March 23, 2004

Mr. Thomas McCue
County of Monterey
Planning and Building Inspection Department
2620 First Avenue
Marina, CA 93933
Via fax (831) 384-3261

Dear Mr. McCue:

Pebble Beach Company
Del Monte Forest Preservation and Development Plan
Draft Environmental Impact Report
SCH #2002021130

Department of Fish and Game (DFG) personnel have reviewed the Draft Environmental Impact Report (DEIR) for the Pebble Beach Company's Del Monte Forest Preservation and Development Plan and offer the following comments. We recognize the reduction in residential development which this project proposes over that which was the subject of the previous DEIR (for the Lot Program and Revised Alternative 2), and commend the applicant for the concurrent reduction in environmental impacts. However, we believe the current proposal still leaves room for significant improvement by way of reduction of impacts to natural resources of the project site through avoidance, minimization, and preservation, thereby reducing reliance on mitigation measures for which the outcome is uncertain, such as translocation, enhancement, and management.

Our comments focus on several general areas, including concerns regarding identification of project impacts, particularly to sensitive plants, animals, and natural communities; identification of mitigations which would be feasible; water supply impacts to biological resources; the need to fully develop Resource Management Plans for inclusion in the public review process; the proposal to lift previously recorded easements; the development of refined alternative(s) which will better address the important natural resources which are found on the project site; and specific comments on the Transplantation Design, Enhancement, and Adaptive Management (TEAM) plan.

The proposed project includes development of a new 18-hole golf course with clubhouse and visitor serving suites; relocation of the existing equestrian center; construction of 91 visitor-serving units; additional meeting space; a new underground parking lot and new driving range/golf teaching facility at Spanish Bay; construction of 63 visitor-serving units, additional meeting and hospitality space and parking at the Lodge at Pebble Beach; creation of 33 residential lots; construction of 12 employee-housing units near Spanish Bay and 48 at the Pebble Beach Company's Corporation Yard; road, infrastructure and trail improvements; preservation and conservation of 500 acres of open space; management, enhancement and restoration of the various conserved areas; and a proposal to amend prior permits/conservation easements issued to the applicant.

Identification and Consideration of Project Impacts

This project has the potential to impact a number of sensitive natural communities. The DEIR considers a wealth of information in identifying impacts to various resources which would result from implementation of the proposed project. However, we are concerned about some information gaps which may result in incomplete impact analysis. In particular, information which Jones & Stokes and Associates (JSA) had previously presented regarding Monterey pine forest, the endemic plant species which are associated with the forest and adjacent dune habitats, and management of Monterey pine forest, does not appear in this document, in spite of similar information appearing in previous draft and final EIRs for this project area. We recommend that this information be incorporated into the impact analysis for the proposed project.

Sensitive Natural Communities

The DEIR does not include information regarding the ecological subtypes of Monterey pine forest, which were developed by JSA in 1994 in "The Monterey Ecological Staircase" and "The Monterey Pine Forest Ecological Assessment;" and in 1996 the "Monterey Pine Forest Conservation Strategy Report." We believe that the DEIR should evaluate the impact of the proposed project on each of the natural communities found on the geomorphic surfaces of the Monterey Peninsula. JSA provides convincing evidence that differing geomorphic surfaces support different assemblages of

plant species, and may influence the distribution of the rare and endemic plants found on the Monterey Peninsula, including a number of State and Federally listed species.

Based on information presented in the Ecological Assessment, several of the geomorphic surfaces found in the Del Monte Forest are of very limited distribution, and any impacts within a type should be considered as significant. In particular, the intact areas of Flandrian dunes, Middle-aged dunes, and Oldest dunes, and Marine terraces 1, 2, and 3, and potentially Marine terraces 4, 5, and 6, warrant special consideration. We recommend that additional analysis be done regarding the impacts and compensatory preservation which would apply within each of the geomorphic surfaces of the project area.

In particular, it appears that B, C, and MNOUV will result in impacts to natural community sub-types that are of extremely limited distribution, and may not have compensatory mitigation identified of the same sub-type. Due to their limited original extent, combined with historic losses, the various dune types are particularly limited resources. The Flandrian dunes have been reduced to just a few acres, given the extensive residential development, as well as the development of the Spanish Bay Golf Course complex; they now are limited primarily to the vicinity of Signal Hill. The Middle-aged dunes are now limited primarily to the vicinity of areas B and C. The Oldest dunes persist inland from Signal Hill, and though never extensive, have been greatly reduced by residential development and the construction of the Cypress Point Golf Course.

The document states that the habitat Central Maritime Chaparral was not delineated on its own as "this community most commonly occurs in the Del Monte Forest within Monterey Pine Forest, often as an understory assemblage." This habitat type should be identified so that the impact assessment and proposed mitigations can be evaluated.

Sensitive Plant Species Distributions

DFG is concerned that impacts to all sensitive resources be adequately characterized. This project has the potential to impact a disproportionately large number of special status plant species

due to the high level of endemism which exists in the Del Monte Forest. Nineteen species of plants known from the project site are considered to be rare or endangered for the purposes of the California Environmental Quality Act (CEQA), seven of which are State and/or Federally listed.

Two species of plants, the Monterey clover *(Trifolium trichocalyx)* and the Pacific Grove clover *(Trifolium polyodon)* were included in JSA's 1995 "Recovery Strategies for Six Coastal Plant Species on the Monterey Peninsula," and both are State listed. In that document, distributions are mapped throughout the Monterey Peninsula and within the Del Monte Forest and discussed in the context of recovery.

The occurrence for Pacific Grove clover in the vicinity of the Equestrian Center grandstands and parking area, was mapped as a much larger polygon in the 1995 document, based on surveys done by Jane Holte and David Allen. We believe that the population of the clover may be more extensive than that presented in the DEIR, and that the impact analysis may not be based on accurate information.

In the 1995 report, there are a number of locations which are mapped for the Monterey clover and are not identified in this DEIR. In particular, locations of Monterey clover are mapped as occurring in or adjacent to G, F3, F2, the Haul Road and Sawmill Gulch. These locations indicate that the distribution of the species is more widespread than the DEIR acknowledges, and that impacts of the project on this species have not been fully identified. The DEIR needs to include this information and analyze the potential significant direct and indirect impacts to this species.

Indirect Impacts to Sensitive Plant Species and Habitats

The DEIR documents the presence of a number of sensitive plant species and natural communities immediately adjacent to proposed development. No buffers are recommended, and no analysis of indirect impacts such as trampling, fire hazard abatement, fire suppression, overspray with water, pesticides, and fertilizer application has been completed. For example, the proposed conservation area by Signal Hill in the dunes supports five State and/or Federally listed plant species. The tee for Hole 16 intrudes into the dunes; a proposed walkway would bisect the dune area between Holes 14 and 15; and portions of 15 and 16 are

immediately adjacent to mapped individuals of sand gilia, beach layia, Tidestrom's lupine and Monterey spineflower. No assessment of indirect impacts to these species is included in the DEIR. We believe that they could be significant, and recommend that the project be reconfigured to provide a meaningful buffer between the sensitive dune habitat, the listed species, and golf facilities. Similar analyses and development of meaningful setbacks should also be undertaken for other sensitive species and habitats.

Need for Permits Pursuant to the California Endangered Species Act (CESA)

A number of species found in the project area are listed by CESA, including sand gilia *(Gilia tenuiflora arenaria)*; Tidestrom's lupine *(Lupinus tidestromii)*; Menzies' wallflower *(Erysimum menziesii)*; beach layia *(Layia carnosa)*; Monterey clover *(Trifolium trichocalyx)*; and Hickman's cinquefoil *(Potentilla hickmanii)*. In addition, Pacific Grove clover *(Trifolium polyodon)* is listed as rare under the Native Plant Protection Act. We believe that this project could have direct and indirect impacts on these species, and may result in incidental take of the species. Incidental take may only be authorized by DFG if the impacts of the take have been minimized and fully mitigated. DFG does not recognize translocation as contributing substantially to a mitigation strategy, and in order to make a determination that impacts have been fully mitigated, we will rely heavily on measures which avoid impacts and provide for conservation of habitat.

Identification of Appropriate Mitigation Measures

Both CEQA and CESA stress the desirability of avoiding and minimizing impacts to sensitive resources prior to consideration of compensatory mitigation measures. Where compensatory measures are required such as the TEAM Plan and the Master Resource Management Plan's (RMP) specific performance, standards and remedial measures should be incorporated.

The existing LCP establishes buffers of 100 feet between any development and sensitive species and habitats. Table E-5a includes a list of those wetlands for which there is an infringement of the 100-foot buffer requirement. The proposed new Equestrian Center use would include encroachment within the predetermined 100-foot buffer of the Lower Sawmill site S-A for parking areas during temporary events. Mitigation measure

Bio C1-2 indicates that the area would be "dedicated to the DMFF" for protection. Temporary encroachment for event parking should not be permitted under this dedication. Other known buffer encroachments should be evaluated and measures implemented to insure the integrity of the buffers. Mitigation Measure BIO-A1-2 identifies no buffer for the dune suite of species, instead directing rare plant and dune restoration areas be located away from the golf course. We believe the more appropriate approach is to require a sufficient buffer, as required in the LCP, around these valuable resources.

DFG is particularly concerned that impacts to Yadon's piperia, an endemic, dry-land orchid, be further avoided and minimized. Mitigation for impacts to Yadon's piperia needs to focus on avoidance, minimization, and conservation of the three primary populations in the Del Monte Forest, which are contained in three large, contiguous blocks of habitat: PQR, MNOUV, and Huckleberry Hill/SFB Morse complex, which includes G, H, I-1, the Corporation Yard, F1, F2, F3, the Sawmill site, and D. The TEAM plan, which emphasizes translocation of salvaged piperia and enhancement of potentially suitable habitat, is intended to address those impacts remaining after avoidance, minimization and preservation actions, and it should be implemented with modifications addressed in detail below.

The DEIR identifies a significant effect of the proposed project on this species. The DEIR describes the importance of the MNOUV occurrence, indicating that the impacts on that occurrence "would have a significant effect at the population and species level." The document stresses the importance of conservation of blocks of large contiguous habitat, and identifies the importance of both occupied and adjacent unoccupied habitat to provide room for expansion, and to allow the species to respond to changing habitat conditions, such as vegetation structure, over time.

Mitigation measure BIO-D1-1 requires that the golf course, road alignments and other development areas (K, F-2, F-3, I-2 and PQR) be redesigned to avoid and minimize development within populations of Yadon's piperia where feasible. We recommend that this measure also apply to all sensitive resources, and be extended to require identification of additional areas where the project could be redesigned to avoid impacts to sensitive resources including, but not limited to, Yadon's piperia. Mitigation measure

BIO-D1-2 requires preservation of areas proposed by the applicant, and preservation of additional areas proposed by the County. It states that for all locations other than the Proposed Golf Course, implementation of these mitigation measures would not result in a "…substantially adverse effect on this species, and thus considers the impacts to be mitigated to a less than significant level."

The DEIR further notes that "preservation alone cannot offset the substantial losses of existing populations, particularly at the Proposed Golf Course" and requires development and implementation of a TEAM Plan to offset impacts to Yadon's piperia for the Proposed Golf Course. According to the DEIR, the determination that impacts of the Proposed Golf Course have been mitigated to a level of less than significant "…rests on all of the applicant proposed and additionally required mitigation including Mitigation Measures BIO-D1-3" (the TEAM plan).

DFG is concerned that the outcome of implementation of the TEAM plan can be relied upon to mitigate impacts to the species. Translocation of Yadon's piperia (as with many other rare species) can be difficult, time consuming and costly. The DEIR notes that the applicant's proposals "are insufficiently detailed to gauge their feasibility and probable success." In spite of the fact that the TEAM plan puts forward a detailed, rigorous and scientific application to the task at hand, we still do not have sufficient information to determine either feasibility or probable success. Determination of success or failure of the translocation and enhancement program will be difficult, given the life-history of the orchid. For this reason, consideration of additional preservation beyond that recommended in the BIO-D1-1 and 2 should be considered. If this is not possible, specific performance standards and remediation measures are needed to determine the success of the TEAM Plan and implement actions to address failure of the plan to meet specified performance standards. Remediation could include protection and/or management and enhancement of other Yadon's piperia populations not protected as part of the current mitigation measures identified in the DEIR. Due to the uncertainties of the TEAM plan, DFG recommends that some level of success in establishing, enhancing populations and growing plants from seeds be demonstrated before loss of Yadon's piperia occurs.

We also recommend that approval of the TEAM plan by DFG be made a condition of project approval. We believe this would best be accomplished through an agreement between DFG and the project

applicant to assure performance of the required mitigation measures for sensitive biological resources, including the TEAM plan and Forest RMP.

The TEAM plan identifies 293 acres as appropriate for translocation throughout the Del Monte Forest area. We do not concur that all of the proposed sites are appropriate as receiver sites for plant materials originating in MONUV. In particular, PQR and Huckleberry Hill/SFB Morse complex, including G, H, F1, F2, F3, the Sawmill site, and D should be off-limits to plant materials from MONUV, or from other areas in or out of the Forest. Importation of plant materials, and associated mycorrhyzae, soil, and potential pathogens, poses a risk to the extant populations which occur in those locations. We recommend that materials which are salvaged from MNOUV be utilized in MNOUV and for *ex-situ* and greenhouse manipulations.

Piperia tubers which are salvaged from development areas should be utilized to better inform the management process. There are numerous questions we have regarding the tolerance of the plants to shade, compaction, drought, soil saturation, competition with other plant species, and herbivory; these can be tested in the greenhouse, or in locations within MNOUV. Salvaged tubers can provide raw material to use for testing management hypotheses, with little risk to populations which we wish to conserve and manage *in-situ*.

It is not clear that all areas which have been identified in the TEAM plan for translocation and enhancement are in fact suitable for piperia. Although the plan identifies 294 acres for translocation and 114 acres for enhancement, it is likely that further screening of these sites will result in less habitat available to the piperia; and even though the areas identified in the TEAM plan for translocation are not appropriate as receiver sites for the tubers from MNOUV, they would likely be appropriate for consideration for enhancement activities. We recommend that the TEAM plan be refocused to screen all the translocation acres and enhancement acres for enhancement, emphasize enhancement activities on suitable sites, which could include sites within the distributional range of the species, and develop a research program to inform management that would utilize the tubers salvaged from

MNOUV that cannot be translocated into another site at MNOUV. Prior to implementation of enhancement activities, risks associated with the implementation of enhancement activities should be anticipated, and measures implemented to reduce the risks to extant populations.

As with Yadon's piperia, the DEIR suggests that impacts to Pacific Grove clover and the suite of dune species can be mitigated, in part, through a program of enhancement and translocation. As with Yadon's piperia, DFG believes that this is not a feasible, reliable approach and has a low probability of success. In regard to Pacific Grove clover, the DEIR also notes that the existing information on the proposed project "does not provide the site-specificity necessary to ensure that final golf course design and resource management will adequately provide for the conservation of this population" and recommends that specific management and enhancement methods for the Pacific Grove clover be defined. Further definition of methods that have an unknown outcome do not ensure either feasibility or probability of success; there are not specific performance standards and remedial measures identified which would be implemented in the event of failure of the management/ enhancement activities. We recommend that project redesign be implemented with the goal of separating the population of Pacific Grove clover from project activities which have a potential to adversely affect the species and its habitat.

Mitigation Measure BIO-A1-2 suggests the same kind of approach for the dune suite of species, directing "rare plant dune restoration areas shall be located away from the perimeter of the golf course unless such mitigation areas are not located where they are likely to be directly affected by…" golf activities. The measure suggests performance criteria for the dune revegetation which may not be appropriate and not stringent enough to restore a functioning dune habitat, and again, there are no performance standards and remedial actions identified which would be implemented if any aspect of the management should not meet performance standards. DFG does not have confidence that this type of mitigation measure will adequately mitigate potential impacts to sensitive habitats and listed species. We recommend that additional avoidance measures be implemented to further separate extant populations of sensitive species and habitats from project activities.

The wildlife section indicates that the nesting season for raptors annually is March 1 to June 30. The document offers a construction buffer from nesting birds of 100 feet. We recommend the buffer distance be increased to a minimum of 150 feet. Incorporation of these recommendations would assure compliance with Fish and Game Code Section 3503.

Development of Resource Management Plans

Mitigation Measure BIO-B1-1 requires development, implementation and monitoring of a County approved RMP and site-specific RMPs for all proposed and additionally required retention, restoration, and preservation areas. We note that there is an applicant-developed summary of RMPs and RMP implementation framework; we also note that BIO-B1-1 requires that a third party consultant develop the RMPs. It is not clear what relationship the applicant-developed RMPs and framework have to the required RMPs. In addition, we believe it is virtually impossible to assess Mitigation Measure BIO-B1-1 as to feasibility or probability of success in the absence of having the completed RMPs to review. Since Mitigation Measure BIO-B1-1 is the underpinning of the entire mitigation program for natural resources, and provides the basis for mitigating impacts to Monterey pine forest, wetlands, dunes, and special-status species on all retained, restored and/or preserved lands, RMPs should be completed prior to certification of the EIR in order to assess the efficacy of the proposed mitigation program, and to evaluate the DEIR's assertion that all impacts have been mitigated to a level of less than significant. As noted above, the plans should include specific performance standards and remedial measures and be subject to resource agency review and approval.

The DEIR indicates that a BMP plan for controlling runoff associated with the new Equestrian Center will be developed. Appendix "H" says that animal waste shall be controlled at the site, "through a combination of design and source control measures aimed at containing, covering and removing wastes to avoid contact and wash-off with rainfall runoff." Implementation of this plan is important to protect resource values in the project area and should be developed, reviewed and approved prior to project approval.

Conservation Easements

The DEIR proposes to use conservation easements as a mechanism to protect preserved lands in the project area. While we support the use of such mechanisms, we are troubled by the proposal of the applicant to remove or amend two easements in the Sawmill area in order to relocate the Equestrian Center to that location. This undermines our confidence in the ability of an easement to provide for protection of resources in perpetuity, if in fact it can be undone at a later date. In addition to the requirements of Mitigation Measure BIO-B1-6, we request that for conservation easements for sites to be preserved for the protection of sensitive resources, DFG be included as a third party beneficiary. Since the easements were recorded to comply with permit conditions of prior projects, it is troubling that they can subsequently be modified. The DEIR indicates that the applicant has requested that permit conditions for specific prior projects be amended and has identified mitigation measures in Chapter 3.3 section B to address the potential loss of natural and revegetated forest on the site.

Given the location of the Sawmill site in the heart of S.F.B. Morse/Huckleberry Hill Natural Area complex; the presence of Monterey clover, a State listed plant species in the vicinity of the site; and the stage of the restoration of natural vegetation on the site, we recommend that the easements remain, and this area not be considered for development of facilities which would be inconsistent with the objectives for which the easements were established.

Water Supply Impacts to Biological Resources

DFG believes the DEIR does not disclose and analyze all the project-related environmental impacts resulting from this project's increased demand for potable water. CEQA requires that all direct and reasonably foreseeable indirect impacts of a project be disclosed and analyzed. The DEIR discloses an increased demand for potable water that relies on withdrawals from the Carmel River aquifer[1], but does not include an analysis of the impacts caused by those increased withdrawals on the public trust resources in the Carmel River system.

[1] The DEIR (ES-16 & 4.4-37) states "the increased demand would result in increased withdrawal by Cal-Am from the Carmel River aquifer and/or Seaside aquifer."

To meet the increased demand for water, the project proposes to rely on potable water supplied by the California-American Water Company (Cal-Am). Currently Cal-Am is not able to meet delivery commitments without over-pumping within the aquifer. This over-pumping has caused adverse impacts to aquatic resources within the Carmel River system, specifically adversely impacting steelhead (*Oncorhynchus mykiss)* and California red-legged frogs *(Rana aurora draytonii)* by dewatering and reducing available habitat.

Based on review of the DEIR, it is clear that the post-project water demand will require at least an additional 182 to 320 acre-feet of potable water each year. It was noted that this may underestimate the actual demand because additional potable water has historically been required to supplement an inadequate supply of treated waste-water. The DEIR presents the argument that although the new project will require additional potable water, this new demand is "offset" by a previous reduction in demand caused by converting from potable water to treated wastewater for irrigation. However, this "offset" scenario does not include an appropriate disclosure and analysis of the increased water demands of this project on the *current* pumping regime. Information on the increased withdrawals required by the water demands of this project as compared with current withdrawals must be disclosed to allow appropriate analysis of the potentially significant adverse impact to public trust resources in the Carmel River system.

There is general agreement that until Cal-Am develops alternative water sources, it lacks the ability to meet any new water demands without causing additional adverse impacts to the quantity and quality of water in the Carmel River. In fact, Cal-Am is currently under court order to *reduce* pumping from the system. Until alternatives are developed, this pumping restriction would appear to curtail the ability of Cal-Am to provide the additional water to this project, regardless of any legal claim or additional entitlements held by the applicant.

We appreciate the opportunity to comment on the DEIR for the Pebble Beach Company's Del Monte Forest Preservation and Development Plan. We remain available to work with the County and the Pebble Beach Company to identify a project which would meet the project's objectives while protecting the valuable resources of the project site.

Questions concerning our comments should be directed to Mr. Carl Wilcox, Habitat Conservation Manager, at (707) 944-5525 or cwilcox@dfg.ca.gov.

Sincerely,

Copy; original signed by

Robert W. Floerke
Regional Manager
Central Coast Region

cc: See next page

cc: State Clearinghouse
Post Office Box 3044
Sacramento, CA 95814
Via fax (916) 323-3018

Tony Lombardo
Lombardo & Gilles
Post Office Box 2119
Salinas, CA 93902

Molly Martindale
U. S. Army Corps of Engineers
333 Market Street
San Francisco, CA 94105-2197

Kathy Mrowka
State Water Resources Control Board
Post Office Box 100
Sacramento, CA 95812

Joyce Ambrosius
NOAA Fisheries
777 Sonoma Avenue, Room 325
Santa Rosa, CA 95404

Charles Lester
California Coastal Commission
725 Front Street, 3rd Floor
Santa Cruz, CA 95060

David Pereksta
U. S. Fish and Wildlife Service
293 Portola Road, Suite B
Ventura, CA 93003-7726

Mike Zander
Zander & Associates
Via fax (415) 897-0425