COUNCIL AGENDA: 10-26-10
ITEM: 7.1

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: John Stufflebean

SUBJECT: SEE BELOW

DATE: 10-05-10

Approved

Date 10/12/10

COUNCIL DISTRICT: 2, 4, 7, 8

SUBJECT: SAN JOSE MUNICIPAL WATER SYSTEM'S WATER SUPPLY ASSESSMENT FOR ENVISION SAN JOSÉ 2040 GENERAL PLAN UPDATE

RECOMMENDATION

Approve the San Jose Municipal Water System's Water Supply Assessment for Envision San José 2040 General Plan Update.

OUTCOME

Council approval of the Municipal Water System's (Muni Water) Water Supply Assessment (WSA) is required for the assessment to be included in the environmental review of the City's General Plan Update process.

BACKGROUND

As the Lead Agency, the City of San José is preparing an Environmental Impact Report (EIR) for the Envision San José 2040 General Plan Update. The EIR will evaluate several Land Use Study Scenarios for potential job and housing growth, including the "Preferred Scenario" selected by Council in April 2010. In June 2009, the Department of Planning, Building and Code Enforcement (PBCE) notified Muni Water, San Jose Water Company and Great Oaks Water Company of their need to prepare a water supply assessment.

As required by California Water Code Section 10910 (Senate Bill 610), Muni Water has prepared a WSA (Attachment 1) to assess whether its existing and future water supplies would be adequate to meet the water demands associated with the various Land Use Scenarios. California Water Code Section 10910, which became effective January 1, 2002, requires that a water supply assessment be provided to cities and counties by any retailer that may serve a project involving 500 or more residential units. The water supply assessment documents sources of water supply, quantifies water demands, evaluates drought impacts, and provides a

comparison of water supply and demand so that a determination of water supply sufficiency can be made for large development projects.

PBCE and their consultants performed an analysis of the anticipated job and population growth associated with the project, and coordinated with the Santa Clara Valley Water District (SCVWD), the wholesale supplier and manager of the groundwater basin, to aid in the estimation of future water supply to the area. This information was provided to each of the potential retailers.

ANALYSIS

Muni Water utilized an existing consultant agreement with Todd Engineers to prepare a draft WSA. The assessment concludes that Muni Water has sufficient water supplies to meet projected water demands during normal and dry years based on information currently available. Future water demands are based on proposed land use, housing, population, and other demographic data from the project obtained from PBCE. Projected maximum water demands in the Muni Water service area attributable to development in line with the preferred scenario are expected to increase to 45,779 acre-feet per year (AFY) by 2035.

Water Supply

Muni Water relies on multiple sources for water supply. Current and future water supply sources include imported water from the SCVWD and the San Francisco Public Utility Commission (SFPUC), groundwater from the Santa Clara Valley groundwater basin (which is managed by SCVWD in collaboration with local water agencies), and recycled water. In addition, water conservation is anticipated to reduce water demand from current projected amounts.

SFPUC

Water is provided to Muni Water's North San José service area from the SFPUC Hetch Hetchy aqueduct. In 2009, Muni Water accepted both a master Water Supply Agreement (the agreement common to all Bay Area Water Supply and Conservation Agency (BAWSCA) agencies), and a Water Sales Contract (specific to Muni Water). The City of San José currently has a contract for up to 5,039 AFY (4.5 million gallons per day, or mgd); this contract is both temporary and interruptible. The Water Supply Agreement with SFPUC is temporary in that it provides an assurance of supply only until December 2018. By December 2018, SFPUC will make further decisions on future water supply beyond 2018, after completing necessary cost analyses and the California Environmental Quality Act (CEQA) evaluation/documentation. The supply is interruptible before December 2018 if the SFPUC determines that aggregate use by all BAWSCA agencies will exceed 184 MGD in 2018. The supply cannot be interrupted until five years after San José has received notice of SFPUC's intention to reduce or interrupt deliveries.

BAWSCA is currently working on a long-term reliable water supply strategy to help ensure future supply to the member agencies. For the purposes of this report, it is assumed that the supply available to San José will remain the same through 2035.This is an extrapolation of current and historical water deliveries. However, these deliveries have been fulfilled for over three decades. Such extrapolation is a reasonable planning assumption based on available data.

As part of the new Water Supply Agreement, Muni Water may purchase water allocated to but not used by the City of Santa Clara, providing the combined purchases between the two retailers do not exceed 9 mgd. Muni Water may also purchase excess water supplies from other BAWSCA agencies. There are no assurances that this excess water will be available and excess supply is not included in water supply analyses. However, Muni Water is committed to purchasing the maximum amount of water available and reducing its reliance on other sources due to the uncertainties regarding the availability and sustainability of the groundwater basin.

SCVWD

SCVWD has contracts with the State of California Department of Water Resources and the United States Bureau of Reclamation to receive, treat, and distribute surface water in the Santa Clara Valley. In 1972 SCVWD entered into the first contract to supply the City of San José with imported water. Another contract initiated in 1981 remains in effect until 2051. The contract established a schedule of water deliveries where the City submits a projected request for a five-year period to facilitate planning and SCVWD contracts annually for minimum deliveries, with restrictions based on peak demand and annual distribution. The City may have access to surplus water as available.

Groundwater

Groundwater has long been a source of supply for Muni Water. Groundwater is available from the Santa Clara Valley groundwater basin, which is managed by SCVWD in collaboration with other agencies. Muni Water currently operates groundwater production wells in the Coyote and Santa Clara subbasins, which together comprise the larger Santa Clara Valley Groundwater Basin. The total available groundwater in a normal year, or sustainable yield, of the Santa Clara subbasins is determined by SCVWD. As part of the SCVWD's 2010 Urban Water Management Plan (UWMP) process, SCVWD will determine the sustainable level of groundwater extraction based on ABAG population projections for the County, water demands of retailers who use groundwater, hydrological conditions, groundwater levels, and the recharge needed to prevent subsidence and saltwater intrusion. Staff anticipates that the City's and SCVWD's UWMPs, scheduled to by completed in mid-2011, will support the analysis contained in the WSA.

Recycled Water

Recycled water is an important component to overall water supply, and currently supplies approximately 11% of total water demands within Muni Water service areas. Recycled water provides for landscape irrigation, ornamental features (fountains), toilet flushing, and specific

industrial uses including cooling towers. It is assumed that these uses will continue in the future. Recycled water also can be extended to supply additional existing landscape irrigation demand (on separate landscape meters and around multi-family complexes) and to supply the irrigation demand of proposed multi-family, commercial, industrial, and park land uses.

Water Demand

The no-project scenario represents the greatest overall water demand. The preferred scenario has the largest water demand of the General Plan Update scenarios. At build out in 2035, the preferred alternative needs a total potable water supply of 38,428 AFY and recycled water supply of 7,351 AFY. However, all scenarios are within 5% of one another in terms of water demand. All scenarios represent an increase in water demand of approximately seventy to eighty percent of current levels.

Overall Sufficiency

For planning purposes, Muni Water prepares estimates of projected water supply 25 years into the future. In Muni Water's 2005 UWMP, potable water demand in 2030 was estimated to be 46,500 AFY, supplemented with 13,200 AFY recycled water for non-potable uses. However, the 2005 UWMP projected a larger supply from SFPUC; specifically the 2005 UWMP assumed a supply of 7,000 AFY when 5,000 AFY is now more likely, with additional water to be supplied by the SCVWD. Muni Water's 2010 UWMP will be prepared and forwarded to Council for approval in Spring 2011.

With less water available from SFPUC, Muni Water would need to rely more on additional supply available from the SCVWD. Assuming that additional SCVWD supplies can be used in lieu of SFPUC water, the overall amount of water supply is sufficient to meet the overall projected demand of the General Plan Update scenarios.

EVALUATION AND FOLLOW-UP

This assessment will be included in the environmental review of the General Plan Update process. No additional follow-up actions with the Council are expected at this time.

POLICY ALTERNATIVES

Alternative #1: Provide direction for revision of the WSA.
Pros: Unknown.
Cons: All options for which adequate information was available were analyzed; revision of the WSA would delay the circulation of the General Plan Update's Draft EIR.
Reason for not recommending: Lack of information to support; project delay.

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)**

This item does not meet any of the above criteria.

COORDINATION

The WSA was coordinated with the Department of Planning, Building, and Code Enforcement, the City Attorney's Office.

COST SUMMARY/IMPLICATIONS

There is no cost associated with approval of the recommendation.

CEQA

Statutorily Exempt, File No. PP10-066 (d), Planning and Feasibility Studies; CEQA Guidelines Section 15262.

/s/
JOHN STUFFLEBEAN
Director, Environmental Services

For questions please contact Mansour Nasser, Deputy Director, at (408) 277-3671.

Attachment 1- Water Supply Assessment
Attachment 2- Appendix A