

## CALIFORNIA COASTAL COMMISSION

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# Th 9d

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49th Day: March 1, 2007  
180th Day: July 10, 2007  
Staff: Ellen Lirley-SD  
Staff Report: May 22, 2007  
Hearing Date: June 13-15, 2007

REGULAR CALENDAR  
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-07-004

Applicant: Los Penasquitos Lagoon Foundation/ City of San Diego      Agent: Joan Jackson

Description: Excavation of 30,500 cubic yards of material to create a sedimentation basin, with associated drainage and slope protection measures and re-vegetation of graded area with native plant species.

Site: East of I-5, north of Sorrento Valley Boulevard, within Los Penasquitos Canyon Preserve, North City, San Diego, San Diego County. APNs 310-050-00; 340-100-00; 341-120-00; and 341-160-00

Substantive File Documents: Certified City of San Diego LCP

STAFF NOTES:

Summary of Staff's Preliminary Recommendation: Staff is recommending approval of the proposal, as the project will result in improved water quality both in the Los Penasquitos Canyon Preserve and the downstream Los Penasquitos Lagoon. Special conditions address the timing of construction, the location of staging and storage areas, maintenance activities, potential impacts on public access, and other required permits.

Standard of Review: Chapter 3 policies of the Coastal Act.

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

**MOTION:**      *I move that the Commission approve Coastal Development Permit No. 6-07-004 pursuant to the staff recommendation.*

**STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

**RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

**II. Standard Conditions.**

See attached page.

**III. Special Conditions.**

The permit is subject to the following conditions:

1. **Final Revised Plans.** **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval final, full-size plans, in substantial conformance with the plan identified as Figure 3 of the *Biological Resources Report for the Los Penasquitos Lagoon Wetland Protection and Restoration Project*, dated July 5, 2005, that shall also include the following:

- a. Grading plans delineating existing and finish elevations.
- b. Erosion control plans identifying the types and locations of the water quality Best Management Practices (BMPs) used to prevent erosion during construction. These shall include silt fences, sandbags or similar devices that will achieve an equivalent of protection of Penasquitos Creek.
- c. Plans identifying the size and location of culverts designed to protect the existing public trail/access road from future flooding.

The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive

Director. No changes to the approved final plans shall occur without an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. Staging Areas/Construction Timing. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval detailed plans incorporated into the construction bid documents for the location of staging areas and of access corridors to the construction sites. The plans shall include, at a minimum, the following:

- a. No storage of equipment, construction materials, or excavated materials shall occur within wetlands or native vegetation areas or on any public trail remaining open during construction. Any stockpiles of graded spoils shall be located away from drainage courses, covered at all times, and contained with runoff control measures, until exported from the site to a City of San Diego landfill.
- b. Storage and staging areas shall be located in a manner that has the least impact on pedestrian and bicycle traffic along the public trail system of Los Penasquitos Canyon Preserve.
- c. Unless authorized by the California Department of Fish and Game (DFG) or the U.S. Fish & Wildlife Service (Service), no work shall occur during the breeding seasons of any threatened or endangered avian species nesting in the vicinity, including the Least Bell's Vireo, whose breeding season extends from March 15<sup>th</sup> to September 15<sup>th</sup>.
- d. The applicant shall submit evidence that the approved plans/notes have been incorporated into construction bid documents. Staging site(s) shall be removed and/or restored immediately following completion of the development; any excavated materials must be stored outside of wetlands and native vegetation areas.

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. Revised Maintenance and Monitoring Plan. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, a final maintenance and monitoring plan, that shall be in general compliance with the maintenance and monitoring provisions of the *Biological Resources Report for the Los Penasquitos Lagoon Wetland Protection and Restoration Project*, dated July 5, 2005, with the following additions/modifications:

- a. Seeding with the coastal sage scrub hydroseed mix shall continue until the success criteria is met, extending the monitoring program beyond the proposed 25 months as necessary.
- b. Removal of non-native vegetation within the hydroseeded area shall occur frequently throughout the period of coastal sage scrub establishment until the success criteria is met.
- c. A copy of the semi-annual monitoring reports shall be submitted to the Executive Director of the Coastal Commission.

The permittee shall undertake maintenance and monitoring in accordance with the approved program. Any proposed changes to the approved program shall be reported to the Executive Director. No changes to the approved program shall occur without an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. Other Permits. **PRIOR TO THE COMMENCEMENT OF CONSTRUCTION**, the permittee shall provide to the Executive Director copies of all other required state or federal discretionary permits, such as permits from the U.S. Army Corps of Engineers and the California Department of Fish and Game, for the development herein approved. Any mitigation measures or other changes to the project required through said permits shall be reported to the Executive Director and shall become part of the project. Such modifications, if any, may require an amendment to this permit or a separate coastal development permit.

5. Maintenance of Public Access. All public access trails through the Los Penasquitos Canyon Preserve, other than the trail segment that is located immediately north of the development footprint, shall remain open for public use during project construction.

#### IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description. The applicant proposes to construct a sedimentation basin at the western end of the Los Penasquitos Canyon Preserve (LPCP), extending west into the adjacent Torrey Pines community. The proposal requires excavation of 30,500 cubic yards of material to create the basin, which is designed to hold approximately 10,000 cu.yds. of sediment during normal operation. A small portion of the excavation, 500 cubic yards, will be reused on site in creating the basin, and the remainder, 30,000 will be exported from the site to the City landfill. Based on the soils report, the material is not suitable for beach sand. Also proposed are associated drainage and slope protection measures and re-vegetation of graded areas with native plant species.

The basin will be parallel to, and immediately north of, Penasquitos Creek, which runs in an east-west direction along the canyon floor. In this area, Penasquitos Creek's northern bank consists of a riprapped levee. Riprap will be removed at the eastern end of the proposed basin, allowing flows from the creek to enter the basin. Riprap will also be lowered along portions of the bank to the west to facilitate passage of water between the creek and the basin. The basin is designed to accept mid-level flows (roughly 2 – 5-year storm events). Lower flows will not enter the basin, but will stay within the creek bed. Higher flows will flow over the riprap into the basin and directly back out to return to the channel. The mid-level flows will stay in the basin for a period of time, allowing sediments to settle out before the water flows back into the creek through an outlet structure at the western end of the basin.

The project crosses the boundary between two communities of the North City LCP segment, with the western approximately three fifths of the basin located in the Torrey Pines Community Plan area. The eastern approximately two fifths of the basin is located within the LPCP, which is an area of deferred certification. Much of the LPCP is geographically located within the Mira Mesa Community Plan area, although the more northern parts of the canyon don't appear to be in any community plan area. The City's action in approving a Site Development Permit and Coastal Development Permit identifies the project site as being only in the Torrey Pines Community Plan. Although the City's discretionary action addressed the entire project, which is appropriate for purposes of the Site Development Permit, the City does not have authority to approve a Coastal Development Permit for that part of the project within the LPCP. Since the project consists of a single structure (i.e., it is all functionally related), the Coastal Commission is reviewing a coastal development permit application for the entire project. Both the Los Penasquitos Lagoon Foundation and the City of San Diego are co-applicants on the permit application.

2. Biological Resources/Water Quality. The following Coastal Act policies related to biological resources and water quality are most applicable to the proposed development, and state, in part:

### **Section 30230**

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

### **Section 30231**

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste

water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

### **Section 30233**

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

... (6) Restoration purposes. ...

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division. ...

### **Section 30240**

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The primary purpose of the proposed development is to remove sediments from Penasquitos Creek. Sedimentation is the main reason that the downstream Los Penasquitos Lagoon has been identified as an impaired water body, and the proposed project is designed to reduce the amount of sediments reaching the lagoon from inland sources located further up the watershed. The proposed sedimentation basin would lie parallel to Penasquitos Creek on its northern side, but would be separated from the creek by existing riprap that lines both the northern and southern stream banks. The riprap would be lowered in places to allow the stream water to enter the basin. The project is designed to intercept 2-5 year storm flows, allow sediments to settle out in the proposed basin, then release the water back into the creek through an outlet structure and pipeline at the western end of the basin. Lower flows (one-year storm or less) would remain in the creek and not flow into the basin, and higher flows would inundate the entire area and, due to their greater velocity, would return to the creek without settling out sediments or passing through the outlet structure.

Penasquitos Creek itself contains some southern willow scrub habitat, but this riparian vegetation does not extend to the project site north of the creek, due to the existing riprap berm separating the creek from the project site. The upland area where the basin is proposed is a disturbed area containing only ruderal vegetation, and a portion of the Preserve trail system runs through the proposed site as well. After excavation of the basin, the created side slopes will be hydroseeded with a coastal sage scrub mix.

A few individual willows in the location where the proposed outlet pipeline enters the creek will be impacted by project construction, but the Commission's staff ecologist has determined that these individuals are isolated and are not part of any significant stands of riparian vegetation; thus, the proposed removal of these individual trees does not constitute an impact on wetlands (ESHA). The 400 sq.ft. area of construction impact for installation of the outlet pipeline will be revegetated after construction. All construction activities will be conducted from an existing public trail/access road that runs along the northern border of the site. No equipment, materials, or personnel will be placed within the stream itself, so no construction impacts beyond the temporary one just noted will occur.

Although the project has no direct impact on wetlands, riparian habitat exists within 100 feet of the site, such that this area would typically be considered a buffer. In addition to the riparian vegetation in Penasquitos Creek immediately to the south, there is also a large wetland mitigation area upstream (east) of the project site. Although it is several hundred feet from the proposed basin, the site has been expanded incrementally to address the mitigation needs of several City of San Diego projects, both in and out of the coastal zone, although mostly out. It is expected that further restoration/mitigation activities will occur in the future in this general location, possibly bringing the restored wetlands closer to the proposed sedimentation site.

The proposed sedimentation basin's purpose is to remove sediments generated by medium intensity storm events before they reach the downstream Los Penasquitos Lagoon. Water will enter the basin primarily from Penasquitos Creek, including flows from Lopez Creek which joins Penasquitos Creek upstream of the basin, and also from minor drainages along the steep hillsides/canyon walls north of the project site. The basin is designed to retain approximately 10,000 cu.yds of sediment, and will require periodic cleanout. As proposed, removal of sediment will occur when the sediment reaches a depth of two feet, but no less than once a year. It will be inspected after every significant storm event, or every 24 hours in multi-day events, with a minimum inspection program of every two weeks during the rainy season. Inspections will not only check the depth of sediment deposits, but also identify any erosion problems or structural damage.

In itself, the proposed development is a wetland enhancement/restoration activity. Thus, it is compatible with and will not degrade the adjacent riparian corridor and wetlands, and it can perform some functions of a typical buffer by providing upland habitat on its

revegetated slopes. The proposed development is therefore consistent with Section 30240(b) of the Coastal Act.

Moreover, the subject site is surrounded by other lands that are either already functioning wetland habitats, or available for restoration to either wetland or native upland habitats. Thus, the sedimentation basin will be part of the overall natural canyon preserve, and will enhance the function of downstream resources.

Since the proposal is a simple restoration project, and is not a project required by the Commission to mitigate for resource impacts associated with a coastal development permit, the Commission's typical five-year (at a minimum) monitoring and maintenance program is not specifically required. However, the application does include a maintenance and monitoring program for the revegetation aspects of the project. The program is proposed to last for 25 months and to include a maximum of two applications of hydroseed. Because of the significant threat of invasive non-native species invading and dominating the revegetated areas, if they have not been fully established, Special Condition #3 requires modification of the proposed program. If two applications of hydroseed are not successful, the condition provides that additional applications be carried out until the success criteria is met. Moreover, removal of non-native species must continue until the revegetation is deemed successful.

In summary, the proposed project will have no adverse impacts on existing sensitive resources, and will improve the quality of waters leaving the Los Penasquitos Canyon Preserve and entering Los Penasquitos Lagoon. However, several special conditions are necessary to ensure maximum resource benefit from the proposed sedimentation basin. In addition to Special Condition #3, discussed above, Special Condition #1 requires submittal of final revised plans that must include, among other things, the types and locations of construction BMPs needed to ensure the stability of the construction site. The second recommended special condition addresses staging areas and construction timing. It provides for protection of resources by prohibiting the use of sensitive areas for staging or storage of materials, and by restricting development during the breeding season of sensitive species. Finally, Special Condition #4 requires submittal of copies of any other required state or federal discretionary permits. With these conditions, the Commission finds the proposed development consistent with the cited Coastal Act policies.

3. Public Access. The following public access Chapter 3 policies are most applicable to the proposed development and state, in part:

**Section 30210**

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.



**Section 30212**

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby, or,

(3) agriculture would be adversely affected. ...

**Section 30213**

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...

Los Penasquitos Canyon Preserve is an open space and recreational area located within and between several of the urbanized communities of northern San Diego. It runs from just east of I-5 eastward, through and beyond the coastal zone, extending all the way to I-15, several miles inland. Most of the Preserve is in public ownership, although some of the canyon side slopes may still be in private ownership; both the City of San Diego and the County of San Diego own portions of the Preserve within the coastal zone.

The Preserve is regionally popular, and includes an extensive system of hiking, biking, and equestrian trails on both the north and south sides of Penasquitos Creek, as well as utility access roads, that are also used as trails. One existing trail/access road runs immediately north of the project site, and all construction activities will be conducted from this trail. During project construction, a portion of the trail may be closed temporarily or intermittently. After construction is complete, culverts will be installed to protect the trail from possible future flooding. Special Condition #1 requires submittal of final project plans, including a plan for the proposed culverts. In addition, Special Condition #5 requires that maximum public access through the Preserve be maintained during project construction. It provides that all existing trails, except the one directly affected by the project, be kept open and usable at all times.

To summarize, the proposed project will temporarily or intermittently interfere with existing low-cost recreational use by using a segment of one existing trail/access road during project construction. This will be a short term impact, and the trail/road accessibility will be enhanced upon project completion with installation of culverts to reduce the risk of future flooding. This will help assure that maximum public access is maintained in this portion of the Preserve for the long term. Therefore, the Commission finds the proposed development, as conditioned, consistent with the cited Coastal Act policies.

4. Visual Resources. Section 30251 of the Coastal Act addresses the preservation and enhancement of visual resources, and states, in part:

**Section 30251**

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. ...

The Preserve provides visual relief from the surrounding industrial and residential areas by providing an open space green belt. Public views to, and throughout, the Preserve are significant resources requiring protection under the Coastal Act. However, the proposed project will not significantly alter the Preserve's visual amenities. All proposed facilities will be at, or below grade, and thus not visible from any distance. Moreover, the side slopes of the basin will be revegetated with upland coastal sage scrub vegetation, consistent with surrounding undisturbed areas of the Preserve. Therefore, the Commission finds that the proposed development, as conditioned, is consistent with Section 30251 of the Coastal Act.

5. Local Coastal Planning. The City of San Diego has a fully certified LCP and issues coastal development permits (CDPs) throughout most of its coastal zone area. However, there are a few remaining areas of deferred certification where the planning process is not complete; these areas remain under the Coastal Commission's jurisdiction, with Chapter 3 of the Coastal Act being the legal standard of review. Part of the proposed project is located in the certified Torrey Pines Community of the North City LCP segment, with the rest in the Los Penasquitos Canyon Preserve. The Preserve is an area of deferred certification, as no land use planning document for the Preserve has been certified by the Commission.

The City approved a CDP for the proposed development, in conjunction with a site development permit (a separate local discretionary approval). Although the permit was appealable, it was determined that no appeal was necessary on behalf of the Commission because the proposal is for a single structure, and must be reviewed as a whole. Thus, although the proposed development is located within two planning areas of the City, one certified and the other not, the Commission has determined it has the ability to review the entire proposal. The City's action had already occurred before legislation allowing a local government to defer its permit authority to the Commission in situations of split jurisdiction went into effect.

The project has been reviewed pursuant to Chapter 3 of the Coastal Act, but is fully consistent with the certified Torrey Pines Community plan as well. The sedimentation basin design approved by the City is identical to the one approved herein, and there is no

conflict between the special conditions of this permit and those required by the City. This is significant because, even though the Commission's CDP would negate the City's CDP, the City approved another local discretionary permit (a site development permit) that would apply to the development as well, with a single set of conditions applying to both City actions. Therefore, the Commission finds that the proposal, as conditioned, will not prejudice the City's ability to continue implementation of its LCP.

6. Consistency with the California Environmental Quality Act (CEQA).

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The City of San Diego is the lead agency on this project for purposes of CEQA review. It determined that the proposed development could have a significant environmental effect and it prepared a mitigated negative declaration. The CEQA document including a mitigation, monitoring and reporting program to reduce potential impacts to biological, historical and/or paleontological resources to a level below significance.

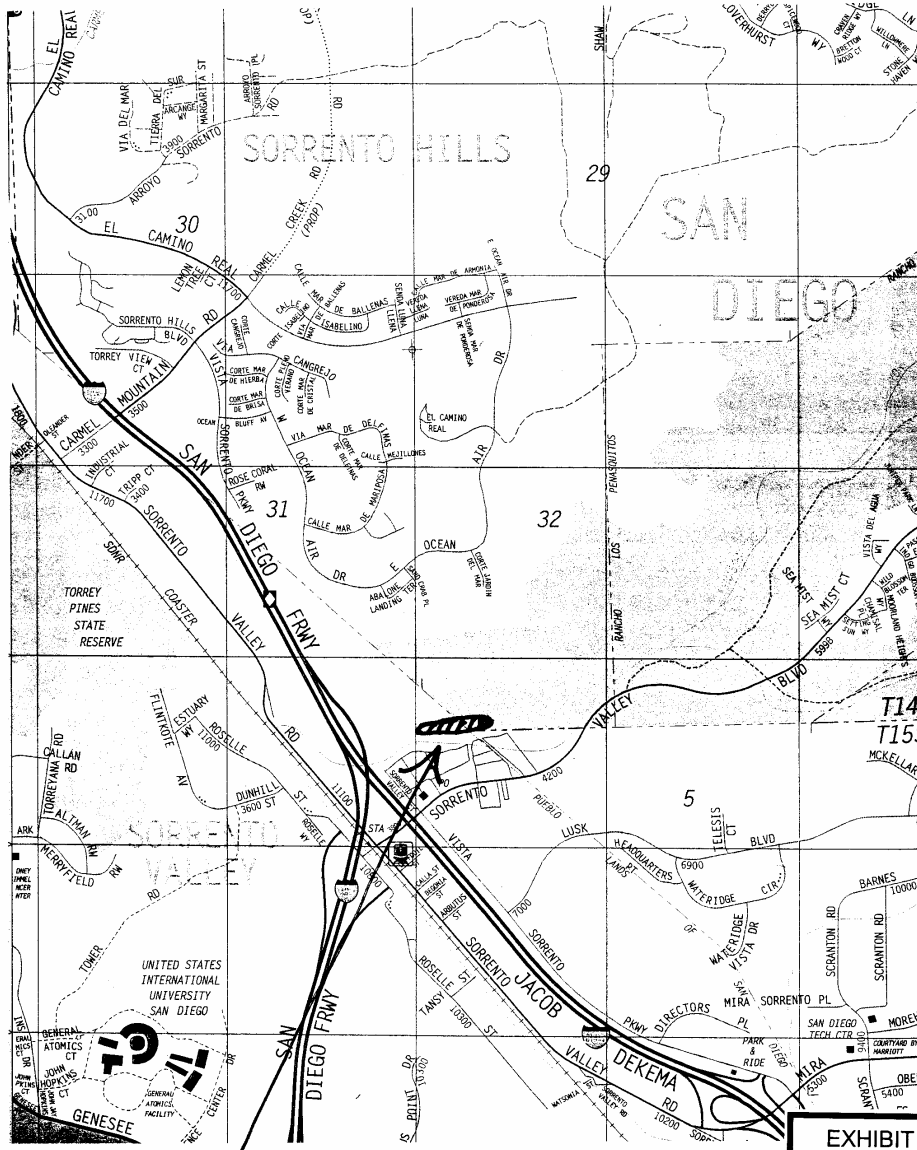
The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing protection of biological resources and public access, will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

STANDARD CONDITIONS:


1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

6-07-004



Site

EXHIBIT NO. 1
APPLICATION NO.
<b>6-07-004</b>
Location Map
 California Coastal Commission



Los Penasquitos Sedimentation Basin Initial Study

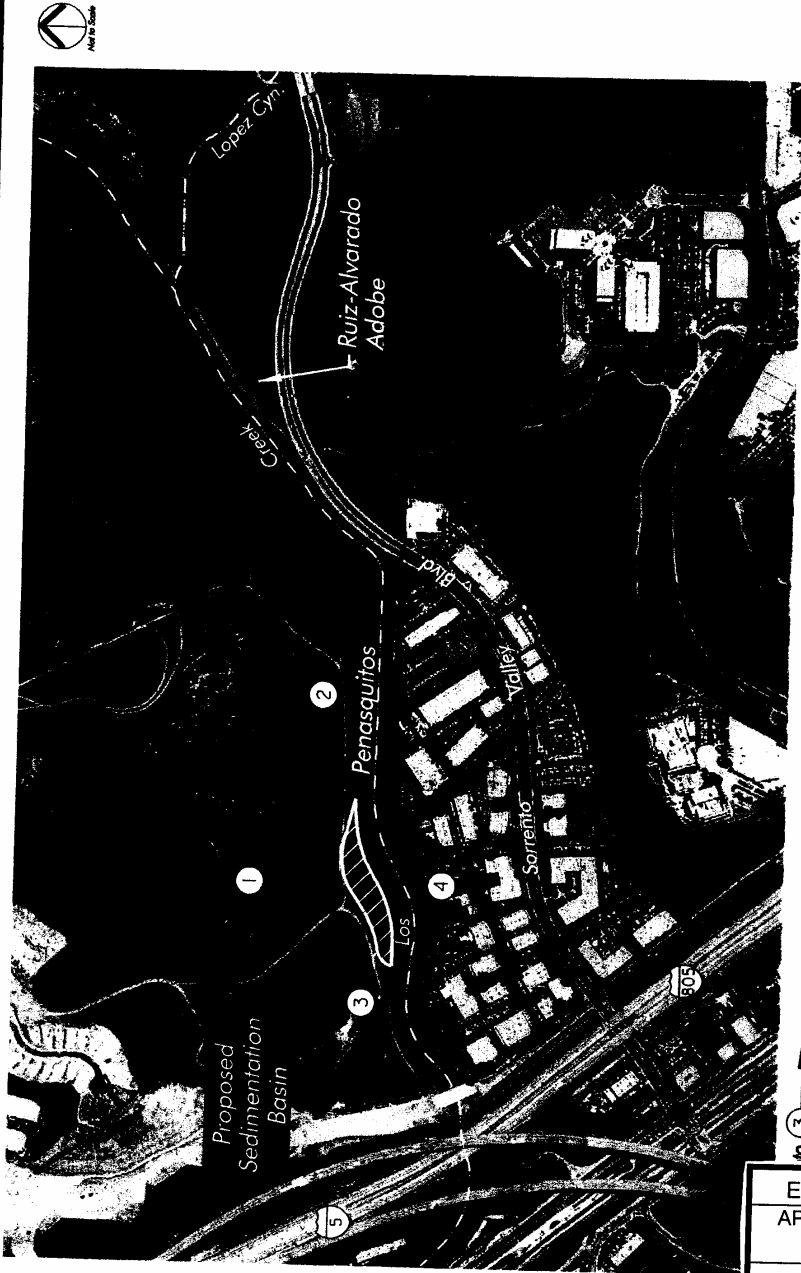


Photo Key

EXHIBIT NO. 3
APPLICATION NO.
<b>6-07-004</b>
Aerial View
California Coastal Commission

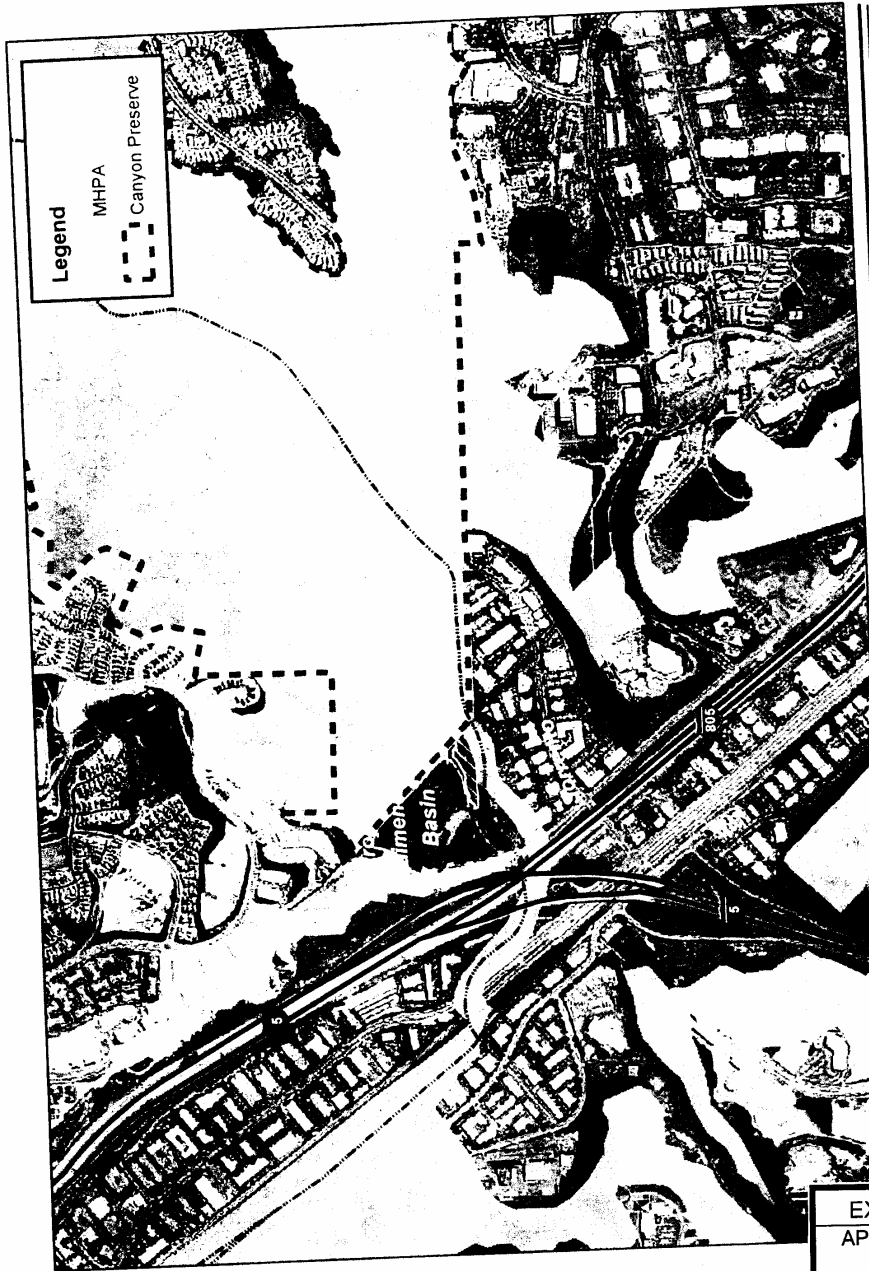


Figure 2

Vicinity Map

Los Penasquitos Sediment Basin Initial Study



EXHIBIT NO. 4  
APPLICATION NO.  
**6-07-004**  
Jurisdiction Boundary





6-07-004

### 7.3 Management Element

This section presents the long-term maintenance and monitoring of the revegetation program for the Los Peñasquitos Sedimentation Basin. The main contractor will be primarily responsible for implementing the mitigation program set forth in the biology report. The monitoring and success of the mitigation implementation will be evaluated by a qualified project biologist. Conditions for maintenance and monitoring are discussed below.

**7.3.1. Project Maintenance.** To ensure that the restoration site develops as planned, revegetated areas on-site will be maintained for a period of 25 months. Maintenance will focus on establishment of target species, removal of weeds, and erosion control.

Site Protection. Signs will be erected 100 ft along the basin instructing the public to keep out of the revegetation areas.

Replacement Seeding. The maintenance contractor will be responsible for re-seeding all or a portion of the site as needed for one additional growing season. Replacement seeds must be collected from the same source as the original seeds and applied either by hand or by hydro-seed. Replacement seeding will occur between December and March to take advantage of the winter rainy season. The need for replacement seeding will be determined by the project monitor.

Irrigation Maintenance. Supplemental irrigation is recommended for all restoration/erosion control sites. A temporary water meter will be required and overhead sprinklers will be used to provide sufficient water and to reduce maintenance required for drip irrigation-type emitters. Irrigation maintenance will be required for the life of the project (25 months).

**7.3.2 Project Monitoring.** A 25-month monitoring program will be implemented to determine if the revegetated portions of the site are functioning as expected. The City of San Diego Land Development Code requires that revegetation areas that are non-permanently irrigated be monitored for no less than a 25-month period (City of San Diego 2000). The overall success of the mitigation program will be evaluated by comparing the final year of monitoring data with the target values. Monitoring will be conducted to identify trends and progress toward the goal of self-sustaining planted species. Monitoring will also assess whether any adjustments to the original plan are needed. Monitoring will be conducted semi-annually. One semi-annual report and one annual report will be prepared for each year. Each report will be submitted to the City and other appropriate agencies each monitoring year. Three types of monitoring will be undertaken for post-construction phase monitoring of the revegetation site. These include implementation monitoring, qualitative monitoring, and quantitative monitoring.

EXHIBIT NO. 5
APPLICATION NO.
6-07-004
Monitoring Plan
2 pages
 California Coastal Commission

6-07-004

Implementation Monitoring. To ensure that the revegetation plan is followed, all implementation activities will be monitored by the project monitor. This individual or individuals will have a minimum of a Bachelor's degree in biology, botany or related science and will have at least 2 years experience in monitoring of native habitat restoration projects in southern California. The project monitor will be on-site for all phases of project implementation including grading and planting. Records will be kept of the initial efforts including dates and quantities of hydro-seed applied, problem areas if any, and weed control measures. These will serve as the "as-built" plans for the project.

Qualitative and Quantitative Monitoring. Qualitative monitoring will be conducted by the project monitor. This individual or individuals will have a minimum of a Bachelor's degree in biology, botany or related science and will have at least 2 years experience in monitoring of native habitat restoration projects in southern California. Qualitative data will include overall survival, evidence of water stress, insect infestation, development of erosion problems and health and vigor of seeded and planted areas by species. Permanent photographic stations will be established and used to document qualitative changes over time.

Quantitative data will include estimates of percent cover by seeded species. Cover will be estimated by the project monitor and will include percent cover by native species, percent cover by non-native species, and percent bare ground.

#### **7.4 Criteria for Success**

In order to determine if the goals of the revegetation program have been achieved, certain success criteria must be met. These criteria typically include measures such as percent cover by seeded species seeded. As discussed, these data will be collected during periodic monitoring events. Each monitoring report will evaluate if these criteria have been met and prescribe corrective measures necessary. Success criteria are presented by monitoring year below.

The successful germination and establishment of coastal scrub seed mix in areas of disturbed habitat impacted by the project will be evaluated over the 25-month monitoring period. Should the seed mix fail to germinate after year 1, one additional seeding is required of the contractor. However, if non-native plant species re-establish after the second seed application, no further measures will be implemented as long as erosion control has been demonstrated.

#### **7.5 Notification of Completion**

Once the project monitor determines that the success criteria have been met, a report summarizing the revegetation project will be prepared and submitted to the City of San Diego.