

CALIFORNIA COASTAL COMMISSION

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



ADDENDUM

DATE: July 6, 2009

TO: Commissioners and Interested Parties

FROM: South Central Coast District Staff

SUBJECT: Agenda Item 8b, Wednesday, July 8, 2009, CDP 4-08-06 (Santa Barbara County)

A. REVISIONS

The following revisions to the findings and special conditions of the report are made as follows (language to be inserted is shown **underlined** and language to be deleted is shown in ~~line out~~):

1. In order to ensure that monitoring is adequate to identify and record the frequency and duration of all slough mouth opening/closure events, which may occur more frequently or for shorter durations than a month, Special Condition Two, Part A, Subpart 3.c (2.A.3.c) is revised as follows:
 - c. Slough Mouth Changes: The applicant shall conduct visual surveys of the slough mouth on a **monthlyweekly** basis for the purpose of recording the frequency and duration of all slough mouth opening/closure events.
2. To ensure that the all potential turbidity impacts that may result from the project are adequately monitored, the first sentence of Special Condition Eight, Part A, Subpart 8 (8.A.8) is revised as follows:
 - (8) Turbidity. The monitor shall observe and document the turbidity of coastal waters during all construction activities related to the permeable pier sand retention system, **offshore dredging operations**, and beach nourishment activities.
3. In order to clarify the intent of the condition, the first bullet point of Special Condition Two, Part A, Subpart 2 (2.A.2), regarding the required criteria for physical modeling of the proposed project, is revised as follows:
 - The sensitivity of the area to pulses of sediment and variable wave climate, **including El Nino/La Nina events**.

4. In order to clarify the intent of the interchangeability of the terms used in this condition to describe the installation of a permanent, easily identifiable, survey marker/monument, Special Condition Two (2), Part A, Subpart 1 (2.A.1) is revised as follows:

Prior to issuance of the coastal development permit, the applicant shall provide revised full-size plans, prepared by a licensed surveyor or engineer, clearly delineating the nine (9) Survey Monuments/Markers (6 baseline survey monument points and 3 control survey monument/markers points) as generally shown on **Exhibits 11 and 12**. The plans shall be of adequate scale to clearly delineate the precise location of each of the nine identified Survey Monuments/Markers and include a physical description of each of the **eightnine** survey monuments/markers to be **permanently** installed. For each designated profile location, the plans shall be adequate to clearly delineate each profile line, the distance between each of the **permanent** survey monuments/markers and the surveyed inland location of the sandy beach and, where bluffs are located, the seawardmost top edge of the bluff on site for the purpose of measuring beach width, bluff edge location, and shoreline profile changes over time.

5. In response to the applicant's request in their July 3, 2009 letter (**Exhibit 1**) to revise the language of Special Condition Two (2) regarding the need to take adaptive management actions if any of the identified Baseline Survey Monitoring Points located downcoast of the pier experience bluff retreat greater than the ambient trend, Commission staff concurs that given the unidirectional nature of bluff retreat, the need to take adaptive management actions may be adequately assessed based on a single annual survey in fall. However, Commission staff, including the Commission's Staff Engineer, Lesley Ewing, disagree with the County's assertion that only a single annual survey in fall of the downcoast sandy beaches (which experience oscillatory changes in width) would also be adequate to evaluate the need for adaptive management actions. In particular, Staff continues to believe that evaluation of both spring and fall survey information of downcoast sandy beach widths are necessary in order to detect abnormal beach conditions as soon as possible and in a responsible manner.

Thus, only the first bullet point item on pages 14 of the report for Special Condition Two (2), Part A, Subpart 4 (2.A.4) and where the same language referencing Special Condition Two on page 58 of the findings contained in the report is revised as follows (the second bullet point on each of these pages shall remain unchanged):

- any of the identified Baseline Survey Monitoring Points located downcoast of the pier experience bluff retreat greater than the ambient trend for two consecutive fall ~~or two consecutive spring~~ surveys; or
- any of the measured beach widths at the identified Baseline Survey Monitoring Points located downcoast of the pier is 15% or more narrower than the projected

future beach width during two consecutive fall or two consecutive spring beach profile surveys and the calculated percentage is greater than the average of the percent narrowing of the beach widths, relative to projected future beach widths at the two downcoast Control Survey Monitoring Points.

6. In order to clarify the intent of Special Condition Two (2), Part A, Subpart 3.b (2.A.3.b) is revised as follows:

Beach Width and Bluff Edge Measurements: Beach width and bluff edge measurements will be performed by the applicant using a **combination (as appropriate) of a** tape measure and a differentially corrected digital global positioning system (GPS) unit to record the beach width and location of the seaward top edge of the coastal bluffs on a monthly basis for at least one year prior to the commencement of development and for a period of 10 years after initial construction, unless the permeable pier sand retention system is removed prior to that time. For each of the sandy beach Baseline and Control Survey Points where no bluffs are present, measurements will occur from the Baseline Survey Marker out to the estimated mean sea level water line and shall be performed in the same location as the beach profile surveys. For each of the Blufftop Baseline Survey Points, bluff measurements will occur from the Baseline Survey Marker out to the seawardmost top edge of the bluff (and within 25 feet of either side of the profile) and beach width measurements shall occur from the toe of the bluff (with ~~GPS~~ toe location recorded) out to the estimated mean sea level water line and shall be performed in the same location as the beach profile surveys. The date, time and tidal conditions for all measurements shall be recorded.

7. In order to clarify the intent of the findings, the last sentence of the first partial paragraph on page 41 of the report is revised as follows:

Thus, regardless of whether the permeable pier sand retention system constitutes an addition to a public pier, the Commission finds that, to the extent Section 30235 requires approval of this project, the more specific ~~and overriding~~ direction of Section 30235 would provide an **additional basis for approval** ~~override any potential prohibition found in Section 30233(a)~~ in this case.

8. In order to clarify that lawns and turf areas (in themselves) do not constitute structures or coastal dependent uses required to be protected by shoreline protective devices pursuant to Section 30235 of the Coastal Act; although in this case, the upland recreational areas of the subject site (which include in part, public parking lots, public restrooms and showers, public picnic facilities, and public lawn/turf recreational areas) constitute a critical and important component of Goleta Beach County Park, which is itself, a coastal dependent use, the following revisions are made:

ADDENDUM
CDP 4-08-006 (Santa Barbara County Department of Parks & Recreation)
Page 4

The second sentence of the second paragraph on page 31 is revised as follows:

Goleta Beach public park has experienced significant erosion over the past two decades, resulting in the construction of over 1,500 linear feet of rock revetment to protect upland areas of the park **and the overall park uses, including grassy lawn and picnic areas, public restrooms, utility pipelines, and public parking lots.**

The first full paragraph on Page 44 is revised as follows:

a. Existing Development to be Protected:

In regards to the first question, the subject site, Goleta Beach County Park, is a public beach park consisting of both sandy beach and upland public recreational use areas (picnic facilities, recreation areas, and parking facilities including 594 existing parking spaces) as well as various structures (including a restaurant, public restrooms, and various utility pipelines including gas and water lines). Goleta Beach County Park is the most popularly used public beach in Santa Barbara County's park system and clearly supports and enhances the public's ability for coastal access and recreation within the project area. Thus, the Commission finds Goleta Beach Park includes sandy beach areas that constitute a "public beach" and that the existing coastal access and recreational facilities located within the upland areas of the park (the non-sandy beach areas) clearly constitute structures and coastal-dependent uses as referenced by Section 30235. **The Commission further finds that although existing lawns and turf areas are not structures or uses that are required to be protected by shoreline protective devices pursuant to Section 30235 of the Coastal Act; in this case, the upland recreational areas of the subject site (which include in part, public parking lots, public restrooms and showers, public picnic facilities, and public lawn/turf recreational areas) constitute a critical and important component of this public coastal park, which is itself, a coastal dependent use.**

The first sentence of the second full paragraph on Page 44 is revised as follows:

In regards to the second question, the Santa Barbara County Parks Department has also established that **the public recreational use areas (upland coastal recreation areas and parking facilities including 594 existing parking spaces) as well as existing structures (including a restaurant, public restrooms, and various utility pipelines including gas and water lines) existing development on site (including the public restrooms, picnic facilities, a grassy lawn area, various utility pipelines, and parking facilities and other upland areas of the park)** are in danger of serious damage or destruction due to further wave attack and associated beach erosion.

9. In order to correct a typographical error, the 6th sentence of the last full paragraph is revised as follows:

In regards to installation of the piles for the permeable pier sand retention system, the placement of new structural piles for public piers serving a public access and recreational purpose is clearly one of the permitted uses under Section 30233(a)~~(3)(5)~~; although installation of groins or other shoreline protective devices are not specifically listed as one of the uses.

B. RESPONSE TO APPLICANT'S LETTER DATED JULY 3, 2009

In a letter dated July 3, 2009, which has been included in the addendum for this item as **Exhibit 1**, the applicant indicates that they are in general agreement with the staff recommendation for approval of the project but requests the Commission make several changes to **Special Conditions Two (2) and Three (3)**.

Staff would note that Commission staff has worked intensively with County staff and their engineering consultants over the past several months in regards to the review of the proposed project and to develop the provisions and requirements of the special conditions, including the monitoring and mitigation requirements of Special Condition Two. Moreover, this item was originally scheduled to be heard by the Commission at its June meeting in Working cooperatively with the County, Staff has previously made several revisions and modifications to this condition and other conditions, in response to County staff's input. In regards to the new changes to **Special Condition Two (2)** requested by the County, staff concurs that the two changes made pursuant to Items 4-6 in the above "Revisions" section of this addendum are appropriate and will not lessen or avoid the intended effect of the required conditions. However, staff is not in agreement with the County's' other recently requested changes, as explained below. Therefore, staff continues to recommend, that with the exception to above changes to these special conditions, that **Special Conditions Two (2) and Three (3)** should remain unchanged.

In regards to the applicant's request that the provision of Special Condition Two (Part A, Subpart 7) be revised, staff notes that as now conditioned, the applicant would be required to deposit the necessary funds for the complete removal of the permeable pier sand retention system in an interest-bearing bank account (held by Santa Barbara County) on annual basis over a period of five years after the date that initial construction of the permeable pier sand retention system is completed. The purpose of this condition was, given the experimental nature of this project, to provide assurance that the County will have the financial ability to remove all portions of the permeable pier sand retention system (prior to the actual expiration of this 10-year authorization for the project pursuant to this permit) in the event that the required monitoring program shows that the project is resulting in increased erosion of downcoast beaches or bluffs experience after a period of 5 consecutive years of monitoring. Thus, the applicant's request to modify this condition, to allow the applicant to deposit the funds incrementally over the entire 10-year term of permit authorization would only be adequate to provide funding for removal at the end of the permit's 10-year term and would not be adequate to meet the intended purpose of this condition which is to actually ensure that sufficient funds are available for demolition and removal of the permeable pier sand retention system, should it be required due to unforeseen impacts, prior to the 10-year term of the permit itself. Thus, Staff continues to recommend that this provision of **Special Condition Two (2)** should remain unchanged.

In addition, as now conditioned, **Special Condition Two** requires the County to implement all necessary “adaptive management” actions on an as-needed basis, based on the results of monthly, semi-annual, and annual monitoring requirements, to prevent downcoast erosion. These adaptive management actions would include adding/removing piles to adjust the permeability of the permeable pier sand retention system and additional beach nourishment. As revised pursuant to this addendum, Special Condition Two (2) requires the applicant to implement the identified adaptive management actions if: (1) any of the bluffs located at the established Baseline Survey Monitoring Points located downcoast of the pier experience retreat greater than the ambient trend over a two year period or (2) if any of the downcoast beaches at the survey points are 15% or more narrower than the projected future beach width during two consecutive fall or two consecutive spring beach profile surveys relative to projected future beach widths at the two downcoast Control Survey Monitoring Points.

Special Condition Two (2) also further requires that if downcoast beaches or bluffs experience retreat above the established ambient retreat trend for 5 consecutive years after initial construction is completed, then the applicant would be required to remove all portions of the permeable pier sand retention system to prevent further impacts from occurring.

The applicant is requesting that the monitoring program be revised to change the threshold for observed downcoast beach erosion that would trigger the need for adaptive management actions by the County to allow for a 20% decrease in downcoast beach width (as opposed to the 15% threshold of the current condition) beyond the observed natural ambient erosion trend. The applicant has indicated that they have previously measured a natural variation in beach widths in the study area of 16% over a single year; whereas, staff believes that the 15% decrease in beach width is still the appropriate threshold given that it is a measurement of additional erosion above and beyond the natural or ambient trend of beach widths over two consecutive years. The purpose of requiring the two downcoast survey control points outside the effects range of the project is to ensure that the monitoring program is able to adequately assess any changes to downcoast beaches and bluffs that occur as a result of the project, as opposed to natural or ambient erosion that is not attributable to the project. As specifically stated in the condition, adaptive management actions would only be required if the decrease in beach width both exceeded the 15% threshold for a decrease in beach width **and** the calculated percentage is greater than the average of the percent narrowing of the beach widths, relative to projected future beach widths at the two downcoast Control Survey Monitoring Points. Thus, as conditioned, staff notes that the condition can be feasibly implemented in a manner that already takes in to account a wide, natural variability in beach widths but that is still adequate to assess reductions in beach width that may potentially occur as a result of the project itself.

Moreover, the Commission Staff’s Engineer, Lesley Ewing has reviewed the County’s requested change and believes that the change proposed by the applicant would result in potential significant erosion as a result of the project. Ms. Ewing has confirmed that she believes the current threshold trigger of a 15% reduction in downcoast beach widths

be reached prior to taking adaptive management actions is adequate to promptly respond to any potential observed increases in downcoast erosion. Moreover, the applicant's proposal to use the 20% threshold would result in potential significant downcoast erosion before mitigative action would be taken by the County to correct the problem.

Further, although staff agrees to the County's request that a single survey taken in fall would be adequate to assess the unidirectional erosion of bluffs (as revised by this addendum) staff continues to disagree with the County's assertion that a single annual survey taken in fall (as opposed to both fall and spring surveys) of the downcoast sandy beaches (which experience oscillatory changes in width) would be adequate to evaluate the need for adaptive management actions. In particular, staff believes the evaluation of both spring and fall survey information of downcoast sandy beach widths is necessary in order to detect abnormal beach conditions and as soon as possible and in a responsible manner. Thus, Staff continues to recommend that **Special Condition Two (2)**, with the exception of the revisions made pursuant to this addendum, should remain unchanged.

The applicant is also requesting other changes to the requirements of special condition including that the applicant not be required to utilize both a GPS device and a standard tape measure for conducting the monthly measurements. In response, staff notes that these monthly measurements are intended to be performed by a non-surveyor or non-engineer and that the use of both a tape measure and a GPS device would be required to ensure accuracy and reliability, particularly given the variability in topography (some survey monument/markers well landward of the sandy beach atop bluffs and may not provide a measurable sight line to the water's edge. Thus, staff believes that this condition is both feasible and necessary to ensure that the accurate and consistent measurements are recorded overtime. Therefore, staff continues to recommend that **Special Condition Two (2)**, with the exception of the revisions made pursuant to this addendum, should remain unchanged.

The applicant is also requesting that **Special Condition Three (3)**, "Timing of Operations" be revised to allow for dredging and beach nourishment activities to occur on Saturdays. The letter from the applicant, dated July 3, 2009, asserts "dredging operations should be allowed on Saturdays because of the time needed to dredge the approximately 500,000 cubic yards of fill sand and the limited window of operation established for the project to minimize impacts to public access and seasonal sensitive species at the Beach Park, restricting dredging activities to the normal work hours would dramatically increase the duration of the project."

Currently, Special Condition Two requires that all project activities, with the exception of monitoring, shall occur Monday through Friday. No work would be allowed on Saturday or Sunday in order to minimize impacts to public access and recreation within Goleta Beach County Park. This same timing restriction (precluding work on weekends to avoid impacts to public access and recreation) has been previously required as a special condition by the Commission for several other projects at Goleta Beach Park in

the past, including CDP 4-02-074 (BEACON) which authorized beach replenishment activities at Goleta Beach, CDP 4-02-054 (BEACON) for a one-time beach nourishment demonstration program at Goleta Beach utilizing up to 150,000 cubic yards of sand, and CDP 4-05-139 (S.B. County) which authorized the County to dredge between 20,000 – 200,000 cu. yds. of material per year from Goleta Slough and deposit the material at Goleta Beach for the purpose of beach nourishment.

As explained in the findings contained of the staff report for this item, dredging and beach nourishment activities require that some, or all, portions of the beach at the County park be closed due to the use of construction equipment and increased turbidity of the water. Further, although the winter and early spring season is the appropriate time of year to implement project activities (as proposed) given the mild climate, the park would still be expected to attract extensive public visitorship on any given weekend. Since Goleta beach is subject to higher levels of public use during weekends, sediment disposal/placement activities during these times would result in significant adverse impacts to public access. Therefore, to ensure that maximum access is maintained for the public in the project area consistent with Coastal Act Section 30210, **Special Condition Three (3)** is necessary to ensure that all construction operations, including any restrictions on public access, be prohibited on any part of the beach and shorefront in the project area on Saturdays and Sundays, thereby removing the potential for construction-related disturbances to conflict with weekend visitor activities. In this way, scheduling operations outside of peak recreational times will serve to minimize potential impacts on public access.

Further, in response to the applicant's request, staff notes that no evidence has been submitted by the applicant that compliance with the timing restrictions of Special Condition Three (3) would not be feasible (including the restrictions that prohibit work during the summer months, during grunion spawning season from March through August, and during times of year when sensitive bird species would be present on from March through August as well). Moreover, the applicant has previously submitted a construction schedule, as part of the application for this item (included as **Exhibit 2** of this addendum) indicating that dredging and beach nourishment activities would only occur for a 4-month period (November – February) during the 5 ½ month window between the bird nesting/breeding season and the known Grunion spawning season. Thus, as shown on **Exhibit 2**, dredging/beach nourishment could already be extended beyond the proposed 4-month period within the allowable 5 ½ month construction window (mid-September – February) while still avoiding any potential adverse impacts to sensitive species. No information has been submitted by the applicant to demonstrate why beach nourishment activities could not feasibly be accomplished in this time period. Therefore, in order to ensure that adverse impacts to public access and recreations are minimized Therefore, staff continues to recommend that **Special Condition Three (3)** should remain unchanged.

C. EX PARTE

One new Ex Parte communication has been included in the record since the staff report was prepared and is included as **Exhibit 3**.

D. OTHER CORRESPONDENCE

Correspondence has been received from a large number of interested parties including letters of both support and opposition. In total, 801 letters, emails, and petition signatures have been received as of July 6, 2009, as listed below:

Letters – Neutral Position

A letter from the Sierra Club, dated 7/5/09 has been received which indicates that the Santa Barbara Group of the Los Padres Chapter of the Sierra Club has decided to not take any position in either support or opposition to either the proposed project or the identified alternative regarding “park reconfiguration”. The Sierra Club’s letter has been included as **Exhibit 4**.

Letters in Opposition

A total of **452 letters and emails in opposition** to this project have been received as of 7/6/09 as follows: The Environmental Defense Center (EDC) has submitted a letter, dated July 3, 2009, with several attachments in opposition to the proposed project, which has been included as **Exhibit 9** of this addendum. In addition, the EDC has also requested that two letters addressed to the EDC from Coastal Tech dated July 3, 2009, and Philip Williams and Associates (PWA) dated July 2, 2009 be included in the addendum as well (**Exhibit 8**). Ten letters in opposition were submitted prior to the date of the staff report. In addition, since the staff report for this item was prepared a total of 39 new letters in opposition to the project have also been received (including the letter from the EDC) and 417 new emails in opposition to the project have also been received. These letters include, among others, a letter from Santa Barbara Channel Keeper dated July 2, 2009; Jessie Alstatt (a marine biologist) dated July 2, 2009; and a letter from Michael Vincent McGinnis, Ph.D. dated July 1, 2009. In general, the issues raised in these letters have been previously identified and discussed in the findings of the staff report. For reference, in addition to the individually cited letters above, 5 of the other recently submitted letters from members of the public and a representative copy of one of the 418 form-based emailed letters submitted in opposition of the project have been included as **Exhibit 7** of this addendum.

Letters in Support

A total of **263 letters and petition signatures in support** of this project have been received as of 7/6/09. Staff notes that 85 letters in support of the proposed project were submitted prior to the date of the staff report and since the staff report for this item was prepared, a total of 16 new letters in support of the proposed project and a petition in support of the proposed project with 162 signatures have also been submitted. New letters in support of the project include a letter from the City of Goleta dated 7/2/09, the

Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) dated 6/24/09, Santa Barbara County Taxpayer's Association dated 6/30/09, and The Southern California Gas Company dated 6/25/09; these letters have been included as **Exhibit 5** of this addendum. For reference, in addition to the individually cited letters above, 5 of the other recently submitted letters in support of the project and a representative page of the petition have been included as **Exhibit 5** of this addendum.

Letters of Interest – Unspecified Recommendation

A total of **85 letters of interest which do not clearly indicate either support or opposition** to the proposed project have been received. Staff notes that 79 letters which did not clearly indicate either support or opposition to the proposed project were submitted prior to the date of the staff report and since the staff report for this item was prepared a total of 6 new letters of interest which do not clearly indicate either support or opposition to the proposed project have also been received. In regards to these letters, the applicant has asserted in their letter dated July 3, 2009, that because many of these letters indicate a desire to "save" or "preserve" the beach, that these letters should be counted as letters of support for the proposed project. However, staff notes that because of the unclear nature of the text of these letters, it is simply not possible to determine their intent with certainty. For reference, 5 of these letters have been included as **Exhibit 6**.

Exhibit 1

*Letter from Santa Barbara
County dated July 3, 2009*



RECEIVED
JUL 3 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT
610 MISSION CANYON ROAD, SANTA BARBARA, CA 93105

July 3, 2009

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Subject: Goleta Beach Park CARE Program – Beach Sand Stabilization
CDP Application No. 4-08-006

Dear Coastal Commissioners:

The County is pleased to have the Goleta Beach Park Coastal Access and Recreation Enhancement (CARE) Program for the Beach Sand Stabilization Project before your Commission on July 8, 2009. Your staff has worked closely and collaboratively with County staff regarding the project technical details and conditions and we appreciate all that they have done to get us to this point. The County is now pleased to have a recommendation for approval of the project. As you are aware, the CARE program at Goleta Beach County Park is designed to implement the Coastal Act provisions and the County's LCP policies to protect natural resource areas and sensitive habitats, while promoting public access and enhancing and maintaining coastal dependent and coastal related recreational uses. For your reference, please find attached the Goleta Beach Park CARE brochure that outlines the project background, design and benefits.

Although the County is in agreement with most of the conditions recommended by staff, there are a few specific issue areas that need to be addressed. This letter is provided to indicate which conditions of approval the County requests be revised and additionally, offers responses to items raised in the Commission staff report. We will continue to work with staff to resolve as many issues as possible prior to the hearing.

Recommended Condition Revisions

The County has prepared revised condition language for 2 out of the 18 conditions on the project. These are provided in "track changes" with annotated explanation comments in an attachment to the letter. Briefly, the changes are necessary in order to increase the feasibility of the project by modifying the following items:

- **Permeable Pier – Triggers for Actions (Special Condition 2)**
County concern is that the appropriate technical measurements and survey methods are applied to the project during monitoring. The natural variation of area beach

widths is 16% which exceeds the 15% monitoring measurement proposed by Coastal Staff. Therefore, the County proposes a 20% monitoring measurement as recommended by our coastal engineer and surveyor.

- **Project Removal Advance Funding (Special Condition 2)**
Since the project is expected to be successful, removal would not be warranted and setting aside the funds prematurely and unnecessary. Therefore, the County recommends modifying the timing to accrue removal funding over a 10 year time period instead of 5.
- **Timing of Operations (Special Condition 3)**
Dredging operations should be allowed on Saturdays because of the time needed to dredge the approximately 500,000 cubic yards of fill sand and the limited window of operation established for the project to minimize impacts to public access and seasonal sensitive species at the Beach Park, restricting dredging activities to the normal work hours would dramatically increase the duration of the project. Doing so would unnecessarily increase the duration of impacts to the users of the Beach Park.

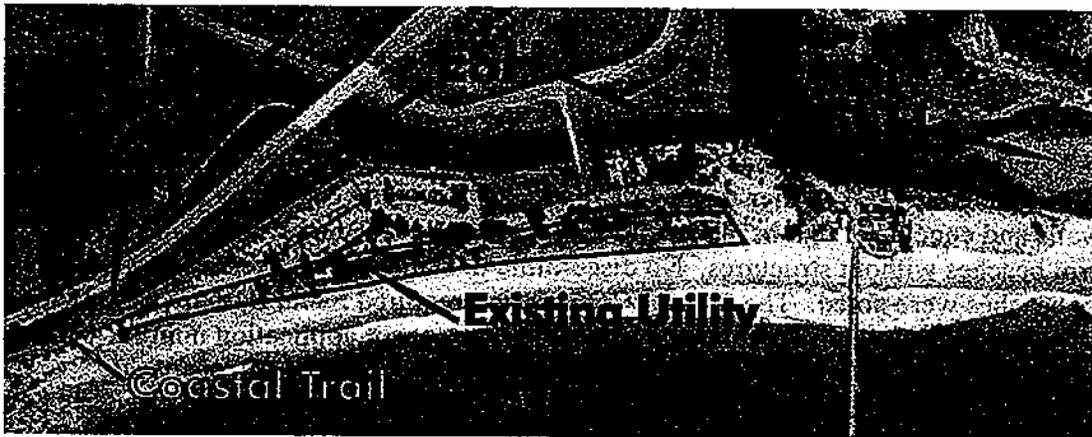
With these recommended changes to the conditions, the proposed project will effectively implement the permeable pier project and adaptive management plan.

Staff Report Responses

This following provides the County's technical responses to several key items in the Coastal staff report, including important information regarding the existing site conditions, the alternatives discussion, the assessment of the project modeling results by PWA and Coastal Tech, cumulative impacts, and the public comments received on the proposed project.

1. Major Utility Lines

The Coastal Commission staff report does not provide a sufficient description of the significant constraint—legal, fiscal or physical—that the existing utility lines place on any beach park solution for erosion. There is a wide utility line corridor and infrastructure running through the beach park and immediately northward of the beach park (high pressure gas line, sewer, water, reclaimed water and Caltrans Highway 217 right-of-way easement).



These lines serve a wide geographic area and represent legal and jurisdictional impediments and liability to any design options that present risk of loss from strong winter storm event erosion and thereby threatening public health, safety and welfare. It is not feasible to relocate these lines, as documented in our CDP permit application.

2. Coastal Trail

Page 67 of your staff report assesses the proposed project against Public Access/Recreation policies. In so doing, the existing public recreation of the Beach Park is described. The report states: “an improved bicycle path (which is part of a larger regional bicycle trail system) crosses the park from west to east”.

We would just like to highlight the fact that this bicycle path traversing Goleta Beach Park serves as the *Coastal Trail* as certified in the County’s LCP. As such, this bicycle path is more than just a local amenity, but a significant statewide recreational resource.

3. Project Alternatives

Retaining the Revetment - Page 46, paragraph 3 of the staff report addresses impacts from retaining the existing revetment. Certain statements need to be discussed.

The unpermitted revetment to be removed west of the pier occupies approximately 10,000 square feet of space, or 0.2 acres, so impacts on recreation from the footprint are limited, contradicting the statement in the staff report, page 67, which states “removal of the rock will also result in *significant* (emphasis added) benefits to public access and recreation as sandy beach areas that was previously occupied by the rock structure will be re-opened to public use”. The revetment effect, such as limiting beach access, only occurs when the revetment is unburied. Moving some sand from the slough mouth to the back beach would allow the revetment to be buried without the need for major beach nourishment.

Passive erosion is acknowledged as an effect of revetments and would occur at Goleta Beach if erosion reached behind (landward of) the revetment. However, this has yet to

occur and beach area presently exists seaward of the revetment. Sand supply should not be affected by the presence of the Goleta Beach revetment as sand is not impounded by the structure.

Also, active erosion by revetments is highly debatable. Dr. Gary Griggs of U.C. Santa Cruz performed several studies to specifically identify erosion caused by revetments and seawalls and concluded that beaches with revetments or seawalls behaved similarly to control beaches without structures. No discernible or statistical differences between the study beaches were noted. The Coastal Commission required Santa Barbara County to monitor the effects of these revetments since 2003 for permit application number 4-02-251, special condition 2. All monitoring reports show no measured effects of the revetments on adjacent beaches (in both the One- and Two-Year Monitoring Reports for the Goleta Beach Revetment Study by County Parks, 2005 and 2006, respectively). In addition, the report by Coastal Frontiers titled "Goleta Beach Monitoring Program, 2006-2007 Annual Monitoring Report" for the County Flood Control District indicates no observable impacts of the revetments on the beach.

The potential for the revetments to cause erosion at Goleta Beach Park was analyzed in the DEIR provided with the CDP application. The various retreat alternatives do not address the major disruption to the park during construction and assume that an eroded park will translate into an equivalent amount of beach—as sand and not clay or other material of the beach park's original fill. Even without sea level rise, there appears to be a loss of upcoast sand supply to replace seasonally eroded beach. This phenomenon has occurred on numerous southern California beaches since the 1983/84 El Nino. Likely there was a loss of sand during the El Nino that has not been replaced because of a lack of sources. Therefore, without beach nourishment the retreat alternatives likely would result in less upland park and less beach.

4. Project Modeling Review

The Coastal Commission staff report references engineering review on behalf of EDC of the project modeling report, Goleta Beach Park Shoreline Morphology Study, which states there are inadequacies in the methods. The following responds to their concerns regarding:

1. Applicability of the Model to Goleta Beach;
2. Use of Wave Data; and
3. Model Calibration and Verification.

Specifically pages 53 – 55 present comments on the modeling addressed herein. The GENESIS model has been used to successfully predict results of recent, high-profile coastal projects in Southern California. Examples are the:

- Bolsa Chica project with a new tidal inlet channel - The Bolsa Chica Steering Committee (including representatives of U.S. Army Corps of Engineers) has

demonstrated that GENESIS results are suitably accurate for these analyses (Moffatt & Nichol Engineers 1999);

- San Diego Regional Beach Sand Project with 2 million cubic yards of nourishment;
- Encinitas/Solana Beach Shoreline Protection Study with more than 1 million cubic yards of nourishment;
- BEACON Demonstration Project by BEACON's technical Director (Jim Bailard); and
- Coney Island Beach Restoration Project in New York.

Numerical modeling of shoreline morphology is inherently difficult because of the complexity of coastal processes. Although coastal processes are becoming increasingly well understood, no comprehensive numerical model exists that accounts for the natural processes of coupled longshore and cross-shore sediment transport. GENESIS models only longshore sediment transport and assumes that cross-shore sediment movement is mainly seasonal and averages out over the long-term. GENESIS is intended to provide a generalized long-term trend in shoreline response from a specific action or actions. It generally indicates whether erosion, accretion, or no effect will occur from an action. The model is robust, reliable, and accurate in predicting general shoreline trends from a project (erosion, accretion, or no change). It was calibrated to existing data adequately to predict credible trends along the vicinity of Goleta Beach. The model was intended to provide an initial assessment of the project for feasibility compared to other alternatives, to be followed by physical modeling in a laboratory for refinement and final design if determined feasible (as was the case).

The DEIR indicates that physical modeling shall occur during design and prior to construction, that monitoring shall occur, and that adaptive management may also be necessary. Adaptive management may not be as challenging as stated by PWA, due to the fairly uniform and predictable longshore sediment transport regime of Goleta Beach due to the one directional longshore currents and consistent relatively low wave conditions over time.

Any uncertainties regarding pier permeability can be resolved by the recommended physical modeling, as the intended purpose for laboratory modeling is to better define permeability. It can also be effectively modified by adjusting pile spacing and number through "tuning" after the structure is installed.

Assuming sediment pulses will pass through this site in the future would be conjectural, and therefore using a time-varying boundary condition would be inappropriate for this study. The Moffatt and Nichol approach for this study used well-established longshore sediment transport rates based on sediment budget analyses and is entirely appropriate, and led to accurate model predictions for many other projects that have already been constructed.

Potential sources of wave data were reviewed to identify which source was most appropriate to develop the wave climate for input to GENESIS. All available wave data

sources were considered and several provided data that could potentially be used including:

- NOAA Buoy 46053 in mid-Santa Barbara Channel;
- CDIP Gages 107 (Goleta), 01701 (Santa Barbara Harbor area), and 071 (Harvest Platform of Point Conception); and
- Wave Hindcast Station 46054 outside of San Miguel Island.

Wave data sources were evaluated for proximity to the project site, island sheltering characteristics, recording of energy and directional data, and duration of record. Wave data sources located far from the project site require transformation of the wave records across long ocean distances and around islands and shoreline features, which can introduce error into the model input data. In addition, local seas are not included and must be measured or hindcast for the project area. Accordingly, wave data sources which experience different sheltering than found at the project site were avoided.

Wave gages in the Santa Barbara Channel are the most appropriate data sources for the shoreline modeling, and wave buoy 107 approximately 5 miles directly offshore of the site was used in the modeling work. The wave gage closest to the site experiences similar exposure and is located in water deep enough to preserve wave properties prior to shoaling. However, the wave record is relatively short, only being available for four years from June 2002 to June 2006, so it was compared to the other wave records to identify whether the wave data represent average conditions or anomalous conditions. It was compared against the NDBC buoy that is a longer-term record from 1994 to the present (including the El Nino year of 1997-1998). The analysis showed wave heights for these wave data sources are very similar with no significant variations. The 12-year NDBC record is sufficiently long to not be biased by severe events, and is assumed to represent average conditions. Therefore, CDIP-107 wave data also represent average conditions without severe events.

Long-term conditions reflect effects of more significant wave events and sea level rise. Long-term and more severe wave conditions were approximated by increasing the wave height in the wave record by 34% on 5 year intervals to represent occurrence of El Ninos. Sea level rise was input by moving the shoreline landward at a rate equal to projected sea level rise over 75 years. This approach was vetted by Coastal staff in spring 2008 with approval and use in the Moffat and Nichol Goleta Beach Park Shoreline Morphology Study. Model results show sensitivity to both El Nino conditions and sea level rise, but still show beach widening under all scenarios. Confidence in the alternative was raised higher by results of these model tests, and referred to as "sensitivity analyses" by one reviewer.

Calibration and verification of the model was very strong, as opposed to the "weak" remark by Coastal Tech. Calibration is adjusting model variables over a certain historic time period to render maximum accuracy, while verification is testing the calibrated model's accuracy over a different time period. The calibration and verification time periods used were pre- and post-nourishment by BEACON and the County Flood Control District, with frequent beach profile monitoring by the County. Therefore, abundant data exist for beach widths during this period to compare model results, and nourishment

activities are well-documented for use as model input data. After adjustment of model variables during the calibration period, resulting shoreline changes modeled were very similar to those measured during this period. Verification of model results occurred over a subsequent defined time period, and it showed very close agreement with measured beach width data, indicating a high degree of accuracy for prediction.

As background and qualifications, M&N is an engineering firm established in 1946 that focuses on coastal engineering, while providing a full suite of other complementary engineering services. M&N coastal engineering practice in Southern California supports a total of sixteen coastal engineers and scientists. The Goleta Beach project is being worked on by this group. Specifically, staff involved with the Goleta Beach project includes several coastal scientists and engineers, and structural engineers (with experience in marine conditions). M&N coastal engineering experience is broad and diverse, and our firm is qualified to address the issues at Goleta Beach. Other M&N experience at this site includes preparation of the:

- Long-Term Shoreline Plan for the County (2001-2003);
- South Central Coast Beach Enhancement Program (2000-2003);
- Monitoring Program Report for the Goleta Beach Demonstration Program (2003-2004);
- Coastal Permit Applications for Repair of East and West-End Revetments (2002-2003); and
- Monitoring Reports for Goleta Beach Required by Coastal for the Long-Term Plan (2003-2005).

M&N analyses indicate that this project appears to result in significant benefits realized by fairly minimal modification of an existing pier coupled with monitoring and adaptive management, while causing no downcoast impacts. M&N has high confidence in the potential for success of this project due to:

- Predictable longshore sediment transport at this site;
- Similar effects of the prototype provided by the former Oil Piers farther east under similar conditions;
- clear benefits shown by numerical model results;
- The ability to test this concept further in a physical modeling laboratory, and
- The opportunity to further “tune” the structure after construction for optimization.

5. Cumulative Project Impact Analysis

The staff report discusses cumulative impacts of beach nourishment from various permitted activities at Goleta Beach Park on page 64, concluding “the Commission notes that the cumulative impacts from the combined projects are not know”. This is incorrect. The environmental information submitted with the County’s CDP application (DEIR, Section 4.1.4.4) specifically addresses cumulative impacts, noting both the BEACON SCCBEP and the County Flood Control District Goleta Slough Annual Maintenance Programs and their contributions to beach nourishment efforts and associated impacts to

Goleta Slough mouth and downcoast sand supply. Both the BEACON and County Flood Control District permitted programs provided beneficial impacts because they provide potential sand nourishment opportunities that could reduce the amount of sand from the proposed dredge site for the permeable pier project. The County included this as part of the CDP application project description but does not object to Special Condition Two that specifically conditions how the permitted programs are intended to operate with the permeable pier project.

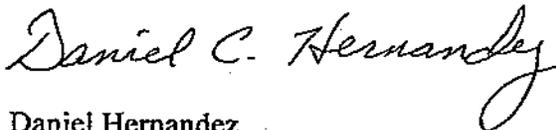
6. Public Comment Letters

Lastly, the staff report lists 174 letters of interest: 85 support letters, 10 opposition letters, and 79 letters "which do not clearly indicate either support or opposition to the proposed project". The County believes this last category is an erroneous classification of letters since the current proposal is for the proposed project to protect and "save" Goleta Beach Park for coastal access and recreation. These letters should be identified in the administrative record as support letters.

Lastly, it is important to note that the County's approach since the 2003 Commission directive to remove or permit the temporary rock revetment, or permit another long term erosion management solution, has been a long and complex effort. The County has been committed to a solution and the current proposal represents an expensive effort and clearly shows the County's dedication to coastal recreation.

Thank you for your attention to our responses and the request for condition revisions as shown in the attached "track changed" exhibit. The County looks forward to successful permitting of this innovative sand management system to preserve and protect coastal access and recreation at Goleta Beach Park.

Sincerely



Daniel Hernandez
Parks Director

cc: Coastal Commission South Central Coast District Staff

Attachments

- County Revision to CDP Special Conditions
- Goleta Beach Park CARE Program Brochure

COUNTY REVISION TO SPECIAL CONDITIONS

Revised July 2, 2009

1. Term of Permit Approval

This coastal development permit authorizes development on a temporary basis only. The development is authorized for a period of ten (10) years from the date of Commission action, after which time the authorization for continuation and/or retention of any development approved as part of this permit (including, but not limited to, the permeable pier sand retention system, seasonal beach berm, and all beach nourishment activities) shall cease. Prior to the date that authorization for the development expires (10 years from the date of Commission action), all portions of the permeable pier sand retention system authorized by this permit must be removed by the applicant, consistent with the requirements of Special Condition Two (2) and timing restrictions of Special Condition Three (3), unless a new coastal development permit, or amendment to this permit, authorizing the retention of the development (including any potential continuation of adaptive management program actions and/or beach nourishment activities) is approved by the California Coastal Commission. The Executive Director may grant additional time for good cause.

2. Final Adaptive Management and Monitoring Plan

A. *Prior to issuance of the Coastal Development Permit*, the applicant shall submit, for the review and approval of the Executive Director, a Revised Final Adaptive Management and Monitoring Plan. The final plan shall incorporate all provisions of the "Revised Draft Guideline Document Adaptive Management Plan for the Goleta Beach Park Coastal Access and Recreation Enhancement Beach Sand Stabilization Project" prepared by Moffatt & Nichol and dated March 2009, except that it shall be consistent with the following revisions:

(1) BASELINE SURVEY MONUMENTS:

Prior to issuance of the coastal development permit, the applicant shall provide revised full-size plans, prepared by a licensed surveyor or engineer, clearly delineating the nine (9) Survey Monuments (6 baseline survey monument points and 3 control survey monument points) as generally shown on Exhibits 11 and 12. The plans shall be of adequate scale to clearly delineate the precise location of each of the nine identified Survey Monuments ~~Markers~~ and include a physical description of each of the eight ~~nine~~ survey markers to be installed. For each designated profile location, the plans shall be adequate to clearly delineate each profile line, the distance between each of the survey markers and the surveyed inland location of the sandy beach and, where bluffs are located, the seawardmost top edge of the bluff on site for the purpose of measuring beach width, bluff edge location, and shoreline profile changes over time.

Comment [GH1]: The county requests that the language be changed to "markers" to avoid the more stringent installation requirements of "monuments". In many locations, such as an unstable bluff, the contractor should have latitude to install a marker that will not impact the stability of the beach or bluff.

(2) PRE-CONSTRUCTION PHYSICAL MODELING AND FINAL PLANS:

The applicant shall implement physical modeling of the permeable pier sand retention system in an appropriate laboratory acceptable to the Executive Director to examine the following:

- The sensitivity of the area to pulses of sediment and variable wave climate.
 - The ability of at least one configuration of 250 to 330 piles with a 500 foot by 20 foot footprint to maintain a large beach salient at Goleta Beach with no reduction in the rate of downcoast sediment transport and no increase in the rate of downcoast erosion of beaches and bluffs.
- a) Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a written report of the model results which shall include documentation of the model scaling, wave and sediment conditions, pile configurations, salient development and downcoast sediment transport rates for all tested pile configurations. The applicant shall post the report on Santa Barbara County's public web site for a period of at least 30 days for public review. The report submitted to the Executive Director shall include the applicant's responses to any substantive comments, that have been received by the County from the public prior to the applicant's submittal of the report to the Executive Director, regarding the results of the physical modeling. The report shall identify at least one configuration design that will meet the anticipated project goals of creating a wide beach seaward of Goleta Beach County Park without resulting in any increase in the rate of downcoast erosion of beaches and bluffs.
- b) Prior to issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, final detailed project design plans (identifying number of piles and spacing for initial installation) which, based on the results of the physical modeling, incorporate all modifications/revisions to the project necessary to avoid any increase in the rate of erosion of downcoast areas resulting from the project.

(3) MONITORING AND REPORTING REQUIREMENTS:

The Final Adaptive Management Plan shall be revised to require that all monitoring shall be conducted for at least one year prior to commencement of development and for a period of 10 years after initial construction, unless the permeable pier sand retention system is removed prior that time. In addition, the Plan shall also provide that the applicant shall conduct monitoring to provide an annual assessment of the shoreline, bluff edge location, and beach width consistent with the following provisions:

- a. Periodic Beach Profile Surveys: A licensed surveyor or engineer shall survey each of the nine identified beach profile transect lines (6 Baseline Survey transects within the Project Reach Study Area and 3

Baseline Survey Control transects outside of the expected reach of the project's effects) on a semi-annual basis each spring and fall season for one year prior to the commencement of development and for a period of 10 years after initial construction, unless the permeable pier sand retention system is removed prior that time. The landward point of each of the beach profile transects shall be a permanent location that can be identified by Baseline Survey Markers and GPS coordinates.

- b. **Beach Width and Bluff Edge Measurements:** Beach width and bluff edge measurements will be performed by the applicant using a tape measure ~~and~~ ^{or} a differentially corrected digital global positioning system (GPS) unit to record the beach width and location of the seaward top edge of the coastal bluffs on a monthly basis for at least one year prior to the commencement of development and for a period of 10 years after initial construction, unless the permeable pier sand retention system is removed prior to that time. For each of the sandy beach Baseline and Control Survey Points where no bluffs are present, measurements will occur from the Baseline Survey Marker out to the estimated mean sea level water line and shall be performed in the same location as the beach profile surveys. For each of the Blufftop Baseline Survey Points, bluff measurements will occur from the Baseline Survey Marker out to the seawardmost top edge of the bluff (and within 25 feet of either side of the profile) and beach width measurements shall occur from the ~~toe of the bluff (with GPS toe location recorded)~~ out to the estimated mean sea level water line and shall be performed in the same location as the beach profile surveys. The date, time and tidal conditions for all measurements shall be recorded.
- c. **Slough Mouth Changes:** The applicant shall conduct visual surveys of the slough mouth on a monthly basis for the purpose of recording the frequency and duration of all slough mouth opening/closure events.
- d. **Aerial Photography:** Aerial photographs of the subject reach (covering, at a minimum, the reach of beach and blufftop spanned by all 6 Baseline Survey transects and the 3 Baseline Survey Control transects) shall be taken concurrent with the fall season beach profile on an annual basis to provide a continuous assessment of the shoreline for one year prior to the commencement of development and for a period of 10 years after initial construction, unless the permeable pier sand retention system is removed prior that time.
- e. **Post-Construction Reporting Requirements:** The applicant shall submit an annual monitoring report, for the review and approval of the Executive Director, for a period of 10 years after initial construction is complete (unless the permeable pier sand retention system is removed prior that time). The monitoring report shall be submitted on annual basis and shall include all survey data and a written report prepared by a qualified coastal engineer indicating the results of the shoreline

Comment [GH2]: It is not necessary to obtain measurements with two independent methods. The county requests the option to choose the most appropriate method for obtaining the measurements based on individual site conditions as determined by the engineer.

Comment [GH3]: Accurate beach width measurements should be reckoned from a permanent back beach location established at the toe of the bluff. This would allow the beach width changes to represent excursions of the shoreline position and not a combo of shoreline position and bluff face-sand junction change.

Comment [GH4]: DGPS positions may not be accurate enough to satisfactorily define this point, particularly if "multipathing" issues are encountered when GPS data are collected in the shadow of a bluff. Multipathing occurs when the direct path of the satellite signal is blocked or reflected by a large object, such as a bluff face or building, generating measurement errors. The County request to define the bluff face-sand junction as the "permanent back beach location" using traditional survey techniques during the initial beach profile surveys.

profile, bluff erosion, and beach width monitoring program. The monitoring report shall include conclusions regarding the level of success of the project, a detailed analysis of any change in shoreline position, increase or decrease in beach widths and bluff erosion rates upcoast and downcoast of the permeable pier sand retention system, details on any nourishment efforts undertaken during the year with the volume and placement location specified, and any adjustments to the permeable pier sand retention system with a plan showing specific changes. The applicant shall post each monitoring report, on an annual basis, on Santa Barbara County's publicly accessible web site for review by interested public. More specifically, the report shall include, but not be limited to, the following:

- Quantification of the volumetric change in the beach for each survey period, using the pre-project condition as the baseline.
- Analysis of the seasonal and interannual changes in width and annual changes in length of dry beach, subaerial and nearshore slope, offshore extent of nourished toe for profiles within the nourishment area, and overall volume of sand in the profile; changes in downcoast bluff position; and, estimates of the rate and extent of transport of material up- and down-coast from the beach nourishment receiver site.
- Comparison of the actual changes to the shoreline in relation to the predicted changes that were anticipated based on the results of the Pre-construction numerical and physical modeling.
- Analysis of the expected time period over which the beach benefits related to the initial nourishment volume and permeable pier sand retention project can be identified as distinct from background conditions; and qualify any abnormal wave and current conditions that could account for changes to the beach outside what was anticipated.
- Provision of cumulative data detailing the annual quantity and placement of material, including interaction of the replenishment project with other beach replenishment projects or other shoreline projects that occur in the project area.
- Utilization of aerial photographs, to the extent feasible, to prepare a summary of beach width changes.
- Conclusions regarding the level of success and any adverse effects, including any observed downcoast beach/bluff erosion and any changes in the frequency that the Goleta Slough opens and closes and/or changes to the duration the slough mouth remains open/closed. The report shall also include a summary of whether excessive entangling of wrack within the piles has occurred, including frequency and effects on permeability.

Comment [GH5]: The length of dry beach can only be derived from the aerial photographs, which are obtained on an annual basis. The County requests modifying language to clarify this requirement.

- The report shall include a brief history of all previous years' monitoring results to track changes in shoreline, bluffs, and slough mouth conditions.

(4) TRIGGERS AND ACTIONS FOR ADAPTIVE MANAGEMENT ACTIONS:

Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a written report, prepared by a qualified civil engineer identifying the ambient rates of erosion for the beach areas at each of the nine (9) identified beach/bluff profile transect locations (6 Baseline Survey transects within the Project Reach Study Area and 3 Baseline Survey Control transects outside of the expected reach of the project's effects) and bluff erosion for the three (3) Baseline Survey transects downcoast of the pier. The report shall provide **projected future beach width** for each transect location, as determined by the established ambient beach shoreline retreat trend and the pre-project baseline beach width. Calculation of the ambient rates of ambient beach shoreline retreat trend at each of the beach profile locations and rates of erosion at each of the bluff profile locations shall be based on analysis of the results of: (1) at least one year of new bluff position and beach profile surveys performed on a semi-annual basis each spring and fall season for one year prior to the commencement of development (2) all available historic beach/bluff profile surveys for the subject areas, (3) comparison of all available historic aerial photographs, LIDAR surveys, and all (4) other appropriate available data concerning beach/bluff erosion/accretion rates. A detailed description and a summary of the findings for each of historic sources of data used in determining the ambient rates of erosion within the study area shall be provided. Prior to or at the same time that the applicant submits this report to the Executive Director, the applicant shall post this ambient beach and bluff change report on Santa Barbara County's publicly accessible web site for review by interested public.

Ambient erosion rates shall be established for the downcoast beaches (at each of the baseline and control survey points). Changes to downcoast beaches/bluffs, relative to control beaches/bluffs, shall be used to establish (1) triggers for implementation of identified adaptive actions including either adjustments of the permeable pier sand retention system (including reconfiguration, removal, or addition of piles) and/or implementation of additional beach nourishment; and (2) triggers for removal of the permeable pier sand retention system. All adaptive actions including either adjustments of the permeable pier sand retention system (including reconfiguration, removal, or addition of piles) and/or implementation of additional beach nourishment shall be implemented as soon as possible after the trigger condition has been reached, within the timing constraints of Special Condition Three (3); but in no case shall action be delayed more than 12 months after occurrence of a trigger condition.

Comment [GH6]: Because bluff measurements are not included in the historical profile data, one year of bluff data may be more misleading (resulting in unrealistically high or low change rates). The County maintains that the best source of long-term bluff erosion rates are likely to be contained in published studies specific to the region. If the existing literature are found to be inadequate, a new photo-based analysis of the project area (using select aerial photos) would provide the best information of bluff retreat.

Comment [GH7]: The County requests that aerial photos be considered under "other appropriate data" and be limited to select data.

Comment [GH8]: It should be understood that beach width data derived from aerial photos can be subject to inaccuracies that are difficult to define because the photos have no vertical reference and older photos are often not georeferenced. Furthermore, photo derived data can be difficult to "mesh" with the more accurate profile data due to the lack of vertical reference for the photos.

Comment [GH9]: During discussions with Lesley Ewing, CCC Staff Engineer, it was decided that the concept of a control bluff was not appropriate in recognition that bluff retreat typically is both episodic and localized. This decision led to the concept of using long-term regional retreat rates from published studies.

In the event that supplemental beach nourishment is necessary after the initial placement of 500,000 cu. yds. of material, then the applicant shall, to the extent that such material is readily available, utilize donor beach nourishment material generated as a result of the ongoing opportunistic beach nourishment program previously approved by the Commission pursuant to CDP 4-02-054 (BEACON) and CDP 4-05-139 (Santa Barbara Flood Control) or other similar projects approved by the Commission pursuant to a separate coastal development permit. In the event that an adequate supply of donor beach nourishment material is not readily available pursuant to CDP 4-02-054 (BEACON) and CDP 4-05-139 (Santa Barbara Flood Control) or other similar projects approved by the Commission pursuant to a separate coastal development permit, then offshore dredging within the identified donor area may be used as a source of material. In no event shall supplemental offshore dredging exceed 100,000 cu. yds. of material per year. In addition, the total amount of beach nourishment material deposited at Goleta Beach pursuant to this permit, in combination with any other sediment disposal/beach replenishment projects (including, but not limited to, all deposition activities implemented pursuant to CDPs 4-02-074 and 4-05-139) shall not exceed a cumulative total of 200,000 cu. yds. of sediment/year, with the exception of the initial placement of 500,000 cu. yds. of material pursuant to this permit. The applicant shall be responsible for coordinating with all other potential sediment disposal/beach replenishment projects at Goleta Beach.

Adaptive actions shall be taken if the annual monitoring report indicates that:

- any of the identified Baseline Survey Monitoring Points located downcoast of the pier experience bluff retreat greater than the ambient trend for two consecutive fall or two consecutive spring surveys; or
- any of the measured beach widths at the identified Baseline Survey Monitoring Points located downcoast of the pier is 20-15% or more narrower than the projected future beach width during two consecutive fall or two consecutive spring beach profile surveys and the calculated percentage is greater than the average of the percent narrowing of the beach widths, relative to projected future beach widths at the two downcoast Control Survey Monitoring Points (the deviation from the natural trend is to be confirmed by additional profiling data to be collected prior to construction).

If any of the above triggers are reached, then the applicant shall implement adaptive management actions including adjustments to the permeable pier sand retention system (add/remove piles), beach nourishment, or a combination of these actions. If any adverse downcoast conditions persist according to monitoring, the applicant shall implement any necessary additional adaptive management actions (including further adjustments to the permeable pier sand retention system and/or beach nourishment). Finally, if the annual monitoring report indicates that downcoast beaches or bluffs within the identified project monitoring area (at any of the identified Baseline Survey

Comment [GH10]: During conversations with Losley Ewing, it was determined that Fall surveys only were appropriate for bluffs in recognition that bluff retreat was unidirectional and could be captured effectively with a single annual survey. The County requests that the condition be amended to reflect the comparison of Fall bluff conditions only.

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Comment [GH11]: The limited Fall profile data at two of the three control sites shows a natural variation from the linear trend line of 16%. The documented natural variation from the trend may increase with more data. The County requests that the allowable percentage of variation be increased to 20%.

Comment [GH12]: Due to lack of sufficient historical survey data obtained during the spring time frame, there is no basis to understand the natural range of fluctuation for Spring beach widths. As such, the County requests that the condition be amended to reflect the comparison of Fall beach widths only.

Comment [C13]: More profile data would substantiate even more the deviation from the natural trend.

Monitoring Points located downcoast of the pier) experience a beach widths that are 20% or more narrower less than the projected future beach width or bluff retreat greater than the established ambient rate of erosion for 5 consecutive years after initial construction is completed, or if the applicant fails to submit any of the required annual monitoring reports, then the applicant shall immediately remove all portions of the permeable pier sand retention system consistent with the timing restrictions of Special Condition Three (3).

Comment [GH14]: The county requests that the same consideration for natural variations from the trend applied above (in terms of %) be incorporated into the 5-year trigger.

(5) PROJECT NOTIFICATION REPORT FOR SUPPLEMENTAL ACTIONS:

In the event that future modifications/adjustments to the number/configuration of the permeable pier sand retention system, additional offshore dredging/beach nourishment activities, or construction of the seasonal sand berm are required to prevent downcoast erosion or to maintain the target beach width after initial construction is completed, then the applicant shall submit a Project Notification Report prior to the commencement of any supplemental activities, for the review and approval of the Executive Director. The Project Notification Report shall describe all supplemental actions, timing of work, staging areas, equipment to be used and method of construction and shall include all relevant monitoring reports required pursuant to this permit for the project site to ensure that the operations are in substantial conformance with the resource protection and public access conditions of this permit. All supplemental actions and work shall be in accordance with all conditions of this coastal development permit. No change to the program beyond the supplemental actions outlined by the approved Final Adaptive Management Plan shall occur without a Commission-approved amendment to the permit, unless the Executive Director determines that no such amendment is required.

(6) REMOVAL PLAN:

Prior to the issuance of the coastal development permit, the applicant shall submit detailed plans for the potential demolition and removal of the permeable pier sand retention system in the event that system is shown to result in an increase in the rate of erosion for downcoast beaches or bluffs pursuant to the above referenced monitoring and reporting requirements of this condition or if a new coastal development permit, or amendment to this permit, authorizing the retention of the development and continuation of an adaptive management program is not approved by the California Coastal Commission prior to the date that authorization for the development expires (10 years from the date of Commission action on this permit). The Executive Director may grant additional time for good cause.

(7) FUNDING ASSURANCE FOR MONITORING/IMPLEMENTATION ACTIONS

A. Prior to issuance of the coastal development permit, the applicant shall provide a detailed cost estimate for the potential demolition and removal of the permeable pier sand retention system. In addition, by acceptance of this permit, the applicant agrees to deposit all necessary funds for the complete removal of the permeable pier sand retention system in an interest-bearing bank account, held by Santa Barbara County, which shall be reserved exclusively for this purpose. The funds shall be deposited by the applicant on an annual basis beginning in year one for a period of ~~ten five years after the date that initial construction of the permeable pier sand retention system is completed~~, so that at the end of this five year period, sufficient funds are available for demolition and removal of the permeable pier sand retention system. The applicant shall be responsible for adding additional funds to the account as necessary to fund the actual removal of the permeable pier sand retention system if costs exceed the original estimate. The applicant shall provide evidence to the Executive Director of each annual deposit to the account. These funds wholly, or in combination with other County funds shall ensure adequate funding remains available for removal of the permeable pier sand retention system if necessary pursuant to the provisions of Special Condition 2.A.4 of this coastal development permit or prior to the date that authorization for the development approved by the permit expires (10 years from the date of Commission action) unless a new coastal development permit, or amendment to this permit, authorizing the retention of the permeable pier sand retention system, is approved by the California Coastal Commission. **PRIOR TO EXPENDITURE OF ANY FUNDS CONTAINED IN THIS ACCOUNT**, the Executive Director shall review and approve, in writing, the proposed use of the funds as being consistent with the intent and purpose of this condition.

Comment [C15]: This provides for proportional funds approach and does not unnecessarily restrict funds used for the adaptive management plan "fine tuning" adjustments.

B. The Permittee shall undertake development and program management in accordance with the final approved plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is legally required.

3. Timing of Operations

It shall be the applicant's responsibility to assure that the following timing restrictions and temporally-based requirements are observed, both concurrent with, and after completion of, all project operations:

- (a) All project activities, with the exception of monitoring and only dredge pipeline discharge at the beach with no earthmoving or heavy equipment

operation, shall occur Monday through Friday, excluding state holidays. No heavy equipment work shall occur on Saturday or Sunday. Discharge of the sand slurry from the dredge discharge line at the beach shall be able to occur on Saturdays, but all operations will cease on Sundays.

- (b) Construction and adjustments of the permeable pier sand retention system and beach nourishment activities shall only occur between Labor Day and February 28th.
- (c) The seasonal sand berm may be constructed in accordance with project plans on an annual basis for a period of 5 years after commencement of development. Construction of the berm shall occur prior to November 1 of each calendar year.
- (d) The seasonal sand berm shall be lowered prior to Memorial Day each year that it is constructed. The sand berm shall be graded to natural beach contours (in connection with its lowering) to restore the shoreline and to facilitate recreational use. If the sand berm has already eroded to an approximation of natural beach contours prior to Memorial Day, then no restorative grading will be necessary.
- (e) All construction operations, including operation of equipment, material placement, placement or removal of equipment or facilities, restricting public access, and seasonal sand berm construction/removal or other activities (with the exception of habitat restoration and wrack habitat management activities) shall be prohibited as follows:
 - i. From the Friday prior to Memorial Day in May through Labor Day in September to avoid impacts on public recreational use of the beach and other public amenities in the project vicinity.
 - ii. On any part of the beach and shorefront in the project area when California grunion (including eggs) are present during any run periods and corresponding egg incubation periods, as documented by the surveys conducted pursuant to Special Condition Nine (9), to avoid impact on the spawning of the California Grunion.
 - iii. On any part of the beach and shorefront in the project area when western snowy plover are present, as identified by the surveys conducted pursuant to Special Condition Nine (9), to avoid adverse effects to western snowy plovers.
 - iv. On any part of the beach and shorefront in the project area when Beldings savannah sparrow are present, as identified by the surveys conducted pursuant to Special Condition Nine (9), to avoid adverse effects to Beldings savannah sparrow.

Comment [C16]: The project's "pre-fill" dredging activities should be exempted from Condition 3 (e). The "pre-fill" dredging activities will relocate sand from an offshore location (approximately 1 mile from Goleta Pier) and place it on the existing sandy beach through an underwater delivery pipeline. The dredging will be powered by a motorized pump located on an offshore barge near the origination point of the "pre-fill" sand. While heavy equipment (bulldozers, etc.) would be necessary to spread the sand around on the beach once it's delivered by the offshore dredge, the opening of the sand delivery pipeline would be moved into the water at the end of each work day and on the weekends. No noise-generating equipment will be located on the sandy beach outside the established work hours. As such, there is no need to condition this portion of the operation to comply with the established work hours. Because of the time needed to dredge the approximately 500,000 cubic yards of fill sand and the limited window of operation established for the project (limited from September 7 to February 28), restricting dredging activities to the normal work hours would dramatically increase the duration of the project. Doing so would unnecessarily increase the duration of impacts to the users of the Beach Park.

4. Removal of Existing Rock Rip Rap

The applicant shall remove all existing rip rap (approximately 1,500 linear feet) on site located west (upcoast) of the Goleta Beach Pier and existing restaurant structure concurrent with, or prior to, the construction of the permeable pier sand retention system and the initial placement of 500,000 cu. yds. of sand for beach nourishment.

5. Limitations on Beach Grooming and Wrack Management

Mechanized beach grooming, including raking, cleaning, and recontouring of sand shall be prohibited at Goleta County Beach with the exception of grooming associated with the placement of sand material for the purpose of beach nourishment or construction/demolition of the seasonal berm or those areas of the beach above the high high water line during summer months. No mechanized beach grooming activities shall occur, at any time, within areas that would result in disturbance or removal of existing coastal strand vegetation. During summer months, beach grooming activities above the high high water line shall be limited to once immediately before Labor Day, Fourth of July, and Memorial Day. Grooming activities shall be implemented in a manner that avoids the removal or disturbance of wrack to the maximum extent feasible. Wrack shall not be removed from this area during grooming or beach nourishment activities with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed as needed. Trash shall be removed by hand to the maximum extent feasible and the mechanical removal of large debris that poses a clear threat to public safety shall be allowed.

6. Plans Conforming to Geotechnical Engineer's Recommendations

By acceptance of this permit, the applicant agrees to comply with the recommendations contained in all of the coastal engineering, geology, geotechnical, and/or soils reports referenced as Substantive File Documents. These recommendations shall be incorporated into all final design and construction plans, which must be reviewed and approved by the consultant prior to commencement of development.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission. Any substantial changes in the proposed development approved by the Commission that may be required by the consultant shall require amendment(s) to the permit(s) or new Coastal Development Permit(s).

7. Operations & Maintenance Responsibilities

It shall be the applicant's responsibility to assure that the following requirements are observed both concurrent with, and after completion of, all project operations:

- (a) All offshore dredging operations shall be conducted using a hopper dredge. Use of a cutter/suction dredge barge shall be prohibited.
- (b) At the completion of the initial beach nourishment operation and any future beach supplemental beach nourishment activities, the sand deposited on the beach shall be graded and groomed to natural beach contours to restore the shoreline habitat and to facilitate recreational use at least one month prior to Memorial Day in May. Disturbance to wrack and coastal strand habitat shall be minimized to the extent feasible.
- (c) Staging areas at Goleta Beach County Park shall be used only during active construction operations and will not be used to store materials or equipment between operations.
- (d) The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project.
- (e) Construction equipment shall not be cleaned on the beach or in the beach parking lots.
- (f) Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
- (g) Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
- (h) During all berm construction and beach nourishment activities authorized pursuant to this permit, the applicant shall be responsible for removing all unsuitable material or debris within the area of placement should the material be found to be unsuitable for any reason, at any time, when the presence of such unsuitable material/debris can reasonably be attributed to the placement material. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.

8. Sediment Analysis and Monitoring

- A. Prior to the issuance of the coastal development permit and prior to the commencement of work each subsequent year that beach nourishment is necessary, an engineer(s) or environmental professional(s), with appropriate qualifications acceptable to the Executive Director, shall: (1) prepare a Sampling and Analysis Plan and conduct testing at the source and receiver site for the review and approval of the Executive Director and (2) monitor the site during all beach nourishment activities. The Sampling and Analysis Plan shall be consistent with the following:
- (1) Sampling Frequency – Samples shall be collected from both the receiver sites and the source sites. For the receiver site, samples shall be collected along transects that are approximately perpendicular to the shoreline, with one (1) transect per each 0.5 miles of receiver beach length. For the source sites, samples shall be collected throughout the source area, with one (1) sample per 0.5 acres, and a minimum of five (5) samples per source site for contaminant testing and a minimum of three (3) samples per source site for all other sediment testing. For the source site samples, the boring depth shall extend approximately one-foot (1-ft) below the anticipated excavation depth.
 - (2) Grain Size – Physical analysis shall be conducted on representative samples of each source material proposed for placement at the Goleta Beach deposition site and on samples from each transect of the receiver beach. The material shall be analyzed for consistency with the U.S. Army Corps of Engineers (ACOE) / Environmental Protection Agency (EPA), State Water Resources Control Board and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Deposition of source material shall occur consistent with the following:
 - i. Source material meeting all applicable federal and state beach nourishment requirements, and for which an average of 75% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200), may be deposited below the mean high tide for the purpose of beach nourishment.
 - ii. Source material meeting all applicable federal and state beach nourishment requirements, and for which an average of 90% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200), may be deposited above the mean high tide line for the purpose of beach nourishment.
 - iii. Source material that does not meet the applicable physical, chemical, color, particle shape, debris, and/or compactability standards for beach replenishment shall not be used.

- (3) **Contaminants** – Based on U.S. EPA Tier I analyses results, Tier II bulk chemical analysis shall be conducted on representative composite samples of each source material proposed for placement at the Goleta Beach deposition site. The material shall be analyzed for consistency with EPA, ACOE, State Water Resources Control Board and RWQCB requirements for beach replenishment. At a minimum, the chemical analysis shall be conducted consistent with the joint EPA/Corps *Inland Testing Manual*. If the ACOE / EPA, State Water Resources Board or RWQCB determine that the sediment exceeds Effects Range Medium (ER-M) contaminant threshold levels as specified by the U.S. EPA, the materials shall not be placed at the site.
- (4) **Color** – Color classification shall be conducted on representative samples of each upland source material proposed for placement at the Goleta Beach deposition site. The color shall reasonably match the color of the receiving beach after reworking by wave action. Color is only an issue for upland sediment, but is not as significant for marine-derived sediment sources.
- (5) **Particle Shape** – Particle shape classification shall be conducted on representative samples of each source material proposed for placement at any of the five deposition sites. For beach replenishment, the source material shall consist of a minimum of 90% rounded particles (i.e., maximum of 10% angular particles).
- (6) **Debris Content** – A visual inspection of the source location shall be conducted to determine the presence and types of debris such as trash, wood, or vegetation. The amount of debris within the material shall be estimated, as a percentage of the total amount of source material. Prior to placement of opportunistic sand at any beach/shoreline receiver site, all such debris material shall be separated from the sand material (by mechanical screening, manual removal or other means) and taken to a proper disposal site authorized to receive such material.
- (7) **Compactability** – Chemical and visual inspections of the source location shall be conducted to determine the presence of elements such as iron oxides which can compact to form a hardpan surface. Source material with compactable material shall be considered for placement below the mean high tide only.
- (8) **Turbidity**. The monitor shall observe and document the turbidity of coastal waters during all construction activities related to the permeable pier sand retention system and beach nourishment activities. The extent of turbidity plumes shall be recorded/mapped by the monitor. Monitoring of turbidity shall occur during and immediately after beach fill placement. In regards to beach nourishment activities, if the monitoring indicates that turbidity

attributed to the project is not completely diminished immediately following construction (1-2 days), then the rate of placement of sand will be modified so that large, long lasting turbidity plumes are no longer created. In such cases, construction methods shall be modified to reduce levels, by such means as: use of coarser beach nourishment material, avoidance of periods of high surf/high tides, and monitoring

- B. The analysis shall include confirmation by the U.S. Army Corps of Engineers and California Regional Water Quality Control Board that the material proposed for beach replenishment meets the minimum criteria necessary for placement on the sandy beach.

9. Biological Monitoring During Construction and Pre-Construction Surveys

The applicant shall retain the services of a qualified biologist or environmental resources specialist (hereinafter, "environmental resources specialist") with appropriate qualifications acceptable to the Executive Director, to monitor the site during construction activities and conduct sensitive species pre-construction surveys. Prior to commencement of development, the applicant shall submit the contact information of all monitors with a description of their duties and their on-site schedule to the Executive Director for review and approval. The applicant shall ensure that the Environmental Specialist shall perform all of the following duties, and the applicant shall observe the following requirements:

- A. The environmental resource specialists shall: (1) conduct a survey of the project site to determine presence and behavior of sensitive species one day prior to commencement of any activities related to the construction of the permeable pier sand retention system, a seasonal beach berm, and/or the commencement of any beach nourishment activities on the project site, (2) immediately report the results of the survey to the applicant and the Commission, and (3) monitor the site during all construction activities related to the permeable pier sand retention system, the seasonal beach berm, and/or the of any beach nourishment activities on the project site.
- B. In the event that the environmental resources specialist reports finding that any sensitive wildlife species (including but not limited to California least tern, western snowy plover, California grunion, Beldings savannah sparrow) exhibit reproductive or nesting behavior, the applicant shall cease work and immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.
- C. Prior to construction of the permeable pier sand retention system, the seasonal beach berm, and/or the commencement of any beach nourishment activities, the applicant shall have the environmental resource specialist conduct a survey of the project site, to determine presence of

California grunion during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Game. If the environmental resources specialist determines that any grunion spawning activity is occurring and/or that grunion are present in or adjacent to the project site, then no construction, maintenance, grading, or grooming activities shall occur on, or adjacent to, the area of the beach where grunion have been observed to spawn until the next predicted run in which no grunion are observed. Surveys shall be conducted for all seasonally predicted run periods in which material is proposed to be placed at any of the above sites. If the applicant is in the process of placing material, the material shall be graded and groomed to contours that will enhance the habitat for grunion prior to the run period. Furthermore, placement activities shall cease in order to determine whether grunion are using the beach during the following run period. The applicant shall have the environmental resource specialist provide inspection reports after each grunion run observed and shall provide copies of such reports to the Executive Director and to the California Department of Fish and Game.

- D. Prior to initiation of daily project activities, the resource specialist shall examine the beach area to preclude impacts to sensitive species. Project activities, including construction, reconstruction, maintenance, other placement activities, or grading or grooming of the beach, shall not occur until any sensitive species (e.g., western snowy plovers, Belding's savannah sparrows, etc.) have left the project area or its vicinity. In the event that the environmental resource specialist determines that any sensitive wildlife species (including but not limited to western snowy plover, Belding's savannah sparrow, California grunion, steelhead trout) exhibit reproductive or nesting behavior, the applicant shall cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director. The applicant shall cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The environmental resource specialist(s) shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The environmental resource specialist(s) shall also immediately notify the Executive Director if development activities outside of the scope of Coastal Development Permit 4-08-006 occur. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts.
- E. The environmental resource specialist will conduct surveys of trees and beach areas on and adjacent to the project site (within 500 feet of any construction activities), just prior to any construction activities and once a week upon commencement of construction activities including pile driving, grading/beach nourishment, or use of other heavy equipment, and that will be carried out between December 1st and September 30th, inclusive. Such surveys shall identify the presence, nests, and eggs or young, of black-crowned night herons, snowy egrets, great egrets, great blue herons,

raptors, western snowy plover, Belding's savannah sparrow, or other sensitive species in or near the project site. All surveys shall be submitted to the Executive Director of the Coastal Commission.

- F. The environmental resource specialist shall be present at all weekly construction meetings and during all significant construction activities including pile driving or grading/beach nourishment activities to ensure that nesting birds are not disturbed by construction related noise. The environmental resources specialist shall be onsite monitoring birds and noise every day at the beginning of the project during heavy equipment use. The environmental resources specialist must review the 2006 guidance issued by the United States Fish and Wildlife Service (USFWS) for estimating the effects of auditory and visual disturbance to northern spotted owls and marbled murrelets. The USFWS document provides guidance for making determinations with regard to potential effects of construction noise on owls and murrelets. While these two species are not expected to be impacted by this project, the guidelines and procedures apply to the herons, egrets, and raptors that potentially could be impacted.
- G. The environmental resource specialist shall be present during all pile driving operations and a safety radius of no less than 500 ft. shall be established on the seaward side of the Pier to serve as a protection zone for marine mammals. The size of the safety radius may be increased based on further consultation with NOAA Fisheries. If marine mammals are observed to enter this safety zone, all pile driving activities shall cease immediately until all marine mammals have vacated the safety zone. No pile driving shall occur if the visibility of the observers is less than the 500 feet radius.
- H. Hydroacoustical monitoring shall be performed to ensure that underwater noise generated by pile driving activities shall not exceed an accumulated 187 dB SEL as measured 5 meters from the source and that at no time shall peak dB rise above 206 at 10 meters from the source for the protection of marine fish including salmon that utilize Goleta Slough. The applicant shall consult with the United States Fish and Wildlife Service and NOAA Fisheries to develop a monitoring program that meets this objective. The applicant shall submit a hydroacoustical monitoring plan for the review and approval of the Executive Director, prior to the commencement of pile driving activities.
- I. The applicant shall submit documentation prepared by the environmental resource specialist which indicates the results of each pre-construction survey, including if any sensitive species were observed and associated behaviors or activities. Location of any nests observed shall be mapped.

10. Construction and Pile Driving Noise Level Restrictions

It shall be the applicant's responsibility to assure that the following occurs concurrent with all project operations:

- A. Noise generated by construction (including, but not limited to, pile driving) shall not exceed 85 dB at any active nesting site for black-crowned night herons, snowy egrets, great egrets, great blue herons, raptors, or other sensitive species in or near the project site. If construction noise exceeds 85 dB, then alternative methods of pile driving (including, but not limited to, vibratory pile driving, press-in pile placement, drilling, dewatered isolation casings, etc.) or other sound mitigation measures (including, but not limited to, sound shielding and noise attenuation devices) shall be used as necessary to achieve the required dB threshold levels. If these sound mitigation measures do not reduce noise levels, construction within 300 feet of the nesting trees shall cease and shall not recommence until either new sound mitigation can be employed or nesting is complete.
- B. Underwater noise generated by pile driving activities shall not exceed an accumulated 187 dB SEL as measured 5 meters from the source. At no time shall peak dB rise above 206 at 10 meters from the source. If construction noise exceeds the above thresholds, then alternative methods of pile driving (including, but not limited to, vibratory pile driving, press-in pile placement, drilling, dewatered isolation casings, etc.) or other sound mitigation measures (including, but not limited to sound shielding and other noise attenuation devices) shall be used as necessary to achieve the required dB threshold levels.
- C. Underwater noise generated by pile driving activities shall not exceed 160 dB at 300 or more feet from the project. If construction noise exceeds the 160 dB threshold, then alternative methods of pile driving (including, but not limited to, vibratory pile driving, press-in pile placement, drilling, dewatered isolation casings, etc.) or other sound mitigation measures (including, but not limited to sound shielding and other noise attenuation devices) shall be used as necessary to achieve the required dB threshold level.

11. Long-Term Biological Monitoring Program

- A. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, a long-term biological monitoring program for the Project Site which describes the methodology the annual monitoring reporting requirements. The program may be prepared in coordination with similar reports prepared by BEACON and Santa Barbara County to satisfy the required conditions of approval for other beach replenishment projects at the subject site. The program shall outline the procedure for the necessary surveys, report preparation and submittal, and the skills and qualifications for all personnel and shall incorporate the following:
 - (1) The monitoring program shall include surveys of habitat areas for California least tern, western snowy plover, raptors, California

grunion, Beldings savannah sparrow, globose dune beetle, coastal strand, wrack, kelp, surfgrass, and eelgrass, as applicable at the subject site, approximately one month prior to initial and any future beach nourishment activities as well as 3 months, 6 months, and 1 year after completion of beach nourishment activities. The one-year monitoring survey may be adjusted to coincide with the following year's survey requirements, where feasible.

- (2) The monitoring program shall include visual surveys of the slough mouth approximately one month prior to construction and/or beach nourishment activities as well as 3 months, 6 months, and 1 year after completion of any beach nourishment activities. The monitor shall record and report any change in the frequency and duration of all slough mouth openings/closures each year. The one-year monitoring survey may be adjusted to coincide with the following year's survey requirements, where feasible.
- (3) The monitoring program shall specify the criteria that would indicate the program's effectiveness/success in avoiding adverse impacts to sensitive biological resources (including, but not limited to, California least tern, western snowy plover, raptors, California grunion, Beldings savannah sparrow, globose dune beetle, coastal strand, wrack, kelp, surfgrass, and eelgrass, etc.). The criteria shall be specific enough to provide a mechanism to determine when/how a project results in adverse impacts to biological resources and a mechanism for making adjustments to all project activities including, but not limited to, any necessary adaptive management actions including pile driving, pile removal, and supplemental beach nourishment activities.
- (4) The monitoring program shall consider potential impacts to previously unidentified or new resources in the project vicinity. If the beach replenishment operations could potentially impact such resources, the monitoring program shall be revised to assess impacts to those resources.
- (5) In addition, the applicant shall monitor on a monthly basis to ensure that the permeable pier sand retention system does not result in excessive entangling of wrack within the piles, or immediately upcoast. If excessive wrack becomes entangled in the piers, or entrained immediately upcoast of the pier and results in a reduction of wrack on the downcoast beach area, then the applicant shall relocate the entangled wrack downcoast of the pier in a manner consistent with the establishment and maintenance of beach wrack habitat.

B. If the Executive Director determines that adverse impacts have occurred to any sensitive biological resources or habitat areas (including, but not limited

to, habitat for California least tern, western snowy plover, raptors, California grunion, Beldings savannah sparrow, globose dune beetle, coastal strand, wrack, kelp, surfgrass, and eelgrass) then the Executive Director shall notify the applicant of such determination. The applicant shall cease work at the subject project site, and shall immediately notify local resource agencies. The applicant shall be required to submit a revised, or supplemental program, for the review and approval of the Executive Director, to adequately mitigate such impacts. Project activities shall resume only upon written approval of the Executive Director.

- C. The applicant shall undertake the development in accordance with the approved monitoring program. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

12. Coastal Strand Habitat Restoration and Monitoring Program

Prior to issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a Coastal Strand Habitat Restoration and Monitoring Program. The Program shall provide for the revegetation and restoration of all areas of existing coastal strand habitat on site that will be temporarily disturbed as a result of the removal of the approximately 1,500 ft. long rock revetment at the upcoast end of the park, repair of the existing rock revetment at the downcoast end of the park, initial and supplemental beach nourishment activities, and seasonal sand berm construction/removal. The program shall be prepared by a qualified biologist(s), ecologist(s), or resource specialist(s), hereafter, referred to as the Environmental Resource Specialist(s), with experience in the field of restoration, beach ecology, and marine biology. The permittee shall provide the resource specialist's qualifications, for the review and approval of the Executive Director, prior to plan development. The Program shall provide, at a minimum, for the following:

A. Coastal Strand Restoration Plan

1. A baseline assessment of all coastal strand vegetation and habitat on site, including detailed documentation of existing conditions on site prior to disturbance by any development authorized by this coastal permit (including photographs taken from pre-designated sites annotated to a copy of the site plans. The plan shall delineate existing vegetation types, show the distribution and abundance of any sensitive species, and shall identify the area(s) of existing coastal strand vegetation/habitat that will be temporarily disturbed as a result of approved development.

2. A description of the goals of the restoration plan, including, as appropriate, topography, hydrology, vegetation types, sensitive species, and wildlife usage. The plan shall also document the performance standards, which provide a mechanism for making adjustments to the mitigation site when it is determined, through monitoring, or other means that the restoration techniques are not working and the necessary management and maintenance requirements, and provisions for timely remediation should the need arise.
3. A description of the methodology of how any existing coastal strand plants that would be impacted as a result of the approved development will be collected, stored, and used for revegetation of the site. Prior to the commencement of the initial beach nourishment activities and/or removal of the approximately 1,500 linear ft. of rock revetment on the upcoast end of the park, the Environmental Resource Specialist(s) shall collect the native coastal strand plants that would be disturbed by these activities and maintain them for future planting. Native coastal strand plant seeds shall also be collected in anticipation of future plantings. The plan shall specify the planting palette (seed mix and collected plants), planting design, source of plant material, and plant installation. The planting palette shall be made up exclusively of native plants that are appropriate to the habitat and region or grown from seeds or vegetative materials obtained from the site or from an appropriate nearby beach location so as to protect the genetic makeup of natural populations. Horticultural varieties shall not be used. Plantings shall be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the revegetation requirements.
4. Sufficient technical detail on the restoration design including, at a minimum, a planting program including a description of planned site preparation, method and location of exotic species removal, timing of planting, plant locations and elevations on the baseline map, and maintenance timing and techniques.
5. Restoration shall be implemented in a manner consistent with the continued provision of public pedestrian access between upland areas of the park and the sandy beach. If temporary fencing or informational signage is necessary to facilitate restoration efforts, then the applicant shall submit a plan indicating the location, type, and height of any temporary fencing and a detailed description of any signage that will be used. Paths and breaks in any temporary fencing shall be provided to ensure adequate public access is maintained between existing parking and upland areas of the park and the sandy beach.
6. The Environmental Resource Specialist(s) shall collect and transplant any observed Globose dune beetles within the area to be impacted by beach nourishment/revetment removal to an appropriate nearby coastal strand/southern foredune location.

7. The applicant shall revegetate all disturbed coastal strand habitat areas on site pursuant to the approved Coastal Strand Restoration Plan within 90 days after the removal of the approximately 1,500 linear ft. of rock revetment at the upcoast end of the park, repair of the rock revetment at the downcoast end of the park, and initial beach nourishment activities are completed. The Executive Director may grant additional time for good cause.
8. In the event that disturbance to coastal strand habitat on site results from future supplemental beach nourishment and/or seasonal sand berm construction/demolition pursuant to this coastal development permit, then the applicant shall revegetate all disturbed Coastal strand habitat areas on site pursuant to the approved Coastal Strand Restoration Plan within 90 days after those activities are completed. The Executive Director may grant additional time for good cause.
9. Provisions for on-going coastal strand habitat maintenance and/or management for the term of this coastal development permit. At a minimum, semi-annual maintenance and/or management activities shall include, as necessary, debris removal, periodic weeding of invasive and non-native vegetation and revegetation consistent with the approved restoration plan.

B. Monitoring

A monitoring program shall be implemented to monitor the project for compliance with the specified guidelines and performance standards and shall provide the following:

1. **Initial Monitoring Report:** The permittee shall submit, upon completion of the initial revegetation, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial revegetation 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/revegetation work.
2. **Interim Monitoring Reports:** After initial revegetation is completed, the applicant shall submit, for the review and approval of the Executive Director, on an annual basis until the authorization for the approved development expires (10 years from the date of Commission action) a written monitoring report prepared by a monitoring resource specialist indicating the progress and relative success or failure of the restoration on the site. This report shall also include further recommendations and requirements for additional enhancement/restoration activities in order for the project to meet the criteria and performance standards. This report shall also include photographs taken from predesignated sites (annotated

to a copy of the site plans) indicating the progress of recovery at each of the sites. Each report shall be cumulative and shall summarize all previous results. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the enhancement/restoration project in relation to the interim performance standards and final success criteria.

3. **Final Report:** Prior to the date that authorization for the approved development expires (10 years from the date of Commission action), a final detailed report on the restoration shall be submitted for the review and approval of the Executive Director. If this report indicates that the restoration project has, in part, or in whole, been unsuccessful, based on the performance standards specified in the restoration plan, the applicant(s) shall submit within 90 days a revised or supplemental restoration program to compensate for those portions of the original program which did not meet the approved success criteria. The revised or supplemental program shall be processed as an amendment to this permit.

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

13. Eelgrass Surveys

- A. **Pre-Construction Eelgrass Survey.** Prior to the commencement of any offshore dredging activities, a pre-construction eelgrass (*Zostera marina*) survey of the transport pipeline route shall be completed by a qualified marine biologist(s) during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of dredging activities and shall be valid until the next period of active growth. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development. Based on the Pre-Construction Eelgrass Survey, a pipeline route shall be selected that avoids contact with eelgrass and kelp habitat to the extent feasible. Immediately following beach fill activities,

another survey of the pipeline area shall be conducted to determine whether any kelp and eelgrass were disturbed.

- B. Post Construction Eelgrass Survey.** If any eelgrass is identified within any portion of the pipeline route by the survey required in subsection A of this condition above, within one month after the conclusion of dredging activities, the applicant shall survey the project site to determine if any eelgrass was adversely impacted. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the post-construction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a minimum 1.2:1 ratio in accordance with the Southern California Eelgrass Mitigation Policy. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.2:1 (mitigation:impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply.

14. Final Public Access Program

- A.** Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a Final Public Access Program that describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around construction areas, beach deposition sites, and/or staging areas shall be maintained during all project operations. The applicant shall maintain public access pursuant to the approved version of the report. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.
- B.** Public parking areas shall not be used for staging or storage of equipment and materials, unless there is no feasible alternative. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces (on and off-street) that are required at each receiver site for the staging of equipment, machinery and employee parking shall be used. At each site, the number of public parking spaces utilized shall be the minimum necessary to implement the project.
- C.** The applicant shall post each construction site with a notice indicating the expected dates of construction and/or beach closures.

15. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion, liquefaction, waves, flooding, and sea level rise; (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.

Prior to issuance of the Coastal Development Permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

16. Required Approvals

Prior to the issuance of this permit, the applicant shall obtain all other necessary State permits that may be necessary for all aspects of the proposed project (including approvals from the California Department of Fish and Game, California State Lands Commission, and Regional Water Quality Control Board, unless evidence is submitted that such approval(s) are not required). In addition, by acceptance of this permit, the applicant agrees to obtain all necessary Federal permits that may be necessary for all aspects of the proposed project (including, but not limited to, the U.S. Army Corps of Engineers).

17. Indemnification by Applicant

Liability for Costs and Attorneys Fees: By acceptance of this permit, the Applicant/Permittee agrees to 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/Permittee 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.

18. Condition Compliance

Within 18 months of Commission action on this coastal development permit application, or within such additional 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.

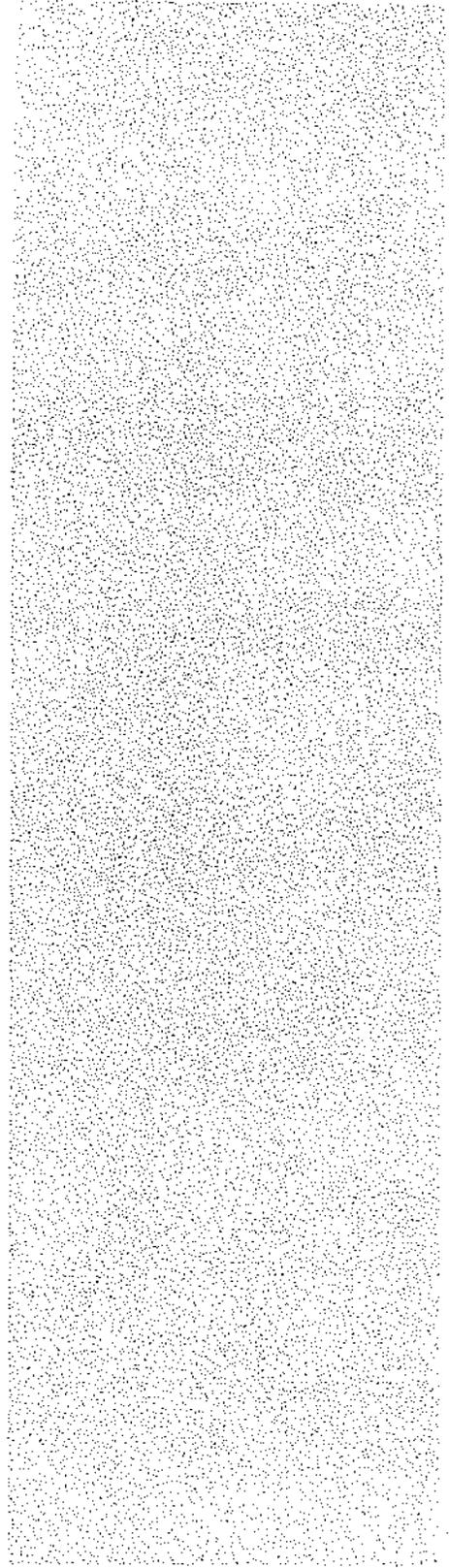


Exhibit 2

Construction Time Table

Exhibit 3

Ex Parte Communications
By
Commissioners

Jul 03 09 01:33p

Drs. Dan & Mary Secord

805-697-0162

P. 1

WEDNESDAY, ITEM 8B

DISCLOSURE OF EX PARTE COMMUNICATIONS

Name or description of project:

Application No. 4-08-006 (Santa Barbara County, Goleta Beach) Application of Santa Barbara County to construct 500-ft. long, 20-ft. wide, permeable pier sand retention system as addition to existing Goleta Beach Pier consisting of 250-330 timber piles (18" to 20" in diameter) and timber decking, seasonal installation of approximately 1,200-ft. long, 3-5 ft. high winter sand berm; removal of approximately 1,500 linear ft. of existing rock rip rap upcoast of Goleta Pier; and implementation of beach nourishment program involving initial offshore dredging of approximately 500,000 cu.yds. of sand and placement of dredged material on beach upcoast of pier for beach nourishment with additional periodic offshore dredging/beach nourishment on as-needed basis not exceeding 100,000 cu.yds. of material per year, at 5986 Sandspit Road, Goleta Beach County Park, Santa Barbara County.

Date and time of receipt of communication:

July 2, 2009 @ 1:30 pm

Location of communication:

Phone

Type of communication:

Teleconference

Person(s) in attendance at time of communication:

Susan McCabe, Anne Blemker

Person(s) receiving communication:

Dan Secord

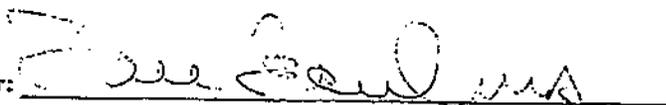
Detailed substantive description of the content of communication:

(Attach a copy of the complete text of any written material received.)

I received an update from the project representatives in which they informed me they were in agreement with staff's recommendation of approval, but still had issues with a few of the special conditions. Concerns relate to the triggers for action in the Adaptive Management Plan, timing restrictions related to weekend dredging operations, and the project removal funding structure. The representatives were hopeful to work out as many issues as possible with staff prior to the hearing.

Date:

Signature of Commissioner:



415 357-2352

Exhibit 4

Letter from Sierra Club – Neutral Position

NOTE: A letter from the Sierra Club, dated 7/5/09 has been received which indicates that the Santa Barbara Group of the Los Padres Chapter of the Sierra Club has decided to not take any position in either support or opposition to either the proposed project or the identified alternative regarding "park reconfiguration". The Sierra Club's letter has been included as **Exhibit 4**.



**SIERRA
CLUB**

FOUNDED 1892

Santa Barbara Group

Chair
James Childress

Vice-Chair
Fran Farina

Secretary
Sally Foushe

Treasurer
Virginia Turner

At Large
Robert
Bernstein

At Large
Stephen
Dougherty

At Large
Jim Balter

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JUL 06 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

PO Box 31241
Santa Barbara 93130-1241
7/5/09

To: California Coastal Commission

Concerning: Sierra Club Santa Barbara Group position on proposed Goleta Beach plans

From: Santa Barbara Group Executive Committee, Los Padres Chapter, Sierra Club

Statement of Position:

The Santa Barbara Group of the Los Padres Chapter of the Sierra Club has considered the two plans put forward for Goleta Beach Park. We have decided not to take any position in support based on environmental issues.

We believe that the two proposals are not equivalent in terms of the preservation of the current services and amenities of the park. Therefore a simple decision of which is "environmentally preferable" or "least environmentally damaging solution" cannot be made in isolation from the issues concerning use of the park and community desires. We believe that the "park reconfiguration plan" is unlikely to effectively retain the current level of amenities and services of the park as is shown by the need for and difficulty of "reconfiguration" within this very small area. While the county plan has the intent to retain the current level of amenities and services, we do not believe we are qualified to judge the technical merit of this plan.

We would also note that much of this area is a long-standing human construct including a restaurant and pier. We find it ironic and perhaps inappropriate that the revetment whose removal from the public use area at the west end of the park is being demanded is being left around the restaurant. This leads to a concern that commercial interests are being favored over public interests.

We also believe there is a very serious environmental justice issue with regard to the users of this, the only readily accessible beach and the only beach park in the Goleta area. The users of this beach represent a wide spectrum of local residents and visitors but for many it is the only reasonably available such facility in the area.

The community is apparently strongly in support of retaining the full functionality of this facility and we too support the concept that the final plans should attempt to do that.

Background:

The Group executive committee heard presentations from County and EDC representatives at its June 1, 2009 meeting. It has since considered documents and further communications from the EDC and the County. It has also had communication with Mark Massara of the Sierra Club. All members of the group executive committee are quite familiar with this park. One member of the executive committee, Fran Farina recused herself from these deliberations due to a conflict of interest due to her employment by the Goleta Water District, which has service lines to UCSB routed through this park.

Sincerely,

James Childress
Chair, Santa Barbara Group, Los Padres Chapter, Sierra Club

Exhibit 5

Letters in Support of Project

NOTE: A total of **263 letters and petition signatures in support** of this project have been received as of 7/6/09. Staff notes that 85 letters in support of the proposed project were submitted prior to the date of the staff report and since the staff report for this item was prepared, a total of 16 new letters in support of the proposed project and a petition in support of the proposed project with 162 signatures have also been submitted. New letters in support of the project include a letter from the City of Goleta dated 7/2/09, the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) dated 6/24/09, Santa Barbara County Taxpayer's Association dated 6/30/09, and The Southern California Gas Company dated 6/25/09; these letters have been included as **Exhibit 5** of this addendum. For reference, in addition to the individually cited letters above, 5 of the other recently submitted letters in support of the project and a representative page of the petition have been included as **Exhibit 5** of this addendum.

All letters received are included as part of the administrative record and are available for review in the California Coastal Commission's Ventura Office. Five of the received letters have been included here for reference.



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JUL 06 2009
CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

July 2, 2009

Bonnie Neely, Chair
California Coastal Commission
South Central Coast Area Office
89 S. California Street, Suite 200
Ventura, CA 93001

CITY COUNCIL
Michael T. Bennett
Mayor

Roger S. Aceves
Mayor Pro Tempore

Jean W. Blois
Councilmember

Eric Onnen
Councilmember

Jonny Wallis
Councilmember

CITY MANAGER
Daniel Singer

RE: SUPPORT FOR GOLETA BEACH EROSION STABILIZATION PROJECT

Dear Chair Neely and Members of the Commission,

Goleta Beach Park offers coastal recreational opportunities important to the residents of Goleta Valley and much of the county. In response to shoreline erosion and related threats to beach and park resources, the County of Santa Barbara released a Draft Environmental Impact Report (EIR) regarding the Goleta Beach County Park Long-Term Protection Plan. In January 2008, the Board of Supervisors approved an erosion prevention approach known as a "Permeable Pier" that would create and maintain a wider beach for shore protection and recreation.

At a public meeting on June 2, 2009, the Goleta City Council voted unanimously to support the Beach Stabilization/Permeable Pier Project as it offers the best opportunity to protect the park facilities and preserve the shore, while eliminating potential adverse down coast effects. Additionally, the project was identified as the environmentally superior alternative in the EIR, further justifying Goleta's support.

Again, we appreciate this opportunity to provide support for this critically important project. Councilmember Michael T. Bennett will speak to this matter at your hearing in San Luis Obispo on July 8, 9, & 10, 2009.

Sincerely,



Roger S. Aceves
Mayor

C: Peter M. Douglas, Commission Executive Director
Goleta City Council

Steve Chase, Planning & Environmental Services Director
Deborah Constantino, City Clerk
Tim Giles, City Attorney
Mike Brown, Chief Executive Officer, County of Santa Barbara
Santa Barbara County Board of Supervisors
Daniel Hernandez, Santa Barbara County Parks Department Director

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JUL 06 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

June 24, 2009

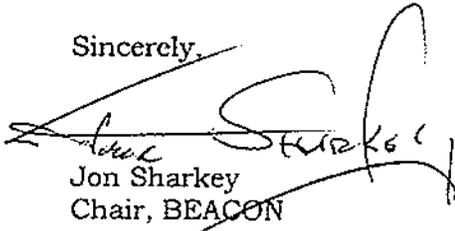
California Coastal Commission
Steve Hudson, District Manager
89 South California Street, Suite 200
Ventura, CA 93001-2801

Subject: Goleta Beach shoreline Project

Dear Mr. Hudson,

The BEACON Board would like to express its support of the Permeable Pier project proposed at Goleta Beach in the County of Santa Barbara. The Permeable Pier and accompanying back-fill nourishment represents an innovative and long term solution to the ongoing erosion of this important beach and park. As you know, BEACON's mission is to address beach erosion in the Central Coast of California and this project is consistent with our long term Coastal Regional Sediment Management Plan.

Sincerely,


Jon Sharkey
Chair, BEACON

cc: Brian Brennan, Executive Director - BEACON
David Ward, County of Santa Barbara



Beach Erosion Authority for
Clean Oceans and Nourishment

A California Joint Powers Agency

Member Agencies

City of Carpinteria
City of Goleta
City of Oxnard
City of Port Hueneme
City of San Buenaventura
City of Santa Barbara
County of Santa Barbara
County of Ventura

Santa Barbara Address:

105 East Anapamu, Suite 201
Santa Barbara, CA 93101

Ventura Address:

501 Poli St.
P.O. Box 99
Ventura, CA 93001

Telephone:

(805) 662-6890

Facsimile:

(805) 568-2982

Email:

Beacon.ca.gov

Internet:

<http://www.beacon.ca>



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JUL 06 2009

STATE OF CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Southern California
Gas Company
1171 More Ranch Road
Goleta, CA 93117

Mailing Address:
PO Box 818
Goleta, CA 93116-0818

June 25, 2009

Ms. Bonnie Neely, Chair
California Coastal Commission
89 South California Street
Ventura, CA 93001

Re: Support Goleta Beach Park Protection – Santa Barbara County

Dear Ms. Neely and Honorable Coastal Commissioners:

The Southern California Gas Company supports Santa Barbara County's application to protect Goleta Beach Park from erosion.

Gas Company representatives have spent the past few years participating on the Goleta Beach Working Group and partnering with Santa Barbara County on beach and park protection as well as restoring Goleta Beach Park to its pre-storm condition.

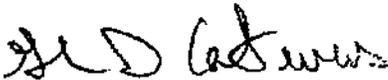
Our involvement with the park goes back decades as we have high pressure natural gas Pipeline #80 that traverses Goleta Beach Park. If we were forced to relocate Line #80 due to unmitigated erosion of the park, we would anticipate significant difficulties and expense related to the following factors:

- Line #80 is located in an environmentally sensitive habitat area (ESHA), and both abandonment/removal of the existing line and installation of a replacement line would involve extensive multi-jurisdictional agency permitting and review.

- A new route for the high pressure gas pipeline would need to be identified and studied, and new easements/rights of way/land for the new route secured.
- Environmental impacts associated with the abandonment/removal of the existing line and installation of the replacement line would need to be identified and mitigated. Impacts may include temporary disruption of public access to Goleta Beach Park facilities.

Based on the above factors and the uncertainty of their outcome, we cannot conclude that relocation of The Gas Company's Pipeline #80 is reasonably feasible. Therefore we urge you to vote in favor of protecting Goleta Beach Park.

Sincerely,



Glenn D. La Fevers
Storage Operations Manager

cc: SB County Board of Supervisors
T. Mahoney (SCG)

Save Goleta Beach

RECEIVED
JUN 30 2009

To the California Coastal Commission:

We, the undersigned residents and visitors to Goleta Beach County Park strongly support the proposal advanced by Santa Barbara County to stabilize this priceless beach park from further erosion. Specifically, we support the county's proposal for additional permeable pilings and pier decking as an elegant approach to retaining sand, without constructing impervious revetments or other armored structures along the shoreline.

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Application No. 4-08-006 (Santa Barbara County, Goleta Beach) Application of Santa Barbara County to construct 500-ft. long, 20-ft. wide, permeable pile sand retention system as addition to existing Goleta Pier consisting of 250-330 timber piles (18" to 20" in diameter) and timber decking, seasonal installation of approximately 1,200-ft. long, 3-5 ft. high winter sand berm; removal of approximately 1,500 linear ft. of existing rock rip rap upcoast of Goleta Pier; and implementation of beach nourishment program involving initial offshore dredging of approximately 500,000 CY of sand and placement of dredged material on beach upcoast of pier for beach nourishment with additional periodic offshore dredging/beach nourishment on as-needed basis not exceeding 100,000 CY of material per year, 5986 Sandspit Rd, Goleta Beach County Park, Santa Barbara County.

At your upcoming hearing, please approve this carefully crafted solution that has also been endorsed by leading environmental scientists, local governments, community leaders, and concerned citizens.

Name	Address	Phone
1. Michael Casey	4694 La Espada Dr	SB, 93111 805-967-4211
2. DAVID MCKEEVER	P.O. B. 11858	CM, 92627 949-650-1222
3. SUSANNE Nichols	5224 Parejo Dr	S.B. 93111 805-964-3632
4. KAREN WILLS	5181 WALNUT PARK DR.	SB 93111 805-967-8609
5. Lillie Jean Brown	5614 Via Ravenna Goleta	805-967-1326
6. SHERLEY KODAK	971 CHELTENHAM RD	SB 805 93105 682-7883
7. Jack M. Rick	327 MORETON Bay Lane - Goleta, CA	805-705-8505
8. Harold Michael Rich	327 MORETON BAY LANE	GOLETA 805-705-8505
9. Jim & KAREN SIFFERT	529 TILA PL.	SB 93111 805 6832120
10. Michael & Beverly Drazold	1116 N Patterson	SB 93111
11. WANDY CAMP	727 VIA MIGUEL	SB 93111
12. Henry J. Guadino	1320 Punta Garda	Sta Barb 93111

June 28, 2009

RECEIVED
JUN 30 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Mr. Jack Ainsworth
Deputy Director
California Coastal Commission
89 S. California Street
Ventura, CA 93001

Subject: Goleta Beach Care Program and Beach Stabilization Project

Dear Mr. Ainsworth:

As a public member of a citizens working group appointed by former Santa Barbara County Supervisor, Susan Rose, five years ago, I strongly recommend that you approve the application and permit No. 4-08-006 for the Goleta Beach Park Care Program and Beach Stabilization Project. After extensive research and study, the conclusion reached by the majority of the working group was that the sand supply to Goleta Beach had decreased so that there is diminishing protection for the park land, utilities, and other infrastructure during annual storm events. The potential for sea water intrusion into the fresh water aquifer of the Goleta Valley could occur should the park land be allowed to erode further. After a decade of studies, engineering opinions, and considerable taxpayer dollars, the permeable pile pier expansion plan is the most natural and environmentally safe long-term solution to protect the park and provide beach stabilization and sand supply.

Great efforts have been made by consultants and Santa Barbara County staff to avoid or mitigate any and all negative environmental impacts. Sound science and engineering practices have been utilized to put forth this project, which is basically the expansion of an existing recreational pier and provides protection by the natural accretion of sand along the front of the park land.

On behalf of the more than a million annual users of the no-fee Goleta Beach Park, I request that you approve this application and permit for the Permeable Pile Pier Beach Stabilization Project and save this vital public asset.

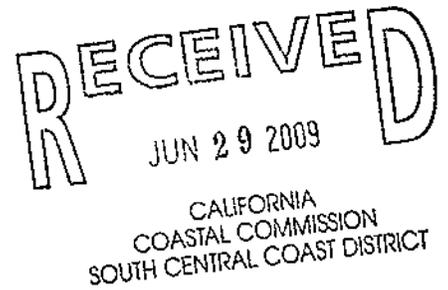
Sincerely,



Ed de la Torre

25 June 2009

Jack Ainsworth, Deputy Director
California Coastal Commission
89 South California Street
Ventura, CA 93001



Dear Director Ainsworth:

I would like to comment on the recent proposal to "save" Goleta Beach, which will come before your Commission next month.

I am a local resident since 1948, intimately acquainted with the waxing and waning of Goleta Beach since then as a fisherman, diver, birdwatcher, etc; I am also a retired biologist with 41 years of experience, and I consider myself a strong environmentalist.

Yet I am in favor of this particular proposal. My feeling is that Goleta Beach Park is built on an unstable sandbar that, without some intervention by man, will eventually wash away, and I see no reason to let that happen just because it is "nature's way." Man has already intervened in the formation of that particular beach, causing a sand accumulation that has already required lengthening of Goleta pier at least twice, so the current Goleta Beach is already "artificial" and largely due to the actions of man. I think that now our job should be to stabilize what we currently have, to protect the recreational values of the beach, the park, the restaurant, the parking, and the restrooms. This proposal would seem to offer a chance for such stability, short of hard-armorizing the beach, and is thus a reasonable compromise between the opposing camps of the Protect the Beach At All Costs crowd and the Absolutely No Human Intervention folks. It is time to reach a compromise, and then, finally, to act.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Michel Masson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Michel Masson
568 Pintura Drive
Santa Barbara, CA 93111

Art Darrow
2896 Hidden Valley Lane
Santa Barbara, CA 93108
805 565 0720

RECEIVED
JUL 06 2009
CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT
App No 4-08-006

June 30, 2009

Mr. John Ainsworth, Deputy Director
California Coastal Commission
South Central Coast District Office
89 South California Street, Suite 200
Ventura, CA 93001-2801

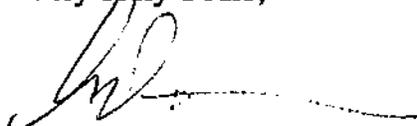
Dear Mr. Ainsworth,

I am writing to express my strong support for the application to implement a Permeable Pier solution to the beach erosion problem at Goleta Beach County Park. I attended most of the meetings of the working group convened by Supervisor Rose to evaluate alternative approaches to preservation of Goleta Beach and the Park behind it.

Based upon the presentations made and the materials provided at and subsequent to these meetings, and on my 30 years experience as a Professional Geologist, it is clear to me that the Permeable Pier solution has the greatest likelihood of successfully preserving the beach and the park. The primary alternative of "Managed Retreat" involves permissive erosion until an ill defined equilibrium is achieved. No evidence and scant analysis were presented to support the efficacy of this approach. Indeed the meager presentation consists largely of ill defined lines purporting to show erosion advances that would essentially destroy most of Goleta Park.

As you are aware, this Beach Park is one of the most heavily used Beach access areas in Santa Barbara County. I urge you to approve Santa Barbara County application.

Very Truly Yours,



Arthur C. Darrow

RECEIVED
JUN 19 2009

Tim & Myra Mahoney
3220 Calle Mariposa
Santa Barbara, CA 93105

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Chairperson Bonnie Neely
California Coastal Commissioners
California Coastal Commission Office
89 South California Street
Ventura, CA 93001

June 17, 2009

Re: Support Goleta Park and Beach Enhancements

Dear Chairperson Neely and Commissioners:

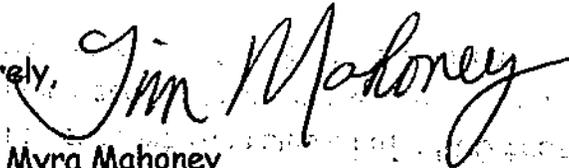
As a family that enjoys Goleta Beach Park in Santa Barbara County, we urge you to support hard structures that will protect the beach, grass, and parking lot as well as ensure public access.

We do not support the removal of 1,500 feet of existing buried rock north of the pier because these rocks are protecting the beach, art work, grass, restrooms, picnic/BBQ tables, restaurant, horse-shoe pits, bike path and other amenities. We do not support "managed retreat".

Since every year, over one million people use Goleta Beach Park, we would like to see more visitor serving uses such as volleyball and basketball courts as well as a ramp for boaters to launch their crafts.

Goleta Beach Park is a community treasure that for decades has provided enjoyment for residents and visitors. There are not enough parks that offer all the amenities (restaurant, pier, parking, restrooms, BBQ/picnic, etc.) like Goleta.

Sincerely,


Tim & Myra Mahoney

—
We support the
Santa Barbara proposal.
Please!

Bob & Frances Kelling
Santa Barbara, CA

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

RECEIVED
JUL 3 2009

Exhibit 6

Letters of Interest: Unspecified Recommendation

NOTE: A total of **85 letters of interest which do not clearly indicate either support or opposition** to the proposed project have been received. Staff notes that 79 letters which did not clearly indicate either support or opposition to the proposed project were submitted prior to the date of the staff report and since the staff report for this item was prepared a total of 6 new letters of interest which do not clearly indicate either support or opposition to the proposed project have also been received. For reference, 5 of these letters have been included as **Exhibit 6**.

All letters received are included as part of the administrative record and are available for review in the California Coastal Commission's Ventura Office.

RECEIVED

JUL 06 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Please
find a way
to save Goleta
Beach! ♡

Dear Mr Ainsworth,

Please use the power of your good
office to save and restore our
beautiful beaches.

Sincerely

Sue & Lou Leopold

sulu@att.net

RECEIVED
JUN 19 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

We love this beach
it fills us with great
memories. We think it
should be the same
but add more sand.

♡anonymys
anonomous!

RECEIVED
JUN 25 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

ATTN: Jack Ainsworth
CA Coastal Commission
Re: Goleta Beach Park

6-27-09

I request that the CCC consider keeping
the rocks @ GBP in place for the following
reasons:

① they work!

② no cost involved \pm removal

③ rock revetment is established
from UCSB southward along
the coast.

Save Goleta Beach Park for the
local community!

Sincerely,

Boetey, Larry Austin
Goleta, CA 93117

RECEIVED
JUN 29 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Please do whatever needs to be
done to keep Solita Beach safe
& clean for us to enjoy.

We love coming here to visit
because it's such a neat little
beach - also good memories of
going to NASB - 1974 -
Richard C Lee
Sula A Lee

Exhibit 7

Letters in Objection to Project

NOTE: A total of **452 letters and emails in opposition** to this project have been received as of 7/6/09 as follows: Ten letters in opposition were submitted prior to the date of the staff report. In addition, since the staff report for this item was prepared a total of 39 new letters in opposition to the project have also been received (including the letter from the EDC included separately as **Exhibit 9**) and 417 new emails in opposition to the project have also been received. These letters include, among others, a letter from Santa Barbara Channel Keeper dated July 2, 2009; Jessie Alstatt (a marine biologist) dated July 2, 2009; and a letter from Michael Vincent McGinnis, Ph.D. dated July 1, 2009. In general, the issues raised in these letters have been previously identified and discussed in the findings of the staff report. For reference, in addition to the individually cited letters above, 5 of the other recently submitted letters from members of the public and a representative copy of one of the 418 form-based emailed letters submitted in opposition of the project have been included as **Exhibit 7** of this addendum

All letters received are included as part of the administrative record and are available for review in the California Coastal Commission's Ventura Office.



**SANTA BARBARA
CHANNELKEEPER®**

Protecting and Restoring the Santa Barbara Channel and its Watersheds

714 Bond Avenue Santa Barbara, CA 93103 Tel (805) 563 3377 Fax (805) 687-5635 www.sbck.org

California Coastal Commission
Steve Hudson, District Manager
89 South California Street, Suite 200
Ventura, CA 93001-2801

RECEIVED
JUL 3 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

July 2, 2009

Re: Agenda item 8b. Application No. 4-08-006 (Santa Barbara County, Goleta Beach)

Dear Mr. Hudson,

This letter is submitted by Santa Barbara Channelkeeper (SBCK) in response to the California Coastal Commission's upcoming decision to act on Agenda Item 8b. Application No. 4-08-006 (Santa Barbara County, Goleta Beach), which proposes to construct an experimental groin to trap sand along Goleta Beach.

SBCK is a local non-profit 501(c)3 organization whose mission is to protect and restore the Santa Barbara Channel and its watersheds through citizen action, education and enforcement. To carry out this mission, SBCK has established five essential goals for the organization: 1) Eliminate industrial and other pollution to the Channel; 2) Eliminate beach closures; 3) Protect local wetlands; 4) Monitor water quality; and 5) Monitor and restore aquatic ecosystems.

We welcome this opportunity to urge that the Commission vote to **deny** the project as proposed, and instead consider adopting the much more precautionary and scientifically sound Alternative as prepared by Philip Williams & Associates, Ltd. 2008 ("Goleta Beach County Park Reconfiguration Alternative").

We remain very concerned over the following issues contained within the Application and proposed groin construction project:

1. Assumptions used in the model are very limited in scope and thus the model is flawed. The groin is presented as an "experiment" and the outcomes are uncertain.
2. Unpredictable changes in sand movement may affect spawning of the California Grunion (*Leuresthes tenuis*). Goleta Beach is one of only a few area beaches where Grunion spawn regularly and thus any activity that may affect beach shape and slope could negatively affect grunion.

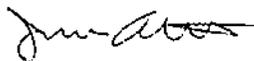


3. Abrupt changes in sand movement offshore may affect the native eelgrass (*Zostera pacifica*) beds found throughout Goleta Bay. This bed is one of the largest along our coast and provides valuable habitat for recreationally and commercially important fishes and invertebrates.
4. There is no protocol given for how the piles will be removed or replaced to "fine-tune" the groin structure as presented. Who will make this decision and how much will it cost? What is the time lag between determination that the configuration needs to be changed and pile removal/additions? What will the effects be on park users?
5. Impacts can only be mitigated partially and after-the-fact. What is to determine if management measures are effective as implemented?
6. Offshore dredging and placement of such a large volume of sediment near-shore may negatively affect the eelgrass beds, by either reduction of water clarity, or burial, or both. There appear to be no measures in place to ensure monitoring of water clarity pre, during or post construction, nor for monitoring eelgrass other than adherence to the Southern California Eelgrass Mitigation Policy, which does not entirely apply to this project other than in regards to placement of the dredge pipeline. There is no mention of monitoring for deposition of fine sediments back offshore as a result of either dredging or of movement of sand offshore rather than side-shore. What will be the mitigation in case deleterious effects are found?

In conclusion, we oppose the County of Santa Barbara's proposed project to construct a permeable sand groin alongside Goleta Pier, with all associated offshore dredging, nearshore filling and related activities. Instead, the Commission and the County of Santa Barbara should pursue a more precautionary, less-costly future for the beach park, that relies on sound science with adequate modeling, that takes into account the dynamic long-term patterns of ocean wave climate. Most importantly, we urge you not to compromise the ecological health of our vital yet sensitive ocean resources.

Thank you very much.

Respectively,



Jessie Altstatt
Science Director

California Coastal Commission
Attention: Steve Hudson
89 South California Street, Suite 200
Ventura, CA 93001-2801

RECEIVED
JUL 3 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

July 2, 2009

Dear Mr. Hudson:

Thank you for the opportunity to provide personal comments on Agenda item 8b. Application No. 4-08-006 (Santa Barbara County, Goleta Beach). I am asking that Commissioners **DENY** the project as proposed, and consider adoption of the **Reconfiguration** Alternative instead.

I am providing these comments based upon my personal experience as a local Goleta resident and user of Goleta Beach since 1985. Goleta Beach is the closest coastal access point from my house and I visit the beach on average 4 days a week to walk on the beach, walk my dog, paddle my surfboard or merely look at the ocean. In addition, I have on many evenings observed the seasonal grunion runs along the sandy beach on both sides of the pier.

I also speak from my professional experience as a marine biologist. I hold a Master's Degree in Marine Biology from UC Santa Barbara, I have performed more than 1300 dives in local waters and I have been employed since 1999 as the Science Director at Santa Barbara Channelkeeper. Channelkeeper has submitted comments on this Agenda item and recommends denial of the project. Aside from my employment, I have **very strong personal feelings** about this project as it stands to **directly impact a place that is very special to me.**

I feel that given my background as a long time Goleta resident and one whom actually uses the Beach Park for recreation and not just as a restaurant customer, I am qualified to speak to the inadequacy of the proposed project to address potential impacts to valuable marine and coastal resources. There appear to be major questions and doubts over the adequacy of the assumptions and model used. I do not believe that the Coastal Commission should approve this costly 'experiment' when the outcome is so iffy.

Goleta Beach is too valuable a resource – both cultural and ecological- to squander in this manner. Instead, I ask the Commission to please consider adopting a more precautionary Alternative such as that prepared by Philip Williams & Associates, Ltd. 2008 (“Goleta Beach County Park Reconfiguration Alternative”).

I have included my original comments for the SB County DEIR dated April 2007 to this letter. Thank you very much for consideration of the much preferable Alternative to this project.

Jessie Altstatt
102 Orange Ave
Goleta, CA 93117

MICHAEL VINCENT MCGINNIS, Ph.D. in Coastal Policy
3865 Sterrett Avenue
Santa Barbara, CA 93110

RECEIVED
JUL 2 2009

July 1, 2009

APPLICATION NO.: 4-08-006

APPLICANT: Santa Barbara County Parks Department

AGENTS: Dave Ward, Santa Barbara County Planning and Development Department

Chris Webb, Moffatt & Nichol

McCabe and Company

Chambers Group

PROJECT LOCATION: Goleta Beach County Park at 5986 Sandspit Road, Santa Barbara County

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

My name is Michael Vincent McGinnis, Ph.D. and I teach undergraduate and graduate courses in coastal processes, coastal marine policy, and other courses at UCSB. These are the only graduate and undergraduate courses offered at UCSB on coastal management and planning. I have also worked with local, state, federal and international resource agencies on a number of environmental planning documents, including required NEPA and CEQA documents for important coastal and marine areas associated with the Southern California Bight.

My area of expertise is in coastal marine science and policy. More recently, I have been working on studies that include analysis of climate change impacts on coastal marine biodiversity in the south coast. These studies also include analysis of alternative policy tools that can be used to respond to the expected impacts from climate change on coastal marine areas.

I have been following the planning process for Goleta Beach for the past 13 years, and am very familiar with the proposed action under consideration by the California Coastal Commission to permit the construction of an approximately 500 ft. long, 20 ft. wide, permeable pier sand retention system at the project site. I am also very familiar with the expected impacts of climate change on coastal marine ecosystems of the south coast, including beach loss, coastal erosion, among other impacts. The proposed action sets an important precedent – it is essential that policymakers and planners begin to address the increasing threats to coastal marine ecosystems that do not emphasize coastal engineering (e.g., sea walls, groins,) options to threats or pressures associated with sea level rise, beach loss, and coastal erosion. Policy responses that emphasize coastal engineering options have been shown to be costly and more ecologically-damaging alternatives to more progressive alternatives, such as non-structural solutions.

When coastal buildings or roads are threatened, the typical response is to harden the coast with a seawall or some other armoring device, such as the proposed sand retention system. It is assumed that the proposed action will halt, to some degree, the shoreline erosion caused primarily by wave action. However, it is important to note that the proposed action may cause a number of other impacts to associated beach and nearshore marine environments. Many of these impacts have been described in my previous comment letters to the County of Santa Barbara on the Goleta Beach issue. (Attachment #1) It is also important to note that there are several problems in the model used to support the proposed action, including failure to consider the natural range of wave energy and sand supply conditions, and failure to include El Nino events in the model inputs. I support the EDC's and Surfrider's Park Reconfiguration Alternative to the proposed action under consideration by the Commission. A managed retreat option is the prudent coastal management solution to the long-term threats posed by climate change on coastal ecosystems.

By the 1980s, the role of engineered structures along the coast as a destructive force on beaches was recognized by most coastal scientists and residents but not by the coastal engineering community. Most estimates indicate that eighty percent or more of the U.S. shoreline is eroding. Areas where the shoreline is either stable or accreting are probably temporary states, and, for all practical purposes, the U.S. shoreline is eroding everywhere. The causes of shoreline erosion are numerous and difficult to establish in a quantitative manner. The fundamental force behind shoreline erosion is the ocean "chewing" at the edges of the continent.

The U.S. coastline is subject to a variety of coastal storm threats. Wind, waves, and currents from storms move material from the shoreline to the continental shelf. Compounding these forces are other factors, such as sea level rise and human activity. Human activity exacerbating the shoreline erosion problem include the interruption of sediment supply to beaches, coastal engineering projects (seawalls, jetties, groins, breakwaters, navigation channel deepening, inlet formation), and sand mining. While coastal armoring may support a "quick fix" for shoreline erosion, they ultimately cause additional shoreline erosion such as down-coast erosion in the long term and at significant cost to the taxpayers. Local erosion, for instance, often occurs to a beach that is down-coast from coastal engineering structures such as groins.

Sea level rise is a characteristic of global warming. The increased atmospheric temperature associated with global warming will melt portions of the ice caps, raising the sea level. Quantifying the exact contribution of sea level rise to shoreline erosion is not possible. Nevertheless, the effects of sea level rise can be seen with absolute certainty on rapidly subsiding coasts.

Philip Williams and Associates (PWA) accounted for the most up-to-date estimates in sea level rise when developing the Park Reconfiguration Alternative, but the County's modeling utilized outdated underestimates of sea level rise.

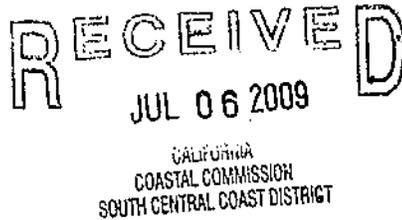
When viewed over a period of decades, the cost of most efforts to stabilize an eroding shoreline with some type of armoring exceeds the value of the property to be saved. When the cost of the eventual degradation of the public beach and the environment is added, the expense of maintaining that fixed point in the shoreline with an armored device is orders of magnitude greater than the value of the property. Shoreline engineering structures are inevitably damaged or destroyed and are replaced with bigger ones. Often the reason a structure is damaged is because the waves have removed the protective beach; as the protective beach is diminished, the armored device must increase in size.

The Park Reconfiguration Alternative is ideal because unlike managed retreat it will not sacrifice park land to erosion, and unlike the proposed groin the alternative does not entail a structure which according to engineering consultants Coastal Tech and PWA robs down-coast beaches of sand.

As noted by Dr. David Revell of Philip Williams and Associates in correspondence to the Coastal Commission, there are a number of problems with the proposed permeable pile groin, including:

- Increasing the size of the Goleta Beach sand box by construction of the groin (if it is effective in widening the beach) will increase the amount of time that Goleta serves as a sand sink (trap) following erosion events. **This will increase the magnitude of future erosion waves (length of time and severity) and thus magnify downcoast beach and bluff erosion impacts.**

Robert Kiel
3306 SW 112th Place
Seattle, WA 98146
206-244-5154
Kiels@comcast.net
robert.kiel@seattle.gov



July 5, 2009
Agenda Number: W 8b
Application Number: 4-08-006

Position: Oppose

Response to Coastal Permit Application Number 4-08-006

Justification:

The proposed permeable pier sand retention system, in conjunction with initial and repeated future beach nourishment, is directed toward treating only a symptom of beach erosion experienced at Goleta Beach County Park over the past 2.5 decades, but fails to address a very-likely cause of the problem.

In the years prior to the addition of fill material used in construction of the Park, flushing and transport of sediment from the Goleta Slough and Atascadero Creek would have prevented the accumulation of sediments from occurring along the inner coastline east of Goleta Point. This is evident in historic photos (circa 1930's). The creek systems were diverted eastward after fill was added to construct the Park in the mid-1940's, and a relatively wide beach formed along the shoreline of the inner-bay. This occurred naturally without structures such as such as the proposed pier modifications being added to the coastline. Seasonal fluctuations in beach size occurred, as did periodic large-swell and storm events, and yet a wide beach existed for more than three decades.

Narrowing of the beach and subsequent erosion of the Park began during the El Niño winter of 1982/'83 and has persisted to varying degrees ever since. Concurrently, the sand-dwelling kelp bed offshore was dislodged during the time period of this event and has failed to recover naturally to date. The likely influence this kelp bed had on altering coastal processes, and the method by which it did so, should be investigated and understood prior to commencing any project attempting to address beach erosion in Goleta Bay.

The dynamic forces acting on any coastline are numerous. The frequency, timing, duration, and intensity of these forces vary over time and determine the quantity, method, and location of sediment transport and accretion. The coastline inside Goleta Bay is unique in that it is defined by a very prominent point (Goleta Point), which affects localized coastal processes within the bay.

Hypothesis:

Current produced from wind common to the area is concentrated and accelerated as it moves across Goleta Point. I have personally observed this condition frequently while SCUBA diving off the point and within the zone once occupied by the kelp bed offshore of Goleta Bay. This primary current draws water toward it from the east side of the point resulting in the formation of a secondary counterclockwise eddy current within the bay. Sediment particles, lifted into suspension by passing swells, are eventually transported offshore by these currents. Over time, this condition results in less

sediment deposited on the beach and more sediment deposited in the nearshore subtidal zone. This has been a common condition occurring within Goleta Bay since the dislodgement of the kelp bed in the early 1980's.

The kelp bed produced a boundary of resistance to the flow of water during the time period in which it existed offshore. By separating the water inside Goleta Bay from the current running outside the bay, it effectively prevented the secondary eddy current from forming. Historical aerial photos depict this by revealing different colored water inside and outside the bay, and a very well-defined outer boundary of the kelp bed. With no abrupt change in bottom morphology or depth occurring at this boundary location, it is likely the formation of this outer boundary resulted from the frequent occurrence of current moving past the outside of the kelp bed. Kelp plants attempting to grow outside the established outer boundary of the kelp bed would be drawn downward by current. This compromises the plants ability to reach the sunlight necessary for optimal growth and the establishment of a suitable size holdfast.

Dislodgement of the plants occurs when the increasing buoyancy and drag of the growing plants exceeds the holdfasts ability to anchor them to the seafloor. This process is observable today when diving within the zone once occupied by the kelp bed in Goleta Bay. On sand bottom, kelp plants grow on (*Diopatra ornata*) worm tubes within the optimal zone, but soon succumb to dislodgement when the frail worm tubes break. By mid-summer each year, many of these plants end up on the beach. The flattened appearance of the holdfasts (characteristic of plants growing on sand bottom) can be observed harboring a remnant of the worm tube in the center of each holdfast. If optimal conditions were to occur for at least a couple consecutive years, it's conceivable that reestablishment of the kelp bed would occur naturally. Unfortunately, this has not been the case since the early 1980's.

When the holdfasts are able to compound in size, sediment surging on the seafloor fills the voids within the holdfast structures anchoring them to the seafloor. Additionally, perimeter scouring during larger swell events creates a depression around each holdfast. The actively growing haptera (root-like projections of the holdfast) at the perimeter bend downward into the depression. Sediment fills in this depression as the swells subside, burying the haptera below the plane of the seafloor. This process continues as the holdfast grows outward, providing an additional hold onto the seafloor. As the holdfasts increase in size, numerous *Diopatra* can be observed colonizing around their perimeters, which may also provide a benefit to the plants anchoring ability. Individual 'growth-centers', each comprised of dozens of fronds, eventually develop as subsequent generations of plants recruit and grow on the structures. The increasing size and density of the kelp bed alters the localized conditions, which favor the continued survival of the plants. Through the deflection of current by the kelp bed, individual plants are able to remain vertical in the water column and receive the sunlight necessary for optimal growth.

Reestablishment of the kelp bed in Goleta Bay would alter the hydrodynamics of the bay, resulting in the redistribution of sediment from the nearshore subtidal zone to the shoreline through normally occurring wave and tidal activity.

Proposal:

I have developed a surface-deployable module consisting of a concrete base supporting a single granite column, which acts as a nucleus for aiding in the establishment of *Macrocystis* kelp growth-centers on sand bottom. I would like the opportunity to demonstrate the performance of these modules through a small demonstration project in Goleta Bay.

Each module weighs ~ 50 lbs in air. When the modules are deployed from a surface vessel, they orient themselves correctly as they fall through the water column and land upright on the seafloor. A depression forms around each base as sediment is scoured away by surge (created by passing swells) moving around the base. This process continues until the base settles below the plane of the seafloor. Once fully-subsided, sediment fills in over the top of the module base as the swells decrease in size. A fully-subsided module develops a strong cohesion with the seafloor and is left with approximately 4" of the granite column protruding from the sediment. The small profile of the exposed granite node prevents further scouring from occurring around the module.

The natural recruitment of kelp on the exposed granite nodes occurs within a few months. Deployment of the modules in late summer or fall ensures the newly-established plants will not be too large before the modules become fully-subsided from the energy provided by winter swells. The modules enable the plants to grow to the surface without becoming dislodged. The plants will reach the surface in 40 feet of water depth within one year. Characteristic growth-centers develop as the plants and holdfast structures grow. If an episodic event resulting in the dislodgement of plants were to occur in the future, the granite nodes would become exposed and the natural recruitment of kelp would occur again as soon as conditions were favorable.

A large-scale project in Goleta Bay would conceivably consist of modules deployed on ~ 20-foot centers within the zone once occupied by a sand-dwelling kelp bed (~ 1.5 miles long by 2,000 feet wide, extending eastward from Goleta Point, within water depths ranging from 35-55 feet). The ~ 40,000 modules required to cover the ~ 363 acres would cost a fraction of other proposed alternatives, would not have any negative environmental impacts, could potentially last for thousands of years, would provide habitat for a myriad of marine life and a renewable resource suitable for periodic harvesting; and unique to this particular location, would create a buffer (proven in the past!) to be capable of altering shoreline processes in a manner resulting in the formation of a wide beach along the shoreline of the bay.

Chair Neely and Commissioners,

I am writing with regards to the Goleta Permeable Pile Groin Project. I urge you greatly to deny this project, as this project would trap tons of sand and prevent the pluses of sand that migrate down the coast line. This in effect would expose steep coastal bluffs to more erosive energy of waves and storms reducing the size of beach for people, shorebirds, and other wildlife as well. This pile groin project is an environmentally damaging project that violates California's Coastal Policies regarding Environmentally Sensitive Habitats and Shoreline Structures.

The feasible Park reconfiguration Alternative prepared by Philip Williams and Associates and peer-reviewed by geologists and engineers, will protect all of Goleta Beach Park, and avoid damaging down-coast beaches, and related impacts to the wildlife habitat.

Therefore I urge you, please uphold the coastal policies by denying the Permeable Pile Groin Project and by approving the Park Reconfiguration Alternative.

Sincerely,

Albert Li
6504 Madrid Rd. #E
Goleta, CA 93117

RECEIVED
JUN 25 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

RECEIVED May 27, 2009
JUN 25 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Steve Hudson:

I am writing you in hopes of convincing you to choose the managed retreat proposal for the Goleta Pier area. This is both the most economically and environmentally friendly option.

The managed retreat plan will cost less than half of what the permeable pile groin project would. The pile groin project is irresponsible because it uses funds that are needed in other areas and destroys delicate ecosystems.

By catching sand to widen Goleta Beach beaches further down will be robbed of sand and begin to disappear. Please ~~to~~ take

this into consideration when making your decision.

The managed retreat is the best for the environment & business.

Sincerely,

Mark P. O. -

RECEIVED
JUN 25 2009
May 27, 2009

Dear Steve Hudson,

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

I adamantly oppose the ~~Goleta~~ Beach Permeable Pile Groin Project. I believe it will cause more harm to the Goleta coastline than it will do good. The coastline along Santa Barbara has always fluctuated and the occurrences as of El Niño are nothing new to the eco-system in Goleta. To simply add such a large change to the coast for what seems like purely aesthetic reasons would be irresponsible. Rather than an unnecessary addition, we at Surfrider UCSB propose a reconfiguration of the surrounding area to rather adapt to the problem instead of creating a new one. This way a more natural solution is achieved. So many other beaches could potentially be negatively affected by the permeable pile groins if the project does not work perfectly. So, seeing as variable occurrences such as El Niño will always happen there is no way to guarantee that an addition of a pile groin could not cause sand loss from other beaches. The Park Reconfiguration Alternative, prepared by Phillip Williams and Associates would be a less evasive alternative to solving this problem. It could potentially minimize potential future problems and would be able to adhere to the inevitable variances in weather and tides. Thank you,

Pat R...

Steve Hudson

From: britney_loren@hotmail.com
Sent: Thursday, July 02, 2009 9:38 AM
To: Steve Hudson
Subject: Please Deny Destructive Groin Project at Goleta

Coastal Commissioners

Dear Coastal Commissioners,

I am writing to urge you to deny the Goleta Beach Permeable Pile Groin Project. The Project would trap sand and keep it from reaching down-coast beaches. This would set a negative precedent for coastlines throughout California.

Coastal Experts agree that the groin will cause down-coast beaches to erode and will threaten to erode the Coastal Bluffs. The groin will also damage "Environmentally Sensitive Habitats" in violation of the state Coastal Act.

The less expensive Park Reconfiguration Alternative fully protects Goleta Beach Park without causing down-coast impacts. This alternative should be approved instead of the groin.

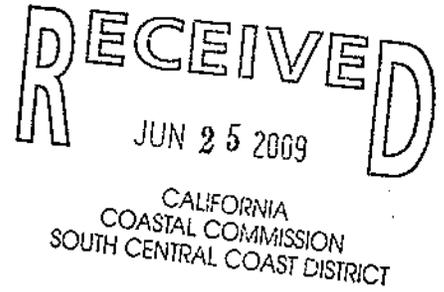
Ironically, while the groin project purports to protect access and recreation, the County's files describe plans to charge "parking fees" at Goleta Beach to pay for construction and upkeep.

Please uphold Coastal Policies by denying the Permeable Pile Groin Project and approving the Park Reconfiguration Alternative.

Sincerely,
Britney Nucci
11911 Mayfield Ave. #201
Los Angeles, CA 90049

June 2009

Bonnie Neely, Chair
California Coastal Commission
Attn: Steve Hudson
89 S. California Street, Suite 200
Ventura, CA 93001
shudson@coastal.ca.gov



Re: Goleta Beach Park – Support for Environmental Alternative

Chair Neely and Commissioners,

As someone who lives in Santa Barbara County just a few miles from Goleta Beach, I feel strongly that the Coastal Commission should approve the environmental alternative for protecting Goleta Beach County Park. Please support the Park Reconfiguration Alternative which protects Goleta Beach Park without depriving down-coast beaches of sand.

I am writing to urge you to deny the Goleta Beach Permeable Pile Groin Project. The Project would trap sand and keep it from reaching down-coast beaches. This would set a bad precedent for coastlines everywhere.

Permeable pile groins are hard structures which capture sand on their up-coast sides. The Goleta Beach pile groin is designed to trap sand in front of Goleta Beach Park. Unfortunately, down-coast beaches will narrow as a result, exposing steep coastal bluffs to more erosive energy of waves and storms and reducing the size of the beach for people, shorebirds and other wildlife.

The pile groin project would “pre-fill” Goleta Beach with 500,000 cubic yards of sand dredged from a 71 acre area off More Mesa. This causes water pollution and air pollution, and the County closes the beach during beach nourishment. Subsequent and repeated dredging to nourish the beach will cause ongoing impacts. The pile groin is an environmentally damaging project that violates California’s Coastal Policies regarding Environmentally Sensitive Habitats and shoreline structures.

The feasible Park Reconfiguration Alternative was prepared by Philip Williams and Associates and peer-reviewed by geologists and engineers including Coastal Tech, Inc. This alternative will protect all of Goleta Beach Park, but it will avoid damaging down-coast beaches, and it will reduce dredging and related impacts to habitats, air and water quality, and project-related beach closures by around 95 percent.

Please uphold Coastal Policies by denying the Permeable Pile Groin Project and approving the Park Reconfiguration Alternative.

CHRIS MURPHY
Print Name

881615 SANTA CATALINA, SR 93106
Address with Zip Code

Exhibit 8

Letters from PWA and Coastal Tech

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JUL 3 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

July 2, 2009

Brian Trautwein, Environmental Analyst
Environmental Defense Center
906 Garden Street
Santa Barbara, CA 93101

Subject: Opinion of Likely Performance of Permeable Groin at Goleta Beach, CA
CCC Application No: 4-08-006

Dear Brian:

In my professional opinion, the effects and effectiveness of the proposed permeable groin are uncertain and therefore the project may not fulfill the objectives and/or will likely result in down-coast impacts. The question before the Coastal Commission is whether to approve a project with uncertain effects and effectiveness. I am concerned that the project documents provide an impression that the project will perform better than I think it will, and hence I am concerned that that the public trust may not be fully served by moving forward with the project. I therefore request that this letter be provided to the Coastal Commission prior to the project hearing.

It is important to understand the implications of downdrift erosion, such as that caused by the construction of Santa Barbara Harbor in the 1930's¹. Also, impermeable groins and permeable groins have a mixed track-record: "Permeable groin structures permit some sand to pass through the groin, but experience has shown that such structures are generally ineffective and are difficult to design, operate and maintain."²

As I understand it, the project proponents acknowledge the project performance is uncertain, and expect to address performance problems by installing and removing piling as needed in response to observed performance. However, the project proponents do not articulate a conceptual model linking the permeable groin design parameters and beach response, and hence have little likelihood of effectively monitoring, adapting or managing. Note that the modeling done so far does not consider the mechanism by which the permeable groin is

¹ Wiegel, Robert L., Oceanographical Engineering, Chapter 18 "A Case History", Prentice-Hall, Inc., Englewood Cliffs, N.J., 1964.

² USACE, 1981. *Groins - Their Applications and Limitations*, Coastal Engineering Technical Note, CETN-III-10, 3/81, by U.S. Army Corps of Engineers, Coastal Engineering Research Center (quote from Page 4).

Brian Trautwein
July 2, 2009
Page 2

theorized to work, and key performance parameters such as beach width have not been linked to design parameters such as pile spacing.

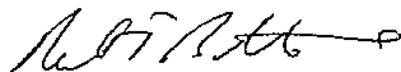
It is my opinion that groins may be appropriate in some situations where either (1) erosion downdrift is not a concern, or (2) where sand transport is supply limited at the project site and becomes transport limited downdrift due to changes in shore orientation or other factors. In either of these cases, slowing the longshore transport rate may not have an adverse effect. Goleta Beach does not fit these limited conditions. Hence I expect the experiment to cause adverse effects in proportion to the extent that the groin actually slows transport and traps sand or deflects it offshore in a rip current.

Adverse effects will become more noticeable after the initial sand placement is denuded and one or more severe wave energy events occur. The County will then need to re-nourish and take other action to mitigate adverse effects to the park and shores to the east. However, as I understand the proposed Special Conditions, this mitigation would only be implemented within a year after initial beach narrowing is observed. The mitigation would therefore be after-the-fact and would only partially mitigate down-coast impacts because, for example, bluff erosion may have already occurred.

I think it is **extremely unlikely** that the project will protect the western part of the park, as implied by the modeling study.

I provide these comments as an experienced coastal engineer, and a licensed professional civil engineer in California. As an employee of PWA, I have contributed to reports on Goleta Beach for Santa Barbara County Parks Department and Environmental Defense Center / Surfrider Foundation. In these prior works, PWA recommended consideration of an alternative termed the Park Reconfiguration Alternative. PWA continues to recommend that the Commission approve the Park Reconfiguration Alternative because it feasibly protects the entire park while avoiding any chance of down-coast impacts.

Sincerely,
PHILIP WILLIAMS & ASSOCIATES, LTD.



Bob Battalio, PE
Principal

July 3, 2009

Modeling of Groin Effects: As identified in the May 11th Memo by Coastal Tech (attached as Exhibit 20 to the CCC Staff Report), “the GENESIS modeling results appear to be inadequate for this particular application due in part to anomalous El Niño storm effects” and “an alternate modeling strategy involving ‘sensitivity analysis’ would likely have yielded a more broad range of feasible results within the limitations of GENESIS. In any event, it is likely that, even based upon the M&N analysis, the permeable pile-groin is likely to adversely affect the downdrift beaches.”

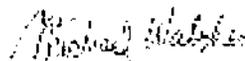
Special Conditions: As identified in the CCC Staff Report, “the proposed permeable pier sand retention system is an experimental effort.” The experimental nature of the proposed project is directly related to uncertainties associated with the future performance of the permeable groin. There is very little uncertainty that the groin will “hold” some sand on the beach within the park, and correspondingly deprive sand from the downdrift beaches leading to “increased erosion of downcoast beaches and bluffs”; however, there is great uncertainty as to the extent of this “holding” and associated adverse “downcoast” erosion effect. If the Commission approves the proposed project, the Special Conditions associated with monitoring and potential removal are fully warranted. However, as has been seen with other “permeable groin structures” (in Michigan & Florida), the ability to hold sand - and any “downcoast” erosion - may be insignificant or minimal and indiscernible from natural changes in the littoral system. In this “minimal effect” scenario, the proposed project:

- would not significantly “reduce the potential for periodic wave-caused erosion to upland park areas and facilities” - contrary to the *Project Purpose*.
- could establish a precedent whereas other property owners may seek Commission approval for similar structures – based upon inconclusive monitoring associated with the proposed project and a claim that such structures have no significant effect upon “downcoast beaches and bluffs.”

Alternatives: EDC has espoused the “Park Reconfiguration Alternative” as developed by Philip Williams & Associates, LTD (PWA). In general, this alternative more fully meets the *Project Purpose* in that it would “create a widened public sandy beach at Goleta Beach County Park” and avoid “increased erosion of downcoast beaches and bluffs.”

Based upon the above it is my recommendation that the Commission reject the proposed project, and embrace the “Park Reconfiguration Alternative” developed by PWA and espoused by EDC. If you have any questions, or if we may assist you further, please contact me.

Sincerely,
COASTAL TECH



Michael Walther, P.E.
(FL, TX, LA, NC)
President



Exhibit 9

[Click here for Exhibit 9](#)

*Letter in Objection to Project by
Environmental Defense Center
(EDC) dated July 3, 2009*