



# Memorandum

**TO:** TRANSPORTATION &  
ENVIRONMENT COMMITTEE

**FROM:** John Stufflebean

**SUBJECT:** PLANT MASTER PLAN  
UPDATE – March 2009

**DATE:** 02-13-09

Approved

Date

2/16/09

## RECOMMENDATION

Accept this progress report highlighting activities since September 2008 on the Master Plan for the San Jose/Santa Clara Water Pollution Control Plant (Plant).

## OUTCOME

Acceptance of this report will allow staff to continue on course with the planned Plant Master Plan activities. These activities include development and analysis of technical and land use options and public and stakeholder outreach through 2009.

## BACKGROUND

In November 2008, the Environmental Services Department (ESD) embarked on a three-year process to develop a 30-year Master Plan for the Plant, which serves 1.4 million people and 16,000 businesses across eight cities and unincorporated pockets within or near those cities. The cities include San José, Santa Clara, Milpitas, Cupertino, Los Gatos, Saratoga, Campbell, and Monte Sereno. The plan aims to chart a course to continue the Plant's success in protecting the public health and environment and supporting the region's economy. It will address the infrastructure needs of the 52-year old facility as well as odor control issues, flood protection, new regulations, and possible land uses for the Plant's 2,600-acre property.

The Plant Master Plan process integrates the following three aspects:

- 1) Technical options evaluation – to identify and consider newer, greener technologies for treating wastewater.
- 2) Land use scenario evaluation – to conduct a site analysis as a basis for considering various scenarios for future uses of the Plant lands.
- 3) Community and stakeholder engagement – to obtain community and stakeholder input into the Master Plan process.

**ANALYSIS**

Since staff last reported to the T&E Committee on the Master Plan in September 2008, the project team has completed the following activities:

***Established Goals***

Through a series of workshops and internal staff meetings, City staff and the consultant team, led by Carollo Engineers, have crafted the goals for the Plant Master Plan. These goals, depicted in the table below, guide the formation of metrics and performance measures that will be used to evaluate the technical options and land use scenarios.

As a foundation, all options and scenarios developed in the master planning process must:

- 1) Be technically feasible
- 2) Satisfy all federal, state, and local regulatory requirements
- 3) Protect public health and safety

<b>Goals</b>	
<b>Operational</b>	Result in a reliable Plant that can flexibly respond to changing conditions
<b>Environmental</b>	Improve habitat and minimize impacts to the local and global environment
<b>Social</b>	Maximize community benefits through improved aesthetics and integrated land uses.
<b>Economical</b>	Maximize economic benefits for customers by determining cost effective operational and land use options

***Continued Technical Evaluation & Conducted a Workshop***

Evaluating technology options for wastewater and solids treatment at the Plant has consisted of the following three elements:

- 1) Data collection and analysis of the last 10 years worth of data on wastewater flows, pollutant loads, and recycled water use
- 2) Development of projections for future treatment needs based on population projections, upcoming regulations, and water conservation strategies
- 3) Validation of the data analysis by experts

City staff and the consultant team have been working together over the last year on the first two elements (data and projections). This technical evaluation process will continue through the next several months to develop the technical options for wastewater treatment. An early validation of this effort was performed by an independent Technical Advisory Group (TAG). TAG is composed of eight wastewater industry experts with backgrounds in liquids and solids treatment,

energy efficiency, constructed wetlands, and regulations. This group also includes Mr. Bruce Wolfe, Executive Officer of the San Francisco Bay Regional Water Quality Control Board, which regulates the Plant's discharge. The TAG will meet periodically throughout the master planning process to continue guiding the technical evaluation process.

TAG's first meeting was a technical workshop held on November 13 and 14, 2008. The group toured the Plant and reviewed the technical analysis on the first day. On the second day, with an audience of staff from the Plant and tributary agencies, TAG discussed general planning principles and projections, ideas for liquids and solids treatment, and considerations for future land uses. Highlights of this discussion included:

Planning Principles and Projections:

- Affirmation of the overall current direction of the Master Plan technical analysis
- Recommendation that future planning and projections include upstream efforts such as water conservation, water recycling, stormwater management, and collection system planning
- Projection that future capital project triggers at the Plant are more likely to be driven by the need to rehabilitate and to treat for more stringent regulations
- Emphasis that water conservation, pollution prevention and public education are essential sustainable practices to wastewater treatment

Liquids and Solids Treatment:

- Challenging the project team to consider alternative beneficial uses for wastewater and biosolids, after treatment.
- Confirmation that higher energy generation potential exists at the Plant by accepting additional wastes such as food waste and grease into the Plant's digesters
- Direction to the project team to consider alternatives to the current solar drying of solids, such as greenhouses or thermal treatment
- Recommendation to consider finer screening of the influent flows and alternative disinfection processes

Site Considerations:

- Recommendation to consider aesthetics for the site through architectural designs as well as water features
- Highlight and refocus the project team to consider the Plant's unique location on the shoreline of the South Bay and consider potential for restoration to natural conditions and plan for sea level rise

***Conducted a Site Analysis & Land Use Workshop***

City staff and the consultant team have been working together to collect data for enabling a thorough site analysis that can be the basis of various land use scenarios. The teams sub consultants, Skidmore, Owings, and Merrill (SOM) and Hargreaves and Associates—known for their expertise in land use planning, architecture, and landscape architecture—developed a site analysis with consideration of wind and sun direction, hydrology, sea level projections, traffic, habitat issues, surrounding development, and projected needs for employment lands and parks.

Using this data they presented land use and water flow concepts for launching group discussions at a Land Use Workshop. Held on January 30, 2009, this workshop gathered together staff from various City departments with interests in the Plant lands and staff from the tributary agencies and Water District to bring individual perspectives to bear on the conceptual scenarios. In small groups, attendees discussed possible types of economic development, recreational uses, shoreline access, trails, environmental protection, and neighborhood and regional concerns and benefits.

Results of the group input are currently being summarized. This input, and input from an upcoming community workshop, will be used by the consultant team to further develop and analyze land use scenarios over the next year.

#### ***Continued Public and Stakeholder Outreach Activities***

The outreach strategy that dovetails with the Plant Master Plan development aims to raise public awareness of the Plant's important role and to secure the ratepayer and stakeholder participation that results in a robust plan that truly reflects community values and achieves community support. Progress on the various elements of the outreach strategy is as follows:

##### To support strategy formation and evaluation:

- ***Baseline Survey:*** A baseline survey to determine current public awareness of the Plant and to gain some measurement of public values was conducted in August 2008. Surveys at the midpoint and endpoint of the master planning process also are planned to measure changes in public perception and values as a result of the public outreach associated with the Master Plan process. Survey highlights are provided in the attached information memo (Attachment A).

##### To raise public awareness:

- ***Plant Tours:*** Free tours of the Plant have been a key tactic to build public awareness of the need for the Master Plan. In 2008, about 3,800 residents toured the Plant, and there is already a wait list of more than 400 for the spring 2009 tours. With the development of broad master plan scenarios soon to be accomplished, a presentation of these can be incorporated in the tours, enabling more specific feedback on those scenarios
- ***Website:*** Staff are currently engaged in developing a website specifically on the Plant Master Plan and anticipate launching this site by early spring 2009.

##### To engage ratepayers and stakeholders:

- ***Community Advisory Group (CAG):*** The 18-member Community Advisory Group has toured the Plant and held two orientation sessions. At a November 27, 2008 orientation, staff provided an overview of the Plant Master Plan project. At the second orientation on January 24, 2009, CAG members actively participated in a "meet-the-neighbors" tour of Alviso, the Don Edwards San Francisco Bay National Wildlife Refuge, Milpitas, and neighboring properties. This helped CAG members gain understanding of the surrounding lands and implications of future land use decisions.
- ***Stakeholder Tours and Speakers Bureau:*** In Fall 2008, staff sent a formal announcement of the Plant Master Plan process with an invitation to tour the Plant to 60 key stakeholder groups that included regulatory agencies, the Water District, and environmental and civic

groups. Staff offered presentations to stakeholders who were unable to attend a tour and held speaker's bureau engagements as well. The following groups attended the tours and/or the speakers bureau engagements:

- Santa Clara Valley Water District
- Audubon Society
- Silicon Valley Leadership
- Committee for Green Foothills
- Yahoo
- Clean Water Action
- Santa Clara County Parks
- South Bay Salt Pod Restoration Project
- San Francisco Bay Regional Water Quality control board
- Environmental Protection Agency (EPA)
- Association of By Area Government (ABAG)
- Baykeeper
- Alviso Collaborative

This early outreach was critical in getting to know stakeholders' issues of concern and to promote the upcoming public workshops as a key opportunity to give input in the process.

To build community relations:

- Alviso Community Relations: Alviso is one of the Plant's closest neighbors and will be directly affected by the Master Plan outcomes. In 2008, staff continued to participate in the Alviso Collaborative, which includes Water District staff and community leaders who are addressing a wide range of water and land use concerns in Alviso. The Plant also sponsored a book drive to support the Santa Visits Alviso Foundation; more than 400 books were provided to the December 13, 2008 Santa event. In addition, staff provided a wastewater treatment display that day and bilingual staff reported conducting more than 100 conversations in Spanish at the event.
- Milpitas Community Relations: The City of Milpitas also has neighborhoods and business developments adjacent to the Plant property that will be directly affected by Master Plan outcomes, particularly with regard to odor control. Two Milpitas representatives are active CAG participants, and helped lead the January 2009 CAG tour through Milpitas areas closest to the Plant. Staff also met with Milpitas staff in preparation for the Land Use Workshop.

**Next Steps**

Building on the above activities, the next steps in the Plant Master Plan process include:

- Elected Official Presentations. Presentations to the tributary city councils and to boards of the sanitary districts are being scheduled for 2009; the first such presentation is scheduled March 17, 2009 with the Milpitas City Council. Tours for elected officials, specifically targeting newly elected officials, are also being planned.
- Business Community and Stakeholder Tours. Special tours are being scheduled for chambers of commerce and other business leaders in 2009.

- Regulatory and Resource Agency Input. Staff will continue to host meetings with regulatory and resource agencies to obtain input on land use scenarios and potential regulatory issues related to both the technical and land use elements.
- Community Workshops. A series of community workshops are planned during the three-year process. The first Community Workshop is slated for this spring, and will solicit public input on the early development of Plant Master Plan scenarios. These workshops will include Spanish and Vietnamese translation services.
- Development of Technical and Land Use Alternatives. Based on the input received at the technical and land use workshops as well as the community workshop and stakeholder outreach, the consultant team will assist in the development of technical options and land use alternatives over the course of 2009.

With these steps completed and the first round of community and stakeholder input gathered, the Plant Master Plan process will continue to the next phase: Staff will work to refine the Master Plan vision that reflects input from all stakeholders and narrow the scenarios for a second round of public input and stakeholder engagement.

### EVALUATION AND FOLLOW UP

The communications strategy for the Plant Master Plan includes a number of performance measures for tour/workshop attendance and survey percentages indicating satisfaction with the participation process. Goals for tours and stakeholder engagement in 2008 have been met or surpassed; given the surprising popularity of the Plant tours, new target goals are being developed for outreach in 2009. Staff will provide another progress report to T&E in May 2009. Each progress report will include communications and outreach activities.

### 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)

Engaging the general public and the many stakeholder groups is an essential component to developing the Plant Master Plan. The communications strategy for the Plant Master Plan was developed by City staff with input from the Master Plan Steering Committee and the Plant's

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Technical Advisory Committee. The tributary-wide Public Outreach Working Group, composed of staff from the cities and sanitation districts, has been giving input on the public outreach strategy since December 2007. The Community Advisory Group, will be used as an active sounding board for gauging community support and providing input for the Plant Master Plan.

### **COORDINATION**

This report has been coordinated with the Attorney's Office and is scheduled to be reported at the March 2009 Treatment Plant Advisory Committee.

### **FISCAL/POLICY ALIGNMENT**

This item is consistent with Council approved Budget Strategy Memo General Principle #2, "We must focus on protecting our vital core City services."

### **CEOA**

Not a Project.



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For questions, please contact Bhavani Yerrapotu, Division Manager, Technical Support Services, at 945-5321.

### **Attachments:**

A - Baseline Survey Information Memo