WHO USES THE PLANT

The cities of San José and Santa Clara co-own the Plant. Either directly or through sanitation districts, six other cities contract for the Plant's services. These cities and districts collectively fund Plant operations and include:

1. San José, co-owner
2. Santa Clara, co-owner
3. Milpitas
4. Cupertino/Cupertino Sanitary District
5. Los Gatos/West Valley Sanitation District
6. Monte Sereno/West Valley Sanitation District
7. Campbell/West Valley Sanitation District
8. Saratoga/West Valley Sanitation District
9. County Sanitation Districts 2-3 (unincorporated)
10. Burbank Sanitary District (unincorporated)

PROJECT MANAGEMENT AND CONTACTS

City of San José Environmental Services Department operates the Plant and is overseeing the Plant Master Plan. For more information, contact:

(area code for all numbers: 408)

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CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT
700 Los Esteros Road, San José, CA 95134

Master Plan Approach

Planning Principles

The Plant Master Plan will chart a course for the next 30 years that continues the Plant's success in protecting public health and the environment and in supporting the region's economy. The intent is to achieve the four master plan goals (below) in coordination with other key planning efforts, such as the South Bay Salt Pond Restoration Project, the Watershed Management Initiative, the City of San José's Envision 2040 General Plan, and the City of San José's Green Vision — including initiatives pertaining to energy, water recycling, and zero waste.

Plant Master Plan Goals

- Operational — Result in a reliable, flexible Plant that can respond to regulations and changing conditions.
- Environmental — Improve habitat and minimize impacts to the local and global environment.
- Economical — Develop cost effective technical and land use options to benefit customers.
- Social — Maximize community benefits through improved aesthetics and recreational uses.

Plant Master Plan

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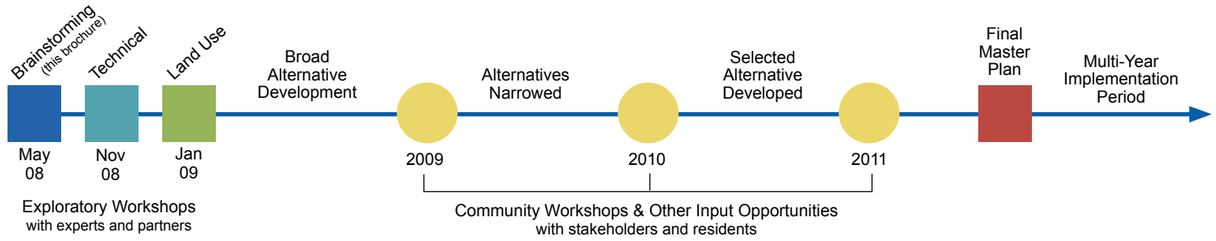
NEXT STEPS

The Plant Master Plan involves a three-year process that begins with a series of exploratory workshops that lead to development of a set of alternatives for the Plant and site. The public will be engaged through community meetings and other ways to give input for the process of narrowing alternatives and selecting the course that culminates in the final Plant Master Plan.



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Take the West Coast's largest advanced wastewater treatment plant, now more than 50 years old and in need of rebuilding …

Contemplate new uses for the plant's 2,600 acres of bufferlands, including open grassland and a large former salt pond …

Consider the plant's location in Silicon Valley, next to residential communities, a landfill, and a national wildlife refuge …

Apply new and exciting advancements in ecological approaches, wastewater treatment, and waste-to-energy technologies …

Add public values and future needs, and then …

Imagine What's Possible

SUMMARY

Plant Master Plan Brainstorming Workshop

May 29-30, 2008

The first of three workshops with experts to lay a foundation for developing Master Plan alternatives for public review

SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT

Plant Master Plan


Bill Browning
green design


Carrie Byles
architecture/land use


Dayna Baumeister
biomimicry


Jonathan Todd
ecological machines


Perry Schafer
alternative energy


Peter Gleick
climatology


Peter Warshall
habitat restoration


Rudy Killian
alternative energy

THE EXPERTS ...

"This site has tremendous and unique potential — you have land, water, and resources to work with."

— Peter Warshall, habitat expert, Warshall & Associates

"This site is rich with opportunities for integrated solutions."

— Jonathan Todd, John Todd Ecological Design

"The Plant can meet its own large energy needs and become a green power supplier as well—using solar, wind, waste conversion, and more."

— Perry Schafer, energy expert, Brown & Caldwell

"We can apply the genius of nature here."

— Dayna Baumeister, biomimicry expert, Biomimicry Guild

"Ecological solutions and design considerations are critical as sea rise is a given part of your future."

— Peter Gleick, climate change expert, Pacific Institute

"Integrating a green approach at the outset of structure design will not only increase energy savings but may cut your capital costs as well."

— Bill Browning, green design expert, Terrapin

Who Attended and What They Did

About 40 representatives from the cities and sanitary districts served by the Plant engaged in a creative two-day process with the experts. They brainstormed a range of ideas unfettered at this point by technical analysis and cost evaluation (those come later). These ideas provide a launching point for developing Plant Master Plan alternatives that will be presented to the public for consideration and input.






A World of Ideas

Leading architects, engineers, ecologists, and planners with global experience led an exploration of innovative concepts for improving the Plant and transforming the site. Ideas included:

Economic and Energy Self-Sufficiency

The San Jose/Santa Clara Water Pollution Control Plant is energy intensive—using more energy in its operations than all other facilities owned by the City of San José combined. However, clean biogas (methane) is a byproduct of both the Plant's wastewater operations and the adjacent landfill operations, and the biogas from these two sources meets two-thirds of the Plant's energy needs. Through process improvements, enough energy can be produced to meet 100 percent of the Plant's needs. More clean energy can be developed by tapping fats, oils, grease, discarded food, and other wastes streams. The Plant site also offers significant opportunity for solar and wind installations, and the discharge flow offers an opportunity to tap hydropower. The Plant can become an energy supplier.

By offering fee-for-service programs to the region—such as collecting grease from the area's restaurants—the Plant literally turns the area's waste streams into revenue streams while providing an environmental value to customers given the shortage of landfill space. Other ideas for revenue generation include:

- Develop algae farming for biodiesel and butanol
- Draw compatible businesses that use the Plant's byproducts to the site
- Consider farming, cash crops, food production, and plant nurseries
- Expand recycled water use (saves drinking water and helps recover treatment costs)
- Explore revenue potential from carbon credits and wetlands banking
- Establish a research institute focusing on renewable energy, clean technologies, and more

Community Amenities and Benefits

The site offers much opportunity to connect people to nature, and stands as a gateway from San José's Innovation Triangle to the southern Bay's beautiful marshlands. Integrating the area's contrasts—industrial and natural; seawater and fresh water; wet and dry—can offer a fascinating, educational examination of environmental dynamics. Workshop ideas for amenities for community benefit and enjoyment include:

- Recreational uses such as trails and a recycled water course for boating
- A "living museum" where animals are seen in their natural habitat
- An innovative "wow factor" such as a large water sculpture that attracts public interest

Ecological Vibrancy

Adjacent to the Don Edwards National Wildlife Refuge, some of the bufferlands already support wildlife. Habitat can be restored or enhanced for greater abundance, benefiting species while also providing enjoyment and educational enrichment for visitors. Ideas to encourage a vibrant, healthy local ecosystem include:

- Consider the whole watershed (upstream activities and effects) in design approach
- Include the flood protection benefits of restored marshlands and creeks
- Plan for habitat restoration at higher elevations to account for sea level rise
- Build smart ecostructures (operational structures that account for ecological dynamics)

Concept of integrated uses, watercourse, and habitat restoration in Shanghai