CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: PLANNING COMMISSION **FROM:** Kerrie Romanow

SUBJECT: PLANT MASTER PLAN ADOPTION **DATE: 10-17-13**

Approved [signature] Date 10/17/13

RECOMMENDATION

Recommend to the City Council adoption of the draft Plant Master Plan for the San José-Santa Clara Regional Wastewater Facility with modifications to the Land Use Component consistent with staff recommendations.

OUTCOME

Adoption of the Plant Master Plan (Plan) would allow staff to begin implementing the Plan including critical infrastructure improvement at the San José-Santa Clara Regional Wastewater Facility (Wastewater Facility). The implementation of the Plan will also result in creating a variety of economic and community benefits such as increased operational reliability, creation and maintenance of sensitive habitat, a variety of economic development resulting into up to 15,000 jobs and recreational amenities for residents.

Adoption of the staff-recommended land use scenario would replace the April 19, 2011 Preferred Alternative land use component for the Plant Master Plan with a land use component that would maximize environmental features while still retaining the same economic development opportunity.

EXECUTIVE SUMMARY

The purpose of the Plan is to ensure the continued role of the Wastewater Facility in protecting public health and the environment, while supporting the region's economy and creating a new vision for San José's South Bay shoreline. The City has engaged in a three-year process between the years 2007 and 2010 to develop the Plan. This extensive process involved community and stakeholder input and technical analysis and review. The primary purpose of the Plan is to ensure that the Wastewater Facility continues to protect the public health and the environment, to support the region's economy, and to create a new vision for San José's South Bay shoreline.

The Plan has two components:

- **Technical Component**: The technical component provides a roadmap for replacing the Wastewater Facility's aging facilities and infrastructure, and consists of process changes and long- range capital projects that will enable the Wastewater Facility to meet future regulatory requirements and population demands using sustainable, energy-efficient, and cost-effective solutions. The capital projects include odor control projects and a major change in the treatment and disposition of biosolids. The proposed new process would phase out the current need for over 500 acres of open air lagoons and drying beds over the next 15 years. The new process of enclosing the treatment and use of mechanical dewatering would shrink the Wastewater Facility's operational footprint, and reduce odors enabling potential new land uses along the South San Francisco Bay shoreline.

- **Land Use Component:** The land use component proposes a mix of new land uses on the Wastewater Facility bufferlands and current biosolids processing area that include: economic development with a focus on Clean Tech and job creation; recreational uses including trails and parks; enhancement of upland habitats; and restoration of habitats. The focus of the extensive community stakeholder process was on a balanced plan that would meet broad and important community goals like job and revenue generation, improve Wastewater Facility operations, and promote environmental stewardship.

Pursuant to the California Environmental Quality Act (CEQA), a draft Environmental Impact Report (DEIR) was prepared and circulated in early 2013. The DEIR identified that the Plan could have environmental impacts in areas such as transportation, noise, air quality, biological resources, hydrology, hazard and hazardous materials, water quality, aesthetics and cultural resources.

The DEIR evaluated reasonable alternatives to the April 19, 2011 Preferred Alternative to either avoid or significantly reduce the environmental impact of the project. The DEIR examined five alternatives, including a No-Project Alternative. The other four alternatives consisted of several combinations of increased open space and reduced footprint of economic development, with jobs ranging from 6,700 to 15,400.

In response to the comments on the DEIR received from various resource agencies and the public, ESD staff evaluated several options that would go farther in addressing the concerns expressed. With input from the Office of Economic Development and the City Manager's office, staff is recommending that Alternative 4: the Eastern Open Space Compressed Development Plan is adopted, with minor modifications, as the new Land Use Component of the Plan. This alternative proposes a land use scenario with a smaller development footprint but virtually the same number of jobs compared to the April 19, 2011 Preferred Alternative. Economic development would be located along Highway 237 to promote visibility and viability. The proposed new land use scenario would also meet the goals of the Plan, such as job creation and habitat preservation. The details of Alternative 4 and its environmental impacts are described in

section 7.3.4 of the DEIR. The Draft EIR is available online at http://www.sanjoseca.gov/DocumentCenter/View/10967.

The Transportation and Environment Committee (T&E) considered staff recommendation at a public hearing on October 7, 2013 and recommended to the Council to adopt the Plant Master Plan with the Modified Alternative 4 as the Land Use Component. Staff is not proposing any changes to the Technical Component of the Plan. The Plan summary report is available online at http://environment.sanjoseca.gov/DocumentCenter/View/5604.

Planning Commission Review
Pursuant to Section 1000 (a) of the San José City Charter, Staff is seeking the Planning Commission's review for recommendations to the Council respecting the adoption of the Plant Master Plan.

BACKGROUND

The San José -Santa Clara Regional Wastewater Facility (legally and officially named the San Jose/Santa Clara Water Pollution Control Plant) is the largest advanced wastewater treatment facility in the western United States. The Wastewater Facility serves approximately 1.4 million residents in the cities of San José, Santa Clara, Milpitas, Cupertino, Campbell, Los Gatos, Monte Sereno, and Saratoga. The City of San José and the City of Santa Clara co-own the Wastewater Facility. Pursuant to the Master Agreement dated 1959, and as amended in 1983 between the Cities of San José and Santa Clara, the City of San José manages the Wastewater Facility operations and the surrounding lands. In 1983, the Cities of San José and Santa Clara jointly contracted to provide sewage treatment capacity to additional five Sanitation Districts which together constitute the tributary agencies.

Wastewater Treatment Process Overview
In this Wastewater Facility, wastewater undergoes a sophisticated 10.5-hour treatment process that simulates the way nature cleans water. After wastewater enters the Wastewater Facility, in a three-step treatment process, solids, pollutants, and pathogenic bacteria are removed from the wastewater. Machinery and gravity separate solids from the wastewater. Added bacteria clean the water pollutants before the flow enters the advanced filter process.

Additional advanced (tertiary) level treatment is necessary to meet our region's strict state regulations for the shallow waters and sensitive ecosystem of the southern Bay. Very few communities undertake this third step of purification. This treatment process produces water that is 99% purified. Ninety percent of this treated water is subsequently discharged into the Bay. The remaining 10% of the treated water is sent to South Bay Water Recycling located onsite and is eventually used to irrigate food crops, parks, schools, golf courses, street medians, cooling towers and business park landscaping.

Solids separated out from the wastewater go through a biological process that relies on anaerobic bacteria to reduce volatile solids and kill pathogens. After 25 to 30 days of this process, the *digested sludge* is pumped to clay-lined storage lagoons for further stabilization that are capped with water for odor control. After 3 years settled solids are dredged, pumped into drying beds and actively dried for up to 6 months. The dried end product called "biosolids" is trucked to the Newby Island landfill for use as daily cover.

Site Description
The Wastewater Facility is located within a 2680 acre site at the northernmost tip of the City of San José, on the southern tip of the San Francisco Bay. The project site consists of 196 acres of wastewater processing operational area within which all mechanical facilities are located. The Residual Solids Management area containing the biosolids lagoons and drying beds used for solar drying of residual solids from processed wastewater occupy 543 acres of land. Currently inactive lagoons that were used until the 1970s for solar drying occupy 214 acre of land. The Wastewater Facility maintains 687 acres of vacant land to the south of the operational area and lagoons that buffers the operational area from developments to the south.

In addition, the site contains 800-acre Pond A-18 (previously a Salt Pond used by Cargill) located in the northwest corner of the site next to the Bay and Coyote Creek Flood Management levee and associated riparian and floodplain management area managed by the Santa Clara Valley Water District (SCVWD) along the eastern boundary. The site also includes the lands of former Nine Par Landfill, Zero Waste to Energy Development facility, the South Bay Water Recycling facility, and a municipal water tank.

The site is home to a large number of special status species. About 12 special status plants and 18 special status wildlife species have potential to occur on the site. The site also hosts managed habitats such as a bird pond and Salt Marsh Harvest Mouse habitat area managed by the SCVWD located in the north-east corner of the site and an approximately 100-acre burrowing owl habitat area managed by the City, currently fostering 5 pairs of owls.

The Wastewater Facility occupies a unique location at the southern edge of the San Francisco Bay, in North San José. South Bay is part of the San Francisco Estuary which supports sensitive wildlife habitats including marshes and mudflats. North San José is an important employment center for the region, including the home of many leading technology corporations.

Plant Master Plan Process
While the Wastewater Facility has successfully served the community for 57 years, aging pipes, pumps, concrete, and electrical systems need immediate and long-range attention in order to continue those successful operations well into the future. On March 27, 2007, the Council accepted staff's report analyzing the infrastructure, planning, and financing needs of the City's wastewater treatment facilities and provided direction to staff to proceed with the development of a Plan for the Wastewater Facility. In November 2007, Council approved a contract with Carollo Engineers to develop a Plan that would address the operational needs of the Wastewater Facility and potential development of the surrounding buffer lands through 2040.

The Plan project team was guided by the Plant Master Plan Steering Committee, made up of staff from the Wastewater Facility's two co-owning cities and from the tributary agencies served by the Wastewater Facility. The project team also provided quarterly updates to the Treatment Plant Advisory Committee (TPAC), and the San José's Transportation and Environment Council Committee (T&E) to solicit policy guidance from interested stakeholders throughout the process.

The following goals for the Plan were developed based on the principles of sustainability:

- Operational: To have a Wastewater Facility that is both reliable and can respond to changing conditions;
- Economical: To have a Plan that would maximize the economic benefits for ratepayers through cost-effective options;
- Environmental: To have a Plan that would improve the habitat in the bufferlands, and to minimize potential impacts to the local and global environment; and
- Social: To have a Plan that would maximize community benefits through improved aesthetics and recreational uses.

During the three-year Plan process, staff, with the assistance of Carollo Engineers, developed a set of technical components for the Plan, and three land use components. Three different land use proposals were developed that contained varying levels of economic development, social land uses, and environmental uses (e.g., habitat restoration). Through an extensive public input process, one of the land use alternatives was selected, and recommended to the Council as a "Preferred Alternative". The details of these land use proposals are provided in a Technical Memorandum available online at http://www.sanjoseca.gov/ArchiveCenter/ViewFile/Item/1562

Staff developed the Preferred Alternative with extensive technical oversight, agency feedback, and public and stakeholder input. In addition, staff addressed comments from the Wastewater Facility's tributary partners, and considered the Milpitas Guiding Principles for Plant Master Plan Reconstruction and Land Use Alternatives adopted by the City of Milpitas.

A critical component of the planning process included participation and input from stakeholders and the larger community on possible new land uses and proposed Wastewater Facility improvements. The public input occurred through ongoing input from the Community Advisory Group (CAG), and at the following times for certain subject matters:

1. May to November 2009: input was collected on community values for the Wastewater Facility lands, and this input was used to develop three land use alternatives.
2. May to November 2010: input was collected on three land use alternatives. The input was used to refine the Preferred Alternative.
3. November 2010 to January 2011: Community input was collected to further refine the "Preferred Alternative" recommended to the Council in April 2011.

In April of 2011, the City Council selected the Preferred Technical and Land Use Components for the Plan, and directed staff to proceed with the Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the draft Plan.

The memorandum is available online at
http://www3.sanjoseca.gov/clerk/Agenda/20110419/20110419_0704.pdf

ANALYSIS

A detailed discussion of the objectives for the Plan and a description of the proposed elements follow below. The goals of the Plan have been mentioned above.

Objectives

The following 15 objectives guided the development of the Plan:

- Protect the environment, public health, and safety through reliable wastewater treatment that can accommodate population growth and meet foreseeable future regulations.
- Maximize the long-range efficient use of the Wastewater Facility's existing facilities and reduce the footprint of the existing biosolids treatment area.
- Maintain cost-effective Wastewater Facility operations and competitive sewer rates through enhanced operations, flexibility, and rigorous evaluation of new technologies.
- Reduce visual, noise, and odor impacts from Wastewater Facility operations to neighboring land uses to the extent practicable.
- Promote additional resource recovery from Wastewater Facility operations by supporting recycled water production, increasing biogas production, and diversifying biosolids reuse options.
- Pursue energy self sufficiency and reduced greenhouse gas emissions by promoting renewable energy generation, increased energy efficiency, and enclosed biosolids processing.
- Allow for the beneficial use of Wastewater Facility effluent through multiple effluent release points and creation of freshwater habitats.
- Allow for complementary economic development that enhances job growth, generates revenue, provides for partnerships with educational institutions, and supports the regional growth of the Clean Tech industry.
- Locate economic development on Wastewater Facility lands to maximize viability and visibility.
- Protect the small-town character of the Alviso Village.
- Allow for complementary recreational uses, including interconnected trails to the Bay, environmental education, and addressing regional recreational needs.
- In partnership with other agencies, protect, enhance, and/or restore habitat, including upland areas, wetlands, and riparian vegetation near creeks.
- Allow for Pond A18 to provide water quality, ecosystem benefits, and flood control benefits.
- Promote access to recreational, educational, and economic development uses by improving transportation connections through the Wastewater Facility lands.
- In partnership with other agencies, protect the Wastewater Facility from flooding and risks associated with sea level rise.

Technical Component of the Plant Master Plan

Aging infrastructure and preparation for meeting stricter future regulations are two major drivers behind the technical component of the Plan. The Wastewater Facility has operated continuously since its construction in 1956, and now faces a need for repair and replacement. In addition, the Wastewater Facility must prepare for potential future changes in regulation affecting the operations. Some of the possible regulatory trends that drive the Plan are stringent requirements for removal of nitrogen, phosphorous, metals, and PCBs.

Biosolids Process
Instead of using over 500 acres of open air lagoons and drying beds, the Plan proposes using a new, enclosed mechanical dewatering and drying processes that will minimize odors, and result in a smaller footprint for that operation of approximately 160 acres. The new process will also help prepare the Wastewater Facility for future greenhouse gas regulations and landfill closure, and allow for diversification of disposal and reuse of the biosolids as a resource.

The magnitude and complexity of the transition to a new biosolids process for the Wastewater Facility that treats the wastewater of 1.4 million people makes it one of the largest in the country. Therefore, the Plan proposes a phased approach to implementation. This phased approach includes field piloting of potential processes to ensure that the significant investment will be successful and the performance and reliability are optimized while minimizing environmental impacts. Each treatment plant's solids are unique and processes must be chosen and fine-tuned to ensure successful operation and optimized operational expenses. Full transition to a new technology under the Plan is estimated to occur in the next several years.

Odor Control
The Plan also includes projects to further reduce odors throughout the Wastewater Facility. Odor control for certain operations such as headworks, primary, and the thickening process will include covering the equipments and treatment of the captured air. Odor control will result in increased operating and maintenance costs, but would fulfill project objective of reducing visual, noise, and odor impacts from Wastewater Facility operations to neighboring land uses to the extent practicable.

New Technologies
New technologies that may be needed to meet future regulations such as new filters and disinfection facilities for discharge to the Bay and provision of recycled water or future renewable energy projects such as solar arrays are reviewed at the programmatic level in the DEIR, and will be evaluated more closely once more information becomes available before these particular projects are implemented.

The total projected capital cost of all the technical improvements identified by the Plant Master Plan process is estimated at $2.2 billion over 30 years (escalated at two percent annually) for all capital projects, including immediate and critical rehabilitation and repair.

Land Use Component of the Plant Master Plan

Land Use Principles That Guided the Land Use Component
The Land Use Component of the Plan is driven by the environmental, social and economical goals. A set of land use principles further elaborate on these goals, and guided decisions associated with future land uses and facilities. The Principles utilize the site's unique assets: proximity to the Bay, abundant supply of treated water, large and contiguous land parcels and access and visibility. These principles include:

- Restore ecological systems by establishing a broad spectrum of habitats that can support local ecologies such as tidal mud flats, salt marshes, wetlands, riparian corridors etc.
- Capitalize on available energy resources by investing in renewable sources like photovoltaic energy fields
- Integrate synergistic research and education by providing opportunities for clustering development which supports research and education in green technologies and provides regional economic benefits and establish a campus-like environment to support R&D and campus development.
- Connect regional open space systems and respond to the unique condition of the Wastewater Facility's waterfront setting at the edge of the Bay with quality open space
- Use a balanced land use strategy between operational, social, environmental and economic land uses
- Promote economic development by provide a set of diverse job types, and maximize opportunities for local and regional job creation, and lease and tax revenues.
- Protect against sea level rise using various strategies and techniques

Together these principles reflect the type and range of non operational land use and developments envisioned under the Plan.

The rest of the report describes the Plan's Land Use Component using details of the Modified Alternative 4. On October 7, 2013, the T&E Committee unanimously recommended the Modified Alternative 4 for consideration of the full City Council.

Preferred Alternative vs. Staff Recommended Alternative
The Preferred Alternative selected in April 2011 proposes to allocate approximately 460 acres of land for new economic development located along the frontage of State Route (SR) 237 and in the current biosolids drying area. It also proposes an arterial roadway through the northeastern part of the site, to connect to Dixon Landing Road to the north for accessing Highway 880, traversing through sensitive habitat in this area. The DEIR identified that the Plan with land uses as described in the Preferred Alternative could have environmental impacts in areas such as transportation, noise, air quality, biological resources, hydrology, hazard and hazardous materials, water quality, aesthetics and cultural resources.

In response to the comments on the DEIR received from various resource agencies and the public, ESD staff evaluated several options that would go farther in addressing the concerns expressed. With input from the Office of Economic Development and the City Manager's office, staff is recommending the adoption, with minor modifications, of Alternative 4: the Eastern Open Space Compressed Development Plan as the new Land Use Component of the Plan. This alternative proposes a land use scenario with a smaller development footprint, but virtually the same number of jobs compared to the April 2011 Preferred Alternative land use component, and also eliminates the Dixon Landing Connection.

All economic development would be located along Highway 237 to promote visibility and viability. The proposed new land use scenario would also meet the goals of the Plan, such as job creation and habitat preservation. Alternative 4 as modified represents a strategic opportunity to increase much needed jobs and advance the City's environmental goals. The modified Alternative 4 would allocate approximately 1,155 acres of land for habitat and roughly 15% of that acreage or roughly 160 acres of land for economic development. It is anticipated that through adjustment to the job mix, the development would still generate approximately the same number of jobs as the "Preferred Alternative" while minimizing the footprint of the development by over 50 percent. Due to the concentration of development in North San José, maintaining economic development along Highway 237 is highly desirable to certain industries because that location offers maximum visibility and accessibility to the existing roadways.

A map comparing the modified Alternative 4 to the Preferred Alternative is provided as Attachment A. A summary of land use areas of these two plans is provided as Attachment B.

Reduced Footprint
A modified Alternative 4 would provide opportunity to preserve habitat otherwise eliminated by the construction of the Dixon Landing Road extension that was proposed for the area east and north east of the Wastewater Facility operational area. This area currently contains the Santa Clara Valley Water District's mitigation area and the adjacent Coyote Creek. Alternative 4 as modified would also reduce some construction-related dust, noise, and emissions relative to the Project, since the footprint of economic development is reduced by almost 50 percent. Under this alternative, some of the potential concerns raised in the DEIR should decrease relative to the Project, with the exception of potential transportation impacts due to the development.

Plant Master Plan Objectives
The modified Alternative 4 meets most of the objectives of the Plan, and partially meets the objectives of Transportation and Recreation. If economic development is limited to the area south of the Wastewater Facility operational area, there would not be a need to construct a Dixon Landing Road connection which would reduce environmental impact to the area east and northeast of the Wastewater Facility operational area. Staff is also recommending that the Institute, a proposed partnership between industry and education, be removed to preserve more of the existing development footprint for jobs. Staff will explore other educational partnerships to fulfill the education-related objectives in the Plan.

Economic Development Land Uses
The intent of the economic development is to create new jobs in existing and emerging economic sectors and to generate lease and tax revenue. The Plan supports City's Green Vision by seeking to attract Clean Technology jobs. The timing of development would be based on the infrastructure improvements needed to reduce odors from Wastewater Facility operations and biosolids management, provide services such as electricity and potable water to the area, and market conditions.

Potential land uses under consideration for these areas are summarized as follows:

- *Light Industrial.* Large and contiguous parcels available under this Plan are desirable to light industrial uses. Thirty one acres of light industrial uses are proposed.
- *Office / Research & Development.* This area could support a range of activities such as research, laboratory, product development and testing, engineering and sales activities, and any other basic research functions leading to new product development. 81 acres of R&D uses are proposed.
- *Retail/Commercial.* Parcels along Hwy 237 provide high visibility and easy access to retail sites. This area may provide for retail and service establishments to serve local employees and residents as well as destination retail. Establishments could include general retail, restaurants, supermarkets, gas stations, and personal service uses. Retail use provides significant revenue to the City. Five acres of retail use is proposed.
- *Renewable Energy Field.* Areas are proposed to be reserved for renewable energy fields such as solar panel installation. In addition, it is proposed that buildings on the site would require solar panels on rooftops.
- *Roads.* A road network to support the proposed land uses would require approximately 31 acres of rights-of-way. New roadways are proposed to connect new development with the rest of the area such as the Nortech Parkway and Ranch Drive Extension.

Environmental Uses
The modified Alternative 4 would preserve approximately 1,170 acres of the Wastewater Facility's property for habitat restoration. Habitat restoration would be implemented in partnership with other entities such as the Santa Clara Valley Audubon Society, the Santa Clara Valley Habitat Conservation Plan (HCP), and the Santa Clara Valley Water District. The following habitat types would still be protected, created, or restored under the modified Alternative 4:

- *Freshwater Wetlands.* Approximately 60 acres of freshwater wetlands would be created to beneficially use fully treated effluent. These wetlands would further improve effluent quality through natural biological processes. Adding the wetland as a discharge location, in addition to the existing Artesian Slough discharge location, could benefit salt marsh habitat in San Francisco Bay and provide wildlife viewing areas that will be made accessible through a network of nature trails.
- *Burrowing Owl Habitat.* Approximately 180 acres of grassland habitat west of the Wastewater Facility operational area would be protected and managed to support burrowing owls, a California species of special concern. Staff recommends analyzing the various options available to the Wastewater Facility to provide for the long term

maintenance and protection of these lands for burrowing owls including, but not limited to, incorporation of the lands into the Habitat Conservation Plan area, and/or to meet any mitigation requirements in future permits required to implement the Technical Component.

- *Riparian Habitat.* Approximately 200 acres of land, including the riparian habitat along Coyote Creek and a restored Artesian Slough corridor, would be provided for protection, maintenance or restoration of riparian habitat.
- *Marsh / Mudflats.* Situated on the site in the location of the existing Pond A18, over 800 acres of salt marsh habitat and tidal areas adjacent to the Bay could be constructed to help provide flood protection and restore a transition from the salt marsh habitat through brackish to perched freshwater wetlands and upland grasslands. This habitat would also support special status species such as the clapper rail and salt marsh harvest mouse and provide large contiguous areas for these inhabitants.

Flexible Space

Approximately 390 acres of land currently occupied by the Wastewater Facility's sludge lagoons and drying beds could become available as open space, once that part of the Wastewater Facility's operation is phased out over the next decade. This space could have many potential future uses. Any use that would result in the generation of more vehicle trips than what was analyzed in the EIR will require additional environmental review prior to implementation.

Flood Protection

As part of the Plan, Environmental Services staff has been actively coordinating with the Army Corps of Engineers, the State Coastal Conservancy, and the Santa Clara Valley Water District on the South Bay Shoreline Study project to determine the appropriate alignment for Bayside levees to protect the Wastewater Facility and Alviso from sea level rise and tidal flooding; and to ensure that lands in the staff recommended land use scenario are designated for future levee placement. It is also anticipated that the restoration of A18 will occur as part of the Shoreline Project.

Recreational Uses

A modified Alternative 4 provides recreational opportunities on land surrounding the Wastewater Facility's operational area. These facilities could be developed in partnership with other agencies and entities, as appropriate funding for these projects become available. Proposed facilities include:

- *Trails.* 9 miles of new trails and connection to the Bay Trail.
- *Park.* A new 40-acre park with sports fields.
- *Habitat Areas.* Access to the Wastewater Facility's Bay front for bird watching and hiking.

Phasing and Fiscal Information

The development of the Wastewater Facility lands proposed under the Plan is contingent on market demand. In addition, future development and availability of land would be contingent on ensuring that the infrastructure improvements at the Wastewater Facility can adequately mitigate

the effect of potential odors on sensitive receptors and that development would not interfere with Wastewater Facility operations.

Market conditions for industrial property have improved significantly since prior economic and fiscal analysis was undertaken in 2008; land values have increased in the area. Silicon Valley's technology and manufacturing industries are vital. Large campus sites are highly desirable and in short supply. The highway 237 corridor has been firmly established as a desired location for tech and manufacturing users. Staff anticipates that up to 15,000 jobs could be supported through the land use plan as proposed. Associated employee income would be directly infused into the local economy and additional jobs and income would be indirectly implemented from the local purchases of goods and services by the new business and employees.

At build-out estimated ground lease revenue is projected to be between $10 million to $12.5 million annually. It is estimated that an additional $4 million to $5.5 million will be generated annually from associated property tax, sales tax, utility users tax, franchise tax, amongst other revenues. Substantial additional benefit would be derived from the City of Santa Clara, the County of Santa Clara, local school districts and the tributary agencies.

The economic analysis using the IMPLAN economic assessment model for Santa Clara County showed that the total economic impact of this development, considering construction and permanent economic activity, is approximately $16.5 billion – a substantial benefit to the region.

The staff recommended land use scenario is shown side-by-side with the original Preferred Alternative as a conceptual map in Attachment A. The modified section of the Draft Plant Master Plan is provided as Attachment C.

General Plan Conformance and Land Use Compatibility
The entire land area within the site, excluding the Pond A-18 and the riparian habitat in the east, has a General Plan Land Use Designation of Public/Quasi Public, consistent with the current use of the site. If the proposed Plant Master Plan is adopted, 340 acres of currently vacant land will be available for other uses such as habitat or economic development. In anticipation of the adoption of the Plant Master Plan, Environmental Services Department (ESD), initiated a General Plan Amendment request to change the Envision San José 2040 General Plan Land Use/Transportation Diagram designation on 81 acres to Industrial Park, on 31 acres to Light Industrial, on 180 acres to Open Space, Parklands and Habitat, on 5 acres to Neighborhood/Community Commercial, and on 11 acres to Combined Industrial Commercial. Detailed discussion of land use compatibility of the proposed land uses are discussed in the General Plan Amendment Staff Report presented by the Planning Department.

To provide access and connectivity for the land uses envisioned in the Plan, the proposed General Plan Amendment would also include the following modifications to the Transportation Diagram: widening of Zanker Road from two lanes to four lanes; extension of Nortech Parkway from its current terminus east of North 1st Street to Zanker Road; and an extension of Ranch

Drive to run parallel to and north of SR 237 from its current terminus west of McCarthy Boulevard to Zanker Road.

POLICY ALTERNATIVES

Alternative #1: Recommend that the Council adopt the Plant Master Plan with the "Preferred Alternative" selected by the Council in 2011
Pros: The Preferred Alternative selected in 2011is the Project based on the collective input of the stakeholders during the Plant Master Plan development process.
Cons: While the Preferred Alternative attempts to balance all interests, proceeding with the land use component would reduce future open space and habitat areas.
Reason for not recommending: Decreases remaining flexible space for habitat, open space, or Wastewater Facility expansion beyond the planning window.

Alternative #2: Recommend that the Council to select from Alternatives 2, 3, or 5 that were analyzed in the DEIR.
Pros: Alternatives 2, 3, or 5 offer a range of options with varying levels of development vs. preservation of open space/habitat.
Cons: None of these alternatives would meet the goals of the Project to the fullest extent practicable as modified Alternative 4.
Reason for not recommending: Limits either the potential for economic development or reduces the amount of open space/habitat depending on the alternative.

Alternative #3: Recommend that the Council not adopt the Plant Master Plan.
Pros: Conditions at the site remain largely unchanged.
Cons: Wastewater Facility reliability could be expected to decline. Odor control projects would not be implemented. New jobs would not be implemented and new habitat would not be created.
Reason for not recommending: The no project alternative does not address any of the Wastewater Facility's aging infrastructure needs, the City's economic development goals, or formally designate any areas for open space or habitat conservation.

PUBLIC OUTREACH/INTEREST

☐ **Criterion 1**: Requires Council action on the use of public funds equal to $1 million or greater. **(Required: Website Posting)**

✓ **Criterion 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)**

☐ **Criterion 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)**

Direct engagement with the public and the Wastewater Facility's many stakeholder groups has been an essential component to developing the Draft Plant Master Plan over the past three years. The communications strategy for the Plant Master Plan was developed by City staff with input from the Plant Master Plan Steering Committee, and implemented using a variety of media, advertising, and community engagement tactics. The tributary-wide Public Outreach Working Group, composed of staff from the cities and sanitation districts, has been providing input on the public outreach plan since December 2007. The Community Advisory Group have met 20 times, and three public input opportunities were provided in May 2009, May 2010 and January 2011. Staff also met with regulatory and resource agencies to obtain input on the Draft Recommended Alternative.

Community comments were received in response to the Notice of Preparation of the EIR in May 2011. The DEIR was circulated from January 13, 2013 through March 13, 2013, which included a statutory public review period of 45 days and a 15-day extended review period. The First Amendment of the DEIR will be circulated for a statutory public review period of 10 days. Public comments were accepted by the Planning Department during these public review periods. During these opportunities for public input, approximately 50 comment letters were received from US and State Resource Agencies, non-profit and environmental organizations, the Tributary Agencies, neighboring cities, private property owners adjacent to the Wastewater Facility and other interested individuals. Public concern focused on land use issues, noise, hydrology and flood control issues, biological resources issues, and technical issues related to the DEIR text. Staff refined the Land Use Component of the Draft Plant Master Plan based on these comments.

Representatives of two environmental groups and one individual provided comments at the T&E hearing held on October 7, 2013. Comments from Santa Clara Valley Audubon Society included concerns with no alternative for Wastewater Facility improvements only, and no trigger for economic development, based on the viability of regionwide burrowing owl population. Comments from Citizens Committee for Completing the Refuge included questions about risks from future potential sea level rise, traffic concerns due to elimination of Dixon-landing road connection, and concern about the ability of Federal agencies to review the 1st Amendment of the DEIR in case of continued Federal shutdown. Response to the comments on the topics of CEQA alternative, triggers, traffic and sea level rise have been analyzed in the 1st Amendment of the DEIR.

In addition to these comments, Councilmembers Liccardo and Rocha requested clarification on the use of "Flexible Space," which has been provided in this memorandum, and also in the Plan, page 50 of Attachment C. Councilmembers Rocha and Herrera inquired about triggers. While triggers based on regionwide burrowing owl population are not included for reasons explained in the 1st Amendment of the DEIR, the Plan currently proposes to phase-in economic development consistent with requirements identified in project-level review, and the effectiveness of improvements at the Wastewater Facility to reduce the impact of odors on potential sensitive receptors (see page 53 of Attachment C).

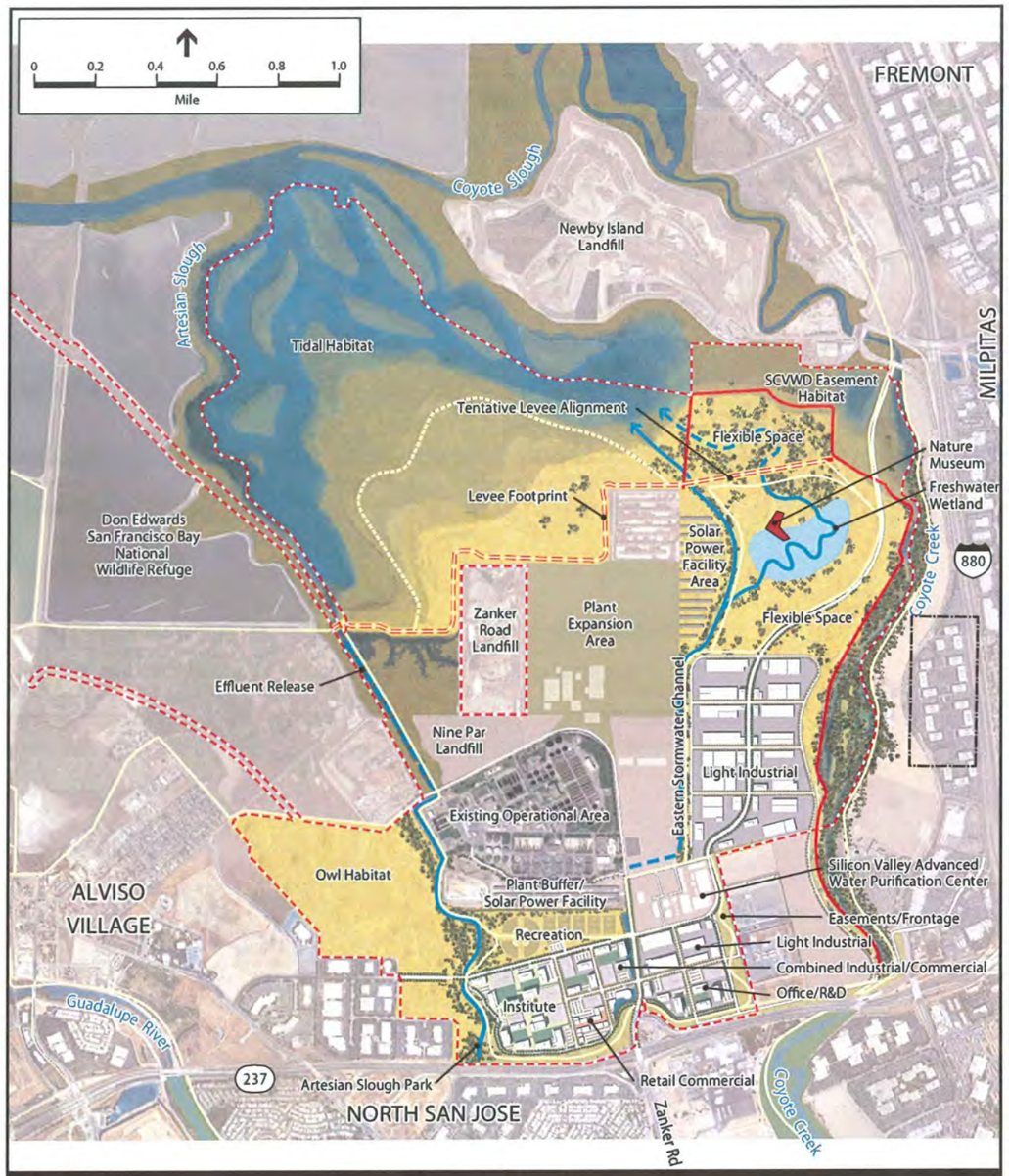
CEQA

CEQA for the environmental impacts of this project were addressed by an Environmental Impact Report (EIR) entitled "San José/Santa Clara Water Pollution Control Plant Master Plan" to be heard by the City of San José Planning Commission on October 30, 2013. The Master Plan EIR serves as both a program and a project EIR for the Master Plan, which includes proposed upgrades to the Wastewater Facility reviewed a project-level of detail and other uses of Wastewater Facility lands reviewed at a program-level. The EIR is discussed in detail in a separate staff report. The EIR and technical appendices are available for review on the Planning web site at: http://www.sanjoseca.gov/index.aspx?nid=2434

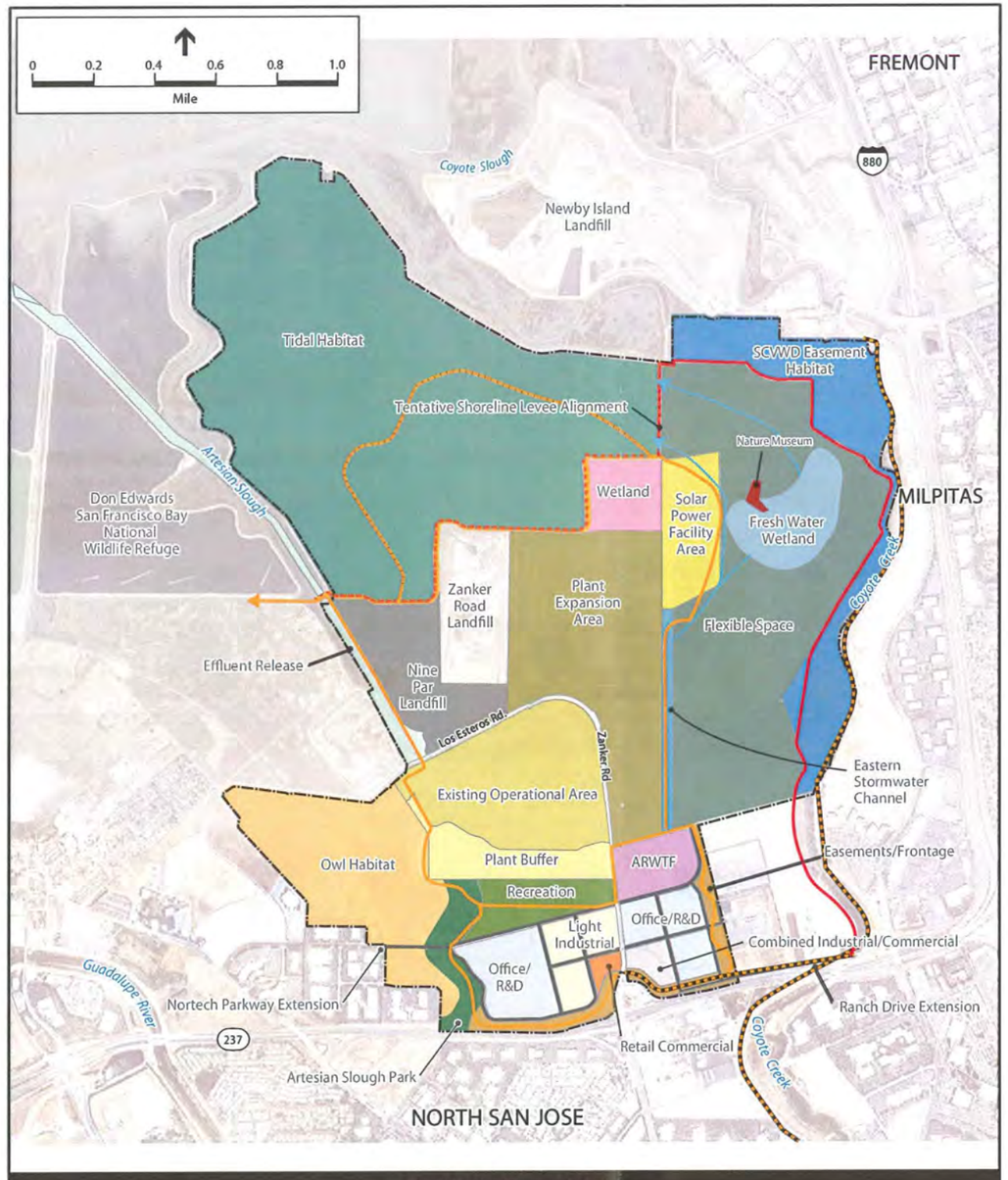
/s/ Ashwini Kantak for
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact René Eyerly, Manager, Sustainability and Compliance at (408) 975-2594.

Attachments:
Attachment A: Comparison of Staff Recommendation and Preferred Alternative Map
Attachment B: Comparison of Staff Recommendation and Preferred Alternative Project Details
Attachment C: Plant Master Plan Updated Land Use Component



Proposed Site Plan



Modified Alternative 4

SOURCE (Proposed): Skidmore, Owings & Merrill LLP

Attachment A

San Jose/Santa Clara WPCP Master Plan

Proposed Site Plan and Modified Alternative 4

LAND USE AREAS ASSOCIATED WITH PREFERRED ALTERNATIVE AND ALTERNATIVE 4

	Proposed Project	Alternative 4: Eastern Open Space Compressed Development	Modified Alternative 4
LAND USE			
WPCP and Recycled Water Area; Effluent Release			
Proposed Operational Area, Recycled Water Facilities, Effluent Release, Plant Buffer Area with Solar Power Facility (E1-P1), and Solar Power Facility Area (E1-P2)	*618*	*618*	*618*
Habitat and Flood Protection			
Levee and Marsh/Mudflat/Shallow Bay/Upland Habitat	847	847	847
Artesian Slough Riparian Corridor	32	32	32
Freshwater wetland	35	61	61
Wetland Refinement Area	35	35	35
Owl habitat	180	180	180
Eastern Stormwater Channel	18	18	18
Sub Total	***1,143***	***1,173***	***1,173***
Economic Development			
Light Industrial	158[a]	11	31
Institute	45	21	-
Office/R&D	23	81	81
Retail Commercial	16	5	5
Combined Industrial/Commercial	21	11	11
Road	64	31	31
Sub Total	***327***	***159***	***159***
Recreation			
Recreation (community park and athletic facility)	40	40	40
Trails	12 miles	9 miles	9 miles
Education Center / Nature Museum	2	2	2
Sub Total	***42***	***42***	***42***
Other Land Uses			
Flexible Space	247[a]	389	389
Easements/Frontage	37	37	37
Santa Clara Valley Water District (SCVWD) Easement	165	165	165
Nine Par Landfill	90	90	90
Sub Total	***539***	***681***	***681***
TOTAL	**2,674**	**2,674**	**2,674**

[a] In order to meet the jobs target for the PMP (15,400 jobs), 132 acres of the 247 total acres of Flexible Space, listed under "Other Land Uses", is assumed to be developed as Light Industrial. Flexible space may ultimately be proposed for light industrial, open space, or other uses at a future date.

Numbers may not total due to rounding.

The Plant occupies a unique 2,600-acre site located at the southern edge of San Francisco Bay in North San José. It is situated at the base of two major Bay Area watersheds: the 170 square mile Guadalupe Watershed, and the 320 square mile Coyote Creek Watershed.

Existing Land Uses

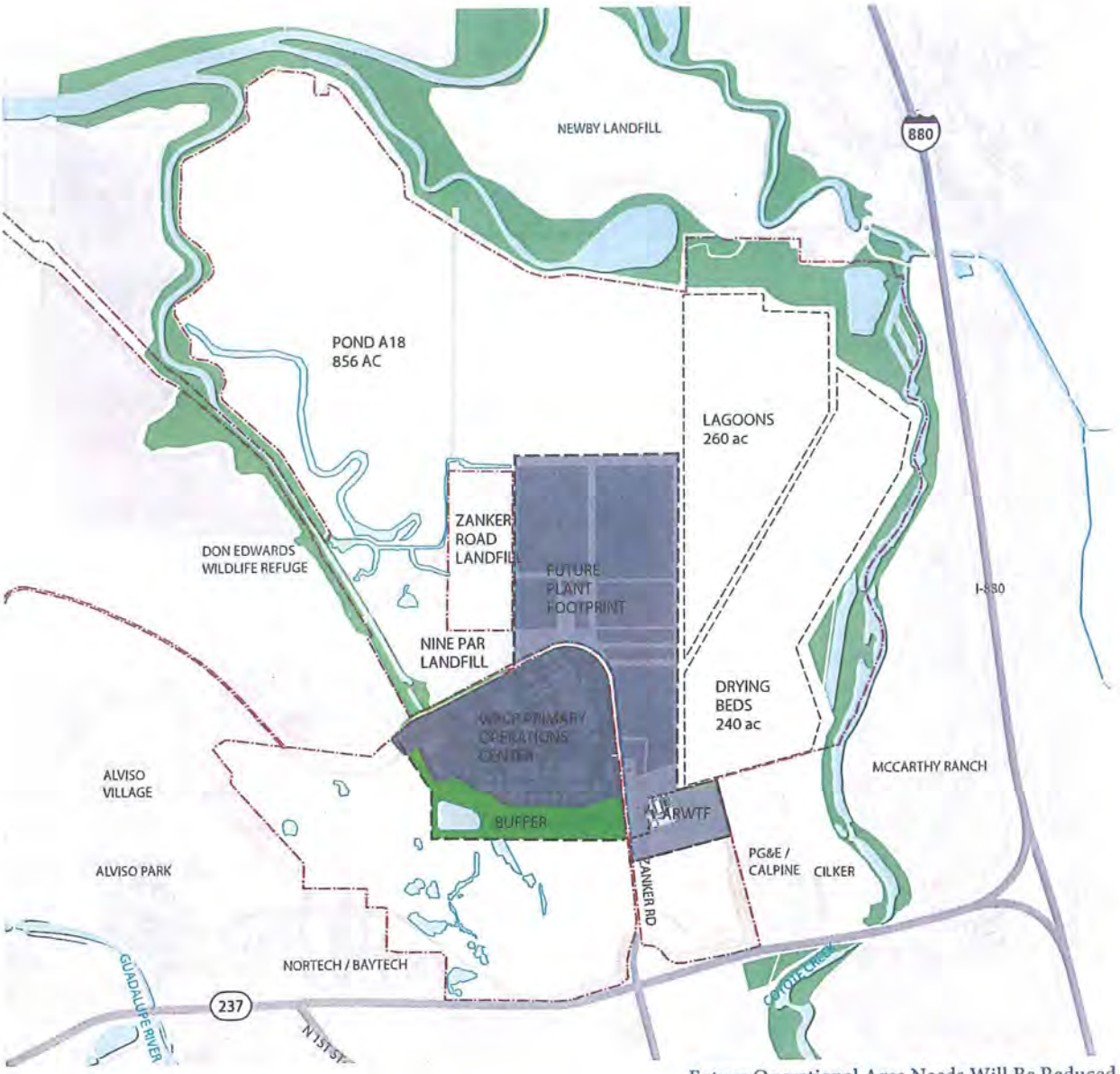
The current Plant site is comprised of the following major elements:

- Operational Area.
- Residual Solids Management (RSM) area, including the biosolids lagoons and biosolids drying beds.
- Legacy biosolids lagoons.
- Pond A18.
- Buffer lands.

The operational area, RSM, and legacy biosolids lagoons comprise approximately 36 percent of the total land area, Pond A18 approximately 32 percent, and the buffer lands approximately 26 percent.

The Plant's existing operations footprint currently includes the operations area, the RSM, and the legacy biosolids lagoons which together comprise a total land area of approximately 950 acres. With the transition to mechanical solids dewatering, and relocation of a major component of the solids handling processes to the legacy biosolids lagoons, the operations footprint will reduce to approximately 440 acres.

Overall, with the implementation of the Plant Master Plan, it is estimated that approximately 1,500 acres will become available for non-operational uses, including habitat and ecological restoration, recreation, and economic development.



Future Operational Area Needs Will Be Reduced

LAND USE PRINCIPLE AND KEY ELEMENTS

Land use principles were established to guide decisions associated with future land uses and facilities in ways that support the goals of the overall Master Plan. These principles seek to capitalize on the Plant's unique assets: proximity to the Bay, abundant supplies of treated water, large and contiguous land parcels, and access and visibility. The principles involve:

Restore ecological systems

- Establish a broad spectrum of habitats that can support local ecologies, including tidal mud flats, salt marshes, upland habitats, wetlands, and riparian corridors.
- Restore the Artesian Slough, Coyote Creek, and other natural water systems of the site.

Capitalize on available energy resources

- Provide land and infrastructure that capitalizes on viable sources of renewable energy such as photovoltaic (PV) energy fields, roof-mounted PV, wind turbines, and water-based energy crops such as algae.
- Develop energy facilities and systems as visible, attractive, and integrated elements of future land uses and developments.

Capitalize on available water resources

- Utilize treated water in innovative ways that support ecological, social and economic development goals.

- Integrate water as a visible, attractive, and functionally integrated element of future land uses and developments.

Integrate synergistic research and education

- Provide opportunities for clustering development which supports research and education in green technologies and provides regional economic benefits.
- Identify opportunities to establish a world-class institution through partnerships between the private, public and academic sectors.
- Establish a campus-like environment to support R&D and campus development.

Connect regional open space systems

- Provide open space and habitat connections to support the goals and objectives of the South Bay Restoration Plan.
- Respond to the unique condition of the Plant's waterfront setting at the edge of the Bay with quality open space.
- Reflect the local needs and desires of the broader community.

A balanced land use strategy

- Balance economic, social, and open space land uses with the need to develop the Plant as a world-class South Bay asset.
- Reserve land area needed for the Plant's operational future.
- Allow for an appropriate development intensity to establish critical mass and a sense of place.

Promote economic development

- Provide a set of diverse land uses to support a variety of economic development opportunities, including office and R&D, light industrial, institutional, and retail.
- Maximize opportunities for local and regional job creation, and lease and tax revenues.

Protect against sea level rise

- Protect the Plant, habitats, and areas of economic development from the threat of sea level rise.
- Utilize "soft" techniques to provide a barrier to sea level rise, such as stepped ecological wetlands.

The land use framework is organized around three key land use elements: Economic Development, Social Uses, and Environment. Together, these elements reflect the type and range of non-operational land use and developments anticipated at the plant. Some of the key aspects of these elements are the following:

Economic development

- Create new jobs in existing and emerging economic sectors.
- Generate lease revenue.
- Generate property, sales, and income tax revenue.
- Promote synergy with the Plant and available assets, such as treated water and energy.
- Promote City's Green Vision by implementing renewable energy systems, green buildings, reuse of recycled water, and green infrastructure.

Social uses

- Establish a wildlife museum that focuses on local ecosystems and opportunities to restore the connection of people to nature.
- Establish parkland to support diverse community needs for passive recreation and outdoor social activity.
- Incorporate recreation-oriented open space resources.
- Provide new trails that connect to the Bay Trail, San José waterfront, and local destinations.

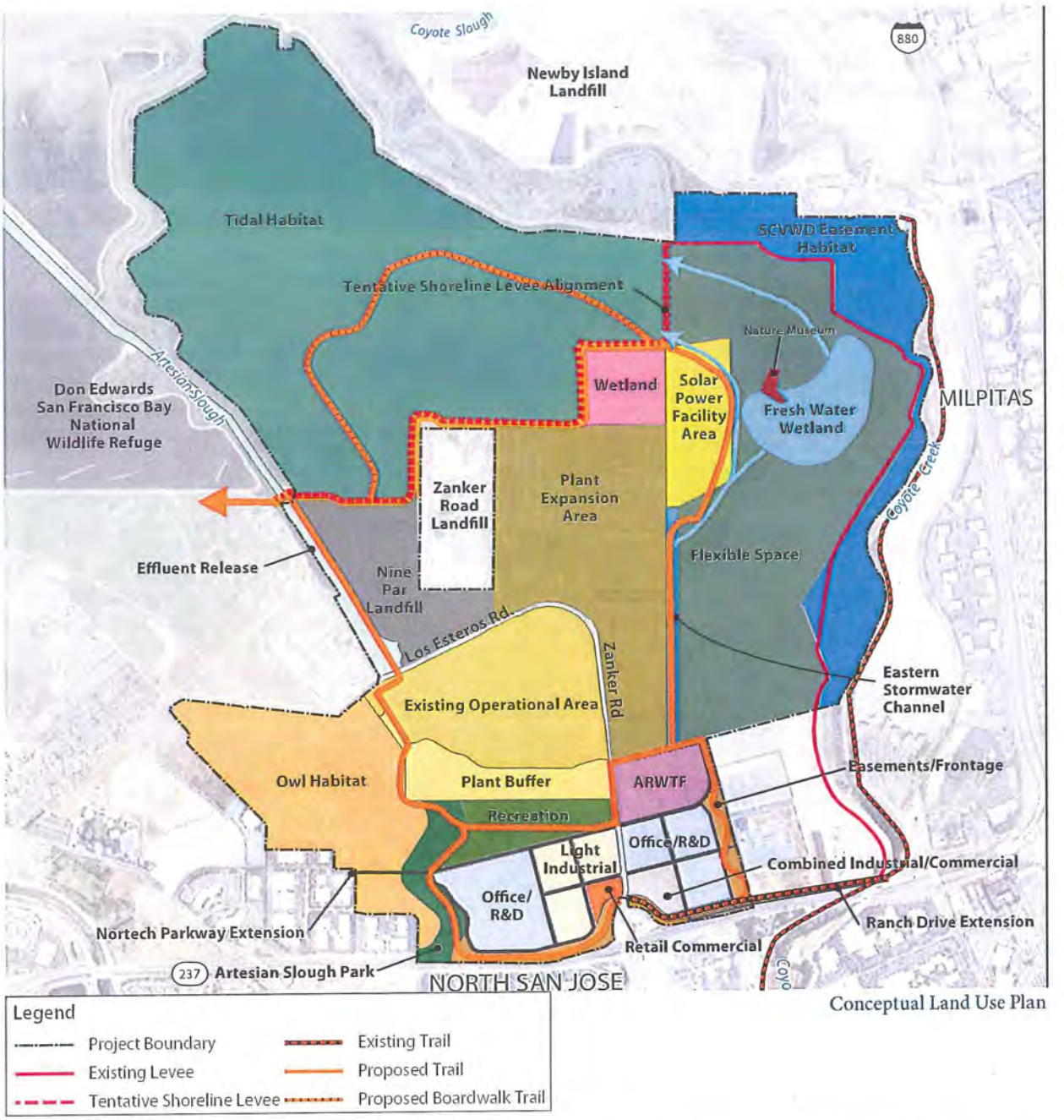
Environment

- Support larger natural systems of the San Francisco Bay through elements such as tidal mud flats, salt marshes, upland habitats, wetlands, and riparian corridors.
- Preserver and enhance special status species located on Plant lands, such as Congdon's tarplant, burrowing owls, and the salt marsh harvest mouse.
- Assist in the management and control of flood mitigation challenges, including new levees to protect against the threat of sea level rise.
- Incorporate water-based programs within the open space network.

LAND USE PLAN

The land use plan provides a comprehensive framework for the long-term development of Plant lands that is consistent and compatible with policies established by the City, the aspirations of the local community, and the vision and goals of the Plant Master Plan. Each land use type, including commercial, industrial, office, recreational, and open space/habitat has been optimized in terms of location and size in order to achieve maximum economic, environmental, and social benefit for the City and the entire South Bay region. All of these non-wastewater uses would be financed by sources other than the Plant's wastewater funds.

Illustrative Land Use Plan



Conceptual Land Use Plan

Economic Development Areas

- Retail, Office/R&D, and light industrial uses would be clustered into a compact footprint located adjacent to Hwy 237 to take advantage of the site's visibility and accessibility.
- Retail would anchor the intersection of Hwy 237 and Zanker Road.
- Renewable energy fields would be located north of the Plant operations area contiguous to the Plant operations area and provide suitable area for a variety of energy systems, such as photovoltaic solar panels.
- In addition to dedicated sites for renewable energy facilities, building-mounted photovoltaic solar panels are proposed for all future economic development.

Flexible Space

- Land area totaling approximately 389 acres, currently occupied by the RSM area, would become available for other uses, once those operations are phased out during the next decade. This space could have many potential uses. Any use that would result in the generation of more vehicle trips than what was analyzed in the Master Plan EIR will require additional enviornmental review prior to implementation.

Summary of the Land Use Plan Area

	Use	Area (acres)
Facilities	Proposed Operational Area, Effluent Release, Plant Buffer Area with Solar Power Facility	558
	Recycled Water Facilities (ARWTF)	60
	Sub Total	**618**
Recreation	Recreation (Community Park and Athletic Facility)	40
	Education Center/Nature Museum	2
	Trails	9 miles
	Sub Total	**42**
Economic Development	Light Industrial	31
	Office/R&D	81
	Retail Commercial	5
	Combined Industrial/Commercial	11
	Road	31
	Sub Total	**159**
Habitat and Flood Protection	Levee and Marsh/Mudflat/Shallow Bay/Upland Habitat	847
	Preserved Wetland Habitat	35
	Artesian Slough Riparian Corridor	32
	Proposed Freshwater Wetland	61
	Owl Habitat	180
	Eastern Stormwater Channel	18
	Sub Total	**1173**
Other Uses	Flexible Space	389
	Easements/Frontage	37
	Santa Clara Valley Water District (SCVWD) Easement	165
	Nine Par Landfill	90
	Sub Total	**681**
Total		**2,673**

Social Uses

- A 40-acre park with sports fields for active and passive recreation would be located south of the Plant operations area. The park will interface with the Artesian Slough.
- 9 miles of trails are proposed to connect with existing and planned segments of the Bay Trail and other proposed recreational/educational uses including the nature museum, community park and sports fields, energy field information center, as well as the Don Edwards National Wildlife Refuge Education Center.
- A nature museum would be situated within the proposed freshwater wetland area. The museum would occupy approximately two acres that features native habitat gardens and viewing platforms of nearby upland and wetland areas.

Habitat Areas

- Freshwater Wetlands: 61 acres of freshwater wetlands would be created to polish full treated effluent. During heavy rain events, these wetlands would offer added capacity for holding water prior to release into the San Francisco Bay.

  Effluent Release Strategy: Wetlands located north of the future Plant operations area would be intended primarily for storage of effluent. The wetlands would also provide benefits to water quality (polishing of the effluent), much needed freshwater wetland habitat (very rare near the Bay), and recreational opportunities. This wetland would discharge into the tidal marsh located downstream of the Water District flood control and conservation easement. An overflow channel, which would designed as a seasonal riparian corridor common to this region, would bypass the freshwater wetland in case of major wet-weather events. This channel would also serve as the stormwater drainage for the development east of Zanker Road.

  The restored Artesian Slough would be designed as an aesthetic feature to re-create a historic slough and rare riparian habitat. This area would serve as a boundary between the developed area to the east and the burrowing owl/grassland habitat to the west.
- Marsh/Mudflats/Upland Habitat: Situated on the site in the location of the existing Pond A18, nearly 800 acres of salt marsh habitat and tidal areas adjacent to the bay would be constructed to help provide flood protection and to restore a transition from the salt marsh habitat through brackish to perched freshwater wetlands and upland grasslands. Additional upland habitat would be established in the northern area of the decommissioned drying bed operations hosting a range of dry and moist grasslands as well as vernal pools and vegetation would include ryegrasses, rushes, and sedges.
- Burrowing Owl Habitat: 180 acres of grassland habitat would be restored to support burrowing owls, a California species of special concern.
- Riparian Habitat: 170 acres of land that contain riparian habitat, including the Coyote Creek Riparian Habitat and the Artesian Slough corridor, would be restored or maintained. Some will redistribute the Plant's discharge of fully treated effluent in a manner that reduces potential adverse effects to salt marsh habitat while regenerating important historic regional freshwater ecologies.
- Wetland Habitat: 35 acres of wetland habitat will be preserved in the northern portion of the existing

inactive biosolids lagoons, which is habitat to the Federally endangered salt marsh harvest mouse

- Levee Concept: As part of the Plan, the City would work with the South Bay Shoreline Study who are developing a feasibility study to construct a levee, or levees, along the northern portion of the Plant site to provide adequate protection from future sea-level rise and flooding.

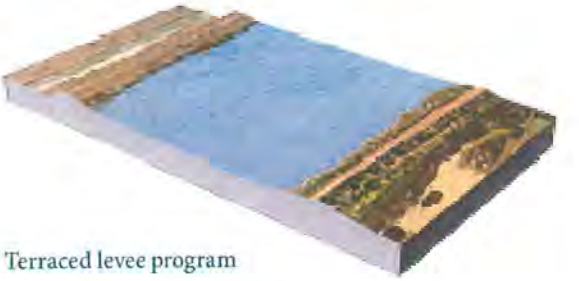
  A terraced levee is proposed to mimic natural landscapes at the edge of the San Francisco Bay with each terrace representing a different ecotone appropriate for the terraces' elevation and exposure to tidal flows. Marsh and mudflats would be integrated below the levee design within the area of the existing Pond A18 so that the entire system would work together to provide flood control, habitat, and water quality benefits.

  The terraced levee would include an inboard levee that would conform to standards of the Army Corps of Engineers (USACE). The levee would be designed and constructed through the San Francisco Bay Shoreline Study (USACE, Santa Clara Valley Water District, and State Coastal Conservancy partners) coordinated with the Don Edwards San Francisco Bay National Wildlife Refuge. A final levee alignment would be developed through this process.

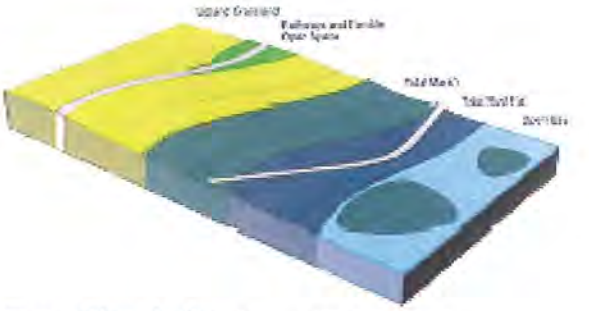
Water Systems

- Restored Artesian Slough would be designed as an aesthetic feature to recreate a historic slough and rare riparian habitat. This area would serve as a boundary between the developed area to the east and the burrowing owl/grassland habitat to the west.
- Freshwater wetlands would be intended primarily for storage of effluent to maximize the cost effectiveness of pump operations. The wetlands could also provide benefits to water quality (polishing of the effluent), much needed freshwater wetland habitat (very rare near the Bay), and recreational opportunities. This wetland would discharge into the marsh downstream of the Water District flood control and conservation easement. An overflow channel, which would be designed as a seasonal riparian corridor common to this region, would bypass the freshwater wetland in case of major wet weather events. This channel would also serve as the stormwater drainage for the development east of Zanker Road.

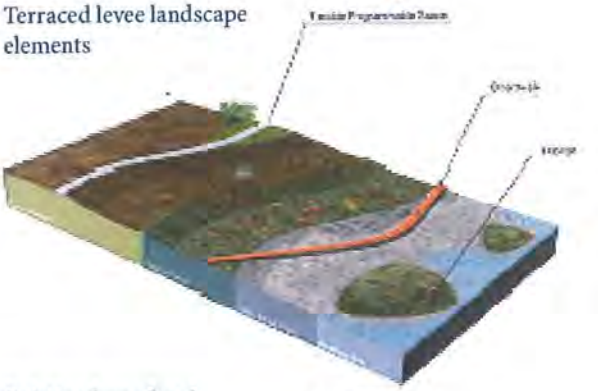
Existing levee condition



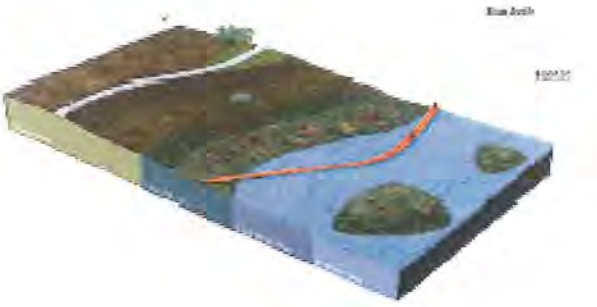
Terraced levee program



Terraced levee landscape elements



Existing levee flood condition



Transportation and Road Network

- Primary vehicular access to the Plant would be via State Route 237. An interchange at Zanker Road would provide access to the Plant operations area.

  Santa Clara Valley Transportation Authority (VTA) is planning to extend the San Francisco Bay Area Rapid Transit (BART) system to Silicon Valley. The 16-mile BART extension would be located east of the Plant and Interstate Highway 880. The proposed South Calaveras station would be located approximately two miles east of the Plant.

- Zanker Road/Nortech: Given the potential for development located on the Hwy 237 corridor, the key opportunity for creating an improved road network would involve establishing a new Collector Street that connects Zanker Road to Nortech Parkway. This new street would become the primary transportation element and access route for future development, and it would provide convenient and direct access from the Plant to North First Street.

- It is expected that future development would generate additional traffic to the extent that improvements to the existing Zanker Road / Hwy 237 interchange could be required. The nature of improvements would be determined following traffic analysis that is conducted as part of subsequent phases of the Plant Master Plan project.

  No new road connections to Alviso neighborhood are proposed. However, it is possible that increased traffic generated by future development on Plant lands could impact Alviso neighborhood streets. Before the streets are designed and constructed, any impacts to the Alviso neighborhood would be analyzed and mitigated.

Phasing

- Future economic development would be contingent on ensuring that the infrastructure development at the Plant can adequately mitigate the effect of potential odors on sensitive receptors and that development would not interfere with Plant Operations.

Development Standards

- In keeping with the character of the area, the development intensity at the Plant Master Plan Site has been envisioned to be lower than that occurs in other parts of the City, as shown in the table below.

Development Standards Table

Land Uses	Net Developable Acres	Max Floor Area Ratio Permitted	Height of Buildings (feet)	Stories
Light Industrial	31	0.55	Up to 45	Up to 2
Office/R&D	81	1.2	Up to 115	Up to 8
Retail	5	0.26	About 45	1-2
Combined Industrial/Commercial	11	1.2	Up to 115	Up to 8
Roads	31			
Total	159			

LAND USE POLICIES AND GUIDELINES FOR DEVELOPMENT

Development under the Plant Master Plan shall be subject to relevant codes, policies and guidelines including, but not limited to, Envision San Jose 2040 General Plan, Alviso Mater Plan, Residential, Commercial and Industrial Design Guidelines, Landscape Design Guidelines, Riparian Corridor Policy, the Municipal Code and various Council policies. A selected list of policies and guidelines that are of specific interest to the best meet the goals and objectives of this Plan is provided here. For issues not addressed here, refer to the relevant Citywide policy or guidelines documents.

- Attractive Public Realm: Create a well-designed, unique, and vibrant public realm with appropriate uses and facilities to maximize pedestrian activity; support community interaction; and attract residents, business, and visitors to the area. Specifically implement Policies CD-1.1, -1.5, -1.7, -1.10, -1..13, -1.17, -1.22, -1.25, -1.29; CD-3.3, -3.5, CD-4.12, CD-10.2, CD-10.3 in GP2040 for all PMP projects.
- Gateway: Provide architectural elements, landscapes and water feature at the intersection of Zanker Road and HWY 237 to help create a gateway and reinforce the sense of arrival to WPCP. Also implement GP2040 Policy CD-10.3.
- Enhance Views: Orient taller buildings on individual sites to maximize views of the bay, hills and the City of San Jose.
- Garage Access: Distribute garages to minimize their impact on streetscape anf to distribute traffic to the greatest extent practicable.
- Subdivision: Development parcels are the 'building block's of the economic development area. Future subdivision should allow for incremental development of parcels, typically bounded by public streets or public open spaces. Large parcels are desirable for Clean Tech industry, which is the focus of employment within the PMP area.
- Open Spaces: Establish open spaces within development parcels such that they connect outwards to the larger system of public open space and habitat areas. Also implement GP Policy CD1.5, CD 1.25.
- Streetscape: Streetscapes should be designed to indicate they are part of the same neighborhood. Use special landscape and streetscape elements to enhance the overall character and identity of the development. Also implement GP2040 Policy CD-10.3.
- General Aesthetic Quality: Developments should reflect a high level or aesthetic quality. Also implement GP2040 Policies CD-10.2, CD 1.13

Landscaping Policies

- Landscaping should incorporate plant materials suited to the area's environmental conditions. Use of native plants, and landscaping that promote habitat should be prioritized.
- Landscaping should incorporate the open, bayside character of the site and should be simple and minimal. Landscaping should not block views of natural features like river, riparian areas or marshlands.
- Landscaping should make a strong connection between the natural and the built environment
- Landscaping shall be irrigated with reclaimed water from the WPCP. Also implement GP2040 Policy MS-19.4
- Also implement GP 2040 Policy CD1.22

Sustainability Policies

- Solar Energy: All buildings shall incorporate solar power facility, to the extent practicable. Also implement GP2040 Policies MS 2.2 and MS 2.3.
- Green Buildings: Promote design and construction standards to achieve the highest level of sustainable building design and construction benchmarks available at the time of construction. Benchmarks that will be used to evaluate include, but are not limited to, LEED, Sustainable Sites Initiative, EPA Energy Star etc. Also implement GP2040 Policy MS1.1,MS-14.4.
- Net Energy Benefit: Promote building operation that provides a net energy benefit, and target to meet highest energy conservation standards of the day. Require evaluation of operational energy efficiency and inclusion of operational design measures as part of development review consistent with benchmarks such as those in EPA's EnergyStar Program. Also implement GP2040 Policy MS -2.8, MS-14.5, MS-15.5.

- Green Streets: Promote street design that minimizes impervious surface and incorporates storm-water features to protect water quality. Also refer to GP2040 Goal ER-8.

Circulation Policies

- Safe Streets: Separate truck traffic from cars, bicycles, and pedestrians wherever feasible. Also implement GP2040 Policies TR 6-1 and TR6-3 of GP2040.
- Off-Street Trails: Provide gateway elements and trailheads for water and land trails. Gateways elements should use common design theme to reinforce travel through the Bay Trail System. The trail system should provide continuous off-street travel, logical linkage to on-street bikeways, standard width paved trail with gravel shoulders, and signage, striping and mileage markers consistent with PRNS policies and guidelines. The Trail system should be highly visible and convey a uniform appearance through the deployment of architectural gateways to be installed at roadway and community entry points. In addition, trail design shall meet goals TN1, TN2 and TN3 in GP2040 and associated, relevant, policies related to those goals in GP2040, and other applicable trail design guidelines.
- Smart Transportation: Road infrastructure should support the needs of vehicular access along with the needs of pedestrians, cyclists and other modes of travel. Ensure wide sidewalks and striped bike lanes to provide travel options. Develop programs with building owners and transit partners to enable travel via all modes including public transportation, bicycle, and pedestrian access to the new uses. Require large employers to develop and maintain strategies that minimize vehicle trips and vehicle miles traveled. Also implement GP2040 Policies TR 1.2, TR1.5, TR7.1 , CD1.7.
- Circulation Planning: Roads should be organized into an interconnected movement system. A clear road hierarchy should be established, including publicly accessible roads, restricted access roads, service roads, etc.
- Sustainable Roads: Opportunities to enhance the environmental performance of all streets should be integrated into their design, through the use of systems that minimize storm water runoff; the coordination of utility infrastructure; and the incorporation of materials with extended life-cycles, high efficiency street lighting, native landscape materials, and extensive pedestrian and bicycle amenities.
- Views: Roads should take advantage of the scenic qualities of the Plant lands. Views towards habitat or other natural features can be enhanced by alignment of roadways.

Economic Development Policy

- Clean Tech Industries: Promote the development of Clean Tech industries by maintaining large parcels, and opportunities for green infrastructure, pure water and renewable energy.

ECONOMIC BENEFITS

The development of the Plant lands under the Recommended Plan would be contingent on market demand. In addition to market demand, phasing of the development and availability of land would depend on the infrastructure improvements at the Plant to control odors and change the solids processing technologies.

At build-out estimated ground lease revenue is projected to be between $10 million to $12.5 million annually. It is estimated that an additional $4 million to $5.5 million will be generated annually from associated property tax, sales tax, utility users tax, franchise tax, amongst other revenues. There will be substantial additional benefits to Santa Clara County and local School Districts. The timing of infrastructure capital investment precedes the development of the land and potential resulting revenues. Therefore, revenues at build out have the potential to offset future operating and maintenance costs for the Plant but do not offset the capital investment for the Plant.

The economic analysis using the IMPLAN economic assessment model for Santa Clara County showed that the total economic impact of this development, considering construction and permanent economic activity, would be approximately $16.5 billion - a substantial benefit to the region.

Summary of Economic Development Benefits at Build Out

	At Build Out 2040+
Developed Acres	159 ac
Light Industrial/Cleantech Area	742,000 sq ft
Office Research and Development Area	4.2 million sq ft
Retail Area	56,000 sq ft
Combined Industrial/Commercial Area	574,992 sq ft
Jobs (Total Permanent)	15,000