Within Jonatkim, developed portion of these areas includes a total 71.9 acres of revegetated open space.

2. School site; but if school district does not purchase, then may be built with up to housing transferred from other areas, provided Jonatkim properties so not exceed 825 dwelling units total, and City finds housing compatible with adjacent uses

3. Includes up to 2.6 acres Neighborhood Commercial, with the remainder designated as RSF-6.

4. Can be developed as housing or commercial at Planning Commission discretion; housing would come from area 16 total

5. Includes all designated Open Space. Up to 30 acres of this total in subarea 4 may be developed with an aquatic center, and 2 acres within subarea 5 could be developed with a fire station. Total does not include revegetated and graded open space within developed areas, which totals 71.9 acres.

6. Includes only major rights-of-way for which associated property owner has development responsibility. Local roads not included in total.

7. Includes 0.8 acres of an abandoned Linne Road, which would be transferred to subarea 17 for development.

8. Jonatkim total may not exceed 825 dwelling units among all areas, even though figures add to 857. Dwelling unit potential may be transferred from one area to another, not to exceed the total shown for any given area, subject to Planning Commission approval.

WATER SUPPLY ASSESSMENT

The following is a discussion of local water supply planning as it relates to the applicable requirements of Section 10910 of the State Water Code.

It should also be noted that the City's General Plan, adopted in December 2003, accounted for development of the magnitude anticipated under the Chandler Ranch Area Specific Plan. A Water Supply Assessment was performed for the General Plan at that time, and it was found that there is sufficient water supply to accommodate development under the General Plan, which by extension, includes the Chandler Ranch Area Specific Plan as proposed. The following assessment provides additional detailed documentation to support this finding.

SB 610 APPLICABILITY

Water Code Section 10910(a) states that projects, as defined in Section 10912, are subject to the requirement to prepare a water supply assessment. A "project" under Section 10912 includes "a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 unit dwelling project." This Specific Plan proposes 1,439 dwelling units; therefore, the requirements of Section 10910 of the California Water Code apply to this proposed project.

WATER SUPPLIER

Water Code Section 10910(b) requires the identification of the public water system that may serve the project. Water will be provided to the Chandler Ranch area by the City of Paso Robles administers and operates water production, storage and conveyance services, including wells and reservoirs, through its own municipal system. The City derives its water from two sources, the Salinas River alluvial flow and the Paso Robles Groundwater Basin, which is a regional aquifer. In the Paso Robles area, the two sources are replenished primarily from uncontrolled runoff originating from several major and minor stream tributaries of the Salinas River, from wastewater treatment plant discharge of effluent into the Salinas River, and to a lesser extent, direct infiltration from precipitation and irrigation.

UWMP APPLICABILITY

Water Code Section 10910(c)(1) requires a determination of whether or not the Specific Plan was included in the most recently adopted urban water management plan. This proposed Specific Plan was not included in the current urban water management plan (November 2000, prepared by Todd Engineers). The November, 2000 Urban Water Management Plan was based on the previous General Plan and did not include the Chandler Ranch Area Specific Plan.

CHANDLER RANCH SPECIFIC PLAN WATER SUPPLIES AND DEMAND

Because the existing UWMP does not account for water demand associated with development accommodated by the proposed Specific Plan, this information must be documented by other means. In this case, an assessment of anticipated water supply and demand was prepared by Penfield & Smith in 2005 and is based on the following information sources:

- Urban Water Management Plan (November 2000; prepared by Todd Engineers)
- City of Paso Robles Water Master Plan (1993)
- City of Paso Robles Water Master Plan Update (1995)
- Fugro West, Inc. and Cleath and Associates.
 - *Geologic and Hydrogeologic Investigation of the Paso Robles Groundwater Basin, 2002 Final Report.*
 - *Interim Report Task 2, Basin Definition, Paso Robles Groundwater Basin Study.* June 2001.
 - *Interim Report, Task 3, Aquifer Characterization, Paso Robles Groundwater Basin Study.* September 2001.

Existing Water Supply

The total estimated groundwater in storage within the Paso Robles Groundwater Basin is approximately 30,500,000 Acre Feet (AF) and the Basin is operating well below its safe-yield. In the year 2000, groundwater pumpage in the Paso Robles Groundwater Basin was approximately 82,638 AFY, compared with the perennial yield estimate of 94,000 AFY. The Nacimiento water supply project is being developed to serve the future needs of the North County cities, San Luis Obispo, Cayucos, and several unincorporated areas in San Luis Obispo County. Since 1959, the San Luis Obispo County Flood Control and Water Conservation District has had rights to 17,500 acre-feet per year (AFY) of Nacimiento water for use in San Luis Obispo County. The County is now moving forward on the 50-mile pipeline project to deliver Nacimiento water to the 18 participating agencies and cities. Based on the 1941 Salinas Withdrawal Permit the City could potentially double the current ground water production from four cubic feet per second to a maximum of eight feet per second.

Currently, City wells furnish nearly all of the water supply for urban use, and a limited number of private wells serve agricultural uses within the city limits. Sixty-two County area parcels are served with City water. Since the 1980s, the City has not offered City water outside City boundaries. Agricultural lands outside City limits use private wells. However, if agricultural lands are present within City limits, they need City Council approval to retain private wells for agricultural use. Golf courses within the City's limits use private wells for irrigation practices, which require back flow devices in order to prevent contamination into City water. These golf courses use City water for services other than irrigation. The City owns fourteen active wells and one standby well. The fourteen active wells combined generate an average of 11,000,000 gallons per day. The Paso Robles Groundwater Basin draws 6,500,000 gallons of water per day to the City,

and the Salinas River Underflow draws approximately 4,500,000 gallons of water per day to the City. City water undergoes chlorination at the well site prior to delivery¹.

According to the General Plan, the existing water supply system has the potential to provide approximately 14,000 AFY based on current permitting and water rights, however the current system can only produce approximately 8,000 AFY. The Paso Robles Public Works Department indicates that, based on recent peak summer demands, the current water supply is marginally adequate for the current peak water use demands. During the summer of 2004, under peak conditions the water supply and storage system were unable to meet the demands, and only fire storage was maintained. Therefore, the expansion of the City's water system would be needed to serve the Chandler Ranch area. The additional water supply needed for the Chandler Ranch area appears to be available from the development of additional ground water sources. Improvements to the water system would include construction of onsite and offsite water mains; development of the existing Thunderbird wells or onsite wells; construction of onsite or offsite storage tank(s); upgrade of existing booster station(s) and/or installation of onsite booster station(s).

Chandler Ranch Specific Plan Groundwater Basin Characterization. The existing terrain of the Chandler Ranch Specific Plan Area ranges in elevation from approximately 780 feet at the lowest point to approximately 985 feet at the highest ground. The relatively large elevation differences are accommodated by two separate water service zones. The lower zone is the "Main East Water Zone" and the higher is the "Orchard Bungalow Water Zone". The Main East Water Zone is served by gravity from the two existing 4 million gallon Golden Hill Reservoirs located approximately 100 feet east of the specific plan area, which have a high water elevation of 1001 feet and can supply the residences up to elevation 880 feet with an estimated water pressure of 45 psi or greater². The higher Orchard Bungalow Water Zone is expected to serve future residences in the specific plan area up to an approximate elevation of 930 feet. The Orchard Bungalow Water Zone is currently served with water from the existing Golden Hill Reservoirs with an existing booster pump³.

Other Existing water facilities in the vicinity of the Specific Plan area include a 12-inch water main on Union Road, a 16-inch main on Sherwood Road, and a 24-inch main on Golden Hill Road. Additional smaller (8-inch) water mains are located in tract 2281 (just south of area 2), which is located immediately southwest of the specific plan area, and on Gilead Lane.

Water Quality. In general, the quality of groundwater in the basin is relatively good, with few areas of poor quality and few major trends of ongoing deterioration of water quality. New wells will be tested and treated for unacceptable levels of total dissolved solids (TDS), chlorides, sulfur, manganese, iron and nitrates.

¹ Kelly Dunham, City of Paso Robles Water Division. 2002

² See Letter Report Water Service for Tentative Tracts 2281 and 2350, by Boyle Engineering, dated February 29, 2000.

³ See also the Engineering Analysis, Chandler Ranch Master Plan, by Cannon Associates dated April 5, 2000.

Groundwater Storage. Water stored in reservoirs is used to provide water to the City during peak demand periods. Reservoirs receive and store water during low demand periods. Storage also serves as an emergency source of water for firefighting and periods when pumping facilities are out of service. Storage provides flow equalization, fire flow augmentation, and emergency storage. The City has four reservoirs, as follows: the 4.0 MG West Side reservoir, located on 21st Street; the 0.15 MG Merryhill reservoir, and two Golden Hills 4.0 MG reservoirs, located between Golden Hill Road and Rolling Hills Road.

The city's water storage policy divides the available storage into 3 equal parts for emergency peak demands, fire flow, and normal operational use. The Paso Robles Public Works Department indicates that the current water storage and supply was marginally adequate for the current peak water use demands. During this last summer under peak conditions the water supply and storage system were unable to meet the demands, and only fire storage was maintained. With this consideration and based on comments by city staff, additional supply is required for the Chandler Ranch Specific Plan development. The City Water Master Plan provides a quantitative analysis that demonstrates that the City's water system is far below its estimated needed storage capacity. This analysis indicates that the East Side storage required (based on an intermediate City-wide population of 35,000) is approximately 16 million gallons (MG) compared to the current 12 MG.

Chandler Ranch Water Storage Calculation, as shown in Table 2, indicates that Chandler Ranch development is responsible for an additional 1.47 to 1.69 MG of storage. This volume was derived utilizing the City's criteria for storage defined in the City's Water Master Plan. The city has acquired/is considering property for four new water storage tanks to meet its storage needs with the Specific Plan Development paying its fair share.

Table 2. Estimated Water Storage Requirements

Method	Chandler Ranch Population ¹	Regulatory Storage (MG)	Emergency Storage (MG)	Fire Storage (MG)	Total Required (MG)
A	3886	0.63	0.58	0.36	1.57
B	3886	0.53	0.58	0.36	1.47
C	3886	0.75	0.58	0.36	1.69
D	3886	0.57	0.58	0.36	1.51

Source:

Boyle Memo Dated March 3, 2005 to John Falkstien

1) Chandler Ranch population estimate: 2.7 persons/dwelling unit x 1439 dwelling units = 3886 persons

2) See Methods A-D above for details

3) Commercial Consumption: 23.2 acres x 1,800 gpd/acre = 41,760gpd

A. 2000-2004 production data used to estimate the gross per capita consumption.

B. 2000-2004 production data used to calculate the residential per capita consumption

C. 1995 Water Master Plan to estimate gross per capita consumption.

D. 1995 Water Master Plan to estimate residential per capita consumption.

Water Balance. The hydrologic budget (or water balance) is simply a quantitative statement of the balance of total water gains and losses from the basin, and can be summarized by the following equation:

Inflow = Outflow (+/-) change in storage where Inflow equals the sum of: subsurface inflow; percolation of precipitation; streambed percolation; percolation of irrigation return water percolation of wastewater discharge; and imported water. Outflow equals the sum of: subsurface outflow; gross agricultural pumpage municipal; rural domestic and small commercial systems pumpage extraction by phreatophytes; and exported water.

Table 3. Chandler Ranch Groundwater in Storage 1980-1997

Subbasin/Area	Groundwater in Storage 1980 (acre feet)	Groundwater in Storage 1990 (acre feet)	Groundwater in Storage 1997 (acre feet)	Change in Groundwater in Storage 1980-1997 (acre feet)
Atascadero Basin	530,717	518,646	524,574	(6,143)
Creston Area	1,999,467	1,940,825	2,024,566	25,099
San Juan Area	4,139,380	4,057,769	4,133,876	(5,504)
Estrella Area	8,902,341	8,829,441	8,824,050	(78,291)
Shandon Area	7,625,594	7,627,854	7,639,123	13,529
Gabilan Area	5,458,171	5,462,096	5,457,080	(1,091)
Bradley Area	1,765,153	1,755,367	1,752,240	(12,913)
Basin Total	30,420,822	30,191,997	30,355,508	(65,315)

Source: Fugro West, Inc and Cleath and Associates, "Paso Robles Groundwater Basin Study", 2002 Final Report.

Although there have been fluctuations in the storage capacity of the basin, the net drawdown in the 17-year period from 1980-97 was 65,315 AF (Table 3). The average annual drawdown during this period was 3,842 AFY. Using this average to project drawdown in the 7-year period 1since that time (1998-2004), it is estimated that a total of 92,000 AF have been drawn down from the basin since 1980. Given a basin storage volume of approximately 30,500,000 AF, this deficit of 92,000 AF over the 24-year time period equals about 0.30% of the total groundwater in storage. It should be noted that this estimate is likely to be refined as a result of a comprehensive Water Master Plan the City is currently conducting, but which will not be completed until 2006.

Perennial Yield. The perennial yield of a basin is the rate at which water can be pumped from wells over a long-term without decreasing the groundwater in storage. Many definitions of perennial yield (or safe yield) tie the concept of basin yield to the rate of groundwater extraction that will not create an economic impact. The concept of perennial yield in this case is related to the natural rate of replenishment or recharge to the basin, such that there is no decrease in groundwater in storage.

This first approach is that the perennial yield is equal to the long-term recharge less the long-term discharge. The data suggest a perennial yield of the Paso Robles

Groundwater Basin of approximately 95,500 AFY. Discharge from the basin exceeded recharge by some 3,800 AFY over the base period, resulting in a "basin-wide" decline in water levels. Imbalances of pumping demand resulting from land use changes over the base period is apparent, which created pronounced lowering of water levels in some parts of the basin.

A second method to estimate the perennial yield of the Chandler Ranch Groundwater Basin is to compute the average annual total net discharge over a period when the net change of groundwater in storage was zero and when recharge was about equal to the long-term average.

This method, the so-called "practical rate of withdrawal" is a useful method so long as the coefficient of correlation between annual pumpage and storage changes is sufficiently robust and the calculated inflow and outflow values are relatively accurate. The intercept of zero storage change occurs at an annual pumpage value of about 93,500 AFY to 94,600 AFY, implying that net annual groundwater extractions at this approximate amount would produce no change of groundwater in storage.

Nacimientto Water Project. It should be noted that the City has also contracted for 4,000 AFY from the Nacimientto water project to augment its existing water supply, but there is sufficient capacity in the groundwater basin, as demonstrated in the following analysis, to meet the City's existing water supply needs for the foreseeable future.

WATER DEMAND UNDER THE CHANDLER RANCH AREA SPECIFIC PLAN

Summary. *Development under the Specific Plan update would increase urban water demand. However, the total estimated groundwater in storage within the Paso Robles Groundwater Basin is approximately 30,500,000 AF and the Basin is operating well below its safe-yield. In addition, the City is conducting a comprehensive Water Master Plan update, which is intended to project City-wide water needs based on General Plan buildout, which anticipates the Chandler Ranch Area Specific Plan. The Water Master Plan will refine the Water Supply Assessment conducted for the City's General Plan, and update its existing Water Master Plan. The result will be that the City's water supplies will be identified, including groundwater sources and participation in the Nacimientto Water Project, to ensure that there is sufficient water supply and storage to address potential future growth under the General Plan, including development within the Chandler Ranch area as envisioned.*

Future Demand. Table 4 provides estimated water use demands on an average day, peak hour and a peak day basis. Water demand from the Specific Plan would be generated from landscaping irrigation, residential use, and commercial uses. As noted in Table 4, it is anticipated that the Chandler Ranch development will require approximately 1.1 to 2.2 million gallons per day, or 1,237 AFY to 2,374 acre-feet per year (AFY).

Table 4. Estimated Water Demand in the Specific Plan Area

Area	Acreeag e	Land Use	Units	Population	Water EDU's	ADD (gpd)	PHD (gpm)	PDD (gpd)
1	63	Residential	50	135	-	35,100	107	73,710
2	22.3	Residential	61	165	-	42,822	130	89,926
3	41.1	Residential	188	508	-	131,976	403	277,150
4	10.0	Commercial	-	-	26	18,000	55	37,800
5	3.0	Pub Facility	-	-	8	5,400	17	11,340
6	33.7	Residential	190	513	-	133,380	408	280,098
7	46.2	Residential	141	381	-	98,982	302	207,862
8	46.2	Residential	100	270	-	70,200	215	147,420
9	27.0	Residential	95	257	-	66,690	204	140,049
10	18.2	School	-	-	47	32,760	100	68,796
11	7.7	Residential	31	84	-	21,762	66	45,700
12	44.1	Residential	205	554	-	143,910	440	302,211
13	25.0	Residential	66	178	-	46,331	142	97,297
14	16.0	Residential	83	224	-	58,226	178	122,359
15	1.3	Residential	NC	NC	-	-	-	-
16	14.1	Residential	139	375	-	97,578	298	-
17	12.4	Residential	90	243	-	63,180	-	-
18	11.0	Retail/Office	-	-	28	19,800	-	-
19	10.0	Commercial	-	-	26	18,000	19	12,852
Totals	485.4		1,439	3,885		1,104,138	3,083.91	2,119,484

Source: Penfield and Smith, October 2005.

Water EDU's = Equivalent Dwelling Units for Water Demand, correlation of Business/Commercial water use in gpd/acre to the number of residential dwelling units to produce similar water consumption

ADD = Average Daily Demand

PHD = Peak Hour Demand

PDD = Peak Daily Demand

Water Distribution System. Water Main improvements within the Specific plan Area include new water mains with looped connections to the existing system at 8 locations. These mains include 8", 12", 14", 16" and 24" pipes and are shown on the Water System Plan Exhibit in this Specific Plan. The distribution system will deliver water to both the Orchard Bungalow and Main East Water Zones from the existing Golden Hill Reservoirs, existing network connections, and the new proposed wells. The existing booster pump station will need to be upgraded to provide the additional water demand supply anticipated with the Chandler Ranch Development. The current facility has a peak capacity of 1,700 gpm, with a current peak use of 1,300 gpm¹. Table 5 identifies the number of units and the associated water demand that may be developed within the expanded Orchard Bungalow Booster Pump area, and summarizes the peak hour demand per dwelling unit.

Table 5. Orchard Bungalow Booster Pump Area Analysis

Area Number	Units	Population	Average Day Demand (gpd)	Peak Hour Demand (gpm)
1	50	135	35,100	107
3b	50	135	35,100	107
7	141	381	98,982	302
8	87	235	61,074	187
9	84	226	58,687	179
Totals	412	1,111	288,943	883

¹ Information provided by City of El Paso de Robles Public Works 7/04

Peak Hour Demand (gpm) per Dwelling Unit	2.15
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An evaluation of the existing facility identifies that the current facility can accommodate an additional 186 units prior to system expansion. This is summarized in Table 6. Presently, it is unknown what entitlements exist within the current booster pump station area

**Table 6.
Existing Facility Data and Capacity**

Capacity (gpm)	1,700
Existing Peak Use (gpm)	1,300
Average Use (gpm)	500
Excess Capacity (gpm)	400
# of Units that may be served prior to expansion	186

Information provided by Public Works 7/04

The system shall be modeled and project specific fire flow analysis to validate main sizes shown in the Water Master Plan, and determine other system improvements required meeting the City’s demand and fire flow criteria. The distribution system shall also provide for future adjacent development. Water infrastructure oversized or installed for the benefit of future or existing development will have the potential for developer reimbursement. The City is currently updating its Water Master Plan, the result of which will be to ensure the city has sufficient supply, storage capacity, and a distribution network. The Water Master Plan accounts for cumulative development under the City’s General Plan, including the buildout potential envisioned under the Chandler Ranch Area Specific Plan.

CONTINGENCY PLANS/WATER CONSERVATION

The City currently pursues water recycling efforts. Wastewater effluent is currently discharged to the Salinas River channel where it recharges the river underflow when the Salinas River is dry, which is most of the year. The river underflow is used for municipal supply by the community of San Miguel and for irrigation downstream.

A variety of potential uses for recycled water are being considered, including industrial reuse, groundwater recharge and irrigation. However, the City’s *Comprehensive Recycled Water Study* (Carollo, 2000) investigated these uses, and concluded that these were not feasible or beneficial. The report notes that the City currently fulfills requirements of the NPDES permit, and finds no imminent shortage of water supply. The report recommends deferring consideration of water recycling options to the future.

ENTITLEMENTS/REGULATORY APPROVALS

Water Code Section 10910(d)(2) requires the identification of existing water supply entitlements, water rights, or water service contracts, federal, state, and local permits for

construction of necessary infrastructure, and any regulatory approvals required in order to be able to deliver the water supply.

To meet the additional Citywide demand, it is proposed that three wells with a production capacity of approximately 650 GPM each be installed on the specific plan site using the City's current permitted water rights. The City desires these well sites to be easily accessible and be approximately 100'x100' in size, each. In general, the quality of groundwater in the basin is relatively good, with few areas of poor quality and few major trends of ongoing deterioration of water quality. New wells will be tested and treated for unacceptable levels of total dissolved solids (TDS), chlorides and nitrates.

REFERENCES

Urban Water Management Plan (November 2000; prepared by Todd Engineers)

City of Paso Robles Water Master Plan (1993)

City of Paso Robles Water Master Plan Update (1995)

Fugro West, Inc. and Cleath and Associates.

- *Geologic and Hydrogeologic Investigation of the Paso Robles Groundwater Basin, 2002 Final Report.*
- *Interim Report Task 2, Basin Definition, Paso Robles Groundwater Basin Study. June 2001.*
- *Interim Report, Task 3, Aquifer Characterization, Paso Robles Groundwater Basin Study. September 2001.*