Morro Bay Power Plant (MBPP) Property Ad-Hoc Committee

Appointed January 2006
Known as the:

Morro Bay
North Embarcadero Waterfront (N.E.W.)
Futures Group

Report to the Morro Bay City Council
July 2007

Phase I – Community Outreach, Future Options & Recommendations

Acknowledgements

Current Members Signing

William Robinson, Citizen
Committee Chair

Homer Alexander, Citizen

Rachel Aljilani, SLO Green Build Technical Committee

Sandra Brazil, Realtor

Ken Haggard, SLO Sustainability Group Principle Architect

Joseph Goodwin, Citizen

Michael Lucas, Cal Poly Associate Professor of Architecture

Ross Stilleson, Graduate of Cal Poly Architecture Program

Contributors

Patti Dunton, Representative from Salinan Tribe
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I. Introduction

The N.E.W. Futures Committee was appointed by the City Council on January 25, 2006 to assess redevelopment of the Morro Bay Power Plant (MBPP) property and seek funding sources to pursue appropriate future uses.

Formation of Morro Bay N.E.W. Futures Group

Soon after appointment, we divided our Committee into four working groups designed to address separate topics important in looking at any alternative use of the power plant property: site, regulators, communications, and finance. We also developed a Mission Statement:

The North Embarcadero Waterfront (N.E.W.) Futures Committee will lead a community driven process to identify and evaluate alternatives for the power plant site. Our Mission will be to create and document a vision that identifies and integrates the diverse perspectives and requirements of our community.

In October of 2005, a staff report was delivered by the City Attorney, Rob Schultz regarding the potential alternatives for the site. This staff report concluded with a 5-0 vote by the City Council to form an ad-hoc committee to investigate alternative uses and potential funding sources for the power plant property. Public commentary following the City Attorney's presentation included several dozen citizens whose suggestions were summarized by our Committee and noted in *Appendix A*.

Precedent Planning Documents

Members of the Committee reviewed the following planning documents.:

- Morro Bay Coastal Land Use Plan 1982
- City of Morro Bay Waterfront Master Plan 1996
- Public Review Draft of the General Plan and Coastal Land Use Plan 2000
- Public Review Draft Estero Bay Master Plan 2002
- Morro Bay 2020 Visioning Goals
- Waterfront Master Plan

These documents should be referenced for applicability to any future development. Our Committee has included specifics from these documents in this report.

Three Basic Scenarios

In thinking about any Scenario, the following must be considered. In 2005, the City entered into an Outfall Lease Agreement and Agreement to Lease with the owners of the MBPP stating that if the foundation pour of the proposed modernization project does not begin by November 15, 2012, then the terms of these agreements will need to be renegotiated. A summary of this agreement can be referenced in *Appendix P*.

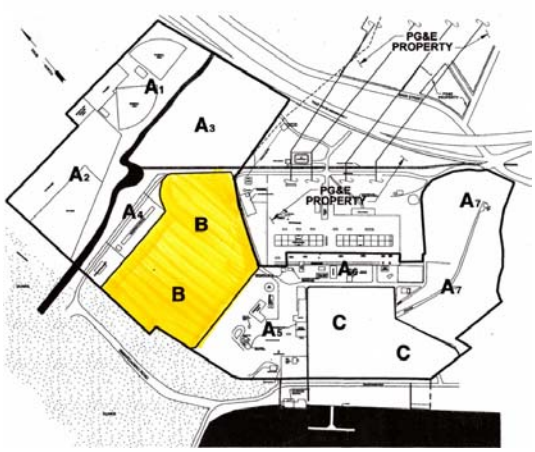
During the 1998 sale from PG&E to Duke Energy, PG&E limited their liability for clean-up of the site by placing stringent deed restrictions on the

property. PG&E's remediation obligation of environmentally hazardous substances is limited should the plant owner choose to develop the site for a use other than a “fossil-fueled power plant” or "substantially similar industrial use." In such a case, PG&E is only responsible for the costs of remediation that it would have incurred if the site were being used for a fossil-fueled power plant or substantially similar use. These restrictions are permanent for all subsequent owners. The applicable deed restrictions appear in *Appendix O*. All three scenarios would prompt renegotiation of these deed restrictions with PG&E.

After discussion with the City Attorney and MBPP property owners, our Committee determined three potential Scenarios for redeveloping the property. The Committee also recognizes other variations on these Scenarios, but for our purposes they can be summarized as follows:

Scenario 1 - No Change

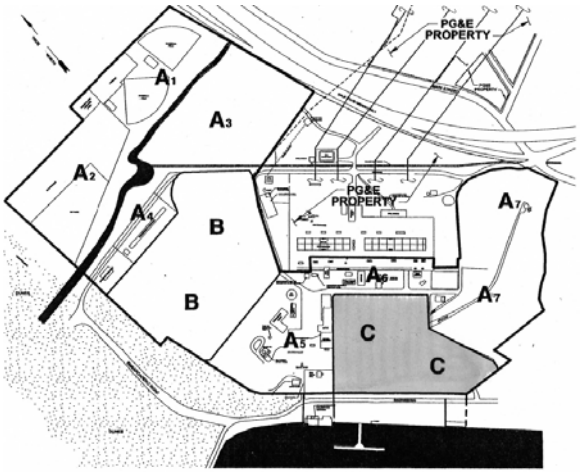
The MBPP continues to operate under contract with PG&E or another utility company and the City would discuss the tank farm location for potential development. The tank farm area is denoted with the letter B and shown in yellow.



Tank Farm view from 2006 Committee plant tour

Scenario 2 - New Power Plant

MBPP owners pursue the ‘Plant Modernization’ project comprised of a new 1200 MW natural gas fired facility located on the existing tank farm (area B). The old MBPP and stacks (noted with letter C) would be demolished within three years of the new plant coming on-line under agreements with the City and requirements of the California Energy Commission (CEC) permit application. This area comprised of approximately nine acres would then be considered for redevelopment.



Scenario 3 - Plant Closure
The entire property would become available to alternative uses. The potential to reduce and/or relocate PG&E's switchyard may be feasible. Under this Scenario, value is seen in the existing power plant structure.

Several cities around the world have undertaken the adaptive re-use of industrial structures. *Appendix C*, identifies 10 case studies of adaptive re-use with before and after photos. These illustrate the potential of adaptive re-use for sites similar to the MB power plant that were re-created as tourism centers. *Appendix C* includes the following sites:

- Gas Works Park, Seattle
- Power Plant, Baltimore
- Emscher Park, Duisburg, Germany
- Harborfront Centre, Toronto
- Powerhouse Museum, Sydney
- Seaholm Power Plant, Austin
- Tate Modern, London
- Battersea Power Plant, London
- Museum of Electricity, Lisbon
- Comal Power Plant, Texas

Following are four images of adaptive re-use.


Tate Modern Museum in London, Bankside Power Plant


Gas Works Park in Seattle

Our Committee would have the City also consider the adaptive re-use of the structure under the second Scenario as well, but this would be contingent on modification of the CEC permit which requires the demolition of the existing plant and remediation of this site to the level of industrial standards within three years of the plant modernization becoming operational.

Adaptive Re-use

Many on the Committee strongly feel that the power plant structure and its current volume allow for almost any of the uses desired by the community as specified in *Appendices A and B*. This volume allows for substantial single

and/or mixed uses such as maritime related in lower areas with less view or access amenity; community and visitor serving, such as the numerous natural and cultural museums noted and preferred; and retail and visitor or residential housing. While the current footprint of the structure is approximately 125,000 square feet, this area could be selectively multiplied many times with inclusion of additional floors within the robust steel structural system, for perhaps as much as one million gross square feet [when occupying all subfloors and roof].

Adaptive re-use could be taken to imply such solutions as: 1) new interior floor structures and recladding of the exterior facades in systems such as glass curtainwall to take advantage of natural daylighting, passive heating, and impressive panoramic views in all directions; 2) selective demolition of portions of the building footprint or reduced building profiles along with new interior construction and infill; and 3) historic preservation, where little may be changed or necessary due to the lighting conditions of certain uses.

The existing volumes and steel structural zones offer numerous opportunities to both selectively retain existing impressive interior volumes and still allow infill with new construction of floors. In all cases, the areas in the lower levels of the structure that are below the 50 year flood plain can be reworked as parking, perhaps in multiple levels, requiring no off-site parking for any of the associated preferred uses. Middle level areas would enjoy vistas north, west and south. Upper level areas would enjoy striking panoramas in all directions.

Developers of mixed-use projects would have specific qualitative and quantitative goals for space based on extensive market studies and cost analysis. The number of permutations and possibilities for re-use are too expansive to investigate adequately within this report. Examples of specific re-use advocated by Cal Poly faculty, Cal Poly students, and local professional and avocational designers appear in *Appendices D through G* as follow.

All scenarios for re-use would require remediation of environmentally hazardous substances inherent with the construction of a building of that era, such as lead paint and asbestos, and any hazardous materials inherent to the processes and operation of the plant over the last fifty years. The latter are not part of the current public record.

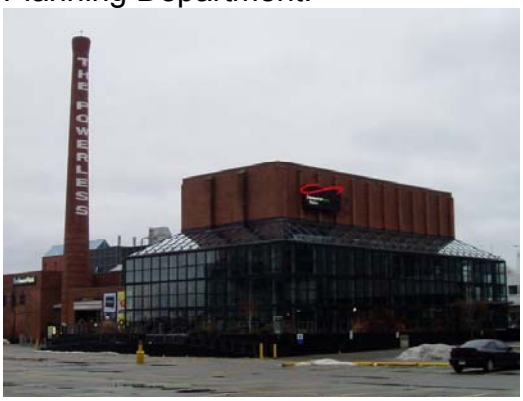
The idea of sustainable development utilizes existing structures and gives them new life. Ken Haggard, a member of the N.E.W. Futures Committee came to the area in 1967 to teach at Cal Poly SLO. The first place he lived was Morro Bay. He remembers living on Kern Ave and every evening after work, he would sit on his deck and watch the sunset behind the estuary, Morro Bay and Morro Rock. The unique qualities of Morro Bay are etched in his memory. He feels the City, owner's of the MBPP and and citizens have a "gold mine" in regard to the power plant. It is a "gold mine" once we realize that a traditional Fossil Fuel power plant here is not an economically and technically appropriate use in this period of history. Ken has illustrated the potentials of this gold mine in our midst with a sustainable N.E.W. Futures vision

including adaptive re-use, renewable energy technologies, landscape regeneration and other innovative redevelopment ideas. Ken's vision is in *Appendix D*.

Ross Stilleson focused his architectural thesis work on the adaptive re-use potentials for the structure. *Appendix E* includes a synopsis of this work.

Toby Crockett, a citizen of Cambria also describes a vision of adaptive re-use for the power plant structure. *Appendix F* describes Toby's vision.

Stu Baron, founder of Baron's orchids in Morro Bay has also created a vision for the adaptive re-use of the power plant structure and a Green Power Plant. His vision is contained in *Appendix G* and can be viewed at the Morro Bay Planning Department.



Harborfront Centre Power Plant, Queen's Quay, Toronto, 1987

Comal Power Plant, New Braunfels, Texas, 2006

Timing

Timing for any Scenario is difficult to pinpoint. One key date is the end of the current PG&E Contract. Another key date is November 15, 2012 identified in the Outfall Lease Agreement and Agreement to Lease between the MBPP owners and the City of Morro Bay. These agreements are summarized in *Appendix P*. However, events may occur between these dates that could trigger action by the City of Morro Bay or by the owners of the MBPP. Another option for the City would be to buy the property "as is" for one dollar if the plant ceases to operate for 15 years.

II. Information on the Property

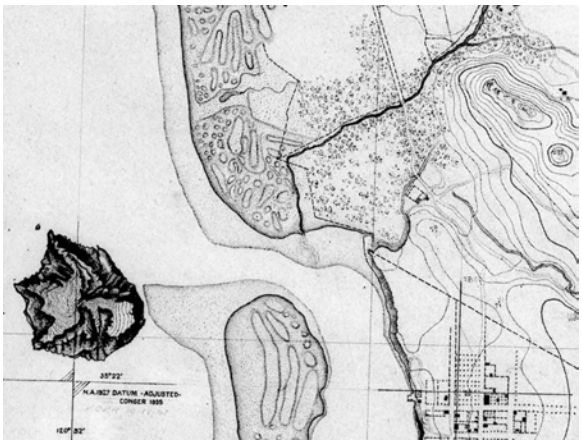
The property has a unique history that will be explored in the following section. A review of the property in a historical context allowed us to understand the variety of current uses, leases, and sensitive areas within and adjacent to the MBPP property.

Brief History of the Site

The site is significant as it forms the terminus for the town's developed bayside waterfront and provides a link to the beaches and lower intensity development to the north. It offers unrivaled potential in its relationship to an existing tourist-oriented commercial area, waterfront fishing, mercantile docks, City services, access to Morro Rock and oceanside beaches.

Beginnings

The power plant parcel today—power plant, tank farm, and underground infrastructure—all reside on a site that has changed radically over time. It is actually a manufactured site constructed in layers in the 20th century over the ancient lagoon of the original outfall of Morro Creek. It is acknowledged in the application for Permit for the replacement plant as containing significant known archeological sites, with the possibility for more to be identified through construction operations. The current plant falls within the definition of an industrial facility, and is noted by multiple sources as a significant architectural structure. As such, the site and surrounding area contain significant prehistoric and historic cultural resources.



Site topography recorded in 1883

As a former fresh water creek outfall and estuary, the site was a logical place for Native American groups to inhabit. At minimum, the site supported temporary or seasonal encampments that could monitor and harvest migrating fish and marine mammals. Larger village or town sites have been identified on adjacent knolls and farther east along the Morro Creek valley. One of the largest Chumash structures discovered was also identified within the power plant parcel during construction activities in the 1960's.

In the 1883 topological record of the bay, Morro Rock is surrounded by tidal channels with Morro Creek emptying into the north end of the bay. At that time the federal government was looking for possible ports to develop or improve along the Pacific. An 1897 map shows little modification of the previously noted conditions. Local lore maintains that a storm in the early 1910's cut a swath through the primary dune system redirecting Morro Creek directly into the ocean.

The harbor grew in the early 20th century as did speculation on how the harbor could best be utilized. One source from that era noted:

Southeasterly along the edges of the harbor is a stretch of solid earth and tidal flats consisting of about 800 acres that can be developed into the best class of harbor industrial lands…ideally suited to accommodate every known kind of manufactury, refinery, and storage enterprise or industry.
-International Appraisal Association report on Potential Harbor Improvements for Morro Bay, 1930 (Gates, 121)


Site aerial from 1937

Subsequently, attention was given to development of the harbor through federal Works Progress Administration (WPA) efforts. Morro Rock was quarried for breakwaters protecting an improved and dredged southeast channel. The northeast channel was filled as documented in the 1937 aerial photo.

World War II Era
An Amphibious Assault Training base in World War II brought further modifications to the harbor entry. A new seawall with additional land fill over the former creek bed and lagoon, sometimes in depths of up to twenty feet. Almost all surface military constructions from that period have been removed as seen in the 1949 aerial photo. It is unknown whether environmentally hazardous substances remain below the surface of the site from these naval operations.


Site aerial from 1949

After the war, the military passed control of the site via sale onto the County of San Luis Obispo. In the post-war period, commercial and recreational fishing expanded as did tourism in Morro Bay. The parcel was identified as a waterfront industrial zone to take advantage of water resources.

Power Plant
Pacific Gas and Electric purchased the parcel in 1951 and subsequently constructed a two turbine oil fired electrical generation facility, completed in 1955. This included an oil tank farm, transformer yard, process and cooling water intake station, underground piping that emptied effluent into the ocean at the northeast base of Morro Rock, desalination plant, and single stack plant (the northernmost of the three stacks today). These initial constructions are documented in a 1957 aerial photo, and

celebrated in local press accounts. By 1965 the plant was expanded with two additional turbines and two additional stacks, bringing the outer appearance largely to what is seen today.


Site aerial from 1957

The City of Morro Bay was incorporated in 1964. Initial zoning for the City retained the waterfront industrial designation, honoring previous county agreements for long term leases in the area of the parcel. The Waterfront Industrial zoning of the site continues today.

Over the years, the plant had numerous upgrades, the most significant being the transition to natural gas in 1995, rendering the oil tank farm obsolete. PG&E recognized the needs of the City as it grew from a village of less than 500 after the war, to a small town in 1953, to a place of 9,000 by 1970. Perimeter portions of the site that are largely undevelopable for the plant due to increasing environmental sensitivities and legislation about cultural and ecological resources were leased or sold to the City for a public park, fisherman's gear storage, and RV park.


Site aerial from 1973

Deregulation and Duke Energy

The deregulation of California utilities caused PG&E to sell the generating assets on a 107-acre portion of the site to Duke Energy North America (DENA) in 1998. PG&E retained the 26.27-acre transformer/switching yard. Duke Energy immediately set into motion studies for a major overhaul of the plant or replacement plant.

To take advantage of technology, Duke Energy proposed a more efficient replacement plant in August 1999. The proposed replacement plant would be sited on the current tank farm, use natural gas, and continue to feed into the existing switchyard. Not long after, the City held a public hearing and soon after that Duke Energy withdrew their initial plan.

A Memorandum of Understanding (MOU) was signed by Duke Energy and the City of Morro Bay in February 2000 outlining the project intent, scope, design and more. The City required the existing plant and stacks be demolished and the site mitigated for hazardous materials. This would, in effect, make approximately nine acres of waterfront property available for discussion as to

its future use. The MBPP agreed to work with the City in master planning the site for future development.

In October 2000, Duke Energy submitted a revised application to the California Energy Commission, the lead review entity for the project. The decision to move forward with a replacement plant met with local opposition, the Coastal Alliance on Plant Expansion (CAPE), because of the plan to continue using the existing cooling water intake and its impact on marine life. CAPE and the City intervened in the CEC process, and numerous public hearings on all aspects of the project were held. A history of the CEC permitting process as summarized by City staff can be referenced in *Appendix P*.

The revised application has been approved by the CEC. However, the CEC is waiting to docket the application pending Air Pollution Control District (APCD) and Regional Water Quality Control Board (RWQCB) permits. EPA-mandated studies had found a significant impact on numerous marine species via the use of once through cooling (OTC), which would continue to draw in marine larvae, inhibiting reproduction in the estuarine ecosystem. In early 2007, Riverkeeper Inc, v. EPA won its case before the U.S. Court of Appeals for the Second Circuit. This has impacted the permitting process for several power plants proposed across the nation. The City Attorney's staff report regarding the implications of the lawsuit can be referenced in *Appendix Q*.

LS Power and Dynegy

In 2006 Duke Energy sold the plant to LS Power. In 2007 LS Power merged its assets, including the MBPP, with Dynegy Inc. They intend to continue to pursue the Application and Plant Modernization project.

Natural and Political Considerations

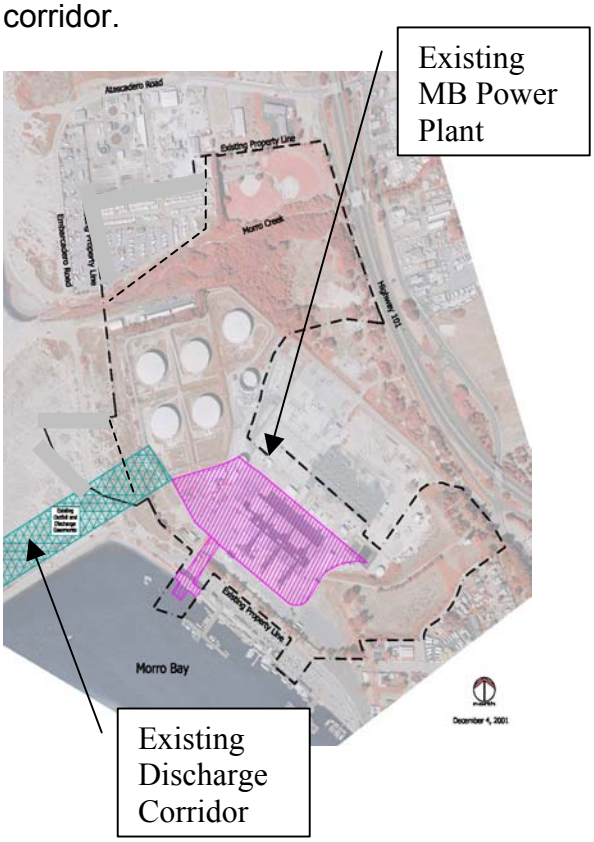
Natural systems at the site continue to manifest themselves, strong Pacific storms breached and notched the protective sandspit in 1955, an impact similar to the one that carved the primary dune and changed the outfall of Morro Creek 50 years earlier. That dune gap was subsequently filled. Heavy rain conditions in 1995 caused localized flooding around the bay edge, and various extrapolations regarding global warming and sea level rise call attention to height considerations for future bay edge developments. Additionally, due to fill and sandy soil subgrade conditions, the parcel is classified as a high risk zone for liquefaction during significant seismic events, again calling for attention to structural issues and construction quality.

Similarly, changing politics and science in environmental awareness has brought greater protection for certain natural aspects of the parcel. These settings are protected by Environmentally Sensitive Habitat Area (ESHA) designation and present significant challenges to any building or development. These zones ring the larger parcel at the north and much of the east boundary as shown on page 16.

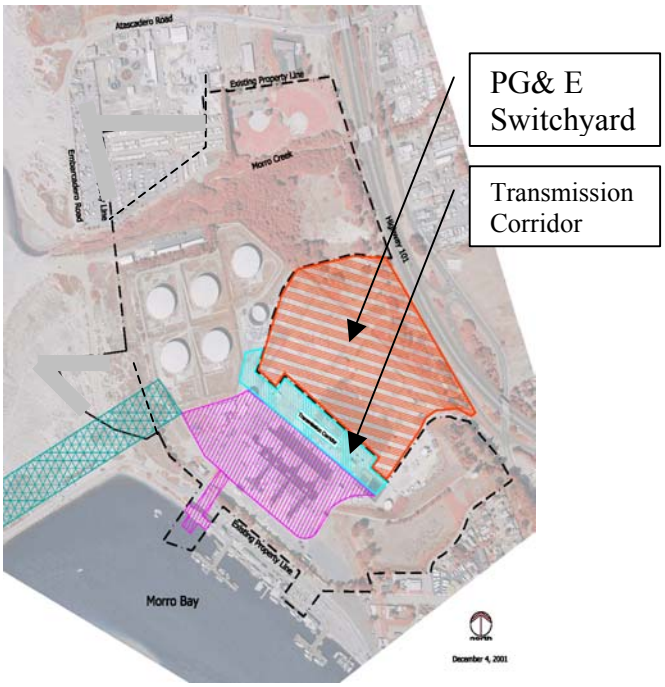
Property Lines & Current Uses

The property has a mixture of leases and sensitive areas that will be explored in the following series of images.

Existing plant location and discharge corridor.
The figure below outlines the location of the existing power plant and discharge corridor.



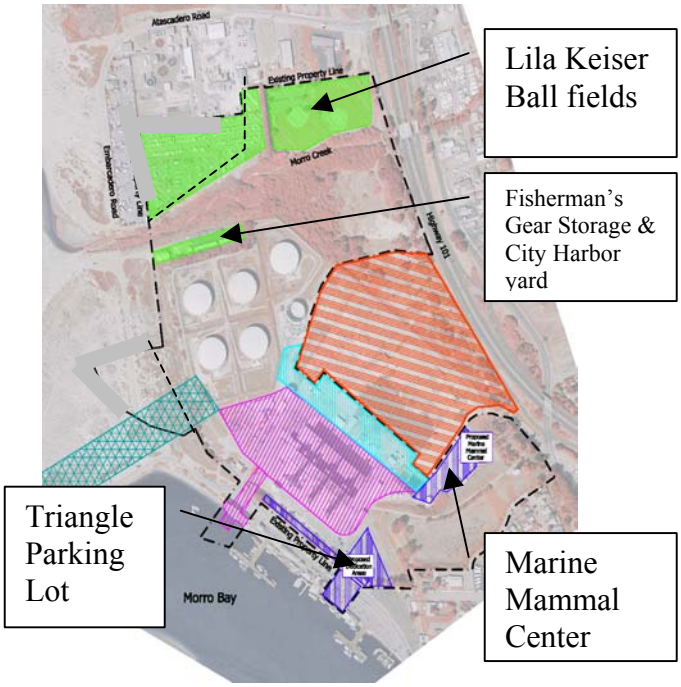
PG& E's Switchyard and Transmission Corridor.
The two parcels to the northeast portion of the site provide infrastructure adjacent to the existing plant for transmission of power to PG&E's switchyard which is approximately 26.27 acres located next to Highway 1. The City of Morro Bay has an easement for the bike path connecting north and south Morro Bay. This bicycle path parallels Highway 1 to the southwest and intersects the Main Street exit and Atascadero Road across from Morro Bay High School. This path floods during extended rainfall and is closed after dark for security purposes.



Revocable City Easements, Licenses & Dedication Parcels
The area to the northeast corner is currently being used as Lila Keiser ball fields. The ball fields are located on property owned by MBPP. The city has a revocable easement for this parcel, which is approximately 6.2 acres and isolated from the other portions of the site by Morro Creek. The parcel to the northwest corner is an RV park currently owned by the City of Morro Bay. The thin parcel to the south of Morro Creek is currently being utilized as a gear storage facility by the Commercial Fishermen's Association and by the City's Harbor Department. This area is approximately 2.5 acres of a revocable easement granted to the City of Morro Bay by the MBPP owners. These easements may only be revoked if the

properties must be used for power producing activities.

The area to the south of the switchyard and existing transmission corridor is occupied by the Marine Mammal Center, DBA Pacific Wildlife Care (PWC). This organization has a license to operate an oiled seabird rehabilitation center for 20 years on approximately half an acre (23,500 S.F.) this license expires on June 1, 2021. PWC currently uses an entrance from the intersection of Highway 1 and Main Street along the bicycle path. Access to the site (shown on the following) is from both east and west and at the discretion of the MBPP.

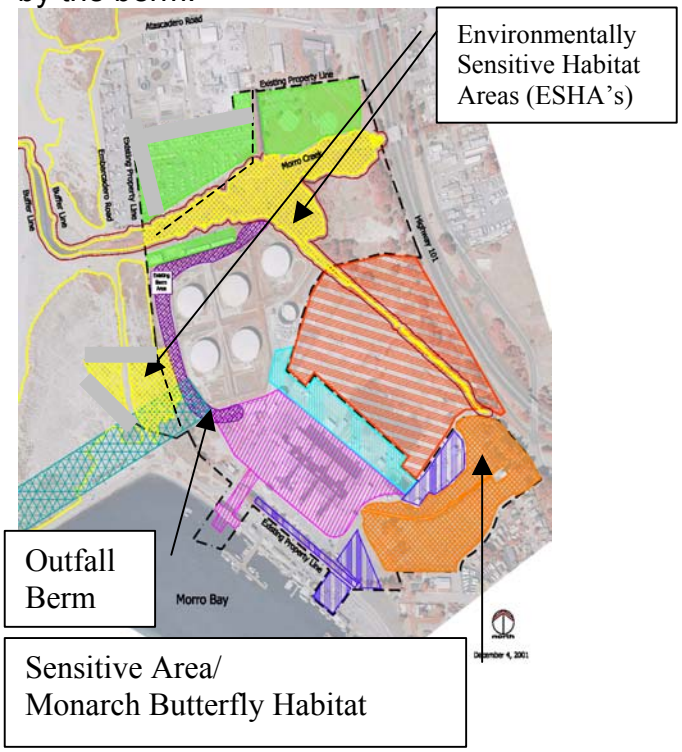


The triangle parking lot and parking strip to the southwest portion of the site, along the Embarcadero is approximately 3.6 acres. The Maritime Museum group would like to develop a maritime museum for this location. In the terms of agreement for constructing a "modernized" power plant facility, this parcel would be deeded to the City of Morro Bay.

Sensitive Areas (Cultural, ESHA, and Other)

The areas in yellow and orange highlight environmentally sensitive areas such as a riparian wetland, dune habitat and monarch butterfly habitat. In total, sensitive areas comprise approximately 25-30 acres of the site.

An outfall berm surrounds the tank farm, highlighted with a dark purple cross hatch pattern. This berm was intended to keep fuel and other hazardous substances from entering the creek or beach. When the plant used oil as a fuel source, it was kept in the tanks enclosed by the berm.



Our Committee created the following map to understand and quantify the uses, ownership and acreages of the MBPP property. Please note, all acreages are approximate and the area designated 14 has an approximate acreage of 4.8 acres though only .6 is officially licensed to the Marine Mammal Center.

III. Community Desires

An important component of Phase I was to assess what the Community wanted as an alternative at the site.

Public Workshop

On September 30, 2006 the Community Desires Workshop took place.

After analyzing the results from the Community Workshop (see Appendix B), we determined that any projects should meet these criteria:

- Be marine oriented
- Be environmentally responsible
- Reflect values of the Central Coast
- Provide economic benefit to the City
- Include cultural, educational and artistic components

Most comments fell into one of five categories: Tourism, Maritime, Environmental, Science and Technology, and Education/Arts. We organized them this way for this report, though most have overlapping considerations.

After going through an introductory information zone, participants then entered the larger room that had several kiosks, which encouraged them to write about and speak about their ideas for reuse of the power plant property under the following categories:

Education/ Cultural/ Arts
Environmental
Maritime
Science & Technology
Sports Activities
Tourism
Other (for any other ideas or concerns)

Education/ Cultural/ Arts

Ideas for education extended from kindergarten to college. Many participants noted the possible linkage to either Cuesta College or Cal Poly to study oceanography, biology, marine science, or renewable energy technologies. Others suggested a teaching facility on site devoted to classes on some or all of the following: sailing, surfing, scuba, or archaeology.

Others suggested that some of the site be focused on the arts such as sculpting, glass blowing, painting or other. Some have suggested that the Power Plant building as it exists should be used for artist lofts (workspace) or galleries.

The idea of a cultural center honoring the unique history of the site and its former inhabitants was also suggested including the Indigenous populations to the present.

Environmental

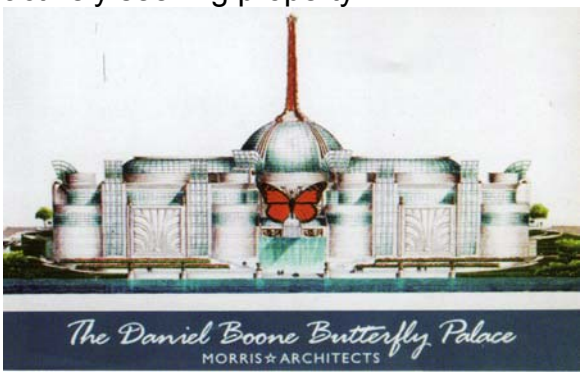
Those who attended the meeting listed existing ESHAs, cultural resources, and proximity to the ocean as reasons for favoring open space and natural rehabilitation. A few citizens suggested reclaiming the land for a natural park with hiking trails and some information kiosks, others spoke of native habitat restoration of the estuary and marshlands. A watershed and creek restoration program could seek grant funding from the California Department of Water Resources and a watershed stewardship program with the Morro Bay high school students could serve to educate and maintain the creek. Encouraging the youth to take part in

preservation efforts would instill a sense of ownership and care for the creek. The Coastal Conservancy would be a potential funding source for this type of program.

Morro Creek's immediate watershed

This would bring only indirect revenues to the city from people who visit these areas; however, some of these ideas could gain financial support from recently passed State Bond measures to increase parklands. Morro Creek is a flood prone natural drainage course that should be maintained in its natural state to protect native vegetation and wildlife habitats (Estero Bay Master Plan). Creek restoration agencies who might provide technical assistance include the Natural Resources Conservation Services, Coastal San Luis Conservation Resources District, and the California Department of Fish and Game. Some or all of this could occur in all scenarios.

New Futures also viewed a presentation by Ms. Sheila Boone and her organization. The non-profit group would work in collaboration with the City under Scenarios Two or Three to build a Butterfly Palace on the site. This falls under environmental as it would preserve and showcase endangered butterflies and generate revenue for the city. See www.butterflypalace.org for more information. This organization is actively seeking property.



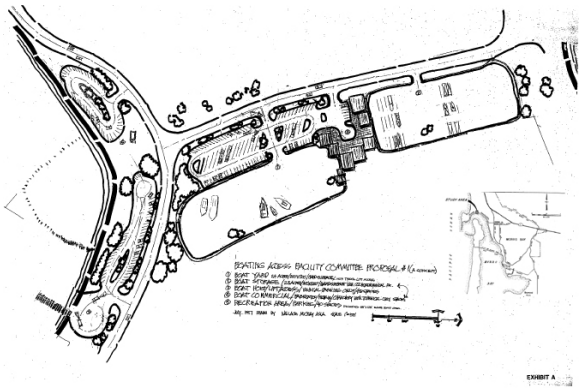
Expresses a every station was that any development undertaken should use SLO Green Build as a resource for green building practices. Green buildings use considerably less energy, conserve resources, and provide healthier indoor environments for building occupants. SLO Green Build has an M.O.U. with the City of Morro Bay and can be contacted through their website at www.slogreenbuild.org.

Maritime

Maintaining a marine-oriented atmosphere at the site would increase visitors and tax revenue. The community would enthusiastically accept these suggestions. Most responses reflect on the theme, as suggested by one resident: use the existing building as a maritime museum housing historical fishing boats and

place a working boatyard in the area outside. A similar suggestion was for a boat museum, showcasing vessels from around the world. This would appeal to the international tourist arena and be culturally enlightening for the maritime community.

The City of Morro Bay would like to build a boat haul-out facility to offer/assure boat repair in its port of refuge. Morro Bay is the only port of refuge between Santa Barbara and Monterey. A group called Concept Marine conducted a feasibility study in 1997. The graphic below is from this conceptual study of a boat haul out facility. Financing could come from coastal and boat-oriented agencies (i.e., Coastal Conservancy or the EPA's "Clean Ports USA" program). Usage fees could provide the income to cover operating costs. When initially studied, the land acquisition costs for such a facility were not feasible. With the execution of the Agreement to Lease, the site selected (Den Dulk property) was deeded to the City of Morro Bay.



Concept Marine Boatyard & Haul-out facility conceptual plan 1997

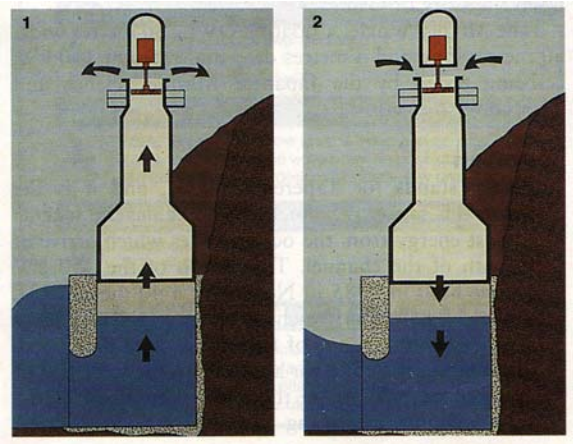
Science and Technology

Many workshop participants noted the energy shortage in California as well as two state laws: AB 1078 and AB 32. AB 1078 requires the state to generate at least 20% of its energy from renewables by 2010 and 33% by 2020. AB 32 requires the reduction of statewide green house gas emissions to 2000 levels by 2010 and to 1990 levels by 2020. These precedents encouraged suggestions for supplementing and/or replacing the power generated at the current plant in any future development. Suggestions included wind (shown below) that could manifest in several forms such as off-shore, ridge top horizontal axis turbines (HAT) or vertical axis turbines (VAT). Vertical axis turbines could be retrofitted to the existing stacks on a trial basis while the plant continues to operate under contract from PG&E.

Vertical axis wind turbines

Off-shore horizontal axis wind turbines

Tidal power and wave power are becoming popular in areas blessed with these resources. Simple wave oscillators and turbines similar to wind mills can be used to take advantage of the ebb and surge of the tides.



Wave oscillators

Solar electric was another suggestion that would incorporate photovoltaics like the ones atop the Morro Bay Community Center. The efficiency of the panels on the Community Center can be referenced to determine the feasibility of such an investment. The Public Utilities Commission (PUC) offers rebates for each kilowatt of solar installed. In Brockton, Mass., the Department of Energy (DOE) came up with the concept of a Brightfield for a 27 acre brownfield site. The solution was to cap the contaminants of the brownfield and place solar arrays on the site. This brownfield to Brightfield case study helped facilitate the city's transformation to a clean energy future.


Brightfield solar elctric on capped brownfield, see *Appendix J*.

Renewable and clean energy technologies would provide power and could be a public venture with Community Choice Law. An investment by the power plant owners would help them diversify their generation portfolio to include less volatile fuel sources. Research and development in clean renewable energy technologies would give the MBPP owners a competitive advantage and a positive image in our community.


Solar Thermal Installation

Solar thermal plants can be combined with natural gas plants as already proven with nearly 400 MW in the Mojave Desert. LS Power is studying the feasibility of such a project at its Arlington Valley, AZ. Plant site.

Other participants thought an aquarium or exploratorium would be a useful idea.

Competition from the Monterey Bay and Long Beach Aquariums would be a consideration for such a venture. The idea of an exploratorium could be integrated into several other museum or cultural centers; a butterfly palace, maritime museum, or other cultural center could include exploration components.

Sports Activities

Several citizens mentioned sports facilities/sites such as swimming pools, water parks, indoor aquatic center, tennis courts, and more. These could occur under any scenario and would require a public and/or private collaboration to build. A recreational center would generate property taxes if the land were independently owned and sales tax revenue for the City.

Tourism

Many attendees wanted to close and re-purpose the power plant buildings and site into a destination-oriented area. They appreciated the size of the location and suggested a mix of uses for the site. The following ideas intend to increase tourism; fill the hotels, restaurants, and shops; and generate revenue for the city.

Conference Center

Several people recommended a conference center. One attendee said, "I attend a lot of professional academic conferences." Morro Bay would attract small to mid-size regional and national conferences. A conference center could happen under any one of the Scenarios. Financing would have to come from a developer, perhaps with city concessions because of traffic impacts from conference events. Also, income from a conference center may not be enough to guarantee financing.

A conference center could fill local hotels (TOT) during the off season and fill the restaurants. A special design like Asilomar's in Pacific Grove could compete well with other conference facilities. Locals may not support this option enthusiastically, but good design and trade-offs from the developer might generate acceptance.

Hotel

Because of the site's location at the entrance to the bay and near the rock, several people recommended a hotel for the site to bring revenue from TOT and sales tax. These ideas ranged from elder and youth hostels to larger high end hotels. We believe Scenario 3 (no power plant nearby) offers the only option for a hotel; however, the hotel could include the conference center and generate sales tax and TOT revenues for the city.

Other

The kiosk labeled "What We Don't Want and Other Ideas" received a few unique suggestions and other ideas from the public. These included, "use for storage of treated water," "large public piazza (plaza)," and "parking structure." On balance, most of the suggestions at this station would more appropriately have been offered at other stations. These included, "aquarium," "open land/parks/bike/walk trails," "green hotel," "casino," and "convention center." These ideas would fit into the other station categories, such as Recreation. A few people wrote that they wanted the power plant to stay.

On the "Don't Want" side, there were many people with passionate concerns. These people don't want: "skateboard park," "parking lot," "pollution," "continued damage to our ecosystem," "blinding lights," "stacks," and "power plant." When people came up to read what others had written, many agreed with certain items and simply put a check after one or more. Many individuals seconded that they neither want pollution, blinding lights nor the power plant.

Five people took the time to fill out the suggestion forms. One of those requested more information regarding how removing the power plant would affect her. One stated "no water polluting, no air polluting."

Another stated "parking structure low key green." Another suggested that the closure of the plant might be used as mitigation for the Diablo Canyon power plant since PG&E has not been able to renew their NPDES permit as no adequate mitigation has been found.

Several participants asserted that that whatever is at the MBPP should preferably be used to enhance the beauty of the site as well as focus on sustainable/healthy living. Predominantly, people believe the site is a valuable asset and should be used for the betterment of the City of Morro Bay.

Methods of Analysis

Our Committee explored several types of analysis. Following is one example of the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis applied to one specific suggestion. A professional firm may employ this type of analysis to determine the feasibility of a project. This type of analysis was beyond the scope of our committee.

SWOT analysis example:

Suggestion: Boatyard, boat haul out, boat repair up to 100', 150 ton crane, boat storage, etc.

Description: Boat repair facility for commercial and private craft up to 100'. Will require 100' dock and lift capabilities, paint yard with overspray protection, etc.

Strengths: Supports existing commercial fishing business and potential to expand private craft in the bay.

Weaknesses: Limited fishing in Marine Protected area (MPAs) reduces the number of vessels operating out of Morro Bay.

Opportunities: The fishing industry has been a mainstay of the local economy for decades. This project would promote growth in that industry.

Threats: Regulations on fishing may threaten the financial viability of this project.

Evaluation of Scenarios

We evaluated the Scenarios using a matrix to compare impacts and resources. Please see the front and back of the fold-out sheet following this page.

IV. Stakeholders

The City, MBPP, and any potential developer must be aware of the numerous stakeholders involved in any re-use project at the site.

Overview of Organizations

Six general categories of organizations or groups have considerable interest in the future of the north embarcadero waterfront. These general categories include:

Residents of the entire Estero Bay: Morro Bay, Los Osos, and Cayucos

Business inclusive of the Chamber of Commerce, Motel & Restaurant Association, the Merchants Association, and others

Non-governmental Organizations (NGO's) such as the National Estuary Program (NEP), Sierra Club, Surfrider, and others

City of Morro Bay advisory boards, employees, and the City Council

Native American community including Chumash, Salinan, and others

Other Government Organizations such as the Regional Water Quality Control Board (RWQCB), School Districts, the County of San Luis Obispo, the Department of Fish and Game, and others

Appendix R includes a list of community groups, advisory boards, the City of Morro Bay official roster and regulatory/permitting agencies. These references are inclusive, but not exhaustive of the many stakeholders who are interested in the future of the north embarcadero waterfront.

Further efforts for redevelopment should include the diverse perspectives of these organizations within the community.

Potential Funding Sources

The type of funds needed by the City of Morro Bay is dependent on the Scenario that plays out. Initially, funding sources for the redevelopment of brownfields were explored. Brownfield mitigation involves a process of preliminary environmental assessments to discover the toxins present on sight. In the evaluation of Scenarios fold-out, a spectrum of known toxins or environmentally hazardous substances are listed. Other unknown substances may be discovered during a phase two environmental assessment which will include soils testing. After the substances are known, then a remedial action plan (RAP) is formulated. Once you have a RAP and the appropriate permits, then mitigation of the brownfield could begin. On the back of the evaluation of scenarios are example remediation costs.

The Center for Creative Land Recycling (CCLR) administers the CalReUse loan program *(Appendix H)* and hosts a conference for interacting with the various federal and state resources on financing brownfield redevelopment. The next workshop includes representatives from the EPA, CCLR, DTSC and others, scheduled for September 19, 2007. Visit www.cclr.org or call (415) 398-1080.

Several opportunities exist for the sustainable redevelopment of brownfields. More information on the EPA's Environmentally Responsible Redevelopment & Reuse (ER3) program is located in *Appendix I.*

A creative solution to a brownfield is the capping of the site and installation of solar electric panels. More information on the Department of Energy's Brightfield program is in *Appendix J*.

The deadline for the Sustainable Communities Grant and Loan program application is July 17, 2007. The City would meet several of the requirements of this program and unlike the grants for brownfield assessment and mitigation, this grant and loan applies to planning costs. This grant may appear in another form in following years. This type of grant could be up to $350,000 with the potential addition of a $150,000 loan at 0% for the term of five years. If the City owned the land, this type of funding would assist in planning, traffic studies, and more as specified. Appendix K provides details on this type of program.

The more traditional financing options described below were also addressed by the MuniFinancial-Revenue Enhancement Opportunities and Development Fee Options for the City of Morro Bay, April 12,2007. Additional information on these types of funding appear in *Appendix L*.

The background discussions regarding the pros and cons of a redevelopment agency are located in *Appendix M*.

An example of the first steps in forming a Benefit Assessment District is given in Appendix Mc. This example is for the under-grounding of utilities in Morro Bay.

Our Committee was only able to secure financing for this phase from the City of Morro Bay. Our expenses are described in *Appendix N*.

Local funding sources:

- Tax Increment Financing (TIF)
- Mello-Roos District Bonds
- Tax abatement agreements
- Municipal grant, loan and public work programs
- Revolving Loan Fund

State Funds:
Cal ReUSE loan interest forgivable loan
Cal/EPA Targeted Site Investigation (TSI) free site investigation up to $100,000

Federal Resources:
EPA- site assessment grants up to $400,000, $350,000 for a single site with a waiver, revolving loan fund up to $1,000,000, clean-up grants up to $200,000 per site for maximum of 3 sites

US Department of Housing and Urban Development (HUD) & Brownfield Economic Development Initiative (BEDI) tied to section 108 loan guarantee fund and pledge of Community Development Block Grant (CDBG) funds

US Department of Commerce Economic Development Administration (EDA)- competitive grants

US Department of Transportation

US Army Corps of Engineers

V. Recommendations

Upon issuance of this report, the N.E.W. Futures Group has completed Phase 1 of the project plan – information and data gathering.

We recommend the City, as a stakeholder, form a Liaison Committee to look at the future of the site with the owners of the MBPP. We recommend that this Committee be comprised of two Council members, two N.E.W Futures members, and two City management level employees.

As to the continuance of the N.E.W. Futures Committee, we wish to remain intact for further assistance in Phase 2 with direction from the Council and the Liaison Committee. We at this point have no formal meetings planned.

After there has been more dialogue, we could be clearer about the most likely future development.

The next step, Phase 2, analysis and consolidation would:

1. Expand the scenario analysis to include specific costs and benefits.
2. Test community assumptions and continue to develop community input.
3. Look at all aspects of each Scenario and subscenario developed here in Phase 1.
4. Formalize the options to the point of developing functional diagrams, circulation requirements, conceptual images and alternatives.
5. Explore grants and other funding sources.
6. Direct development and revitalization within the boundaries of a required general plan consistent with sustainable development principles.

Engaging a firm to prepare this study would cost approximately $150,000 to $200,000. Grant funding is limited under Phase 2 due to property ownership. Some grant funding may be available with the coordination and cooperation of MBPP's consent of ownership.

Phase 2 (Analysis and Consolidation) and Phase 3 (Redevelopment) are beyond the scope of an ad-hoc citizens committee with limited time and funding. Hence the City Council needs to decide how to continue and what the structure of the Phase 2 organization should be. Some options in this regard are:

1. Set up a redevelopment agency (refer to Appendix M, staff reports on RDAs)
2. Disband NEW Futures and have it re-emerge as a non-profit 501c3 to take advantage of additional funding opportunities.
3. Hire a development firm to do this work.
4. Negotiate with a developer to do both phases two and three.
5. Enter discussions with the ownership group to investigate Scenario three.
6. Buy the power plant now for an unknown amount or for $1 after the plant ceases operations for 15 years.
7. Work on master planning the remainder of the site with the power plant owners if the plant modernization occurs.

8. Explore a joint venture arrangement with a private organization or a non-profit organization to pursue some of the grants available in order to accomplish Phase 2. In this option, the City is essentially agreeing to issuing a hunting license" to a selected group to go after these funds on an entrepreneurial basis which does not present the City with any up front costs.
9. Run a competition similar to an architectural competition to develop a variety of approaches to Phase 2. This would allow the development of different options to Phase 2. The award could be a contract for work on Phase 3.
10. Set up a Benefit Assessment District to allow the City to purchase the MBPP property.

VI. Appendices

PUBLIC INPUT

- A- Public Input October 2005
- B- Public Forum September 2006
- C- Adaptive Re-Use of Obsolete Power Plants- Case Studies
- D- Ken Haggard's Vision of a Sustainable N.E.W. Future
- E- Ross Stilleson's Architectural Thesis Work 2006-07
- F- Toby Crockett's Vision
- G- Stu Baron's Vision of a Green Power Plant

GRANT OPPORTUNITIES, FUNDING SOURCES & ACCOUNTING

- H- Brownfield Assessment- Cal ReUse Program
- I- EPA: Environmentally Responsible Redevelopment & Reuse (ER3)
- J- Brightfield- Department of Energy (DOE)
- K- Sustainable Communities Grant & Loan Program- Smart Growth
- L- Other Grant & Funding Opportunities
- M- Redevelopment Agencies – ref. MB City Council minutes 7/25/05 & 8/22/05
- Mc- Benefit Assessment District Requirements
- N- NEW Futures Income & Expenses

LEGAL DOCUMENTS

- O- MBPP Deed Restrictions
- P- Summary of Outfall Lease and Agreement to Lease,
  Staff Reports- CEC Application & Terms of the Outfall Lease (Res.44-05)
- Q- Staff Report-Legal Review of Riverkeeper Case and Status of LS Power NPDES Permit

REGULATORS & STAKEHOLDERS

- R- List of Community Groups, Advisory Boards, City Roster and Regulators

VII. References

City of Morro Bay Harbor Department
http://www.morro-bay.ca.us/harbor.html

City of Morro Bay Planning Department
http://www.morro-bay.ca.us/planning/planning.htm

City of Morro Bay Site for Power Plant Project Updates [local actions; apparently not updated since 2001]
http://www.morro-bay.ca.us/duke.html

California Energy Commission for the Modernization and Replacement Power Plant Project; Overview
http://www.energy.ca.gov/sitingcases/morrobay/

California Energy Commission for the Modernization and Replacement Power Plant Project Documents and Images Listing
http://www.energy.ca.gov/sitingcases/morrobay/documents/index.html#pictures

Morro Bay National Estuary Program Site
http://www.mbnep.org/index.php

Morro Bay State Park
http://www.parks.ca.gov/?page_id=594

Morro Strand State Beach
http://www.parks.ca.gov/default.asp?page_id=593

Re-use Precedent: Comal Power Plant, Comal, Texas
http://www.lcra.org/featurestory/comal_dedication.html

Re-use Precedent: Electricity Museum, Lisbon, Portugal
http://www.edp.pt/EDPI/Internet/EN/Group/Sustainability/Community/EDPFoundation/EDPElectricityMuseum

Re-use Precedent: Emscher Park, Duisburg-Nord, Germany
http://www.latzundpartner.de/L3/eng/e-4-du.htm

Re-use Precedent: Gasworks Park, Seattle, Washington
http://www.seattle.gov/parks/parkspaces/gasworks.htm

Re-use Precedent: Harbourfront Centre, Toronto, Canada
http://www.harbourfrontcentre.com/noflash/media.php

Re-use Precedent: Power house Museum, Sydney, Australia
http://www.powerhousemuseum.com/

Re-use Precedent: Power Plant, Baltimore, Maryland
http://en.wikipedia.org/wiki/Power_Plant_Live!

Re-use Precedent: The Power Station/Battersea Power Plant Proposal, London, England
http://www.arup.com/developmentplanning/project.cfm?pageid=4695
http://www.thepowerstation.co.uk/press/

Re-use Precedent: Tate Modern Museum, London, England
http://www.tate.org.uk/modern/building/default.htm

Re-use Precedent: Seaholm Power Plant, Seaholm, Texas
http://www.seaholm.info/