



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Joseph Horwedel

**SUBJECT:** COYOTE VALLEY  
SPECIFIC PLAN WATER  
SUPPLY EVALUATION

**DATE:** February 7, 2007

Approved

*Ray Wimer*

Date

*2/12/07*

**COUNCIL DISTRICT:** 2  
**SNI AREA:** None

## RECOMMENDATION

The Director of Planning, Building, and Code Enforcement recommends that the City Council accept the attached Coyote Valley Specific Plan Water Supply Evaluation as the draft master plan for supplying potable and non-potable water for the future development and build out of the Coyote Valley Specific Plan (CVSP), and to direct staff to include the Water Supply Evaluation in the CVSP DEIR for appropriate environmental analysis and review.

## OUTCOME

Accepting the CVSP Water Supply Evaluation (WSE) would establish Council direction regarding a sustainable preference for local water supplies, utilization of recycled water and water conservation to the maximum extent possible to meet long-term water supply demands and supplemental groundwater recharge requirements. State law requires that the CVSP WSE be included as a part of the CVSP Draft Environmental Impact Report (DEIR) analysis. Council action on the WSE facilitates preparation and completion of the CVSP DEIR for public circulation scheduled for March 2007.

## BACKGROUND

The Governor of California signed California Senate Bill 610 (SB610) in 2001 and this legislation was effectuated in 2002 to improve the link between information on water supply availability and certain land use decisions. SB 610 requires that detailed information regarding water supply availability be provided to the local decision makers prior to the approval of specified large development projects and those subject to the California Environmental Quality Act. The Coyote Valley Specific Plan (CVSP) is subject to SB610 based on meeting the following criteria established to determine whether a project is subject to SB 610:

- Residential developments of more than 500 units;
- Commercial/business developments that would result in more than 1,000 employees or more than 500,000 square feet of floor area; and
- Industrial developments that would also result in more than 1,000 employees, occupy a site greater than 40 acres, or more than 250,000 square feet of floor area.

The Initial Draft CVSP proposes the development of approximately 26,000 residential units and 55,000 new jobs on approximately 3400 acres in northern and mid-Coyote Valley, an existing rural area south of the Santa Teresa neighborhood and Tulare Hill. The area referred to as the South Coyote Valley Greenbelt is intended to be and remain a permanent non-urban buffer between San Jose and Morgan Hill. The City is in the final preparation stages of a CVSP DEIR for circulation in March 2007 and is required to incorporate a water supply analysis in the DEIR.

Per SB610 requirements, the City requested and received Water Supply Assessments (WSA) from three potential water retailers for the CVSP area. WSAs were submitted by: Great Oaks Water Company, San Jose Water Company, and the City of San José Municipal Water System. These WSAs are based in large part on the Santa Clara Valley Water District's (SCVWD) 2005 Urban Water Management Plan (UWMP). An UWMP is intended to be a step-by-step approach for water utilities to assess their water resource needs and is a valid basis for local and regional water management planning. SB610 recommends their use as a source of information for the preparation of WSAs.

The SCVWD's UWMP accounted for the CVSP's future water demands at build-out and concluded that with water conservation savings and additional investments, current water supplies are adequate to meet the future demand for normal-year and dry-year scenarios. Additional water supply sources have been defined by the SCVWD to meet the future countywide water supply demands. These sources include one or more of the following: maximized water conservation, advanced treatment of recycled water for groundwater recharge, development of desalination, expanded water supply banking or a new 100,000 acre-foot reservoir. According to the SCVWD's UWMP any combination of these could reduce potential countywide water shortages through 2030 to negligible levels.

The analysis below summarizes the highlights of the CVSP's WSE, which was prepared in substantial collaboration with the SCVWD. The SCVWD Board is expected to consider the CVSP WSE on February 13, 2007. Staff will convey the results of that meeting to the City Council for consideration in conjunction with this item.

## **ANALYSIS**

The CVSP Water Supply Evaluation was prepared for the City's independent consideration, as the lead agency on the CVSP project under the California Environmental Quality Act of 1970, as amended, to assist and inform the City in making a determination, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the CVSP at build-out. Water demands for the build-out of the CVSP are projected to total 18,500 acre-feet per year, excluding recycled water already supplied to the Metcalf Energy Center that is located in North Coyote Valley. The SCVWD's 2005 UWMP considered the build-out demand by the CVSP and concluded that with aggressive water conservation savings and additional infrastructure, particularly

for advanced treated recycled water, the projected Countywide water demand (including Coyote Valley) can be satisfied.

The three potential water retailers have expressed interest in serving customers within the CVSP and have prepared SB610 WSAs, which are included in the WSE. Each of the retailers concluded that they will have access to an adequate supply of water to meet build-out demand for the entirety of the CVSP as well as their respective service areas projected demand through 2030. Each retailer proposes to deliver water from the greater San Jose area into Coyote Valley as necessary to make up for any shortfalls in local groundwater supplies that could be extracted from the Coyote Groundwater Sub-basin.

The WSE includes a graphic depiction of the CVSP water demand and supply on page 42. Existing groundwater supplies in Coyote Valley can meet 8,000 acre-feet per year (afy) of the projected 18,500 afy build-out demand in a sustainable fashion. An estimated demand of 4,300 afy has been identified as potentially non-potable, leaving a potable water demand of 14,200 afy. Staff has reviewed the SCVWD's plans, each retailer's WSA, and the SCVWD Board policies stating a preference for local water supplies over imported water supplies. In light of this analysis, the CVSP WSE incorporates a combined approach for a sustainable long-term water supply plan for Coyote Valley:

1. With the application of 6,000 afy of supplemental groundwater recharge in the Coyote Valley Groundwater Sub-basin with fully advanced treated recycled water, a total of up to 13,000 afy of potable water may be pumped from the Sub-basin with no adverse effects in a multi-year drought.
2. The SCVWD has an agreement with the South Bay Water Recycling Program to purchase 5,600 afy of additional recycled water at the end of the existing Silver Creek Pipeline. To account for operational peaking factors, local storage facilities will be needed to harness this complete volume, and the lake feature of the CVSP is a potential storage site. Any recycled water applied to the ground will require full advanced treatment including reverse osmosis and ultraviolet disinfection, and compliance with any state mandated regulations.
3. The advanced treatment process results in a loss of roughly 30 percent of the incoming water supply. Given this loss, contracted recycled water from the Silver Creek Pipeline can furnish roughly 90 percent of ultimate direct non-potable demand from the CVSP.
4. Potable water is not required for groundwater recharge, and by supplying another 9,100 afy of recycled water for advanced treatment, the use of recycled water for direct non-potable demands and indirect potable groundwater recharge can be maximized. A remaining need for 1,200 afy of potable water to be delivered to the CVSP area can be addressed through several alternative methods including:
  - a. Delivery of treated surface water or groundwater from the Santa Clara Valley Sub-basin (delivery facilities presently exist);
  - b. Aggressive water conservation to minimize the need for off-site water deliveries; and/or
  - c. Direct use of treated water from the Santa Teresa Water Treatment Plant and other sources in greater San Jose.

There is a sufficient long-term recycled water supply between the South Bay Recycled Water Program and the South County Water Recycling Agency to provide CVSP's direct non-potable and indirect potable water demands with appropriate additional infrastructure and treatment. The use of recycled water should be maximized, because it represents a sustainable robust supply that is locally controlled and largely uninterrupted.

Some measure of county-wide water supply redundancy is desirable by the City and the SCVWD. When analyzing the redundancy of water supplies, a county-wide scope is appropriate, as water supply throughout Santa Clara County is very integrated, and as such the demands specific to the CVSP are also integrated into County-wide demands. The SCVWD has prepared additional water supply studies, including the 2003 Integrated Water Resource Plan. The Integrated Water Resource Plan Study serves as a guide to assist in sound investment decision-making for long-term water supply, looking at current and future trends, challenges, and opportunities. An update to the this plan study (due in 2008) will include the further identification and detail of some of the specific investments needed to protect existing and develop new water supplies.

Further investigation of the associated costs and economic feasibility for the each of the proposed long-term water supply alternatives is being prepared by the SCVWD. Working closely with the SCVWD, it is intended that the City of San José, as lead agency, would select a preferred CVSP supply alternative, or a combination of supply alternatives, as the CVSP process moves forward. Future planning may need to be adjusted in response to actual water demands in compliance with SB610. Notwithstanding these future efforts, the CVSP EIR will evaluate various water supply alternatives at a programmatic level, including the impacts of deploying these various supply sources.

Based on additional feedback regarding the content of the City of San Jose's Coyote Valley Specific Plan WSE additions and changes to the text of the WSE are included as a supplement to the WSE (Attachment A). These text changes do not have an effect on the document's conclusions, but have only been included to respond to the recent court decision of Vineyard Area Citizens for Responsible Growth, Inc., et al., v. City of Rancho Cordova (Ct. App. 3 C044653). These changes are intended to serve as a technical basis for a Draft EIR that recognizes the implications of the Vineyard decision.

In summary, the WSE prepared for the proposed development associated with the CVSP identifies, in coordination with the SCVWD, predicts that there will be a sufficient supply of potable and non-potable water through various supply alternatives as identified in the attached WSE.

### **POLICY ALTERNATIVES**

Not applicable.

**PUBLIC OUTREACH/INTEREST**

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
  
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
  
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

**COORDINATION**

The attached WSE and this memorandum are a result of extensive consultation with the City Attorney's Office and the Santa Clara Valley Water District. The subject report is scheduled to be discussed by the SCVWD Board on February 13, 2007, the results of which discussion will be reported back to the Council when this report is considered by Council.

**FISCAL/POLICY ALIGNMENT**

The WSE supports the San Jose 2020 General Plan Major Strategies regarding "Sustainable City." The identification of a predictable water supply is critical to the sustainable development of new growth areas in San Jose and the protection of regional and county-wide resources.

**COST SUMMARY/IMPLICATIONS**

Not applicable.

**BUDGET REFERENCE**

Not applicable.

**CEQA**

Exempt: PP07-025



JOSEPH HORWEDEL, DIRECTOR  
Planning, Building and Code Enforcement

For questions please contact Darryl Boyd, Principal Planner, at (408) 535-7898.

The following changes have been made to the WSE document currently in circulation for administrative review.

**Page 2**

Revise the second paragraph:

“The District has also determined that an additional 6,000 acre-feet per year of groundwater recharge into the Coyote Sub-basin via new recharge facilities is required to safely increase groundwater withdrawal from the Sub-basin to the maximum sustainable long-term amount, which is 13,000 afy regardless of hydrologic conditions (e.g. drought).”

**Page 3**

Revise the fourth paragraph:

“In summary, based on available information including Santa Clara Valley Water District planning documents and retailer Water Supply Assessments, there is enough evidence to support a finding that sufficient water supplies will be available to support CVSP build-out concurrent with 2030 County-wide demand. The City will continue to work with the District staff in identifying and developing aggressive water conservation measures and policies that should be included in the Coyote Valley at the time development is implemented in Coyote Valley.”

**Page 13**

Revise the last paragraph:

“Existing groundwater supplies (8,000 afy) can meet 43 percent of the projected ultimate water demand in Coyote Valley during a multiple year drought. The unmet potable water demands at build-out total 6,200 afy and estimated direct non-potable demands total 4,300 afy. Without advanced treatment, most of that direct non-potable demand could not be met using recycled water currently available from the Silver Creek Pipeline. (With advanced treatment and California Department of Health Services Health Department approval, existing recycled water supplies could meet just over 90 percent of the identified direct non-potable water use in CVSP at build-out, beyond the water presently furnished to Metcalf Energy Center.) The total projected annual water supply deficit during a multiple dry year scenario is 10,500 acre-feet per year.”

**Page 15**

Correct typographical error in last sentence of first paragraph:

“The third scenario depends on water conservation to meet demands in single and multi-year drought scenarios.”

**Page 35**

Revise the first sentence of the last paragraph:

“Table 12 summarizes CVSP water demands, compares the demand to existing multiple dry year supplies, and identifies additional supplies that must be brought into the valley assuming that the maximum potential local groundwater extraction is achieved and advanced treated recycled water can be used to meet non-potable water demands, including additional groundwater recharge pending DHS approval.”

**Page 36**

Revise the Table 12 title:

“Table 12: CVSP Multiple Dry Year<sup>1</sup> Water Balance with Recycled Water Use (acre-feet per year).”

Revise the first paragraph titled *Potable Water Augmentation*:

“Under the recommended water supply strategy, the direct potable water augmentation is 1,200 afy. Based on the ~~information presented above~~ feasible inter-basin delivery of 5,600 afy identified previously, this annual volume of water can be furnished by sources within the greater San Jose area, including groundwater, regardless of the retailer.”

**Page 41**

Revise the first sentence of the first paragraph:

“New infrastructure is needed to deliver and appropriately treat additional recycled water to the CVSP Plan Area to augment the current 8,000 afy multiple dry year groundwater supply with 6,000 afy of indirect potable groundwater recharge use, as well as the CVSP non-potable demand of 4,300 afy.”

Revise the second sentence of the third paragraph:

“Based on these projections, this Water Supply Evaluation concludes that ~~there is sufficient if~~ existing tertiary treated water available either solely from the SBWRP, or from a combination of SCRWA and the SBWRP ~~to meet the~~, can be advanced treated to the satisfaction of the SCVWD and other jurisdictional regulatory agencies, CVSP recycled water demand ~~if that water is treated to the satisfaction of the SCVWD~~ can be met through projected build-out.

Revise the last paragraph:

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<sup>1</sup>Although normal, single-dry and multiple-dry year scenarios have all been evaluated, the conservative multi-dry scenario will govern decision-making for Coyote Valley.” (reference added)



“Figure 14 presents a schematic that illustrating this the recommended supply strategy summarized by Table 13.”

Add the following table after Page 41:

**Table 13: Recommended Multiple Dry Year Supply Strategy for Coyote Valley**

Water Sources	Gross Supply (afy)	Net Supply (afy)	Relative Certainty of Source	Requirements for Use of Supply
<b>Potable Water</b>				
Coyote Sub-basin Groundwater	8,000	8,000	Most Certain	<ul style="list-style-type: none"> <li>• Current Groundwater Management Strategies</li> </ul>
Santa Clara Sub-basin Groundwater	1,200	1,200	More Certain	<ul style="list-style-type: none"> <li>• Delivery Infrastructure</li> <li>• Regulatory Approval</li> </ul>
Indirect Potable Groundwater Recharge		5,000	Less Certain	<ul style="list-style-type: none"> <li>• Technical Studies</li> <li>• Storage and Delivery Infrastructure</li> <li>• Additional Treatment</li> <li>• Additional Energy Supplies</li> <li>• Treatment Waste Disposal</li> <li>• DHS Approval</li> <li>• SCVWD Approval</li> <li>• Recharge Basins/Injection Wells</li> </ul>
		14,200		
<b>Non-Potable Water</b>				
South Bay Water Recycling	to 14,700	4,300	More Certain	<ul style="list-style-type: none"> <li>• See Indirect Potable GW Reqts.</li> </ul>
South County Regional Wastewater Authority	to 7,300		Less Certain	<ul style="list-style-type: none"> <li>• See above, and</li> <li>• City of San Jose approval of importation of outside recycled water into service area</li> </ul>
		4,300		
<b>TOTAL SUPPLY</b>	<b>23,900</b>	<b>18,500</b>		

**Page 42**

Revise the caption to Figure 14:

**Figure 14: Recommended Multiple Dry Year Water Supply Strategy for Coyote Valley**

**Page 43**

Replace the third paragraph:

“Existing groundwater supplies in Coyote Valley can meet 8,000 afy of the 18,500 afy build-out demand in a sustainable fashion. To maximize this existing resource, an estimated demand of 4,300 afy has been identified as potentially non-potable, leaving a potable demand of 14,200 afy. After reviewing the UWMP and each retailer’s WSA, District Board policy with respect to the preference for local water supplies over imported water supplies, and the City’s stated goal of the CVSP as a model project with innovative solutions, this Water Supply Evaluation recommends the following water supply master plan for Coyote Valley through build-out:”

With:

“After reviewing available data the City concludes that existing groundwater supplies in Coyote Valley can meet 8,000 afy of the 18,500 afy build-out demand in a sustainable fashion during a multiple dry year scenario. The City also concludes that securing additional potable and non-potable supplies to meet the remaining projected CVSP demand during multiple dry years is achievable with additional planning, technical evaluation and regulatory approval. These additional supplies, while derived from currently available water sources, are not considered to be existing water supplies as defined by SB610 guidelines.

“To be compatible with the UWMP, District Board policy with respect to the preference for local water supplies over imported water supplies, and the City’s stated goal of the CVSP as a model project with innovative solutions, this Water Supply Evaluation recommends the following water supply master plan for Coyote Valley through build-out:”