



MEMORANDUM

Engineering Division

To: City Council
From: Thomas Williams, City Manager
Through: Greg Armendariz, Public Works Director
By: Kathleen Phalen, Utility Engineer
Subject: Approval of the Water Supply Assessment for the Milpitas Square Mixed-Use Development
Date: October 21, 2008

Recommendation: Staff recommends that the City Council approve the Water Supply Assessment for the proposed Milpitas Square Mixed-Use development.

Background: As lead agency and water service provider, City staff has prepared the attached Water Supply Assessment (WSA) in accordance with California Senate Bill 610 for the proposed McCarthy Ranch Mixed-Use Development (Project) to document that the City can provide potable water for the Project. The property is located between Ranch Drive and Dixon Landing Road, on the west side of McCarthy Boulevard. Since this is within the City’s Santa Clara Valley Water District (SCVWD) service area, it will be served by this wholesale source. SCVWD staff reviewed the draft WSA and their comments have been incorporated into the final document.

The Project will consist of approximately 1,070,000 square feet of office park floor space and 93,000 square feet of shopping center floor space on approximately 58.5 acres. Irrigation, dual plumbing and cooling towers will be served with recycled water.

Projected water demands for the Project were calculated using water use factors as referenced in the City’s 2002 Water Master Plan. In comparison with these planned projections, the Project would need an additional 10,741 gallons per day (gpd), or 12.0 acre-feet (ac-ft) per year. Adjusting for an additional 6.1% demand for unaccounted water, the Project would need an additional supply of 11,396 gpd, or 12.8 ac-ft per year.

This assessment is based on projections from SCVWD’S 2005 UWMP and the City’s 2002 Water Master Plan and 2005 UWMP. Based upon evaluation results, the minor increase in water demand is within the range of error for the estimates and is not significant. The staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, this development will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policy.

**McCARTHY RANCH
MIXED-USE PROJECT**

Water Supply Assessment
(for compliance with SB 610 of 2001)

**Approved
October 21, 2008
Milpitas City Council**

McCARTHY RANCH MIXED-USE PROJECT WATER SUPPLY ASSESSMENT

Summary

The City of Milpitas (City) completed this Water Supply Assessment (WSA) in compliance with California Senate Bill 610 (SB 610), which requires a WSA to be included in any environmental documentation for projects subject to the California Environmental Quality Act (CEQA). The WSA was completed using the City's 2005 Urban Water Management Plan (UWMP), the Santa Clara Valley Water District (SCVWD) 2005 UWMP and the City's 2002 Water Master Plan. The finding is that sufficient water supply is available for the proposed development.

Introduction

The McCarthy Ranch Mixed-Use project ("Project"), proposed by McCarthy Ranch, consists of approximately 1,070,000 square feet of office park floor space and 93,000 square feet of shopping center floor space on approximately 58.5 acres. The project site is located between Ranch Drive and Dixon Landing Road, on the west side of McCarthy Boulevard and includes Assessor Parcel Numbers 22-29-036, 22-30-037, 22-30-039 and 22-30-048.

The WSA shall include:

- 1. Identification and documentation of water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Project.***
- 2. A discussion with regard to whether the public water system's total projected water supplies available during normal, single-dry and multiple-dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to the public water system's existing and planned future uses.***

As lead agency and water service supplier for the Project, the City prepared this WSA in compliance with SB 610 and CEQA. The findings of the WSA shall be submitted to City Council for approval and included in the environmental review process.

The City's most current UWMP, adopted in 2005, did not exactly account for water use associated with the Project as the parcels in question were anticipated to have an industrial park use. One of the parcels (22-30-048) is proposed to have its zoning changed to commercial, while the remaining parcels will continue to be zoned for industrial park. The Project would result in a net increase of 0.011 million gallons per day (mgd). The increase in water demand was based upon the acreage of the proposed zone change multiplied by water use factors identified in the City's 2002 Water Master Plan. Unaccounted water was also factored in at 6.1% of the calculated increase.

Water Supply Assessment

This section includes an evaluation of the City’s ability to provide water for the Project. In accordance with SB 610, the WSA consists of the following:

- (1) Water Supplies
 - a. Wholesale Sources,
 - b. Wholesale Supplies;
- (2) Demand Analysis
 - a. City’s UWMP Projected Demand,
 - b. Project Demand,
 - c. Net Increase due to Project;
- (3) Supply and Demand Comparison under Normal, Single-Dry, and Multiple-Dry Year Conditions; and
- (4) Determination of Sufficient or Insufficient Water Supply.

1. WATER SUPPLIES

Wholesale Sources. The City purchases potable water from two wholesalers: the San Francisco Public Utilities Commission (SFPUC) and SCVWD. About 65% of the City’s potable water is from SFPUC; the remaining is from SCVWD. The City also purchases recycled water through the South Bay Water Recycling Program for irrigation and other appropriate uses.

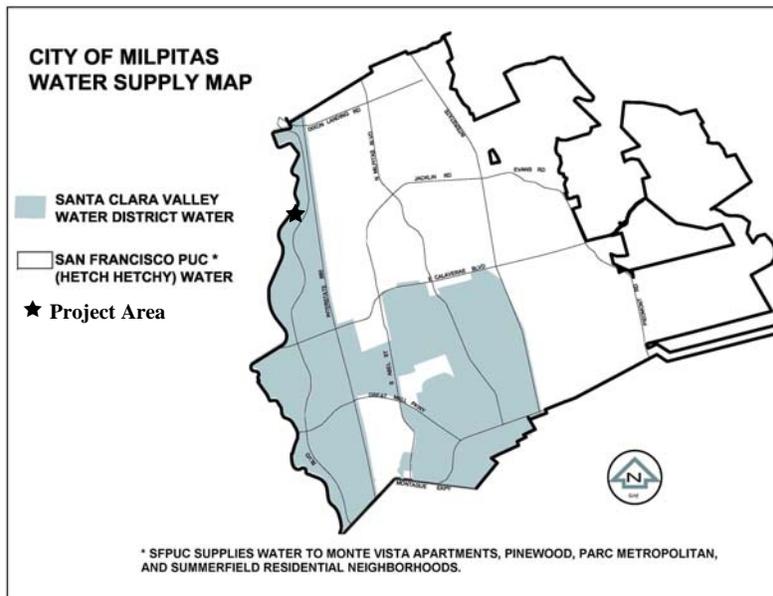
Guaranteed annual supply is established by contractual agreements between the City and the water wholesalers. SFPUC and SCVWD are expected to supply all potable water over the next 30 years, with no new water sources added. However, two wells (Pinewood Well and future Curtis well) will be available for emergency and supplemental purposes as necessary.

Table 1 -- Wholesale Supply Sources

Supply Source	Entitlement	Right	Contract	Ever Used	Will Supply Project
SCVWD			Yes	Yes	Yes
SFPUC			Yes	Yes	No
Recycled Water			Yes	Yes	Yes (irrigation, dual plumbing and cooling towers)
Wells		Yes		Yes	No

As shown in Figure 1, the City distributes SFPUC water to areas south of Calaveras Blvd. and east of I-680, as well as areas north of Calaveras Blvd. and east of I-880. The City distributes SCVWD water to all areas west of I-880 and areas south of Calaveras Blvd. and west of I-680, excluding the Monte Vista Apartments, Pinewood, Parc Metropolitan and Summerfield residential neighborhoods. These two sources are not blended under normal operating conditions; however, they can be physically interconnected to provide emergency water supply if necessary.

Figure 1 -- Water Source Map



The Project is located west of I-880, within the SCVWD service area. Therefore, this evaluation will assess project impacts related to water supply and demand within the SCVWD service area only.

Wholesale Supplies: The City began receiving SCVWD water in August 1993. SCVWD’s water supply system consists of both treatment and distribution facilities that include imported supply facilities, raw water conveyance facilities, treatment plants, local reservoirs, treated water transmission lines and the groundwater basin.

SCVWD’s water supply comes from a variety of sources, including local surface water and groundwater aquifers, as well as imported water from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. SCVWD treats both surface and imported water and sells treated water to its retailers. In addition, both local surface and imported water are recharged to the groundwater sub-basins, which SCVWD manages to the benefit of agricultural users and other independent users, as well as water retailers that pump groundwater.

Local runoff is captured in local SCVWD reservoirs, whose total storage capacity is about 170,000 acre feet (ac-ft). Water is then diverted for either recharge into the groundwater basin or treatment at one of SCVWD’s three water treatment plants: Santa Teresa, Rinconada and Penitencia. Water is provided to the City’s SCVWD turnout via the Milpitas Pipeline from Penitencia (and Santa Teresa as necessary).

Water purchased from SCVWD is governed by contract between SCVWD and the City. The actual contract amount is adjusted periodically based on an annual delivery schedule the City submits triennially. This schedule is binding for the subsequent three-year period. The City’s annual request must be at least 95% of the maximum year in the current three-year schedule. The City’s monthly “supply guarantee” is at least 15% of the total estimated yearly amount.

Table 2 shows historical purchases from SCVWD. The downward trend is attributed to conservation efforts, conversion from potable water irrigation to recycled water irrigation and economic factors.

Table 2 -- SCVWD Historical Water Purchases (mgd)

96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08
5.06	4.59	4.21	4.33	4.53	4.03	3.95	3.91	3.53	3.65	3.61	3.67

City’s UWMP Projected Supply: The City’s UWMP evaluated current and future water supply and demand in accordance with Section 10631 of the California Water Code. Table 3 lists water supplies the City can reasonably expect to receive under “Normal Year” conditions:

**Table 3 – Quantity of Water Received in Normal Year (mgd)
Actual and Projected ^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

2. DEMAND ANALYSIS

City’s UWMP Projected Demand: A variety of demographic factors may affect water use. Section 2.4 of the City’s UWMP lists planning assumptions used to project future water demands. Table 4 provides the actual and projected water demands under normal conditions. Water demand includes an average unaccounted for water loss of 6.1%.

**Table 4 – Normal Year Water Demand (mgd)
Actual and Projected ^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

The City’s UWMP assumed land use within the project area would remain consistent with the buildout scenario of the 2002 Water Master Plan, in which the assumption was made that the project area would remain industrial park zoning. Water demand assigned to the project area is calculated in Table 5.

**Table 5 – Project Area Water Demand
UWMP Demand Calculations ^(a)**

Assessor Parcel Number	Parcel Size (acre)	Water Use Factor (gpd/acre)	Water Demand (gpd)
22-29-036	35.01	1,250	43,763
22-30-037	9.19	1,250	11,487
22-30-039	5.00	1,250	6,250
22-30-048	9.34	1,250	11,675
Total			73,175

^{a)} City of Milpitas 2002 Water Master Plan Table 3-1

Project Demand: Projected water demands for the Project are shown in Table 6. As indicated in Table 7, the Project will result in a 10,741 gpd net increase in water demand (12.0 ac-ft per year). **Adjusting for an additional 6.1% demand due to unaccounted water, the Project will require an additional supply of 11,396 gpd (12.8 ac-ft per year).**

Table 6 -- Project Water Demand

Assessor Parcel Number	Parcel Size (acre)	Water Use Factor (gpd/acre)	Water Demand (gpd) ^(a)
22-29-036	35.01	1,250	43,763
22-30-037	9.19	1,250	11,487
22-30-039	5.00	1,250	6,250
22-30-048	9.34	2,400	22,416
Total			83,916

^(a) Calculated based on water use factors from Table 3-1 in the 2002 Water Master Plan.

Table 7 -- Project Impact on Water Demand

	Water Demand
Project Demand	83,916 gpd
- 2005 UWMP projected demand	- 73,175 gpd
Net Increase over 2005 UWMP	10,741 gpd

Table 8 -- Project Impact on Water Supply

	Water Demand
Project Net Increase in Demand	10,741 gpd
6.1 % Unaccounted Water	+ 655 gpd
Net Increase over 2005 UWMP	11,396 gpd

$$\text{Demand} = 11,396 \text{ gpd} * 365 \text{ days/year} * 1 \text{ ft}^3/7.48 \text{ gal} * 1 \text{ ac-ft}/43,560 \text{ ft}^3 = \mathbf{12.8 \text{ ac-ft/year}}$$

Currently, there is no definitive timeframe for the Project. However, the City expects the Project to move forward in the next few years. For the sake of this WSA, the City will assume Project completion by 2015. The 0.011 mgd increase in water demand will apply to Fiscal Year 2014-15 and beyond. Revised water demand projections (including projected demand) are shown in Table 9.

**Table 9 – Projected Water Demand (mgd)
(2005 UWMP plus Project Demand)^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.38	6.64	6.89	7.14

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

To reduce potable water demand, the Project will incorporate water conservation practices to the maximum extent practicable in accordance with City policies and utilize recycled water to the maximum extent practicable. Recycled water will be required for landscape irrigation and toilet/urinal flushing. In addition, recycled water will be required for cooling towers (if used), unless determined infeasible by the City.

3. SUPPLY AND DEMAND COMPARISON UNDER NORMAL, SINGLE-DRY AND MULTIPLE-DRY YEAR CONDITIONS

Supply Reliability: To maintain water supply reliability and flexibility, multiple sources comprise SCVWD's water supply, including local groundwater, imported water, local surface water and recycled water. SCVWD has an active conjunctive water management program to optimize the use of groundwater and surface water, and to prevent groundwater overdraft and land subsidence.

As part of their Integrated Water Resources Planning Study (IWRP) and UWMP, SCVWD performed planning and modeling analysis, which indicated that future countywide demands can reliably be met if additional investments are made. SCVWD intends to ensure that these additional investments be undertaken in accordance with the IWRP framework, which recommends a flexible resource mix be implemented in phases over the planning horizon. This flexibility allows SCVWD to respond to changing and uncertain future conditions.

The net increase in demand of 12.8 ac-ft per year associated with the proposed development was not included in the analysis performed for SCVWD's UWMP. This and other incremental increases in demand, when aggregated, have the potential to change the composition and timing of required future investments. Further analysis, within the structure of SCVWD's long-term planning framework, is required to better define the specific projects and project timing in order for SCVWD to meet demands in the future. In addition, provisions of water supply to meet new growth are based upon assumptions (listed in SCVWD's UWMP) and funding for many long-term water supply projects and infrastructure projects has not been secured. However, as the primary water wholesaler in Santa Clara County, SCVWD has a commitment to ensure that the water supply is reliable to meet future demands, consistent with the County's and cities' General Plans and other appropriate regional and statewide projections.

Per Figures 6-2 through 6-4 and Tables 6-2 through 6-4 (pages 125-128) of SCVWD's UWMP, SCVWD's supply is anticipated to meet future countywide demands during normal, single-dry and multiple-dry water years. Although this analysis presents projections of future water supply, ongoing coordination with SCVWD will be necessary to ensure projections are consistent with SCVWD's long-term water management strategies. The City will continue to work with SCVWD to refine future water supply projections and ensure that long-term planning efforts are consistent. Tables 10 through 12 compare water supply and demand under normal year, single-dry year and multiple-dry year conditions.

**Table 10 -- Projected Normal Water Year SCVWD Service Area
Supply and Demand Comparison**

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Year 04/05 (3.53 mgd)	Difference Supply - Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	164	0	0	0
14/15	6.37	100	6.38	181	-0.01	0.16	0.16
19/20	6.63	100	6.64	188	-0.01	0.15	0.15
24/25	6.88	100	6.89	195	-0.01	0.15	0.15
29/30	7.13	100	7.14	202	-0.01	0.14	0.14

Table 11 -- Projected Single-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply - Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	100	0	0	0
14/15	6.37	100	6.38	100	-0.01	0.16	0.16
19/20	6.63	100	6.64	100	-0.01	0.15	0.15
24/25	6.88	100	6.89	100	-0.01	0.15	0.15
29/30	7.13	100	7.14	100	-0.01	0.14	0.14

Table 12 -- Projected Multiple-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply - Demand (mgd)	Difference as % of Supply	Difference as % of Demand
05/06	3.98	100	3.98	100	0	0	0
06/07	4.43	100	4.43	100	0	0	0
07/08	4.88	100	4.88	100	0	0	0
08/09	5.33	100	5.33	100	0	0	0
09/10	5.78	100	5.78	100	0	0	0
10/11	5.90	100	5.90	100	0	0	0
11/12	6.01	100	6.01	100	0	0	0
12/13	6.12	100	6.12	100	0	0	0
13/14	6.24	100	6.24	100	0	0	0
14/15	6.37	100	6.38	100	-0.01	0.16	0.16
15/16	6.42	100	6.43	100	-0.01	0.16	0.16
16/17	6.47	100	6.48	100	-0.01	0.15	0.15
17/18	6.53	100	6.54	100	-0.01	0.15	0.15
18/19	6.58	100	6.59	100	-0.01	0.15	0.15
19/20	6.63	100	6.64	100	-0.01	0.15	0.15
20/21	6.68	100	6.69	100	-0.01	0.15	0.15
21/22	6.73	100	6.74	100	-0.01	0.15	0.15
22/23	6.79	100	6.80	100	-0.01	0.15	0.15
23/24	6.84	100	6.85	100	-0.01	0.15	0.15
24/25	6.88	100	6.89	100	-0.01	0.15	0.15
25/26	6.93	100	6.94	100	-0.01	0.14	0.14
26/27	6.98	100	6.99	100	-0.01	0.14	0.14
27/28	7.03	100	7.04	100	-0.01	0.14	0.14
28/29	7.08	100	7.09	100	-0.01	0.14	0.14
29/30	7.13	100	7.14	100	-0.01	0.14	0.14

4. DETERMINATION OF SUFFICIENT OR INSUFFICIENT WATER SUPPLY

SCVWD has a commitment to ensure that the water supply is reliable to meet future demands. The City recognizes that funding for long-term water supply projects and infrastructure projects must be secured in order to meet this commitment.

This evaluation is based on projections from SCVWD'S 2005 UWMP and the City's 2002 Water Master Plan and 2005 UWMP. Based upon evaluation results, the minor increase in water demand is within the range of error for the estimates and is not significant. The staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, the Project will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policies.

MEMORANDUM

Engineering Division



To: City Council
From: Thomas Williams, City Manager
Through: Greg Armendariz, Public Works Director
By: Kathleen Phalen, Utility Engineer
Subject: Approval of the Water Supply Assessment for the Milpitas Square Mixed-Use Development
Date: October 21, 2008

Recommendation: Staff recommends that the City Council approve the Water Supply Assessment for the proposed Milpitas Square Mixed-Use development.

Background: As lead agency and water service provider, City staff has prepared the attached Water Supply Assessment (WSA) in accordance with California Senate Bills 610 and 221 for the proposed Milpitas Square Mixed-Use Development (Project) to document that the City can provide potable water for the Project. The property is bounded Barber Lane to the south, Caltrans property to the north and west, and private property to the east. Since this is within the City's Santa Clara Valley Water District (SCVWD) service area, it will be served by this wholesale source. SCVWD staff reviewed the draft WSA and their comments have been incorporated into the final document.

The Project is a redevelopment of the existing Milpitas Square shopping center. The proposed development is for six buildings totaling 900 residential units and 175,000 square feet of commercial space on 16.85 acres. Irrigation and dual plumbing will be served with recycled water.

Projected water demands for the Project were calculated using water use factors as referenced in the City's 2002 Water Master Plan. In comparison with these planned projections, the Project would need an additional 197,550 gallons per day (gpd), or 221 acre-feet (ac-ft) per year. Adjusting for an additional 6.1% demand for unaccounted water, the Project would need an additional supply of 209,540 gpd, or 235 ac-ft per year.

This assessment is based on projections from SCVWD'S 2005 UWMP and the City's 2002 Water Master Plan and 2005 UWMP. Based upon evaluation results, the minor increase in water demand is within the range of error for the estimates and is not significant. The staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, this development will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policy.

**MILPITAS SQUARE
MIXED-USE PROJECT**

Water Supply Assessment
(for compliance with SB 610 and SB 221 of 2001)

**Approved
October 21, 2008
Milpitas City Council**

MILPITAS SQUARE MIXED-USE PROJECT WATER SUPPLY ASSESSMENT

Summary

The City of Milpitas (City) completed this Water Supply Assessment (WSA) in compliance with California Senate Bill 610 (SB 610) and California Senate Bill 221 (SB 221). SB 610 requires a WSA to be included in any environmental documentation for projects subject to the California Environmental Quality Act (CEQA). Under SB 221, an affirmative written verification of sufficient water supply is required if the proposed development exceeds 500 residential dwelling units.

The WSA was completed using the City of Milpitas 2005 Urban Water Management Plan (UMWP), the Santa Clara Valley Water District (SCVWD) 2005 UWMP and the City's 2002 Water Master Plan. The finding is that sufficient water supply is for the proposed development.

Introduction

The Milpitas Square Mixed-Use project ("Project"), proposed by Milpitas Square LLC, is a redevelopment of the existing Milpitas Square shopping center. The Project will consist of six buildings totaling 900 residential units and 175,000 square feet of commercial space on 16.85 acres. The project site includes Assessor Parcel Number 86-01-043 and is bounded by Barber Lane to the south, Caltrans property to the west and north, and private property to the east.

The WSA shall include:

- 1. Identification and documentation of water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Project.***
- 2. A discussion with regard to whether the public water system's total projected water supplies available during normal, single dry and multiple dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to the public water system's existing and planned future uses.***

As lead agency and water service supplier for the Project, the City prepared this WSA in compliance with SB 610, SB 221 and CEQA. The findings of the WSA shall be submitted to the City Council for approval and included in the environmental review process.

The City's most current UWMP, adopted in 2005, did not fully account for water use associated with the Project as the parcel in question was anticipated to have a commercial land use. The parcel is proposed to be rezoned to mixed-use commercial/residential. The Project would result in a net increase of 0.21 million gallons per day (mgd). The increase in water demand was based upon the number of proposed dwelling units and proposed commercial square footage multiplied by water use factors identified in the 2002 Water Master Plan. Unaccounted water was also factored in at 6.1% of the calculated increase.

Water Supply Assessment

This section includes an evaluation of the City’s capability to provide water for the Project. In accordance with SB 610 and SB 221, the WSA consists of the following:

- (1) Water Supplies
 - a. Wholesale Sources,
 - b. Wholesale Supplies;
- (2) Demand Analysis
 - a. City’s UWMP Project Demand,
 - b. Project Demand,
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- (3) Supply and Demand Comparison under Normal, Single-Dry, and Multiple-Dry Year Conditions; and
- (4) Determination of Sufficient or Insufficient Water Supply.

1. WATER SUPPLIES

Wholesale Sources. The City purchases potable water from two wholesalers: the San Francisco Public Utilities Commission (SFPUC) and SCVWD. About 65% of the City’s potable water is from SFPUC; the remaining 35% is from SCVWD. The City also purchases recycled water through the South Bay Water Recycling Program for irrigation and other appropriate uses.

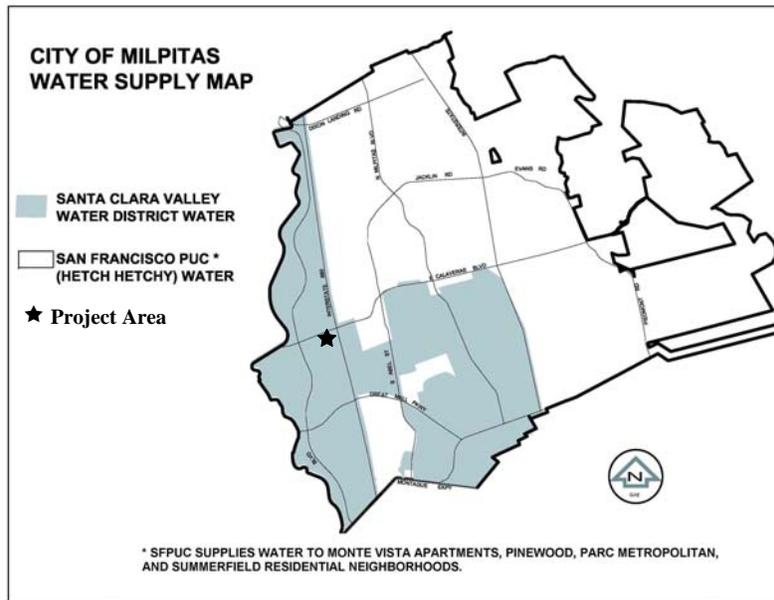
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Table 1 – Wholesale Supply Sources

Supply Source	Entitlement	Right	Contract	Ever Used	Will Supply Project
SCVWD			Yes	Yes	Yes
SFPUC			Yes	Yes	No
Recycled Water			Yes	Yes	Yes (irrigation and dual plumbing)
Wells		Yes		Yes	No

As shown in Figure 1, the City distributes SFPUC water to areas south of Calaveras Blvd. and east of I-680, as well as areas north of Calaveras Blvd. and east of I-880. The City distributes SCVWD water to all areas west of I-880 and areas south of Calaveras Blvd. and west of I-680, excluding the Monte Vista Apartments, Pinewood, Parc Metropolitan and Summerfield residential neighborhoods. These two sources are not blended under normal operating conditions; however, they can be physically interconnected to provide emergency water supply if necessary.

Figure 1: Water Source Map



The Project is located west of I-880 and south of Calaveras Blvd., within the SCVWD service area. Therefore, this evaluation will assess project impacts related to water supply and demand within the SCVWD service area only.

Wholesale Supplies: The City began receiving SCVWD water in August 1993. SCVWD’s water supply system consists of both treatment and distribution facilities that include imported supply facilities, raw water conveyance facilities, treatment plants, local reservoirs, treated water transmission lines and the groundwater basin.

SCVWD’s water supply comes from a variety of sources, including local surface water and groundwater aquifers, as well as imported water from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. SCVWD treats both surface and imported water and sells treated water to its retailers. In addition, both local surface and imported water are recharged to the groundwater sub-basins, which SCVWD manages to the benefit of agricultural users and other independent users, as well as water retailers that pump groundwater.

Local runoff is captured in local SCVWD reservoirs, whose total storage capacity is about 170,000 acre-feet (ac-ft). Water is then diverted for either recharge into the groundwater basin or treatment at one of SCVWD’s water treatment plants: Santa Teresa, Rinconada, and Penitencia. Water is provided to the City’s SCVWD turnout via the Milpitas Pipeline from Penitencia (and Santa Teresa as necessary).

Water purchased from SCVWD is governed by contract between SCVWD and the City. The actual contract amount is adjusted periodically based on an annual delivery schedule the City submits triennially. This schedule is binding for the subsequent three-year period. The City’s annual request must be at least 95% of the maximum year in the current three-year schedule. The City’s monthly “supply guarantee” is at least 15% of the total estimated yearly amount.

Table 2 shows historical purchases from SCVWD. The downward trend is attributed partially to conservation efforts, conversion of potable water irrigation to recycled water irrigation and economic factors.

Table 2 – SCVWD Historical Water Purchases (mgd)

96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08
5.06	4.59	4.21	4.33	4.53	4.03	3.95	3.91	3.53	3.65	3.61	3.67

City UWMP Projected Supply: The City’s UWMP evaluated current and future water supply and demand in accordance with Section 10631 of the California Water Code. Table 3 lists water supplies the City can reasonably expect to receive under “Normal Year” conditions.

**Table 3 – Quantity of Water Received in Normal Year (mgd)
Actual and Projected ^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

2. DEMAND ANALYSIS

City UWMP Projected Demand: A variety of demographic factors may affect water use. Section 2.4 of the City’s UWMP lists planning assumptions used to project future water demands. Table 4 provides the actual and projected water demands under normal conditions. Water demand includes an average unaccounted for water loss of 6.1%.

**Table 4 – Normal Year Water Demand (mgd)
Actual and Projected ^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

The City’s UWMP assumed land use within the project area would remain consistent with the buildout scenario of the 2002 Water Master Plan, in which the assumption was made that the project area would remain commercial zoning. Water demand assigned to the project area is calculated in Table 5.

**Table 5 – Project Area Water Demand
UWMP Demand Calculations ^(a)**

Assessor Parcel Number	Parcel Size (acre)	Water Use Factor (gpd/acre)	Water Demand (gpd)
86-01-043	16.85	2,400	40,400

^(a) City of Milpitas 2002 Water Master Plan Table 3-1

Project Demand: The Project consists of 900 residential units and 175,000 square feet of commercial space. Projected water demands are shown in Table 6 and are calculated assuming 2.7 residents per unit and a water demand of 90 gallons per capita per day, as referenced in the City’s 2002 Water Master Plan. As indicated in Table 7, the Project will result in a 197,550 gpd net increase in water demand (221 ac-ft per year). **Adjusting for a 6.1 % average unaccounted for water loss, the project will require an additional supply of 209,540 gpd (235 ac-ft per year).**

Table 6 -- Project Water Demand

Type of Usage	Development Density	Water Use Factor	Water Demand (gpd)
Residential	900 du	243 gpd/du	218,700
Commercial	175,000 SF	0.11 gpd/SF	19,250
Total			237,950 gpd

Table 7 -- Project Impact on Water Demand

	Water Demand
Project Demand	237,950 gpd
- 2005 UWMP projected demand	40,400 gpd
Net Increase over 2005 UWMP	197,550 gpd

Table 8 -- Project Impact on Water Supply

	Water Demand
Project Net Increase in Demand	197,550 gpd
6.1 % unaccounted for Water	11,990 gpd
Net Increase over 2005 UWMP	209,540 gpd

$$\text{Demand} = 209,540 \text{ gpd} * 365 \text{ days/year} * 1\text{ft}^3/7.48 \text{ gal} * 1 \text{ ac-ft}/43,560 \text{ ft}^3 = \mathbf{235 \text{ ac-ft/year}}$$

The Project will be divided into five phases and is expected to be constructed over a 20-year period. For the purpose of this WSA, the City will assume that each phase will take four years to construct and that the 0.21 mgd increase in projected water demand will be equally distributed amongst the different phases. Revised water demand projections (including project demand) are shown in Table 9.

**Table 9 – Projected Water Demand (mgd)
(2005 UWMP plus Project Demand)^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.41	6.71	7.01	7.34

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

Recycled water, which is not factored in the aforementioned water demands, will continue to supply the Project’s irrigation and ornamental features. In addition, one of the six buildings will not have residential units, thus allowing for dual plumbing for toilet/urinal flushing. To reduce potable water demand, the Project will incorporate water conservation practices to the maximum extent practicable in accordance with City policies and utilize recycled water to the maximum extent practicable.

3. SUPPLY AND DEMAND COMPARISON FOR NORMAL, SINGLE-DRY AND MULTIPLE-DRY YEAR CONDITIONS

Supply Reliability: To maintain water supply reliability and flexibility, multiple sources comprise SCVWD's water supply, including local groundwater, imported water, local surface water, and recycled water. SCVWD has an active conjunctive water management program to optimize the use of groundwater and surface water, and to prevent groundwater overdraft and land subsidence.

As part of their Integrated Water Resources Planning Study (IWRP) and UMWP, SCVWD performed planning and modeling analysis, which indicated that future countywide demands can reliably be met if additional investments are made. SCVWD intends to ensure that these additional investments be undertaken in accordance with the IWRP framework, which recommends a flexible resource mix be implemented in phases over the planning horizon. This flexibility allows SCVWD to respond to changing and uncertain future conditions.

The net increase in demand of 235 ac-ft per year associated with the Project was not included in the analysis performed for SCVWD's UWMP. This and other incremental increases in demand, when aggregated, have the potential to change the composition and timing of required future investments. Further analysis, within the structure of SCVWD's long-term planning framework, is required to better define the specific projects and project timing in order for SCVWD to meet demands in the future. In addition, provisions of water supply to meet new growth are based upon assumptions (listed in SCVWD's UWMP) and funding for many long-term water supply projects and infrastructure projects has not been secured. However, as the primary water wholesaler in Santa Clara County, SCVWD has a commitment to ensure that the water supply is reliable to meet future demands, consistent with the County's and cities' General Plans and other appropriate regional and statewide projections.

Per Figures 6-2 through 6-4, and Tables 6-2 through 6-4 (pages 125-128) of SCVWD's UWMP, SCVWD's supply is anticipated to meet future countywide demands during normal, single-dry and multiple-dry water years. Although this analysis presents projections of future water supply, ongoing coordination with SCVWD will be necessary to ensure projections are consistent with SCVWD's long-term water management strategies. The City will continue to work with SCVWD to refine future water supply projections and ensure that long-term planning efforts are consistent. Tables 10 through 12 compare water supply and demand under normal year, single-dry year and multiple-dry year conditions.

**Table 10 -- Projected Normal Water Year SCVWD Service Area
Supply and Demand Comparison**

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Year 04/05 (3.53 mgd)	Difference Supply – Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	168	0	0	0
14/15	6.37	100	6.37	180	-0.04	0.63	0.62
19/20	6.63	100	6.63	188	-0.08	1.21	1.19
24/25	6.88	100	6.88	195	-0.13	1.89	1.85
29/30	7.13	100	7.13	202	-0.21	2.95	2.86

Table 11 -- Projected Single-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	100	0	0	0
14/15	6.37	100	6.41	101	-0.04	0.63	0.62
19/20	6.63	100	6.71	101	-0.08	1.21	1.19
24/25	6.88	100	7.01	102	-0.13	1.89	1.85
29/30	7.13	100	7.34	103	-0.21	2.95	2.86

Table 12 -- Projected Multiple-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply Demand (mgd)	Difference as % of Supply	Difference as % of Demand
05/06	3.98	100	3.98	100	0	0	0
06/07	4.43	100	4.43	100	0	0	0
07/08	4.88	100	4.88	100	0	0	0
08/09	5.33	100	5.33	100	0	0	0
09/10	5.78	100	5.78	100	0	0	0
10/11	5.90	100	5.90	100	0	0	0
11/12	6.01	100	6.01	100	0	0	0
12/13	6.12	100	6.12	100	0	0	0
13/14	6.24	100	6.28	101	-0.04	0.64	0.64
14/15	6.37	100	6.41	101	-0.04	0.63	0.62
15/16	6.42	100	6.46	101	-0.04	0.62	0.62
16/17	6.47	100	6.51	101	-0.04	0.62	0.61
17/18	6.53	100	6.61	101	-0.08	1.23	1.21
18/19	6.58	100	6.66	101	-0.08	1.22	1.20
19/20	6.63	100	6.71	101	-0.08	1.21	1.19
20/21	6.68	100	6.76	101	-0.08	1.20	1.18
21/22	6.73	100	6.86	102	-0.13	1.93	1.90
22/23	6.79	100	6.92	102	-0.13	1.91	1.88
23/24	6.84	100	6.97	102	-0.13	1.90	1.87
24/25	6.88	100	7.01	102	-0.13	1.89	1.85
25/26	6.93	100	7.10	102	-0.17	2.45	2.39
26/27	6.98	100	7.15	102	-0.17	2.44	2.38
27/28	7.03	100	7.20	102	-0.17	2.42	2.36
28/29	7.08	100	7.25	102	-0.17	2.40	2.34
29/30	7.13	100	7.34	103	-0.21	2.95	2.86

4. DETERMINATION OF SUFFICIENT OR INSUFFICIENT WATER SUPPLY

SCVWD has a commitment to ensure that the water supply is reliable to meet future demands. The City recognizes that funding for long-term water supply projects and infrastructure projects must be secured in order to meet this commitment.

This evaluation is based on projections from SCVWD's 2005 UWMP and the City's 2002 Water Master Plan and 2005 UWMP. Based upon evaluation results, the minor increase in water demand is within the range of error for the estimates and is not significant. The staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, the Project will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policies.

MEMORANDUM

Engineering Division



To: City Council
From: Thomas Williams, City Manager
Through: Greg Armendariz, Public Works Director
By: Kathleen Phalen, Utility Engineer
Subject: Approval of the Water Supply Assessment for the Campus at McCarthy Ranch (Veritas) Development
Date: October 21, 2008

Recommendation: Staff recommends that the City Council approve the Water Supply Assessment for the proposed Campus at McCarthy Ranch (Veritas) development.

Background: As lead agency and water service provider, City staff has prepared the attached Water Supply Assessment (WSA) in accordance with California Senate Bill 610 for the proposed Campus at McCarthy Ranch (formerly known as Veritas) Development (Project) to document that the City can provide potable water for the Project. It is to be located at the northwest corner of McCarthy Boulevard and Ranch Drive. Since this is within the City's Santa Clara Valley Water District (SCVWD) service area, it will be served by this wholesale source. SCVWD staff reviewed the draft WSA and their comments have been incorporated into the final document.

The Project will have a total building square footage of 1,415,814, consisting of six new industrial/office buildings totaling 946,350 square feet and existing industrial/office space totaling 469,464 square feet on a 65-acre site. In addition, the existing large surface parking lot will remain. Irrigation, dual plumbing and cooling towers will be served with recycled water.

The City's most current Urban Water Management Plan (UWMP), adopted in 2005, fully accounted for water use associated with the Project as the parcels in question were anticipated to be designated MP – Industrial Park. Therefore, no net increase in water demand would result from the Project since the land use would remain the same.

This assessment is based on projections from SCVWD'S 2005 UWMP and the City's 2002 Water Master Plan and 2005 UWMP. The staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, this development will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policy.

**THE CAMPUS at McCARTHY RANCH
(VERITAS) PROJECT**

Water Supply Assessment
(for compliance with SB 610 of 2001)

**Approved
October 21, 2008
Milpitas City Council**

THE CAMPUS at McCARTHY RANCH (VERITAS) PROJECT WATER SUPPLY ASSESSMENT

Summary

The City of Milpitas (City) completed this Water Supply Assessment (WSA) in compliance with California Senate Bill 610 (SB 610), which requires a WSA to be included in any environmental documentation for projects subject to the California Environmental Quality Act (CEQA). The WSA was completed using the City's 2005 Urban Water Management Plan (UWMP), the Santa Clara Valley Water District (SCVWD) 2005 UWMP and the City's 2002 Water Master Plan. The finding is that sufficient water supply is available for the proposed development.

Introduction

The Campus at McCarthy Ranch project ("Project"), proposed by McCarthy Ranch, will have a total building square footage of 1,415,814, consisting of six new industrial/office buildings totaling 946,350 square feet, and 469,464 square feet of existing industrial/office buildings. In addition, the existing large surface parking lot will remain. The 65-acre project site is located at the northwest corner of McCarthy Boulevard and Ranch Drive. Five parcels comprise the site: Assessor Parcel Numbers 22-56-005, 22-56-006, 22-56-007, 22-56-008 and 22-56-009.

The WSA shall include:

- 1. Identification and documentation of water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Project.***
- 2. A discussion with regard to whether the public water system's total projected water supplies available during normal, single-dry and multiple-dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to the public water system's existing and planned future uses.***

As lead agency and water service supplier for the Project, the City prepared this WSA in compliance with SB 610 and CEQA. The findings of the WSA shall be submitted to City Council for approval and included in the environmental review process.

The City's most current UWMP, adopted in 2005, fully accounted for water use associated with the Project as the parcels in question were anticipated to be designated *MP – Industrial Park*. Therefore, no net increase in water demand would result from the Project since the land use would remain the same.

Water Supply Assessment

This section includes an evaluation of the City’s capability to provide water for the Project. In accordance with SB 610, the WSA consists of the following:

- (1) Water Supplies
 - a. Wholesale Sources,
 - b. Wholesale Supplies;
- (2) Demand Analysis
 - a. City’s UWMP Projected Demand,
 - b. Project Demand,
 - c. Net Increase due to Project;
- (3) Supply and Demand Comparison under Normal, Single-Dry, and Multiple-Dry Year Conditions; and
- (4) Determination of Sufficient or Insufficient Water Supply.

1. WATER SUPPLIES

Wholesale Sources. The City purchases potable water from two wholesalers: the San Francisco Public Utilities Commission (SFPUC) and SCVWD. About 65% of the City’s potable water is from SFPUC; the remaining 35% is from SCVWD. The City also purchases recycled water through the South Bay Water Recycling Program for irrigation and other appropriate uses.

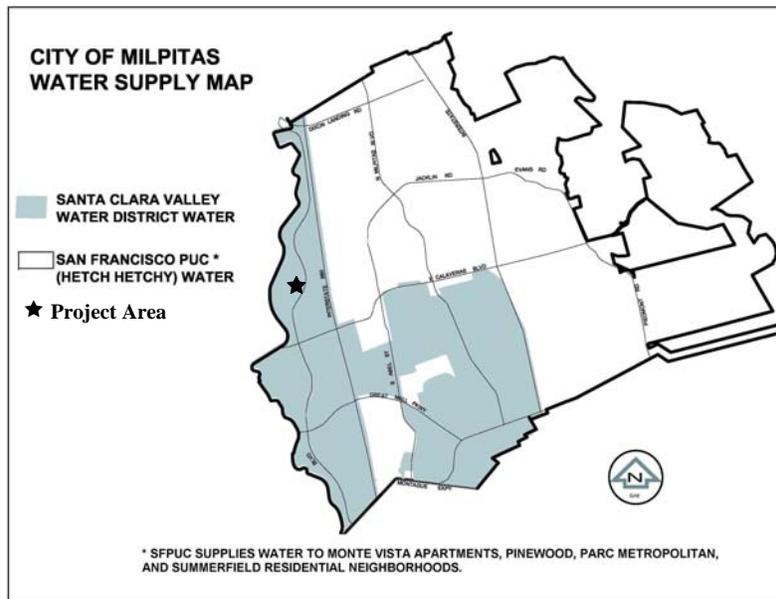
Guaranteed annual supply is established by contractual agreements between the City and the water wholesalers. SFPUC and SCVWD will continue to supply all potable water over the next 30 years. No new water sources are planned. However, two wells (Pinewood Well and future Curtis well) will be available for emergency and supplemental purposes as necessary.

Table 1 -- Wholesale Supply Sources

Supply Source	Entitlement	Right	Contract	Ever Used	Will Supply Project
SCVWD			Yes	Yes	Yes
SFPUC			Yes	Yes	No
Recycled Water			Yes	Yes	Yes (irrigation, dual plumbing and cooling towers)
Wells		Yes		Yes	No

As shown in Figure 1, the City distributes SFPUC water to areas south of Calaveras Blvd. and east of I-680, as well as areas north of Calaveras Blvd. and east of I-880. The City distributes SCVWD water to all areas west of I-880 and areas south of Calaveras Blvd. and west of I-680, excluding the Monte Vista Apartments, Pinewood, Parc Metropolitan and Summerfield residential neighborhoods. These two sources are not blended under normal operating conditions; however, they can be physically interconnected to provide emergency water supply if necessary.

Figure 1 -- Water Source Map



The Project is located west of I-880, within the SCVWD service area. Therefore, this evaluation will assess project impacts related to water supply and demand within the SCVWD service area only.

Wholesale Supplies: The City began receiving SCVWD water in August 1993. SCVWD’s water supply system consists of both treatment and distribution facilities that include imported supply facilities, raw water conveyance facilities, treatment plants, local reservoirs, treated water transmission lines and the groundwater basin.

SCVWD’s water supply comes from a variety of sources, including local surface water and groundwater aquifers, as well as imported water from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. SCVWD treats both surface and imported water and sells treated water to its retailers. In addition, both local surface and imported water are recharged to the groundwater sub-basins, which SCVWD manages to the benefit of agricultural users and other independent users, as well as water retailers that pump groundwater.

Local runoff is captured in local SCVWD reservoirs, whose total storage capacity is about 170,000 acre-feet. Water is then diverted for either recharge into the groundwater basin or treatment at one of SCVWD’s three water treatment plants: Santa Teresa, Rinconada and Penitencia. Water is provided to the City’s SCVWD turnout via the Milpitas Pipeline from Penitencia (and Santa Teresa as necessary).

Water purchased from SCVWD is governed by contract between SCVWD and the City. The actual contract amount is adjusted based on an annual delivery schedule the City submits triennially. This schedule is binding for the subsequent three-year period. The City’s annual request must be at least 95% of the maximum year in the current three-year schedule. The City’s monthly “supply guarantee” is at least 15% of the total estimated yearly amount.

Table 2 shows historical purchases from SCVWD. The downward trend is attributed to conservation efforts, conversion from potable water irrigation to recycled water irrigation and economic factors.

Table 2 -- SCVWD Historical Water Purchases (mgd)

96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08
5.06	4.59	4.21	4.33	4.53	4.03	3.95	3.91	3.53	3.65	3.61	3.67

City's UWMP Projected Supply: The City's UWMP evaluated current and future water supply and demand in accordance with Section 10631 of the California Water Code. Table 3 lists water supplies the City can reasonably expect to receive under "Normal Year" conditions:

**Table 3 – Quantity of Water Received in Normal Year (mgd)
Actual and Projected ^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

2. DEMAND ANALYSIS

City's UWMP Projected Demand: A variety of demographic factors may affect water use. Section 2.4 of the City's UWMP lists planning assumptions used to project future water demands. Table 4 provides the actual and projected water demands under normal conditions. Water demand includes an average unaccounted for water loss of 6.1%.

**Table 4 – Normal Year Water Demand (mgd)
Actual and Projected ^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

The City's UWMP assumed land use within the project area would remain consistent with the buildout scenario of the 2002 Water Master Plan, in which the assumption was made that the project area would remain industrial park zoning. Water demand assigned to the project area is calculated in Table 5.

**Table 5 – Project Area Water Demand
UWMP Demand Calculations ^(a)**

Assessor Parcel Numbers	Parcel Size (acre)	Water Use Factor (gpd/acre)	Water Demand (gpd)
22-56-005 thru 009	65	1,250	81,250

^{a)} City of Milpitas 2002 Water Master Plan Table 3-1

Project Demand: The land use will remain *MP – Industrial Park* for the Project. Projected water demands are shown in Table 6. As indicated in Table 7, ***the proposed project will result in no net increase in water demand.***

Table 6 -- Project Water Demand

Type of Usage	Parcel Size (acre)	Water Use Factor	Water Demand
Industrial Park	65	1,250 gpd/acre	81,250 gpd ^(a)
Total			81,250 gpd

^(a) Calculated based on water use factors from Table 3-1 in the 2002 Water Master Plan.

Table 7 -- Project Impact on Water Demand

	Water Demand
Project Demand	81,250 gpd
- 2005 UWMP projected demand	-81,250 gpd
Net Increase over 2005 UWMP	NONE

Table 8 -- Project Impact on Water Supply

	Water Demand
Project Net Increase in Demand	NONE
6.1 % Unaccounted Water	N/A
Net Increase over 2005 UWMP	NONE

Currently, there is no definitive timeframe for the Project. However, the City expects the Project to move forward in the next few years. For the sake of this WSA, the City will assume Project completion by 2015. Revised water demand projections (including projected demand) are shown in Table 9. Since there is no net increase in demand, Table 9 is identical to Table 4.

**Table 9 – Projected Water Demand (mgd)
(2005 UWMP plus Project Demand)^(a)**

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

^(a) Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

To reduce potable water demand, the project will incorporate water conservation practices to the maximum extent practicable in accordance with City policies and utilize recycled water to the maximum extent practicable. Recycled water will be required for landscape irrigation and toilet/urinal flushing. In addition, recycled water will be required for cooling towers (if used), unless determined infeasible by the City.

3. SUPPLY AND DEMAND COMPARISON UNDER NORMAL, SINGLE-DRY AND MULTIPLE-DRY YEAR CONDITIONS

Supply Reliability: To maintain water supply reliability and flexibility, multiple sources comprise SCVWD's water supply, including local groundwater, imported water, local surface water and recycled water. SCVWD has an active conjunctive water management program to optimize the use of groundwater and surface water, and to prevent groundwater overdraft and land subsidence.

As part of their Integrated Water Resources Planning Study (IWRP) and UWMP, SCVWD performed planning and modeling analysis, which indicated that future countywide demands can reliably be met if additional investments are made. SCVWD intends to ensure that these additional investments be undertaken in accordance with the IWRP framework, which recommends a flexible resource mix be implemented in phases over the planning horizon. This flexibility allows SCVWD to respond to changing and uncertain future conditions.

The proposed development was included in the analysis performed for SCVWD's UWMP. However, other incremental increases in demand, when aggregated, have the potential to change the composition and timing of required future investments. Further analysis, within the structure of SCVWD's long-term planning framework, is required to better define the specific projects and project timing in order for SCVWD to meet demands in the future. In addition, provisions of water supply to meet new growth are based upon assumptions (listed in SCVWD's UWMP) and funding for many long-term water supply projects and infrastructure projects has not been secured. However, as the primary water wholesaler in Santa Clara County, SCVWD has a commitment to ensure that the water supply is reliable to meet future demands, consistent with the County's and cities' General Plans and other appropriate regional and statewide projections.

Per Figures 6-2 through 6-4 and Tables 6-2 through 6-4 (pages 125-128) of SCVWD's UWMP, SCVWD's supply will be reliable to meet future countywide demands during normal, single-dry and multiple-dry water years. Although this analysis presents projections of future water supply, ongoing coordination with SCVWD will be necessary to ensure projections are consistent with SCVWD's long-term water management strategies. The City will continue to work with SCVWD to refine future water supply projections and ensure that long-term planning efforts are consistent. Tables 10 through 12 compare water supply and demand under normal year, single-dry year and multiple-dry year conditions.

**Table 10 -- Projected Normal Water Year SCVWD Service Area
Supply and Demand Comparison**

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Year 04/05 (3.53 mgd)	Difference Supply – Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	5.78	5.93	168	0	0	0
14/15	6.37	6.37	6.52	185	0	0	0
19/20	6.63	6.63	6.78	192	0	0	0
24/25	6.88	6.88	7.03	199	0	0	0
29/30	7.13	7.13	7.28	206	0	0	0

Table 11 -- Projected Single-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	100	0	0	0
14/15	6.37	100	6.37	100	0	0	0
19/20	6.63	100	6.63	100	0	0	0
24/25	6.88	100	6.88	100	0	0	0
29/30	7.13	100	7.13	100	0	0	0

Table 12 -- Projected Multiple-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply Demand (mgd)	Difference as % of Supply	Difference as % of Demand
05/06	3.98	100	3.98	100	0	0	0
06/07	4.43	100	4.43	100	0	0	0
07/08	4.88	100	4.88	100	0	0	0
08/09	5.33	100	5.33	100	0	0	0
09/10	5.78	100	5.78	100	0	0	0
10/11	5.90	100	5.90	100	0	0	0
11/12	6.01	100	6.01	100	0	0	0
12/13	6.12	100	6.12	100	0	0	0
13/14	6.24	100	6.24	100	0	0	0
14/15	6.37	100	6.37	100	0	0	0
15/16	6.42	100	6.42	100	0	0	0
16/17	6.47	100	6.47	100	0	0	0
17/18	6.53	100	6.53	100	0	0	0
18/19	6.58	100	6.58	100	0	0	0
19/20	6.63	100	6.63	100	0	0	0
20/21	6.68	100	6.68	100	0	0	0
21/22	6.73	100	6.73	100	0	0	0
22/23	6.79	100	6.79	100	0	0	0
23/24	6.84	100	6.84	100	0	0	0
24/25	6.88	100	6.88	100	0	0	0
25/26	6.93	100	6.93	100	0	0	0
26/27	6.98	100	6.98	100	0	0	0
27/28	7.03	100	7.03	100	0	0	0
28/29	7.08	100	7.08	100	0	0	0
29/30	7.13	100	7.13	100	0	0	0

4. DETERMINATION OF SUFFICIENT OR INSUFFICIENT WATER SUPPLY

SCVWD has a commitment to ensure that the water supply is reliable to meet future demands. The City recognizes that funding for long-term water supply projects and infrastructure projects must be secured in order to meet this commitment.

This evaluation is based on projections from SCVWD'S 2005 UWMP and the City's 2002 Water Master Plan and 2005 UWMP. Based upon evaluation results, the staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, the Project will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policies.