



MEMORANDUM

DATE: 8 June 2012

TO: Planning Commission

FROM: John Swiecki *JAS*
Community Development Director

SUBJECT: Draft Sustainability Goals for the Baylands

The City Council has directed the Planning Commission to review and comment on the above-referenced document, which is attached for the Commission's use. This review is tentatively scheduled for the July 12, 2012 Planning Commission hearing.

SUSTAINABILITY GOALS FOR THE BAYLANDS DRAFT FOR DISCUSSION

APRIL 2012

The citizens of Brisbane have widely expressed the importance of environmental responsibility and its application to the Baylands project. In response, the City Council formed a Baylands Sustainability Committee to provide this guiding document, which is organized around the ten One Planet Living principles developed by BioRegional. In parallel with this effort, the project is also under review as part of the Environmental Impact Report (EIR), and this plan will be updated to reflect information coming out of that process when it is available.

The purpose of a Sustainability Action Plan is to create the DNA for achieving sustainable results. It is aspirational and is not a contract for specific results, however it will inform the negotiation of binding criteria between the City and the Developer in a Development Agreement. This document will continually evolve over the course of the Baylands project to reflect new information, new funding mechanisms, new policies and technologies, and improvements to the project design, and thus it is termed a "living document."

With this draft, the City invites input from the public and the developer to make this plan effective and to create the strategies that will be used to achieve the sustainability goals articulated here.

The Sustainability Committee holds this vision for the project:

The Baylands presents an opportunity to create a development that heals the land, provides prosperity that is fair and equitable, strengthens our relationship with nature, and enhances Brisbane's commitment to Community values. The core pillars of sustainability—environment, economics and social equity—will be woven into every building, park and transportation mode, creating a balanced approach to development that will be safe, engaging, and within the means of the Earth's resources.

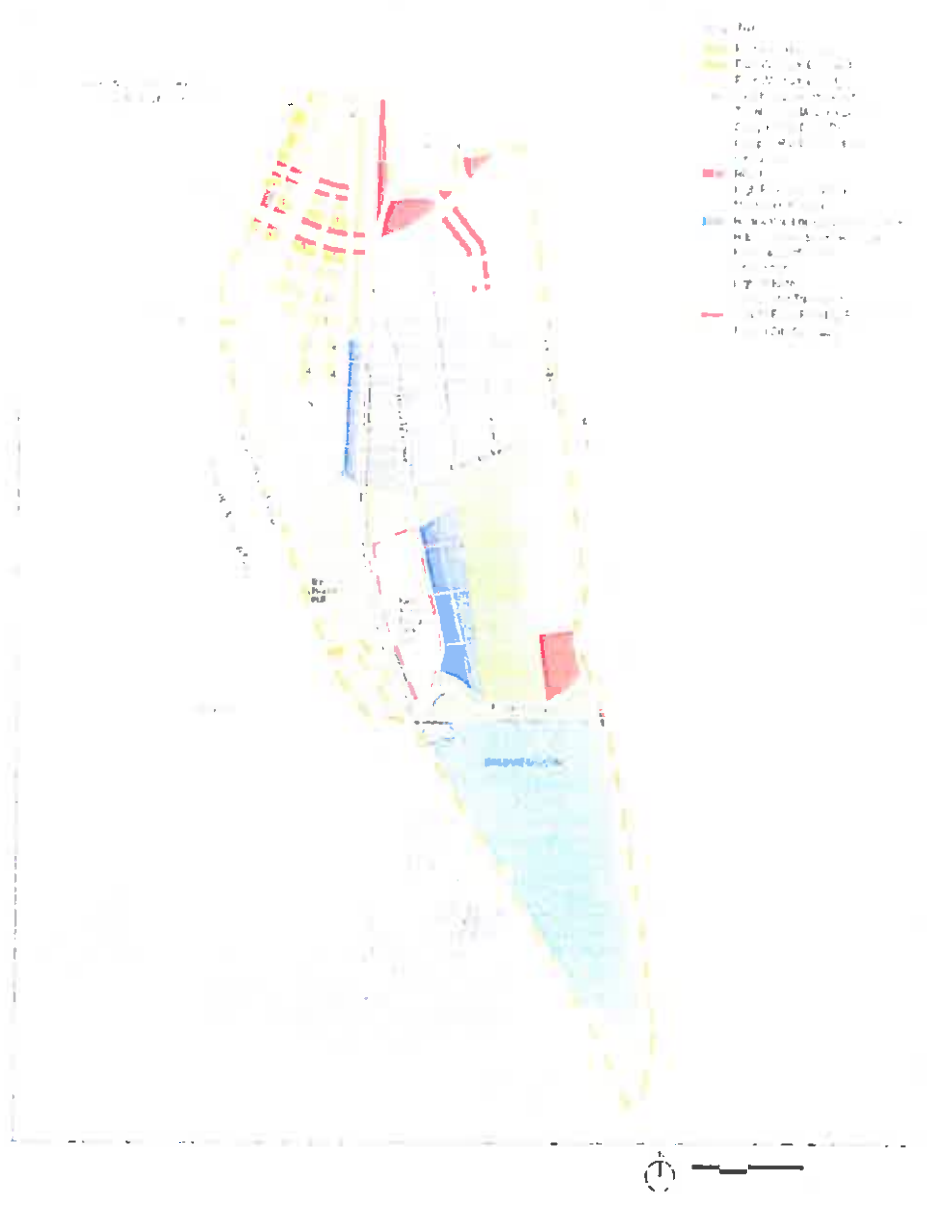
The ecological footprint, developed by the Global Footprint Network, measures how much land and water area a human population requires to produce the resources it consumes and to absorb its carbon dioxide emissions. The tool has been in use since 1990, and we now know that it takes the Earth one year and six months to regenerate what we use in a year.

For this effort, the ecological footprint is used as the underlying metric for physical sustainability within the One Planet Communities program. The goal is to set criteria that will ensure the Baylands is truly sustainable, and that if everyone in the world modeled themselves after what these principles propose for the Baylands, the Earth would have a one-planet ecological footprint.

With this draft Sustainability Action Plan, the Sustainability Committee shares its research into the local Context of the project and provides a Summary Approach to achieving sustainability. We now, all of us, have the task of creating two more sections for each principle: the Key Performance Indicators and the Detailed Plan.

Key Performance Indicators are the metrics by which we will track the Baylands' progress toward sustainability. Good indicators are simple, easy to use and communicate with, and strongly linked to the sustainability goal. They are not intended to measure all impacts, but rather to "indicate" progress on the most important aspects, and many projects use just one or two for each principle.

The **Detailed Plan** is the set of actions and policies which will be taken to achieve the sustainability goals, and is the only part of the Sustainability Action Plan that evolves over time as we learn, as policy changes, as new technologies are developed and applied.



Enchan, E. et al. 2012
Figure 4
 Proposed Land Uses
 Developer-Sponsored Project

COMMUNITY ALTERNATIVE PROJECT SUMMARY

Total Site Area	684 acres	Comm. and Indust.	8.3 million sq. ft.
Public Use/Open Space	330 acres	Residential	0 units
Lagoon	111 acres		

how we plan, construct and operate our neighborhoods. Transportation and housing make up the majority of our California carbon footprint—two categories directly impacted by development. How and where we shop and eat is strongly influenced by development patterns as well.

New development has a special obligation to go beyond the AB32 goals because it is less expensive to avoid emissions through constructing efficient, renewably powered buildings than it is to reduce emissions through retrofitting existing buildings.

The State of California's mandatory green building code, CAL Green, contains two optional tiers for performance above the minimum standard. The current Tier 2 requirement is that buildings use 30% less energy than allowed by code. The energy code is expected to get significantly more stringent with the adoption of the 2012 update.

The State of California's energy code, Title 24 Part 6, requires that all buildings be constructed "Net Zero Energy" beginning in 2020 for homes and 2030 for nonresidential buildings. In addition, a number of "Energy Plus" or "Energy Positive" buildings are being tested around the world, including some larger commercial projects, such as in Freiburg, Germany. An advanced energy plan will be studied in the EIR and in a National Renewable Energy Laboratory study to determine feasibility and compatibility with overall sustainability objectives.

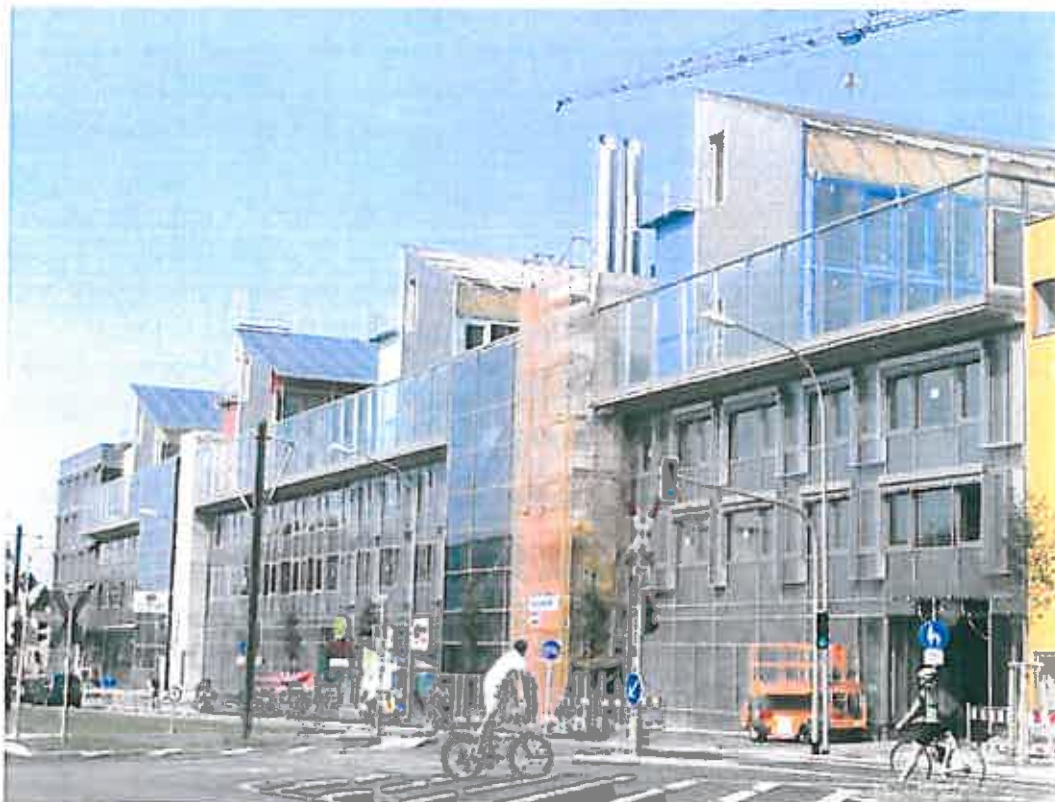


FIGURE 2. FOUR AND FIVE-STORY BUILDINGS CAN NOW PRODUCE MORE ENERGY THAN THEY USE

2. ZERO WASTE

Our vision for the Baylands is of a future where resources are used efficiently, and ultimately zero waste is sent to a landfill. The "byproducts of consumption" should be the materials of tomorrow's uses.

COMMON INTERNATIONAL TARGETS

The less waste that is generated in the first place, the less there is to deal with. Best practice standards in waste minimization during construction should be employed, and a clear set of time-specific targets should be established in order to achieve an ultimate zero waste outcome. The project must demonstrate a rapid, verified progress toward the zero waste target, especially given current rapid advances in the introduction of waste processing globally.

At least 70% of baseline waste by weight generated within the development should be reclaimed, composted or recycled, and no more than 2% should be sent to a landfill.

CONTEXT

Through AB 939 California has mandated an ultimate goal of zero waste to landfills. Diversion rate targets were included in this legislation, and all cities have to report their progress toward these targets.

Brisbane's solid waste is collected by South San Francisco Scavenger Company. The City has curbside pick-up for recyclables and greenwaste, but does not currently have food waste collection. The current franchise agreement for the City of Brisbane waste hauling expires in 2013. San Francisco's waste management provider, Recology, has their recycling operation located in the Baylands. Plans are being implemented to expand this

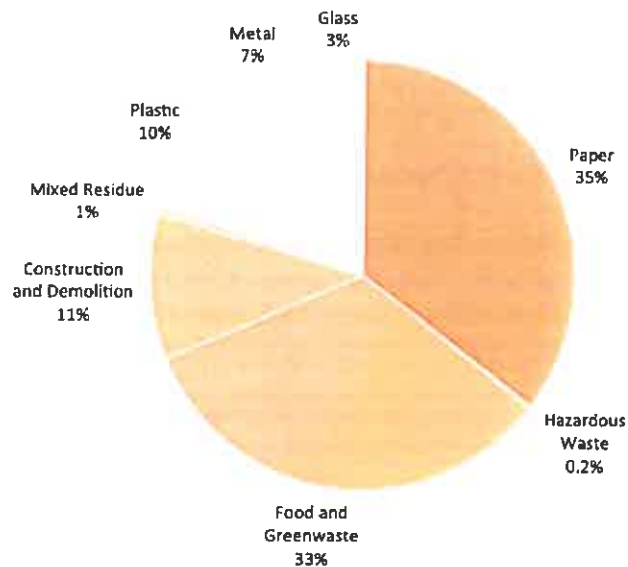


FIGURE 3. 2010 CALIFORNIA AVERAGE NONRESIDENTIAL WASTE STREAM (SOURCE: CALRECYCLE)

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The project developers and occupants will work with the City of Brisbane to support standards and policies that create a more environmentally responsible approach to packaging and containers used in the supply chain and by consumers.

In 2008, California voters passed Proposition 1A to link the major cities of California by high-speed rail. The Baylands has been considered as a possible site for a railyard for the high-speed rail line. However, the legislature is now debating the feasibility of the project and it is unlikely such a project would be built in the near future.

Bicycle routes are available, but are limited. There are no existing community bicycle programs such as exist in New York and Washington DC.

Brisbane does not have a gas station.

Brisbane's Baylands area is part of a regional Priority Development Area (PDA) that also encompasses the Schlage Lock housing development site in San Francisco, Executive Park, Candlestick and Hunter's Point. Schlage Lock and the Baylands are projects of the same company, Universal Paragon Corporation.

SUMMARY APPROACH

A comprehensive transportation study will be completed during the course of the EIR study. While we have identified some preliminary approaches in this Sustainability Action Plan, we fully expect to modify and improve our approach to transportation as a result of this comprehensive study. At a minimum, we will look for ways to set appropriate targets for vehicle miles travelled, greenhouse gas emissions, and level of service for traffic.

We will reduce emissions from transportation first by reducing the *need* to move long distances and also by reducing the need for fossil fuel based modes. We will create an easy pedestrian and bicycle lifestyle, where the location of jobs, restaurants, retail, services and recreation are in close proximity to each other. If housing is allowed, it will be incorporated into this web of mutual efficiency.

For public transportation to be a significant part of the Baylands, it needs to be easily accessible from all parts of the development and tied together by a variety of transportation modes.

The multi-modal station is the heart of the development. To fully utilize the potential of the multi-modal station, a minimum of a ¼ mile radius of combined uses must surround the station. This may require relocating the station to a point south of its currently planned site, and integrated into the Geneva Avenue extension—a prospect that is currently being studied.

It will be important to establish strong lines of communication with the various transportation authorities such as SamTrans, CalTrain, Muni and the various private companies. We will assert our desire that all public transportation be electric driven with renewable sources or use low- or zero-carbon alternative forms of fuel.

We will work with San Francisco to connect transit systems that further the city's program goals of sustainability for this project.

4. LOCAL AND SUSTAINABLE MATERIALS

Our Baylands vision is one where all goods and materials used for construction and property management are made from renewable, reclaimed, or recycled resources with low embodied energy and, wherever possible, sourced locally. As new technologies and methods present themselves, every effort will be made to implement these new products and practices.

COMMON INTERNATIONAL TARGETS

Via the common process guidelines at the One Planet Communities website, country-specific targets should be determined to increase and optimize the use of local, reclaimed, renewable, recycled, healthy and low environmental impact materials for construction and property management.

CONTEXT

National protocols for sustainable materials are rapidly developing. Examples include wood from FSC-certified forests, products that are free of formaldehyde and volatile organic compounds, products made without the use of toxic chemicals, materials that are produced with low amounts of energy, especially fossil fuel based energy, etc. Attention is increasingly being dedicated to making buildings and products more easily recyclable at the end of their useful lifetime.

Brisbane was one of the first cities in California to adopt a green building ordinance.

Though mostly undeveloped, the Baylands does have a few existing building sites—one is occupied by Sierra Point Lumber, which has expressed interest in relocating to another area of the Baylands, while San Francisco's waste management company, Recology, conducts their recycling operation in the Baylands, but has plans to expand their program with buildings that will be LEED Platinum.

A large portion of the Baylands is currently being used for recycling concrete, aggregate, soil and rocks.

With the rapid growth in popularity of LEED, a national protocol on sustainable materials is emerging. The focus is two-fold: look towards using materials that are reclaimed, locally sourced, locally manufactured, containing wood from FSC-certified forests, and containing recycled content, while discouraging the use of materials that are harmful to the environment and human health.

5. LOCAL AND SUSTAINABLE FOOD

Our Baylands vision is one where healthy diets are promoted through local, seasonal, and organic produce, and that all food should be minimally processed and packaged.

COMMON INTERNATIONAL TARGETS

Healthy diets should be promoted and minimum targets achieved for supply of organic or low environmental impact food and local sourcing.

Sustainable agriculture involves food production methods that provide safe working conditions, do not degrade the environment, are humane to animals, support farming communities, and produce healthy food.

One Planet Communities throughout the world will develop strategies to enable and encourage people to adopt a One Planet diet, through education and agreements with onsite retailers and caterers.

Onsite facilities, including retail and catering facilities, will strive to minimize packaging in line with zero waste targets, and minimize consumption of processed foods which have a large ecological footprint. Food waste from all residents, tenants, businesses, restaurants and shops will be minimized.

Food growing will be integrated onsite where appropriate. Strategies will be put in place to enable food growing on site. Local food mapping will be undertaken and partnerships will be developed with local producers to establish regular supplies and to work with them to further reduce their impacts.

Purchasing systems will be established to ensure food provided does not contribute to deforestation, over-fishing or pollution and minimizes other negative impacts.

CONTEXT

We have existing national organic standards and a more stringent set of California organic standards. For products coming from areas with poor working conditions, such as coffee, tea, sugar, chocolate, vanilla and fresh fruit, the Fair Trade Certified™ program is an effective labeling system for promoting good practices in the international food industry and is widely used in local stores.

A number of organic farms exist in San Mateo County and the surrounding region. Consequently, seasonal organic produce should be readily available. Over the past twenty years,

SUMMARY APPROACH

Brisbane will set standards and incentives for local, sustainable and affordable food in the restaurants and food markets that will be established in the Baylands. When a viable commercial level is reached, a farmers' market featuring locally grown foods will be established.

Promote healthy diets high in local seasonal, organic and low-environmental impact foods.

A significant proportion of food should be locally sourced from low environmental impact farming with reduced packaging from a radius of 50-100 miles from the center of the site. Given the importance of food to ecological footprints, stretching targets are essential to achieving a one-planet footprint.

Key Performance Indicators should be set for certified organic and Fair Trade food.

Several techniques will be considered to increase consumption of locally-produced and low-impact food including fruit trees on site on both public and private land, a year-round farmer's market, and strong incentives in lease agreements for grocers and restaurants to source local, organic, fair trade and low-impact foods.

Brisbane already has a community garden for residents. Another could be established in the Baylands, taking great care to use techniques that protect against introducing soil contaminants into foods (e.g., raised beds with imported soil). The feasibility of an urban farm on Ice House Hill should be investigated and pursued. Ice House Hill and the adjacent "corral" provide an opportunity to create a highly productive and diversified urban farm. Not only could this area provide a great source of produce, honey and eggs to the community, it could help reestablish our agricultural roots with the land. An effort will be made to consult with local farmers who specialize in high yield, low impact farming, including the best methods for minimizing irrigation water. The farm may be established in partnership with a local school or a community-supported agriculture (CSA) farmer.

Work with San Mateo County's Health System to conduct community workshops on healthy eating practices, and establish healthy guidelines for restaurants.

Create public events and outreach, such as a possible annual "Sustainable Food Fair" to promote local and healthy food.

Restaurants and stores will be required to use re-usable or compostable containers for to-go food.

Legislative efforts are underway to expand the allowed use of greywater to single family homes and businesses, making safety controls achievable as in Arizona or New Mexico.

The cost of water has risen dramatically over the past decade in the State of California, and for the citizens of Brisbane. This increase is not just the result of increased demand, but also from the costs related to maintaining the infrastructure. In the Bay Area, sewage lines and treatment plants must be constructed to a size required to treat the inflow and infiltration of rainwater—often more than 50% of the peak winter flow.

The Visitacion-Guadalupe Valley Watershed moves water from San Bruno Mountain, McLaren Ridge and Bayview Hill to the San Francisco Bay. There are several watercourses that pass through the Baylands. Organizations such as the California Native Plant Society, the Watershed Project, and San Mateo County Parks have been instrumental in restoring waterways on San Bruno Mountain, around the lagoon, on site and in the PG&E marsh.

The California EPA and the State of California have strong wetland and bay protection standards under the National Pollution Discharge and Emissions Standards or NPDES. While the site has known soil contamination, the state and federal standards offer a standard for this aspect of environmental protection.

The collection of rainwater is a practice encouraged by the City of Brisbane, though it is only allowed under federal law in certain narrow instances.

SUMMARY APPROACH

The integrated water system planned for the Baylands should aim toward eventually reducing the need for imported fresh water to near zero. We will create a Water Balance investigating the optimal ways to use the four sources of water: rainwater, greywater, reclaimed water and municipal drinking water. It might be useful to investigate local sources of water such as springs and rainwater in combination with a recharge plan, but no extraction should endanger local groundwater or water flows required for the local habitat.

In our effort to use water in a more efficient manner and to establish greater local control over sewer treatment rates, we will investigate the construction of a local sewage treatment plant on site at the Baylands that would serve all of Brisbane. Whether sewage is treated on site or elsewhere, reclaimed water will be used for all non-food irrigation, commercial toilet flushing and other non-potable uses. Landscaping will follow the Bay Friendly Landscape Guidelines to promote water conservation, soil health and other environmental outcomes.

Water conservation will be integrated into all uses throughout the Baylands. An aggressive strategy for informing the public about water conservation will be implemented.

The restoration and expansion of Visitacion Creek will complement the existing wetlands of the Lagoon and will provide greater habitat for Bay species. Close collaboration with local

7. OPEN SPACE AND HABITAT

Our Baylands vision includes provisions for significant open space and open areas that enhance biological connectedness and habitat preservation.

COMMON INTERNATIONAL TARGETS

The development will make a net positive contribution to local native biodiversity and natural habitats. Any imperiled species must be identified and monitored as part of a local conservation plan. A site-specific action plan to maintain, enhance or revive valuable aspects of biodiversity and nature stocks must be prepared.

At least one opportunity must be identified to regenerate degraded local natural resource stocks (wetlands, lagoon, etc.) and a plan implemented. At least two programs should be showcased, one for biodiversity and one for natural resource stocks.

CONTEXT

The citizens of Brisbane have a strong reputation for being environmental stewards of the land around them. They've worked hard over the years to restrict development on San Bruno Mountain, and have invested funds to acquire open space, remove invasive plant species and enhance endangered butterfly habitat.

Brisbane was influential in creating the first Habitat Conversation Plan (HCP) in the country.

Brisbane's General Plan states that a minimum of 25% of the Baylands will be dedicated as open space/open area. The City submitted an "Alternative Plan" to UPC's specific plan to be analyzed in the EIR process, in which almost 50% of the land would be dedicated to open space/open area. The lagoon will not be counted toward any open space calculations.

Two of the project alternatives studied in the Environmental Impact Report ("Community Preferred," and "Renewable Energy") include a community formulated open space/open area, wetlands and riparian park.

Though surrounded by urban sprawl from neighboring cities, Brisbane still has a rural-like quality. Horses still graze on the slopes of Ice House Hill.

The Baylands is home to a variety of small and medium-sized animal species. Occasional sightings of coyote and jackrabbits occur on and around the site. The annual Audubon Christmas bird count records an amazing amount of land and water bird species in the San

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Conduct a study on Ice House Hill to determine the significance of butterfly habitat for the endangered Mission Blue and Callippe Silverspot butterflies. If significant habitat exists, explore the possibilities of expanding the San Bruno Mountain HCP to portions of the Baylands.

Collaborate with members of the community and environmental groups that are already working to improve local habitat preservation. Seek out native plant nurseries, and enhance the capabilities of the Mission Blue Nursery to provide greater biodiversity for local seed stock.

railyard was abandoned in 1982. Both uses left the land contaminated. Since its closure, the landfill area has been surcharged with presumably clean soil from several debris recycling operations on site.

SUMMARY APPROACH

One of the most important components of a complex and sustainable culture is that it is a living culture. The present actively connects the past to the future. Some legacies of the past will be showcased and built upon in the nucleus of culture in the Baylands.

The Roundhouse, with its historic brick structure linking the present to the Baylands' railyard past, could highlight a railroad museum, a farmers' market, public art, exhibitions, or an education and entertainment center. The Roundhouse could be the social hub of the Baylands.

Another area to showcase is the City's relationship with the landfill. It will be an informative journey to explore the history, the confrontations, and the healing of the land. Since the Baylands was previously part of the Bay, the history of the early indifference to the consequences of filling the Bay to the present awareness of its ecological importance should be taught.

The Baylands should be designed to emphasize the connection between San Bruno Mountain and San Francisco Bay, utilizing the natural watershed as well as a connecting trail network. Informative signs throughout the trail network can help people understand the transformation of the land beneath their feet.

Though small town Brisbane cannot be duplicated in the Baylands, the Community's values will be woven throughout the development.

Like so many places in and around the San Francisco Bay Area, San Mateo County has high housing costs that are unaffordable to many working class people. Combined with a high percentage of single-family homes in the existing housing stock, there is a shortage of affordable housing.

There will be tremendous pressure by the State to make Brisbane implement housing as an approved use in the Baylands because of the transit/housing focus in recently approved State legislation (SB 375 - Sustainable Communities). Funding assistance for infrastructure projects will be tied to transit oriented mixed-use development.

Brisbane's General Plan prohibits housing in the Baylands. Many residents believe that housing in the contaminated Baylands would not be safe. Other residents argue that there will be ample housing in the new developments planned across the border in San Francisco for those working in the Baylands who wish to live nearby. However, it is not clear how much of that housing will be affordable, especially with the recent demise of redevelopment agencies and their support for affordable housing.

SUMMARY APPROACH

The Baylands project is expected to bring thousands of jobs to Brisbane, and will be a showcase of a sustainable economy. The infrastructure planning and construction will incorporate sustainability principles across the board, so that economic vitality with equity and ecology becomes the way business is done. To do this, an ecological perspective must inform the planning, construction, operation, and evaluation of the development over its lifetime.

At the heart of our approach is an acknowledgement of the tension between short-term and long-term decision-making. For-profit organizations often focus on meeting short-term financial targets rather than long-term economic development. The public interest perspective focuses on the long-term effects of making irreversible impacts to land, air quality, the Bay and our community's health and well-being. While both ways of thinking co-exist, the concerns of sustainability require that we introduce long-term decision-making into the for-profit process.

A tool for helping make decisions with long-term benefits is called "Life Cycle Cost Analysis (LCCA)," and is widely recognized by the State of California. A truly energy efficient building that is powered by renewables is not only much less costly to operate over its lifetime, a substantial benefit for its occupant, but it also emits few if any greenhouse gases, a major benefit for society. Less pollution and less contribution to climate change are certainly major public benefits.

The Baylands will design the business areas to best support local, small, and public benefit companies. These companies will be given priority in leasing and purchase.

The question of whether housing will be allowed as part of the Baylands development has important impacts on sustainability and the approach to creating an economic plan. The Baylands is currently zoned for commercial and industrial uses in the City's General Plan, and

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Much can be learned about fair trade resolutions from San Francisco and Berkeley, as well as from organizations such as "Fair Trade Towns USA."

11.2.34

San Mateo County and Brisbane are known for their high quality lifestyles, yet with the high cost of housing and transportation, many residents have less time for leisure activities. The Baylands creates an opportunity to enjoy leisure every day with a walk to nearby restaurants, cafés, services, entertainment, as well as recreational opportunities and open space.

The United States spends more money on healthcare than any country in the world, but the high cost of coverage has left many Americans uninsured, which has resulted in thousands of unnecessary deaths. Many of these deaths were caused by not having access to basic medical advice and observation, where preventive measures could have been implemented before terminal medical conditions took hold. Local universities such as San Francisco State University, have a Student Health Service that provides basic care for acute and chronic problems, promotes health awareness, educates students about preventive care, disease management and therapeutic choices, and helps students develop the skills to manage their own health.

SUMMARY APPROACH

Dr. G. Fred Lee's report will be used to better understand regulator's recommendations for testing, remediation, and monitoring the contamination that exists at the Baylands. An independent peer review will assist the City in understanding the mitigation findings that will be presented by the agencies.

Community meetings will be used to get input on what works and what doesn't work and what the larger community would like to see happen at the Baylands. We will use *play and fun* to generate ideas and seek to keep a light heartedness when evaluating our success.

The San Mateo County Health System could play a major role in helping the Community to adopt health standards to the uses it feels should be implemented at the Baylands. The possibilities of providing basic healthcare for Brisbane residents and workers that is supported by an increase in sales tax or other funding mechanism, such as the one provided by San Francisco State University for its students, should be explored.

The Baylands development should enhance the standard of living that currently exists in Brisbane. The Baylands should be a destination, a source of pride and engagement for the Community, rather than just a location on the outskirts of town.

A pedestrian friendly design will encourage walking, with the majority of buildings located within ½ mile of the Multi-Modal Station.

The natural beauty of the area will be enhanced by complementary architecture, community gardens and comfortable public spaces for community activities.

The Baylands should bring out the best a society has to offer by providing a variety of job skill opportunities with living wages, ample opportunities for recreation and leisure within the open space and open areas, ensure that the health and safety for all who engage it is never compromised, and if allowed, provide affordable and community oriented housing.