CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

W 12a

ADDENDUM

DATE: August 6, 2012

Click here to go to the original staff report.

TO: Commissioners and Interested Parties

FROM: South Central Coast District Staff

SUBJECT: Agenda Item 12a, Wednesday, August 8, 2012
CDP No. 4-09-013 (Mariposa Land Company)

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1. The applicant's representative, Sherman Stacey, submitted a letter that was received on July 27, 2012 in support of the staff recommendation. This letter is attached as Exhibit 1 of this addendum.

2. Dr. J. Robert Hatherill submitted a letter that was received on August 1, 2012 in support of the proposed vegetation restoration plan. This letter is attached as Exhibit 2 of this addendum.

3. Dave Crawford, the City Biologist for Malibu, provided comments on the proposed vegetation restoration plan (attached as Exhibit 3 of this addendum). His comments, and Commission staff response to them, are summarized below.

   D. Crawford Comment 1: The two existing canary island date palm trees within the restoration area should be removed.

   In response to this comment, Commission staff would note that the two existing mature palm trees in the upland portion of the proposed restoration area are not considered an invasive species and would not inhibit the restoration and biological function of the site. The trees have been there for more than 60 years and may provide some habitat value for birds. Therefore, Commission staff cannot justify requiring that they be removed.

   D. Crawford Comment 2: A 5-year monitoring period should be required instead of the proposed 3-year because 5 years is an industry standard and additional time may be needed in this case to ensure success due to the uniqueness of planting in the existing rip-rap.

   In response to this comment, Commission staff would note that a 3-year monitoring period for the proposed restoration plan has been required in this case pursuant to Special Condition 2 due to site-specific considerations such as the scale of the project and the water-rich environment that will speed plant establishment. Commission staff

Biologist, Dr. Engel, has determined that given the site-specific considerations in this case, it would be possible for the restoration effort to meet the performance standards within the 3-year monitoring period. If not, there is an adaptive management provision in Special Condition 2 that requires follow-up measures be undertaken should the third year monitoring report indicate that the planting is not in conformance with or has failed to meet the performance standards.

4. Heal the Bay submitted a letter that was received on August 6, 2012 expressing opposition to the staff recommendation (attached as Exhibit 4 of this addendum). Heal the Bay states that stream bank armoring is an ineffective method for long-term bank stabilization and a major cause for downstream bank erosion and sedimentation. Heal the Bay asserts that the proposed project is not the least environmentally damaging alternative, and recommends analyzing the alternative of combining a soft bioengineered approach (biodegradable filter fabric planted with vegetation) with engineered techniques (buried rip-rap up to the toe of the bank) to stabilize the stream bank.

   Commission staff would note that the suggested alternative was analyzed by staff on pages 18-19 (see alternative #2 and #7) of the staff report. The alternative of installing rip rap within the low flow channel and stabilizing the upper bank with vegetation was determined to be hydraulically infeasible due to the velocity of flows along the subject westward meander cut bank. The alternative of deconstructing the existing revetment and reconstructing it at a more gradual slope (3:1 or 2:1) and planting with native riparian vegetation was also determined to be infeasible.

   Heal the Bay asserts that the staff report does not address potential undermining of the rip rap should the roots of the willows to be planted outgrow the spaces in the rip rap. In response, staff would note that it has been determined that the existing rock revetment is stable and the proposed vegetation of the revetment is anticipated to enhance the stability of the revetment. The proposed vegetation restoration approach has been successfully employed elsewhere by CalTrans and such an approach is not anticipated to destabilize the rock revetment. In addition, to ensure that the permitted bank protection is maintained in its approved state and future maintenance, repairs or additions to the approved structure receive the appropriate approvals, Special Condition 8 requires the applicant to contact the Executive Director for a determination of whether a coastal permit or permit amendment are legally required when it is apparent that repair and maintenance is necessary.

   Heal the Bay also believes that the subject stream bank should be designated ESHA or ESHA buffer. These comments and concerns are addressed on page 17 in Section IV.B of the staff report.

   Heal the Bay comments that the rip-rap has contributed to water quality and habitat degradation in the Malibu Creek and Lagoon for the past 14 years and recommends that the applicant be required to restore disturbed riparian habitat (at a ratio of 3:1 or greater) as mitigation for all areas permanently displaced by development. In response, Commission staff would note that analysis of the proposed project and its consistency with the applicable policies of the Coastal Act and Malibu LCP is included in Section IV.B of the staff report.

5. Michael Blum, Stewardship Chair of the Malibu Surfing Association, submitted a letter that was received on August 6, 2012 (attached as Exhibit 5 of this addendum) expressing opposition to the staff recommendation and concurring with the comments Heal the Bay provided in their letter of August 6, 2012. Staff response to the Heal of Bay comments are provided above (#4). Mr. Blum also comments that potential adverse impacts to Malibu Lagoon and Surfrider Beach resulting from the proposed project were not evaluated. In response, Commission staff would note that technical studies were prepared for the project, which have concluded that channel hydraulics of lower Malibu Creek are not significantly impacted by the proposed project and that the project will not cause erosion or other adverse impacts downstream. From both a biological and engineering standpoint, the bioengineered rip rap slope protection that is proposed is the least environmentally damaging feasible alternative and has been sited and designed to avoid and minimize impacts to the habitat values of the riparian stream corridor of Malibu Creek.

6. Since publication of the staff report, Commission staff has received correspondence from State Parks (attached as Exhibit 6 of this addendum) indicating that the applicant, Mariposa Land Company, holds an easement that allows for protecting the banks of the creek on State Parks property. Therefore, State Parks permission for the portion of the proposed project that encroaches onto State Park property is not required. As such, Special Condition 11 (State Parks Permission) of the staff recommendation shall be deleted, as well as references to that condition on pages x and x of the staff report, as follows (deletions shown in ~~strikethrough~~, additions shown in <u>underline</u>):

Modify the first paragraph of the Summary of Staff Recommendation on Page 1:

> Staff recommends **approval** of the proposed development with ~~eleven (11)~~ <u>ten (10)</u> special conditions regarding Assumption of Risk, Vegetation Restoration Plan Implementation and Monitoring, Restoration Timing and Best Management Practices, Required Agency Approvals, Site Inspection, Condition Compliance, Project Implementation, Maintenance Activities and Future Alterations, Liability for Costs, <u>and</u> Deed Restriction~~, and State Parks Permission~~. The proposed project area lies within the City of Malibu, but falls within the Commission's area of retained original permit jurisdiction because development is proposed on lands that are below the mean high tide line and/or on public trust lands. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu Local Coastal Program (LCP) serve as guidance.

Delete Special Condition 11 (State Parks Permission) on Page 8:

> ~~11. California Department of Parks & Recreation Permission~~

~~PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director evidence that California State Parks has granted permission to undertake the portion of the project that is on State Parks property, or evidence that no permission is required.~~

Delete the following sentence on Page 12:

~~However, according to the applicant's site plan, it appears a small portion of the proposed rip rap is located on an adjacent parcel owned by California Department of Parks & Recreation (4452-011-903). As such, **Special Condition No. Eleven (11)** is required to ensure that State Parks permission is obtained prior to issuance of the permit.~~

Modify the following paragraph on Page 25:

The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through ~~11~~ 10

FRED GAINES
SHERMAN L. STACEY
LISA A. WEINBERG
REBECCA A. THOMPSON
NANCI S. STACEY
KIMBERLY RIBLE
ALICIA B. BARTLEY

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1111 BAYSIDE DRIVE, SUITE 280
CORONA DEL MAR, CALIFORNIA 92625

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W 12a

Received
JUL 27 2012
California Coastal Commission
South Central Coast District

July 27, 2012

Commissioners
California Coastal Commission
45 Fremont Street, #2000
San Francisco, California 94105

Re: Application for Permit No. 4-09-013 (Mariposa Land Company)
Maintenance of Rock Protection along Malibu Creek, Malibu

Dear Commissioners:

On Wednesday, August 8, 2012, I will appear before you on behalf of Mariposa Land Company ("Mariposa"), the Applicant on CDP No. 4-09-013. The Application is to maintain a rock bank protection installed in 1998 under Emergency Permit No. 4-98-024-G. The rock bank protection runs along approximately 500 feet of the west bank of Malibu Creek, a short distance north of the Pacific Coast Highway bridge. The Applicant is in agreement with the Special Conditions recommended by the Staff.

The need for the rock bank protection arose due to changes in the course of lower Malibu Creek and severe erosion in 1998 which eroded soil from the west bank approximately 20 feet wide along much of the 500 feet where the rock bank protection was installed. The changes in the course of Malibu Creek had taken place over a 40 year period. The creek was generally straight from where it emerges from Malibu Canyon to Malibu Lagoon. This course was maintained by the agricultural uses which were made along the lower creek. When the agricultural uses ceased, accretion along the west bank and then the east bank altered the creek into a long "S" curve which directs waters toward the Mariposa property. These waters then must be turned so that the waters can flow beneath the Pacific Coast Highway bridge. This turn places great stress upon what was an unprotected bank, 20 feet from the fire lanes and sewage disposal system for the adjoining shopping center.

Exhibit 1
CDP 4-09-013
Addendum

Attached under Tab 1 is a series of photographs showing the change in the course of Malibu Creek as well as the loss of the Applicant's property to erosion.

Public Resources Code §30236 allows for bank protection along existing rivers and creeks where necessary to protect development in danger from erosion.

> 30236. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

There is no question that the adjoining shopping center is in the flood plain as designated by the Federal Emergency Management Agency. Without protection the creek bank lost 20 feet in a single season and has lost more than 50 feet over 40 years. At this point, the creek bank is less than 20 feet from the parking area with a sewage disposal field located beneath the paving. The emergency fire line around the structures is only 30 feet away. Protection is necessary both for public safety and to protect existing development.

In 2009, the Staff and the Applicant were not in disagreement (i) that protection of the bank was necessary to protect the adjoining shopping center from erosion, and (ii) that the least environmentally damaging alternative is a rock bank protection. The differences between the Applicant and the Staff in 2009 were whether or not removing the rock, regrading the bank, and replacing the rock was the least environmentally damaging feasible alternative, a finding required by CEQA. In 2009, the Commission found that the Special Conditions requiring the changes in the slope of the rocks was the least environmentally damaging feasible alternative. Judge Chalfant ruled that this finding was not supported by substantial evidence for a variety of reasons which are set out in his 21 page decision. (See, Staff Report, Exhibit 12.)

The Staff has reexamined the evidence and now recommends that the Commission find that leaving the rocks in place with an enhanced vegetation plan will be the least environmentally damaging feasible alternative. The alternatives analysis which the Commission has done is comprehensive. The conclusion recommended by the Staff is well supported by the evidence provided by the Applicant's civil engineers and biologist. This evidence has been reviewed for the Commission by its civil engineer, Lesley Ewing, and by its biologist, Jonna Engel, who agree that the evidence in the record supports this conclusion. (See, Staff Report, Exhibits 9 and 10, also reproduced under Tabs 4 and 5 hereto.)

Opposition to the project has centered on objections to any rock bank protection, arguing in favor of a soft, bioengineered protection. The Commission considered those objections in 2009 and rejected them. The bank cannot be adequately protected with plants or wooden materials. Bioengineered banks have limited application on the outside bend of a river where the bank is steep and the erosive forces are strong. There is nothing new in 2012 to change the Commission's findings. The mitigation plan with both willows, mulefat and other plants within the rocks as well as trees and shrubs on the upland area, is the best mitigation measure feasible.

Since the Commission last considered this matter, three years have past. The Applicant requested that its engineers and biologist visit the site last week and report on the condition of the rock bank protection and the vegetation that has grown above and within the rocks. The reports of PACE and Impact Sciences are attached at Tab 2 and Tab 3.

The existing project has similarities to the project approved by the Commission on October 5, 2011 for a portion of the west bank of Topanga Creek, south of Pacific Coast Highway. (CDP No. 4-10-055 (Los Angeles County Department of Public Works)) The slope of the proposed rock protection at Topanga Creek is 1.5:1, steeper than the average 1.7:1 slope at Malibu Creek but less steep than the maximum 1.3:1 slope. The Commission found that the County's revegetation plan within the rocks at the 1.5:1 slope was feasible. The Special Conditions imposed upon CDP No. 4-10-055 are substantially similar to those recommended in the Staff Report in this case. It is reasonable that a private project and a public project that serve the same purpose should be treated similarly.

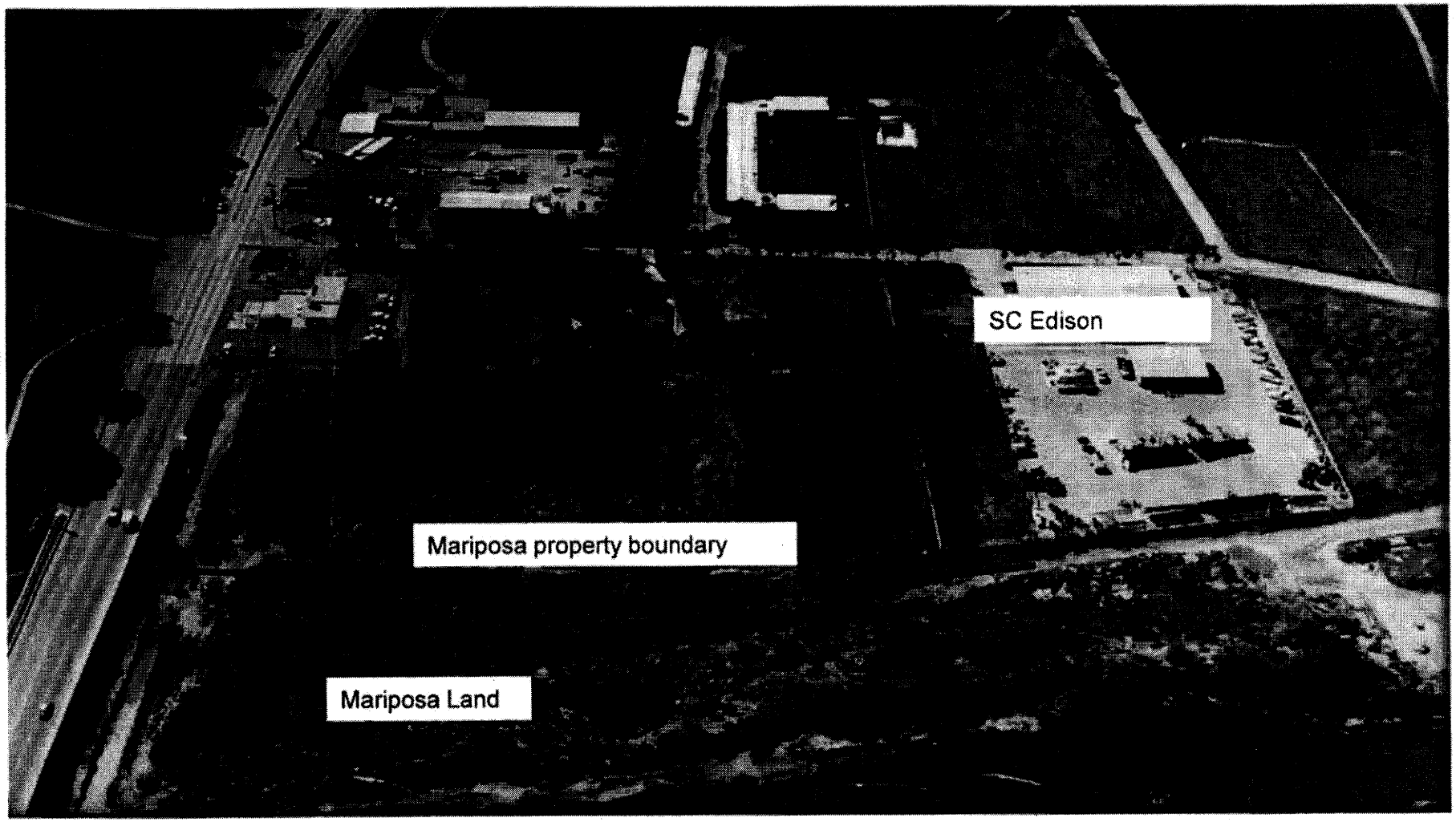
The rock bank protection has operated successfully for more than 14 years. Since it works, the Commission should leave it in place. The Applicant asks for the Commission to adopt the resolutions recommended in the Staff Report and approve CDP No. 4-09-013 subject to the recommended Special Conditions.

Sincerely,

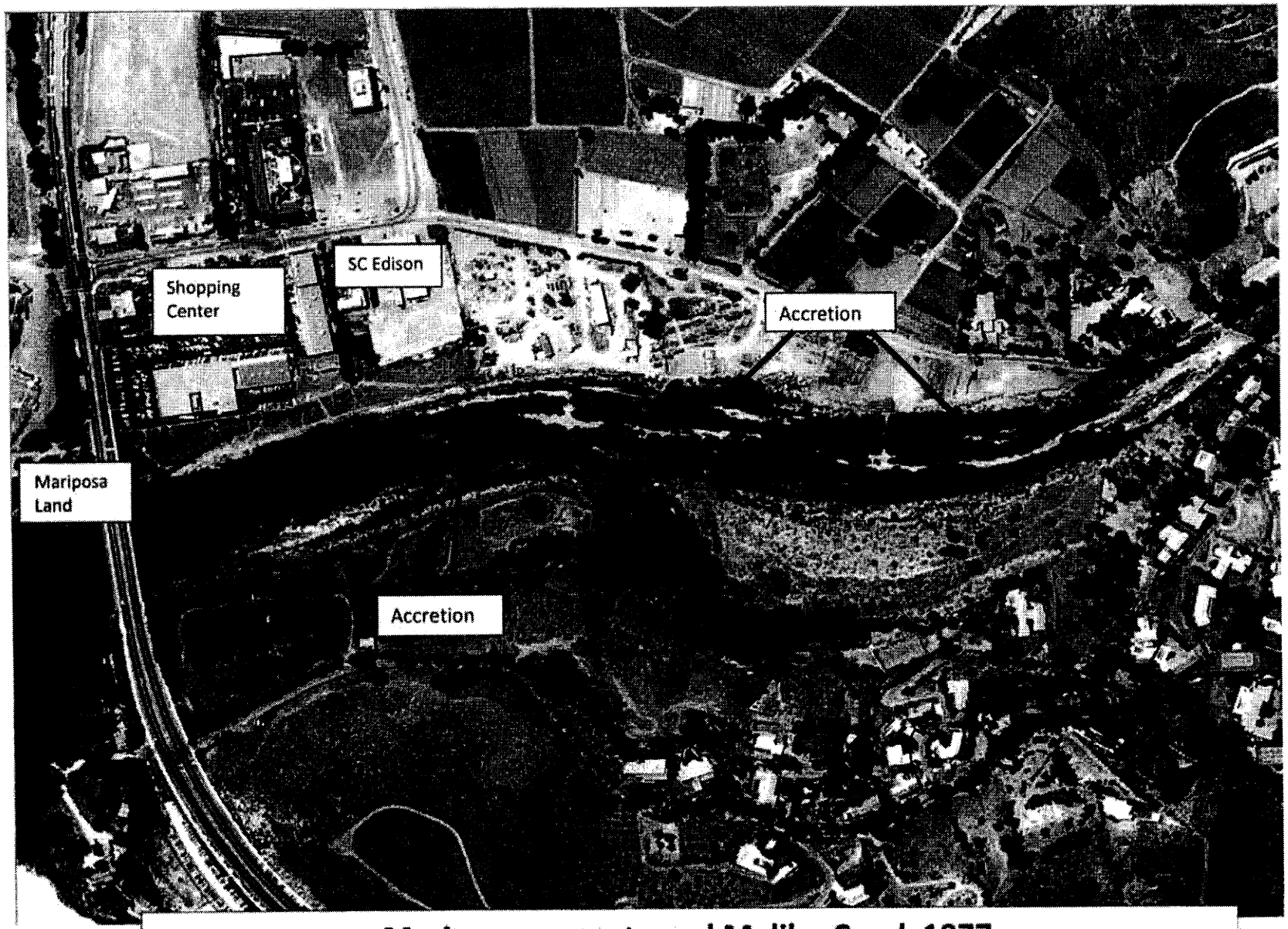
SHERMAN L. STACEY

SLS/sh
cc: All Commissioners
Ventura Commission Office
San Francisco Commission Office
Mr. Grant Adamson

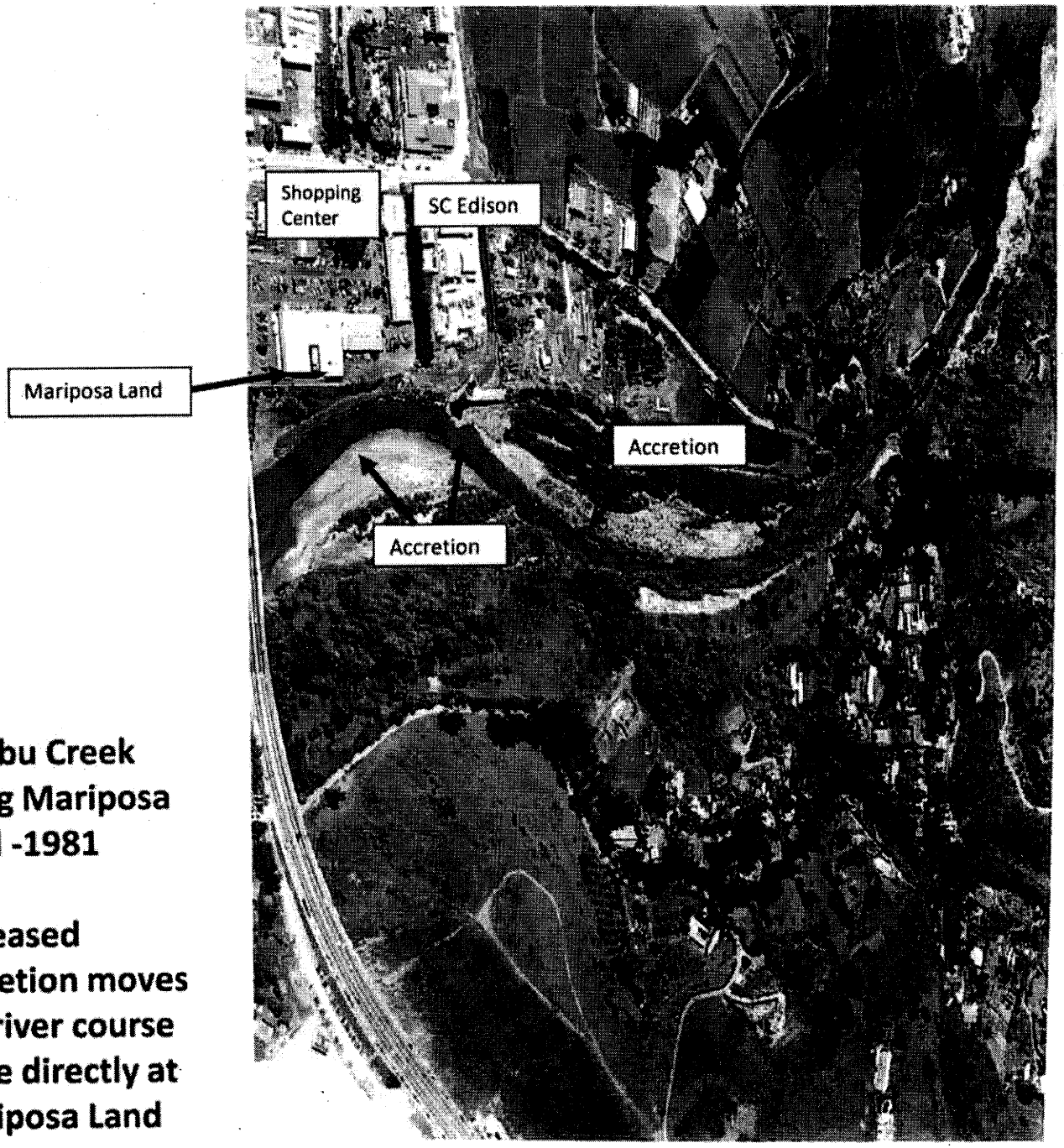
Tab 1



Malibu Creek at PCH 1962
Creek along Mariposa Land is straight and land is wide

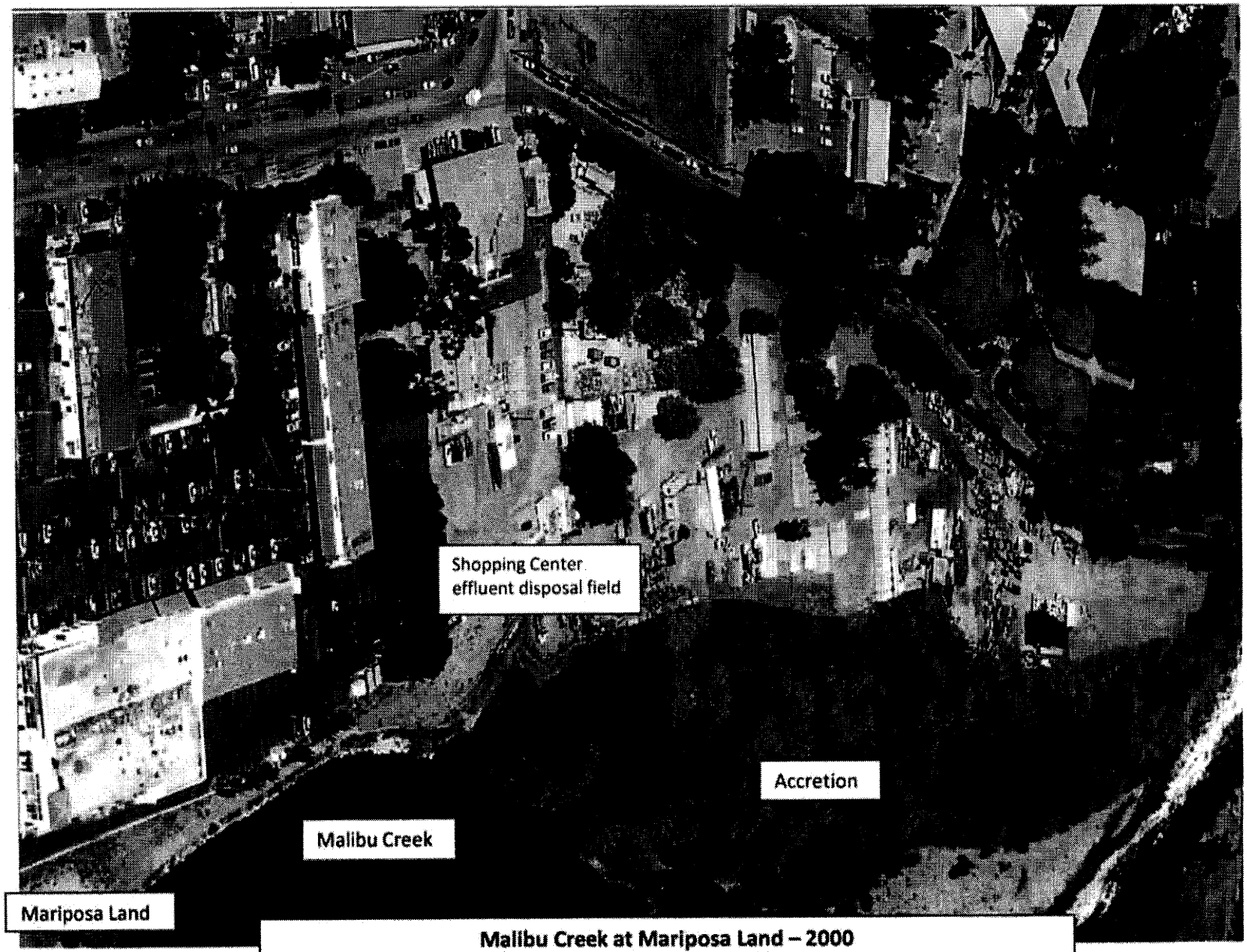


Mariposa property and Malibu Creek 1977
Accretion along the river banks is curving the river to erode the west bank

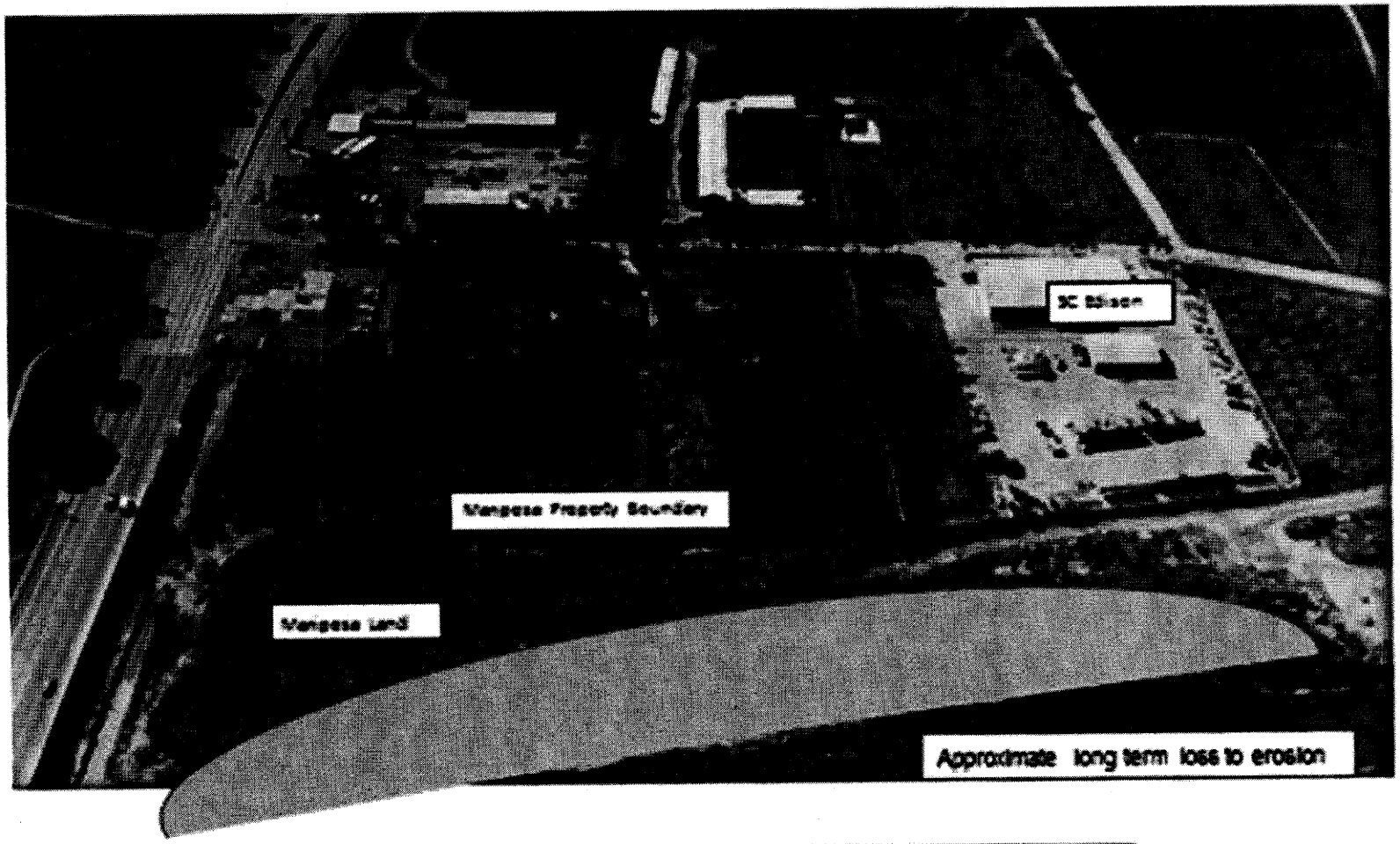


Malibu Creek along Mariposa Land -1981

Increased Accretion moves the river course more directly at Mariposa Land



Malibu Creek at Mariposa Land – 2000
River Course now makes 90 degree bend abutting Mariposa Land
Only the existing rock protection prevents erosion of the adjoining shopping center and its newly built effluent disposal field



Malibu Creek – Loss of Land between 1962 and 1998 due to erosion.

Tab 2

PACE
Advanced Water Engineering

Memorandum

Date: July 26, 2012

To: Grant H. Adamson, Mariposa Land Corporation

From: Andrew Ronnau, PhD, PE

Re: Malibu Creek West Bank Emergency Revetment – July 20, 2012 # 7856E

PACE has provided engineering consulting services to Mariposa Land Company regarding the emergency bank protection measures installed along the west bank of Malibu Creek upstream of Pacific Coast Highway in February 1998. As part of ongoing measures to answer comments arising out of Coastal Commission hearings on the bank improvements, PACE has been asked to perform a field reconnaissance survey of the bank and assess the condition of the rip-rap to determine if there has been any damage or deterioration.

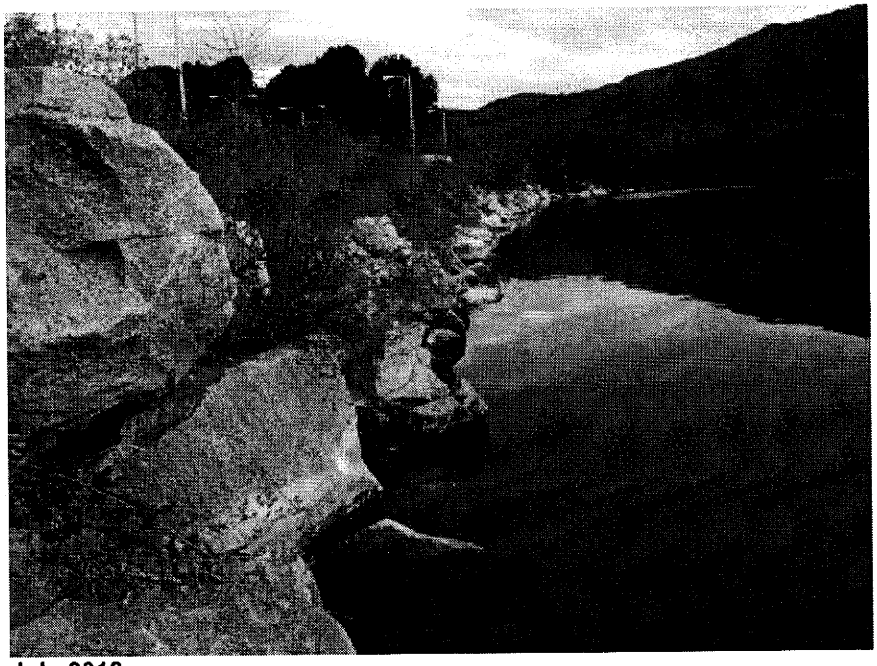
On July 18, 2012, an engineer from PACE made a field visit and took numerous photographs to determine and document the current condition of the rip-rap bank protection. Although the naturally occurring sandbar in the lagoon had currently built up high enough to limit tidal ebb in the creek, photographs were taken at approximately 6:00 am to maximize the possible exposure of the rip-rap above the water surface. Photographs taken by PACE during previous site visits in 2004 and 2009 provide a basis for comparison. Five sets of example pairs, current and previous, are presented. The results of the findings are summarized herein.

An overall examination of the bank protection shows the rock placement is stable with no signs of rock displacement due to erosive forces from flow in Malibu Creek. There is no evidence of uplift from vegetation growth. Disruption from burrowing animals or undermining from rain or surface flow over the bank was not observed.

In sum, the riprap bank protection remains in good condition. PACE engineers have visited the site at least three times (in 2009, in 2010, and in 2012) since the PACE letter of August 5, 2009, and the conclusions in that letter remain. The rip-rap embankment has performed well since construction, with no signs of damage, deterioration, or instability. The rip-rap is suitably sized and is functioning properly, continuing to provide protection from further lateral erosion on the west bank of Malibu creek.

17520 Newhope Street, Suite 200 | Fountain Valley, CA 92708
P: (714) 481-7300 F: (714) 481-7299 | www.pacewater.com

Photo Location #1: Approximately 300 ft upstream of PCH, looking North

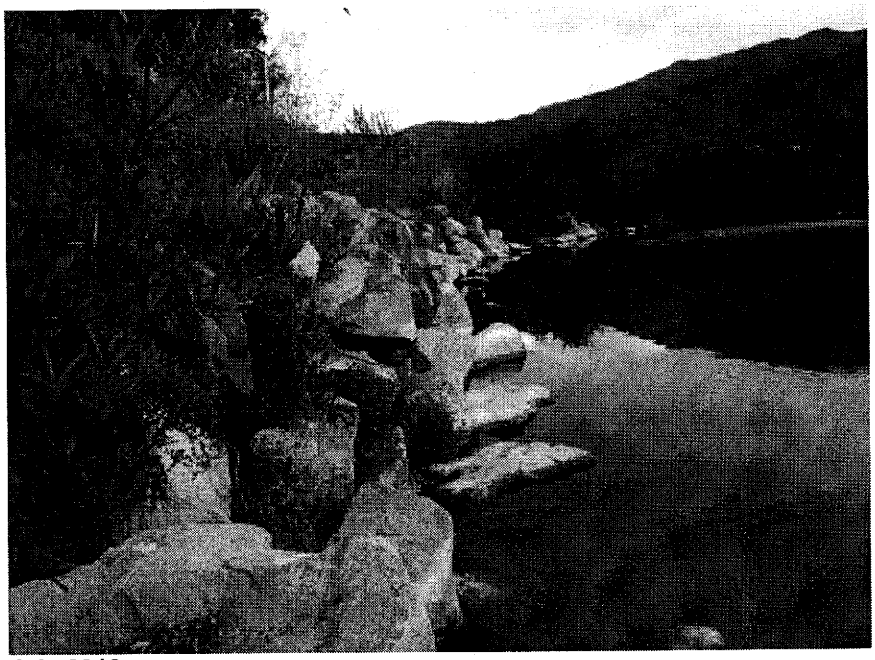


July 2012

August 2009

PACE

Photo Location #2: Approximately 500 ft upstream of PCH, looking North

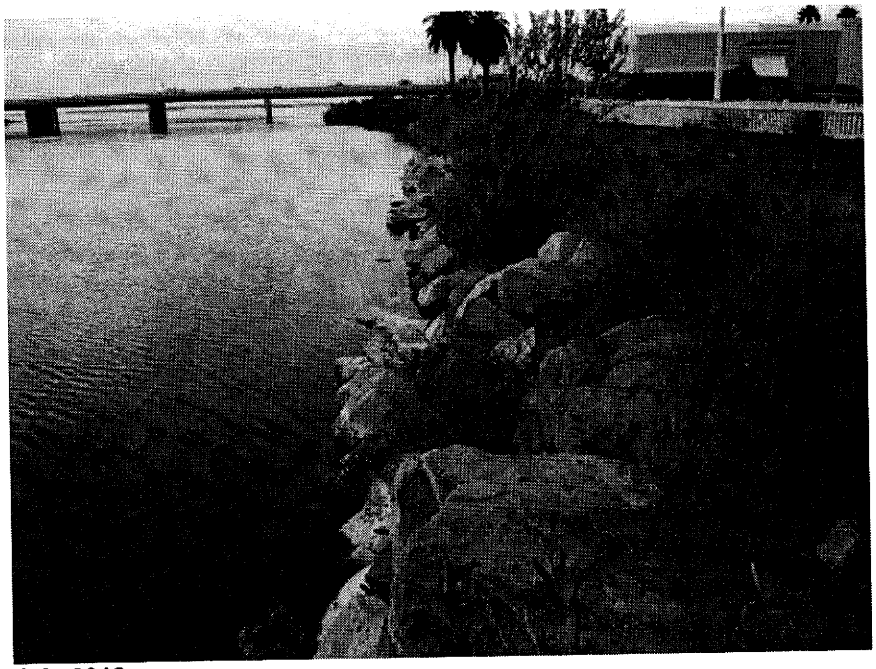


July 2012

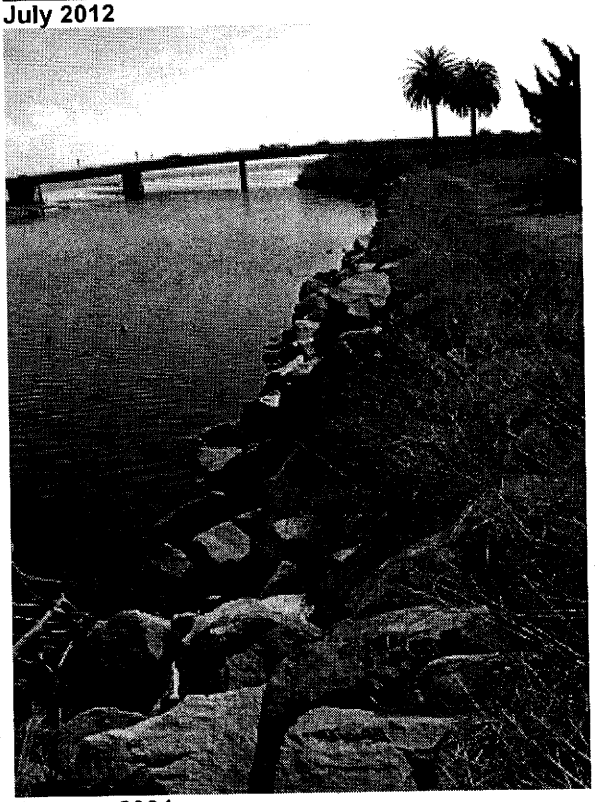
August 2009

PACE

Photo Location #3: Approximately 550 ft upstream of PCH, looking South



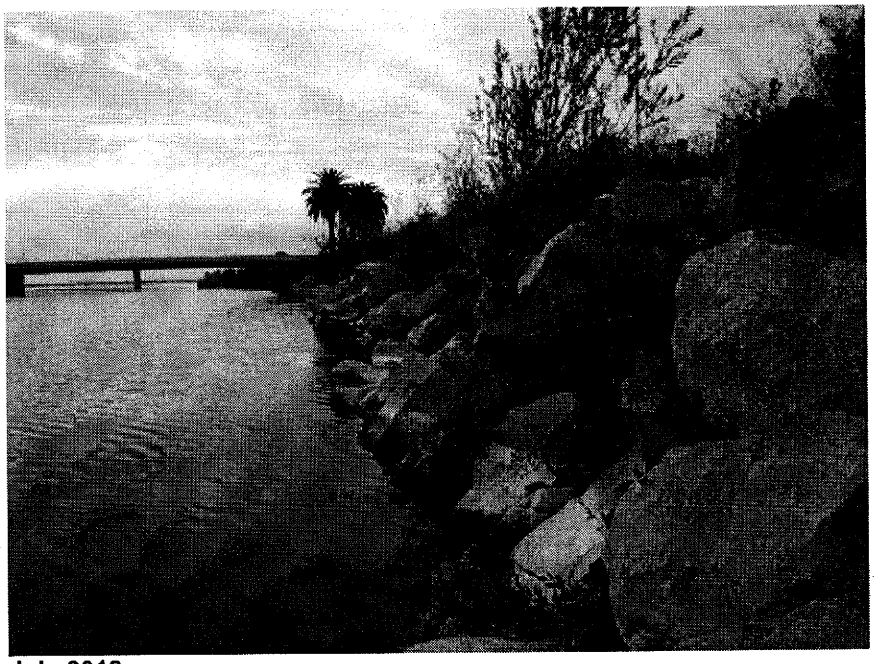
July 2012



January 2004

PACE

Photo Location #4: Approximately 600 ft upstream of PCH, looking South

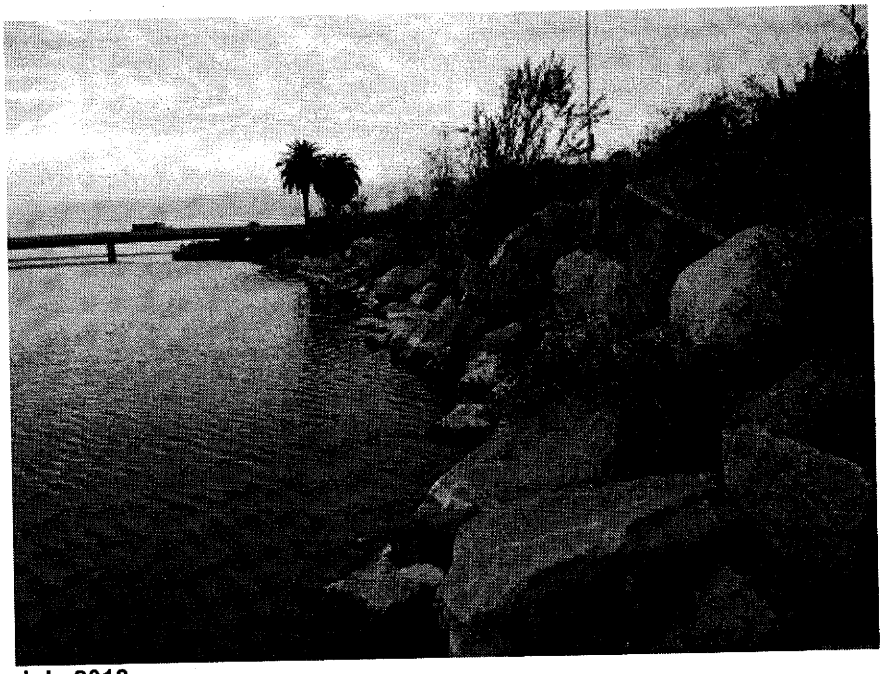


July 2012

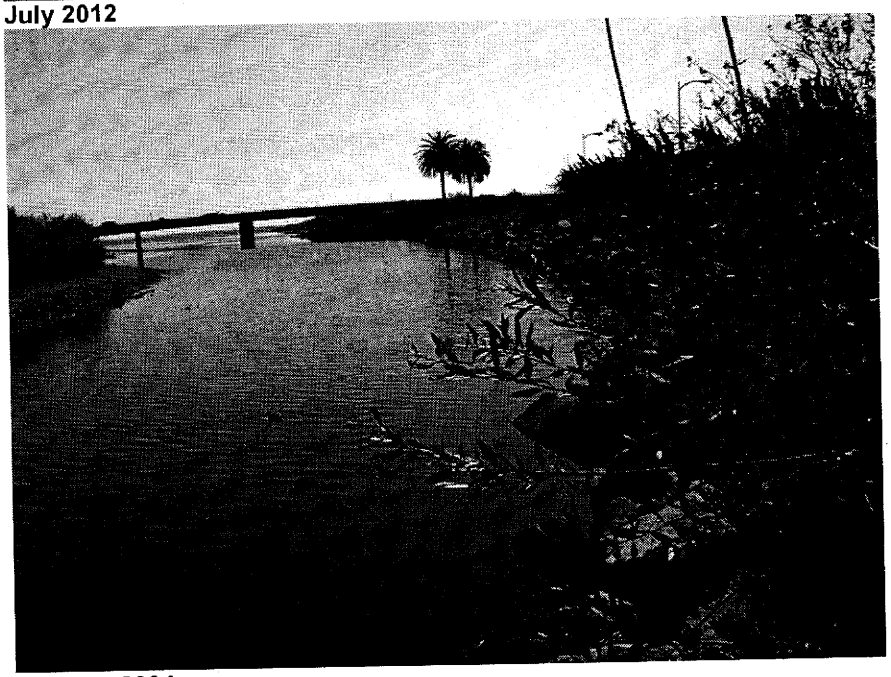
August 2009

PACE

Photo Location #5: Approximately 650 ft upstream of PCH, looking South



July 2012



January 2004

PACE

Tab 3

IMPACT SCIENCES
803 Camarillo Springs Road, Suite A
Camarillo, California 93012
(805) 437-1900 FAX (805) 437-1901
www.impactsciences.com

MEMORANDUM

To: Grant Adamson
From: Daryl Koutnik
Subject: Malibu Creek Vegetation Regrowth
Date: July 20, 2012

Job No. 908.001

COMMENTS

I visited the Mariposa Land Company property along the western bank of Malibu Creek on July 18, 2012 to observe the vegetation that is currently growing along the stream bank and rip-rap as well as the adjacent upland area. At the southern end of the property, just north of Pacific Coast Highway, *Baccharis salicifolia* (mulefat) grows mostly at the top of the natural bank, with a few plants growing closer to the water's edge. Mulefat grows sporadically along an approximately 250 feet section. I counted 43 mulefat plants that have naturally established along the top of the nearly vertical stream bank. In addition, there was one *Baccharis pilularis* (coyote bush) growing among the mulefat plants.

Within the ungrouted rip-rap, which measures approximately 325 feet from the north end of where the mulefat plants are growing to the chain link gate near the north end of the rip-rap, I counted ten *Salix lasiolepis* (arroyo willow) growing among the boulders of the rip-rap. Most of these plants were occurring individually but in the middle of this section, there is a group of five willow plants measuring up to 10 feet tall and two of these plants exhibit a stem diameter of about three inches. These plants with larger trunks indicate a well-established root structure has grown within the soil areas beneath and behind the rip-rap boulders. Willow heights were estimated from six feet tall to one specimen of more than 12 feet tall.

Where the chain-link gate is located, the streambank vegetation becomes quite thick, quickly making walking along the top of the bank cumbersome because of the thick vegetation. Located adjacent to the chain-link fence is a very large mulefat individual measuring about ten feet tall and spreading about 20 feet wide. A second mulefat plant about ten feet wide and tall occurs just to the north of the larger individual.

Beyond these two plants, more arroyo willows occur with the first specimen being established with a canopy of greater than 20 feet in width and a tree height of at least 15 feet. This individual has the same stature as the arroyo willows growing along the eastern bank of Malibu Creek.

In the upland area west of the creek, the two most common native species are *Ambrosia psilostachya* (western ragweed) and *Heliotropium curassavicum* (seaside heliotrope). Both of these species have increased in numbers from past years, although no empirical data has been gathered. It is my opinion that these species are increasing in number because brush management has reduced competition from the non-native species. The most troublesome non-native species in this area are *Euphorbia terracina* (carnation spurge) and *Lepidium latifolium* (perennial pepperweed). Both of these species are well established along the stream bank and within the ungrouted rip-rap. With the removal of these non-native species, the opportunity for a number native species to become established would greatly improve the habitat value of this area.

Having observed this location over the course of the past three years, I have observed native riparian species slowly begin to grow within the rip-rap boulders, as well as along the top of the stream bank. Overtime, this trend can be expected to continue and with the increased number of individual native species growing along the bank, the habitat adjacent to these plants will improve, both within the water and in the terrestrial upland area. Through a combination of revegetation and invasive species control, the establishment of wildlife habitat can be expected. Any disturbance to the existing native species in the area, such as the removal of the rip-rap among which both mulefat and arroyo willow have taken hold, would curtail the current natural recruitment of native species and reverse the current trend of increasing native vegetation.

Arroyo Willow at North End of Rip-rap

Willows Growing within Rip-rap

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., *GOVERNOR*

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885

July 18, 2012

To: Deanna Christensen, Coastal Program Analyst

FROM: Lesley Ewing, Sr. Coastal Engineer

SUBJECT: Lower Malibu Creek, West Bank Protection

Based on decisions and direction from the court concerning the Commission's conditions of approval for CDP #4-09-013, I have been asked to re-examine the existing emergency revetment for use as a more long-term bank stabilization structure. In undertaking this examination, I have reviewed the following reports, in addition to my previous memos.

- CCC. Staff Report 4-09-013 for hearing 8/13/09, including attachments
- Letter from Sherman Stacy to Ms. Deanna Christensen, dated February 12, 2010.
- PACE. Technical Memo Re: Hydraulic and Spatial Feasibility of California Coastal Commission Special Condition Number 2 for Malibu Creek Bank Restoration, January 26, 2010.
- PACE. Lower Malibu Creek Emergency Revetment Geomorphic, Bank Erodibility, and Alternatives Analysis, may 25, 2007.
- Impact Science, Inc. Vegetation Restoration Plan – Malibu Creek, May 2012

In response to bank erosion of approximately 20 feet (lateral) of banktop land during the 1997/98 El Niño winter, the Mariposa Land Company requested and received an emergency permit to place rock protection along about 500 feet of Lower Malibu Creek, adjacent to land owned by the applicant. The emergency revetment was constructed by placing rock, ranging in size from 0.5 tons to 8.0 tons directly onto the eroded creek bank and creek bed. The toe to top of slope varies greatly throughout the 500 foot long structure, from 1.3:1 to over 2:1 (Pace, 2010).

In 2009, The Commission approved the installation of a revetment, with a condition that portions of the revetment be regraded to provide a more gradual slope, ranging from 2:1 to 3:1. The applicant's engineer submitted information that such regrading would require a coffer dam for construction and be very costly to undertake. Also due to the configuration of the applicant's lot, these more gradually sloped revetments would be impossible to construct without going beyond the applicant's property. The applicant's engineer also has submitted hydraulic model results showing that, for the more gradual slope conditions, water levels during flood stage could be almost 2 feet higher, at small sections for the 3:1 slope and almost a foot higher at small sections for the 2:1 slope. Some sections of the 2:1 slope would have a lower water elevation than the emergency

Exhibit 9
4-09-013 (Mariposa)
Lesley Ewing Memo (7/18/12)

revetment; however, the 2:1 slope would have an overall increase in water level of approximately +0.1 feet and the 3:1 slope would have a higher overall water level. I agree with the modeling undertaken by the applicant.

I have not undertaken independent modeling of the creek flows with the various bank slopes. I do not have reason to doubt the results from the applicant's reports; I find the model results to be in keeping with expected model results and concur with the overall flow conditions as depicted by the applicant's engineer. The applicant's engineer never modeled the hydraulic conditions for a variable 3:1 to 2:1 slope, but the prior modeling for the individual 3:1 and 2:1 scenarios would likely bound the water elevations resulting from the modified slope that the Commission previously required. Based on the adequacy of the analysis that has been provided, I concur that the emergency revetment configuration will result in lower overall water level conditions than the 2:1 slope, the 3:1 slope or the variable 3:1 to 2:1 slope revetment.

Normally a 1.5:1 revetment slope is considered the minimum needed for slope stability. The emergency revetment was constructed to mirror the creek slope and as noted earlier, some sections have a slope that is steeper than 1.5:1. However, the normally accepted stability of a 1.5:1 or gentler slope is based in an unvegetated slope and the added stability from the vegetation plan may enhance the stability of the emergency revetment in areas, such as those that are at a 1.3:1 slope, that have the potential to have some rip-rap rock become dislodged during a large flow event. The applicant's engineer has determined that the emergency revetment, as installed, is stable. The monitoring and maintenance conditions that staff is recommending will assure repair and maintenance of any small, potentially problematic areas of the slope protection.

The proposed emergency revetment design will protect the inland area from additional bank erosion. The Federal Emergency Management Agency (FEMA) has mapped the creek bank and the inland area as being within the 100-year flood plain. The no project condition has not been modeled so there is no information on the changes to flooding between the pre-project and emergency revetment condition. There are small sections of the uniform 2:1 slope alternative that would have a lower flow depth than the emergency revetment configuration. However, I concur with the applicant's engineer, that the proposed project is "hydraulically adequate". (Pace 2007, page 15.)

The proposed revetment is an acceptable alternative. The flow conditions at this location would not be conducive to a "soft" or vegetation-only solution. The applicant's engineer has evaluated vegetation-only and vegetation with geotextile options and shown that these bank treatment options would not protect the creek bank from additional erosion under high flow conditions. I concur with this analysis.

Thus, the proposed project is adequate for the intended purpose to protect the bank from erosion. When compared with other bank protection alternatives, it can be considered adequate in terms of hydraulic modifications to the flood conditions in the creek.

Tab 5

STATE OF CALIFORNIA – THE RESOURCES AGENCY EDMUND G BROWN JR, *Governor*

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

MEMORANDUM

FROM: Jonna D. Engel, Ph.D., Ecologist

TO: Deanna Christensen, Coastal Analyst

SUBJECT: Vegetation Restoration Plan for the Mariposa Land Property

DATE: July 18, 2012

Documents Reviewed:

Koutnik, D. (Principal, Impact Sciences). May 2012. Vegetation Restoration Plan – Malibu Creek; Mariposa Land Company. Prepared by Impact Sciences, Inc. for Mariposa Land Company.

Koutnik, D. (Principal, Impact Sciences). March 2012. Draft Vegetation Restoration Plan for the Mariposa Land Property at Malibu Creek, City of Malibu, California. Prepared by Impact Sciences, Inc. for Mariposa Land Company.

Following the heavy stormwater flows in Malibu Creek during the winter and spring of 1998 emergency bank protection was installed to protect the Mariposa Land Company property. The bank protection is made of approximately 1,400 tons of rip rap that consists of individual rocks ranging in size from 0.5 to 8 tons. The rip rap extends for approximately 500 feet along the western bank of lower Malibu Creek and covers approximately 0.25 acres of land. While some native arroyo willow (*Salix lasiolepis*) has recruited among the rip rap at the northern end, the rest of the stretch of rip rap remains bare rock. I have worked with Mariposa Land Company's biological consultant, Impact Sciences, Inc. to develop a restoration plan to restore native vegetation and natural processes to this stretch of bare rip rap. The overall goal of the plan, *Vegetation Restoration Plan – Malibu Creek, Mariposa Land Company,* is to create native riparian habitat among and immediately adjacent to the rip rap.

A key element of the restoration plan is soil supplementation among the rip rap as absence of vegetation is due to a lack of substrate. To ensure that seeds/ plantings/cuttings become established, the restoration plan requires rip rap interstitial areas to be filled with a sand/soil mix. The plan calls for the sand/soil mix to be compacted (to the greatest extent possible) into the interstitial areas and erosion control fabric to prevent loss of soil. The restoration plan incorporates rip rap "pole planting" and "rock with interstitial fill" methodology that CalTrans has developed and successfully

Exhibit 10
4-09-013 (Mariposa)
Dr. Engel Memo (7/18/12)

employed.[1] The restoration plant palette consists of native riparian ground, shrub, and tree layer species appropriate for the western bank of lower Malibu Creek and all seeds, cuttings, and container plants will be obtained from local genetic stock to the greatest extent possible. Temporary irrigation will be used to facilitate vegetation establishment.

The restoration work (project construction) will occur between August 15 and November 15 during the fall dormant season which is the ideal time for planting. This timing also falls outside the months when the majority of bird breeding activities occur. However, in order to ensure that no breeding birds are impacted by the restoration, monitoring for bird breeding/nesting will occur through the end of September because some birds may still be engaged in breeding activities through September. If active nests are found, site preparation and planting within 300 feet of the nest (500 feet for raptors) will be postponed or halted until the nest (s) is vacated and juveniles have fledged.

In addition, while this vegetation restoration project will have little, if any, adverse impact on the Malibu Creek ecosystem, project construction between August 15 and November 15 avoids peak breeding season for tidewater gobies and the timing of southern steelhead runs/migration[2]. Furthermore, rain typically does not occur in southern California until late fall or winter and during this dry time Malibu Creek does not experience high water flow and more often than not there is no water flow at all. During no water flow times the water near the rip rap is quite stagnant with large mats of floating algae and high amounts of suspended algae that cloud the water. Any sediment entering the water at this time would settle to the creek bottom within a short distance from the project. However, to further protect the Malibu Creek ecosystem from adverse impacts, best management practices shall be employed during project construction to prevent project materials, sediment, debris, or waste from entering the creek or adjacent riparian habitat.

Completion of this vegetation restoration project will greatly enhance the western bank of the lower Malibu Creek ecosystem. Restoring native riparian understory and canopy plant species along the bare rip rap will increase the shaded areas of the creek which are preferred by tidewater gobies and will also create a continuous wildlife corridor along the western bank that will greatly facilitate native bird, amphibian, reptile, and mammal movement/migration. Vegetated rip rap will also improve creek water quality by reducing the amount of runoff and sediment entering the system as vegetation will receive and capture runoff and loose materials. While this restoration project will have no impacts on the Malibu Lagoon restoration being undertaken by State Parks, realization of the two projects will increase the overall habitat value of the lower Malibu Creek ecosystem.

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[1] CalTrans. June 2003. CalTrans Erosion Control New Technology Report. CTSW-RT-03-049. Sacramento, CA. 463 pgs.

[2] During breeding tidewater gobies exhibit a preference for sand substrate but they also are found on cobbles, mud, and silt. Tidewater gobies spawn all year round with peak spawning occurring in April and May. While gobies may be nearby, it is unlikely that gobies will be in the immediate vicinity of the project footprint because large rocks are not one of their preferred habitat types.

EXHIBIT 11
CDP 4-09-013
Correspondence

a. Letter from Dr. J. Robert Hatherill, dated August 11, 2008

b. Letter from Ron Schafer, California Dept. of Parks and Recreation former District Superintendent, dated November 14, 2008

c. Letter from Heal the Bay, dated July 2, 2009

d. Letter from Heal the Bay, dated June 23, 2009

e. Letter from Malibu Surfing Association, dated February 3, 2009

f. Letters from Mark Abramson, Santa Monica Baykeeper, dated February 3, 2009 and April 7, 2009

g. Letter from Sandra Albers, Santa Monica Mountains Resource Conservation District, dated April 7, 2009

July 27, 2012

Ms. Deanna Christensen
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

RE: Application No. 4-09-013

In a letter dated August 11, 2008 to the California Coastal Commission I strongly supported the original restoration plan (please see attached letter). I further support the Impact Sciences Inc. amended restoration plan with the minor modifications of its native vegetation plan. The restoration plan is enhanced since it will be carried out under the supervision of a qualified biologist or environmental resource specialist.

The planting of native shrubs and trees in the upland area and the removal of the non-native plant species is commendable. Removing non-native species will aid in the establishment of the natural vegetation and will enhance aesthetic values and contribute to better stream water quality. Further the smaller herbaceous plants will afford the riverbank a natural and aesthetic appearance.

Thanks for your assistance in this matter.

Dr. J. Robert Hatherill
Lawrence Berkeley National Lab
One Cyclotron Road, MS7R0222
Berkeley, CA 94729

Exhibit 2
CDP 4-09-013
Addendum

Christensen, Deanna@Coastal

From: Joyce Parker-Bozylinski [JParker-Bozylinski@malibucity.org]
Sent: Wednesday, July 25, 2012 12:35 PM
To: Christensen, Deanna@Coastal
Subject: RE: Consultation Request - Project on West Bank of Lower Malibu Creek

Hi Deanna,

Sorry for the late reply. I had Dave Crawford, the City Biologist, review the restoration plan and he had the following comments:

1. They propose to keep the two canary island date palms in the restoration area. I don't see any justification for that. Those trees should go.
2. They are proposing a 3-year monitoring plan. I would recommend 5 years as this has been the industry standard and it is sort of a unique condition planting in the rip-rap so the additional time should be incorporated to ensure success

Joyce

Joyce Parker-Bozylinski, AICP | **Planning Director** | **City of Malibu**
23825 Stuart Ranch Road, Malibu, CA 90265
(310) 456-2489 ext. 265

Connect with the City of Malibu!

From: Christensen, Deanna@Coastal [mailto:Deanna.Christensen@coastal.ca.gov]
Sent: Wednesday, July 11, 2012 3:07 PM
To: Nye, LB@Waterboards; 'crystal.marquez@usace.army.mil'; Joyce Parker-Bozylinski; Jaime Jackson (jjackson@dfg.ca.gov); Suzanne Goode
Subject: Consultation Request - Project on West Bank of Lower Malibu Creek

Hi there-

We have tentatively scheduled a Coastal Development Permit Application (No. 4-09-013) for Coastal Commission consideration at the August 2012 Commission hearing in Santa Cruz. The property owner is Mariposa Land Company (Grant Adamson). The application is in follow-up to the Emergency Coastal Development Permit (No. 4-98-024-G) we issued in 1998 for placement of rock rip-rap revetment along an approximately 500 foot long section of the west cut bank of lower Malibu Creek. Some of your agencies also issued emergency authorizations for this work. The follow-up permit application included new proposed revegetation of the existing revetment site to create riparian and upland habitat.

Our Commission previously approved the application, with conditions, in August 2009. The applicant filed a lawsuit regarding our conditions of approval, and due to the unfavorable court decision, the application is being remanded back to our Commission for action. The applicant has since revised their proposed revegetation plan for the existing rock revetment with native riparian and upland plant species in order to improve the ecological function of this stretch of the creek and bank.

Exhibit 3
CDP 4-09-013
Addendum

The purpose of this email is to seek your feedback and recommendations on the proposed project, which is retention of the existing rock revetment that was approved pursuant to emergency permits and revegetation of the bank with native plants. Attached is the proposed restoration plan.

I would like to include the outcome of our consultation with your agency in our staff report. The deadline for publishing my staff report is July 20th, so it would be appreciated if you could respond to me by then.

Thanks in advance.

Deanna

Deanna Christensen
Coastal Program Analyst
California Coastal Commission
South Central Coast District
P: 805.585.1800 F: 805.641.1732
Deanna.Christensen@coastal.ca.gov

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August 6, 2012

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001

Via Fax: (805) 641-1732

Re: Oppose CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:

Heal the Bay has reviewed the staff report related to Application No. 4-09-013, submitted by the Mariposa Land Company, which requests permission to permanently retain approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek. Heal the Bay urges the Coastal Commission to deny this application based on our concerns outlined below as well as previous written comments that we have submitted to the Coastal Commission (Attachment A). The proposed project is in direct conflict with policies in the California Coastal Act, as well as the City of Malibu's Local Coastal Program ("LCP"), as it will negatively affect habitat that is buffer zone for designated environmentally sensitive habitat area ("ESHA").

Our concerns with the most recent recommendations are as follows:

1. **The proposed alternative is <u>not</u> the least environmentally damaging alternative.**

The proposed project allows for the permanent placement of 500 linear feet of rock rip-rap. Stream bank armoring is an ineffective method for long-term bank stabilization and a major cause of downstream bank erosion and sedimentation. The applicant analyzed seven alternatives to the proposed alternative and found them all to be infeasible. The alternatives included vegetation only and vegetation with geotextile options. However, the applicant did not adequately analyze an alternative that Heal the Bay proposed in a previous letter to the Coastal Commission dated July 2, 2009 (Attachment A). The suggested alternative is a hybrid approach, combining a soft bioengineered approach (biodegradable filter fabric planted with vegetation) with engineered techniques (buried rip-rap up to the toe of the bank) to stabilize the stream bank. This hybrid approach would provide bank stability while protecting ESHA and critical habitat area through the conservation of instream sandy bottom and creation of riparian vegetation. This alternative is less environmentally damaging than the proposed project and needs to be properly analyzed and considered. Due to the lack of thorough alternative evaluation, the proposed alternative is in conflict with Malibu Local Coastal Program Land Use Plan ("LUP") Policy 3.34, which requires that the least environmentally damaging

Exhibit 4
CDP 4-09-013
Addendum

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alternative is chosen if bioengineering methods are indeed determined to be infeasible. [1] Additionally, the proposed project also conflicts with the Malibu LCP Local Implementation Plan ("LIP"), which states "...bioengineering, unless no feasible alternative exists, is the only acceptable method of bank stabilization and flood protection, and the preferred method for redevelopment."[2]

Another concern with the proposed project is that the revegetation plan has the potential to exacerbate impacts from stream bank hardening and will not likely adequately restore upland and riparian habitat. The staff report does not address the potential disturbance to the rip-rap from the roots of the planted willows when they reach a mature size and overgrow the width of spacing between the rip-rap. Moreover, the proposed project is not a long-term solution and the rip-rap is likely to fail, requiring further repair in the future. Heal the Bay's Stream Team conducted a comprehensive survey of the Malibu Creek Watershed in from 2000-2004 and documented that 75% of loose boulder/rip-rap stream bank modifications were failing in this area

2. The proposed project occurs in designated Environmentally Sensitive Habitat Area ("ESHA") and an ESHA buffer zone, areas which require protection.

The staff report states that Malibu Creek is designated as ESHA while the disturbed west bank "does not meet the definition of ESHA under the Coastal Act." There is no reason given as to why this area is not also considered ESHA, and it appears to be mapped as ESHA in the Malibu LCP ESHA overlay map.[3] The staff report also states that "Malibu Creek is a U.S.G.S. designated blue-line stream that supports a well-developed riparian corridor which constitutes ESHA. Malibu Creek and its riparian corridor is also designated as ESHA in the certified Malibu LCP." These two statements are contradictory. Given the scarcity of wetlands and riparian habitat in southern California, Heal the Bay strongly urges the Coastal Commission to designate the proposed project area as ESHA.

If the Commission chooses to recognize only the creek as ESHA, the area surrounding it would be an ESHA buffer zone, and should be treated as such. Section 30240 of the Coastal Act requires that both ESHA and ESHA buffers be protected from development and activities that cause degradation.[4] Section 4.6.1(A) of the Malibu LIP states that development should provide a 100ft buffer from the outer edge of the riparian canopy, and when no riparian vegetation is present, the buffer shall be measured from the outer edge of the stream bank.[5] Yet, the existing and proposed development is directly along the edge of the stream bank. Furthermore, the proposed project has clearly impacted the Malibu Creek streambed which is designated as ESHA, through loss of natural stream bottom habitat

[1] Malibu Local Coastal Program Land Use Plan, adopted in 2002 available at: http://www.coastal.ca.gov/ventura/malibu-lup-final.pdf
[2] Malibu Local Coastal Program Local Implementation Plan, sections 17.9 (A) and (B), adopted in 2002, available at: http://www.coastal.ca.gov/ventura/malibu-lip-final.pdf
[3] Malibu Local Coastal Program, ESHA Overlay Map 3: Dan Blocker to Malibu Pier, available at: http://www.coastal.ca.gov/ventura/malibu-maps-8mm2.pdf
[4] California Coastal Act, 2010, section 30240, available at: http://www.coastal.ca.gov/coastact.pdf
[5] Malibu Local Coastal Program Local Implementation Plan, adopted in 2002, available at: http://www.coastal.ca.gov/ventura/malibu-lip-final.pdf

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due to placement of rip-rap and degradation of water quality. Additionally, the proposed project clearly impacts the riparian corridor since the rip-rap extends out of the water, onto the stream bank, causing further loss of habitat. Permanently hardening the stream through placement of rip-rap in ESHA is unacceptable and an alternative that is less environmentally harmful needs to be found.

3. **The proposed project does address or properly mitigate for the extensive damage done over the last 14 years.**

Stream bank armoring is known to cause serious environmental problems. The alteration and loss of a natural stream bank has detrimental impacts to the species that depend on this habitat. Malibu Creek and Lagoon provide critical habitat for two federally endangered species: the southern California steelhead trout (*Oncorhynchus mykiss*) and the tidewater goby (*Eucyclogobius newberryi*). Further, the addition of concrete rip-rap to a riparian area negatively impacts and changes a stream's natural morphology, hydrology, sediment regime, and natural and chemical biological processes. [6] The Malibu Creek and Lagoon are listed on the Clean Water Act section 303(d) list of Impaired Water Bodies for sediment, bacteria, and nutrients. [7] Heal the Bay's Stream Team has documented the severe impacts of stream bank hardening in the Malibu Creek Watershed, including increased sediment scour downstream and increased likelihood to place additional armoring as downstream erosion mitigation.

We urge the Commission to require that the applicant restore and properly mitigate the impacts caused by over a decade of rip-rap in lower Malibu Creek. Proper mitigation is required in the LCP, and specifically LUP provision 3.34, which states that "any unavoidable impacts have been mitigated to the maximum extent feasible"[8] and LIP section 17.9(B), which states that "Any channelization or stream alternation permitted for one of these three purposes shall minimize impacts to coastal resources, including the depletion of groundwater, ***and shall include maximum feasible mitigation measure to mitigate unavoidable impacts***"[9] [emphasis added].The rip-rap has contributed to water quality and habitat degradation in the Malibu Creek and Lagoon for the past 14 years. We recommend that the applicant be required to restore disturbed riparian habitat (at a ratio of 3:1 or greater) as mitigation for all areas permanently displaced by development.

4. **The Mariposa Land Company has been in noncompliance with Emergency Coastal Permit from September 1998 to present and should incur appropriate penalties.**

[6] J. Craig Fischenich. 2003. "The effects of riprap on riverine and riparian ecosystems" A report published by the US Army Corps of Engineers, Engineer Research and Development Center.
[7] California State Water Resources Control Board. California's 2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments, available at: www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml
[8] Malibu Local Coastal Program Land Use Plan, adopted in 2002, available at: http://www.coastal.ca.gov/ventura/malibu-lup-final.pdf
[9] Malibu Local Coastal Program Local Implementation Plan, adopted in 2002, available at: http://www.coastal.ca.gov/ventura/malibu-lip-final.pdf

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The conditions of the Emergency Permit issued in 1998 required that the applicant apply for a permit within 60 days to have the emergency work considered permanent and if no application was received, the emergency work was to be removed within 150 days of the emergency permit issuance. Neither of these requirements were met by the applicant and the applicant has now been out of compliance for 14 years. This is inexcusable and we urge the Commission to impose appropriate penalties on the applicant.

Conclusions

Heal the Bay opposes this project, as it will result in the permanent hardening of a section of lower Malibu Creek. We urge the Coastal Commission to deny this this application. The emergency rip-rap placed at this location back in 1998 was not meant to be a long-term or permanent solution. The rip-rap has already detrimentally impacted the habitat and water quality of the environmentally sensitive habitat area of Malibu Creek and its riparian area. The proposed alternative is not the least environmentally harmful alternative and the project, as proposed, will continue to degrade water quality and habitat. We urge the Commission to recommend a hybrid soft bioengineered approach with engineered techniques. Further, we urge the Commission to require further mitigation for the detrimental effects already incurred and proceed with enforcement action against the applicant for lack of compliance with the Emergency Permit. As one of the few remaining coastal wetlands in southern California, it is critical that the Malibu Lagoon and Creek be protected. We appreciate the opportunity to comment on this staff report; please feel free to contact us if you have any questions.

Sincerely,

Katherine M. Pease, PhD
Watershed Scientist

Sarah Abramson Sikich, MESM
Coastal Resources Director

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Attachment A: February 3, 2009 Heal the Bay Letter to the Coastal Commission

February 3, 2009

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001
Via fax: (805) 641-1732

Re: Opposition to CDP Application No. 4-98-024 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:

Heal the Bay has reviewed Application No. 4-98-024, submitted by the Mariposa Land Company, which requests permission to permanently retain approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek. After thorough review, Heal the Bay urges the Coastal Commission to deny this application. The proposed project is in direct conflict with numerous policies in the California Coastal Act, as well as the City of Malibu's Local Coastal Program ("LCP"), as it will negatively affect habitat that is designated environmentally sensitive habitat area ("ESHA"). Additionally, we believe the methods presented for revegetation of the impacted riparian zone will not achieve the stated goal of restoring upland and riparian habitat and will further exacerbate erosion and sediment loading of the Malibu Creek and Lagoon. Due to the proximity of this site to the ecologically important Malibu Lagoon, an environmentally responsible long-term, "soft" bioengineered solution is needed.

As stated in the staff report, this application is based on a previously issued emergency permit (Emergency CDP No. 4-98-024-G) and development, which has been unlawfully retained for the past 10 years. This permit was granted for an emergency situation during an El Niño year and was never intended to help the applicant permanently harden this stretch of the lower Malibu Creek and avoid meeting the conditions of the Coastal Act. As stated in the staff report, to obtain a full Coastal Development Permit, an application must be within 60 days of issuance of the emergency permit; otherwise, the emergency work shall be removed within 150 days of the emergency permit date.

Heal the Bay's Stream Team has over 10 years of experience in research and restoration of native riparian and scrub habitats in the Malibu Creek Watershed. The Malibu Creek and Lagoon are sensitive habitats that face disturbance from water quality impairments, hardened stretches upstream in the creek, and other factors in the watershed. The Malibu Creek and Lagoon are listed on the Clean Water Act section 303(d) list of Impaired Water Bodies for sediment, bacteria, and nutrients. Efforts are currently underway by the California Coastal Conservancy and State Parks to restore the ecologically significant Malibu Lagoon based on a restoration plan Heal the Bay helped develop.

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The Malibu Creek and lagoon also are home to important species. The Malibu Creek is listed by the National Oceanic and Atmospheric Administration as critical habitat for the southern California steelhead trout (*Oncorhynchus mykiss*), according to the Federal Register (Vol. 70, Number 170), and for tidewater goby (*Eucyclogobius newberryi*), according to Federal Register: January 31, 2008 (Volume 73, Number 21). Both of these species are federally listed as endangered.

Heal the Bay submitted a letter in 2005 to the City of Malibu opposing the Negative Declaration submitted for this project. We have provided that letter as an attachment, as most of our initial concerns are still valid and have not been adequately addressed in this application. We also address additional concerns, which are further detailed in this letter:

The following issues are of major concern to Heal the Bay in regards to the current application:

- The proposed project does not consider or has rejected environmentally superior alternative scenarios, as required by the City of Malibu LCP;
- The proposed project is in direct conflict with the California Coastal Act and City of Malibu LCP ESHA policies;
- The proposed project fails to address the fencing area, storage buildings, and the grouted rip-rap armoring directly upstream of the site, which contribute to stream bank erosion and habitat degradation;
- The streambank slope should be recontoured to better protect the area from further erosion; and
- The revised revegetation plan will not adequately restore upland and riparian habitat and it will exacerbate impacts from streambank hardening.

1. <u>The proposed project does not consider or has rejected environmentally superior alternative scenarios, as required by the City of Malibu LCP.</u>

The proposed project will have serious negative impacts to sensitive habitat areas designated as ESHA in the lower Malibu Creek system, including Malibu Lagoon. The presence of concrete rip-rap in the stream and riparian ecosystems negatively impacts and changes the stream's natural morphology, hydrologic balance, sediment regime, habitat provision, species composition, and natural chemical and biological processes.[10] A "soft" bioengineered solution, instead of one reliant on stream bank hardening, would create less impact to ecologically sensitive features at the site and downstream, and has not been adequately proposed or assessed.

As we outlined in our previous letter (Discussion Point #2), the presence of rip-rap as a permanent measure to redesign the stream bank for flood control measures is not a workable long-term solution and will have

[10] J. Craig Fischenich, 2003, "The Effects of Riprap on Riverine and Riparian Ecosystems" a report published by the US Army Corps of Engineers, Engineer Research and Development Center.

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significant negative impacts onsite and downstream. A "soft" bioengineered solution is not only preferable, but it is mandated in section 3.32 of the Malibu LCP (Discussion Point #5). As further discussed below, the proposed project does not adequately demonstrate the feasibility of a "soft" bioengineered solution at this site.

Relying on the hardening of a stream bank for bank stabilization, where there are feasible non-hardening alternatives, is inconsistent with Chapter 3, section 3.2 of the LCP, which states, "Channelizations or other substantial alterations of streams shall be prohibited except for...2) flood protection for existing development where there is no other feasible alternative,...Any channelization or stream alteration permitted for one of these three purposes shall minimize impacts to coastal resources..., and shall include maximum feasible mitigation measures to mitigate unavoidable impacts." The project applicant has failed to demonstrate that a bioengineered bank stabilization project is adequate at this site. A "soft" bioengineered solution would meet the project goals of protecting existing structures, flood control, and habitat protection, and it would be compliant with Coastal Act and LCP policies (see Discussion Point #3 in the attached letter).

For example, alternative #6 proposed in the staff report, which features the construction of a concrete floodwall and revegetation of creek bank, is a viable alternative that is consistent with Coastal Act and LCP policies. Rejection of this alternative was based largely on cost, which is not an adequate reason under the Coastal Act, especially considering the impacts of the preferred alternative to the Malibu Creek and Lagoon and its associated aquatic life, including the federally endangered southern steelhead trout, a state-listed threatened species, and the tidewater goby, which are detailed in the attached letter (Discussion Point #2). Alternative #6 was also rejected based upon the potential erosional effects this alternative "could" have at the stream bank; however, sufficient evidence supporting this conclusion was not provided in the staff report.

We urge you to deny this application and instead recommend the removal of the existing rip-rap paired with a "soft" or bioengineered solution to stabilize the stream bank (such as that provided in Alternative #6), as this approach is consistent with the Coastal Act and LCP. Implementing a bioengineered solution at the site will effectively restore native riparian and upland trees, shrubs, and other vegetative components of the riparian zone, while preventing additional erosional impacts and sediment loading downstream that are associated with hardened revetments.

2. The proposed project is in direct conflict with California Coastal Act and City of Malibu LCP ESHA policies

The proposed project will result in further degradation to environmentally sensitive habitat area ("ESHA") at this location. Downstream scour and sediment loading from the existing rip-rap at this site already impact the lower Malibu Creek and Lagoon. The Malibu Creek is designated as ESHA. The staff report states that although Malibu Creek itself meets the definition of an ESHA, the disturbed west bank does not. We disagree with this conclusion. According to the Coastal Act and City of Malibu LCP, the west stream bank of lower Malibu Creek and the adjacent riparian buffer zone are designated and

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protected as ESHA. As such, it is the responsibility of the applicant and the Coastal Commission to ensure that this environmentally sensitive area is protected, according to law, and that impacts to this area and the contiguous areas of Malibu Creek and Malibu Lagoon are minimized and mitigated to the fullest extent possible.

According to the City of Malibu LCP the disturbed west bank should be considered ESHA. The City of Malibu Local Implementation Plan ("LIP"), Chapter 4.3.B.2, defines ESHA as, "Any habitat area that contributes to the viability of plant or animal species that are designated or are candidates for listing as rare, threatened, or endangered under State or Federal law." The Malibu Creek and Lagoon are critical habitat for the federal endangered southern steelhead and tidewater goby, and therefore, should be considered ESHA based on requirements under the LIP.

Furthermore, according to the City of Malibu Land Use Plan ("LUP"), lower Malibu Creek and its corresponding riparian area are considered part of ESHA. Section 3.1 of the LUP states, "The ESHAs in the City of Malibu are riparian areas, streams, native woodlands, native grasslands/savannas, chaparral, coastal sage scrub, dunes, bluffs, and wetlands, unless there is site-specific evidence that establishes that a habitat area is not especially valuable because of its special nature or role in the ecosystem." The area considered in the proposed project contains both stream and riparian habitat, and should be protected as ESHA under the LUP.

The project area is also mapped as ESHA in the City Malibu LCP. Section 3.6 of the LUP states "Any area mapped as ESHA shall not be deprived of protection as ESHA, as required by the policies and provisions of the LCP, on the basis that habitat has been illegally removed, degraded, or species that are rare or especially valuable because of their nature or role in an ecosystem have been eliminated." Coastal Commission staff contend in their report that, "Work will take place along a bank that has obviously been disturbed over the years, both by the erosive forces of Malibu Creek and by disturbance from adjacent development in the floodplain. As such, the subject bank is not considered ESHA." Under the LUP, degradation of habitat is not sufficient justification for loss of ESHA protections.

Moreover, Section 30240 of the Coastal Act requires that both ESHA and ESHA buffers be protected from development and activities that cause degradation.[11] Armored stream banks are one of three major causes of downstream bank erosion and sedimentation, based on Heal the Bay's Stream Team mapping efforts in the Malibu Creek Watershed. In addition to the hardened stream bank, the proposed project also features permanent submerged rip-rap within Malibu Creek, which Coastal Commission staff already recognizes as ESHA since it is a blue-line stream. Approval of a permanent hardened revetment in Malibu Creek is inconsistent with the ESHA policies of the Coastal Act and the City of Malibu LCP, as it will cause further degradation of stream and riparian habitat in this area.

[11] California Coastal Act section 30240 (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (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.

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3. **The proposed project fails to address the fencing area, storage buildings, and the grouted rip-rap armoring directly upstream of the site, which contribute to stream bank erosion and habitat degradation.**

The contribution of upstream fencing, storage buildings, and rip-rap armoring to stream bank erosion and habitat degradation was discussed extensively in our previous letter (Discussion Point #3, Discussion Point #5 e. Bullet 8), yet it is still not addressed in the current proposal. The cumulative effects of these structures, which are contiguous to the project area, on both flood control and habitat impairment, must be addressed in this proposal and staff report. As outlined in our previous letter, both the fencing and storage area were illegally built in the riparian buffer zone, on the subject parcel, upstream of the subject stretch of riprap. These structures, in combination with the proposed downstream rip-rap revetment, will contribute to further bank erosion, failure of the bank downstream, and sediment loading to the stream and lagoon. Finally, the combined negative effects of these structures on the project area make it impossible to correctly assess the actual impacts of the described alternatives, as they may contribute to the failure of any of the proposed alternatives. The applicant has a long history of violating the Coastal Act and even now, while requesting Coastal Commission approval, has neglected to to remove these structures and restore the area. The presence of these structures must be addressed and included in the design of an environmentally superior alternative, and the illegal structures (fence and storage facilities) must be removed.

4. **The stream bank slope should be recontoured to better protect the area from further erosion.**

In a November 14, 2008 letter to the Coastal Commission, The California Department of Parks & Recreation (the owner and manager of downstream, impacted Malibu Lagoon State Park) recommends that a slope of 3:1 would be more suitable to habitat restoration at the site. However, under Special Condition #2, the staff report recommends recontouring the stream bank to a 2:1 slope. Insufficient evidence is provided in the staff report to substantiate the effectiveness of recontouring at a 2:1 slope. We urge the Commission to deny this project, and instead recommend a solution that is consistent with the Department of Parks & Recreation recommendation, as this would better support rehabilitation of native riparian flora, while also helping to mitigate high velocity flow at the site, and thus onsite erosion.

Furthermore, more information is needed regarding the geotextile fabric proposed to be used in the stream bank stabilization effort. Although the use of a geotextile fabric filter might be necessary to prevent soil loss during revegetation efforts, the applicant does not describe what type of product will be used. We recommend that only biodegradable materials be considered for long-term placement, as the use of non-degradable plastic-based material could have negative impacts on the riparian floral and faunal communities, as well as to downstream recipients of possible degraded materials. The long-term placement of plastic-based materials would further hinder the growth of vegetation at the site. Plastic-based filter fabrics are designed for uses such as for placement under permeable concrete, and not for habitat restoration purposes. A full analysis of the material to be used on the slope would be needed to further address potential impacts to the ecosystem.

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Moreover, depending on the material used for the geotextile fabric filter, it is possible that the filter fabric will create an artificial layer on top of the soil, under which plant and animal life will not be able to thrive. The high possibility of this effect is acknowledged in the applicant's restoration plan itself, where it is stated that holes will need to be cut in the filter fabric to accommodate the willow plantings.

5. **The revised revegetation plan will not adequately restore upland and riparian habitat and it will exacerbate impacts from stream bank hardening.**

The restoration goal within this project is "to create approximately 0.59 acres of riparian and upland habitat," however, the proposed restoration activities will simply not result in adequate habitat restoration. In the attached letter we address the faulty of design of the revegetation plan for this project (Discussion Point #4). We also find that the added revisions by Coastal Commission staff and per recommendations of scientists at Impact Scientists, do little to better the plan from an ecological viewpoint. For example, the plant list included in this application is limited to very few species. No habitat in Southern California consists of only nine species of plants, and we recommend more plant diversity be built into a proposed restoration at this site. Furthermore, the effects of disturbance to the rip-rap from the planted willows when they reach a mature size and overgrow the width of spacing between rip-rap blocks has not been addressed in the staff report. Heal the Bay's Stream Team has documented numerous rip-rap plantings that have failed throughout the watershed. Future concrete breakage and other impacts from mature willows associated with the proposed project should be considered in the staff analysis.

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Conclusion

Heal the Bay opposes this project and strongly urges the Coastal Commission to deny this application, which would result in the permanent hardening of this lower reach of the Malibu Creek. In fact, we have testified previously urging the Commission to move forward on enforcement action against the applicant because of the egregious violations of the Coastal Act. Rather than moving forward on enforcement, Commission staff unconscionably went against the recommendations of State Parks, City of Malibu LCP policies and ESHA requirements to recommend a severely flawed streambank stabilization project. The application is not supported by sound ecology, and it is in direct conflict with the Coastal Act and City of Malibu LCP. The emergency rip-rap located at this site has detrimentally impacted the natural resources and water quality in the Malibu Creek and Lagoon for the past ten years. Approval of this project will have long-term negative impacts from stream bank erosion and sediment loading on the Malibu Creek and Lagoon and will potentially compromise future habitat restoration efforts in these areas. Significant financial investments have been made by the State Coastal Conservancy and the City of Malibu to improve water quality and enhance habitat at Malibu Lagoon and Surfrider Beach. Restoration of Malibu Lagoon, at considerable taxpayer expense, will begin soon and this project will likely negatively impact this restoration. As one of the few remaining coastal wetlands in Los Angeles County, it is critical that the Malibu Lagoon be protected and restored.

We urge the Commission to recommend a "soft" bioengineered solution at this location, which would restore riparian habitat and some floodplain connectivity in this region. Restoration is preferable to continued degradation. A "soft" bioengineered solution would also be more cost effective, as it would not require regular maintenance and repair. We appreciate the opportunity to comment on this staff report; please contact us if you have any questions.

Sincerely,

/s/	/s/	/s/
Alison J. Lipman, Ph.D. Stream Team Manager Heal the Bay	Sarah Abramson Sikich Director of Coastal Resources Heal the Bay	Mark Gold D.Env. President Heal the Bay

Christensen, Deanna@Coastal

From: michael blum [michael.blum@gmail.com]
Sent: Monday, August 06, 2012 1:39 PM
To: Christensen, Deanna@Coastal
Subject: Re: Oppose CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

August 6, 2012

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001
via email: dchristensen@coastal.ca.gov

Re: Oppose CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:

The Malibu Surfing Association (MSA) formed in 1961 as one of California's first surfing clubs. The MSA is an all-volunteer, nonprofit organization dedicated to the fellowship of surfing and to the stewardship of our home break, world-famous Malibu Surfrider Beach.
Our club membership represents over 750 years of cumulative surfing experience at Malibu. We advocate for the protection and preservation of this historic surfing spot and a positive experience for Surfrider's 2.5 million annual visitors. In over 50 years since our club's founding, we remain intimately associated with the past, present, and future of Malibu surfing and of Surfrider Beach.

This letter constitutes our objection to the California Coastal Commission Staff Report and recommendations, related to the Mariposa Land Company Application (4-09-013) for a permit to make permanent the 500-foot stretch of riprap along the west bank of lower Malibu Creek, at their site at 3728 Cross Creek Road, Malibu.

We are joining in, and concurring with, Heal the Bay's comment letter which is being submitted contemporaneously.

We also add the following:

1. The proposed project does not consider downstream impacts.
Surfing is an example of a low-cost, low-impact recreational opportunity recognized by the Coastal Act. Surfrider Beach, at the terminus of Malibu Creek, is one of California's -- and the world's -- most important surfing beaches. This history and importance was recognized by the 2010 dedication of Sufrider Beach as the first World Surfing Reserve. The WSR program, "highlight(s) the tremendous universal value of outstanding surf breaks and their surrounding environments throughout the world," and has been supported through resolution by the Costal Commission. (Th32-a-1-2010). The wave quality at surfing breaks like Surfrider Beach (i.e., a point break wave) are a function of several variables, including: swell conditions, bathymetry, sediments, and outflow from upstream rivers and creeks.

In short, activities like surfing are recognized by the Coastal Act, Surfrider Beach is a 'crown jewel' in the history and culture of surfing, and surfing at Surfrider Beach is dependent, in part, on upstream flow.

From this perspective, we're alarmed and saddened that no studies have been undertaken to evaluate potential downstream impacts of this project, located in proximity to the lagoon and Surfrider Beach. If altered hydrodynamics caused by an increased sinuosity of the lower Malibu Creek stream channel necessitated the revetment project, what of altered hydrodynamics caused by the revetment itself? Specifically:

Exhibit 5
CDP 4-09-013
Addendum

are there altered flow patterns into the lagoon and ultimately Surfrider Beach impacted by the proposed project? We oppose this proposed project until the aforementioned question is addressed.

Over 2.5 million annual visits take place at Surfrider Beach. For us recreating in these waters, and being intimately involved in the future of surfing there, we ask that you take every reasonable step to understand and evaluate projects with potential downstream impacts.

We appreciate the opportunity to comment on this staff report. Please feel free to contact me at 818.564.4217 with any questions.

Sincerely,

Michael Blum
Stewardship Chair
Malibu Surfing Association

Christensen, Deanna@Coastal

From: Pederson, Chris@Coastal
Sent: Thursday, July 19, 2012 5:25 PM
To: Christensen, Deanna@Coastal
Subject: FW: Mariposa Land Co. v. CCC (Malibu Creek revetment)
Attachments: grant deed.pdf; State Parks Site Plan 1.pdf; State Parks Site Plan 2.pdf

FYI

From: Wiseman, David [mailto:dwiseman@parks.ca.gov]
Sent: Thursday, July 19, 2012 5:12 PM
To: Malcolm, Ann; Pederson, Chris@Coastal
Cc: Lynch, Tara
Subject: RE: Mariposa Land Co. v. CCC (Malibu Creek revetment)

Coastal Commission Staff Counsel Chris Pederson,

Thank you for the opportunity to review and comment on the email from Sherman L. Stacey sent on behalf the of the Mariposa Land Company, Ltd.. I have concluded my initial review of this matter, and notwithstanding a subsequent determination from our legal department, it appears the easement referred to by Mr. Stacey is still in existence. While I haven't explored this matter from all potential legal angles (merger etc.), I did find our most up to date acquisition map and/or Site Plan for the area. That Site Plan is included within this email and identified as Site Plan 1 and Site Plan 2.

On the page two (2) of the Site Plan there is an area west of the creek which is labeled by a circle and the marking of "E21". That E21 marking references an encumbrance identified on page one (1) of the Site Plan. Under the Schedule of Acquisition identified on page one (1) of the Site Plan you will see that E21 refers to a document dated April 24, 1945, recorded on May 21, 1945, with a book and page number of 21953/302. The specific book and page number referenced, as well as all pertinent subsequent pages, is attached to this email in a more legible format than the material provided by Mr. Stacey and labeled is as 21953 302.

Our copy of book 21953 page 302 et seq, seems to be identical to the one provide by Mr. Stacey. Although Mr. Stacey's description of the property at issue was somewhat vague, at this point in time we would also agree that the encumbrance/easement identified under section C of the grant deed and referenced by Mr. Stacey is still in existence and in effect today.

Again, subject to the admonition identified in the first paragraph, so long as the property owner holding the encumbrance/easement identified above is utilizing that entitlement in accordance with the terms pursuant to the grant deed, which includes but is not limited to "protecting the banks", approval for such utilization from CSP is not required. Whether or not the easement identified above is being utilized by individuals with authority to do so, or whether or not the activity which took place, or is taking place is within the scope and authority of the easement referenced, is an issue we leave to the California Coastal Commission.

Please do not hesitate to contact me should you have any questions.

David L. Wiseman, Staff Counsel
California State Parks

Exhibit 6
CDP 4-09-013
Addendum

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

W 12a

Filed: Remand
180th Day: N/A
Staff: D. Christensen
Staff Report: 7/19/12
Hearing Date: 8/8/12

STAFF REPORT: REGULAR CALENDAR

Application No.: **4-09-013**

Applicant: **Mariposa Land Company**

Agent: **Sherman Stacey**

Project Location: **3728 Cross Creek Road, City of Malibu, Los Angeles County APN 4452-011-036**

Project Description: **Follow-up to Emergency Coastal Development Permit No. 4-98-024-G for placement of rock rip-rap revetment along an approximately 500 foot long section of the west bank of lower Malibu Creek. The proposed project also includes vegetation restoration of the revetment site to create riparian and upland habitat.**

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed development with eleven (11) special conditions regarding Assumption of Risk, Vegetation Restoration Plan Implementation and Monitoring, Restoration Timing and Best Management Practices, Required Agency Approvals, Site Inspection, Condition Compliance, Project Implementation, Maintenance Activities and Future Alterations, Liability for Costs, Deed Restriction, and State Parks Permission. The proposed project area lies within the City of Malibu, but falls within the Commission's area of retained original permit jurisdiction because development is proposed on lands that are below the mean high tide line and/or on public trust lands. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu Local Coastal Program (LCP) serve as guidance.

The applicant is requesting authorization to permanently retain approximately 500 linear feet of rock rip-rap revetment that was installed along the west bank of lower Malibu Creek to protect an existing commercial development from flood waters pursuant to Emergency CDP No. 4-98-024-G. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1.3:1 to 2:1 (H:V) slope (average slope is approx. 1.75:1) slope and 14-16 feet in height (2-4 foot toe below stream bed). The applicant is also proposing a comprehensive restoration plan to vegetate the existing rock revetment and the slope above the revetment with native riparian and upland plant species.

The proposed project would function to adequately protect existing development in the floodplain, consistent with the Chapter 3 protections for Malibu Creek ESHA, water quality, and visual resources (Section 30230, 30231, 30236, 30251, 30253, and 30240 of the Coastal Act) and the relevant policies of the Malibu LCP, which the Commission uses as guidance.

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Exhibit 7. Proposed Vegetation Restoration Plan (May 2012)
Exhibit 8. Emergency CDP 4-98-024-G
Exhibit 9. Lesley Ewing Memo, dated July 18, 2012
Exhibit 10. Dr. Engel Memo, dated July 18, 2012
Exhibit 11. Correspondence
Exhibit 12. Statement of Decision
Exhibit 13. Peremptory Writ of Mandate

I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

*I move that the Commission **approve** Coastal Development Permit No 4-09-013 pursuant to the staff recommendation.*

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:

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

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.

III. SPECIAL CONDITIONS

1. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

2. Revised Vegetation Restoration Plan, Implementation and Monitoring

By acceptance of this permit, the applicant agrees to implement the revised "Vegetation Restoration Plan for the Mariposa Land Property at Malibu Creek, City of Malibu, California" (by Impact Sciences, Inc. dated August, 2007, and amended May 2012).

The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal

development permit unless the Executive Director determines that no amendment is legally required.

The plan shall be carried out under the direction of qualified biologist or resource specialist. Successful site restoration shall be determined if the planting of native plant species on site is adequate to provide 80% coverage by the end of the three (3) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation.

The applicant shall implement and complete the revised restoration plan between August 15 and November 15 of either 2012 or 2013. The Executive Director may grant additional time for good cause.

The applicant shall submit, upon completion of the initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial planting work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planting work.

Three years from the initial planting completion date, the applicant shall submit for the review and approval of the Executive Director, a Vegetation Monitoring Report, prepared by a qualified biologist or resource specialist, that certifies whether the on-site planting is in conformance with the vegetation restoration plan approved pursuant to Special Condition 2 and has been implemented consistent with, and restoration has been successful as defined by, this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the monitoring report indicates that the planting is not in conformance with or has failed to meet the performance standards specified in this condition or in the vegetation restoration plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental vegetation restoration plan for the review and approval of the Executive Director. The revised vegetation restoration plan must be prepared by a qualified biologist or resource specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan. The Executive Director shall determine if an amendment to the permit is necessary for the revised or supplemental vegetation restoration plan. The approved revised vegetation restoration plan must be implemented at the beginning of the next rainy season to enhance the success of the revegetation.

3. Vegetation Restoration Timing and Best Management Practices

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a vegetation restoration timing and best management practices plan for review and written approval of the Executive Director. The plan shall specify that the permittee will comply with the following minimum requirements:

a. Planting shall be confined to the months of August 15 – November 15 (late summer and fall). The fall dormant season is the ideal time for planting and this timing falls outside the months when the majority of bird breeding activities occur (the bird breeding/nesting monitoring laid out in the “Vegetation Restoration Plan”, Impact

Sciences Inc., dated August, 2007, and amended May 2012, must occur through the end of September because some birds may still be engaged in breeding activities through September). In addition, although this vegetation restoration project will have little, if any, impact on the Malibu Creek ecosystem, this timing coincides with the dry season and is outside the estimated peak period of tidewater goby spawning and during the non-migration period of southern steelhead. This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director.

b. No vegetation restoration project materials, debris, or waste shall be placed or stored where it may enter environmentally sensitive habitat areas, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion. The plan shall depict the staging area for project materials, debris, or waste.

c. No vegetation restoration project equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to environmentally sensitive habitat areas, streams, wetlands or their buffers. The plan shall depict the footprint for project activities/equipment and the staging area for project equipment and materials.

d. Any and all debris resulting from the vegetation restoration activities shall be removed from the project site within 24 hours of completion of the project.

e. Vegetation restoration project debris and sediment shall be removed from work areas each day that project activity occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.

f. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every project activity day.

g. The discharge of any hazardous materials into any receiving waters shall be prohibited.

h. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other project materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from receiving waters and storm drain inlets as possible.

i. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of project-related materials, and to contain sediment or contaminants associated with project activity, shall be implemented prior to the on-set of such activity.

j. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

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

4. Required Approvals

By acceptance of this permit, the applicant agrees to obtain all other Local, State, and/or Federal permits that may be necessary for all aspects of the approved project (including any necessary permits from the California Department of Fish and Game, Regional Water Quality Control Board, and the U.S. Army Corps of Engineers).

5. Site Inspection

A. By acceptance of this permit, the applicant irrevocably authorizes, on behalf of itself and its successors-in-interest with respect to the subject property, Coastal Commission staff and its designated agents to enter onto the property to undertake site inspections for the purpose of monitoring compliance with the permit, including the special conditions set forth herein, and to document their findings (including, but not limited to, by taking notes, photographs, or video), subject to Commission staff providing 24 hours advanced notice to the contact person indicated pursuant to paragraph B prior to entering the property, unless there is an imminent threat to coastal resources, in which case such notice is not required. If two attempts to reach the contact person by telephone are unsuccessful, the requirement to provide 24 hour notice can be satisfied by voicemail, email, or facsimile sent 24 hours in advance or by a letter mailed three business days prior to the inspection. Consistent with this authorization, the applicant and its successors: (1) shall not interfere with such inspection/monitoring activities and (2) shall provide any documents requested by the Commission staff or its designated agents that are relevant to the determination of compliance with the terms of this permit.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to Commission staff the email address and fax number, if available, and the address and phone number of a contact person authorized to receive the Commission's notice of the site inspections allowed by this special condition. The applicant is responsible for updating this contact information, and the Commission is entitled to rely on the last contact information provided to it by the applicant.

6. Condition Compliance

Within 90 days of Commission action on this coastal development permit application, or within such time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions Chapter 9 of the Coastal Act.

7. Implementation of Approved Project

The applicant shall implement and complete the proposed Restoration Program prepared by Impact Sciences, Inc. between August 15th and November 15th, either in 2012 or 2013. The Executive Director may grant additional time for good cause.

8. Maintenance Activities and Future Alterations

The permittee shall maintain the permitted bank protection in its approved state. Any change in the design of the project or future additions/reinforcement of the approved structure beyond exempt maintenance as defined in Public Resources Code section 30610(d) and Section 13252 of Title 14 of the California Code of Regulations to restore the structure to its original condition as approved herein will require a coastal development permit. However, if (after inspection) it is apparent that repair and maintenance is necessary, the permittee shall contact the Executive Director to determine whether a coastal development permit or an amendment to this permit is legally required, and, if required, shall subsequently apply for a coastal development permit or permit amendment for the required maintenance.

9. Liability for Costs and Attorneys Fees

The applicant shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the applicant against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

10. Deed Restriction

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

11. California Department of Parks & Recreation Permission

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director evidence that California State Parks has granted permission to undertake the portion of the project that is on State Parks property, or evidence that no permission is required.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND BACKGROUND

Background and Prior Commission Action

On February 20, 1998, the Executive Director authorized Emergency Coastal Development Permit No. 4-98-024-G. The permit authorized Mariposa Land Company (Grant Adamson) to place approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek, about 300 feet upstream of the Pacific Coast Highway bridge. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1.3:1 to 2:1 (H:V) slope (average slope is approx. 1.75:1) slope and 14-16 feet in height (2-4 foot toe below stream bed). The contractor who installed the rock used a backhoe to cut back the eroded vertical bank slope and notched a key at the toe of the slope to allow for a stable base surface for the rock. Rocks were then placed individually with the backhoe, starting at the key, and working upwards in sections. In the several months following the initial installation, boulders were adjusted and additional rocks were added to enhance the stability of the emergency revetment.

In the application for Emergency Permit 4-98-024-G, the applicant stated that the revetment was necessary to protect the subject property and an adjacent commercial development from further severe stream bank erosion in the face of potential continuing winter storms. Prior to placement of the revetment, approximately 20 feet of lateral erosion occurred along the subject stretch of creek bank following significant storm flows in February 1998. Conditions of approval of Emergency CDP No. 4-98-024-G required the applicant to apply for a regular CDP within 60 days in order to seek permanent authorization for the emergency work, and that the regular CDP application was to include an analysis of stream bank protection alternatives prepared by a qualified engineer (**Exhibit 8**).

On June 3, 1998, Mariposa Land Co. submitted a regular CDP application (No. 4-98-024) requesting permanent authorization for the rock rip-rap revetment that was installed under the emergency permit. However, the CDP application did not contain enough information to deem the application "complete" under the applicable regulations, and Commission staff sent the applicant an "incomplete" letter on June 24, 1998, outlining the needed application items. Additional information was not received from the applicant until July 2000. However, again, not all of the information requested in staff's 1998 letter was included. Commission staff sent a follow-up letter in September 2000 outlining the outstanding items. Over the next eight years the applicant submitted portions of the requested application items and numerous contacts were made by Commission staff to the applicant attempting to obtain the necessary information, particularly in regards to an engineering analysis of alternatives. In July 2006 and June 2007, the applicant provided an engineering design study/alternatives analysis for the proposed project. And in October 2007, the applicant revised the proposed project description to include planting of the rip-rap stream bank and top of bank with riparian and upland species, and submitted a "Vegetation Restoration Plan", prepared by Impact Sciences, Inc.

On May 21, 2008, the CDP application was deemed complete, and Commission staff tentatively scheduled the application for the Commission's November, 2008 hearing. In August 2008, it was brought to the attention of Commission staff that the as-built project plans submitted by the applicant and analyzed by their engineer were not based upon a detailed survey and therefore were not a reliable depiction of the actual configuration of the rip-rap slope across the project area. Commission staff requested the applicant provide accurate, detailed surveyed plans of the proposed project, prepared by a licensed land surveyor, to facilitate staff's analysis of the as-built project. The applicant provided staff with surveyed plans on October 10, 2008.

The application was then scheduled for the February 4, 2009 Commission hearing and a staff report was circulated on January 22, 2009. The February hearing was the last hearing the Commission could act upon the application before the Permit Streamlining Act deadline. Therefore, since the applicant found they needed more time to respond to the January 22, 2009 staff report, the applicant withdrew permit application No. 4-98-024 two days before the scheduled hearing and re-submitted it as a new application. The re-submitted application was identical to the previous application, but it was assigned a new permit number (4-09-013) and filed on February 2, 2009. This application was brought to a Coastal Commission hearing on April 9, 2009. At the meeting, the Commission continued this item and directed staff to provide additional analysis regarding the revegetation-only alternative, and, conversely, the feasibility of laying the recommended vegetated rip rap design alternative back to a 3:1 (H:V) slope where possible. In addition, concern was raised regarding the impacts of potential construction dewatering on sensitive species.

Staff then considered and addressed the issues raised by the Commission and brought the item forward for Commission consideration at the August 13, 2009 Commission hearing. Commission staff recommended approval of the project with fifteen (15) special conditions relating to assumption of risk, revised bank protection plans, revised revegetation plans, revegetation implementation and monitoring, construction timing and best management practices, dewatering plan, aquatic species protection, required approvals, future alterations, deed restriction, site inspection, condition compliance, State Parks permission, nesting bird protection measures, and implementation of approved project. The special conditions required that the rock slope protection be re-engineered to be laid back to a 3:1 (H:V) slope for all on-site areas where it is feasible; however, the re-engineered slope was not allowed to be steeper than 2:1 (H:V) in any location. At the hearing of August 13, 2009, the Commission approved the project per the staff recommendation.

The applicant then filed suit challenging the approved permit condition that required the rock slope protection be re-engineered. The trial court ruled in the applicant's favor, finding that the evidence in the record did not establish that the re-engineered revetment would be feasible, that evidence in the record indicated that a 3:1 slope would worsen flooding problems, and that evidence in the record was insufficient to support the Commission's finding that a revetment with a 3:1 slope was the environmentally preferable alternative (**Exhibit 12**). The court issued a writ of mandate remanding the permit back to the Commission with directions to hold a new hearing on the permit application (**Exhibit 13**). The Commission has appealed the trial court's decision, but if it acts on the remanded permit, that action will render the appeal moot. If the Commission approves the permit with the conditions recommended by staff, the applicant has agreed to waive claims for attorneys' fees and court costs. The Commission retains discretion to

take an action different than the staff recommendation, so long as it complies with legal requirements and is supported by substantial evidence in the record.

Environmental Setting

The Malibu Creek watershed covers approximately 110 square miles. It is the second largest watershed draining into Santa Monica Bay and the largest draining from the Santa Monica Mountains. Lower Malibu Creek watershed includes the steep and rugged Malibu Canyon, which cuts through the central axis of the Santa Monica Mountains. Downstream of Malibu Canyon the watershed emerges onto a coastal plain where channel slopes and flow velocities reduce and the Malibu Creek fluvial system begins to transition to a coastal estuarine lagoon system. Malibu Lagoon is a 31-acre shallow embayment at the terminus of Malibu Creek that empties into the Pacific Ocean at Surfrider Beach. However, depending on hydrologic conditions of the estuary system, the mouth of the lagoon may either be "open" with no barrier beach, or "closed" by the presence of a barrier beach and lack of tidal inlet channel. When the lagoon is closed, the water level in the subject reach of creek ranges between 6 and 7 feet in depth.

Malibu Creek and its estuary provide habitat for a diversity of wildlife, including waterfowl, shorebirds, wading birds, songbirds, and raptors. A smaller number of mammals, amphibians and reptiles also inhabit the area. The significant species of fish that are known to utilize lower Malibu Creek are southern steelhead trout (*Oncorhynchus mykiss*), a state-listed threatened species, and tidewater goby (*Eucyclogobius newberryi*), federally listed as endangered and a California species-of-special-concern.

The subject 500 linear foot section of the west bank of lower Malibu Creek is situated along a westward meander cut bank approximately 300 feet upstream from the Pacific Coast Highway bridge and Malibu Lagoon (**Exhibits 1-3**). The project site is located on a narrow, relatively flat, 2.5-acre strip of vacant land owned by the applicant that is bound by a commercial shopping center development to the west and Malibu Creek to the east (**Exhibit 2**). The site is located within the 100-year floodplain for Malibu Creek, as designated by the Federal Emergency Management Agency (FEMA). Prior to severe storm erosion and subsequent placement of the proposed rip rap revetment on the property in the late 1990's, the subject stretch of creek bank was primarily disturbed and did not possess a well-developed riparian canopy due to its close proximity to a commercial shopping center and Pacific Coast Highway. Currently, the subject bank and rip rap is largely devoid of vegetation, with the exception of a small amount of arroyo willow at the northern end of the revetment and a small amount of mulefat at the southern end. The upland area above the revetment is dominated by weeds and non-native annual grasses. A footpath also exists on the upland area above the revetment. The width between the top of existing revetment and the adjacent commercial development/property varies between 18 feet and 60 feet (**Exhibits 3-4**).

Lower Malibu Creek in the project vicinity has changed significantly over time according to historic aerial photographs dating back to 1932. Stream flows had historically been confined to a rather straight channel leading up to the Pacific Coast Highway bridge, since much of the floodplain was in agricultural production, particularly the west side of the creek. In the 1960's, a shopping center was built in close proximity to the subject stretch of the west bank. An old rip rap revetment that extends along the west creek bank at least a thousand feet upstream from the Pacific Coast Highway bridge is evident in a 1972 aerial photograph. It appears this old

revetment was constructed to protect the adjacent shopping center prior to 1972. The sinuosity of the lower Malibu Creek stream channel increased substantially between 1976 and 1985, which increasingly directed flows against the west bank in the project location. By 1998, it appears that most of the old rip rap revetment had fallen away due to changes in channel morphology. However, there still exists some grouted rip rap on either side of a storm drain outlet located on an adjacent parcel approximately 100 feet north of the proposed rip rap revetment. A canopy of healthy riparian vegetation is growing on the bank above the grouted rip rap section. The storm drain and grouted rip rap were installed by Los Angeles County Flood Control District in the 1970's. Although this grouted rip rap is connected to the stretch of proposed rip rap, it is not a part of the subject permit application since it is located on an adjacent parcel under separate ownership and appears to have been constructed prior to the Coastal Act. However, according to the applicant's site plan, it appears a small portion of the proposed rip rap is located on an adjacent parcel owned by California Department of Parks & Recreation (4452-011-903). As such, **Special Condition No. Eleven (11)** is required to ensure that State Parks permission is obtained prior to issuance of the permit.

Description of Proposed Project

The applicant is requesting authorization to permanently retain, in its "as-built" condition, approximately 500 linear feet of rock rip-rap revetment that was installed along the west bank of lower Malibu Creek to protect an existing commercial development from flood waters pursuant to Emergency CDP No. 4-98-024-G. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1.3:1 to 2:1 (H:V) slope (average slope is approx. 1.75:1) and 14-16 feet in height (2-4 foot toe below stream bed) (**Exhibits 5-6**).

The applicant is also proposing to vegetate the area of the revetment site to create approximately 0.59 acres of riparian and upland habitat ("Vegetation Restoration Plan," prepared by Impact Sciences, Inc., dated May 2012, attached as **Exhibit 7**). To vegetate the existing rock revetment, the applicant has proposed to insert and fasten willow and mulefat cuttings, that are 1-2 inches in diameter and 5 feet long, between the rip-rap boulders. The interstitial spaces of the boulders where cuttings are placed would be filled with a compacted sand/soil mix as a substrate to promote root growth. Fabric would also be used to contain the substrate within the interstitial spaces. Smaller, herbaceous plant species, such as yerba mansa and mugwort, would also be scattered between the tree plantings in selected clusters. The applicant also proposes to plant the upland area above the revetment with a mixture of native shrubs and trees, such as California blackberry, mulefat, sycamore, black walnut, cottonwood, and elderberry. An access and maintenance path, approximately 8 feet in width, would be maintained along the top of the bank. In addition, a temporary irrigation system would be used to ensure establishment of the new plantings. Non-native plant species would be removed. The vegetation restoration work is proposed to occur between August 15 and November 15 to increase probability of planting establishment and avoid or minimize potential disturbance to breeding birds, tidewater goby, and Southern steelhead.

Correspondence Received

Commission staff has received correspondence regarding the proposed project from the following interested parties (letters attached as **Exhibit 11**):

a. Letter from Dr. J. Robert Hatherill, former faculty member of the UCSB Environmental Studies Program, dated August 11, 2008, expresses support for the proposed restoration plans to enhance the habitat value of the creek bank for tidewater goby and other native fauna.

b. Letter from Ron Schafer, former California Dept. of Parks and Recreation District Superintendent, dated November 14, 2008, expresses concern regarding the proposed project. The letter states that the un-engineered revetment continues to contribute to an unstable site for establishment of riparian vegetation. Now that the emergency has passed, State Parks believes that the rip rap should be removed if possible and the bank should be laid back at a less steep slope that is soft bio-engineered for greater water quality, stability, and habitat benefits. If the rip rap cannot be removed, State Parks requested that the revetment be modified with vegetation and other materials to create a soft bioengineered slope.

   In response, Commission staff would note that the issues raised in this letter are addressed in Section IV.B of this staff report.

c. Letter from Heal the Bay, dated June 23, 2009, asserts that portions of the proposed as-built riprap are failing, portions of the adjacent grouted riprap to the north are failing, and the stream bank south of the proposed riprap is unstable. Heal the Bay also asserts that there is evidence of unpermitted fencing and structures adjacent to the stream bank on the subject property. Heal the Bay provided GPS-mapping and photographs of the unpermitted development and bank failures.

   The issue of the compromised bank areas is addressed in Section IV.B, page 20 of the staff report. Regarding the alleged unpermitted development on the subject property, staff has confirmed that there is a chain link fence enclosing a stockpile area and various structures at the northern portion of the property. The chain link fence runs parallel to the creek for several hundred feet, and is only a few feet from the top of bank of the subject rock revetment. It appears that the northern-most approximately 150 feet of the as-built/proposed revetment bank has a fence within feet of it. The alleged unpermitted development on the subject property is unrelated to the proposed project in the subject permit application and in a location that is outside the Commission's retained jurisdiction. However, Commission enforcement staff has notified City of Malibu enforcement staff of the alleged unpermitted development on the subject property.

d. Letter from Heal the Bay, dated February 3, 2009 and April 6, 2009, expresses opposition to the proposed project. Heal the Bay states that stream bank armoring is an ineffective method for long-term bank stabilization and a major cause for downstream bank erosion and sedimentation. Heal the Bay recommends a soft solution in that the rip rap should be removed, the bank slope laid back at a 3:1 slope and re-vegetated, and if necessary, a floodwall installed next to the shopping center as far back as possible. Heal the Bay also believes that the subject stream bank should be designated ESHA. These comments and concerns are addressed in Section IV.B of the staff report. Lastly, Heal the Bay states that the grouted rip rap at an upstream storm drain outlet and an adjacent fenced storage area are unpermitted and should be included in the scope of work for the subject permit. See staff response to bullet (c) above regarding the fenced storage area. Regarding the grouted rip rap at the upstream storm drain outlet, although it is connected to the stretch of proposed rip rap,

it is not a part of the subject permit application since it is located on an adjacent parcel under separate ownership and appears to have been constructed prior to the Coastal Act.

e. Letter from Malibu Surfing Association, dated February 3, 2009 and April 7, 2009, joining in and concurring with Heal the Bay's letter described above.

f. Letter from Mark Abramson of Santa Monica Baykeeper (SMB), dated February 3, 2009 and April 7, 2009, expresses opposition to the proposed project. SMB states that stream bank armoring is an ineffective method for long-term bank stabilization and a major cause for downstream bank erosion and sedimentation. SMB recommends a soft solution in which the bank slope is laid back at a 3:1 slope and re-vegetated. In addition, SMB states that the subject stream bank should be designated an ESHA. These comments and concerns are addressed in Section IV.B of the staff report. SMB also states that a grouted rip rap area upstream and an adjacent fenced storage area are unpermitted and should be addressed as part of the subject permit application. See staff response to bullet (c) above regarding the fenced storage area. Regarding the grouted rip rap at the upstream storm drain outlet, although it is connected to the stretch of proposed rip rap, it is not a part of the subject permit application since it is located on an adjacent parcel under separate ownership and appears to have been constructed prior to the Coastal Act.

g. Letter from Sandra Albers of the Santa Monica Mountains Resource Conservation District (SMM RCD), dated April 7, 2009, in opposition to the proposed project. The SMM RCD states that bioengineering techniques, which provide valuable habitat for fish and wildlife species and improved water quality, should be utilized in this case. These comments and concerns are addressed in Section IV.B of the staff report.

B. WATER QUALITY, STREAM ALTERATION, HAZARDS, AND SENSITIVE HABITAT

The proposed project area lies within the City of Malibu, but falls within the Commission's area of retained original permit jurisdiction because development is proposed on lands that are below the mean high tide line and/or on public trust lands. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu Local Coastal Program (LCP) serve as guidance.

Section 30230 of the Coastal Act states:

> *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 of the Coastal Act states that:

> *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 30236 of the Coastal Act states:

> *Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.*

Section 30253 of the Coastal Act states, in pertinent part, that new development shall:

1. *Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*

2. *Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Coastal Act Section 30240 affords protection of environmentally sensitive habitat areas as follows:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
> *(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.*

Section 30107.5 of the Coastal Act defines an environmentally sensitive area as:

> *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and, where feasible, restored through, among other means, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and

minimizing alteration of natural streams. Special protection shall be given to areas and species of special significance, and uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters. Section 30236 limits channelizations, dams, or other substantial alterations of rivers and streams to flood control projects necessary to protect public safety and existing development and two other types of projects, any of which must incorporate the best mitigation measures available and where there are no feasible alternatives. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could significantly degrade those resources.

In addition, the City of Malibu certified Local Coastal Program contains the following policy that specifically pertains to lower Malibu Creek:

> *LUP Policy 3.34*
> *Bioengineering methods or "soft solutions" should be developed as an alternative to constructing rock revetments, vertical retaining walls or other "hard structures" along lower Malibu Creek. If bioengineering methods are demonstrated to be infeasible, then other alternatives may be considered. Any applications for protective measures along lower Malibu Creek shall demonstrate [1] that existing development in the Civic Center is in danger from flood hazards, [2] that the proposed protective device is the least environmentally damaging alternative, [3] that it is sited and designed to avoid and minimize impacts to the habitat values of the riparian corridor along the creek and the recreational and public access use of State Park property along the creek, and [4] that any unavoidable impacts have been mitigated to the maximum extent feasible.*

The proposed project site is situated along a 500 linear foot section of the west bank of lower Malibu Creek, approximately 300 feet upstream from the Pacific Coast Highway bridge and Malibu Lagoon. The lower Malibu Creek watershed emerges onto a coastal plain where channel slopes and flow velocities reduce and the Malibu Creek fluvial system begins to transition to a coastal estuarine lagoon system. Malibu Lagoon is a 31-acre shallow embayment at the terminus of Malibu Creek that empties into the Pacific Ocean at Surfrider Beach. Malibu Creek and its estuary provide habitat for a diversity of wildlife, including waterfowl, shorebirds, wading birds, songbirds, and raptors. A smaller number of mammals, amphibians and reptiles also inhabit the area. The significant species of fish that are known to utilize lower Malibu Creek are southern steelhead trout (*Oncorhynchus mykiss*), a state-listed threatened species, and tidewater goby (*Eucyclogobius newberryi*), federally listed as endangered and a California species-of-special-concern. Malibu Creek is a U.S.G.S. designated blue-line stream that supports a well-developed riparian corridor which constitutes ESHA. Malibu Creek and its riparian corridor is also designated as ESHA in the certified Malibu LCP.

Riparian habitats and their associated streams form important connecting links in the Santa Monica Mountains. These habitats connect all of the biological communities from the highest elevation chaparral to the sea with a unidirectional flowing water system, one function of which is to carry nutrients through the ecosystem to the benefit of many different species along the way. The streams themselves provide refuge for sensitive species including: the coast range newt, the Pacific pond turtle, tidewater goby, and southern steelhead trout. The health of the streams is dependent on the ecological functions provided by the associated riparian woodlands.

These functions include the provision of large woody debris for habitat, shading that controls water temperature, and input of leaves that provide the foundation of the stream-based trophic structure.

The project site is located on a narrow, approximately 2.5-acre strip of vacant land owned by the applicant that is bound by a commercial shopping center development to the west and Malibu Creek to the east. Prior to severe storm erosion and subsequent placement of the proposed emergency rip rap revetment on the property in the late 1990's, the subject stretch of creek bank was primarily disturbed due to modifications to the creek's west bank and floodplain that created a highly disturbed riparian environment of presumably limited habitat value. Currently, the subject bank and proposed as-built rip rap remains largely devoid of vegetation, with the exception of a small amount of arroyo willow at the northern end of the revetment and a small amount of mulefat at the southern end. The upland area above the revetment is dominated by weeds and non-native annual grasses. A footpath also exists on the upland area above the revetment. The width between the top of revetment and the fence/wall that delineates the edge of a commercial shopping center varies between 18 feet and 60 feet.

For the reasons listed above, the Commission finds that Malibu Creek itself meets the definition of ESHA under the Coastal Act, but the disturbed west bank in the area of the proposed project does not meet the definition of ESHA under the Coastal Act.

The applicant is requesting authorization to permanently retain approximately 500 linear feet of rock rip-rap revetment that was installed along the west bank of lower Malibu Creek to protect an existing commercial development from flood waters pursuant to Emergency CDP No. 4-98-024-G. The revetment consists of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1.3:1 to 2:1 (H:V) slope (average slope is approx. 1.75:1) and 14-16 feet in height (2-4 foot toe below stream bed). The applicant is also proposing to vegetate the revetment site to create approximately 0.59 acres of riparian and upland habitat. At the time of installation, the proposed rock was placed outside the stream channel and within the footprint of the excavated/eroded stream bank following a severe El Nino storm event. Therefore, no fill of wetland areas occurred at the time of installation.

Pursuant to Coastal Act Section 30236, the substantial alteration of coastal streams is limited to necessary water supply projects, habitat improvement projects, and flood control projects where flood protection is necessary for public safety or to protect existing structures in the floodplain and no other method of protecting the structures is feasible. In this case, prior to placement of the emergency revetment, approximately 20 feet of lateral erosion occurred along the subject stretch of creek bank following significant storm flows in February 1998. The revetment was deemed a necessary measure to temporarily protect an adjacent commercial development from damage as a result of further severe stream bank erosion in the face of potential continuing winter storms. The applicant asserts that the existing rock slope protection is permanently needed in the project location to continue to protect adjacent development from future erosion.

The subject 500 linear foot section of the west bank of lower Malibu Creek is situated along a westward meander cut bank. The hydraulics of the creek will likely erode the west bank, perhaps significantly during a severe storm event, and threaten the existing development if some form of bank protection is not utilized. In this case, the proposed project protects existing development from erosion associated with flooding and is therefore an allowable use under Section 30236.

However, Section 30236 further limits streambed alterations for flood control to situations where no other method for protecting the existing structures in the floodplain is feasible. In addition, Policy 3.34 of the Malibu LCP requires that bioengineering methods should be developed as an alternative to constructing rock revetments, vertical retaining walls or other "hard structures" along lower Malibu Creek. If bioengineering methods are demonstrated to be infeasible, then other alternatives may be considered provided they are demonstrated to be the least environmentally damaging alternatives and are sited and designed to avoid and minimize impacts to the habitat values of the riparian corridor along the creek. In other words, under the policies of the Coastal Act and the Malibu LCP, the project must be the least environmentally damaging feasible alternative.

The various alternatives to the proposed project that have been analyzed are discussed below.

1. **Vegetation of Creek Bank**: This alternative would involve removing the temporary emergency revetment that is in place and vegetating the subject bank with riparian vegetation. The applicant's engineer has indicated that this alternative is not hydraulically suitable to protect the bank because stream power and velocity values along this reach of cut bank exceed what re-vegetation alone is capable of resisting. Shear stresses in the channel exceed 3 lb/sq. ft. for most of the subject channel length, and greater than 5 lb/sq. ft. at the main bend in the project area. The use of vegetation alone for bank protection is not considered appropriate for shear stresses greater than 2.5 lb/sq. ft. Staff finds this analysis to be valid. Therefore, this would not be a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

2. **Vegetation of Upper Bank with Rip Rap in Low Flow Channel**: This alternative would involve removing the temporary emergency revetment that is in place except for the rip rap in the low flow channel and vegetating the upper bank with riparian vegetation. The applicant's engineer has indicated that this alternative is not hydraulically suitable to protect the bank because erosion would occur within the channel behind the rip rap, which would eventually undermine the rip rap and cause it to fail. Staff finds this conclusion to be valid. Therefore, this would not be a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

3. **Vegetation of Creek Bank Using Geotextiles**: This alternative would involve removing the temporary emergency revetment that is in place, with the exception of a rock or concrete footing upon which to anchor geotextile fabric to the bank. The geotextile slope would then be vegetated. The applicant's engineer has indicated that this alternative is not hydraulically suitable to protect the bank because stream power and velocity values along this reach of cut bank exceed what geotextiles are capable of withstanding in the long-term. Concrete block-based geotextiles have a higher velocity and shear tolerance, but due to the steep bank slope and constrained space, this alternative would require more grading and likely placing fill into the creek to achieve sufficient grade. Staff finds this conclusion to be valid. Therefore, this would not be a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

4. **Construction of Concrete Levee or Soil Cement Levee**: This alternative would involve removing the temporary emergency revetment that is in place, and installing a concrete or soil cement levee along the bank. The applicant's engineer has indicated that this

alternative would be hydraulically feasible, but would require significant grading and costs to install. Staff finds this conclusion to be valid. Due to the intensive cost and environmental impacts associated with this alternative, it is not a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

5. **Construction of Crib Wall**: This alternative would involve removing the temporary emergency revetment that is in place, and installing crib walls (a three dimensional structure created from untreated timbers, fill, and live cuttings). Live cribwalls provide a means of long-term streambank stabilization and are best used as part of a system which includes a component to deter undercutting at the bed/bank interface, such as rock riprap or gabions. The applicant's engineer has indicated that this alternative is not hydraulically suitable for banks that experience lateral migration or in locations where bank roughness is an issue, such as the subject site. Staff finds this conclusion to be valid. Therefore this alternative is not a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

6. **Construction of Concrete Floodwall and Vegetation of Creek Bank**: This alternative would involve removing the temporary emergency revetment that is in place, installing a concrete floodwall next to the commercial development, lay back the bank between wall and channel, and vegetate bank. While this alternative would protect the adjacent development from flood waters permanently, the cut bank would continue to erode until there was no longer a natural bank between wall and channel. Such a solution is high cost and in the long run could result in the loss of any vegetated streambank area along this stretch of Malibu Creek. Therefore this alternative is not a feasible alternative that is consistent with all Chapter 3 policies of the Coastal Act.

7. **Laid-back Revetment and Vegetation**: This alternative would involve deconstructing the temporary emergency revetment that is in place, and reconstructing it at a more gradual slope (3:1 or 2:1) and planting with native riparian vegetation. The applicant's engineer has indicated that this alternative would be hydraulically and spatially infeasible. The applicant's engineer modeled this alternative and found that a 3:1 slope would increase water surface elevations by almost 2 feet in some locations, while the 2:1 slope would increase water surface elevations by almost 1 foot in some locations. The modeling also indicated that, on average, the depth of flow during the 100-year discharge event will increase by 0.1 ft. for the subject reach as a whole. This increase in flow depth has the potential to exacerbate flooding in this area and potentially impact adjacent structures. In addition, the limits of grading and construction that would be required by this alternative would extend beyond the boundaries of the subject property. Commission Staff Coastal Engineer, Lesley Ewing, in her memo dated July 18, 2012 (**Exhibit 9**), agrees with the modeling undertaken by the applicant and concurs that the proposed as-built revetment configuration will result in lower overall water level conditions than a 2:1 slope, a 3:1 slope, or a variable 3:1 to 2:1 slope revetment. The Commission required a modified version of this alternative in its previous action. The trial court held that the Commission's action was not supported by substantial evidence in the record.

   Commission staff has received correspondence from the California Department of Parks and Recreation, Heal the Bay, and Santa Monica Baykeeper, all of whom recommend that the subject bank be laid back at a 3:1 slope to widen the channel and thereby reduce

water velocities while also maximizing restoration of the riparian corridor. While a more gradual bank gradient may enhance plant establishment and persistence and also provide greater area for multi-leveled structure of native plants, such an alternative would increase flood levels, would involve greater construction-related impacts to the creek, and would require expensive reconstruction of the revetment. It therefore is not a feasible alternative.

Commission Staff Coastal Engineer, Lesley Ewing, has evaluated the various alternatives and concurs with the analysis of the alternatives presented in the staff report.

Proposed Project: The applicant is requesting permanent authorization for an as-built rip rap revetment, consisting of 1,500 tons of 0.5 to 8-ton granite boulders placed at approximately 1.3:1 to 2:1 (H:V) slope (average slope is approx. 1.75:1) and 14-16 feet in height (2-4 foot toe below stream bed). Technical studies prepared for the project have concluded that channel hydraulics of lower Malibu Creek are not significantly impacted by the proposed project and that the project will not cause erosion or other adverse impacts to adjacent banks. The proposed emergency revetment design will protect the inland area from additional bank erosion. The Federal Emergency Management Agency (FEMA) has mapped the creek bank and the inland area as being within the 100-year flood plain. The revetment is an erosion-reduction structure that addresses erosion associated with flooding and high stream flows. Because it is not intended to contain floods or reduce the likelihood of flooding, however, it will not have a significant impact on inland flooding conditions. Commission Staff Coastal Engineer, Lesley Ewing, concurs with the applicant's engineer that the proposed project is "hydraulically adequate" for its intended purpose to protect the bank from further erosion. In her memo dated July 18, 2012 (**Exhibit 9**), Ms. Ewing also indicates that normally a 1.5:1 revetment slope is considered the minimum needed for slope stability. The emergency revetment was constructed to mirror the creek slope and some sections have a slope that is steeper than 1.5:1. However, the normally accepted stability of a 1.5:1 or gentler slope is based in an unvegetated slope and the added stability from the vegetation plan may enhance the stability of the emergency revetment in areas, such as those that are at a 1.3:1 slope, that have the potential to have some rip-rap rock become dislodged during a large flow event. The applicant's engineer has determined that the emergency revetment, as installed, is stable. The monitoring and maintenance conditions that staff recommends will assure repair and maintenance of any small, potentially problematic areas of the slope protection.

Heal the Bay has asserted that upon surveying the as-built revetment from Malibu Creek they have found evidence of undercutting and loose rock along the bank, which may indicate that the revetment is unstable. Heal the Bay has provided photographs of portions of the revetment that they assert exhibit signs of loosening and undercut. However, staff does not have enough evidence to support that assertion. In addition, the applicant's engineer has examined the rip-rap and found no evidence of failure.

Since the revetment site does not contain much native riparian vegetation, the applicant is proposing to revegetate the area of the revetment site to create approximately 0.59 acres of riparian and upland habitat ("Vegetation Restoration Plan," prepared by Impact Sciences, Inc., dated May 2012). The proposed restoration plan will serve to improve stream and riparian habitat value along the subject section of creek.

To vegetate the existing rock revetment, the applicant has proposed to insert and fasten willow and mulefat cuttings, that are 1-2 inches in diameter and 5 feet long, between the rip-rap boulders. The interstitial spaces of the boulders where cuttings are placed would be filled with a compacted sand/soil mix as a substrate to promote root growth. Fabric would also be used to contain the substrate within the interstitial spaces. Smaller, herbaceous plant species, such as yerba mansa and mugwort, would also be scattered between the tree plantings in selected clusters. The applicant also proposes to plant the upland area above the revetment with a mixture of native shrubs and trees, such as California blackberry, mulefat, sycamore, black walnut, cottonwood, and elderberry. Non-native plant species would be removed. An access and maintenance path, approximately 8 feet in width, would be maintained along the top of the bank. In addition, a temporary irrigation system would be used to ensure establishment of the new plantings.

Commission Staff Ecologist, Dr. Jonna Engel, in her memo dated July 18, 2012 (**Exhibit 10**), indicates that the proposed Vegetation Restoration Plan dated May 2012 contains all of the appropriate components for successful riparian restoration along this stretch of Malibu Creek. She also concludes that restoring native riparian understory and canopy plant species along the bare rip rap will increase the shaded areas of the creek which are preferred by tidewater gobies and will also create a continuous wildlife corridor along the western bank that will greatly facilitate native bird, amphibian, reptile, and mammal movement/migration. Vegetated rip rap will also improve creek water quality by reducing the amount of runoff and sediment entering the system as vegetation will receive and capture runoff and loose materials. Dr. Engel also concludes that the proposed vegetation restoration project will have no adverse impacts on the Malibu Lagoon restoration project that is being undertaken by California Department of Parks and Recreation (State Parks), and that realization of the two projects will increase the overall habitat value of the lower Malibu Creek ecosystem.

As such, from both a biological and engineering standpoint, the bioengineered rip rap slope protection that is proposed is the least environmentally damaging feasible alternative and has been sited and designed to avoid and minimize impacts to the habitat values of the riparian stream corridor of Malibu Creek.

In order to ensure that the proposed vegetation restoration plan is implemented, **Special Conditions Two (2) and Seven (7)** requires implementation of the proposed plan, which shall be carried out under the direction of qualified biologist or resource specialist. Successful site restoration shall be determined if the planting of native plant species on site is adequate to provide 80% coverage by the end of the three (3) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation. The applicant shall submit, upon completion of the initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial planting work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planting work.

Three years from the initial planting completion date, the applicant shall submit for the review and approval of the Executive Director, a Vegetation Monitoring Report, prepared by a qualified biologist or resource specialist that certifies whether the on-site planting is in conformance with the approved vegetation restoration plan. If the monitoring report indicates that the planting is

not in conformance with or has failed to meet the performance standards specified in this condition or in the vegetation restoration plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental vegetation restoration plan for the review and approval of the Executive Director. The revised vegetation restoration plan must be prepared by a qualified biologist or resource specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan. The Executive Director shall determine if an amendment to the permit is necessary for the revised or supplemental vegetation restoration plan. The approved revised vegetation restoration plan must be implemented at the beginning of the next rainy season to enhance the success of the revegetation.

Special Conditions 2, 3, and 7 require that the applicant implement and complete the restoration plan between August 15 and November 15 of either 2012 or 2013, because the fall dormant season is the ideal time for planting and this timing falls outside the months when the majority of bird breeding activities occur (the bird breeding/nesting monitoring laid out in the "Vegetation Restoration Plan", Impact Sciences Inc., dated August, 2007, and amended May 2012, must occur through the end of September because some birds may still be engaged in breeding activities through September). In addition, although this vegetation restoration project will have little, if any, adverse impact on the Malibu Creek ecosystem, this timing coincides with the dry season and is outside the estimated peak period of tidewater goby spawning and during the non-migration period of southern steelhead. This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director.

The project, as revised, would involve some soil disturbance and vegetation removal along the bank. The work will take place along a bank that has obviously been disturbed over the years, both by the erosive forces of Malibu Creek and by disturbance from adjacent development in the floodplain. As such, the subject bank is not considered ESHA. However the project area is adjacent to the Malibu Creek channel that is considered to be ESHA and the potential exists for impacts to the water quality of the creek, particularly from erosion of sediment from the site.

Although implementing the project will ultimately enhance the habitat value of lower Malibu Creek, there is potential for impacts to water quality and biological productivity of Malibu Creek through the release of sediment. Soil disturbance and vegetation removal adjacent to the creek could result in the discharge of sediment into Malibu Creek, causing increased turbidity and adversely affecting fish and other sensitive aquatic species. Sediment is considered a pollutant that affects visibility through the water, and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. Sediments may physically alter or reduce the amount of habitat available in a watercourse by replacing the pre-existing habitat structure with a stream-bottom habitat composed of substrate materials unsuitable for the pre-existing aquatic community. In addition, sediment is the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles. It is particularly critical that these impacts are avoided given the presence of endangered southern steelhead and tidewater goby in Malibu Creek and Lagoon during certain times of the year.

Conducting work when stream flows are minimal during the dry season will minimize erosion into the creek, associated turbidity, and will minimize the potential for disturbing local

amphibians and fishes. As such, **Special Condition Three (3)** outlines construction timing and best management practices to be implemented during all approved work activities.

Although the conditions described above render the project sufficiently stable to satisfy the requirements of Section 30253, no project is wholly without risks. Due to the fact that the project is located in an area subject to an extraordinary potential for damage or destruction from erosion and flood flows, those risks remain substantial here. If the applicant nevertheless chooses to proceed with the project, the Commission requires the applicant to assume the liability from these associated risks. Through the assumption of risk condition, the applicant acknowledges the nature of the flood flow and erosion hazard that exists on the site and that may affect the safety of the development. Therefore, **Special Condition One (1)** is required, as determined in the findings above, to assure the project's consistency with Section 30253 of the Coastal Act and as a response to the risks associated with the project.

To ensure that the permitted bank protection is maintained in its approved state and future repairs or additions to the approved structure receive the appropriate approvals, **Special Condition Eight (8)** requires the applicant to contact the Executive Director for a determination of whether a coastal permit or permit amendment are legally required when it is apparent that repair and maintenance is necessary. **Special Condition Ten (10)** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the property and thereby provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property.

In addition, **Special Condition Four (4)** specifies that the applicant is required to obtain all other Local, State, and/or Federal permits that may be necessary for all aspects of the approved project (including any necessary permits from the California Department of Fish and Game, Regional Water Quality Control Board, and the U.S. Army Corps of Engineers).

In order to ensure that the project, as required to be revised, is implemented in a timely manner, **Special Condition Six (6)** requires that the applicant satisfy all conditions of this permit which are prerequisite to the issuance of this permit within 90 days of Commission action. The Executive Director may grant additional time for good cause.

In order to ensure that the terms and conditions of this permit are adequately implemented, **Special Condition Five (5)** authorizes Commission staff to enter onto the property (subject to 24 hour notice to the property owner) to undertake site inspections for the purpose of monitoring compliance with the permit.

Finally, pursuant to **Special Condition Nine (9)**, the applicant shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the applicant against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

As such, the Commission finds that, as conditioned, the project will (a) protect the ESHA from any significant disruption of habitat values, (b) not significantly degrade adjacent ESHA, (c) be compatible with the continuance of the habitat area, (d) restore the biological productivity and water quality of Malibu Creek to maintain optimum aquatic populations, and (e) minimize risks to life and property and assure stability. Therefore, the project, as conditioned, is consistent with Section 30230, 30231, 30236, 30253, and 30240 of the Coastal Act. In addition, the project, as conditioned, is consistent with Policy 3.34 of the Malibu LCP, which the Commission uses as guidance.

C. VISUAL RESOURCES

Section 30251 of the Coastal Act states, in part:

> *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.*

Section 30251 of the Coastal Act requires scenic and visual qualities to be considered and preserved. Section 30251 also requires that development be sited and designed to protect views of scenic areas, minimize alteration of landforms, and be visually compatible with the surrounding area.

The project is located along a 500-foot section of the west bank of lower Malibu Creek, approximately 300 feet upstream from Pacific Coast Highway and Malibu Lagoon State parkland. The project site is located on a narrow, approximately 2.5-acre strip of vacant land owned by the applicant that is bound by a commercial shopping center development to the west and Malibu Creek and State parkland to the east. The subject site is visible from State parkland to the east, as well as Pacific Coast Highway to the south, a designated scenic highway.

The as-built rock revetment consists of light colored rock that is almost entirely devoid of natural vegetation that would have acted to screen views of the armored stream bank from public viewing areas. As such, the proposed project will include the revegetation of the bank and revetment with willows or other riparian plant species, and the planting of the area adjacent to and above the revetment with a diverse mix of riparian and upland native plants. As conditioned, the revised revetment will be vegetated and the area landward of the revetment will be vegetated with plants appropriate for the riparian and upland areas of the project site. This will reduce the reflective effect of the light colored rocks and soften, if not obscure, the view of the revetment from Malibu Creek State Beach and other public viewing areas.

The following special conditions are required to assure the project's consistency with Section 30251 of the Coastal Act:

Special Condition 2. Revised Vegetation Restoration Plan, Implementation and Monitoring
Special Condition 3. Vegetation Restoration Timing and Best Management Practices
Special Condition 6. Condition Compliance

Special Condition 7. Implementation of Approved Project

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30251 of the Coastal Act.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, 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 that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, project alternatives and mitigation measures have been considered and incorporated into the project. Five types of mitigation actions include those that are intended to avoid, minimize, rectify, reduce, or compensate for significant impacts of development. Mitigation measures required to minimize impacts to coastal resources include requiring implementation and monitoring of the proposed vegetation restoration plan, restoration timing and best management practices, and requiring future improvements to be considered through a CDP.

The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through 11

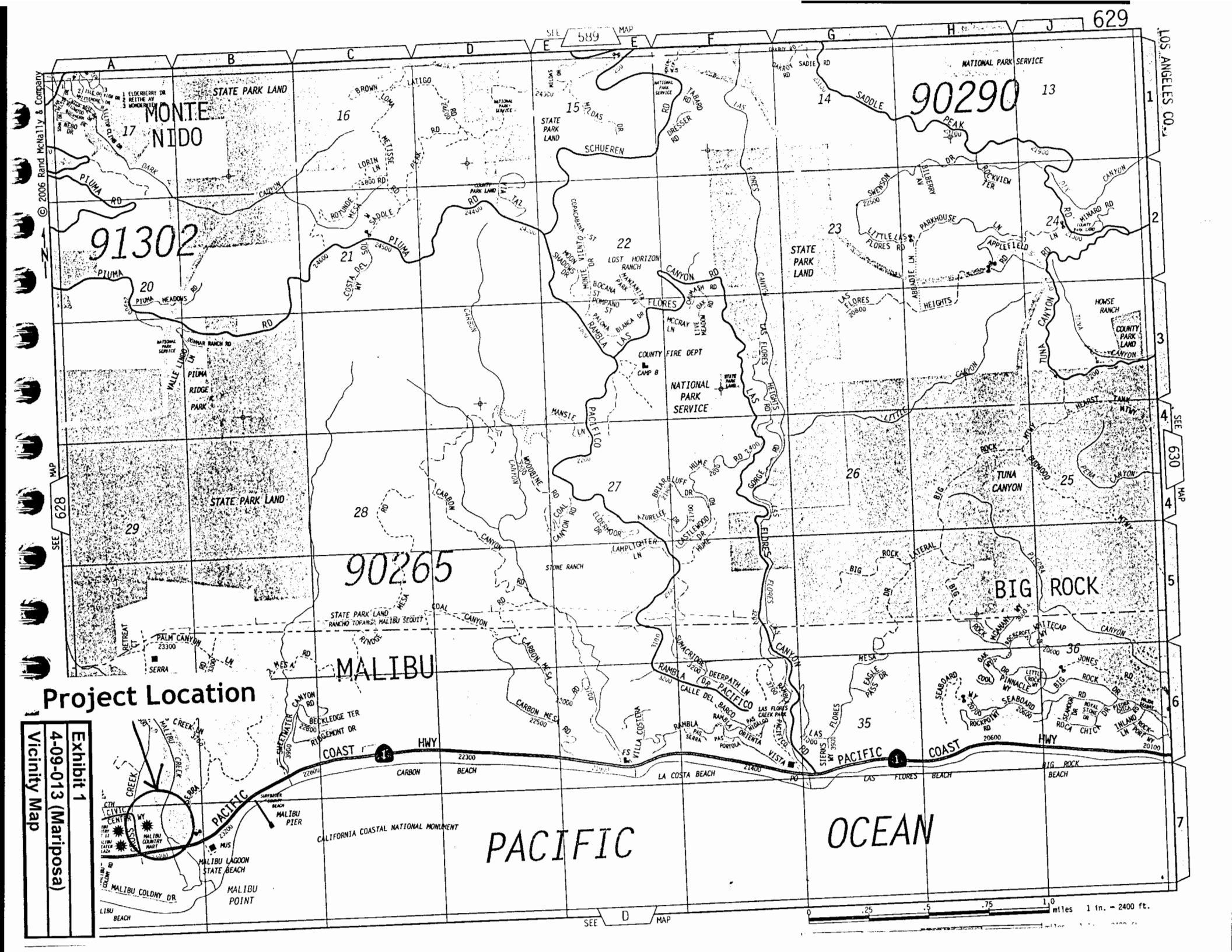
As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX 1

CDP APPLICATION NO. 4-09-013

LIST OF SUBSTANTIVE FILE DOCUMENTS

Certified City of Malibu LCP; City of Malibu Approval-in-Concept, dated June 28, 2007; Emergency Coastal Development Permit No. 4-98-024-G (Mariposa Land Company); U.S. Army Corps of Engineers Regional General Permit No. 98-00315-AOA for emergency placement of rip-rap revetment, issued February 13, 1998; U.S. Army Corps of Engineers Jurisdictional Determination letter for the proposed vegetation restoration plan, dated March 6, 2008; Notification of Emergency Streambed Alteration Work for revetment sent to California Department of Fish & Game February 19, 1998 (no agency response); California Department of Fish & Game letter stating statutory deadline had lapsed to issue an agreement regarding Streambed Alteration Notification No. 1600-2005-0503-R5 (vegetation restoration plan), dated January 13, 2008; "Emergency Regional General Permit No. 52," Regional Water Quality Control Board, Los Angeles Region; "City of Malibu Initial Study 03-003 and Mitigated Negative Declaration 04-002, dated July 7, 2005; "Lower Malibu Creek and Lagoon Resource Enhancement and Management Plan," by Richard Ambrose and Anthony Orme, dated May 2000; "Preliminary Engineering Design Study for Lower Malibu Creek Emergency Revetment," prepared by Pacific Advanced Civil Engineering Inc. (PACE), dated March 28, 2006; "Addendum to the Preliminary Engineering Design Study for Lower Malibu Creek Emergency Revetment," prepared by PACE, dated May 25, 2007; "Response to Comments" Memo, by PACE, dated October 18, 2007; "Evaluation of Biological Impacts of Bank Stabilization Project," prepared by Hunt & Associates Consulting Biologists, dated September 5, 2000; "Floodplain Analysis for Rock Levee along Malibu Creek," prepared by Land Design Consultants Inc., dated September 23, 1998; "Vegetation Restoration Plan,", prepared by Impact Sciences Inc., dated August 2007; January 9, 2009 Letter from Impacts Sciences, Inc. Regarding Modification to the "Vegetation Restoration Plan"; Riprap Installation Letter by Roy Brothers' Drilling Company, dated January 7, 2009; Memoranda by Commission Ecologist Dr. Jonna Engel, dated July 18, 2012, April 2, 2012, and January 9, 2009; Memoranda by Commission Coastal Engineer Lesley Ewing, dated July 18, 2012, January 7, 2009, and June 23, 2009; "Biological Analysis Malibu Creek Riprap Replacement," by Impact Sciences, dated April 3,2009; Memorandum by PACE, dated March 24, 2009, regarding HEC-RAS modeling results of staff recommendation; Technical Memoranda by PACE, dated August 5, 2009 and January 26, 2010; "Vegetation Restoration Plan,", prepared by Impact Sciences Inc., dated May 2012.



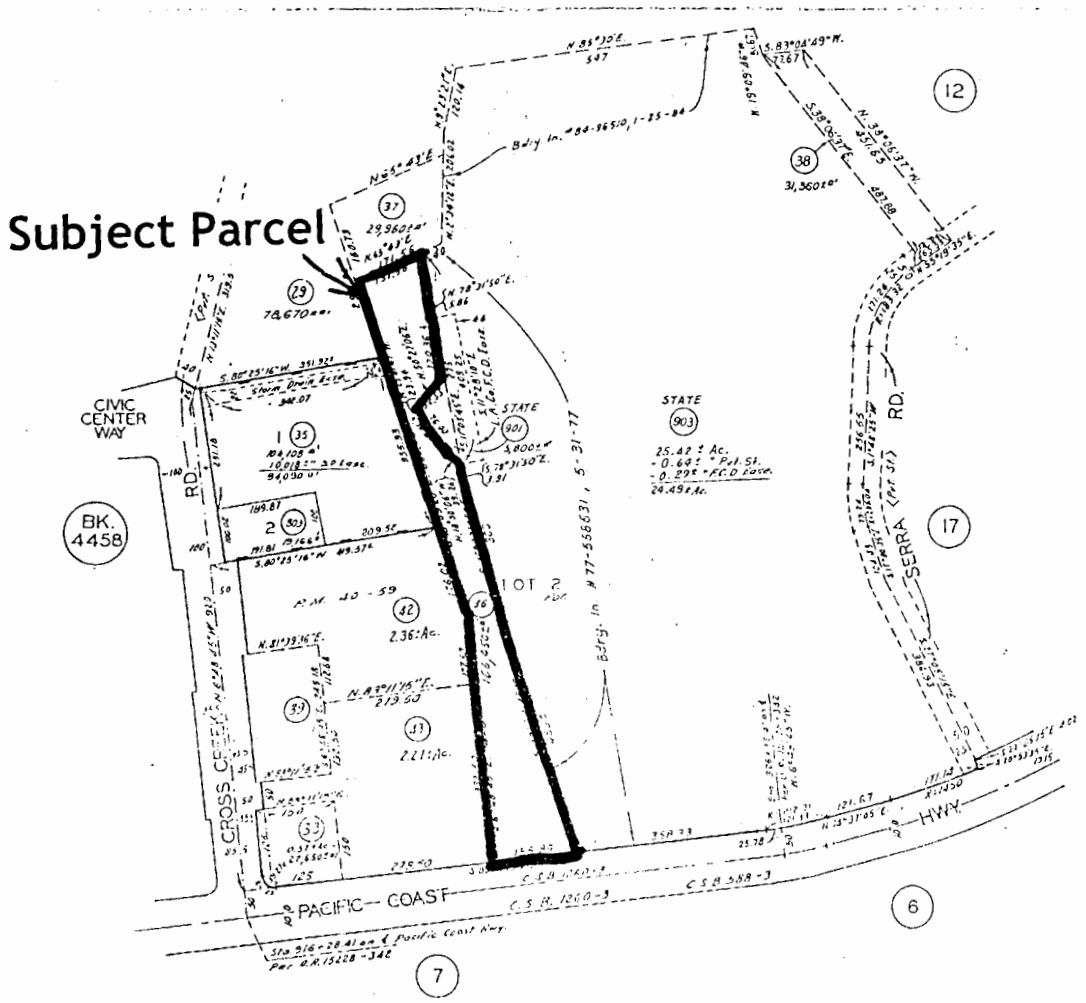
Project Location

Exhibit 1
4-09-013 (Mariposa)
Vicinity Map

4452 | 11

SCALE 1" = 200'

1992



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910606

CODE 10850

TAX PREV. ASSMT SEE: 4452-11 & 12

PARCEL MAP _ _ P. M. 166 - 6 - 7

LAND OF MATTHEW KELLER IN THE RANCHO TOPANGA MALIBU SEQUIT R.F. 534

ASSESSOR'S MAP COUNTY OF LOS ANGELES, CALIF.

Exhibit 2
4-09-013 (Mariposa)
Parcel Map

Exhibit 3
4-09-013 (Mariposa)
Aerial View (1 of 2)

Exhibit 3
4-09-013 (Mariposa)
Aerial View (2 of 2)

Exhibit 4
4-09-013 (Mariposa)
Site Photos (1 of 2)

Exhibit 4
4-09-013 (Mariposa)
Site Photos (2 of 2)

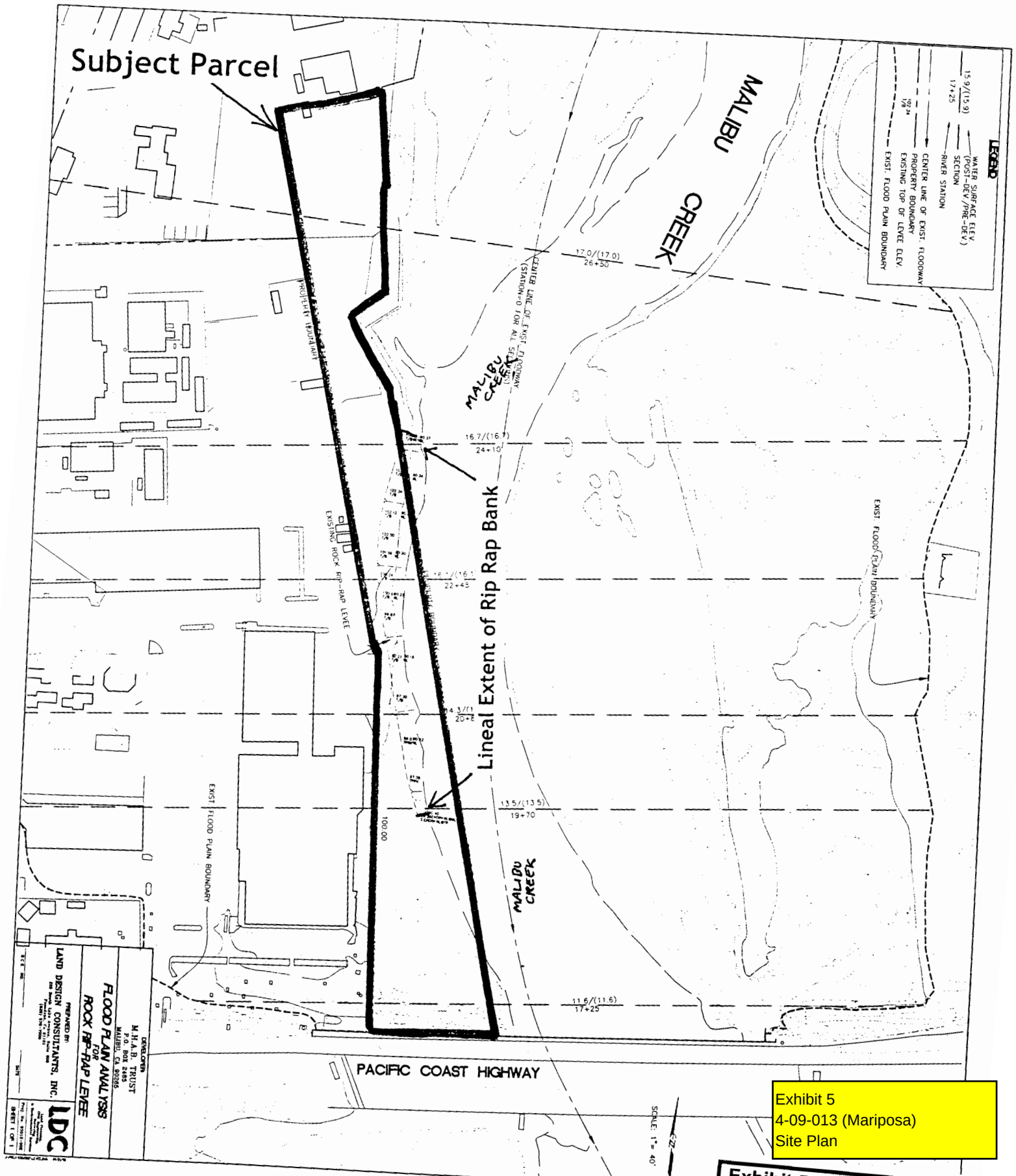
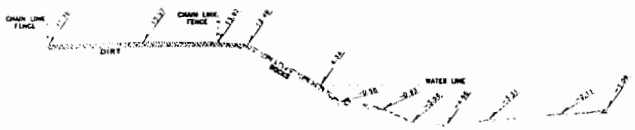


Exhibit 5
4-09-013 (Mariposa)
Site Plan

Exhibit 5
4-09-013 (Mariposa)

Exhibit 6
4-09-013 (Mariposa)
Surveyed Site Plan with Cross Sections

SECTION VIEW "C-C"



65% Slope
Top of Bank to Property Line: 45 ft.

SECTION VIEW "D-D"

81% Slope
Top of Bank to Property Line: 19 ft.

SECTION VIEW "E-E"

85% Slope
Top of Bank to Property Line: 18 ft.

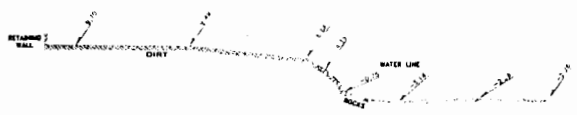
SECTION VIEW "F-F"

73% Slope
Top of Bank to Property Line: 22 ft.

SECTION VIEW "G-G"

100% Slope
Top of Bank to Property Line: 35 ft.

SECTION VIEW "H-H"



75% Slope
Top of Bank to Property Line: 58 ft.

SECTION VIEW "I-I"

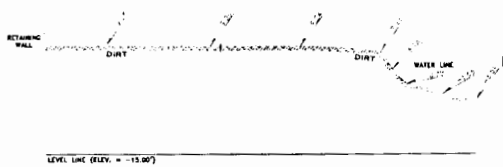


EXHIBIT 6

Mariposa Land Company

Vegetation Restoration Plan - Malibu Creek

Prepared By:

IMPACT SCIENCES, INC.

803 Camarillo Springs Road, Suite A
Camarillo, California 93012

Exhibit 7
4-09-013 (Mariposa)
Proposed Vegetation
Restoration Plan (May 2012)

May 2012

Vegetation Restoration Plan

for the
Mariposa Land Property at Malibu Creek

City of Malibu, California

Prepared for Approval by:

The California Department of Fish and Game (CDFG)
The California Coastal Commission (CCC)

Requested by:

Mariposa Land Company
23852 Pacific Coast Highway #368
Malibu, California 90265

Prepared by:

Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012
Phone: (805) 437-1900
Contact: Daryl Koutnik
Principal

August 2007
Updated May 2012

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INTRODUCTION

This Vegetation Restoration Plan for the Mariposa Land Company property along lower Malibu Creek details necessary mitigation for impacts to jurisdictional waters and streambeds resulting from emergency bank protection measures implemented during the high stormwater flows experienced during the winter and spring of 1998. These impacts include those to "waters of the U.S." under federal and state jurisdiction, streambeds under California Department of Fish and Game (CDFG) jurisdiction, and land regulated by the California Coastal Commission (CCC) resulting from the placement of approximately 500 linear feet of rip-rap on the west bank of lower Malibu Creek, upstream from the Malibu Creek Bridge where the Pacific Coast Highway (PCH) crosses the creek.

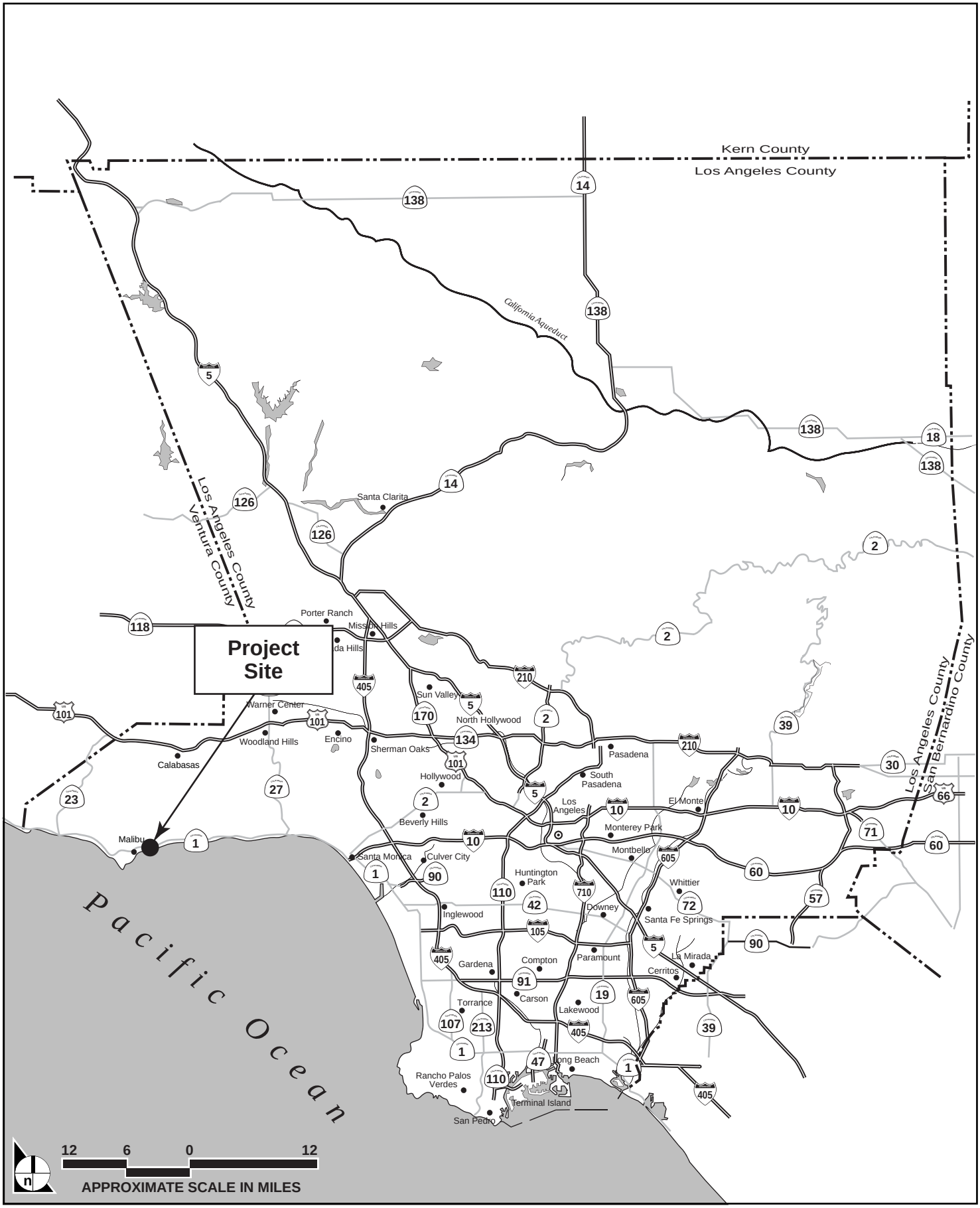
Specifically this plan will address:

- measures to mitigate for the installation of a protective revetment to a cut bank section of the creek;
- specific locations of mitigation;
- restoration goals and performance standards, including details of monitoring and maintenance activities;
- contingency plans; and
- specific funding obligations by the applicant that will be required to successfully carry out all procedures outlined in this MMP.

The overall goal of this restoration plan is to create riparian and adjacent upland habitat, while maintaining minimal erosion and lessening the visual impacts created by the placement of the rip-rap.

Project Location

The project site is located on the west side of Malibu Creek, upstream of the Malibu Creek Bridge, extending north approximately 500 feet (**Figure, Regional Location 1** and **Figure 2, Project Location**). The site is bounded by the creek and relatively undisturbed riparian habitat across the creek to the east, to the west by the Cross Creek Shopping Center and associated parking lot, to the south (downstream) by Malibu Lagoon and the Pacific Ocean, and industrial and storage usage to the north. The project site is within the City of Malibu, California.



SOURCE: Impact Sciences, Inc. – August 2006

FIGURE **1**

Regional Location

SOURCE: Google Earth – 2007, Impact Sciences, Inc. – July 2007

FIGURE **2**

Project Location

908-001•07/07

Project Description

During the wet season of 1997–98, heavy rainstorms resulted in high stormwater flows in lower Malibu Creek that caused severe erosion to the easternmost boundary of the property at 3738 Cross Creek Road. Approximately 0.25 acre of land was lost, the creek flows along the eroded cut-bank threatened to continue to further impinge upon the property. At that time the owner of the property, Mariposa Land Company, applied for and received emergency authorizations to armor the outside curve of the creek adjacent to its property to protect it from further erosion. Approximately 1,400 tons of rip-rap, ranging in size from 0.5 ton to 8 tons, was placed along the western bank of the creek, starting 300 feet north of the Malibu Creek Bridge and extending approximately 500 feet upstream. The work was started in February of 1998 and concluded in May of the same year. At the time, the rapid erosion of the bank did not allow time to explore alternatives to the installation of the revetment.

Ownership and Responsible Parties

Mariposa Land Company
23852 Pacific Coast Highway #368
Malibu, California 90265
Attention: Grant Adamson

Emergency Project Permits Obtained (1998):

- Army Corps of Engineers (ACOE) – Emergency Regional General Permit No. 52 (with concurrence from the United States Fish and Wildlife Service [USFWS]) (Permit No. 98-00315-AOA)
- California Department of Fish and Game (CDFG) – Applicant submitted a "Notification of Emergency Stream Alteration Work Pursuant to Fish and Game Code Sections 160–1603"
- California Regional Water Quality Control Board (RWQCB), Los Angeles Region – Emergency Regional General Permit No. 52
- California Coastal Commission – Emergency Coastal Development Permit (Permit No. 4-98-024-G)

Subsequent Project Permits Obtained or Applied For:

- City of Malibu – (Mitigated) Negative Declaration No. 04-002 – Submitted July 7, 2005
- CDFG – Section 1600 Notification for Lake or Streambed Alteration (Permit No. 1600-2005-0503-R5) – Application submitted July 15, 2005
- ACOE – Section 404 Department of the Army Permit – Application submitted September 28, 2005

SITE DESCRIPTION

Existing Site Conditions

Topography and Hydrology

The topography of the site is relatively flat, sloping upward slightly to the north. The site is located within the 100-year floodplain for Malibu Creek as designated by the Federal Emergency Management Agency (FEMA).

A considerable number of hydrologic studies conducted in Malibu Creek demonstrate that the water levels in the creek are dependent on whether the mouth of Malibu Lagoon is closed to tidal influence by sand and sediment deposits, or whether the lagoon is open to tidal waters. Typically the lagoon is closed by deposits and tidal action and inflows of salt water are not significant. Under these conditions, the water level in this portion of the creek ranges between 6 and 7 feet in depth (per hydrology study by Pacific Advanced Civil Engineering).

Riparian Vegetation

Due to the absence of substrate among the individual boulders in the revetment, substantial vegetation has not reestablished along the 500-foot stretch of the western bank of lower Malibu Creek adjacent to the Mariposa Land property. However, towards the northern end of the rip-rap emplacement some arroyo willow (*Salix lasiolepis*) has established as well as some mulefat (*Baccharis salicifolia*) towards the southern end.

The eastern bank of lower Malibu Creek is relatively undisturbed and supports significant growth of riparian vegetation, primarily comprised of large stands of arroyo willow and several western sycamores (*Platanus racemosa*).

Upland Vegetation

Upland vegetation on the site is currently dominated by a mix of non-native annual grasses and weed species, including black mustard (*Brassica nigra*), castor bean (*Ricinis communis*), sweet fennel (*Foeniculum vulgare*), yellow star thistle (*Centaurea melitensis*), sweet clover (*Melilotus alba*), cheese weed (*Malva parviflora*), crown daisy (*Chrysanthemum coronarium*), perennial pepperweed (*Lepidium latifolium*), and horseweed (*Conyza canadensis*). Trees on the property are limited to two Canary Island Palms (*Phoenix canariensis*) and an occasional small seedling toward the southern end of the site and a row of Monterey cypress (*Cupressus macrocarpa*) at the northern end. Some coyote brush (*Baccharis pilularis*) grows in the

upland portion of the property, however much of the ground surface remains bare soil. Periodically, brush control occurs on the site at the discretion of the land owner.

Photographs depicting the current condition of the site are provided in **Figure 3**.

Jurisdictional Waters and Streambeds

Functional Assessment

All open space performs multiple ecological functions. The degree to which functions are performed depends on both physical (e.g., location, size, soils, and available moisture) and biological (e.g., species dominance, composition, diversity, and spacing) characteristics. Examples of ecological functions provided by ACOE and CDFG jurisdictional aquatic resources include wildlife habitat, biofiltration, groundwater recharge, stormwater attenuation, shoreline or streambank stabilization, and sediment movement or trapping.

PROJECT IMPACTS

Impacts to Jurisdictional Waters and Streambeds

The impacts to jurisdictional waters were completed approximately nine years ago when the rip-rap was placed along the west bank of lower Malibu Creek. The finished revetment slope is approximately 1.3:1 in the steepest slope and 15 feet in height. The area of impact was along 500 linear feet of shoreline.

MITIGATION PLAN

Goals

- Protect the cut-bank along a 500-foot section of Malibu Creek;
- Revegetate the remainder of the undeveloped area between the Malibu Creek and the Cross Creek Shopping Center to create approximately 0.585 acre of riparian and associated upland habitat (0.701 total acre on site minus 0.116 acre of the access path);
- Improve the aesthetics of Malibu Creek as seen from Malibu Lagoon, the Pacific Coast Highway and from the adjacent Cross Creek Shopping Center; and
- Establish an access path on the site to limit intrusion into the revegetation area. The path will also be just wide enough to accommodate a pickup truck for access and maintenance purposes.

Photo 1 – South end of site

Photo 2 – North end of site

SOURCE: Impact Sciences, Inc. – August 2007

FIGURE **3**

Photographs Depicting Current Site Conditions

Proposed Mitigation

The enhancement of the riparian corridor along lower Malibu Creek will mitigate for the impacts related to the emergency bank stabilization. Due to the emergency nature of the original authorizations, no specific mitigation requirements and/or ratios were defined by the permitting agencies. As such, most of the undeveloped area from the west bank of Malibu Creek to the retaining wall that borders the east edge of the Cross Creek Shopping Center will be replanted. This enhancement of the riparian corridor will include the following:

- Willow and mulefat cuttings will be installed along the length of the revetment to begin to fill in the interstitial spaces in the rip-rap and create overhanging vegetation adjacent to Malibu Creek. Once willows and mulefat have established, the interstitial spaces may be filled with sand or fine gravel as a substrate for additional plantings (estimated to take place during year three).

- Habitat value will further be improved by planting the upland areas with a mixture of native shrubs and trees, including mulefat (*Baccharis salicifolia*) and Mexican elderberry (*Sambucus mexicana*), and trees such as sycamore (*Platanus racemosa*), black walnut (*Juglans californica*), and Freemont cottonwood (*Populus freemontii*). As the canopy begins to close (also estimated to take place during year three), shade-tolerant vegetation will be planted to further fill out the understory.

- Habitat for tidewater goby (*Eucyclogobius newberryi*) will be enhanced upstream of Malibu Lagoon by the planting of the willows directly adjacent to Malibu Creek as well as the sycamore and walnut trees in the upland areas. In the afternoon, these plantings will increase the shaded areas of the creek preferred by the goby.

- Planting of vegetation will improve the aesthetics of this stretch of Malibu Creek.

- An undefined trail currently exists on the site. Defining a path will allow continued use, and will protect the planted area from being trampled.

The Planting Plan (**Figure 4**) provides details of the mitigation, including planting and access path locations.

PRE-CONSTRUCTION MITIGATION

Pre-Construction Surveys for Common and Special-Status Bird Nests

Within 30 days prior to ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet (500 feet for raptors) of the construction zone. The surveys shall continue on a weekly basis with the last survey being

Project Boundary

Canary Island palms (existing)

Access Path

Legend:

Salix lasiolepis	Arroyo willow
Populus fremontii	Fremont cottonwood
Muhlenbergia rigens	Deergrass
Rubus ursinus	California blackberry
Leymus condensatus	Giant wild rye
Baccharis salicifolia	Mulefat
Sambucus mexicana	Mexican elderberry
Juglans californica	Black walnut
Platanus racemosa	California sycamore

Note: California wild rose (Rosa californica) will be planted once the above-mentiond plantings have established (estimated for year three). Planting locations will be site-determined based on conditions at that time.

50 25 0 50

APPROXIMATE SCALE IN FEET

SOURCE: Impact Sciences, Inc. - July 2007

FIGURE **4**

Planting Plan

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conducted no more than three days prior to initiation of clearance/construction work. If ground-disturbing activities are delayed for more than seven days past the pre-construction survey, then additional pre-construction surveys will be conducted such that no more than seven days will have elapsed between the survey and ground-disturbing activities.

If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits on construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. The results of the survey, and any avoidance measures taken, shall be submitted to CDFG within 30 days of completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

If any areas of impact are scheduled to occur outside the specified time period, Impact Sciences shall be notified and consulted as to whether surveys are necessary.

MITIGATION SUPERVISION

A project biologist experienced in restoration ecology will be retained to coordinate the implementation of this vegetation restoration plan, and will periodically monitor work conducted in the restoration areas for compliance. This person will serve as a liaison between the property owner, the contractor, and the resource/regulatory agencies. The project biologist shall ensure that the mitigation plan is implemented consistent with the requirements of the Streambed Alteration Agreement and the CCC, in a way that will maximize the likelihood of success of the mitigation. The project biologist will be empowered to make minor modifications to the implementation of the mitigation plan based on field conditions and unforeseen circumstances. However, any deviation from this plan shall be reported to the responsible parties for the mitigation implementation, including the developer and the resource agencies.

Mitigation Site Preparation

The site will not be graded. However, a defined access path will be constructed to take the place of the informal trail that currently bisects the site. The meandering access path will be 8 feet in width (to accommodate a maintenance pickup truck) and maintain at least a 10-foot setback from the streambank, or as much as existing structures will allow. The path's location is depicted in the Planting Plan (**Figure 4**).

Weeding and other non-native plant species removal will take place by hand prior to the revegetation. This process is further explained below.

PLANTING PLAN

Non-Native Plant Eradication

Invasion of non-native, exotic plants is a threat to the success of most mitigation projects. Exotic species may quickly colonize riparian areas, particularly after manmade or natural disturbances have occurred, and may dominate the vegetation by out-competing native plant species. Once established, the competitive nature of many exotic plants makes it difficult for native species to become re-established and grow. On the Mariposa Land Company site, nearly every non-native species that occurs requires full sun to survive. The emphasis of this plan is to promote tree cover whose shade will eliminate the habitat for these species. In addition to eliminating the habitat for existing exotic plants to become established, a comprehensive weed eradication program shall be implemented to minimize the adverse effects of weed invasion. Mechanical, chemical, and/or biological control measures will be used, as appropriate, to control weed infestation of the site.

Control of the non-native species is important in the short-term until the habitat on the site is altered by the shade provided by the planted trees and shrubs. Mowing and/or hand clearing must be performed selectively so as not to damage desirable native species, especially those planted.

Some of the most prevalent non-native plant species known to occur in the area that will be removed if present on the site are listed below in **Table 1**. This table may not include all non-native plant species found in the mitigation area. The monitoring biologist shall determine weed species to be targeted and native plants to remain.

Note: Two mature Canary Island Palms are present on the site and are designated to remain in place. However, any seedlings from these trees shall be removed.

Table 1
Non-Native Plant Species that Shall be Controlled if Present on the Mariposa Land Company Site
(See reference list at the end of the table)

Scientific Name	**Common Name**
Ageratina adenophora	Sticky eupatory
Ailanthus altissima	Tree of heaven
Anthriscus caucalis	Bur chervil
Aptenia cordifolia	Baby sun rose
Arctotheca calendula	Cape weed
Arundo donax	Giant reed
Asphodelus fistulosus	Asphodelus
Atriplex sembiccata	Australian saltbush
Avena barbata	Slender wild oat
Avena fatua	Wild oat
Bassia hyssopifolia	Bassia
Bellardia trixago	Mediterranean linseed, garden bellardia
Brassica tournefortii	Moroccan mustard
Bromus hordeaceus	Soft chess
Bromus madritensis	Foxtail chess
Cardaria chalapense	Lens-pod
Cardaria draba	Hoary cress
Cardaria pubescens	White-top
Carduus pycnocephalus	Italian thistle
Carpobrotus chilensis	Sea fig, Iceplant
Carpobrotus edulis	Ice plant
Catharanthus roseus	Madagascar periwinkle
Centaurea melitensis	Tocalote
Chenopodium album	Lamb's quarters, Pigweed
Chenopodium murale	Nettle-leaved goosefoot
Chrysanthemum coronarium	Garland or crown daisy
Conicosia pugioniformis	Narrow-leaved iceplant
Conium maculatum	Poison hemlock
Cortaderia jubata	Jubata grass
Cortaderia selloana	Pampas grass
Cotoneaster lacteus	Cotoneaster
Cotoneaster pannosus	Cotoneaster
Cynara cardunculus	Artichoke thistle, Cardoon
Cynodon dactylon	Bermuda grass
Cyperus difformis	Umbrella sedge
Cytisus canariensis	Canary Island broom
Cytisus striatus	Portuguese broom
Datisca glomerata	Durango root

Scientific Name	**Common Name**
Delairea odorata	Cape ivy (German ivy)
Descurainia sophia	Tansy mustard
Digitalis purpurea	Foxglove
Ehrharta calycina; E. erecta; E. longiflora	Veldt grass
Erechtites glomerata	Cutleaf fireweed
Erechtites minima	Australian fireweed
Eucalyptus spp.	All Eucalyptus species
Eupatorium (Ageratina) adenophorum	Eupatory
Euphorbia esula	Leafy spurge
Foeniculum vulgare	Fennel
Genista monspessulana	French broom
Gunnera tinctoria	Gunnera
Halogeton glomeratus	Halogeton
Hedera canariensis	Algerian ivy
Hedera helix	English ivy
Hordeum jubatum	Foxtail barley
Lactuca serriola	Prickly lettuce
Lepidium latifolium	Perennial pepperweed
Lobularia maritima	Sweet alyssum
Lolium multiflorum	Italian ryegrass
Lolium perenne	Perennial ryegrass
Lonicera japonica	Japanese honeysuckle
Leucanthemum vulgare	Ox-eye daisy
Lythrum spp.	Loosestrife
Malephora crocea	Iceplant
Malva parviflora	Cheeseweed, Little mallow
Marrubium vulgare	Horehound
Melilotus alba, M. officinale, M. indicus	All sweetclover species
Mentha pulegium	Pennyroyal
Mesembryanthemum crystallinum	Crystalline iceplant
Myoporum laetum	Myoporum
Nerium oleander	Oleander
Nicotiana glauca	Tree tobacco
Ottelia alismoides	Ottelia
Oxalis pes-caprae	Bermuda buttercup
Oxalis rubra	Oxalis
Parentucellia viscosa	Parentucellia
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	Fountain grass
Phalaris aquatica	Harding grass
Phyla (Lippia) nodiflora	Lippia
Picris echioides	Bristly ox-tongue
Piptatherum miliaceum	Smilo grass

Scientific Name	**Common Name**
Poa pratensis	Kentucky bluegrass
Raphanus sativus	Radish
Ranunculus muricatus	Buttercup
Retama monosperma	Bridal veil broom
Rhus lancea	African Sumac
Ricinus communis	Castor bean
Rumex conglomeratus	Whorled dock
Rumex crispus	Curly dock
Salix alba	White willow
Salsola spp.	Tumbleweed
Salsola tragus	Russian thistle, Tumbleweed
Schismus arabicus; S. barbatus	Mediterranean grass
Senecio mikanioides (see Delairia odorata)	German ivy
Silybum marianum	Milk thistle
Sisymbrium irio	London rocket
Sisymbrium officinale	Hedge mustard
Sisymbrium orientale	Oriental mustard
Sorghum halepense	Johnsongrass
Spartium junceum	Spanish broom
Tamarix aphylla	Athel
Tamarix ramosissima, T. chinensis, T. gallica, T. parviflora	Salt cedar, tamarisk
Tropaeolum majus	Garden nasturtium
Verbascum spp.	Mullein
Veronica anagallis-aquatica	Speedwell, brooklime
Vinca major	Greater periwinkle
Vulpia myuros	Rattail fescue

Sources: California Native Plant Society. 1992. Non-Native Invasive Plants in the Santa Monica Mountains; Dudley, T. 1998. Exotic Plant Invasions in California Riparian Areas and Wetlands. Fremontia 26(4): 24–29; California Exotic Pest Plant Council. 1996. List of Exotic Pest Plants of Greatest Ecological Concern in California; Bossard, et al. 2000. Invasive Plants of California's Wildlands. Univ. of California Press.

Methods of Control for Non-Native Species

Removal of all non-native species shall be timed such that removal efforts are completed before fruits or seeds are produced.

In the riparian corridor, only chemicals approved for aquatic use may be used. Rodeo is an effective herbicide on many non-native species. Surfactants shall not be used. Herbicides shall not be used when wind velocities are greater than 5 mph. Herbicides may not be used where Threatened or Endangered species occur.

Project Implementation - Timing

The vegetation restoration work will occur between August 15 and November 15 (late summer and fall) to avoid or minimize potential disturbance or impacts to breeding bird activities, which may continue through the end of September. Most plant species recommended for this revegetation plan are dormant during the late summer and fall, which increases the probability of cutting establishment success. Late summer to fall planting also avoids peak spawning season for the tidewater goby, reducing and minimizing impact to tidewater goby, as well as to potential Southern steelhead migration. Water flow is lowest prior to the onset of the fall-winter rainy season so any sediment entering the Malibu Creek has a high probability of quickly settling to the bottom close to the point of entry.

Inspection upon Delivery

The project biologist shall be on site to inspect any plants purchased for the mitigation at the time of delivery and after planting and weeding activities. All plants used in this mitigation plan shall be certified as free of Argentine ants.

Container-Grown Planting Technique

For planting container-grown plants, dig a hole twice as deep and twice as wide as the plant container. Remove medium to large rocks from the bottom of the hole, leaving sandy soil for the plants to grow in. No fertilizers should be added, as most native plants adapted to this type of riparian corridor are able to accumulate nutrients, even in poor soils.

Fill the planting hole with water and allow it to percolate (drain) into subsoil. Backfill material into the hole, moisten and tamp mound slightly. Set plant root ball atop the moistened backfill so that plant collar is 1 inch higher than finished grade. Fill any remaining portion around top of root ball with backfill and the medium to large rocks removed from the hole. Be sure plant collar remains higher than natural grade.

Create an irrigation basin berm outside of the perimeter of the hole using remaining backfill and native sand and gravels. Irrigate sufficiently to fill the basin with water and sprinkling around to settle backfill, mulch, and berm. Allow the water to soak in around the root ball and repeat.

Mulching

All planted trees shall have mulch placed around the base in an area two to three times the radius of the plant's crown, but not touching the plant's stem or trunk.

Riparian Vegetation

To improve the biological value of the Malibu Creek riparian corridor by planting the area with native riparian vegetation, sufficient hydrology must be present or restored to support the supplemental plantings. Container stock of southern mixed riparian woodland species consistent with the planting palette below shall be planted in on-site mitigation areas.

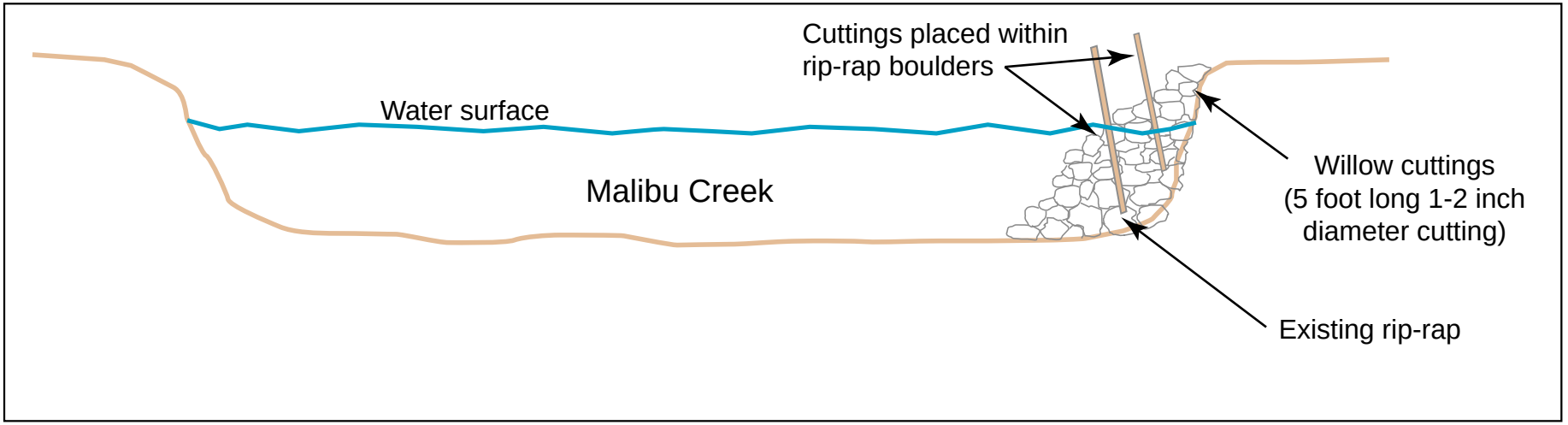
The following plant palette (**Table 2)** specifies the native plant species to be included in the landscape plan. Any deviations from these palettes should be approved by the monitoring biologist and/or CDFG.

Table 2
California Sycamore-Cottonwood Woodland Plant Palette

Scientific Name	Common Name	Size	Density
Platanus racemosa	California sycamore	15 gallon and 24" box	
Populus fremontii	Fremont cottonwood	15 gallon and 24" box	
Juglans californica	Black walnut	5 gallon	
Sambucus mexicana	Mexican elderberry	5 gallon	
Salix lasiolepis	Arroyo willow	Cuttings	
Baccharis salicifolia	Mulefat	Cuttings	
Anemopsis californica	Yerba mansa	Container-grown	3 percent cover
Artemisia douglasiana	Mugwort	Container-grown	3 percent cover
Leymus condensatus	Giant wild rye	Container-grown	5 percent cover
Muehlenbergia rigens	Deergrass	Container-grown	5 percent cover
Rosa californica	California wild rose	Container-grown	10 percent cover
Rubus ursinus	California blackberry	Container-grown	10 percent cover

*Planting locations are shown in **Figure 4***

The initial phase of this plan calls for the establishment of vegetation along the length of the revetment to enhance tidewater goby habitat along this stretch of Malibu Creek. To accomplish this, willow and mulefat cuttings will be secured to the rip-rap by carefully inserting cuttings between rip-rap boulders. These will begin to root in the interstitial spaces between the individual boulders and create the overhanging vegetation conducive to the tidewater goby. The willow and mulefat cuttings will be 1 to 2 inches in diameter and 5 feet long. They will be securely fastened with wire along the length of the rip-rap at an angle, facing downstream, with one end securely inserted into the creek below the water line. A drawing depicting the placement methodology of the willow cuttings is provided in **Figure 5**.



SOURCE: Impact Sciences - July 2007

FIGURE 5

Willow Cuttings Schematic

Willow and mulefat cuttings (poles) will be inserted for rooting and establishment along the top of the rip rap at the bank edge and within the rip rap near the water's edge. In addition, willow and mulefat cuttings will be inserted within the middle of the rip rap boulders, between the top and bottom of the rip rap. All willow and mulefat cuttings will be randomly placed patches at a distance of 20 to 35 feet between patches.

Interstitial areas may be filled around cuttings with a compacted (to the greatest extent possible) sand/soil (slurry) mix in order to maximize cutting establishment. The sand/soil mix (slurry) will prevent cuttings from drying out and promote adventitious root growth. Where appropriate to prevent erosion and sediment movement, fabric may be used to contain soil within the rip rap similar to the "Pole Planting" and "Rock with Interstitial Fill" techniques successfully used by Caltrans.[1]

Temporary irrigation will be used at the time of cutting planting for the establishment of willow and mulefat patches to hasten development of a riparian canopy over the rip rap (see Irrigation discussion below under **General Maintenance**).

The smaller herbaceous species of yerba mansa and mugwort will be scattered between the tree plantings in selected clusters.

In addition, California blackberry will be planted at the top of the rip-rap revetment and trained to cascade over the boulders to assist in covering of the boulders. The upland California Sycamore-Cottonwood Woodland trees will include larger container trees (24-inch box) closer to the creek and smaller container trees (15-gallon) closer to the Cross Creek Shopping Center. This will provide for increased shading along the creek bank. The landscaped upland and riparian vegetation will be planted in such a manner as to space the trees sufficiently wide to allow vistas of Malibu Creek from the trail and restaurant in the Cross Creek Shopping Center.

Specific planting locations for the riparian trees and shrubs are provided in **Figure 4** (the larger container specimen trees are indicated by larger circle size along stream bank) and photo simulations depicting the completed project are provided in **Figures 6** and **7**.

Seed/Cuttings/Container Sources

Seeds, cuttings, and container plants shall be obtained from local genetic stock, to the greatest extent possible.

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1 Caltrans. June 2003. Caltrans Erosion Control New Technology Report. CTSW-RT-03-049. Sacramento, CA. 463 pgs.

SOURCE: Impact Sciences - July 2007

FIGURE **6**

Photograph Simulation of Mitigation – South End of Site

SOURCE: Impact Sciences - August 2007

FIGURE **7**

Photograph Simulation of Mitigation – North End of Site

GENERAL MAINTENANCE

Maintenance is the ongoing process of ensuring that the mitigation has the means to reach the performance standards in the prescribed timeframe. Maintenance visits shall be performed weekly during the first month after the initial vegetation installation, monthly for the remainder of the first year, and quarterly for the remainder of the mitigation monitoring period. During each maintenance visit, the mitigation areas shall be inspected for trash, vandalism, disease, and pest infestation that may threaten the long-term health of the riparian community. Trash will be removed, vandalism will be repaired, and approved methods of pest/weed control will be employed as necessary. A pest is an insect or animal that may affect the success of the mitigation project. Any signs of distress or mortality will be noted and rectified (i.e., dead plants will need to be replaced) if the cause is apparent. If there are recurring or persistent indicators of distress or mortality and/or the cause of these problems is not apparent, CDFG will be consulted regarding appropriate remedial actions.

Responsibility for Maintenance

The responsibility for maintenance shall be designated to the Mariposa Land Company. Any transfer of responsibility shall be reported to CDFG and CCC and shall include the new responsible party's address, telephone number, e-mail address, if applicable, and the contact person responsible for the success of the mitigation. A biologist shall be hired to periodically monitor the site for the required three years of maintenance within the mitigation area. The biologist will direct any necessary weed or pest control on a regular basis and will report the success/maintenance needs of the mitigation area on an annual basis to Mariposa Land Company or the new responsible party, CDFG, and CCC.

Initial Maintenance of Plant Materials

Like all nursery stock, container-grown California native plants need careful attention for the first two years during their establishment period in the landscape. It is important that the root ball does not dry out during the first two or three months. Irrigate about once each week, trying not to over soak the surrounding soil. After two months, be sure to water deeply every two or three weeks during the summer and fall of the first year. Less frequent irrigation is required in the spring. During the winter, rainfall alone should be adequate for most plantings. Avoid overhead watering during the hot part of the day in the warm season.

Periodic Weeding

Mariposa Land Company shall be responsible for contracting with a landscape maintenance firm for removal of non-native species on a regular basis. Weeding shall be monitored by the project biologist to

ensure only non-native species are removed and the removal methodology is sound and does not encourage the recolonization of non-native species. Weeding is best performed just before, or at the onset of flowering, but before seeds are produced. If seeds are already present on the species to be removed, additional care is required to remove the plants with the seeds attached, or the seeds should be removed from the plants prior to the plant removal.

Weed control activities will occur monthly for the first three months following planting, as determined to be necessary by the project biologist. If there is a high incidence of weed infestation during the initial three months, weed control will occur every four weeks for the remainder of the first year following planting (along with other maintenance activities). If there is a moderate to low incidence of weed infestation during the initial three months, weed control may occur every six to eight weeks. Following the first year of monitoring, the frequency of weed control activities will decrease incrementally based on the magnitude of any infestation. After the first year, weed removal may be required three times annually (March, May, and September) during the growing season. Soil disturbance will be limited by hand weeding, where possible, and weeds shall be disposed of off site to avoid any re-infestation through reseeding or from plant propagules. If hand weeding is not possible, the project biologist shall be consulted regarding the appropriate method of weed removal.

Irrigation

Irrigation is necessary for the success of the vegetation enhancement. Transplanted or newly planted plants generally need a supply of water after installation to recover from the stress of transplanting. The irrigation system shall be a temporary system designed to supply water to the newly installed plants for a period of two years. After two years, the plants should be sufficiently established to survive without supplemental watering. An irrigation system shall be field-designed and installed by the project's landscape architect, engineer, or contractor, concurrent or prior to the installation of the plant materials. Monitoring shall include ensuring that the irrigation is working properly.

Protection from Herbivory and Vandalism

Herbivory of new planting can be a problem at restoration sites. Rodents and various mammalian species may be responsible for damage to newly established plants. Following initial planting, the site will be monitored for signs of herbivory. Wire cages, enclosure fences, or other plant sheltering devices will be used on an as-needed basis. Tubex or equivalent tree shelters are effective at curtailing herbivory and can also serve as watering tubes. Any signs of herbivory will be noted in the monitoring reports.

Vandalism may also be detrimental to newly established plants. Unauthorized vehicles, such as all-terrain vehicles, must be kept out of the mitigation area.

Mitigation "As-Built" Plan

Upon completion of the site preparation, planting, and irrigation planning, an "As-Built" Plan shall be prepared showing the mitigation site and vegetation as it exists at the time of completion of initial installation and filed with the permitting agencies. This plan shall be used as the baseline to which annual performance monitoring shall be compared.

PERFORMANCE STANDARDS

To ensure that the goals and objectives of the mitigation plan have been met, the following performance standards have been developed to evaluate the success of the mitigation of the Mariposa Land Company site. Performance standards are also used to evaluate progress and success of mitigation projects, and express the objectives of the mitigation plan in a quantifiable and objective format. Field measurements falling below these standards signal that the goals of the plan are not being reached. Measurements surpassing the standards signal that the program is successfully attaining the long-term goals. Data collected during monitoring may warrant adjustments to the mitigation plan so performance standards are met. If the performance standards are met prior to the three-year monitoring period and it appears that the mitigation will be successful in the long term, the permitting agencies shall be notified to determine if the mitigation monitoring remains necessary.

Required Areas Performance Standard

- At least 0.585 acre of CDFG jurisdiction (California Sycamore-Cottonwood Woodland habitat) shall be enhanced/created through non-native weed abatement and native riparian vegetation plantings.

Survivorship Percentage Performance Standard

- All plantings shall have a minimum of 80 percent survival the first year and these surviving plants will approach 100 percent survival, for the number of plants specified in the plant palette, at the end of the three-year monitoring period.
- With the exception of the access path, the site shall attain 80 percent native cover after 3 years.
- Replacement plants shall be monitored with the same survival and growth requirements for three years after planting.

Plant Spacing Performance Standard

- All plants shall be planted in randomly spaced, naturally clumped patterns. Western sycamore 24-inch box and 15-gallon container-grown plantings and California black walnut 5-gallon container-grown plantings shall be planted at a minimum of 20 feet on center. 24-inch box and 15-gallon cottonwood container-grown plantings, included as a supplemental species, shall be planted at a

minimum of 20 feet on center. Mexican elderberry 5-gallon container plants, also a supplemental species, shall be planted at a minimum of 30 feet on center.

Native/Non-Native Cover Performance Standard

- Non-native plant cover shall not exceed 10 percent cover at the end of the three-year monitoring period.

Height Requirement Performance Standard

- Western sycamore plantings shall reach a minimum height of 15 feet by the third year following planting.

Numbers of Native Trees

The planting target for native trees is 18 California sycamores, 10 black walnuts, 8 Mexican elderberry and 6 cottonwoods.

Approximate planting locations are shown in **Figure 4**.

MONITORING

A monitoring program will be implemented to document performance of the mitigation areas relative to the ultimate success criteria, and to identify any shortcomings or problems in the mitigation areas. Early detection of problems or other unforeseen issues allows for adaptive management and mid-course adjustments to the mitigation program that will maximize the likelihood of success.

A monitor shall oversee the physical and biological aspects of the mitigation area, as both are indicative of the functional condition of the riparian corridor. The routine monitoring will include evaluations of site hydrology, plant establishment and vigor, indicators of use by wildlife, indicators of functional processes, site photographs, and any problems associated with the mitigation including trash disposal, herbivory, erosion caused by factors other than normal geophysical processes, or vandalism.

Once the mitigation is completed, a qualitative assessment of the natural structure and functions shall be made to ascertain whether the mitigation has achieved the anticipated effects.

Monitoring Protocol

Irrigation

The landscape contractor shall examine the irrigation system for defects, such as vandalism or malfunction, at least once every two weeks during the dry season (typically May through mid October),

and once every month during the rainy season for the first year of the mitigation project, or when new plants have been planted in the mitigation area. After the first year, the irrigation system may be checked once a month, unless new plants (replacements for any dying plants) have been added to the mitigation area. Any replacement plants will require irrigation for the first year or until they become established.

As described earlier in this plan, supplemental irrigation should be shut off at some time within the first three years of monitoring (preferably after year two) and shall remain off to allow assessment of plant establishment and ability to survive without supplemental irrigation. If the monitoring biologist determines that plantings are self-sustaining without supplemental irrigation, then irrigation shall remain off and irrigation lines shall be removed, and not abandoned in place. If it is found that plantings are not self-sustaining then contingency measures shall be triggered.

Hydrologic Monitoring

Hydrologic monitoring will consist of a qualitative evaluation of site hydrology. The goal of this monitoring is to determine if the irrigation system is working and whether, in the long term, adequate natural hydrology is available to sustain the riparian habitat.

Biological Monitoring

Plant monitoring shall consist of two parts: monitoring individual plants for growth and survival, and monitoring the plant composition. The plants monitored shall be randomly selected plants whose locations have been mapped by a global positioning system (GPS) as part of the "As-Built Plan." Individual plants will be measured for growth and health. These data will be used to determine whether performance standards on the growth and health of the mitigation plantings are being met and whether the mitigation plantings are performing in a similar manner to the naturally occurring population. Mortality of species will be determined from this sampling and the need for replacement assessed.

Photo Documentation

Permanent photo stations will be established at intervals along the mitigation area upon initiation of site preparation. Site photographs will be taken from the photograph stations during monitoring sessions. Photograph stations will be permanently marked with stakes and located with GPS to within 1 meter of the actual location for inclusion in the As-Built Plan. There will be sufficient stations to clearly show the progress of the vegetation establishment and site development.

Monitoring Schedule

The mitigation sites shall be monitored for three years: quarterly during the first year, and semi-annually during the second and third years. Monitoring will begin during the first major planting period and will continue until the mitigation areas have met the final success criteria.

Monitoring Reports

Monitoring reports will show the results of the monitoring; an assessment of the progress made toward achievement of the success criteria; maintenance performed, and further recommendations of any remedial or adaptive management measures that should be initiated. The specific contents of the monitoring reports will include:

- results of field data collection for the physical state of the site, evidence of hydrology, plant establishment, vigor, survival, and recruitment;
- performance of site mitigation relative to success criteria;
- problems with the mitigation area and any recommended remedial actions;
- maintenance activities performed during the previous monitoring cycle; and
- photographs from established photo stations.

Annual reports summarizing monitoring results shall be submitted on or before December 1, beginning the year after completion of mitigation implementation and continuing throughout the monitoring period.

If substantial corrective or remedial actions are required, supplemental monitoring and reports will be prepared. These supplemental reports will describe the problem and cause, recommended corrective measures, schedule for remedial actions, and any modification of the mitigation maintenance. Supplemental reports will be submitted within 60 days of the date when the corrective action was taken.

ADAPTIVE MANAGEMENT/CONTINGENCY MEASURES

Contingency measures cover unforeseen situations that may occur on mitigation sites. Unforeseen situations may occur when mitigation plans fail to meet performance standards or when an outside event occurs that either directly or indirectly impacts the mitigation site.

The purpose of monitoring is to detect problems early in the mitigation process, determine the cause of the problem, and modify the mitigation program in a manner that will allow the mitigation program to

meet the performance standards and have the greatest chance for success. While this program has been planned with the best available information and predicts success, there are frequently unforeseen circumstances that occur beyond the project proponent's control. These unforeseen circumstances can present major or minor problems for attaining the goals of the mitigation program and meeting the performance standard goals.

If insufficient vegetative cover within the upper levels of the rip-rap revetment is determined, a method for placing fill among the rocks similar to the Rock with Interstitial Fill on the Caltrans Erosion Control New Technology Report will be implemented which would consist of a rock slurry mixture saturated with seeds for various appropriate plants.

Concerns that warrant contingency measures include various issues. Minor issues, such as vandalism, small-scale plant mortality, or weed/pest infestations, can be rectified as they are discovered during routine site monitoring. Major issues include flooding, drought, breakdowns of irrigation systems, and similar problems that prevent the performance standards from being met.

Contingency measure will be enacted if, at the end of each monitoring period, natural recruitment of native vegetation is not meeting the performance standards. Major remedial actions or contingency measures will also be triggered if there are large-scale instances of mortality, weed infestation, or disease (i.e., greater than 10 percent of a site is affected) or if the site is not making progress toward attainment of the interim performance standards after the end of the second year. Under either of these situations, the cause of mitigation failure will be investigated and the agencies involved with the original permitting will be notified of potential courses of action and/or corrective measures, with an opportunity to comment. These measures may include supplemental contour manipulation (gravel removal), plantings, changes to the plant palette, or adjustment of the maintenance of the site.

If a catastrophic flood, fire, or outbreak of disease occurs prior to the on-site mitigation areas achieving the interim success criteria, the property owner shall be responsible for remediating the mitigation areas. In cases where site remediation is necessary, the property owner shall contact the agencies involved with the original permitting to discuss the most appropriate course of action to achieve the required remediation.

CERTIFICATION OF SUCCESS

For the mitigation to be considered successful, all of the performance standards must be met. When the mitigation area has met the performance standards, the permitting agency will be notified in writing. The notification will be accompanied by the most recent annual monitoring report and any supplemental information necessary to document attainment of the success criteria.

LONG-TERM MAINTENANCE

Long-term protection of the mitigation site will be the responsibility of the receiving landholder.

Long-term maintenance refers to the continuing maintenance after the three-year monitoring period has ended. The mitigation area shall continue to have an active management program, although not as intensive as during the initial three years. The mitigation area will continue to be a protected habitat area.

Long-term management of the mitigation area will include the ongoing protection of the vegetation and maintenance signs around the site.

REFERENCES

Brinson, Mark, M. *A Hydrogeomorphic Classification for Wetlands*. U.S. Army Corps of Engineers, Technical Report WRP-DE-4. 1993.

Cowardin, L. M., et al. "Classification of wetlands and deepwater habitats of the United States." U.S. Fish and Wildlife Service. Washington, D.C. 1979.

Ventura County Planning Division. *Guide to Native and Invasive Streamside Plants*. "Restoring Riparian Habitants in Ventura County and along the Santa Clara River in Los Angeles County." County of Ventura, Planning Division. 2006.

STATE OF CALIFORNIA—THE RESOURCES AGENCY PETE WILSON, *Governor*

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 641-0142

EMERGENCY PERMIT

February 20, 1998

Applicant: **Grant Adamson (Mariposa Land Company)** **Permit No.: 4-98-024-G**

Project Location: **3728 Cross Creek Road (west bank of Malibu Creek)**

Work Proposed: **Placement of rock rip-rap along 450 feet of the west bank of Malibu Creek to protect property from erosion. The revetment will use 1,500 tons of .5 to 8 ton boulders and will be approximately 14 to 16 feet in height (2-4 foot toe below stream bed).**

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from the information submitted that an unexpected occurrence in the form of severe stream bank erosion resulting in a threat to a parking area and property requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director hereby finds that:

(a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit;

(b) Public comment on the proposed emergency action has been reviewed if time allows; and

(c) As conditioned the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the reverse.

Very Truly Yours,

Peter M. Douglas
Executive Director

Chuck Damm

By: Chuck Damm
Title: Senior Deputy Director

Exhibit 8
4-09-013 (Mariposa)
Emergency CDP 4-98-024-G

CONDITIONS OF APPROVAL:

1. The enclosed form must be signed by the property owner and returned to our office within 15 days.

2. Only that work specifically described above and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.

3. The work authorized by this permit must be completed within 30 days of the date of this permit.

4. Within 60 days of the date of this permit, the permittee shall apply for a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 150 days of the date of this permit unless waived by the Director.

5. In exercising this permit the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.

6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies.

7. The regular coastal development permit application shall include an analysis of all other alternatives for shoreline, bluff, or stream bank protection prepared by a qualified engineer.

IMPORTANT

Condition #4 indicates that the emergency work is considered to be temporary work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a coastal permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly.

If you have any questions about the provisions of this emergency permit, please call the Commission Area office.

Enclosures: 1) Acceptance Form; 2) Regular Permit Application Form

cc: Local Planning Department

File: gm/98-024g

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885

July 18, 2012

To: Deanna Christensen, Coastal Program Analyst

FROM: Lesley Ewing, Sr. Coastal Engineer

SUBJECT: Lower Malibu Creek, West Bank Protection

Based on decisions and direction from the court concerning the Commission's conditions of approval for CDP #4-09-013, I have been asked to re-examine the existing emergency revetment for use as a more long-term bank stabilization structure. In undertaking this examination, I have reviewed the following reports, in addition to my previous memos.

- CCC. Staff Report 4-09-013 for hearing 8/13/09, including attachments
- Letter from Sherman Stacy to Ms. Deanna Christensen, dated February 12, 2010.
- PACE. Technical Memo Re: Hydraulic and Spatial Feasibility of California Coastal Commission Special Condition Number 2 for Malibu Creek Bank Restoration, January 26, 2010.
- PACE. Lower Malibu Creek Emergency Revetment Geomorphic, Bank Erodibility, and Alternatives Analysis, may 25, 2007.
- Impact Science, Inc. Vegetation Restoration Plan – Malibu Creek, May 2012

In response to bank erosion of approximately 20 feet (lateral) of banktop land during the 1997/98 El Niño winter, the Mariposa Land Company requested and received an emergency permit to place rock protection along about 500 feet of Lower Malibu Creek, adjacent to land owned by the applicant. The emergency revetment was constructed by placing rock, ranging in size from 0.5 tons to 8.0 tons directly onto the eroded creek bank and creek bed. The toe to top of slope varies greatly throughout the 500 foot long structure, from 1.3:1 to over 2:1 (Pace, 2010).

In 2009, The Commission approved the installation of a revetment, with a condition that portions of the revetment be regraded to provide a more gradual slope, ranging from 2:1 to 3:1. The applicant's engineer submitted information that such regrading would require a coffer dam for construction and be very costly to undertake. Also due to the configuration of the applicant's lot, these more gradually sloped revetments would be impossible to construct without going beyond the applicant's property. The applicant's engineer also has submitted hydraulic model results showing that, for the more gradual slope conditions, water levels during flood stage could be almost 2 feet higher, at small sections for the 3:1 slope and almost a foot higher at small sections for the 2:1 slope. Some sections of the 2:1 slope would have a lower water elevation than the emergency

Exhibit 9
4-09-013 (Mariposa)
Lesley Ewing Memo (7/18/12)

revetment; however, the 2:1 slope would have an overall increase in water level of approximately +0.1 feet and the 3:1 slope would have a higher overall water level. I agree with the modeling undertaken by the applicant.

I have not undertaken independent modeling of the creek flows with the various bank slopes. I do not have reason to doubt the results from the applicant's reports; I find the model results to be in keeping with expected model results and concur with the overall flow conditions as depicted by the applicant's engineer. The applicant's engineer never modeled the hydraulic conditions for a variable 3:1 to 2:1 slope, but the prior modeling for the individual 3:1 and 2:1 scenarios would likely bound the water elevations resulting from the modified slope that the Commission previously required. Based on the adequacy of the analysis that has been provided, I concur that the emergency revetment configuration will result in lower overall water level conditions than the 2:1 slope, the 3:1 slope or the variable 3:1 to 2:1 slope revetment.

Normally a 1.5:1 revetment slope is considered the minimum needed for slope stability. The emergency revetment was constructed to mirror the creek slope and as noted earlier, some sections have a slope that is steeper than 1.5:1. However, the normally accepted stability of a 1.5:1 or gentler slope is based in an unvegetated slope and the added stability from the vegetation plan may enhance the stability of the emergency revetment in areas, such as those that are at a 1.3:1 slope, that have the potential to have some rip-rap rock become dislodged during a large flow event. The applicant's engineer has determined that the emergency revetment, as installed, is stable. The monitoring and maintenance conditions that staff is recommending will assure repair and maintenance of any small, potentially problematic areas of the slope protection.

The proposed emergency revetment design will protect the inland area from additional bank erosion. The Federal Emergency Management Agency (FEMA) has mapped the creek bank and the inland area as being within the 100-year flood plain. The no project condition has not been modeled so there is no information on the changes to flooding between the pre-project and emergency revetment condition. There are small sections of the uniform 2:1 slope alternative that would have a lower flow depth than the emergency revetment configuration. However, I concur with the applicant's engineer, that the proposed project is "hydraulically adequate". (Pace 2007, page 15.)

The proposed revetment is an acceptable alternative. The flow conditions at this location would not be conducive to a "soft" or vegetation-only solution. The applicant's engineer has evaluated vegetation-only and vegetation with geotextile options and shown that these bank treatment options would not protect the creek bank from additional erosion under high flow conditions. I concur with this analysis.

Thus, the proposed project is adequate for the intended purpose to protect the bank from erosion. When compared with other bank protection alternatives, it can be considered adequate in terms of hydraulic modifications to the flood conditions in the creek.

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
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(805) 585-1800

M E M O R A N D U M

FROM: Jonna D. Engel, Ph.D., Ecologist

TO: Deanna Christensen, Coastal Analyst

SUBJECT: Vegetation Restoration Plan for the Mariposa Land Property

DATE: July 18, 2012

Documents Reviewed:

Koutnik, D. (Principal, Impact Sciences). May 2012. Vegetation Restoration Plan – Malibu Creek; Mariposa Land Company. Prepared by Impact Sciences, Inc. for Mariposa Land Company.

Koutnik, D. (Principal, Impact Sciences). March 2012. Draft Vegetation Restoration Plan for the Mariposa Land Property at Malibu Creek, City of Malibu, California. Prepared by Impact Sciences, Inc. for Mariposa Land Company.

Following the heavy stormwater flows in Malibu Creek during the winter and spring of 1998 emergency bank protection was installed to protect the Mariposa Land Company property. The bank protection is made of approximately 1,400 tons of rip rap that consists of individual rocks ranging in size from 0.5 to 8 tons. The rip rap extends for approximately 500 feet along the western bank of lower Malibu Creek and covers approximately 0.25 acres of land. While some native arroyo willow (*Salix lasiolepis*) has recruited among the rip rap at the northern end, the rest of the stretch of rip rap remains bare rock. I have worked with Mariposa Land Company's biological consultant, Impact Sciences, Inc. to develop a restoration plan to restore native vegetation and natural processes to this stretch of bare rip rap. The overall goal of the plan, *Vegetation Restoration Plan – Malibu Creek, Mariposa Land Company,* is to create native riparian habitat among and immediately adjacent to the rip rap.

A key element of the restoration plan is soil supplementation among the rip rap as absence of vegetation is due to a lack of substrate. To ensure that seeds/ plantings/cuttings become established, the restoration plan requires rip rap interstitial areas to be filled with a sand/soil mix. The plan calls for the sand/soil mix to be compacted (to the greatest extent possible) into the interstitial areas and erosion control fabric to prevent loss of soil. The restoration plan incorporates rip rap "pole planting" and "rock with interstitial fill" methodology that CalTrans has developed and successfully

Exhibit 10
4-09-013 (Mariposa)
Dr. Engel Memo (7/18/12)

employed.[1] The restoration plant palette consists of native riparian ground, shrub, and tree layer species appropriate for the western bank of lower Malibu Creek and all seeds, cuttings, and container plants will be obtained from local genetic stock to the greatest extent possible. Temporary irrigation will be used to facilitate vegetation establishment.

The restoration work (project construction) will occur between August 15 and November 15 during the fall dormant season which is the ideal time for planting. This timing also falls outside the months when the majority of bird breeding activities occur. However, in order to ensure that no breeding birds are impacted by the restoration, monitoring for bird breeding/nesting will occur through the end of September because some birds may still be engaged in breeding activities through September. If active nests are found, site preparation and planting within 300 feet of the nest (500 feet for raptors) will be postponed or halted until the nest (s) is vacated and juveniles have fledged.

In addition, while this vegetation restoration project will have little, if any, adverse impact on the Malibu Creek ecosystem, project construction between August 15 and November 15 avoids peak breeding season for tidewater gobies and the timing of southern steelhead runs/migration[2]. Furthermore, rain typically does not occur in southern California until late fall or winter and during this dry time Malibu Creek does not experience high water flow and more often than not there is no water flow at all. During no water flow times the water near the rip rap is quite stagnant with large mats of floating algae and high amounts of suspended algae that cloud the water. Any sediment entering the water at this time would settle to the creek bottom within a short distance from the project. However, to further protect the Malibu Creek ecosystem from adverse impacts, best management practices shall be employed during project construction to prevent project materials, sediment, debris, or waste from entering the creek or adjacent riparian habitat.

Completion of this vegetation restoration project will greatly enhance the western bank of the lower Malibu Creek ecosystem. Restoring native riparian understory and canopy plant species along the bare rip rap will increase the shaded areas of the creek which are preferred by tidewater gobies and will also create a continuous wildlife corridor along the western bank that will greatly facilitate native bird, amphibian, reptile, and mammal movement/migration. Vegetated rip rap will also improve creek water quality by reducing the amount of runoff and sediment entering the system as vegetation will receive and capture runoff and loose materials. While this restoration project will have no impacts on the Malibu Lagoon restoration being undertaken by State Parks, realization of the two projects will increase the overall habitat value of the lower Malibu Creek ecosystem.

[1] CalTrans. June 2003. CalTrans Erosion Control New Technology Report. CTSW-RT-03-049. Sacramento, CA. 463 pgs.

[2] During breeding tidewater gobies exhibit a preference for sand substrate but they also are found on cobbles, mud, and silt. Tidewater gobies spawn all year round with peak spawning occurring in April and May. While gobies may be nearby, it is unlikely that gobies will be in the immediate vicinity of the project footprint because large rocks are not one of their preferred habitat types.

EXHIBIT 11
CDP 4-09-013
Correspondence

a. **Letter from Dr. J. Robert Hatherill, dated August 11, 2008**

b. **Letter from Ron Schafer, California Dept. of Parks and Recreation former District Superintendent, dated November 14, 2008**

c. **Letter from Heal the Bay, dated July 2, 2009**

d. **Letter from Heal the Bay, dated June 23, 2009**

e. **Letter from Malibu Surfing Association, dated February 3, 2009**

f. **Letters from Mark Abramson, Santa Monica Baykeeper, dated February 3, 2009 and April 7, 2009**

g. **Letter from Sandra Albers, Santa Monica Mountains Resource Conservation District, dated April 7, 2009**

August 11, 2008

Ms. Deanna Christensen
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

RE: CDP Application Number 4-98-024

Dear Ms. Christensen,

It is a pleasure to write this letter in support of the existing creek bank stabilization effort and proposed mitigation of the west bank of Malibu Creek. In addition to numerous site visits to the lower Malibu Creek study area, I have extensively reviewed the "Lower Malibu Creek Emergency Revetment Geomorphic, Bank Erodibility, and Alternatives Analysis prepared by Pacific Advanced Civil Engineering, (PACE) and the Malibu Creek Vegetative Restoration Plan prepared by Impact Sciences. The studies identify the best action plan for flood- bank protection, creek hydraulic suitability, costs, re-vegetation and maintaining minimal environmental impacts. As a former faculty member of the Environmental Studies Program, University of California at Santa Barbara, I am qualified to review the mitigation measures presented herein.

The goals of the mitigation plan will substantially improve and:
- Protect the Western bank along Lower Malibu Creek from further erosion;
- Re-vegetate the area to create a native flora riparian habitat and;
- Improve the aesthetics of lower Malibu Creek.

The enhanced riparian corridor will include the installation of fascines of arroyo willow along the revetment perimeter to create overhanging vegetation adjacent to lower Malibu Creek. This action will likely attenuate the steep slope of the revetment and will be aesthetically pleasing.

Removing non-native species and planting a mixture of native shrubs and trees will improve the riparian habitat value. This action will increase the habitat area for the tidewater goby (Eucyclogobius newberryi), as the shaded areas of the creek are the preferred habitat of the tidewater goby. The extensive planting of native vegetation will dramatically improve the aesthetics of lower of Malibu Creek and support and provide a habitat for the native fauna.

I strongly support the proposed mitigation plans for the west bank of Malibu Creek, prepared by PACE and Impact Sciences. If you require additional information, please do not hesitate to contact me [jhatherill@delmar.edu].

Sincerely,

Dr. J. Robert Hatherill
Professor

AUG 14 2008

ex. 13a

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY
ONE CYCLOTRON ROAD | BERKELEY, CALIFORNIA 94720 | TEL: 510.486.4000

Angeles District
1925 Las Virgenes Road
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(818) 880-0350

November 14, 2008

Deanna Christensen
Coastal Program Analyst
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

Re: **Vegetation Restoration Plan for the Mariposa Land Property at Malibu Creek City of Malibu, California**

Dear Mrs. Christensen,

The California Department of Parks and Recreation, Angeles District, has reviewed the above referenced Restoration Plan and offers the following comments for your consideration.

This property has a long history and several proposals have been reviewed by State Parks. As with past plans, we have two concerns with the current proposal. First, leaving the rip-rap in place with its current 1:1 slope configuration is not a solution to mitigating the erosion problem next to the Mariposa Land Property. Second, using willow fascine and minimally erodible component to fill in interstitial spaces in between rip-rap is not a known or proven restoration method. Each concern is discussed in detail below.

Rip-rap Configuration

The placement of the rip rap was granted as an emergency permit during the1997-1998 wet season. It is known that hardened structures on stream banks change the hydrology of the creek. Evidence of this is apparent with the current emergency project, as well as the grouted rip-rap and chain link fencing upstream of the project. The unconsolidated nature of the boulders and their un-engineered placement has continued to contribute to an unstable site for vegetation development. This is evident by the absence of vegetation along the 500-foot stretch of rip-rap adjacent to the Mariposa Land property.

Now that the emergency has passed, it is justifiable that the applicant take the time to design a sustainable bio-engineered project. We suggest the rip-rap be removed to create a sustainable soft bio-engineered slope. If rip-rap can not be removed it should be modified with vegetation and other materials to create a soft bio-engineered slope. Using vegetation and other materials to soften the land-water

interface is known to improve ecological features without compromising the engineered integrity of the shoreline (Best Management Practices for Soft Engineering, U.S. Fish and Wildlife Services July 9, 2008).

Design considerations should include tying into the top of the existing slope with a slope that is 3:1. A 3:1 slope will widen the creek channel; thus, reducing water velocities along the edges of the creek. Reduced velocities will in turn encourage deposition of suspended sediment and help begin the process of establishing a soil matrix for vegetation growth. In addition, slopes that are 3:1 can be stabilized with riparian vegetation which provides shade for aquatic species and filters urban runoff.

Willow Fascines & Filling Interstitial Spaces

We are concerned with the proposed attachment of willow bundle fascines to rip-rap as a way to establish willows at the rip-rap water interface. Additionally, the suggestion to later fill in interstitial spaces (after 2-3 years) with minimally erodible material to establish vegetation cover is also a concern. To our knowledge, neither of these approaches is a proven restoration methodology.

As discussed above, we suggest utilizing a soft engineering approach to re-design the slope. This technique should combine live and dead vegetation with other materials to create a slope that can be planted with willow stakes (*Salix spp.*) and other native plants. Unlike the proposed willow bundle fascines, many examples of stream bank stabilization projects that utilize willow stakes can be found in California. Planting of willow stakes is a known method to reduce erosion, encourage deposition of suspended sediment, and improve wildlife habitat associated with the immediate streambank.

Overall, our suggestions focus on eliminating and/or reducing impacts from the current rip-rap configuration while providing natural bank stabilization. Hard structures are known to have a high failure rate and are difficult areas to re-establish vegetation. Softer bio-engineered solutions are now recognized as more sustainable than rock rip-rap. If you have any questions or need any clarification of the information in this letter, please call Environmental Scientist, Kristi Birney, at the number listed above, extension 104. She can also be reached by email at kbirney@parks.ca.gov .

Thank you for your consideration of these comments in this matter.

Sincerely,

Ron Schafer
District Superintendent

ex. 13b

Heal the Bay

1444 9th Street
Santa Monica CA 90401

ph 310 451 1550
fax 310 496 1902

info@healthebay.org
www.healthebay.org

July 2, 2009

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001

Submitted via FAX: (805) 641-1732

Re: Opposition to CDP Application No. 4-98-024 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road.

Dear Coastal Commissioners:

Heal the Bay has reviewed the staff report released June 25, 2009, related to Application No. 4-98-024 submitted by the Mariposa Land Company, which seeks to permanently retain approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek. After thorough review of this updated report, Heal the Bay urges the Coastal Commission to deny this application.

The proposed project, including the changes in the current staff report, is still in direct conflict with numerous policies in the California Coastal Act, as well as the City of Malibu's Local Coastal Program ("LCP"), as it will negatively affect habitat that is designated environmentally sensitive habitat area ("ESHA"). Please refer to our previous letters submitted February 3, 2009 and August 4, 2005, where these concerns are documented in detail.

Our concerns with the most recent recommendations are as follows:

1. **ESHA should be consistently designated and protected at the Malibu Creek site.**

   The staff report inconsistently represents the affected habitat area. The report states that "Malibu Creek and its riparian corridor is also designated as ESHA in the certified Malibu LCP (p. 21)". This statement is followed by a contradictory statement that the placed rip-rip is on the west bank of Malibu Creek, an area which does not fit ESHA criteria. The staff report accurately reflects the designation of Malibu Creek as ESHA, yet the rip-rap in question extends far into the creek, thereby negatively affecting ESHA, which is discordant with the Coastal Act and LCP (see Heal the Bay's February 3, 2009 and August 4, 2005 for further detail). As we outlined in our previous letters, the Malibu LCP requires protection of both ESHA areas and ESHA buffer zones. The concrete rip-rap is placed both within the Malibu Creek streambed, as well as within the riparian corridor of Malibu Creek, which is the buffer zone to Malibu Creek. Therefore, according to both the Coastal Act and the Malibu LCP, Malibu Creek and its buffer zone should be protected as ESHA and ESHA buffer zone.

Heal the Bay

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2. The permitted alternative must protect ESHA and endangered species onsite.

Our main concern with the current proposal is that staff recommends a "bioengineered" approach that still includes the placement of concrete rip-rap along the entire portion of the stream bank, as well as within the actual stream, which is a sensitive wetland environment. The new approach integrates more vegetative plantings between concrete blocks laid back at a less steep slope, which will benefit plantings; however, it still allows illegal hardening of Malibu Creek, which will continue to detrimentally affect sensitive wetland habitat and locally present endangered species, such as the Tidewater Goby. We have outlined this problem in our previous letters regarding this site. The revised proposal does not address the negative impacts of continued stream bank hardening to this species, nor does it recommend mitigation for the negative impacts caused by the rip-rap at this site over the past 10 years.

The staff report asserts that there "are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment (p. 33)." However, there is a viable option to remove instream and above ground rip-rap, and replace it with a true soft bioengineered solution. This alternative has not been adequately evaluated or assessed. We recommend combining a soft bioengineered approach (biodegradable filter fabric planted with vegetations) with engineered techniques that bury rip-rap up to the toe of the bank. This method would conserve instream sandy bottom habitat as well as riparian vegetation on the stream bank. Buried rip-rap could be used in areas where stability and close proximity to legal existing structures are of concern. After consultation at the site on June 22, 2009, Heal the Bay recommends this option, which has not yet been assessed by Commission staff, as the best alternative to stabilize the bank while protecting ESHA and critical habitat areas of endangered species on and contiguons to the site.

3. Clear directives are needed for the applicant to remove illegal developments onsite.

We support the staff recommendation under Special Condition 2 that states "...where any fencing or unpermitted development exists along the bank that interferes with the re-engineered revetment required herein, as well as the associated Revised Revegetation Plan..., be removed from the site (p. 5)." However, this condition is unsoundly limited to unpermitted development that interferes with the proposed project. We urge the Coastal Commission to require removal of all illegal structures on the site as a permit condition. Staff ecologists also noted that if all illegal structures are removed and restored to riparian habitat, onsite creek velocities will be largely absorbed by a more natural and vegetated buffer zone, which will positively mitigate downstream bank instability and erosion.

ex. 13c

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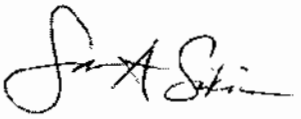
4. The timing of construction should avoid Tidewater Goby spawning season.

Lastly, the timing for construction outlined in the staff report (June through October) is within the peak season for Tidewater Goby spawning, which is documented to occur from April through July, and can extend through November, depending on seasonal temperature and rainfall[1]. If this project is permitted, we recommend the Commission include a requirement to avoid this season for construction to adequately protect this sensitive species.

We applaud staff for its attempt to further consider suitable alternatives to hardened rip-rap for this site; however, we cannot support the current recommendation, as it is not a "soft" bioengineered solution. Instead, we urge the Commission to recommend a "soft" bioengineered solution at this location to protect this environmentally sensitive area and endangered species, by restoring riparian habitat and some floodplain connectivity in this region. A "soft" bioengineered solution would also be more cost effective, as it would not require regular maintenance and repair. We appreciate the opportunity to comment on this staff report; please contact us if you have any questions.

Sincerely,

/s/



Alison J. Lipman, Ph.D.
Stream Team Manager
Heal the Bay

Sarah Abramson Sikich
Director of Coastal Resources
Heal the Bay

1 U.S. Fish & Wildlife Service. 2008. Federal Register 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Tidewater Goby (Eucyclogobius newberryi); Final Rule.

ex. 13c

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June 23, 2009

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001

Submitted via email to jainsworth@coastal.ca.gov and dchristensen@coastal.ca.gov.

Re: Map and pictures to support opposition position to CDP Application No. 4-98-024 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road.

Dear Coastal Commissioners,

On June 22, 2009, Heal the Bay scientists, accompanied by Baykeeper staff, mapped onsite riprap and illegally developed areas, with GPS to an accuracy of 5 cm. This letter includes mapped and photographed areas of the Mariposa Land Co. site, which are relevant to CDP Application No 4-989-024.

The results of our mapping efforts are attached as Figure 1, which clearly delineates the unpermitted development on the site (referenced in our April 6, 2009 letter to the Commission). Photos of this area are attached as Figures 7-11. Development within the fenced area is visible in Figures 8-11. A photograph of the large white trailer visible in the later aerial photos (Figures 5 & 6) clearly shows surrounding intensive development that includes a road (Figure 11). The illegally fenced area and all enclosed unpermitted structures and development were constructed post 1979, with most development having occurred between 1986 and 2004, as indicated in the attached aerial photos of the area from 1979, 1986, 2002, 2004, and 2008 (Figures 2-6). Black line polygons were added as a layer to these aerial photographs in order to clearly delineate the area of unpermitted construction. The polygons appear to be slightly different sizes due to the different angles from which aerial photos were taken; however, they delineate the same area on the ground.

In addition to mapping the described unpermitted developments, Heal the Bay mapped areas of failing riprap and unstable stream bank downstream from the riprap. Linear areas mapped in Figure 1 include grouted concrete and portions of failing grouted concrete that are within a fenced area marked with a State Park sign. Areas of failing grouted riprap are visible in Figure 12. Also included in Figure 1 is the linear area of loose boulder concrete placed by Mariposa Land Co. and the area of unstable stream bank downstream of all riprap areas. There are multiple failures along the entire length of loose boulder riprap; two of these loose boulder riprap failures are visible in Figures 13 and 14. Areas of undercut loose boulder riprap, which we measured to 1.3 m, are mapped in Figure 1, and are visible in Figure 15. The entire length of stream bank on the subject site and downstream from riprap areas is clearly eroded and unstable (Figure 16).

ex. 13d

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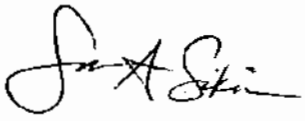
The attached maps and photos clearly demonstrate that the property owners are in violation of their development permits and that the areas indicated in Figures 1-11 have been illegally developed over the last 20 years. Furthermore, the current placement of riprap on the stream bank of Malibu Creek is not only in violation of state and local coastal resource protection and development laws (as indicated in April 6, 2009 letter), but the riprap onsite is failing and promoting downstream erosion and bank instability. Finally, this stretch of creek is home to the federally endangered tidewater goby, and the riprap associated with this project is located in prime freshwater goby habitat (see Figure 1). This species requires soft bottom stream for its reproduction, and the concrete rip-rap is compromising its critical habitat.

Please contact us with any questions or for higher resolution copies of any of these photos. We appreciate the opportunity to provide information related to this site, and we hope it can be used to recommend a "soft" bioengineered solution at this location, which would restore riparian habitat and some floodplain connectivity in this region.

Sincerely,

/s/



Alison J. Lipman, Ph.D.
Stream Team Manager
Heal the Bay

Sarah Abramson Sikich
Director of Coastal Resources
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Figure 1. Mariposa RipRap area on Malibu Creek, mapped June 22, 2009 by Heal the Bay and Baykeeper staff.

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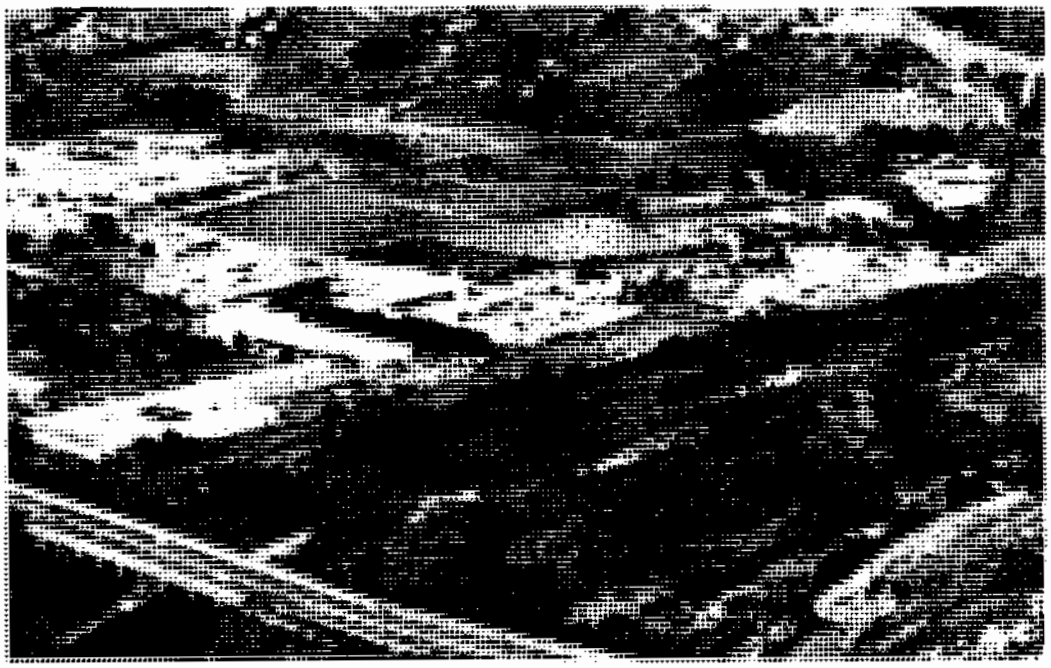

Figure 2. Malibu Creek, 1979, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

Figure 3. Malibu Creek, 1986, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org

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Figure 4. Malibu Creek, 2002, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

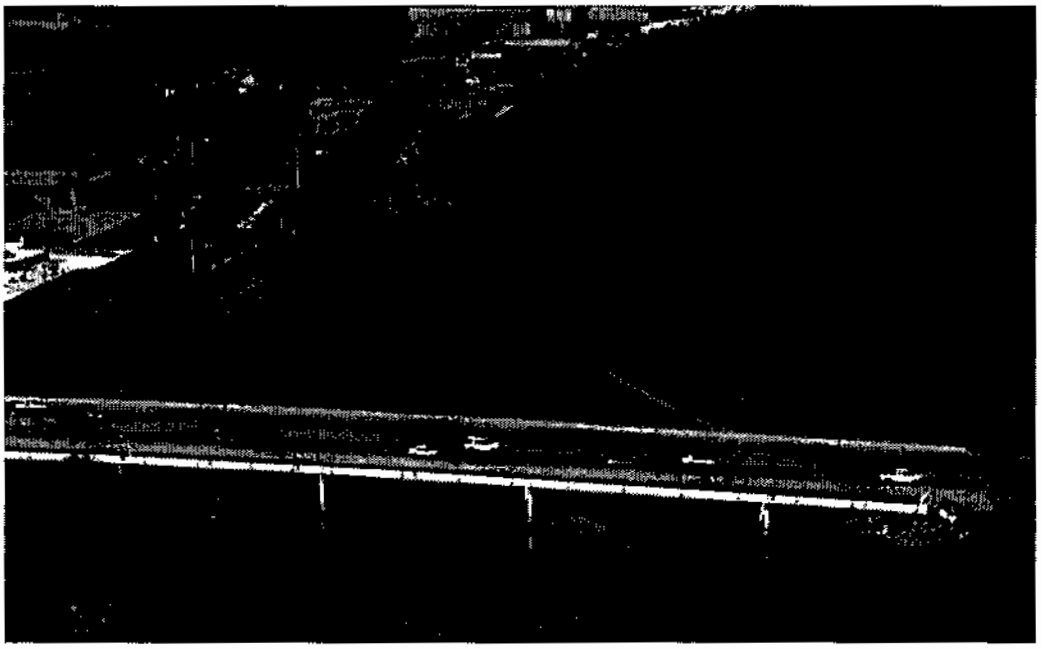

Figure 5. Malibu Creek, 2004, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

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Figure 6. Malibu Creek, 2008, with polygon overlay of illegally fenced and developed area. Copyright (C) 2002-2009 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org.

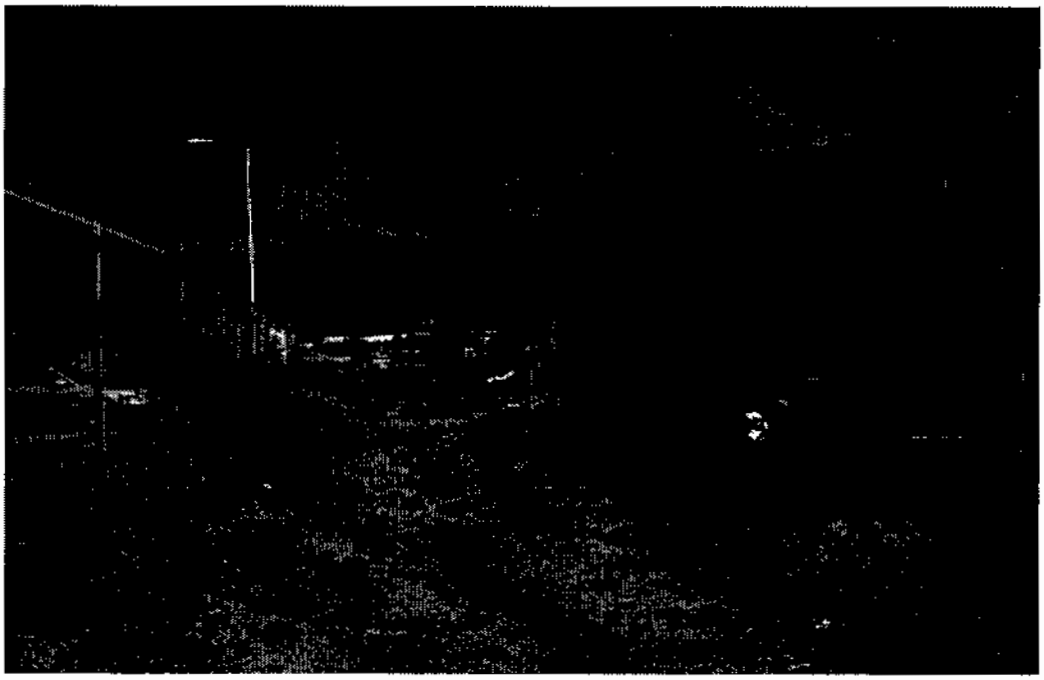

Figure 7. Illegally fenced area developed by Mariposa Land Co. on Malibu Creek. North facing picture taken from vantage point south of illegally fenced area, on June 22, 2009.

13 d

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Figure 8. Illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. North facing picture taken just south of illegally fenced area, on June 22, 2009.

Figure 9. Inside illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. North facing picture taken just south of illegally fenced area, on June 22, 2009.

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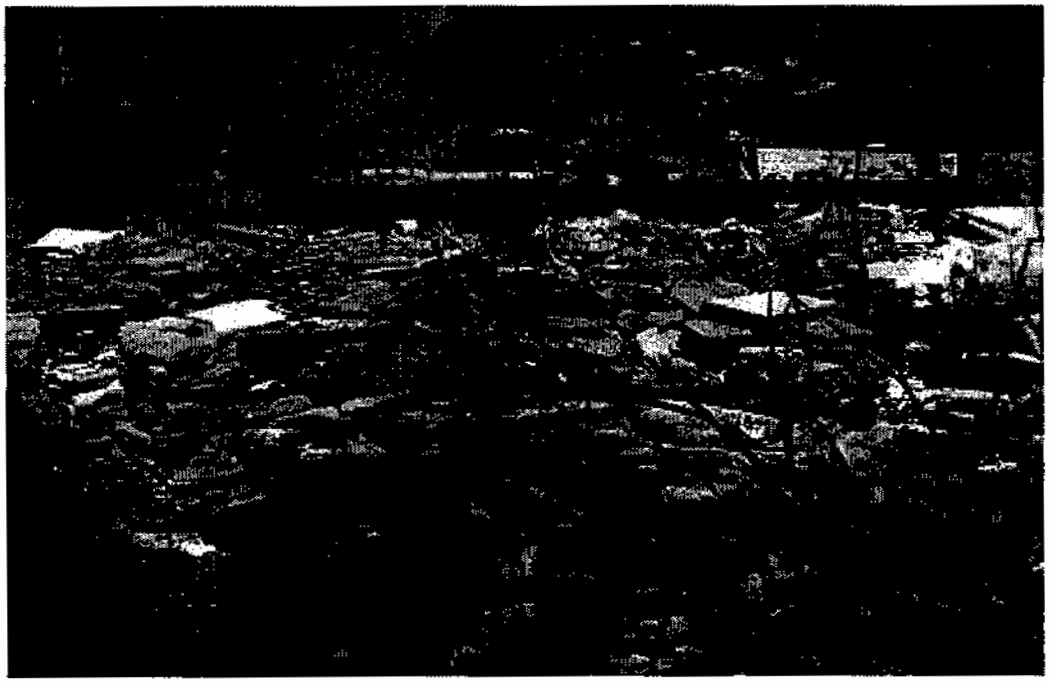

Figure 10. Inside illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. West facing picture taken just east of illegally fenced area, on June 22, 2009.

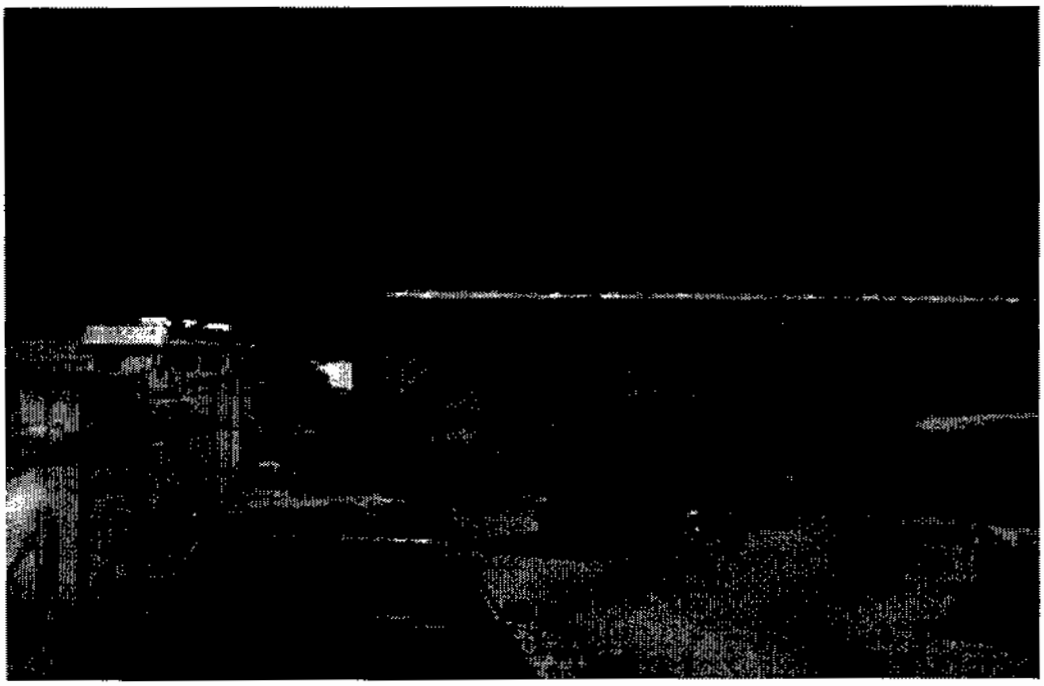

Figure 11. Inside illegally fenced area constructed by Mariposa Land Co. on Malibu Creek. North facing picture taken of trailer visible in Figures 5 & 6, on June 22, 2009.

13 d

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Figure 12. Failing grouted riprap. West facing picture taken from Malibu Creek on June 22, 2009.

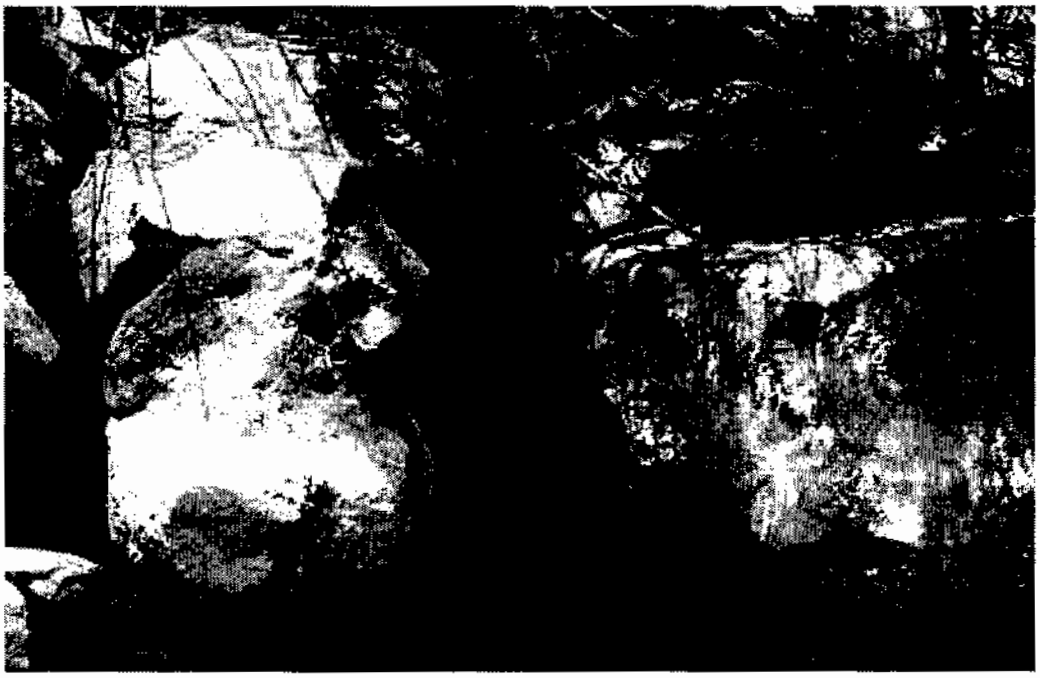

Figure 13. Failing loose boulder riprap placed by Mariposa Land Co. West facing picture taken from Malibu Creek on June 22, 2009.

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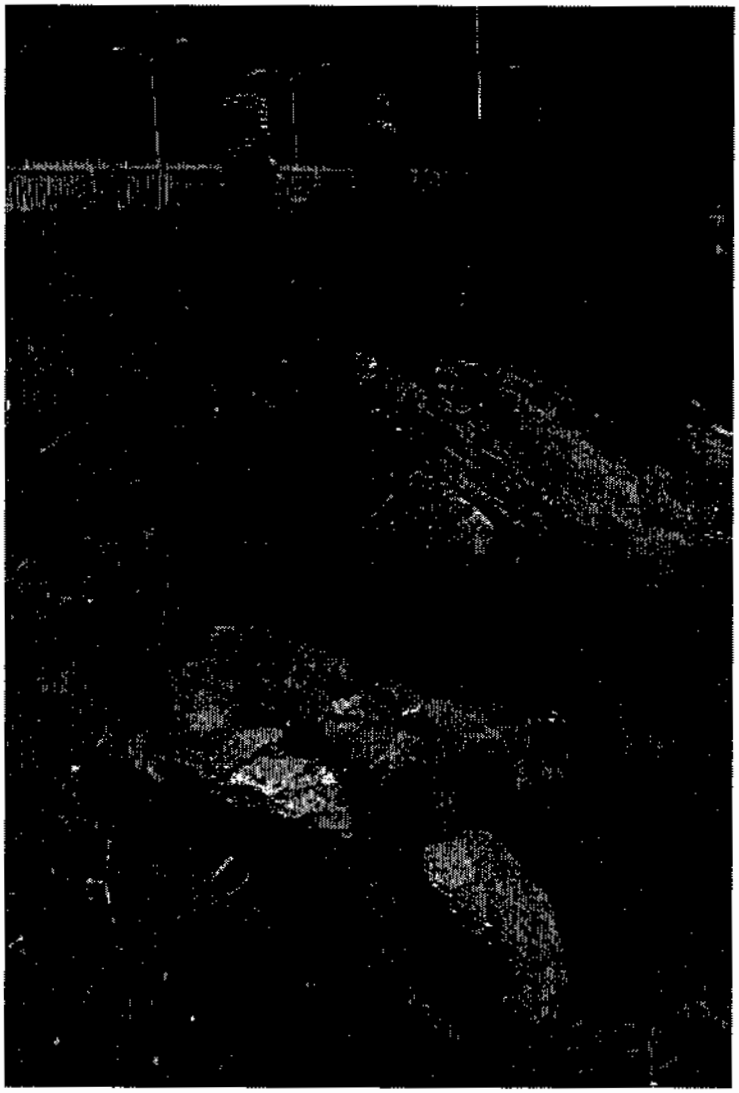

Figure 14. Failing loose boulder riprap placed by Mariposa Land Co. on Malibu Creek. North facing picture taken on June 22, 2009.

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Figure 15. Undercut loose boulder riprap placed by Mariposa Land Co. North facing picture taken from Malibu Creek on June 22, 2009.

Figure 16. Unstable stream bank on Mariposa Land Co property, south of loose boulder riprap. West facing picture taken from Malibu Creek on June 22, 2009.

13d

Malibu Surfing Association

A non-profit organization
Federal Tax ID 95-4459007

PO Box 2683
Malibu, California
90265-7683 USA

msasurfing.org

February 3, 2009

VIA FEDERAL EXPRESS

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001

Re: Agenda Item: Th2.6a
Application No.: 4-98-024

To Whom It May Concern:

Malibu Surfing Association was founded by members of the Malibu community more than 40 years ago and we are intimately involved with the past, present, and future of Malibu Lagoon and Surfrider Beach. Many of our members are residents of the City of Malibu and we are an entirely volunteer association. We speak on behalf of our members whose views represent those of the surfing community and the 1.5 million visitors to Malibu Surfrider Beach who should be able to use this recreational resource without fear of water borne illness.

This letter shall constitute our objection to the California Coastal Commission Staff Report and recommendations, related to the Mariposa Land Company Application (4-98-024) for a permit to make permanent the 500 ft. stretch of riprap along the west bank of lower Malibu Creek, at their site at 3738 Cross Creek Road.

We are joining in and concurring with Heal the Bay's comment letter which is being submitted contemporaneously. In particular, we believe that the Staff Report and recommendations still fail to address the following:

1. The project, and the Coastal Commission's review of it, still defends illegal hardening of a streambank of Malibu Creek, which is designated as riparian habitat ESHA (Ecologically Sensitive habitat Area) by all interpretations of the Coastal Act and Chapter 3 of the City of Malibu LCP Land Use Plan. Even if this area were not designated ESHA, it would still be well within the legally protected 100 ft. buffer of Malibu Creek;

2. The proposal of the plan to "create riparian habitat," even with revisions by the Coastal Commission, is a false one, for the following reasons:

    a. The proposed 2:1 slope is still too steep to create viable habitat;

Re: Agenda Item: Th2.6a
Application No.: 4-98-024

b. The idea that concrete riprap can support native riparian flora and fauna, many of which depend on a sandy substrate, is absurd;

c. The idea to use a "geotextile filter fabric" as an underlay to the riprap could cause potential additional problems to the environment, depending on material used (many are plastic-based); and

d. The inclusion of only a handful of plant species in the revegetation plan does not constitute "habitat".

3. The proposal still does not address the illegal fence and 400 ft. of riprap located upstream and contiguous to the site;

4. Both the Coastal Act and the City of Malibu LCP Land Use Plan clearly state that impacts to ESHA and buffer areas to protect existing structures are allowed only when there are no "feasible alternatives." There are feasible alternatives to this plan that have not been considered. One is the creation of a flood wall on the existing parking structure, to protect the entire property; and

5. The current proposed plan could necessitate further impact to the creek, due to described construction activities.

Thank you for taking the time to consider our comments.

Sincerely,

Joseph S. Melchione, Chairman
Environmental Committee
Malibu Surfing Association

JSM/so

Malibu Surfing Association

A non-profit organization
Federal Tax ID 95-4459007

PO Box 2683
Malibu, California
90265-7683 USA

msasurfing.org

April 7, 2009

VIA FAX AT: (805) 641-1732

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001

Re: Opposition to CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:

Malibu Surfing Association was founded by members of the Malibu community more than 40 years ago and we are intimately involved with the past, present, and future of Malibu Lagoon and Surfrider Beach. Many of our members are residents of the City of Malibu and we are an entirely volunteer association. We speak on behalf of our members whose views represent those of the surfing community and the 1.5 million visitors to Malibu Surfrider Beach who should be able to use this recreational resource without fear of water borne illness.

Malibu Surfing Association would like to join in on opposing the CDP Application No. 4-09-013 for the reasons set forth in Heal the Bay's letter which is attached hereto for your ready reference.

Sincerely,

Joseph S. Melchione, Chairman
Environmental Committee
Malibu Surfing Association

JSM/so
Attachment

cc: Michael Blum, President
Malibu Surfing Association (via email w/attachment: Michael.blum@gmail.com)

cc: Sarah Sikich, Coastal Resources Director
Heal the Bay (via email w/attachment: ssikich@healthebay.org)

ex. 13 a

SANTA MONICA BAYKEEPER

February 3, 2009
California Coastal Commission
89 South California Street, Suite 200
Ventura, CA 93001

Re: Follow-up to Emergency Coastal Development Permit No: 4-98-024, Placement of Rock Rip Rap Along Lower Malibu Creek – DENY Permit Application

Dear Commissioners,

My name is Mark Abramson. I am the Director of Watershed Programs for Santa Monica Baykeeper. I have been monitoring water quality, biological communities, and restoring stream and wetland habitats throughout the Santa Monica Mountains for more than 12 years. I have also been commenting on this specific project for more than 10 years. This project remains relatively unchanged despite the fact that the Coastal Commission has recommended that the applicant restore the area and has denied the applicants previous Coastal Development Permits to leave the rip-rap on this site. The Santa Monica Baykeeper strongly urges the Commission to deny staff's recommendation on CDP ***Permit Application 4-98-024 with 13 special conditions to address the unpermitted loose boulder rip-rap on the applicant's property that was installed in 1998 as "an emergency permit".***

While the staff recommendations of the 13 special conditions improve the project they are wholly inadequate and do not restore the streambanks of Malibu Creek and Lagoon and will likely not work as staff intends. The staff report and proposed permit fails to address the 10 plus years of with the emergency permit and water quality degradation of Malibu Creek and Lagoon caused by the unpermitted rip-rap. The project as proposed is not compliant with the Coastal Act, the Malibu Local Coastal Plan LUP or LIP.

Additionally, staff has incorrectly stated that the project area in question is not ESHA. We vehemently disagree with this unfounded assertion. The disturbances on this site have been wholly caused by the property owner and the site has been maintained purposely in this unnatural state. Directly upstream and downstream of the project site Malibu Creek and Lagoon has intact riparian and wetland vegetation. If not for the activities of the landowner and the rip-rap installed on the site, this location would also have extensive riparian and wetland vegetation.

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Additionally, this area supports and is critical habitat for two federally endangered fish species: steelhead trout and tidewater goby. This deliberate degradation and destruction of ESHA should not be validated or encouraged as the staff is proposing here with its recommendation to approve the CDP.

In addition, the proposed permit does not address persistent Coastal Act violations that have occurred on the same parcel and constitute impermissible encroachment into the stream buffer area. These same violations exacerbate conditions that cause or contribute to streambank erosion and degrade water quality downstream. The staff report makes no recommendation to correct these violations.

The proposed staff solution to create planted rip-rap does not incorporate proper techniques or reflect current practices. Finally, the planting plan is woefully inadequate to restore riparian habitat and ESHA buffer back to this site.

In short, the overall plan as proposed is inconsistent with existing Coastal Act policies and the Malibu Local Coastal Plan; it will not function properly and will lead to further degradation of water quality and habitat over the long term.

I. Background:

Rip rap does a poor job of stabilizing stream banks and causes or contributes to downstream erosion and sediment loading. Based on my specific experience in the Malibu Creek Watershed I believe that the rip rap proposed by this project is a wholly inadequate approach to stream bank stabilization in the Lower Malibu Creek.

I have mapped over 70 miles of streams in the Malibu Creek Watershed and documented 987 individual bank armoring projects, of which 62% were failing or had failed. Loose boulder rip-rap accounted for 403 of the mapped bank armoring projects and had a failure rate of 74.9%, and grouted or concreted boulder rip-rap accounted for 173 of the mapped bank armoring projects with a failure rate of 68.2%. Armored stream banks were one of three major causes of downstream bank erosion and sedimentation identified in the Draft State of Malibu Creek Watershed Report. (Luce and Abramson, June 2005). The data analyzed in that report clearly demonstrated the ineffectiveness of bank hardening, especially rip-rap, as well as the damage that armored stream banks cause to downstream resources.

II. Noncompliance with Emergency Coastal Permit from September 1998 to present; no mitigation or attempt to correct violations.

The emergency permit ("Permit") was granted by the Coastal Commission to protect structures during an emergency situation (El Nino) and was never intended to help the applicant avoid meeting the conditions of the Coastal Act. Moreover, the applicant did not even meet the conditions required in the Permit to make the emergency work permanent. The applicant is therefore in violation of the Permit conditions and has been since September of 1998.

The intent of an emergency permit is not to allow for the permanent placement of structures that damage waters of the United States and fill wetlands, but to protect property during extreme conditions using temporary measures. This is clearly in the Permit dated February 20, 1998, Emergency Permit Application Number 4-98-024-G, in Attachment 7, Page 2, Bullet Point 4 and "Important" note.

Within 60 days of the date of this permit, the permittee shall apply for a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received the emergency work shall be removed in its entirety within 150 days of the date of this permit unless waived by the director.

IMPORTANT
Condition # 4 indicates that the emergency work is considered to be temporary work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a coastal permit must be obtained. A regular permit would be subject to all the provisions of the California Coastal Act and may be conditioned accordingly.

Bullet 7 on the same page states:

The regular Coastal Development permit application shall include an analysis of all other alternatives for shoreline, bluff, or stream bank protection prepared by a qualified engineer.

The applicant did not submit an application for a new Coastal Permit to make the emergency work permanent. Nor did the applicant conduct an analysis of all other alternatives for stream bank protection. Instead, the applicant now, 11 years later, is trying to make the rip-rap permanent with this application, which also contains no real analysis of alternatives. This is not consistent with the Coastal Act or the City of Malibu's LUP or LIP.

Further, the staff report fails to recognize the serious impacts caused to the ecosystem by the installation of the rip-rap in 1998 and the significant impacts that have occurred during the time in which the applicant has been in violation of their temporary Permit (September 1998 to date), as well as ignores the requirement to comply with the provisions of the Permit and to correct the situation. Allowing the rip-rap to become a permanent solution will degrade water quality and habitat downstream including critical habitat for the federally endangered steelhead trout and

tidewater goby. Exhibit 1 shows the map of this area; special notice should be paid to the stream bank erosion downstream of the rip-rap at issue. This is a continual source of sediment loading to Malibu Lagoon. Fine sediments are considered a significant source of phosphates in the summer months and contribute to eutrophication in the Lagoon (Malibu Lagoon Restoration and Enhancement Plan, June 2005). The existing rip-rap on site is already failing (toe undercut) and this lateral and downward channel erosion further exacerbates sediment loading to Malibu Lagoon. Malibu Lagoon is on the State 303(d) List of Impaired Water Bodies for algae, eutrophication, and sediment.

Santa Monica Baykeeper requests the Commission require the applicant to address the entire stream reach from the Civic Center Drain approximately 860 ft downstream to the Shell Drain (Exhibit 4). Addressing the entire streambank is essential to a successful stable final project Additionally, we request that property owner be assessed significant fines and penalties for the years of non-compliance and environmental degradation caused by this non-compliance. The applicant has been in non-compliance for more than 10 years (over 3,650 days). Even if the Commission issued a minimum fine of $ 500.00 dollars per day, the applicant would owe at least $ 1,825,000 as of today.

III. Failure to address adjacent unpermitted fencing and grouted rip-rap armoring directly upstream contribute to the stabilization problem.

The proposed special conditions specifically exclude the grouted rip-rap and fence placement directly upstream on the applicant's property on the same parcel (Exhibits 1 through 3), both of which contribute to bank erosion and bank failure downstream. If all three of these elements are not addressed together, existing erosion and bank failure problems will continue to occur and the resulting maintenance activities will continue to jeopardize water quality and habitat in the lagoon.

The attached 2004 and1997 and aerial photos (Exhibits 2 & 3 respectively) clearly shows that the upstream fencing did not exist prior to the bank erosion. Further, a comparison of Exhibit 2 taken in 2004 and Exhibit 3 taken in 1997 clearly shows the loss of vegetation that occurred within the fenced area. The steep bank that supports the fencing forces higher volumes and velocity water to scour the stream bank contributing to its failure. As there is no mention of the fencing in the temporary Permit, and there is no other Coastal Permit allowing this fencing, it should be removed. Similarly, the grouted rip-rap upstream of the project (Exhibits 1 and 2) actually deflects flows toward the project stream bank and likely induces scouring of that bank. Clearly, if the fencing and upstream rip-rap elements are ignored, there is an even higher likelihood that the proposed stabilization will continue to fail.

We urge the Commission to require the property owner to address the entire stream reach from the outlet of the Civic Center Drain to the Shell Drain approximately 860 ft. (Exhibit 4). The restoration should include removal of the unpermitted fencing and all material storage in that area. The restoration should require the reestablishment of the riparian vegetation and stream ESHA buffer. Staff recommends laying back the streambank to a 2-1 slope. Creating a 3-1 slope is more appropriate and better reflects the slopes of streambanks upstream and downstream of the project site in this area. Additionally a 3-1 slope would allow for far superior energy dissipation of stream flows and re-vegetation of the site.

IV. The current loose boulder rip-rap, grouted rip-rap, and fencing are in the riparian ESHA and riparian buffer ESHA.

The existing unpermitted structures and proposed recommendations in the staff report conflict with the following sections of the Coastal Act, Malibu's Local Coastal Plan, Land Use Plan.

Sections 30230 and 30231 of the Coastal Act require that the biological productivity and the quality of coastal waters and streams be maintained and where feasible, **restored** through among other means, minimizing adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and minimizing alteration of natural streams. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values.

3.23 State Development adjacent to ESHAs shall minimize impacts to habitat values or sensitive species to the maximum extent feasible. Native vegetation buffer areas shall be provided around ESHAs to serve as transitional habitat and provide distance (minimum 100ft.) and physical barriers to human intrusion.

3.32 Channelizations or substantial alterations of streams shall be prohibited except for flood protection of existing development **where there is no feasible alternative** and **bioengineering shall be preferred for flood protection over rip-rap channels.**

3.34 Bioengineering methods or "soft solutions" should be developed as an alternative to constructing rock revetments, vertical retaining walls or other "hard structures" along lower Malibu Creek. If bioengineering methods are demonstrated to be infeasible, then other alternatives may be considered. Any applications for protective measures along lower Malibu Creek shall demonstrate that existing development in the Civic Center is in danger from flood hazards, that the proposed protective device is the least environmentally damaging alternative, that it is sited and designed to avoid and minimize impacts to the habitat values of the riparian

corridor along the creek and the recreational and public access use of State Park property along the creek, and that any unavoidable impacts have been mitigated to the maximum extent feasible.

3.88 Buffer areas shall be provided around wetlands to serve as transitional habitat and provide distance and physical barriers to human intrusion. Buffers shall be of sufficient size to ensure biological integrity and preservation of the wetland they are designed to protect, but in no case shall they be less than 100 feet in width.

3.121 Alteration or disturbance of streams or natural drainage courses or human-made or altered drainage courses that have replaced natural streams or drainages and serve the same function, shall be prohibited, except where consistent with Policy 3.32. Any permitted stream alterations shall include BMPs for hydromodification activities.

This project also is in conflict with the City of Malibu, Local Implementation Plan, Section 17.9: Hydromodification, Paragraph B:

Any channelization or stream alteration permitted for one of these three purposes shall minimize impacts to coastal resources, including the depletion of groundwater, and shall include maximum feasible mitigation measures to mitigate unavoidable impacts. Bioengineering, unless no feasible alternative exists, is the only acceptable method of bank stabilization and flood protection for new development, and the preferred method for redevelopment. Where armoring of stream banks has failed, streambanks shall be stabilized using bioengineered structures, unless no feasible alternative exists. Any permitted stream alterations shall include BMPs such as incorporating vegetation in structure design, deflecting flow from eroding stream banks, and reshaping the eroding bank and establishing vegetation.

V. Alternatives Analysis is inadequate and conflicts with Malibu's LCP and LUP.

It appears that all the alternatives analyzed were done either by Commission staff and or the environmental community and not the applicant. In fact, other than what the applicant has proposed the project engineers state that all other alternatives are not feasible and/or more environmentally damaging. Santa Monica Baykeeper is currently managing the Lagoon Restoration and Enhancement project on behalf of California State Parks and the State Coastal Conservancy directly downstream of the project site. We had offered to include the Mariposa Land Company's rip-rap area as part of our original design and engineering for the Lagoon project but the property owner refused. Our engineers stated from their initial review that a project could be designed using soft bio-engineering solutions at this location. No review (other

than the applicant's consultants statements) has been conducted that adequately excludes soft bio-engineering. Also many of the other hybrid alternatives i.e. using geo-textiles, using rip-rap in the low flow channel and re-vegetating the upper bank have been successfully used on larger rivers (Ohio River) with significantly higher stream velocities and scour. Finally, the staff recommendations to plant the spaces between newly placed rip-rap is wholly inadequate and will not work. There are specific techniques required when installing planted rip-rap to better ensure vegetation will grow and establish. These techniques have been employed on Las Virgenes Creek upstream in the watershed and on Las Flores Creek in an adjacent watershed. We strongly recommend that only soft bio-engineered approaches be employed at this site but even if the Commission determined that planted rip-rap was needed a firm that knows how to design and install this technique must be required. Additionally, we need to see an engineered plan showing how this technique will be employed. Just describing it in a staff report is inadequate and inappropriate.

We urge the Commission to require soft bio-engineering at the site. Natural vegetation exists without armoring directly upstream and downstream of this location. Further, we are not employing any armoring in the Lagoon project directly downstream of the project site. The floodwall/ soft bio-engineered alternative accomplishes both property protection and real streambank restoration even though we believe that the floodwall is unnecessary.

VI. The current design has not employed the use of large woody debris to deflect flows from the streambank.

Santa Monica Baykeeper would strongly recommend that large woody debris be installed along two locations adjacent to the streambank. The woody debris should be anchored to the bank using the techniques in the Salmonid Habitat Restoration Manual produced by the California Department of Fish and Game. Additionally, this woody debris should be placed facing upstream to deflect flows away from the streambank design and installation should follow the procedures outlined in the Salmonid Habitat Restoration Manual produced by the California Department of Fish and Game. This will have two beneficial effects: 1. It will help deflect flows away from the streambank while allowing the vegetation to become established and 2. It will provide instream habitat for steelhead trout and tidewater goby.

VII. The Commission should require a Hazard Analysis Critical Control Point Plan (HACCP) to prevent the transport of New Zealand Mudsanils (NZMS) to other streams and watersheds.

Malibu Creek was identified as having NZMS in 2005 benthic macroinvertebrate samples. Santa Monica Baykeeper and the Santa Monica Bay Restoration Commission have conducted annual NZMS surveys on Malibu Creek 2006-2008. NZMS have dramatically increased their density

and geographic distribution since they were first discovered. NZMS are easily transported to uninfected waterbodies by attaching themselves to clothing (especially footwear) and equipment and hitching a ride to a new waterbody. NZMS have been recorded in densities greater than 500,000 organisms per square yard and simply outcompete our native benthic macroinvertebrates, such as dragonflies, which are a critical food source for fish and other aquatic wildlife. NZMS reproduce asexually or through cloning; it only takes one snail to start a new colony.

It is strongly recommended that measures be implemented to prevent the spread of this noxious invader. Clothing and footwear should be frozen for 48 hours after having contact with the stream. Construction workers must be required to strictly follow this protocol. Additionally, any equipment that has contacted the stream including heavy equipment should be pressure washed, steam cleaned and allowed to thoroughly dry out for 72-hours before being transported to another site. Requiring all contractors to complete a HACCP plan that is then approved by the Commission who understand how NZMS are transported is essential. Santa Monica Baykeeper and the Santa Monica Bay Restoration Commission are happy to review any HACCP plans.

VIII. Conclusion

We urge the Commission to **deny** this permit. The CDP, even incorporating commission staff recommendations for this site, is wholly inadequate and is in direct conflict with the State Coastal Act and Malibu's own Local Coastal Plan LUP and LIP.

The project site is within Malibu Lagoon, one of the few remaining coastal wetlands in Los Angeles County. Significant financial resources and investment have been spent and will be spent in the near future by the State to improve water quality and enhance habitat at Malibu Lagoon and Surfrider Beach. Further, the project site was considered one of the highest priority restoration sites to enhance Malibu Lagoon throughout the 6-year planning, facilitation, and design process that culminated in June 2005 with the Malibu Lagoon Restoration and Enhancement Plan. In fact during the creation of the Lagoon Restoration and Enhancement Plan, the applicant **refused** to have the consulting team research and present other solutions for this site.

As proposed the project will continue to degrade water quality and critical habitat for the federally endangered tidewater goby and southern steelhead trout. In addition, the rip-rap will require maintenance and repair in perpetuity, each time further degrading habitat and water quality in the Lower Malibu Creek and Lagoon. A bioengineered solution will be the most protective of the streambank, restore some floodplain connectivity and restore riparian vegetation – all critically needed to restore stream function and natural processes in this area. Moreover, soft bioengineering will be more cost effective and is consistent with the Coastal Act and

Malibu's Local Coastal Plan, as well as with the overall restoration effort for Malibu Lagoon and Surfrider Beach.

The emergency rip-rap bank stabilization has already had a detrimental impact on Malibu Lagoon's natural resources and water quality for more than ten years. At this point, the Commission shouldn't consider any project short of a full-blown stream bank and riparian buffer restoration plan that encompasses the entire approximate 860 ft. stream reach (Exhibit 4) with a mitigation component and fines for the historic damages caused by the emergency rip-rap bank modification. The proposed project even with staff recommendations fails to accomplish this. Consequently, the application for CDP should be DENIED.

We appreciate the opportunity to comment on this CDP.

Sincerely,

Mark Abramson
Director of Watershed Programs
Santa Monica Baykeeper

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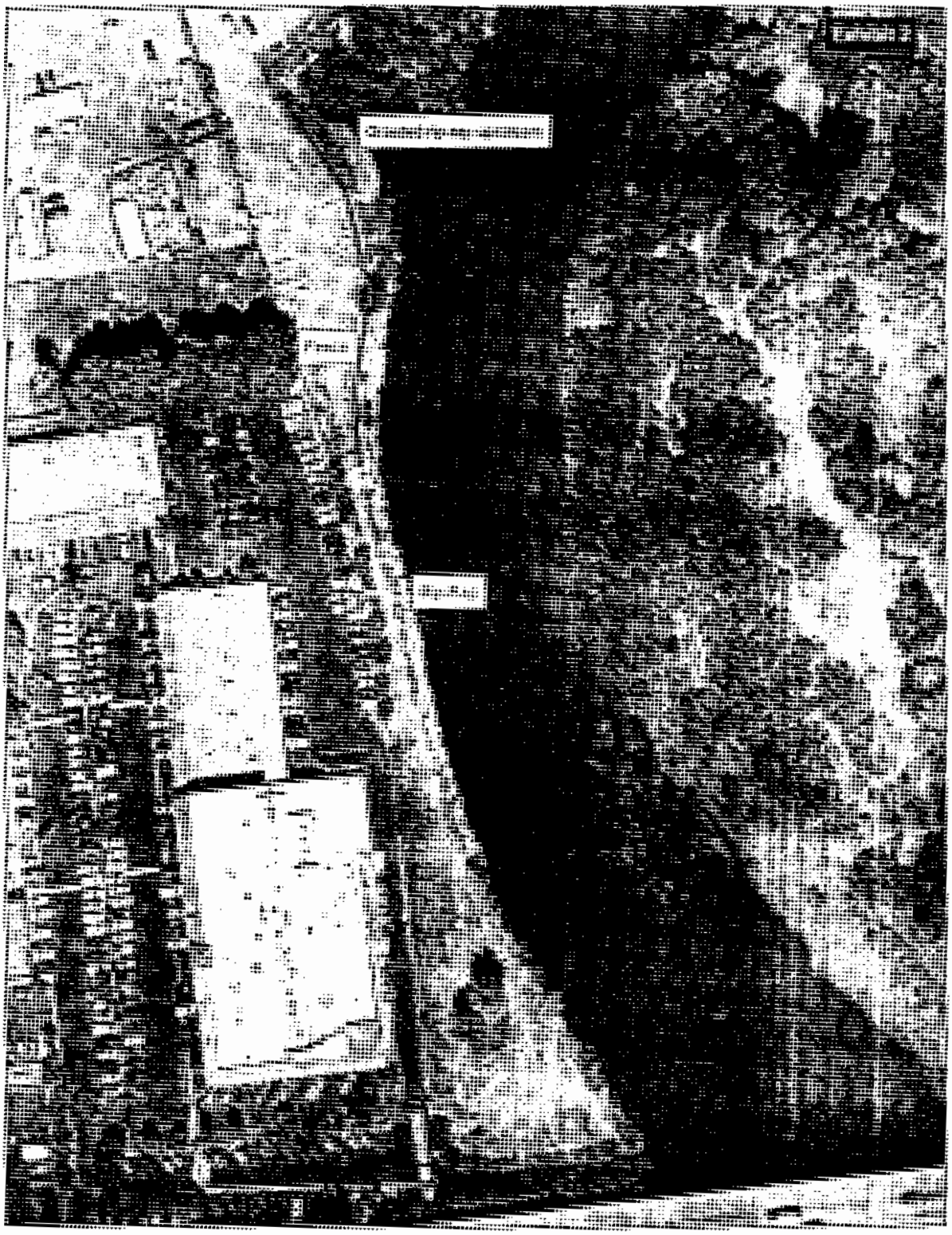
ex. 13 f



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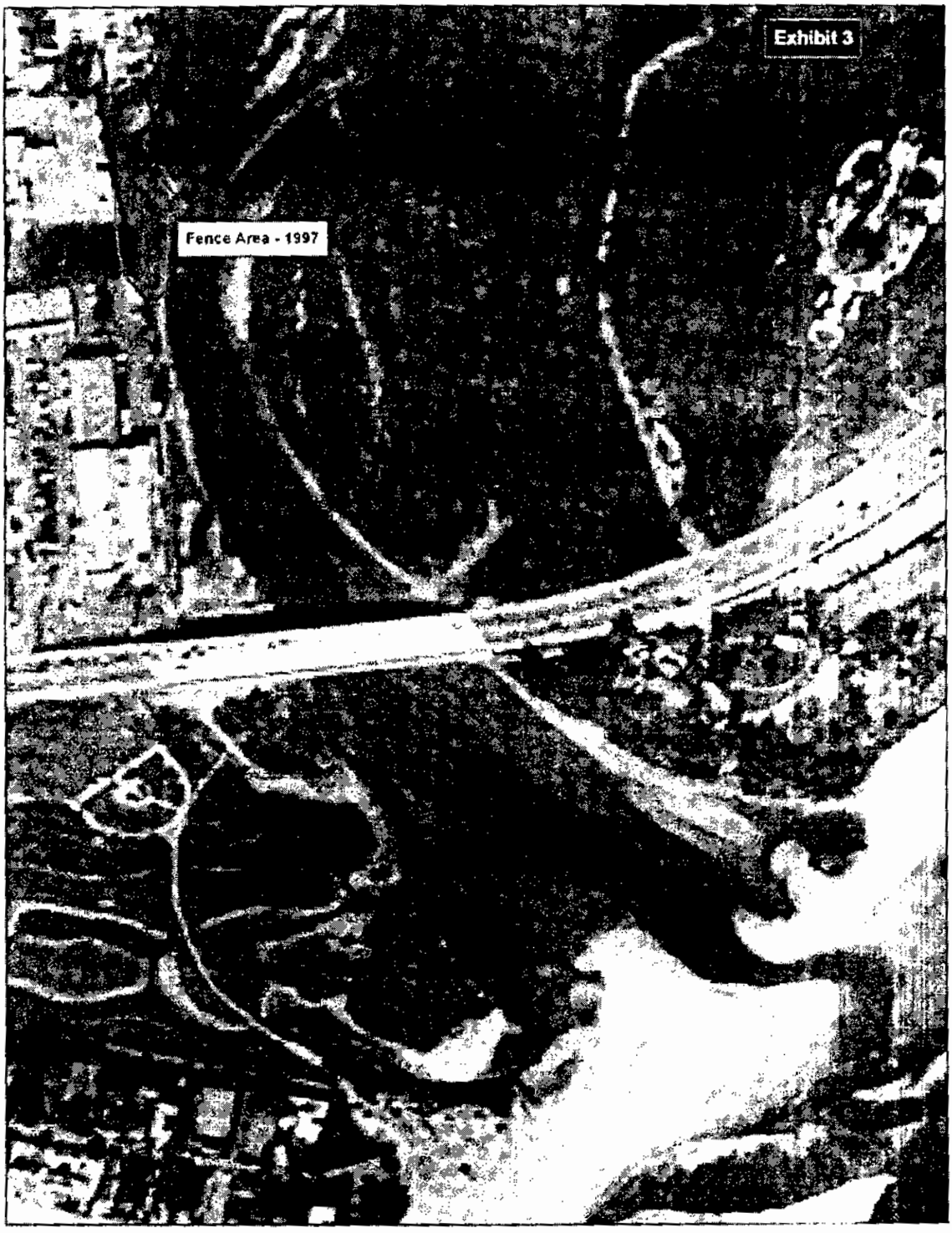

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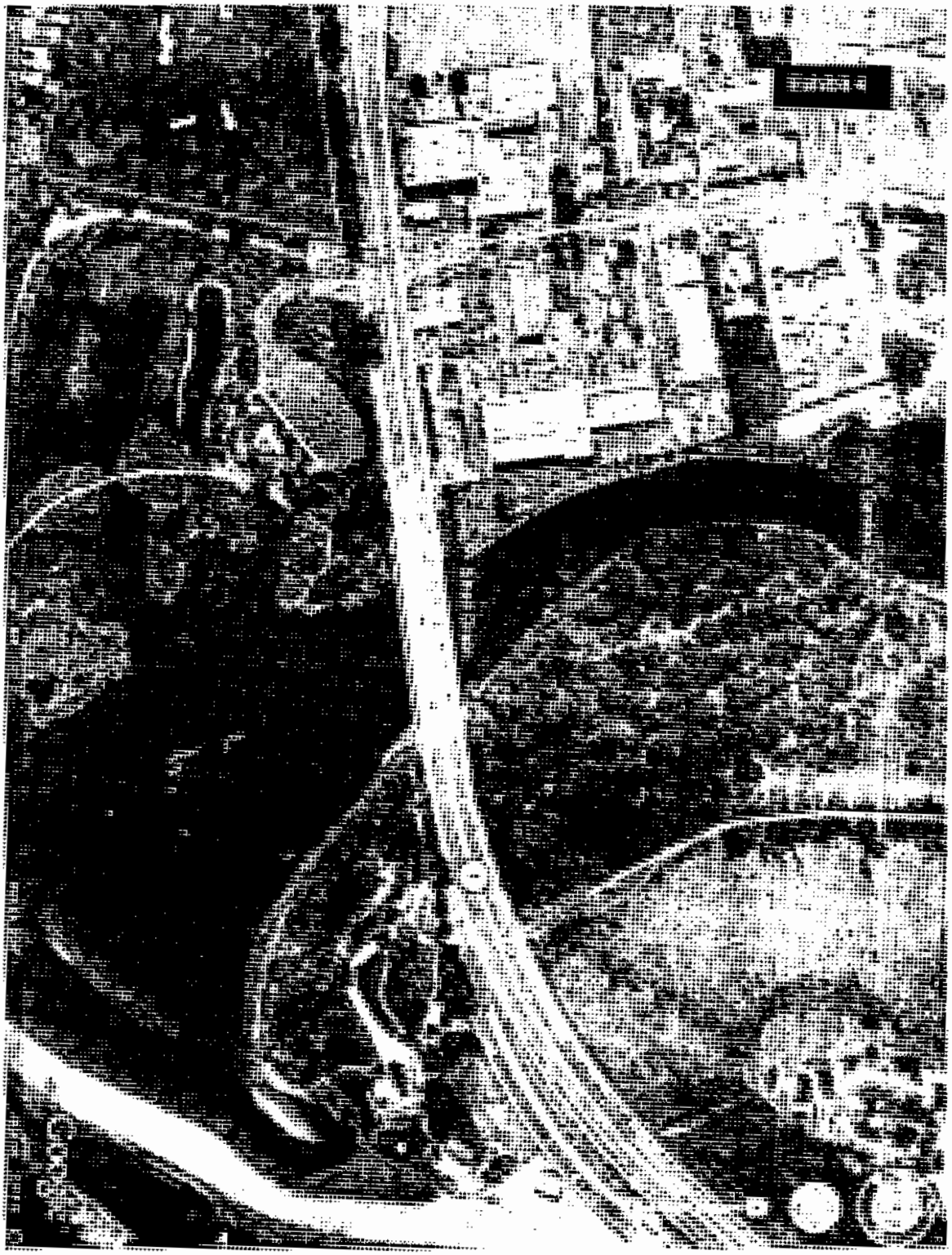

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ex. 13 f

SANTA MONICA BAYKEEPER

RECEIVED
APR 08 2009
CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Item Th 9c

April 7, 2009

California Coastal Commission
South Central Coast Area
89 South California St., Suite 200
Ventura, CA 93001

Re: Opposition to CDP Application No. 4-09-013 to permanently retain 500 linear feet of rock rip-rap revetment on Malibu Creek at 3728 Cross Creek Road

Dear Coastal Commissioners:
Santa Monica Baykeeper (SMBK) has reviewed Application No. 4-09-013, submitted by the Mariposa Land Company, to permanently retain approximately 500 linear feet of rock rip-rap revetment along the west bank of lower Malibu Creek. SMBK urges the Coastal Commission to deny this application based on the detailed written comments we submitted on February 3, 2009 (Attachment A) and the concerns outlined below.

In 2005, State Parks and the California Coastal Conservancy offered to include the specific parcel subject to CDP Application No. 4-09-013 as part of the comprehensive Malibu Lagoon Restoration project at no cost to the project applicant. The larger Malibu Lagoon Restoration project design involved substantial engineering and monitoring that could have included the subject parcel resulting in a restored and fully-functional stream bank. Inexplicably, this offer was repeatedly refused by Mariposa Land Company and the parcel did not become part of the larger restoration effort. This resulted in continued degradation of water quality and sedimentation to the Malibu Creek and Lagoon ESHA, potentially impacting two federally endangered aquatic species (Tidewater goby and Steelhead trout). The Coastal Commission should not allow the perpetuation of this continued disregard and violation of the Coastal Act and the authority of the Commission to protect our coastal resources from pollution and ill-conceived development. Mariposa Land Company's CDP Application No. 4-09-013 should therefore be denied.

The proposed project is in direct conflict with numerous policies in the California Coastal Act, as well as the City of Malibu's Local Coastal Program ("LCP"), as it will negatively affect habitat that is designated as ESHA. In our previous letter we raised concerns that the subject stream bank should be designated ESHA, and therefore the proposed project should be designed to provide the most ESHA protection. Although the staff report states that this concern is addressed in its section B, that section has not been updated since the staff report on the previous application 04-98-024 and in fact no new information regarding ESHA has been added.

Malibu Creek is a USGS-designated blue-line stream, which constitutes ESHA. Malibu Creek and its riparian corridor are also designated as ESHA in the certified Malibu LCP. Section 30240 of the Coastal Act requires that both ESHA and ESHA buffers be protected from development and activities that cause degradation. Surveys that I conducted throughout the Malibu Creek Watershed document that armored streambanks are one of three major causes of downstream bank erosion and sedimentation. Moreover, these types of armoring have the highest rates of failure of any type of stream bank armoring projects (74.9 % failure rate for loose boulder rip-rap and 68.2 % for grouted rip-rap). In fact, the exact same streambank subject to this permit application was previously rip-rap before it failed during the 1998 storm events.

In addition to the hardened streambank, the proposed project also features permanent submerged rip-rap within Malibu Creek and Lagoon, which is undoubtedly ESHA and is designated critical habitat for the federally endangered Tidewater goby and southern Steelhead trout. Approval of a permanent hardened revetment in Malibu Creek, Lagoon, and their buffers is inconsistent with the ESHA policies of the Coastal Act and the City of Malibu LCP, as it will cause further degradation of stream, wetland, and riparian habitat in this area. Instead, we support a bioengineered solution, as it will be the most protective of the streambank, restore some floodplain connectivity and restore riparian vegetation.

In our February 3, 2009 letter we also pointed out that the grouted rip-rap at an upstream storm drain outlet and an adjacent fenced storage area on the same parcel owned by Mariposa Land Company are unpermitted and should be included in the scope of work for the subject permit (Exhibit 1 and 2). It is highly unlikely that the project as described in the CDP application will be successful if the upstream grouted rip-rap area that currently is putting pressure on the proposed area downstream is not addressed. This entire contiguous stream reach must be sloped back and restored if the project is to succeed.

Staff responded in the current report that this development "is unrelated to the project proposed in the subject permit application and in a location that is outside the Commission's retained jurisdiction." Aerial photographs and parcel data gathered from the City of Malibu clearly shows that this upstream area is on the same parcel and is therefore subject to this permit (Exhibits 1 and 2). Furthermore, it is unclear how that area would be outside of the Commission's retained jurisdiction, as properties to the north, south, east and west of that property all fall within the Coastal Zone. The staff report and proposed permit fail to address the emergency permit (Emergency CDP No. 4-98-024-G) and associated development, which has existed unpermitted and has contributed and continues to contribute to water quality and habitat degradation in Malibu Creek and Lagoon for more than 10 years. In addition, the permanent rip-rap proposed within this application will require regular maintenance and repair, which will further degrade habitat and water quality in the Malibu Creek and Lagoon.

We urge the Commission to deny this permit application and recommend that a bioengineered solution be designed for this site. A soft bioengineered solution will be the most protective of the streambank, restore some floodplain connectivity and restore riparian vegetation in Malibu Creek and Lagoon. We strongly object to the lack of alternatives analysis and the heavy reliance of the Coastal Commission Staff on the project applicant's engineer. In addition, the entire contiguous stream reach must be addressed to ensure the success of the project and protection of the ESHA. In order for the Coastal Commission or the public to truly evaluate the impacts of the project as proposed by either the project applicant or the Commission Staff actual engineered drawings, and a fully thought-out planting plan should be provided for review. A bioengineered solution is consistent with the Coastal Act and the City of Malibu LCP, and will be the most cost-effective long-term solution for stabilization at this site.

Sincerely,

Mark Abramson
Director of Watershed Programs
Santa Monica Baykeeper

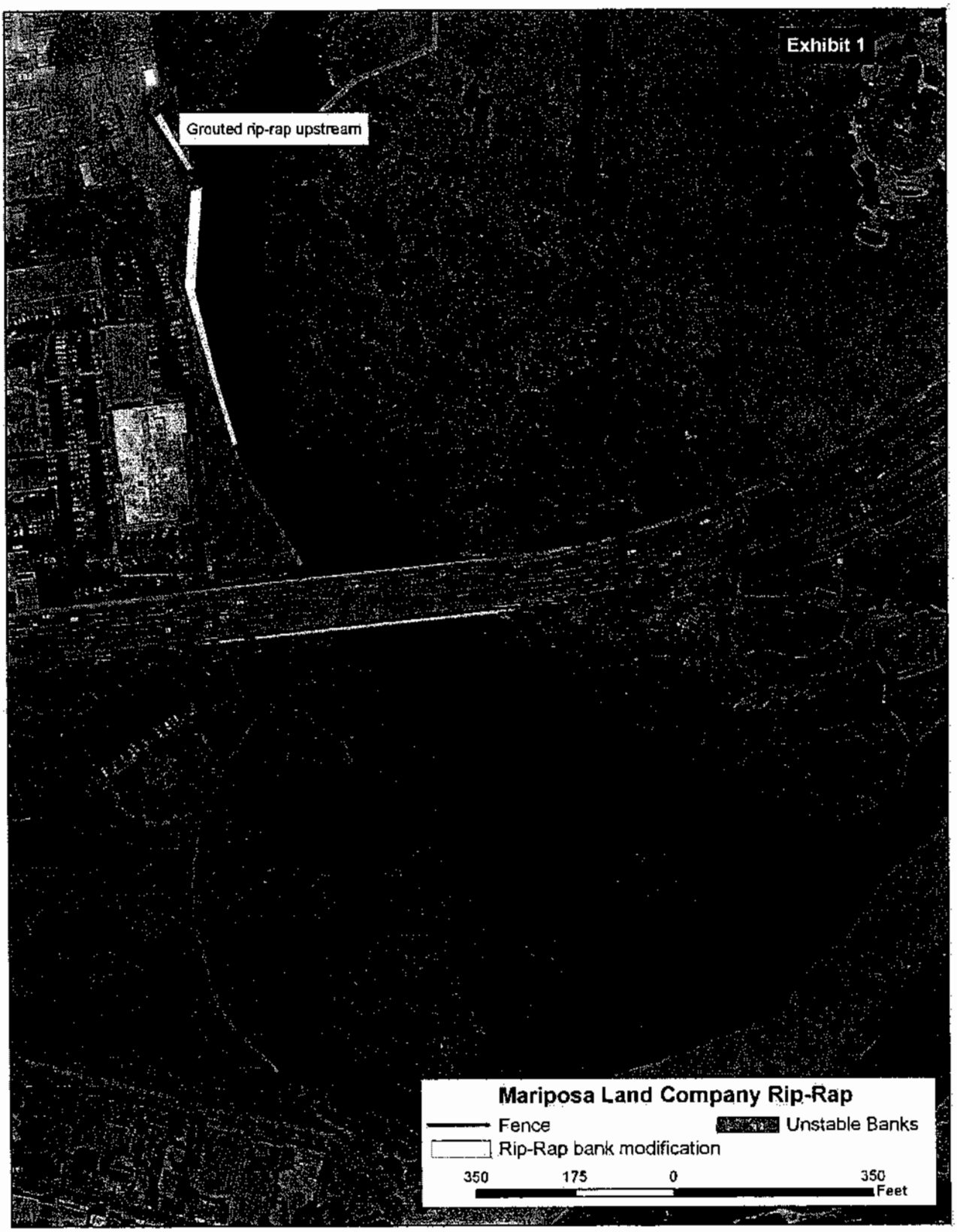
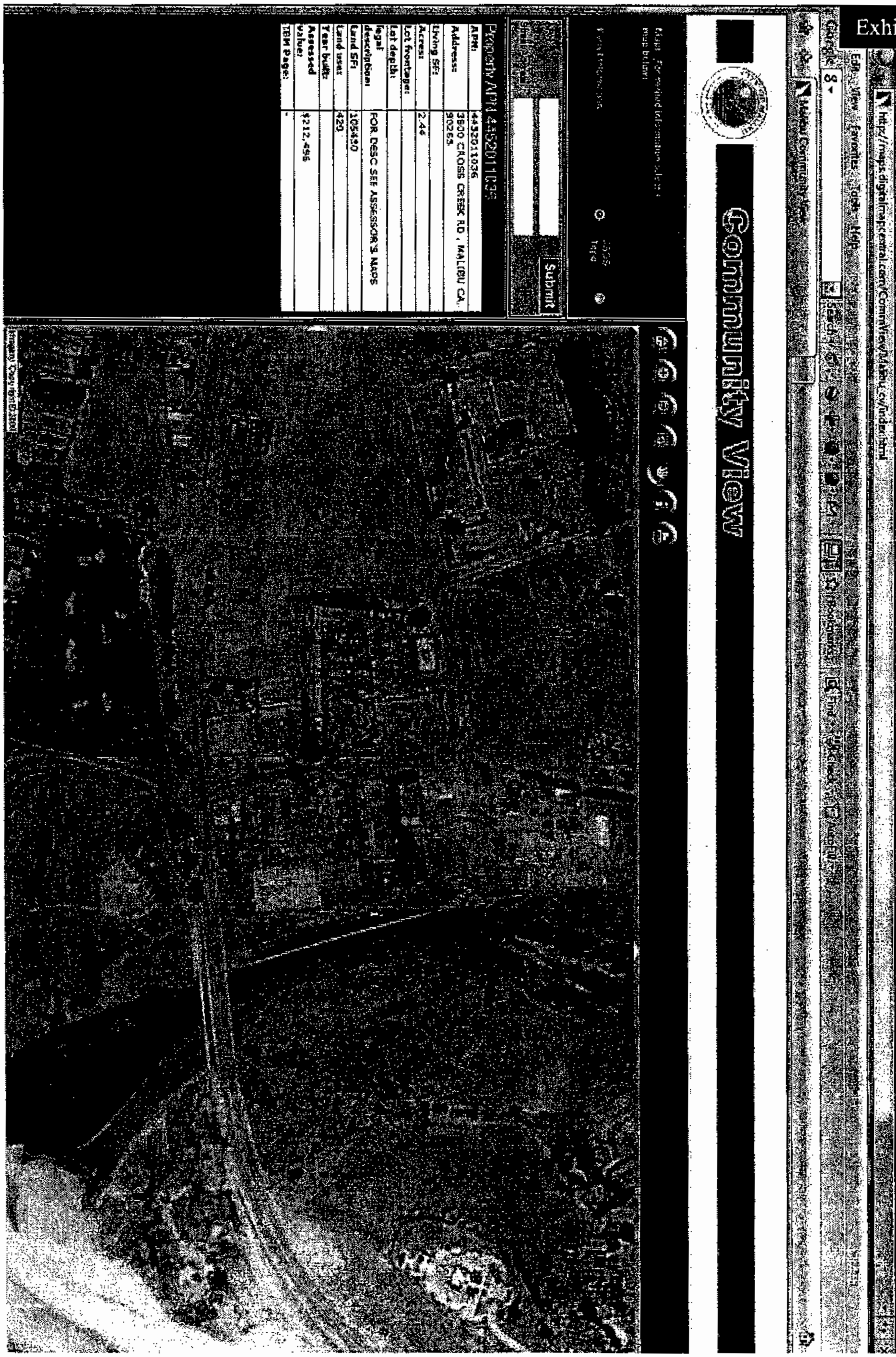


Exhibit 1
Grouted rip-rap upstream
Mariposa Land Company Rip-Rap
Fence
Unstable Banks
Rip-Rap bank modification
350
175
0
350
Feet

Exhibit 2



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RESOURCE CONSERVATION DISTRICT
OF THE
SANTA MONICA MOUNTAINS

30000 MULHOLLAND HIGHWAY, AGOURA HILLS, CALIFORNIA 91301
MAIL: P.O. BOX 638, AGOURA HILLS, CALIFORNIA 91376-0638
(818) 597-8627 FAX (818) 597-8630

A Political Subdivision
of the State of California

DANIEL C. PREECE
Executive Officer

April 7, 2009

California Coastal Commission
South Central Coastal Area
89 South California St., Suite 200
Ventura, CA 93001
Via fax (805) 641- 1732

RE: CDP Application 4-98-024: Rip-rap revetment on Malibu Creek at 3738 Cross Creek Road

Dear Coastal Commissioners:

The Resource Conservation District of the Santa Monica Mountains (RCDSMM) has reviewed the Coastal Development Permit Application 4-98-024 submitted by the Mariposa Land Company, concerning the permanent placement and continued maintenance of an approximately 500-foot linear riprap revetment along Malibu Creek. Our organization previously commented on this project in 2005 (Appendix A) and our chief concerns remain the same.

As already emphasized by Heal the Bay, the project does not comply with Section 30236 of the Coastal Act:

> "Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat."

In fact, the project has not conducted a thorough study of bioengineering alternatives. Furthermore, the existing rip-rap may diminish habitat of local federally endangered species, the tidewater goby (*Eucyclogobius newberryi)* and southern steelhead trout (*Oncorhynchus mykiss*). The RCDSMM has been active in the conservation and management of the populations of tidewater gobies and southern steelhead trout within Malibu Creek and Lagoon since the lagoon restoration commenced in 1984.

ex. 13g

Tidewater Goby

The proposed rip-rap occurs within the lower portion of Malibu Creek, which is within the "LA-1: Malibu Lagoon" unit a 64-acre critical habitat unit designated by the U.S. Fish and Wildlife Service, outlined in the "Revised Designation of Critical Habitat for the Tidewater Goby; Final Rule" (Volume 73, No. 21). (Appendix C)

LA-1 is one of the two remaining extant populations of the tidewater goby within Los Angeles County, both of which have been designated as critical habitat units. The LA-1 unit contains the biological features that are essential to the conservation of the species, or its Primary Constituent Elements (PCEs). According to the Final Rule, the PCEs for this species are the following:

1. Persistent, shallow (in the range of about 0.1 to 2 m), still-to-slow-moving, aquatic habitat most commonly ranging in salinity from 0.5 ppt to about 10 to 12 ppt, which provides adequate space for normal behavior and individual and population growth;
2. Substrates (e.g., sand, silt, mud) suitable for the construction of burrows for reproduction;
3. Submerged and emergent aquatic vegetation, such as *Potamogeton pectinatus, Ruppia maritima, Typha latifolia,* and *Scirpus* spp. that provides protection from predators; and
4. Presence of a sandbar(s) across the mouth of a lagoon or estuary during the late spring, summer, and fall that closes or partially closes the lagoon or estuary, thereby providing relatively stable water levels and salinity.

Malibu lagoon contains PCEs 1, 2 and 3, although their precise location during any particular time period may change in response to seasonal fluctuations in precipitation and tidal inundation.

In June of 2005, the RCDSMM, in partnership with Heal the Bay, conducted a survey of tidewater gobies in Malibu Lagoon (see Appendix B) and observed over 400 individuals. A total of six sample sites were selected to provide an overview of all potential habitat types in the lagoon, except for the deep thalweg in the center (which was too deep to seine effectively). Sites conform to those proposed for continued post restoration monitoring, plus a known tidewater goby site upstream of the PCH bridge (TG1). Seining was conducted in conformance to the pre and post project monitoring plan protocol, as noted in the Draft Malibu Lagoon Monitoring Plan, the Lagoon Restoration and Enhancement Project Monitoring Plan, and the Lagoon Restoration and Enhancement Quality Assurance Project Plan.

Southern Steelhead Trout

The project site is also within federally designated critical habitat for the Southern California Evolutionary Significant Unit of endangered southern steelhead trout (Appendix D). Presence of individuals has also been well-documented by RCDSMM biologists upstream of the existing rip-rap along the west bank of Malibu Creek. Monthly snorkel surveys of Malibu Creek, conducted by the RCDSMM since 2001, have found that steelhead trout utilize pools along Malibu Creek up to the pool just below Rindge Dam.

Steelhead PCEs include:

1. Freshwater spawning sites with water quantity and qualityconditions and substrate supporting spawning, incubation and larval development.
2. Freshwater rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.
3. Freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

4. Estuarine areas free of obstruction with water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater;
5. Nearshore marine areas free of obstruction with water quality and quantity conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation;
6. Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

Conclusion

Section 7 of the Endangered Species Act (ESA) states that each federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. It requires the review of specific projects so as to avoid and minimize adverse impacts to federally-listed species, where another federal permit is required. The federal nexus created by the U.S. Army Corps of Engineers' issuance of a Regional General Permit for this project may trigger the need for a Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The USFWS manages impacts to the tidewater goby and the NMFS manages anadromous species, including the southern steelhead trout. The Coastal Commission should ensure that both the USFWS and NMFS have reviewed the project in order to properly address these issues.

We request that the applicant be required to analyze bioengineering alternatives to the streambank stabilization along the existing rip rap structure. Bioengineering is a well-founded restoration method, encouraged by the Natural Resources Conservation Service (NRCS) in situations where it is a technically sound restoration method as a substitute for the more frequently used methods (rip-rap revetment, etc.) that are much less desirable from an environmental perspective. Bioengineering techniques have been proven to provide valuable fish and wildlife habitat, along with improving water quality rather than diminish it like traditional approaches.

The RCDSMM appreciates the chance to comment on this CDP application. We ask that the Coastal Commission requires the replacement of the existing rip rap with a bioengineered alternative, and deny the current application. Further analysis of more sustainable erosion control systems are necessary, and appropriate wildlife agency reviews/permits should be sought for federally endangered species impacts, if not already done so.

Sincerely,

Sandra Albers
Conservation Biologist
Resource Conservation District of the Santa Monica Mountains

ex. 13 g

APPENDIX A: RCDSMM Comment Letter 2005

RESOURCE CONSERVATION DISTRICT
OF THE
SANTA MONICA MOUNTAINS

122 NORTH TOPANGA CANYON BOULEVARD TOPANGA, CALIFORNIA 90290
(310) 455-1030 FAX (310) 455-1172

DANIEL C. PREECE
District Manager

August 5, 2005

Raneika Brooks McClain
Associate Planner
City of Malibu
Planning Division
Attn: IS No. 03-003
23815 Stuart Ranch Road
Malibu, CA 90265

IS No. 03-003 ,3738 Cross Creek Road

Dear Raneika Brooks-McClain,

The Resource Conservation District of the Santa Monica Mountains (RCDSMM) appreciates the opportunity to provide comments on IS No. 03-003 and Mitigated Negative Declaration No. 04-002 concerning the permanent placement and continued maintenance of an approximately 500-foot linear riprap revetment along Malibu Creek. These are our chief concerns:

1. Any unresolved enforcement issues with the Coastal Commission should be settled before the MND is certified

2. The document fails to include review by the USFWS who may require a permit for impacts to federally endangered species present at site: the Tidewater Goby and Southern Steelhead Trout.

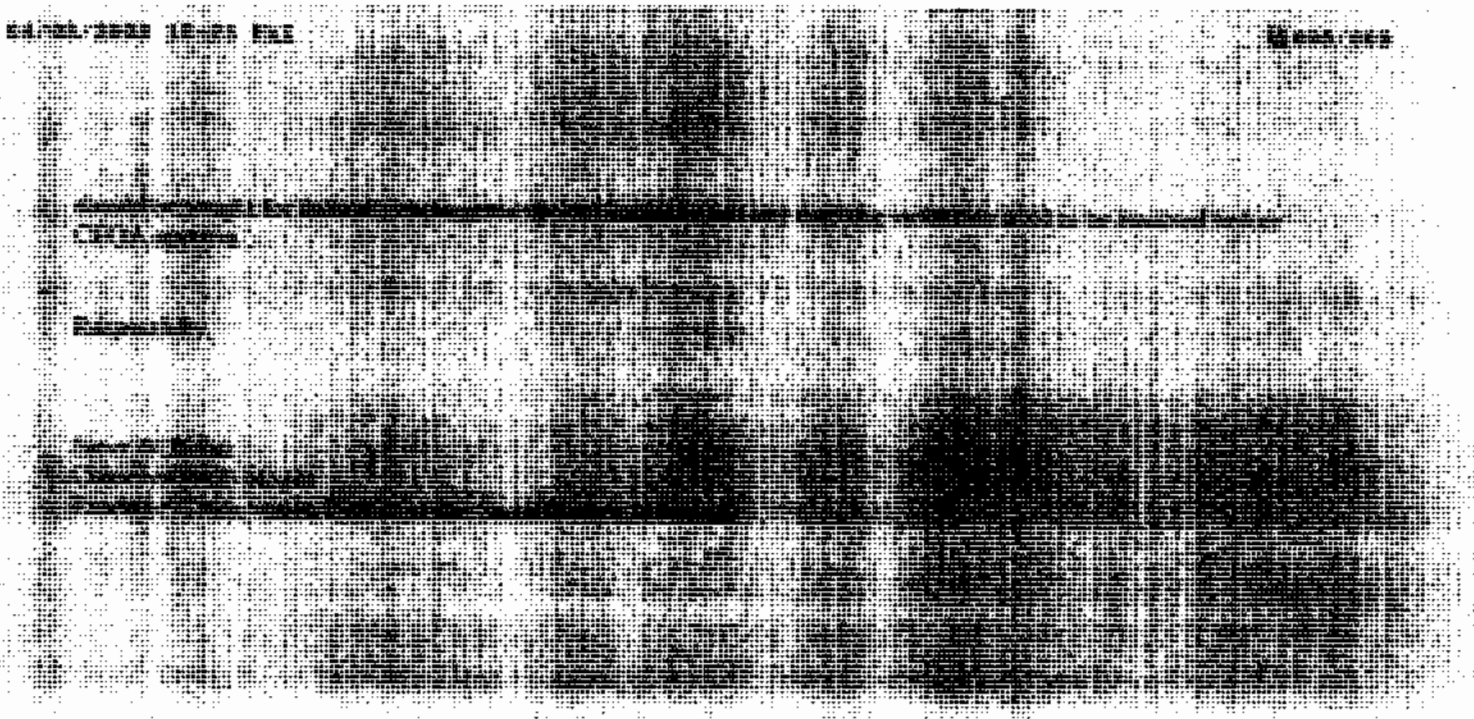
3. The proposed ongoing maintenance of the riprap is an admission of failure. The riprap is already undercut; this type of creekside hard armoring is outdated and possesses a long history of failure and exacerbation of downstream erosion and sedimentation, in this case into endangered species habitat. This emergency stop-gap measure does not provide a sustainable and environmentally sound solution to future high water events.

4. Alternative erosion solutions, such as riprap removal and re-sloping with a deeply-rooted vegetated buffer, are not analyzed in the MND. As such, the MND is in violation of CEQA for not providing an analysis of an environmentally superior alternative.

5. The proposed addition of topsoil and plantings into gaps in the riprap will fail to allow root contact with the slope soil, resulting in shallow-rooted plantings which may easily die and/or wash away during flood events. Vegetation should be planted directly into re-contoured slope substrate (which requires riprap removal), thereby creating a strong root network to fortify bank against erosion. This is the most sustainable solution requiring the least maintenance and least impact to the Tidewater Goby and Steelhead Trout habitat.

Thank you for listening to our concerns with this project. The RCDSMM asks Malibu to not approve the MND as it appears. Further analysis of more sustainable erosion control systems are necessary, appropriate wildlife agency permits

ex. 13 g



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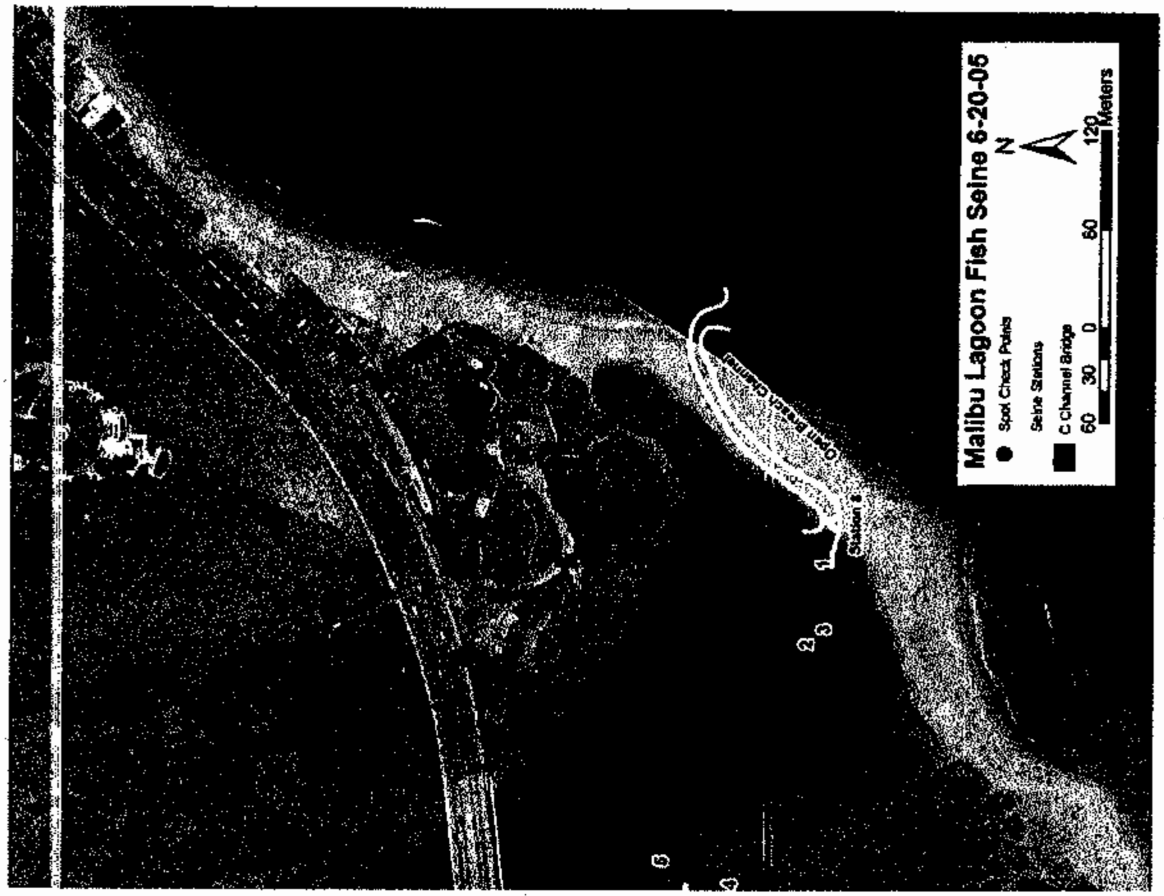
Malibu Lagoon Fish Seine 6-20-05
Spot Check Points
Seine Stations
C Channel Bridge
N
60 30 0 60 120
Meters

ex. 13 9

Mariposa Land Company, Ltd. v. California Coastal Commission,
BS 122761

Statement of Decision on Petition for Writ of Mandate

Petitioner Mariposa Land Company, Ltd. ("Mariposa") petitions for writ of mandate under the California Environmental Quality Act ("CEQA") and the California Coastal Act of 1976 ("Coastal Act"). The court has read and considered the moving papers, oppositions, and reply, heard oral argument, and renders the following decision.

A. Statement of the Case

Petitioner Mariposa filed the Petition on September 14, 2009. The First Amended Petition ("FAP"), the operative pleading, was filed on January 11, 2010. In the FAP, Mariposa makes an administrative mandamus challenge under CEQA of an August 13, 2009 decision by the Commission to approve a coastal development permit ("CDP") with special conditions for a permanent revetment[1] on Mariposa's property along the west bank of the Lower Malibu Creek. The Petition claims that the Commission violated CEQA by (1) failing to consult with other agencies, (2) failing to provide written response to public comments, (3) improperly delegating the determination of whether the project as approved was the least environmentally damaging feasible alternative.

Mariposa also challenges the Commission's decision as violating the Coastal Act because (1) its finding of feasibility was not supported by substantial evidence, (2) the finding that the project was consistent with Public Resources Code section 30253 was not supported by the evidence and the finding did not support the decision, (3) the finding that the project was consistent with Public Resources Code section 30236 was not supported by the evidence and the finding did not support the decision, and (4) the finding that the project was consistent with Public Resources Code sections 3030, 30231, 30233, 30240, and 30251 was not supported by the evidence and the finding did not support the decision.[2]

In addition to administrative mandamus claims, the FAP makes claims for declaratory relief that the Commission's actions constitute a taking within the Fifth Amendment of the United States Constitution.[3]

B. Standard of Review

A party may seek to set aside an agency decision for failure to comply with CEQA by petitioning for either a writ of administrative mandamus (CCP §1094.5) or of traditional mandamus. CCP §1085. A petition for administrative mandamus is appropriate when the party

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[1]A "revetment" is a masonry or boulder protection of a river or stream bank.

[2]Mariposa's moving papers purport not to waive any claim of abuse of discretion raised in the FAP but not discussed in the brief (Mot. at 25), but that is exactly what they do.

[3]The declaratory relief claims are stayed pending resolution of mandamus.

Exhibit 12
4-09-013 (Mariposa)
Statement of Decision

discretion in the determination of facts is vested in a public agency, on the grounds of noncompliance with [CEQA]." Pub. Res. Code §21168. This is generally referred to as an "adjudicatory" or "quasi-judicial" decision. Western States Petroleum Assn. v. Superior Court, ("Western States") (1995) 9 Cal.4th 559, 566-67. A petition for traditional mandamus is appropriate in all other actions "to attack, review, set aside, void or annul a determination, finding, or decision of a public agency on the grounds of noncompliance with [CEQA]." Where an agency is exercising a quasi-legislative function, such as by adopting a rule or entering into a contract, it is properly viewed as a petition for traditional mandamus. Id. at 567; Pub. Res. Code §21168.5.

At issue here is a CEQA and Coastal Act challenge to a quasi-judicial action taken by the Commission in approving a CDP for a project. This procedural setting, where an administrative hearing was required, is governed by administrative mandamus. *See* Pub. Res. Code §§ 21168, 30801. Review of the Commission's decision on a CDP where there is no vested right to develop property is governed by the substantial evidence test. Paoli v. California Coastal Commission, (1986) 178 Cal.App.3d 544, 550-51. "Substantial evidence" is defined as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Guidelines[3] §15384(a). Public entities abuse their discretion if their actions or decisions do not substantially comply with the requirements of CEQA. Sierra Club v. West Side Irrigation District, (2005) 128 Cal.App.4th 690, 698. Abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence. Western States, *supra*, 9 Cal.4th at 568; Pub. Res. Code §21168.5.

Mariposa argues that factual issues should be governed by the independent judgment standard of review. It contends that as a property owner it has a fundamental right to restore and even reclaim is property when lost through "avulsion."[4] It also has a right to access its property. Therefore, Mariposa argues, both its restoration and access rights should be treated as fundamental vested rights and reviewed under the independent judgment standard. Mot. at 11-12.

As the Commission correctly responds (Opp. at 7-8), a fundamental vested right to protect property is not the same as a vested right to protect the property in a particular manner. A permanent revetment in the coastal zone is a development and not a continued use protected as a vested right. Absent government approval, Mariposa does not have the right to build that permanent revetment in the coastal zone without a CDP. *See* Whaler's Village Club v. California Coastal Commission, (1985) 173 Cal.App.3d 240, 253. The Commission's approval of the revetment project is reviewed under the substantial evidence standard. *See* ibid.

Mariposa replies that the Commission's approval of the project's Special Conditions require the grading of 10,000 square feet of property and restrict its right of access, both of which

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[3]As an aid to carrying out the statute, the State Resources Agency has issued regulations called "Guidelines for the California Environmental Quality Act" ("Guidelines"), contained in Code of Regulations, Title 14, Division 6, Chapter 3, beginning at section 15000.

[4]"Avulsion" is the sudden removal of land by a current or change of a streambed.

constitute takings. Takings claims are reviewed under a *de novo* standard. Hensler v. City of Glendale, (1994) 8 Cal.4th 1, 16. *See also* Surfside Colony, Ltd. V. California Coastal Commission, (1991) 226 Cal.App.3d 1260, 1270 ('heightened scrutiny' or 'substantial relationship' test applies to takings review of connection between burden of proposed construction and the agency's conditions for permit).

This may be true, but the court is reviewing Mariposa's CEQA and Coastal Act claims concerning the Commission's approval of a project with Special Conditions. It is not deciding whether such conditions constitute a taking under the Fifth Amendment. The court reviews the Commission's decision under these environmental statutes using the substantial evidence standard. If the Commission's decision were upheld, Mariposa's taking claims would then be subject to *de novo* review.

Whether the agency abused its discretion must be answered with reference to the evidence in the administrative record. This standard requires deference to the agency's factual and environmental conclusions based on conflicting evidence, but not to issues of law. Laurel Heights Improvement Association v. Regents of University of California, ("Laurel Heights") (1988) 47 Cal.3d 376, 393, 409. Argument, speculation, and unsubstantiated opinion or narrative will not suffice. Guidelines, 15384(a), (b). Thus, the court will consider whether the Commission failed to comply with CEQA or made findings under the Coastal Act that were not supported by substantial evidence. The question whether substantial evidence exists is a question of law. *See* California School Employees Association v. DMV, (1988) 203 Cal.App.3d 634, 644.

C. The Administrative Record

The Commission has certified the administrative record. Pub. Res. Code § 21167.6; LASC 9.24(e).

Petitioner Mariposa seeks to augment the record with photographs showing that willow trees are naturally developing along the revetment, and an engineering report dated January 26, 2010. Petitioner argues that the report was filed with the Commission in accordance with Special Condition No.2, and it concludes that a revetment slope of either 3:1 (horizontal to vertical) or 2:1 is not hydraulically or spatially feasible.

Mariposa's request must be denied. First, it is procedurally defective. A request to augment the record must be made by noticed motion. Local Rule 3.231(g)(3). Assuming that Mariposa's "request" is deemed to be a noticed motion, it is untimely. The motion was required by CCP section 1005 to be filed and served on August 1, 2011, and instead was filed and served by mail on August 9, 2011.

Second, assuming that the Commission has waived the timeliness objection, the motion does not meet the requirements of CCP section 1094.5(e) ("section 1094.5(e)"). Extrinsic evidence in administrative mandamus may be considered where it is relevant and could not have been produced before the agency in the exercise of reasonable diligence or was improperly excluded at the agency hearing. CCP §1094.5(e). Where the additional evidence could affect the agency's decision in a case reviewed under the substantial evidence standard, the remedy is to remand the decision to the agency for consideration of such evidence. Ibid.

Petitioner Mariposa purports to justify the photographs of its property as showing the

growth of willow trees because the photographs were not available in 2009. The photographs are cumulative because the Commission had photographs of the same willow trees. Mariposa points to nothing new in the current photographs -- only the fact that the trees are larger than they were in the photographs contained in the administrative record. This is not enough to meet the requirement of section 1094.5(e).

The report is an expression of expert opinion that is not truly new evidence of emergent facts. *See* Fort Mojave Indian Tribe v. Dept. of Health Services, (1995) 38 Cal.App.4th 1574, 1595-96. Rather, the report is an elaboration of its authors' opinions on hydraulic and spatial feasibility that have been previously expressed. *See* id. at 1596.

Mariposa argues that the report is relevant because the Commission delegated these issues to its Executive Director, and "the administrative process did not end" with the Commission's decision. Yet, Mariposa objects to that very delegation in this mandamus proceeding. Either the delegation was proper and Mariposa can present the report to the Executive Director, or it was improper and there is no reason to supplement the administrative record with the report. Under either circumstance, the report is inadmissible.

The request to augment is denied.

D. Statement of Facts

1. The Property

The subject of this petition is a 500-foot-long stretch of Lower Malibu Creek, approximately 300 feet upstream of Pacific Coast Highway and the Malibu Lagoon. AR 1605. Malibu Creek is a United States Geological Survey-designated blue-line stream supporting a well-developed riparian[5] corridor and is an Environmentally Sensitive Habitat Area ("ESHA"). AR 1606. Mariposa's property along Malibu Creek is not within an ESHA, and is considered to be ESHA-adjacent property. Ibid.

Two threatened species of fish swim in Lower Malibu Creek: the tidewater goby and the southern steelhead trout. AR 1605. Malibu Creek and its estuary provide habitat for a diversity of wildlife, including waterfowl, shorebirds, wading birds, songbirds, and raptors, as well as a number of mammals, amphibians and reptiles. Ibid.

Immediately upstream of Mariposa's property is a well-developed, healthy riparian canopy. AR 1650. The health of Malibu Creek depends on the ecological functions of the associated riparian woodlands. AR 1606. The woodlands provide large woody debris for habitat, shading that controls water temperature, and leaves that are the foundation of the stream-based food chain. Ibid.

2. The Emergency CDP

Following heavy flooding along Malibu Creek in February 1998, the Commission issued an emergency CDP to Mariposa that temporarily authorized construction of a 500 foot long rip-rap[6] rock revetment along the west bank of Lower Malibu Creek. AR 1597, 1632. The

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[5]"Riparian" means along the bank of a river or stream.

[6]A "riprap" is a foundation or sustaining wall of stones thrown together without order.

revetment was necessary to protect an adjacent commercial development from damage as a result of stream bank erosion from additional winter storms. AR 1607. The emergency CDP required Mariposa to apply for a regular CDP within sixty days in order to obtain permanent authorization for the revetment. AR 1633. That application was to include an analysis of stream bank protection alternatives by a qualified engineer. Ibid.

3. The Application for a Permanent Revetment

On June 3, 1998, Mariposa submitted an application for a regular CDP. AR 1597. The application was incomplete and Commission staff informed Mariposa in a June 24, 1998 letter that its application lacked necessary approvals from other public agencies, site and grading plans, and analyses of biological and hyrdolgical impacts. AR 916-20.

Mariposa submitted a flood plain engineering analysis by Land Design Consultants (AR 822-66) and a biological impacts analysis by Hunt & Associates ("Hunt"). AR 806-21. Hunt found that there had been no adverse impacts to the Malibu Creek or wildlife from placing the boulders on the Malibu Creek bank. AR 813-14.

Over the next eight years, there were numerous contacts between Commission staff and Mariposa concerning the necessary information, particularly concerning engineering alternatives. AR 1598.

In 2005, the City of Malibu ("Malibu") found that with mitigating measures, continued maintenance of the existing boulders posed no risk of significant adverse environmental effect. AR 177-78.

Mariposa hired Pacific Advanced Civil Engineering, Inc. ("PACE"), a consulting engineering firm which specialized in water projects. AR 72. PACE did an analysis dated March 28, 2006 of the entire Malibu Creek area upstream for more than a mile. AR 1019-47. This study was updated in May 2007 to respond to Commission staff comments. AR 739-80.

PACE found that no changes in sediment transport of the Malibu Creek would be caused by leaving the boulders in place, and that there would be a change in sediment transport if a "laid back" alternative of reducing the bank slope and replacing the boulders was adopted. AR 762. PACE further found that leaving the existing boulders in place was the least environmentally damaging alternative. AR 766.

Commission staff asked for a more detailed re-vegetation plan. Mariposa submitted the report of Impact Sciences, Inc. ("ISI") detailing a proposed enhancement plan with willow trees planted among the rocks and a palette of native trees and shrubs planted on the level area behind the rocks. AR 868-98. Commission staff biologist Dr. Jonna Engel ("Engel") found that vegetation restoration would be more successful if the riprap were laid back at a lesser slope angle, such as 2:1. AR 911. She noted that ISI's re-vegetation plan was appropriate. AR 912.

On May 21, 2008, the Commission accepted the application as complete and the application was officially filed. AR 1115.

4. Mariposa's Re-Submission of the Application

In August 2008, Commission staff learned that Mariposa's plans for the as-built project were not based upon a detailed survey and were therefore not a reliable depiction of the existing revetment. AR 1598. Staff asked Mariposa to supply an as-built survey. Mariposa hired Grimes

Surveying to prepare a survey both of the land and water portions of the rocks. AR 1122-24. This report was submitted on October 10, 2008. AR 1598.

Under the Permit Streamlining Act ("PSA"), the Commission is required to schedule an application for hearing and act on an application within 180 days, with an allowance for one 90-day extension. Gov. Code §65950. In order to allow Commission staff adequate time to examine the survey, Mariposa extended the Commission's review time by 90 days. Ibid. The application was scheduled for a hearing at the Commission's meeting on February 4,2009, and the staff report was circulated on January 22, 2009. Ibid.

The January 22, 2009 staff report recommended that the existing riprap boulders be removed, the bank be graded to a 2:1 slope, and then the boulders returned to the newly graded bank. AR 98.

The Commission's regularly scheduled February meeting was its last before the elapse of the 270-day period mandated by the PSA. AR 1598. As Mariposa desired more time to respond to the staff report, it withdrew its application and resubmitted it, thereby starting the clock anew. Ibid.

The new application, identical to the first, was heard at the Commission's meeting on April 9,2009. Ibid. The staff recommendation was reissued on March 19, 2009. AR 1182-1208. Mariposa objected to the recommendation in writing. AR 1272-89.

Mariposa and its engineer and biologist testified at the Commission's April 9, 2009 hearing. AR 1383-95. PACE engineers provided an opinion that regrading the bank to a 2:1 slope would increase flooding risk in the FEMA mapped flood plain around the Malibu Civic Center. AR 1290-92. Mariposa also argued that reconstruction would cost $1,000,000 to move the boulders an average of only 54 inches. AR 1389.

The Commission took no action and continued the hearing in order to allow additional analysis of Mariposa's re-vegetation-only alternative and the feasibility of laying the slope back to 3:1. AR 1598.

5. The Commission's Approval with Special Conditions

The hearing resumed on August 13, 2009. The Commission staff's July 22, 2009 report noted that the bank along Mariposa's existing revetment is largely devoid of any vegetation, with the exception of small amounts of shrub and willow growing at either end. AR 1606. The existing riprap revetment was constructed using boulders varying in size from 1,000 to 16,000 pounds, placed at a slope ranging from 1:1 to 1.5:1 Ibid. The revetment is 14 to 16 feet in height, including a two- to four-foot toe below the streambed. Ibid. The area immediately above the existing revetment is dominated by weeds and non-native annual grasses. Ibid. The top of the revetment is between 18 and 60 feet from a nearby commercial shopping center, and a small footpath runs the length of the property along the top of the revetment. Ibid.

The staff report made a threshold finding that the adjacent Malibu Creek was an ESHA located within the 100-year flood plain. AR 1599. The report considered seven alternatives to Mariposa's proposal, and concluded that a riprap revetment with a more gradual slope than the existing slope was the least environmentally damaging alternative. AR 1607-08. The report further concluded that other alternatives either would not effectively control erosion of the bank or would cause long-term environmental harm by preventing the re-vegetation of the bank. Ibid.

The report recommended removal of the riprap boulders, grading to a flatter slope of 3:1 where feasible and no steeper than 2:1, placement of a filter blanket over the soil through which holes would be cut to allow the growth of planted willows, and replacement of the boulders. AR 1612.

The staff report also rejected Mariposa's proposal only to re-vegetate the as-built revetment. AR 1610-12. Staff found that maintaining the temporary revetment was not the least environmentally damaging feasible alternative because its steep angle is unsuitable for re-vegetation and re-establishment of the riparian corridor, contributes to erosion, impairs water quality, and compromises the structural stability of the bank. Ibid. Thus, the project would not ensure that water quality, stability, and habitat value of the bank were protected consistent with the policies of Chapter 3 of the Coastal Act. AR 1612.

PACE submitted a written report showing that a shallower 3:1 bank would increase the risk of flooding even more than the previously recommended 2:1 slope. AR 1718-27. Mariposa's biologist pointed out that a 2:1 slope would reduce the diversity of plants which could be planted, and those trees which could be planted would not provide riparian cover because they would be farther away from the water's edge. AR 1775-76.

At the conclusion of the August 13 hearing, the Commission adopted the staff recommendation and the findings of fact. The Commission approved the CDP subject to fifteen Special Conditions (the project with the Special Conditions is sometimes referred to herein as "the project"). AR 1850-57. Special Conditions Two and Three imposed bank protection and re-vegetation plans, requiring Mariposa to reconstruct the revetment at a shallower slope (3:1 where feasible, and no steeper than 2:1 in any location) and incorporate willow plantings into the final design. AR 1590-91. Special Condition Three required Mariposa to re-vegetate the revetment site and adjacent land with plants appropriate for the area. Ibid. The Commission relied upon opinions from Commission Staff Engineer Lesley Ewing ("Ewing") and Commission Staff Biologist Engel to support the conclusion that a revetment built subject to the Special Conditions was feasible and more likely to support the plant life necessary to develop a healthy riparian canopy, prevent erosion, and stabilize the creek bank. AR 1612-13.

Implementation of the Special Conditions requires Mariposa to, between June 1 and October 31: (1) drive piles into the bed of Malibu Creek and build a cofferdam to isolate the area around the boulders (Special Condition No. 5(o)); (2) pump the waters between the cofferdam and the bank over the cofferdam to expose the boulders to enable their removal (Special Condition Nos. 6, 8); (3) capture and relocate endangered species of fish (Special Condition Nos. 7, 8); (4) remove and store the boulders from the bank (Special Condition No. 5(i)); (5) grade the soils at the bank edge to a slope between 2:1 and 3:1 over the 500 feet where the boulders had been and remove the soils to a legal disposal location outside the coastal zone (Special Condition No. 5(h)); (6) lay a fabric filter on the surface after grading (Special Condition Nos.3, 8); (7) replace the boulders previously removed with such additional boulders as may be needed to cover the increased surface area of the slope after grading (Special Condition Nos. 2 & 5, 8); (8) cut holes in the fabric filter to allow the planting of willow trees (Special Condition Nos. 3, 8); and (9) implement the remainder of ISI's vegetation restoration plan with limited changes (Special Condition Nos. 3, 8). *See* AR 1754.

E. CEQA

Mariposa contends that the Commission violated CEQA by (1) failing to consult with other agencies, (2) failing to provide written response to public comments, (3) improperly delegating the determination of whether the project as approved was the least environmentally damaging feasible alternative. Mariposa argues that each of these was a failure to proceed in the manner required by law.

1. The Governing Authority

The purpose of CEQA (Pub. Res. Code §21000 *et seq.*) is to maintain a quality environment for the people of California both now and in the future. Pub. Res. Code §21000(a). "[T]he overriding purpose of CEQA is to ensure that agencies regulating activities that may affect the quality of the environment give primary consideration to preventing environmental damage." Save Our Peninsula Committee v. Monterrey County Board of Supervisors, (2001) 87 Cal.App.4th 99, 117. CEQA must be interpreted "so as to afford the fullest, broadest protection to the environment within reasonable scope of the statutory language." Friends of Mammoth v. Board of Supervisors, (1972) 8 Cal.3d 247, 259. Public agencies must regulate both public and private projects so that "major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian." Pub. Res. Code §21000(g).

The Legislature chose to accomplish its environmental goals through public environmental review processes designed to assist agencies in identifying and disclosing both environmental effects and feasible alternatives and mitigations. Pub. Res. Code §21002. The environmental impact report ("EIR") is the "heart" of CEQA, providing agencies with in-depth review of projects with potentially significant environmental effects. Laurel Heights Improvement Association v. Regents of University of California, ("Laurel Heights II") (1994) 6 Cal.4th 1112, 1123. An EIR describes the project[7] and its environmental setting, identifies the potential environmental impacts of the project, and identifies and analyzes mitigation measures and alternatives that may reduce significant environmental impacts. Id. The EIR serves to "demonstrate to an apprehensive citizenry that the agency has in fact analyzed and considered the ecological implications of its actions." No Oil, Inc. v. City of Los Angeles, (1974) 13 Cal.3d 68, 86. Using the EIR's objective analyses, agencies "shall mitigate or avoid the significant effects on the environment... whenever it is feasible to do so. Pub. Res. Code §21002.1.

CEQA permits a state agency with a regulatory program to be exempt from CEQA's

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[7]A "project" is defined as any activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment (1) undertaken directly by any public agency, (2) supported through contracts, grants, subsidies, loans or other public assistance, or (3) involving the issuance of a lease, permit, license, certificate, or other entitlement for use by a public agency. Pub. Res. Code §21065. The "project" is the whole of the action, not simply its constituent parts, which has the potential for resulting in either direct or reasonably foreseeable indirect physical change in the environment. Guidelines §15378.

requirements for preparing EIRs, negative declarations, and initial studies if the Secretary for Resources certifies that the agency's program meets the criteria set forth in Pub. Res. Code section 21080.5. Environmental Protection Information Center, Inc. v. Johnson, (1985) 170 Cal.App.3d 604, 620, 610. Agencies certified under section 21080.5 must adopt a "functional equivalent" of the EIR or negative declaration process. Certified regulatory programs are exempt only from Chapters 3 and 4 of the Pub. Res. Code (concerning EIRs) and section 21167 (statute of limitations), remain subject to the other provisions of CEQA. Sierra Club v. State Board of Forestry, (1994) 7 Cal.4th 1215, 1231; Guidelines §15250. The agency "must comply with all of CEQA's other requirements. Mountain Lion Foundation v. Fish & Game Commission, (1997) 16 Cal.4th 105, 114 (section 21080.5 establishes a limited CEQA exemption).

A certified regulatory agency must prepare an environmental document that includes a description of the project, identifies a project's adverse environmental impacts, and mitigates those effects through adoption of feasible alternatives or mitigation measures that may substantially lessen significant adverse impacts. Pub. Res. Code §21080.5(d)(2)(a); Citizens for Non-Toxic Pest Control v. Department of Food and Agriculture, (1986) 187 Cal.App.3d 1575, 1586; Guidelines §15252.[8] It must be supported with "references to specific scientific and empirical evidence." Mountain Lion Coalition v. Fish & Game Commission, ("Mountain Lion") (1989) 214 Cal.App.3d 1043, 1047. The document must consider cumulative as well as direct and site-specific environmental impacts. Laupheimer v. State of California, ("Laupheimer") (1988) 200 Cal.App.3d 440, 462-63; Friends of the Old Trees v. Dept. Of Forestry and Fire Prevention, ("Friends of the Old Trees") (1997) 52 Cal.App.4th 1383.

The procedure must allow for review and comment by the public and other agencies and must include a detailed response to all significant environmental issues raised by commentators. Pub. Res. Code §21080.5(d)(2)(C),(D); Schoen v. California Dept. of Forestry and Fire Protection, (1997) 58 Cal.App.4th 556, 565.

The Secretary for Resources has determined that the Commission's regulatory program of granting coastal development permits and certifying local coastal programs qualifies for certification under section 21080.5. Guidelines §15251(c), (f). The Commission's certified regulatory program is an extension of its Coastal Act mandate to "[p]rotect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources." Pub. Res. Code §30001.5(a). The Commission's staff report for such projects serves as a "functional equivalent" of an EIR.

3. Failure to Consult

As stated above, the Commission has a duty to "consult with all public agencies that have jurisdiction, by law, with respect to the proposed activity." Pub. Res. Code §21080.5(d)(2)(C). The failure to consult may be an abuse of discretion based on a failure to proceed according to law. Environmental Protection Information Center v. Johnson, (1985) 170 Cal.App.3d 604, 626-27.

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[8]The Commission's regulations also require it to make specific findings with regard to a development's consistency with CEQA and the Coastal Act. 14 CCR §§ 13356, 13057, and 13096.

Mariposa contends that at least seven agencies have jurisdiction over the project: (1) Army Corps of Engineers ("Army Corps") must issue a permit under the Clean Water Act; (2) the U.S. Fish & Wildlife Service is required by the Endangered Species Act to issue a permit to allow the capture of the tidewater goby as set forth in Special Condition 7; (3) the Federal Emergency Management Agency is required to authorize changes to the previously designated flood plain; (4) the California Department of Fish & Game ("Fish & Game") is required to issue a streambed alteration permit under the Streambed Alteration Act; (5) the Regional Quality Water Control Board ("RQWCB") is required to issue a water quality certification; (6) The National Marine Fisheries Service is required to consult with the Army Corps to protect the habitat of the steelhead trout; and (7) Malibu is required to issue grading and flood plain management permits. Mot. at 7-8.

Mariposa argues that the Army Corps, Fish & Game, RQWCB, and Malibu each approved the existing temporary revetment. Given that the project would require disturbance of Malibu Creek, removal and replacement of endangered species, and a shallower grade which would increase the risk of a mapped flood plain, the Commission was obligated to consult with these seven agencies on the project for a permanent revetment. Yet, the record reflects no consultation. Mot. at 8.

The Commission responds that Mariposa failed to raise the issue of consultation before it, and thus has failed to exhaust its administrative remedies. Opp. at 15-16.

The essence of the exhaustion of administrative remedies requirement is to provide the public agency an opportunity to receive and respond to articulated factual issues and legal theories before it acts. *See* Park Area Neighbors v. Town of Fairfax, (1994) 29 Cal.App.4th 1442, 1447. *See also* Azusa Land Reclamation Co., Inc. v. Main San Gabriel Basin Watermaster, (1997) 52 Cal.App.4th 1165, 1215 (exhaustion must include legal theories and articulated factual issues). This purpose is not satisfied if the objections are not sufficiently specific so as to allow the public agency to evaluate and respond to them. More is required to exhaust administrative remedies than generalized environmental criticisms at public hearings: "It is difficult to imagine any derogatory statement about a land use project which does not implicate the environment somehow." Coalition for Student Action v. City of Fullerton, (1984) 153 Cal.App.3d 1194, 1197.

The court has reviewed all of Mariposa's citations list on page three of the Reply. Mariposa objected that "[w]ithout consultation with U.S. Fish & Wildlife...Special Condition 7 proposed by Staff purports to authorize a 'qualified resource specialist' to capture and relocate any tidewater goby found to exist. This is unlawful without an incidental take permit from U.S. Fish & Wildlife...." AR 1277. Fairly construed, this objection was to the imposition of a condition requiring the capturing fish without the authorization of a permit. It is not an objection to the Commission's failure to consult.

Most of the rest of Mariposa's objections concern the fact that the Special Conditions would require it to obtain permits from the named agencies, which may prove difficult to do. *See e.g.*, AR 1280, 1305-06, 1718-19. These are not objections about the failure of the Commission to consult, but rather about the burden which the Special Conditions would impose on Mariposa.

At hearing, Mariposa's counsel also relied on AR 1816. The objection at that page was merely that the staff report does not comply with Pub. Res. Code section 21080.5, which sets

forth the requirements for a regulatory program to be certified. A general reference to a statute is not a specific objection.

Mariposa failed to exhaust its administrative remedies on its contention that the Commission did not consult with other agencies.[9]

3. Response to Public Comments

An agency must provide written responses to significant environmental objections raised during the public evaluation process for the project. Pub. Res. Code §21080.5(d)(2)(D). Responses should explain rejections of the commentators's proposed mitigations and alternatives. Cleary v. County of Stanislaus, (1981) 118 Cal.App.3d 348, 355-60. Articulation of the reasons for rejecting opposing views in written form while the project decision is pending sharpens the agency's understanding of the significant points raised in opposition. Mountain Lion Foundation, *supra*, 16 Cal.4th at 123. A general response to a specific question is usually insufficient. People v. County of Kern, (1976) 62 Cal.App.3d 761. However, a general response to a general comment may be adequate. Browning-Ferris Industries v. City Council, (1986) 181 Cal.App.3d 852.

Mariposa commented in writing that the project (1) would increase the flooding risk to the adjoining mapped flood plain (AR 1290-93, 1718-19); (2) increase sediment transport potential which could degrade existing habitat quality (AR 1719); (3) increase erosion of the streambed due to a lesser side slope (AR 1719); (4) cause the loss of land for revegetation because vegetation will not grow at the outside bend of the stream channel due to the yearly cycle of flooding and scouring along the bank (AR 1775); (5) impact endangered fish species and their habitat through construction and removal of a cofferdam on Malibu Creek (AR 1776-77); and (6) impact shading because fewer riparian trees will exist at the water's edge as a result of the more gradual slope (AR 1776). Mariposa also commented at the hearing that the project would impact the habitat of animals because filter fabric would prevent burrowing. AR 1817.

Mariposa contends that the Commission did not respond to these comments, and provided only generalizations that best management practices would prevent adverse impacts (AR 1592-93). Mot. at 10.

The Commission implicitly admits that it did not respond to these issues. It argues that it is obligated only to respond to significant environmental questions, and it is sufficient if it grasps the substance of the problem and resolves it with an awareness of the environmental consequences. It concludes that the staff report shows that the Commission understood the environmental issues and addressed them with the Special Conditions. Opp. at 17.

This is incorrect. Both Pub. Res. Code section 21080.5(d)(2)(D) and the Commission's own regulation, 14 CCR section 13057(c)(3), require that the Commission respond in writing to significant environmental points raised in public comment. It is not enough to dismiss Mariposa's comments by stating that the Commission understood and addressed the issues.

CEQA is an informational statute which requires documentation of, *inter alia*, the agency's response to an issue. It is true that the Commission need only respond to significant

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[9]As a result, the court need not address the Commission's response that it consulted with some agencies and complied with its own regulations. Opp. at 16-17.

issues, but that limitation does not aid its failure. Mariposa raised all of the above issues in writing (with the exception of the impact on animal burrows from filter fabric), and each was supported by an expert's opinion based on a study or report.

The cases of Sherwin-Williams Co. v. South Coast Air Quality Management District, (2001) 86 Cal.App.4th 1258, 1227 and Dunn-Edwards Corp. v. South Coast Air Quality Management District, (1993) 19 Cal.App.4th 519, do not aid the Commission. The former does not even address an allegation of failure to respond to public comment. 86 Cal.App.4th at 1227. The latter noted the requirement of written response to significant environmental objections, and noted that the agency responded both in writing and at hearing. 19 Cal.App.4th at 534. Neither case supports a conclusion that no written response is required where, as here, each of Mariposa's written comments listed above had supporting data and raised significant issues.

The Commission failed to proceed in the manner required by law in not responding in writing to the written comments of Mariposa's experts on the issues raised.

4. Improper Delegation

Special Condition No. 2 provides that the revetment shall be laid back to a 3:1 slope where feasible, and no steeper than 2:1 at any location. Mariposa may provide engineering evidence for the Executive Director's review and approval demonstrating that the 3:1 slope at a particular site is infeasible either hydraulically or spatially so that a 2:1 slope should be permitted. AR 1590.

Mariposa argues that Special Condition No. 2 improperly delegated what is "hydraulically infeasible" or "spatially infeasible" to the Executive Director. Mariposa argues that this Condition essentially delegates the decision of whether the project is the least environmentally damaging feasible alternative, and at a minimum shows that the Commission's feasibility determination lacks substantial supporting evidence. Mot. at 10.

Mariposa's argument that the Commission's lacks substantial evidence is addressed *infra*. As for whether the Commission has improperly delegated the feasibility determination, an assessment of a project's environmental impacts, unlike mitigation of those impacts,[10] must made at the time of agency approval. Under CEQA, a project's feasibility is part of an assessment of its environmental impacts.

The Commission has approved the project as mitigated to substantially lessen significant environmental impacts. AR 1618. As approved, the project may have a slope of 3:1, and may be no steeper than 2:1 where Mariposa's engineer shows that it is necessary. These are clear parameters, and the location of those differing slopes is a design issue.

As the Commission argues (Opp. at 19), it is permitted by the Coastal Act to delegate administrative powers to the Executive Director. *See* Pub. Res. Code §7, 30335. The Commission, therefore, may delegate to the Executive Director the actual design of the project's

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[10]Mitigation measures can be deferred in situations where the precise means of mitigation is infeasible at the time of project approval. In such situations, the agency should treat the impacts as significant and commit itself to work out feasible mitigation with performance standards articulated at the time of approval. Sacramento Old City Association v. City Council, (1991) 229 Cal.App.3d 1011, 1029-30.

slope. Assuming that the Executive Director knows what "hydraulically infeasible" and "spatial infeasible" mean (*infra*), the locations of 3:1 and no steeper than 2:1 slopes are design details that are properly delegated.

The Commission did not improperly delegate the design of the slope.

F. The Coastal Act

Mariposa challenges the Commission's decision as violating the Coastal Act because (1) its finding of feasibility was not supported by substantial evidence, (2) the finding that the project was consistent with Pub. Res. Code section 30253 was not supported by the evidence and the finding did not support the decision, (3) the finding that the project was consistent with Pub. Res. Code section 30236 was not supported by the evidence and the finding did not support the decision, and (4) the finding that the project was consistent with Pub. Res. Code sections 3030, 30231, 30233, 30240, and 30251 was not supported by the evidence and the finding did not support the decision.

1. The Governing Authority

The Coastal Act (Pub. Res. Code §30000 *et seq.*) requires the Commission to protect the coastal zone's ecosystem. Pub. Res. Code §30001(a). The Coastal Act includes a number of coastal protection policies, commonly referred to as "Chapter 3 policies," which are the standards by which the permissibility of proposed development is determined. Pub. Res. Code §30200(a). These policies include protection of the coastline and its resources and to maximize public access. Pub. Res. Code §§ 30200-55. Permitted development shall be sited and designed to minimize alternation of natural land forms. La Fe, Inc. v. County of Los Angeles, (1999) 73 Cal.App.4th 231, 234-35. Development must also "minimize risks to life and property in areas of high geologic, flood and fire hazard." Pub. Res. Code §30253. Significant alteration of streams may be made for flood control purposes only where the best mitigation measures feasible are required and where no other method for protecting existing structures is feasible. Pub. Res. Code §30236.

The Coastal Act provides for heightened protection of ESHAs, defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Pub. Res. Code §30107.5. The heightened protection exists regardless of the quality of the ESHA resources. Bolsa Chico Land Trust v. Superior Court, (1999) 71 Cal.App.4th 493, 506, 507-08. ESHAs "shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Pub. Res. Code §30240. Development in areas adjacent to EHSAs shall be sited and designed to prevent impacts which would significant degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas. Id. Thus, the Coastal Act places strict limits on the uses which may occur in an ESHA and carefully controls the manner in which uses around the ESHA are developed. Bolsa Chica Land Trust v. Superior Court, *supra*, 71 Cal.App.4th at 506-08. *See also* Feduniak v. California Coastal Commission, (2007) 148 Cal.App.4th 1346, 1376.

The heart of the Coastal Act is the requirement that all persons shall obtain a permit prior

to undertaking development within the coastal zone. Pub. Res. Code §30106. In reviewing proposed development, the Commission must consider the effect of the proposed development on the coastal environment. City of San Diego v. California Coastal Commission, (1981) 119 Cal.App.3d 228, 234. Before it can approve a project, the Commission must make the finding that the project, as conditioned, is consistent with the applicable Chapter 3 policies of the Coastal Act and the applicable requirements of CEQA. Pub. Res. Code §30604(a); 14 CCR §13096(a).

The Coastal Act must be liberally construed to accomplish its purposes (Pub. Res. Code §30009), and any conflict between the Chapter 3 policies should be resolved in a manner which on balance is the most protective of significant coastal resources. Pub. Res. Code §30007.5.

2. The Finding of "Feasibility"

Under the Coastal Act and the Malibu Local Coastal Plan ("LCP"), the Commission must approve the project which is the least environmentally damaging feasible alternative. AR 1607. "Feasibility" is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Pub. Res. Code §30108. Mariposa contends that the Commission's finding that the project is "a feasible and preferred alternative" (AR 1610) is unwarranted.

First, Mariposa contends that the Commission made no express findings with respect to economic, environmental, social, or technological factors, or that the project could be constructed within a reasonable period of time. Mot. at 13. Mariposa fails to show that the Commission had any obligation to make express findings on the factors supporting feasibility, or the length of construction. It is sufficient if the Commission concludes, based on substantial evidence, that the project is feasible under the definition of section 30108.

Second, Mariposa argues that the Commission's finding of feasibility is not supported by substantial evidence. Mot. at 13-14. Mariposa focuses on Special Condition No. 2, which concerns the slope of the revetment, and argues that the only support for this condition lies in two memoranda by Commission Staff Engineer Ewing which are not substantial evidence. Id.

As stated above, Special Condition No. 2 provides that the revetment shall be laid back to a 3:1 slope where feasible, and no steeper than 2:1 at any location. Mariposa may provide engineering evidence for the Executive Director's review and approval demonstrating that the 3:1 slope at a particular site is infeasible either hydraulically or spatially so that a 2:1 slope should be permitted. AR 1590.

In a January 7, 2009 memorandum, Ewing noted that the as-built temporary bank is steep, approaching 1:1 in locations, which does not readily allow for plants to colonize in the voids between rocks. Photographs show that most of the temporary bank is devoid of vegetation. AR 913. While Mariposa's engineer asserts that the steepness is intended to mimic the natural bank cut that developed on the outer side of the Malibu Creek bend, Commission staff was asking for a permanent bank stabilization that would allow for the propagation of native vegetation. AR 913.

Ewing opined that the bank could feasibly be contoured to a less steep slope. While the PACE May 25, 2007 study asserts that a 2:1 slope would result in increased turbidity, no evidence was submitted to support this assertion. Ibid. There could be increased turbidity during construction, but this could be addressed through best management practices. Ibid. Any more

gradual revetment should have filter fabric with root holes cut in it to reduce "soil piping" and turbidity from high flow events. Ibid. Turbidity should certainly be less than the current revetment with rock covering a bare slope with no filter fabric layer. Ibid. "Based on all information provided by [Mariposa], it appears feasible that this slope can be rebuilt at a more gradual 2:1 slope." Ibid.

In a June 22, 2009 memorandum, Ewing opined that the bank could be uniformly graded at a 2:1 slope and could be less steep (for example 3:1) where conditions would allow. AR 1571. There are several constraints to the more gradual slope. The revetment ends should transition to the natural bank slope, which is steeper. In the middle, the slope can be a uniform 2:1 or 3:1, depending on whether the upper bank is wide enough to accommodate both the slope and the maintenance path. Ibid.

These modifications would result in small changes to Creek hydraulics. Mariposa's engineering model shows that expected flow depths from a 100-year flood event would be from +0.3 to +0.6 feet above the 2:1 slope in some places, and +0.9 to +0.5 feet above the 2:1 slope in others. Overall, the 2:1 slope would have flow depths +0.1 feet higher than the expected flow depths from a 100-year event. Ewing concluded that it is feasible to use a 2:1 slope based on this information, but additional hydraulic analysis would be needed if the slope is reduced to 3:1. Ibid. Small adjustments may be needed to keep the flow depths to levels that are below the effective protection level of the bank. Ibid.

The opinion evidence of an expert in environmental planning is substantial evidence upon which the Commission may base its decision. Coastal Southwest Dev. Corp. v. California Coastal Zone Conservation Com., (1976) 55 Cal.App.3d 525, 532. However, expert opinion is not substantial evidence when it is based upon conclusions or assumptions not supported by evidence in the record. Hongsathavij v. Queen of Angels/Hollywood Presbyterian Med. Center, (1998) 62 Cal.App.4th 1123, 1137. "The chief value of an experts testimony in this field, as in all other fields, rests upon the material from which his opinion is fashioned and the reasoning by which he progresses from his material to his conclusion." Rorges v. Department of Motor Vehicles, (2011)192 Cal.App.4th 1118, 1122 (emphasis in original), *quoting* Carter v. United States, (D.C. Cir. 1957) 252 F.2d 608, 617. "An expert's opinion is no better than the facts upon which it is based. Turner v. Workmen's Comp. Appeals Board, (1974) 42 Cal.App.3d 1036, 1044.

Mariposa is correct that the Commission's finding that the project is feasible is not supported by substantial evidence. The two Ewing memoranda may be fairly summarized as stating that (1) the slope can be rebuilt at a more gradual 2:1 slope, and at a 3:1 slope where conditions would permit it, (2) a 2:1 slope would not have a major impact on Malibu Creek flood depths, but small adjustments may need to be made, and (3) any slope of 3:1 would have to have additional hydraulic study.

Thus, while Ewing supports a 2:1 slope based on PACE's study, she does not support a 3:1 slope. PACE submitted an August 5, 2009 report opining that a shallower 3:1 bank would increase the risk of flooding to almost two feet above the bank, which was above the almost one foot level above the bank for some places at a 2:1 slope. AR 1718. There is simply no evidence from Ewing or anyone else rebutting or addressing this conclusion.

Despite this evidence, the Commission found in Special Condition No. 2 that the project

is feasible with a 3:1 slope, adding that Mariposa may provide engineering evidence for the Executive Director's review and approval demonstrating that the 3:1 slope at a particular site is infeasible either hydraulically or spatially so that a 2:1 slope should be permitted. While the Executive Director may make design decisions, he or she may not determine feasibility. There is no support for a 3:1 slope anywhere on the project.

Moreover, Mariposa is correct that the terms "spatial infeasibility" and "hydraulic infeasibility" are not defined. In referring to spatial infeasibility, the Commission apparently seized upon Ewing's point that there may not be sufficient room in certain locations for both a 3:1 slope and the maintenance path. If so, the Commission should have said so. As for hydraulic infeasibility, the Commission may be referring to Ewing's point that flow depths of a 100-year event may be more than one foot above the bank at 3:1 slopes. Again, if so, the Commission should have said so. The failure even to define these vague terms is support for the conclusion that the Commission lacked substantial evidence to find that a 3:1 slope is feasible.

Mariposa also argues that the Commission completely failed to address economic feasibility. Mot. at 13; Reply at 7.

Mariposa presented evidence that the project would cost $1,000,000 to move the boulders an average of only 54 inches. AR 1389. The Commission failed to address the issue of economic feasibility, which is whether the marginal cost of the project, as opposed to that proposed by Mariposa, would be so great that a reasonable person would not undertake it. Uphold Our Heritage v. Town of Woodside, (2007) 147 Cal.App.4th 587, 600.

The Commission's only response is to argue that Mariposa applied for and built the temporary revetment. Since Mariposa built a poorly engineered temporary revetment, it cannot complain about the cost of a permanent one. Opp. at 11.

While the Commission addressed the need for riparian vegetation (AR 1610) and concludes that the "un-engineered [temporary] revetment has resulted in adverse impacts to aquatic, semi-aquatic, and terrestrial habitats through loss of cover continuity and shade along the bank" (AR 1611),[11] it never addressed the issue of cost. The Commission's conclusion that Mariposa built a poorly engineered temporary revetment which is inadequate as a permanent structure certainly bears on the issue of cost, but that conclusion is insufficient to support a conclusion that the $1 million project is feasible.

In sum, the Commission's conclusion that the project is feasible lacks substantial evidence because there is no evidence that a 3:1 slope is feasible and the Commission failed to consider cost.

3. The Finding Under Pub. Res. Code Sections 30253 and 30236

[11]Mariposa disputes the conclusion that the temporary revetment was "unengineered." It contends that the emergency project was installed by experienced contractors, whom PACE concluded built the revetment with contractor's wisdom, doing an excellent job. AR 1392-93. PACE further opined that a fabric filter was not appropriate for slopes steeper than 2:1, implying that is why one was not installed. AR 1720. Whatever the quality of contractor work, the Commission was entitled to conclude that it was performed without engineering design to protect environmental issues of hydrology, plants, and animals.

Pub. Res. Code section 30253 provides that "new development" shall minimize risks to life and property in areas of high flood hazard, and shall assure stability and neither create nor contribute significantly to erosion or destruction of the site or surrounding area.[12]

Pub. Res. Code section 30236 provides that a "channelization" (including placement of boulders) may be made along a stream as a flood control project where no other method for protecting existing structures in the flood plain is feasible, such protection is necessary for public safety or to protect existing development, and it incorporates the best mitigation measures feasible.[13]

The Commission acknowledged the governance of both provisions (AR 1603-04), noted that section 30236 limits streambed alterations for flood control to situations where no other method for protecting the existing structures in the flood plain is feasible (AR 1607), found that a riprap revetment is necessary to protect existing development consistent with Section 30236, (Ibid.), and found that the project would "minimize risk to life and property and assure stability... consistent with Section...30236, 30253...of the Coastal Act. AR 1616.

Mariposa agrees that a permanent streambed alteration through a riprap revetment is necessary, but argues that the Commission's finding that the project minimizes risk to property and assures stability lacks substantial evidence. Mot. at 15-18. It points out that federal law prohibits alterations to a watercourse that increases base flood elevations of a mapped flood plain if existing structures are impacted, citing 44 CFR section 65.12(a)(5). Mot. at 15.

Existing structures are mapped in flood plain Zone AO. AR 1723. Therefore, the Commission cannot adopt a project that increases base flood elevations if those structures will be impacted. Mariposa's unrebutted evidence is that a 2:1 slope will increase the 100-year flow depth by up to .9 feet, and a 3:1 slope will increase the depth by almost two feet.[14] Ewing did not

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[12]The full text of Pub. Res. Code section 30253 is as follows: "New development shall: a) Minimize risks to life and property in areas of high geologic, flood and fire hazard. b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs."

[13]The full text of Pub. Res. Code section 30236 is as follows: "Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and shall be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish or wildlife habitat."

[14]Mariposa argues that PACE's engineers calculated the as-built slope as being between 1.3:1 and 2.1:1, and the Commission wrongly calculated the existing slope at between 1:1 and 1.5:1. Mot at 17. It is impossible to discern from the evidence cited by Mariposa (AR 1627, 1724) what the Commission's calculations were or whether they differ from PACE's calculations.

disagree with this analysis. It is unclear whether this increase in flood risk will impact existing structures, but the Commission had no evidence to the contrary.

Therefore, the Commission's finding that the project is consistent with the requirements of sections 30253 and 30236 concerning the risk of flooding existing property is not supported by substantial evidence. This risk is warranted only if it is minimized and no other method of protecting existing structures is feasible. The Commission may not permit a 3:1 slope, or even a 2:1 slope, if it will impact existing structures. The Commission cannot say that it will not, for even it acknowledged that the increased flood risk is substantial. AR 1614.

Section 30253 also requires that the project assure stability and neither create nor contribute significantly to erosion or destruction of the site. In August 2007, PACE opined that the proposed 3:1 slope will change sediment transport by as much as 5%. AR 1719. Additionally, a more gradual slope will increase the erosive force on the stream bed. Ibid.

Ewing opined that a fabric filter would reduce turbidity from high flow events, which would at least be better for turbidity than the current riprap revetment covering bare soil. AR 913. She also concluded that PACE's May 25, 2007 opinion about increased turbidity from a laid off slope was unsupported by evidence. Ibid. But she never addressed PACE's points about streambed erosion and its August 2007 opinion on turbidity from a laid off slope.[15]

The Commission lacked substantial evidence to conclude that the project is consistent with section 30253's requirement of assured stability and no significant contribution to erosion.

4. The Findings Under Pub. Res. Code Sections 30230, 30231, 30233, 30240, and 30251

Pub. Res. Code sections 30230, 30231, 30233, 30240 and 30251 relate to protection of the marine environment, biology protection and dredging of waterways, protection of ESHAs, and visual quality.[16] Malibu Creek is an ESHA, but the project site is adjacent to, not in, an

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[15]The Commission argues that Ewing opined that the project would not result in increased turbidity and there is merely a disagreement among experts. Opp. at 14. Actually, in June 2009 Ewing merely criticized PACE's May 2007 study as not being supported by evidence and concluding that filter fabric at least would result in less turbidity than the bare soil slope of the temporary revetment. AR 913. PACE's August 2009 opinion is unrebutted.

[16]Pub. Res. Code section 30230 provides: "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."

Pub. Res. Code section 30231 provides: "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, among other means, minimizing adverse affects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies

ESHA. AR 1606. Pursuant to the Coastal Act and the Malibu LCP, the project must be the least environmentally damaging feasible alternative. AR 1607. Pursuant to Pub. Res. Code section 30240(b), it must be designed to prevent impacts that would degrade EHSAs.

The Commission found that the project site was "a highly disturbed riparian environment of presumably limited habitat value." AR 1606. "Prior to severe storm erosion and subsequent placement of the proposed rip-rap revetment on the property in the late I 990's, the subject stretch of creek bank was primarily disturbed and did not possess a well-developed riparian canopy due to its close proximity to a commercial shopping center and Pacific Coast Highway." AR 1599.

"Currently the [site] is largely devoid of vegetation, with the exception of a small amount of arroyo willow at the northern end of the revetment and a small amount of mulefat at the southern end." Ibid.

The Commission noted that the site had changed significantly over time according to aerial photographs. In 1972, there was a grouted riprap revetment extending a thousand feet upstream. AR 1599. By 1998, most of this riprap had fallen away. Ibid. About 100 feet north of the project site, a canopy of healthy riparian vegetation is growing on the bank above the remaining grouted section. Ibid. This grouted riprap is connected to the stretch of the project site, but is not part of it and was constructed prior to the Coastal Act. Ibid.

The Commission concluded that Mariposa's alternative of permanently leaving the riprap revetment in place was not the least environmentally damaging alternative because the temporary revetment "has resulted in adverse impacts to aquatic, semi-aquatic, and terrestrial habitats through loss of cover continuity and shade along the bank. Loss of shade and cover results in loss

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and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams."

Pub. Res. Code section 30233 provides: "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."

Pub. Res. Code section 30240 provides: "(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in area adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts that would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

Pub. Res. Code section 30251 provides: "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."

of protective foliate for animal movement, increased water temperatures, and loss of areas to seek shelter from predators." AR 1611.

This finding was based on the fact that the project site remains practically devoid of vegetation in the ten years since the temporary rip-rap revetment was constructed. AR 1599. Commission Staff Biologist Engel noted from personal observation and photographs that vegetation has grown along the bank where there is a less than 1:1 slope, but plants have been unable to establish on the majority of riprap which is at a 1:1 slope. AR 1637. She opined that a stream bank restoration would be more successful if the riprap were laid back "at a lesser slope angle, such as 2:1." Ibid.

Mariposa claims that the Commission's findings are inconsistent. That is, the project site was highly disturbed prior to the installation of the temporary revetment. The site immediately before the 1998 storm and erosion shows no trees and only shrubs along the bank which were swept away by the flooding Malibu Creek. Mot. at 22 (citing AR 907). There has not been a riparian canopy for at least 65 years, and the temporary revetment therefore could not have caused the adverse environmental harm through loss of cover continuity and shade along the bank. Ibid.

Although the photograph at AR 907 does not show all existing vegetation, it is clear from the photograph and the Commission's findings that there was no riparian canopy when the temporary revetment was built. Nor was there before the 1998 storm. The Commission relies on Engel's opinion as substantial evidence of environmental harm, but her opinion merely is that a stream bank restoration would be more successful if the riprap were laid back at a lesser slope angle, not that the temporary revetment had caused environmental harm.[17]

The Commission's finding that the temporary revetment caused environmental harm to a riparian canopy is unsupported by substantial evidence. This conclusion is significant because the Commission must adopt the least environmentally harmful feasible alternative. In addition, Pub. Res. Code section 30240(b) requires that development in this ESHA-adjacent area be designed to prevent impacts that would significantly degrade the ESHA area. Therefore, in order to be sustained, the project approved by the Commission must be less environmentally harmful than leaving the existing revetment, and may not significantly degrade plant or animal habitat areas in the ESHA. While the court cannot conclude that Mariposa's proposal -- that the temporary revetment be made permanent -- meets both criteria, it can conclude that the Commission's finding that the project meets these criteria is unsupported.[18]

5. The Remaining Contentions

Mariposa's remaining contentions are unsupported. It argues that the Commission's

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[17]ISI disagrees that a lesser slope would aid in the growth of willows for riparian cover. AR 1777-78.

[18]The Commission also found that the absence of vegetation has caused greater sediment transport and turbidity during winter seasons, adversely impacting water quality to the detriment of aquatic species. AR 1611. The court has addressed *supra* the issue of turbidity from sediment.

findings do not support its decision under section 30253 and 30236, but does not explain why. Mot. at 17-18.

Mariposa further argues that the Commission's decision not to approve Mariposa's proposed project was an abuse of discretion. Mot. at 24-25. However, its counsel conceded at hearing that the court cannot direct the Commission to approve Mariposa's proposed project.

Mariposa contends that the Commission cannot order it to build project with increased risk and demand that it agree to indemnify the Commission for any liability. Mot. at 19, n.18. This is true, but whether Mariposa will agree to Special Condition No. 1 is beyond the scope of the FAP.

Finally, Mariposa argues that the Commission "does not even try to defend" the finding that the project minimizes the alteration of natural landforms under Pub. Res. Code section 30251. Reply at 7. Mariposa's opening brief makes no argument under section 30251 other than citing it. Mot. at 20. As such, it is waived.

G. Conclusion

The FAP is granted. The Commission failed to proceed in the manner required by law under CEQA by not responding in writing to the written comments of Mariposa's experts on the issues raised. Under the Coastal Act, the following Commission findings lack substantial evidence: (1) the project with Special Conditions is feasible; (2) the project is consistent with the requirements of sections 30253 and 30236 concerning the risk of flooding existing property; (3) the project is consistent with section 30253's requirement of assured stability and no significant contribution to erosion; (4) the temporary revetment caused environmental harm to a riparian canopy; and (5) the project is the least environmentally harmful feasible alternative.

Whether a writ will issue at this time directing the Commission to comply with its CEQA and Coastal Act obligations depends on whether Mariposa intends to pursue its declaratory relief claims. If it does, the writ cannot issue until final judgment and the declaratory relief claims will be ordered transferred to Department One for assignment to a trial court. If it does not, then Mariposa's counsel is ordered to prepare a proposed judgment and writ of mandate, serve them on the Commission's counsel for approval as to form, wait 10 days after service for any objections, meet and confer if there are objections, and then submit the proposed judgment and writ along with a declaration stating the existence/non-existence of any unresolved objections. An OSC re: transfer/judgment is set for September 29, 2011.

Dated: September 1, 2011

/s/ JAMES C. CHALFANT

Superior Court Judge

JAMES C. CHALFANT

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SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

MARIPOSA LAND COMPANY, LTD, a California limited partnership, originally mistakenly named as Mariposa Land Company, a California corporation, Petitioner/Plaintiff, v. CALIFORNIA COASTAL COMMISSION, PETER DOUGLAS, Executive Officer of CALIFORNIA COASTAL COMMISSION, and DOES 1 through 10, inclusive, Respondents,	CASE NO. BS122761 PEREMPTORY WRIT OF MANDATE Trial Date: August 23, 2011 Dept. 85 Judge James C. Chalfant

TO Respondents CALIFORNIA COASTAL COMMISSION and PETER DOUGLAS, or his successor in interest:

JUDGMENT GRANTING PEREMPTORY WRIT OF MANDATE in the above captioned matter having been entered directing that the Clerk of the Los Angeles Superior Court issue a PEREMPTORY WRIT OF MANDATE in accordance with the JUDGMENT;

YOU ARE HEREBY ORDERED AS FOLLOWS:

1. Respondent CALIFORNIA COASTAL COMMISSION shall set aside its decision of August 13, 2009 to approve with conditions Application for Coastal Development Permit No. 4-

Exhibit 13
4-09-013 (Mariposa)
Peremptory Writ of Mandate

09-013 made by Petitioner MARIPOSA LAND COMPANY, LTD, a California limited partnership, for a permit to install and maintain a rock rip-rap revetment at Petitioner's property along Lower Malibu Creek at Malibu, California originally installed under Emergency Coastal Development Permit No. 4-98-024-G; and

2. Respondent CALIFORNIA COASTAL COMMISSION shall take further action in connection with Application for Coastal Development Permit No. 4-09-013 consistent with the Statement of Decision filed by this Court on September 1, 2011, and Respondent PETER DOUGLAS, or his successor as Executive Director of Respondent CALIFORNIA COASTAL COMMISSION, shall take such actions as may be reasonable and necessary to enable Respondent CALIFORNIA COASTAL COMMISSION to comply with this Peremptory Writ of Mandate.

3. Respondents shall file a return to this Peremptory Writ of Mandate issued under this Judgment stating what Respondents have done, and intend to do, to comply with this Peremptory Writ of Mandate within sixty (60) days of service of the Peremptory Writ of Mandate upon them, and shall file a supplemental return to the Peremptory Writ of Mandate issued under this Judgment stating what final action the Respondents have taken on the Application for Coastal Development Permit No. 4-09-013 within thirty (30) days after such final action.

SUPERIOR COURT, LOS ANGELES COUNTY, CALIFORNIA

John A. Clarke
Clerk of the Superior Court

Dated: 10-18, 2011

By _____
Deputy Clerk