Chapter 2

Comments Received on the Draft EIR

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Comments Received on the Draft EIR

This chapter includes the letter of receipt from the State Clearinghouse; a list of the agencies, organizations and individuals who commented on the draft EIR (Table 2-1); and the actual comment letters submitted. The comment letters have been numbered as shown in Table 2-1 and include letters, emails, and relevant portions of the transcript from the December 14, 2011, Planning Commission meeting. The individual comments within each letter have been numbered in the right margins. There is a response for each comment in Chapter 3, Responses to Comments. The location of the responses for each letter is indicated in Table 2-1.

Table 2-1. List of Commenters and Location of Responses

Letter #	Commenter	Location of Responses in Chapter 3 (Page #)
Federal A	gencies	
1	United States Fish and Wildlife Service (USFWS)	3-2
State Age	ncies	
2	California Coastal Commission (CCC)	3-4
3	California Department of Transportation (Caltrans)	3-12
Local Age	ncies	
4	City of Monterey (Monterey)	3-15
5	Monterey Bay Unified Air Pollution Control District (MBUAPCD)	3-16
6	Monterey Peninsula Water Management District (MPWMD-1)	3-24
7	Monterey Peninsula Water Management District (MPWMD-2)	3-25
8	Pebble Beach Community Service District (PBCSD)	3-28
9	Transportation Agency of Monterey County (TAMC)	3-30
Organizat	tions	
10	California Native Plant Society (CNPS)	3-41
11	LandWatch Monterey County (LandWatch)	3-45
12	League of Women Voters (LWV-1)	3-58
13	Monterey Pine Forest Watch (MPFW-1)	3-59
14	Monterey Pine Forest Watch (MPFW-2)	3-64
15	Skyline Forest Homeowners Association (Skyline)	3-66
16	The Open Monterey Project (TOMP)	3-73
Individua	ıls	
17	Robert Hale (Hale)	3-92
18	Donald Scifres (Scifres)	3-102
19	Pebble Beach Company (Stilwell)	3-122
Comment	s Received After the Public Review Period	
20	Helping Our Peninsula's Environment (HOPE)	3-142
21	League of Women Voters (LWV-2)	3-149
22	Mark Blum (Blum-1)	3-150
23	Mark Blum (Blum-2)	3-153

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United States Department of the Interior

FISH AND WILDLIFE SERVICE Ventura Fish and Wildlife Office 2493 Portola Road, Suite B Ventura, California 93003



IN REPLY REFER TO: 08EVEN00-2012-CPA-0032

January 9, 2012

Mr. Joseph Sidor, Associate Planner Monterey County Resource Management Agency 168 West Alisal Street Salinas, California 93901

Subject:

Draft Environmental Impact Report for the Pebble Beach Company Project; State

Clearinghouse No. 2011041028

Dear Mr. Sidor:

This letter provides the U.S. Fish and Wildlife Service's (Service) comments on the subject Draft Environmental Impact Report prepared for the Pebble Beach Company Project (DEIR). We provide our comments as a responsible agency pursuant to Article 20, §15381, of the California Environmental Quality Act (CEQA). It is our understanding that comments on this draft document are due to the County by 5 pm on January 9, 2012.

The Service's responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of the Act defines "take" to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways. If a project is to be funded, authorized, or carried out by a Federal agency, and may affect a listed species, the Federal agency must consult with the Service pursuant to section 7(a)(2) of the Act. If a proposed project does not involve a Federal agency but may result in the take of a listed animal species, the project proponent should apply to the Service for an incidental take permit pursuant to section 10(a)(1)(B) of the Act.

As it is not our primary responsibility to comment on documents prepared pursuant to the CEQA, our comments on this DEIR do not constitute a full review of project impacts. Rather,

Joseph Sidor 2

they focus on those sections that address the federally listed species under our role as a responsible agency, particularly as they relate to compliance with the Act and its implementing regulations.

The DEIR addresses the proposed development and preservation of Pebble Beach Company (PBC) properties located in the Del Monte Forest, Monterey County, California. The proposed project would include renovation and expansion of visitor-serving uses at The Lodge at Pebble Beach, The Inn at Spanish Bay, Spyglass Hill, and the Pebble Beach Equestrian Center; creation of 90 to 100 single-family residential lots; preservation and conservation of approximately 635 acres as open space; relocation of existing trails and construction of new trail segments; construction and installation of roadways and drainage improvements at four intersections; and reconstruction of the main entrance to the Pebble Beach area.

Impact BIO-D6 discusses indirect impacts to the federally endangered Hickman's potentilla (*Potentilla hickmanii*). We recommend the final environmental impact report (FEIR) include provisions to protect the Indian Village population of Hickman's potentilla by establishing educational signage and mechanisms to prevent trespass onto the property from the adjacent PBC development in efforts to protect the species.

Impact BIO-E1 discusses impacts to the federally threatened California red-legged frog (*Rana draytonii*). Mitigation Measure BIO-E1 states that if California red-legged frogs are identified during preconstruction surveys, individuals will be captured and relocated to nearby suitable habitat. Capture is considered take under the ESA and can only be authorized with consultation with the Service as described above.

Conservation Areas

We recommend that all resource management plans for conservation areas be prepared and reviewed by all resource agencies prior to approval of the FEIR. Establishment of the management plans will aid the agencies in determining the conservation benefits of each area and the proposed project as a whole. We recommend that during preparation of the FEIR, the County of Monterey (County) and PBC enter discussions with CALFIRE to determine any requirements that may negatively impact the conservation value or reduce the size of each conservation area.

Migratory Birds

The Service is concerned about potential impacts to migratory birds in the proposed project area. We have conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et. seq.). Any land clearing or other surface disturbance associated with proposed actions should be timed to avoid potential destruction of bird nests or young of birds that breed in the area, as such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be damaged, nor may migratory birds be killed. If this seasonal restriction is not possible, we recommend that a qualified biologist survey the area for nests or evidence of nesting (e.g., mated pairs, territorial defense, carrying of nesting material, transporting food) prior to the

1-01 cont'd

1-02

1-03

1-04

Joseph Sidor 3

commencement of land clearing activities. If nests or other evidence of nesting are observed, a protective buffer, as established in coordination with the Service, should be delineated and the entire area avoided preventing destruction or disturbance to nests until they are no longer active.

1-05 cont'd

We appreciate the opportunity to provide comments on the DEIR for the Pebble Beach Company Project and look forward to the receipt of the Final Environmental Impact Report. If you have any questions regarding the contents of this letter, please contact Christopher Diel at (805) 644-1766, extension 305.

Sincerely,

Diane K. Noda Field Supervisor

Dane & Vole

cc: Brandon Sanderson, CDFG

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060 PHONE: (831) 427-4863 FAX: (831) 427-4877



January 9, 2012

Joseph Sidor Associate Planner Monterey County Resource Management Agency - Planning Department 168 W. Alisal Street 2nd Floor Salinas, CA 93901

Subject: Pebble Beach Company Project Draft Environmental Impact Report (SCH # 2011041028)

Dear Mr. Sidor:

Thank you for sending the above-referenced Draft Environmental Impact Report (DEIR) to our office for review. We appreciate the information developed and presented in the DEIR thus far, and the level of complexity and difficulty associated with an evaluation of a project and Local Coastal Program (LCP) amendment of this magnitude. As you know, it is important that LCP and coastal development permit (CDP) decisions in this matter be well-supported with clear and comprehensive evidence and analysis, and the CEQA process plays a critical role in this regard. In general, we believe that the DEIR provides detailed factual information that the Coastal Commission can rely on for its review and analysis of the proposed project and LCP amendment. The following comments address additional information and clarification needs as they relate to such review and analysis.

2-01

Biological Resources

Many of the impact analyses in the Biological Resources section rely on Mitigation Measure BIO-A1 to lessen impacts to a less-than-significant level. This mitigation measure requires preparation of a Master Resource Management Plan (RMP) for each preservation area associated with the project. Although the RMP can certainly serve as mitigation for project impacts for CEQA purposes, our understanding of the vision for this master RMP was that it be a more holistic, living document that would cover management in perpetuity of all the Applicant's protected habitat areas in Del Monte Forest, including those covered by the Open Space Advisory Committee (OSAC) Plan in the existing Land Use Plan (LUP) (such as the Huckleberry Hill Natural Habitat Area, Crocker Grove, etc.). Ideally, the updated plan would also cover other Del Monte Forest preservation areas as well. The proposed LUP amendment (p. 37) describes it thus: "Such plan shall, as feasible, also incorporate prior forest and resource management requirements (and updated requirements, as appropriate in light of changes in resource conditions or understandings) associated with other Del Monte Forest properties that the Pebble Beach Company either previously deeded or previously dedicated easements to the Del Monte Forest Foundation as a means of providing a unified and updated plan for long term management of all such areas in perpetuity." Thus, we'd suggest that the RMP framework be revised to account for this more comprehensive expectation. In addition, the Draft Master RMP

Joseph Sidor, Monterey County Resource Management Agency - Planning Department PBC Project DEIR (SCH # 2011041028)
January 9, 2012
Page 2

(Appendix C of the DEIR) should include a description of coastal development permit (CDP) requirements associated with it, such as for restoration work, prescribed burns, and tree removal, as necessary. It may be that a master CDP is appropriate for the RMP, or a master CDP for each preservation area or for each development type, or some combination of approaches.

2-02 cont'd

Impact BIO-A1 provides detailed descriptions of the direct impacts to environmentally sensitive habitat area (ESHA), but the discussions of indirect impacts for some ESHAs are not clear. For example, the DEIR states that the project would result in 41 acres of direct impacts to Monterey pine forest in the form of direct removal for development, and 44 acres of indirect impacts to Monterey pine forest. The impact discussion provides a general description of what those indirect impacts would be (disturbance of the root zone and soil compaction from adjacent grading and trenching, changes in soil and hydrologic conditions from increased irrigation and run-off, etc.), but does not describe or show where these indirect impacts would occur. Although it is assumed that the indirect impact areas are all along the forested edges of development areas, it is unclear how the acreage was quantified and where exactly the impacts would occur. Please clarify. Also, the subsequent impact (BIO-B1) includes a table of Monterey pine forest impacts, with 41 acres of direct impact and 44 acres of indirect impact, but then concludes that 47 acres would be indirectly affected. Again, please clarify.

2-03

A clarification is also needed for Impact BIO-C1. The impact statement says that project development would result in <u>potential</u> disturbance of up to 0.06 acre of wetlands/drainages, but then the impact discussion concludes that direct impacts on 0.06 acre of wetlands <u>would</u> occur as a result of the project. This may be a wording oversight, but please clarify.

2-04

The criteria for determining significance states that a project impact would be significant if the project would result in any direct or indirect disturbance of habitats designated as ESHA as defined by the Coastal Act which results in disruption of protected resources and habitat values. The impact analyses for various ESHAs then conclude that all the impacts can be mitigated to a less-than-significant level with mitigation. However, under the DEIR's significance criteria, direct removal of ESHA is unmitigatable. The conclusion under Impact BIO-A1 that the project's ESHA impacts are less than significant because the Coastal Commission can invoke the conflict resolution parameters of the Coastal Act to address ESHA impacts misrepresents the DEIR significance criteria, and seems off-point in a CEQA context. Conflict resolution is an available tool to the Commission under the Coastal Act, but that is different conc ept than identifying impacts and mitigations under CEQA. Impacts and mitigations in the DEIR need to be in a CEQA context.

2-05

2-06

Land Use

The DEIR does not include discussion or analysis of any of the LCP changes not directly associated with the Pebble Beach Company (PBC) project. Although it is true that local governments do not need to develop CEQA documents for proposed LCP amendments, it is also true that local governments often use the CEQA process to develop the types of information that the Commission will need to be able to evaluate proposed LCP amendments for consistency with

Joseph Sidor, Monterey County Resource Management Agency - Planning Department PBC Project DEIR (SCH # 2011041028)
January 9, 2012
Page 3

the Coastal Act. The County intends in this case for the CEQA document to form the basis for the LCP amendment submittal. As such, the DEIR should be framed to account for all LCP amendment components as well. 2-07 cont'd

We have the following additional comments on the Land Use section of the DEIR:

• Under the description of existing residential designations in the LCP, the text states that golf courses can be allowed as a conditional use in the Low Density Residential and Medium Density Residential land use designations in Del Monte Forest per the current LCP. The proposed LCP amendment deletes golf courses as an allowed use in these areas, but the DEIR does not state this, nor does it include the changes to Sections 20.12.050 and 20.14.050 (where this will be accomplished) in Appendix D along with the proposed changes to the LUP and CIP. Please include the proposed changes to Sections 20.12.050 and 20.14.050 and clarify that the LCP amendment will delete golf courses as an allowed use in these areas.

2-08

• Under the description of existing commercial designations in the LUP, the text states for Institutional Commercial that "the area of the PBC Corporation Yard immediately south of the proposed employee housing is also designated institutional." No employee housing is proposed at this location. Please clarify in the text.

2-09

Under the descriptions of the proposed residential development sites, the text describes the
proposed changes to land use and zoning designations, including removal of the resource
constraint overlay (B-8). The DEIR fails to identify the proposed B-6 (no future subdivision)
overlay that would be imposed on all the areas proposed for residential development after the
areas are subdivided. Please include this in the description.

2-10

• Under Impact LU-B1, the two land use plans or regulations that are applicable to the proposed project are the Del Monte Forest LCP and the Coastal Act, not the Coastal Act Area. Please also clarify that the proposed project is inconsistent with not only biological resources and forest resources policies but also environmentally sensitive habitat area policies. In addition, the LCP amendment provides a plan for a majority of PBC's remaining development potential in the Del Monte Forest, not for a majority of remaining development potential in the Del Monte Forest generally. Finally, the list of Coastal Act policies for which consistency is measured against for this impact analysis is incomplete. For example, the public access policy that is evaluated is only one of the Coastal Act public access policies, and there are others that would be considered just as much if not more critical for the LCP amendment evaluation, namely Section 30210 which requires maximum public access and recreational opportunities. As stated above, please include a complete evaluation of all applicable Coastal Act policies for the entire LCP amendment, not just the PBC Concept Plan portion.

2-11

2-12

Alternatives

We appreciate the evaluation of alternatives that can reduce the project's impacts on Monterey pine forest and Yadon's piperia, since the Coastal Commission will need to see a similar

Joseph Sidor, Monterey County Resource Management Agency - Planning Department PBC Project DEIR (SCH # 2011041028)
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Page 4

evaluation of such alternatives for the LCP amendment submittal. However, the clustered development options (Alternatives 1A, 1B, and 1C) include 18 inclusionary housing units in addition to the proposed 90 market-rate units. In our staff level agreement with the Applicant, only 90 total (market-rate or otherwise) (or 100 total if a hotel is not built at Area M) new residential units were agreed upon, based on a careful evaluation by our staff of potential impacts and consistency with the Coastal Act. As such, these alternatives do not meet the project objective to "provide a reduced-intensity buildout plan compared to prior proposals for Del Monte Forest that can obtain Coastal Commission staff concurrence..." In addition, to support our own Commission's evaluation of the project and LCP amendment, including in terms of reduced impact alternatives, it would be helpful to see an alternative that eliminates all of the project's ESHA impacts and that is based purely on resource and constraint identification and avoidance. In other words, although Alternatives 2A, 2B, and 2C evaluate elimination of development in certain ESHA areas, the DEIR should include evaluation of an alternative that eliminates development in all ESHA (i.e., Areas J, K, L, F2, and I2) and limits development to non-ESHA areas only.

2-13 cont'd

2-14

In closing, we believe that the proposed project and LCP amendment are important vehicles for resolving longstanding coastal planning and development issues in the Del Monte Forest, and recognize that the DEIR information will be critical to their evaluation. We hope that these comments help the County to develop the best possible fact set for review and evaluation of the proposed LCP amendment and PBC project. We appreciate the ongoing coordination between the County and our staff on the project and LCP amendment, and look forward to continued coordination and agreement. As we have stated previously on earlier iterations of the project, it is important that the County and the Coastal Commission maximize the extent to which we are working from a common knowledge base, including biologic expertise, concerning the basic facts and science underlying the various resources at issue, and we are pleased to see that we have reached common ground on these issues. We continue to be available to the County and PBC as the project moves forward.

2-15

Sincerely,

Katie Butler Coastal Planner

cc: State Clearinghouse Applicant

DEPARTMENT OF TRANSPORTATION



Flex your power'
Be energy efficient!

January 9, 2012

MON-68-4.26/Var. SCH# 2011041028

Joe Sidor Monterey County Planning Department 168 West Alisal Street, 2nd Floor Salinas, CA 93901

Dear Mr. Sidor:

COMMENTS TO PEBBLE BEACH COMPANY 2011 DRAFT EIR

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the above referenced project and offers the following comments in response to your summary of impacts.

In previous correspondence for this project, Caltrans expressed concern that the growth and additional trips related to the development should be mitigated prior to occupancy. One of the main concerns with additional trips on the Holman Highway is the resulting increased delay for medical-emergency traffic heading west. As stated in our last letter, "Caltrans is not inclined to approve any project design/permit that will result in increased delay for Highway 68 Westbound ambulance traffic to the Community Hospital for Monterey County." That said, we feel continued coordination between the respective agencies on how best to accomplish this goal is important.

3-01

2. During the past several months there have been discussions on potential Interchange design ideas that can accommodate the existing demand as well as new growth at Highway 1/68/Pebble Beach entrance. No one alternative has stood out as superior at this point. That said, while we are not supportive of a double-roundabout feature (Alternative 5), we feel there is merit in having continued study of a single roundabout design included in the range of alternatives.

3-02

7. Caltrans believes an important design feature of any alternative must include more opportunity for storage of vehicles entering the Pebble Beach property off the State facilities. As a CEQA Responsible Agency for this project, we will continue to pursue this critical element as a feature in all future design discussions.

3-03

4. Caltrans is currently revising the Transportation Concept Report for the entire Highway 68 from Salinas to Pacific Grove. The segment in this area (Post Mile L4.26 to 0.0 in Pacific Grove) is a two-lane conventional Highway, mostly urbanized, and with multiple signal controls. The ultimate concept for this segment of the route is being proposed as full relinquishment to the City of Monterey and Pacific Grove. Caltrans will continue to pursue this option with both Cities thereby allowing local design decisions of roadway enhancements.

Pebble Beach Company DEIR January 9, 2012 Page 2

If you have any questions, or need further clarification on items discussed above, please don't besitate to call me at (805) 542-4751.

Sincerely.

JOHN J. OLEJNÍK

Associate Transportation Planner District 5 Development Review Coordinator john.olejnik@dot.ca.gov

Mark McCumsey (D5)
Mike Zeller (TAMC)
Dave Rasmussen (D5)
Frank Boyle (D5)

Monterey

January 5, 2012

Joseph Sidor, Assoc. Planner

Monterey Co. Resource Management Ag.

CHUCK DELLA SALA 168 W. Alisal Street 2nd Floor

Salinas, CA 93901

Councilmembers: LIBBY DOWNEY JEFF HAFERMAN NANCY SELFRIDGE FRANK SOLLECITO

Via Email: CEQAcomments@co.monterey.ca.us

City Manager: FRED MEURER

Beach Company Project (SCH# 2011041028)

Dear Mr. Sidor.

Subject:

Thank you for the opportunity to comment on the above referenced environmental document for the Pebble Beach Company Project. The City of Monterey supports the Pebble Beach Company Project Alternative involving construction of a roundabout at the Highway 1/Holman Highway 68/17-Mile Drive intersection. This alternative is consistent with the City's mission to improve mobility and to ensure that such improvements address multiple modes of transportation that are safe, efficient and effective.

Comments Regarding Draft Environmental Impact Report for the Pebble

4-01

The City of Monterey agrees with the DEIR Alternatives Analysis conclusion that the Alternative 5 roundabout would mitigate the project's traffic impacts. The footprint of the roundabout is similar to that of the five-legged signalized intersection and therefore biological, archaeological, and geological impacts would be similar and no additional studies would be necessary. The roundabout alternative also requires a lower retaining wall for the new Hwy 68 eastbound lane than the signalized intersection design, which reduces the grading and visual impacts. Finally, the roundabout alternative improves operation conditions such as vehicle queues at the SR1/SR68/17-Mile Drive Interchange, which reduces air quality impacts caused by vehicles queuing and idling at a signalized intersection.

4-02

The City notes one correction regarding the future Holman Highway 68 Widening Project and the Professional Center driveway. The City does not support the installation of a signal at this location. The Community Hospital of the Monterey Peninsula (CHOMP) is required to allow a U-Turn for east-bound traffic exiting the Professional Center. This requirement is a mitigation measure to the recent CHOMP expansion project. Please eliminate all references to this signal at the Hwy 68/Professional Center driveway throughout the DEIR.

4-03

We look forward to continuing the cooperative effort by all stakeholders to improve the capacity of Holman Highway 68 to serve regional traffic. Please give me a call at 831-646-3760 if you would like to discuss any of these issues with me or the City's traffic engineering staff.

Sincerely.

Fred Meurer City Manager





January 9, 2012

Joseph Sidor Monterey County Resource Management Agency - Planning Department 168 W. Alisal Street 2nd Floor Salinas, CA 93901

Submitted Electronically to: CEQAcomments@co.monterey.ca.us

Original sent First Class Mail

SUBJECT: Draft Environmental Impact Report for the Pebble Beach Company Project (PLN100138)

Dear Mr. Sidor:

Thank you for providing the Monterey Bay Unified Air Pollution Control District (Air District) the opportunity to comment on the above-referenced document. The comments contained in this letter are intended as guidance for the Lead Agency and should be incorporated into the final document, as appropriate. Overall, the Air District is concerned that the project's construction health risk impacts were underestimated and that the significant impact from greenhouse gas (GHG) emissions identified in the document are not sufficiently mitigated.

5-01

In addition, the Air District requests documentation to support emission calculations and consistency in the assumptions used to evaluate air quality, health risk, and greenhouse gas (GHG) emissions impacts. The document or appendices did not include CalEEMod output files which made it impossible for the Air District to review and confirm the emission estimates reported. It also appears that a different set of assumptions was used to estimate criteria pollutant emissions, evaluate construction health risks, and estimate GHG emissions. This is of particular concern for the screening-level health risk assessment because less conservative assumptions were used to evaluate risk than were used to evaluate criteria pollutant impacts. A screening-level health risk assessment should be based on conservative assumptions. If there was a reason for using different sets of assumptions, this should have been clearly described in the document.

5-02

The following sections provide specific comments on the above-reference document.

Impact Analysis

The following comments address the Air Districts concerns related to the air quality and climate change impact analyses and Appendix E.

Comments on Section 3.2 Air Quality

<u>Table 3.2-6. Operational Emissions on Page 3.2-18 and Table 3.2-7 Unmitigated Construction PM10 Emissions and Mitigated Construction PM10 Emissions.</u>

The operation and construction emissions reported in the tables are not supported with information in Appendix E such as, emission calculations, output reports from CalEEMod, or output from the Sacramento Roadway Construction model for the intersections. Therefore, the Air District is unable to confirm that the emissions were estimated correctly.

5-03

Sensitive Receptors on Page 3.2-22 and Table 3.2-10 on Page 3.2-24.

The text states that "...a screening-level (worst-case) analysis of potential health risks" was evaluated for construction activities. However, based on the information provided in Table E-8 in Appendix E, the analysis was based on less conservative construction equipment assumptions when compared to the construction equipment data contained in Table E-2. Therefore, the results of the screening analysis may not represent a worst-case analysis. The Air District is concerned that areas identified in Table 3.2-10 with a mitigated cancer risk of 8 in one million may be greater than the threshold of 10 in one million if more conservative assumptions had been used for the analysis.

5-04

Cumulative Impacts and Mitigation Measures on Page 3.2-28

The text states that operational emissions were based on daily trip generation data from Fehr and Peers 2011. However, the Air District cannot confirm what trip rates the operational emissions were based on because the CalEEMod output files were not included with the document. Therefore, there is no documentation of what trip rates were used to generate the operational emissions. The Air District is concerned that without being able to confirm what traffic assumptions were used for the analysis, the ROG or NOx emissions from operation may be underestimated.

5-05

Comments on Section 3.4 Climate Change

Approach to Developing Significance Criteria on Page 3.4-14.

Please confirm what year the analysis considers as the "Business-as-Usual" (BAU) conditions for evaluating significance. The footnote #4 on page 3.4-14 refers to the year 2008; however, the Monterey County GHG inventory used 2005 as BAU condition.

5-06

<u>Table 3.4-7 Unmitigated Operational GHG Emissions (metric tons/year) Pages 3.4-18 through 3.4-20.</u>

Please explain why the GHG emissions in Table 3.4-7 do not match the emissions presented in Table 3.2-6. The GHG emissions are underestimated compared to the criteria pollutant emissions for area and mobile sources. For example, the area and mobile source emissions presented in Table 3.4-7 for Option 1 are lower than the mobile source emissions presented in Table 3.2-6 for Option 1. If Table 3.4-7 represents operational emissions without design features or measures to reduce GHGs, then the mobile source emissions presented in Table 3.4-7 should at least be equal to, if not higher than, the emissions presented in Table 3.2-6.

<u>Table 3.4-7 Unmitigated Operational GHG Emissions (metric tons/year) Pages 3.4-18 through 3.4-20 and Table 3.12-7 on Page 3.12-26.</u>

Please confirm the water use for the project estimated using CalEEMod matches the estimates from Table 3.12-7. It appears water use based on the CalEEMod defaults may underestimate water demand compared to the values presented in Table 3.12-7. Additional water use would result in more electricity and higher GHG emissions than have been reported.

5-08

Table 3.4-9 Total Project Emissions Over Baseline on Page 3.4-21.

The annual operational emissions for Option 1 and Option 2 presented in Table 3.4-9 do not match the values in Table 3.4-7. Please review and explain why the values in both tables are not consistent.

5-09

GHG Reduction Plan Measures listed at bottom of Page 3.4-24.

Please provide documentation to support the GHG reductions for the measures listed as being included in the GHG Reduction Plan. The reductions shown for the state measures represent statewide GHG reductions and overestimate the potential local GHG reductions that could be achieved with the project. For example, the energy emissions reductions are overestimated. Pacific Gas and Electric Company (PG&E) is the electricity provider in the project area. If the BAU condition is represented by the year 2008 (or 2005), PG&E had already achieved a renewable portfolio standard value of approximately 15%. Please explain how the Renewable Portfolio Standard measure, assuming this means 33% by 2020, will achieve reducing energy emissions by 23.9% compared to the BAU condition of 15%. Based on the underestimate of GHG reductions, the applicant must include additional measures in the GHG Reduction Plan to reduce GHG emission to less than significant.

5-10

Comments on Appendix E Air Quality and Climate Change, Information for Analysis

Appendix E.

For future reference, the CalEEMod output tables should be included in the appendix in order for the Air District to review the emissions reported. The emissions reported in Table 3.2-6 and Table 3.4-7 could not be confirmed in CalEEMod using the information provided in Appendix E. If the CalEEMod default values were changed, an explanation to support changing the default values should also be included in the appendix.

5-11

Construction in Appendix E on Page E-2.

The text states that mitigated construction emissions were estimated assuming incorporation of DPFs capable of 25% reduction. However, this measure is not listed in Mitigation Measure AQ-C2. Please clarify what construction mitigation measures will be implemented.

5-12

Table E-5 Operational Assumptions in Appendix E

The project element sizes in Table E-5 must match with the information in Chapter 3 Project Description. It appears different sizes for some project elements were used to estimate emissions compared to what is summarized in the project description. For example on page 2-12 it states, "The existing ballroom on the first floor would be expanded... to create an additional 4,155 sf..." and "... the existing meeting facilities... additional 4,660 sf of meeting space." However, Table E-5 shows the ballroom was modeled as 3,960 sf and the meeting

facilities were modeled as 3,960 sf. Therefore, the emissions may be underestimated if smaller facility sizes were evaluated in CalEEMod than are planned for the project.

5-13 cont'd

Table E-8 Health Risk Assessment Assumptions in Appendix E

Please provide a more detailed description of how the screening health risk assessment was conducted. The basic assumptions used for off-road equipment; amount, horsepower, load factor, and hours per day, should be consistent between the criteria pollutant emission calculations and the health risk assessment. Based on the following comments, it appears the emissions used for the health risk assessment were underestimated compared to the methodology used to estimate criteria pollutant emissions.

5-14

a. The health risk assessment methodology states it is based on off-road equipment emission factors from URBEMIS2007. However, the load factors shown in Table E-8 are lower than the load factors presented in Table E-2 (the load factors in Table E-2 are similar to the default load factors in URBEMIS2007). Please provide justification for using lower load factors as these will result in lower emission rates which will underestimate the health risk.

5-15

b. The methodology also states that "...associated health risks was conducted for the Pebble Beach Links Driving Range Relocation to Collins Field." Please explain why the equipment listed for the grading and paving phases in Table E-8 do not match the equipment listed for the same project element and phase in Table E-2. In particular, the health risk assessment appears to have assumed fewer hours per day of equipment operation than presented in Table E-2. For example, most of the equipment in Table E-2 is listed to operate 8 hours per day while Table E-8 has most equipment operating less than 8 hours per day. The emissions used for the health risk assessment are underestimated if fewer equipment types and fewer hours per day were used.

5-16

c. Please confirm whether the emission rates presented in Table E-8 are for the unmitigated or mitigated case. It appears the emission rates include mitigation measure AQ-D1. The PM emission rates (g/hr) presented in Table E-8 are lower than what can be calculated using off-road equipment emission factors from URBEMIS2007 as stated in the methodology. The PM emission factor in URBEMIS2007 for a rubber tired dozer in the year 2015 is 0.125 g/bhp hr (Appendix I to the URBEMIS2007 User's Guide). This equates to an emission rate of 16.4 g/hr and was calculated based on values in Table E-8 (0.125 g PM/bhp hr x 357 hp x 0.3685 load factor = 16.4 g/hr). An 85% reduction of the URBEMIS2007 emission factor for a rubber tired dozer would equate to nearly the same emission rate presented in Table E-8 (85% reduction of 16.4 g/hr = 2.46 g/hr and Table E-8 shows 2.83 g/hr). Therefore, it appears the emission rates include mitigation measure AQ-D1, installation of DPFs capable of achieving an 85% reduction in PM10 exhaust emissions.

5-17

Mitigation Measures

The Air District's 2008 CEQA Guidelines discusses how the site design of a project can influence the impact on air quality. One type of site design feature the Air District encourages the applicant to consider is excluding wood-burning fireplaces. Wood-burning fireplaces can negatively impact air quality by generating fine particulate matter and creating an odor nuisance for neighbors. Therefore, the Air District recommends that the applicant requires installation of pellet stoves or fireplace inserts that operate with natural gas in

locations where fireplaces may be planned, such as, residences, hotel rooms, or meetings rooms.	18 ont'd
The Air District supports the transportation mitigation measures that relieve congestion or promote alternative transportation uses as these measures will also contribute to benefiting air quality and GHG emissions. In particular, the Air District supports the development of an alternative transportation plan as listed under Mitigation Measure TRA-G1. A main source of criteria pollutant and GHG emissions associated with the project will result from transportation. Reducing the number of vehicle trips will benefit reducing both criteria pollutant emissions and GHG emissions.	19
Finally, the Air District recommends that the applicant commit to implementing the GHG Reduction Plan under Mitigation Measure CC-A2-A. The measures under consideration for reducing GHG emissions complement the recommended site design measures listed in the Air District's 2008 CEQA Guidelines. Implementing these measures would benefit both air quality and climate change by reducing emissions. If this mitigation measure is selected, please forward a copy of the GHG Reduction Plan to the Air District upon completion.	:0
General Comments The following are editorial comments for clarification in the document.	
Table 3.2-6 on Page 3.2-18 Please confirm the units for the criteria pollutant emissions, the table title says "lbs/day" but the table header says "lb/year".	21
Significance Criteria on Page 3.4-15 and Mitigation Measure CC-A2-A on Page 3.4-22. Please review and confirm the percentage reduction from business as usual (BAU) used to evaluate the project. It is not clear whether a 24% reduction from BAU or a 26% reduction from BAU is considered the reduction needed for the project. The text on page 3.4-15 states, "represents a reduction in GHG emissions equal to 24% below 2020 BAU conditions", however, Mitigation Measure CC-A2-A states "Reduce annual greenhouse gas emission by 26% relative to business as usual".	? 2

Mitigation Measure AQ-D1 on Page 3.2-25.

A DPF capable of achieving an 85% reduction in PM10 emissions is considered "Level 3" not "Tier 3", please change text to state "Level 3" in both places in the mitigation measure.

Table E-5 Operational Assumptions in Appendix E

Please confirm that the table head name "Trip Rate" is incorrect and should be called "Unit Amount" to correspond to the value used in CalEEMod. The values in the "Trip Rate" column do not match with the values in Table 3.11-20 Project Trip Generation. A table showing what trip rates were used to estimate operational mobile source emissions must be included in the appendix.

Thank you for the opportunity to provide comments. Please contact me at (831) 647-9418 ext. 226 or bnunes@mbuapcd.org if you have questions regarding these comments. Also, please provide the Air District with written responses to all comments contained herein prior to the

certifying the Final	Environmental	Impact Report	(per Public	Resources	Code Section
21092.5).					

Best regards,

Robert Nunes Air Quality Planner

> Cc: Amy Clymo, MBUAPCD Air Quality Planner David Craft, MBUAPCD Air Quality Engineer





December 14, 2011

Mike Novo,
Director of Planning
Monterey County Resource Management Agency
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

Re: Pebble Beach Company Water Entitlement

Dear Mr. Novo:

This letter responds to a request by Pebble Beach Company ("PBC") for the Monterey Peninsula Water Management District's ("MPWMD") to clarify the status of the Water Entitlement granted to PBC by MPWMD pursuant to Ordinance No. 39, as amended by Ordinance No. 109, and various agreements related to the Carmel Area Wastewater District – Pebble Beach Community Services District Wastewater Reclamation Project (the "Reclamation Project").

MPWMD granted a Water Entitlement of 365 acre feet per year ("AF") to PBC pursuant to the Wastewater Reclamation Project Fiscal Sponsorship Agreement between MPWMD and PBC dated as of October 3, 1989. This Water Entitlement is evidenced by Water Use Permits issued by MPWMD to PBC in accordance with Ordinance No. 39 and the Fiscal Sponsorship Agreement.

MPWMD Ordinance No. 109 authorized PBC to sell up to 175 AF of its Water Entitlement to other landowners in Del Monte Forest for residential use, to assist in funding the improvements to the Reclamation Project with the intent of eliminating the use of supplemental potable water for irrigation of the golf courses and open spaces. Phase I of the Reclamation Project was completed in 1994, and the Phase II improvements were completed in 2009. The Reclamation Project is now supplying 100% of the water used for irrigation of the Del Monte Forest golf courses and other open spaces that are receiving recycled water, and saving, on average, approximately 1,000 acre feet per year of potable water.

The referenced agreements related to the Reclamation Project provide that MPWMD has a legal obligation to supply water pursuant to the Water Entitlement. MPWMD holds regulatory powers to require California American Water Company ("Cal-Am") to provide water service to the holders of the Water Entitlement through the Cal-Am system. However, if Cal-Am is unable to supply such water,

M. Novo Page 2 of 2 December 14, 2011

MPWMD is committed to finding other sources of water from which to supply the holders of the Water Entitlement.

The Cease and Desist order ("CDO") issued by the State Water Resources Control Board ("SWRCB") provides in its decision that Cal-Am may serve the holders of the Water Entitlement from withdrawals from the Carmel River irrespective of its water rights until December 31, 2016. After that date, unless the CDO is amended, Cal-Am is required to serve the Water Entitlement (and all other Cal-Am customers) only through legal water sources available to it (or to MPWMD). The CDO exempts the Water Entitlement from its moratorium on new connnections.

6-01 cont'd

The effect of MPWMD ordinances and agreements, as well as the CDO, is therefore as follows:

1) Holders of the Water Entitlement have the right to connect to the Cal-Am system even if no alternative water supply has been developed by Cal-Am.

6-02

2) Once connected, Water Entitlement users have the right to be served on the same basis as any other Cal-Am customer. That means that Water Entitlement users may be served by Cal-Am from its then legal sources in the same manner and extent as any other Cal-Am customers. 3) MPWMD continues to pursue development of alternative sources of water which, among other things, can satisfy the Water Entitlement.

The MPWMD is pleased to confirm its position related to PBC's Water Entitlement rights. I'm happy to respond to any questions or attend any future meetings to address this matter further.

Sincerely yours,

Monterey Peninsula Water Management District

By: David J. Stoldt, General Manager

cc: M. Stilwell, Pebble Beach Company

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January 9, 2012

Mr. Joseph Sidor, Associate Planner Monterey County Resource Management Agency Planning Department 168 W. Alisal Street., 2nd Floor Salinas, California 93901

Subject: Pebble Beach Company Project (PLN100138)

Dear Mr. Sidor:

The Monterey Peninsula Water Management District (District or MPWMD) appreciates the opportunity to comment on the Pebble Beach Company Project Draft EIR (DEIR). The project is described as the build-out of the remaining undeveloped Pebble Beach Company (PBC) properties in the Del Monte Forest Local Coastal Plan (LCP) area, including the renovation and expansion of visitor serving uses at The Lodge at Pebble Beach, The Inn at Spanish Bay, Spyglass Hill, and the Pebble Beach Equestrian Center; and the creation of 90-100 single-family residential lots. MPWMD's comments are as follows:

7-01

General Comments

- 1. MPWMD is referenced frequently in the DEIR, but is not included in the list of acronyms and abbreviations.
- 2. Water Permits from MPWMD will be required for each New Connection, modification to an existing Connection and each Expansion of Use. Prior to issuance of a building permit, a final review of the demand projection will take place and all development will be subject to water efficiency standards and other rules in effect at the time the Water Permit is considered. Water Permits will be issued for the project only if sufficient water from the Pebble Beach Company Entitlement is available.

7-03

Environmental Setting

ES Comment 1: Page ES-14, line 7: California American Water has not been ordered to cease extracting all water from the Carmel River, only the amount which exceeds its legal right. This comment applies to similar statements found in the Water Supply and Demand section of the DEIR.

Water Supply and Demand

WSD Comment 1: MPWMD acknowledges and recognizes an entitlement to a total of 365 acre-feet of potable Cal-Am water that is held by the Pebble Beach Company for financing the CAWD/PBCSD Recycled Water Project. This water can be used for any purpose if that use

Joseph Sidor, Associat Planner Re: Pebble Beach Company Project Page 2 of 2 January 9, 2012

conforms to current County and MPWMD regulations. Permits for use of the Pebble Beach Company Water Entitlement are governed by District Rule 23.5 of the MPWMD Rules and Regulations.

7-05 cont'd

WSD Comment 2: SB 610 and SB 221 Applicability, page 3.12-16, lines 9-10: The use of a factor of 0.42 acre-feet per year (AFY) that was used to review the need for a Water Supply Assessment is referenced as a factor used by MPWMD. MPWMD seeks clarification regarding the source of this factor. The factor may have been derived from average actual consumption by residential users within the County during a previous year. Current Cal-Am data (Water Year 2010-2011) shows the average water use of a residential customer in Pebble Beach to be 0.2612 AFY per connection. Actual water use varies depending on the location and size of the SFD and its landscaping.

7-06

WSD Comment 3: History of Pebble Beach Company's Water Entitlement, page 3.12-17, lines 15-16: The SWRCB Order prohibits Cal-Am from diverting water above its legal right from the Carmel River after December 31, 2016, to supply the applicant's water entitlement.

7-07

WSD Comment 4: History of Pebble Beach Company's Water Entitlement, page 312.18, lines 33-39: Information about the current status of Pebble Beach Entitlements can be found in the MPWMD monthly board packet. The packet is available on the MPWMD website at www.mpwmd.net.

7-08

Thank you for the opportunity to review and respond to the Pebble Beach Company Project Draft EIR. We trust that our comments will be considered in the approvals for the Project. If you have any questions or would like to discuss our comments, please contact me at 658-5630.

Stephanie Pintar

Sincerel

Water Demand Manager

cc: Henrietta Stern

Undernand/Work Letters Unvironmental Comments PB Project DEIR 20120109. Pintar docx





Mike Niccum, General Manager/Secretary

PEBBLE BEACH

COMMUNITY SERVICES DISTRICT

3101 FOREST LAKE ROAD . PEBBLE BEACH, CALIFORNIA 93953 . (831) 373-1274 . FAX (831) 373-2357

January 9, 2012

Mr. Joseph Sidor Monterey County Planning Department 168 West Alisal Street, 2nd Floor Salinas, CA 93901

> Re: PBCSD Draft EIR Comments Pebble Beach Company Project PLN100138, SCH# 2011041028

Dear Mr. Sidor,

District staff comments are attached on the Draft Environmental Impact Report (DEIR) for the Pebble Beach Company Project.

Thank you for the opportunity to review the DEIR. Please contact Fire Prevention Chief, Robin Hamelin, Associate Engineer, Christina Baca, or me if you have questions or require more information or clarification of any of the recommendations in the attached response.

8-01

Sincerely,

Mike Niccum General Manager

Attachment: District Recommendations

C Rick Hutchinson, Fire Chief Robin Hamelin, Battalion Chief Christina Baca, Associate Engineer Mark Stilwell, Pebble Beach Company

PBCSD COMMENTS (1/9/12) ON DRAFT EIR FOR

PEBBLE BEACH COMPANY PROJECT

PLN100138, SCH#2011041028

Chapter 3.10 Public Services

1.	<u>Page 3.10-6 Fire Protection</u> : Change Line 28 to: One (2011) Emergency One fire engine with a Class A triple combination pump that produces 1,500 gallons per minute (gpm).	
2.	Page 3.10-6 Fire Protection: Change Line 30 to: One (2004) American LaFrance Truck with a 75' aerial ladder and pump that produces 2,000 gpm.	8-02
3.	<u>Page 3.10-6 Fire Protection</u> Change Line 31 to: One (2000) Emergency One Fire Engine with a pump that produces 1,500 gpm.	
4.	<u>Page 3.10-12 Police and Fire Protection</u> Change Line 27 to: In addition, PBCSD has an automatic aid agreement with Cypress Fire Protection District and the cities of Pacific Grove and Monterey that improves	8-03
5.	Page 3.10-13 Emergency Access The section starting at line 31 on page 613 of the DEIR states that the fire department (Hamelin) feels the housing development in the Corporation Yard would not block fire department access to Haul Road or Fire Roads 2 and 4 based on preliminary plans. The PBCSD Fire Department requires that notation be made in the DEIR that fire department access to Fire Roads 2 and 4 and Haul Road will not be blocked by development in the Corporation Yard.	8-04
6.	Several sections of the DEIR identify locations where trails will be created on Fire Roads or Fire Road/Fuel breaks. The PBCSD Fire Department requires language in the DEIR that makes it clear that such trails will not cause the closing of any Fire Roads or Fire Road/Fuel breaks.	8-05
7.	The Draft Environmental Impact Report references the review and rewriting of sections of the Land Use Plan which will include creating the Del Monte Forest Master Resource Management Plan (MRMP). Following completion of the MRMP, localized Research Management Plans (RMP) will be created for various parts of the Del Monte Forest. The PBCSD Fire Department must be a part of the review team creating or rewriting the MRMP and the RMPs.	8-06







Regional Transportation Planning Agency • Congestion Management Planning Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

January 9, 2012

Joseph Sidor, Associate Planner Monterey County Resource Management Agency - Planning Department 168 W. Alisal Street 2nd Floor Salinas, California 93901

SUBJECT: Comments on the Draft Environmental Impact Report for the Pebble Beach Company Project

Dear Mr. Sidor:

The Transportation Agency for Monterey County is the Regional Transportation Planning and Congestion Management Agency for Monterey County. Agency staff has reviewed the draft Environmental Impact Report for the Pebble Beach Company Project.

The proposed project would allow the renovation and expansion of visitor-serving uses at The Lodge at Pebble Beach, The Inn at Spanish Bay, Spyglass Hill, and the Pebble Beach Equestrian Center; creation of 90 to 100 single-family residential lots; preservation and conservation of approximately 635 acres as primarily forested open space; the relocation of existing trails and construction of new trail segments; construction of internal roadway, circulation, and drainage improvements at four intersections; and the reconfiguration of the main gate to the Pebble Beach area at the Highway 1/Highway 68/17-Mile Drive intersection.

The Transportation Agency appreciates the County, City of Monterey and the applicant's coordination on this proposal early in the environmental review process to discuss a possible roundabout alternative on Highway 68, and encourages continued coordination with our agency as well as Caltrans and other stakeholders as the development proposal progresses.

The Transportation Agency offers the following comments:

Regional Roads & Highways

 Our agency appreciates the County's intent to collect Regional Development Impact Fees as mitigation for cumulative impacts for this development proposal. However, there are some issues with the manner in which the regional impact

9-01

fees are being utilized by this development as mitigation for both project-specific and cumulative impacts.

Mitigation measures TRA-C2 and TRA-C4 call for the payment of the Regional Development Impact Fee as mitigation for project-specific impacts. The regional fee, as designed, is adequate mitigation only for cumulative impacts. By definition, a project-specific impact entails a level of significance in excess of a cumulative impact. Since the regional fee funds are spread across 17 regionally-significant transportation projects to satisfy a development's cumulative impacts throughout the county, not solely for direct impacts within the vicinity of the development, payment of regional fees would be less than what would be expected for adequate mitigation of project-specific impacts. An example of this would be that a portion of the regional fees paid by this development would go towards mitigating cumulative impacts to Highway 156 from tourist traffic visiting Pebble Beach, resulting in a shortfall for mitigating direct impacts on Highway 68. Additional project-specific impacts would still need to be addressed through another mechanism, such as direct fair share payments towards the planned improvements at the impacted facilities.

9-02 cont'd

As with our agency's comments on the environmental document for the Corral de Tierra Neighborhood Shopping Center, the Transportation Agency defers to the County to finalize decisions related to adequate mitigations for project-specific transportation impacts. However it is recommended that these mitigation measures should be revised to identify alternative project-specific mitigations.

2. The Transportation Agency supports the construction of a roundabout at the interchange of Highways 1 and 68 that is being considered by the City of Monterey. Our agency strongly encourages that this alternative be considered and is available to help facilitate stakeholder meetings to pursue this option either as mitigation for this development or as a stand-alone project.

9-03

Bicycle, Pedestrian, & Transit Facilities

3. The Transportation Agency supports accommodation of alternative forms of transportation (rail, bus transit. bicycle and pedestrian transportation), both through the design of transportation facilities, and through the design and orientation of land uses. The Transportation Agency supports that one of the goals is to create a bike and pedestrian-friendly development, with design features including wide sidewalks, bicycle parking, and safe pedestrian access to the development site.

9-04

To accomplish these goals the development planning should place a premium on safe and accessible pedestrian access to the site from intersections and crosswalks, sidewalks, and bicycle facilities. The project site should also be designed with sidewalks that connect to external facilities, provide access to transit stops, and do not include the use of cul-de-sacs without a cut-through for

pedestrian travel. New roadways should be designed to accommodate bicycles with adequate pavement for bike travel.

9-04 cont'd

4. As noted in the environmental document, the proposed development will result in higher traffic volumes on 17-mile Drive, which will have a detrimental effect on bicycle and pedestrian facilities. With the proposed mitigation measure to improve signage and striping to clearly identify bicycle facilities, our agency recommends that the improved striping and signage continue along 17-mile Drive connecting with the Hatton Canyon Trail in Carmel. The development should also provide a fair share contribution towards the class 2 bike lanes that are planned for the area at Ocean View, from Asilomar Boulevard to 17-mile Drive. More information about these projects can be found in the Transportation Agency's Bicycle and Pedestrian Master Plan.

9-05

5. For pedestrians, consideration should also be given to the inclusion of intelligent crosswalks, which provide flashing notification lights when a pedestrian enters the crosswalk to increase visibility and alert drivers of their presence. In addition, our agency recommends the use of mid-crosswalk islands as a safe refuge for pedestrians that do not completely cross before the traffic signal changes.

9-06

6. Our agency also supports and recommends that bicycle parking should be provided near the entrances of each building. To support this goal, our agency offers a Bicycle Protection Program that supplies grant funding for the purchase of bicycle storage facilities – our agency encourages the County and the applicant to apply to this program.

9-07

7. As part of Mitigation Measure TRA-G1, which will require the applicant to prepare and implement an alternative transportation plan that emphasizes trip reduction measures, a clear enforcement mechanism should be included and reviewed by the County prior to the issuance of building permits.

9-08

SB 375 & Greenhouse Gas Emissions

8. Senate Bill 375 requires the Metropolitan Planning Organization to develop a Sustainable Communities Strategies as a comprehensive approach to addressing greenhouse gas emissions at a regional level by linking land use and transportation planning decisions. Our agency encourages the City's coordination with the Association of Monterey Bay Area Governments in the development of the region's Sustainable Communities Strategy and for developments within the specific plan area to be consistent with the plan once it is completed.

9-09

9. Our agency supports the use of light-colored pavement for pedestrian areas to cut down on the heat island effect. In addition, the development should explore the use of gray granite pavement for parking areas and roadways, which has the

benefit over traditional blacktop of increasing nighttime visibility and is permeable to aid in the control of on-site water run-off.

9-10 cont'd

10. Where appropriate, light-emitting diode (LED) lighting should be used for external lighting to reduce the site's electricity consumption.

9-11

11. Consideration should be given to including preferred parking spaces for carpools, alternative fuel vehicles and electric vehicle charging stations. The Monterey Bay Electric Vehicle Alliance has received grants for charging stations to be installed throughout the county. This provides the opportunity for new developments to plan to include charging stations at potentially reduced costs.

9-12

Thank you for the opportunity to review this document. If you have any questions, please contact Michael Zeller of my staff at 831-775-0903.

Sincerely

Debra L. Hale Executive Director

CC: Paul Greenway, County of Monterey Public Works
Richard Steadman, Monterey Bay Unified Air Pollution Control District
Brandy Rider, California Department of Transportation (Caltrans) District 5
Carl Sedoryk, Monterey-Salinas Transit

CNPS

California Native Plant Society

Monterey Bay Chapter

2 Via Milpitas Caarmel Valley, CA 93924 Jan. 8, 2012

Mr. Joseph Sidor Monterey County Planning Dept. 168 West Alisal Street, 2nd Floor Salinas, CA 93901

Gentlepeople

The Monterey Bay Chapter of the California Native Plant Society would like to submit the following comments on the DEIR for the Pebble Beach Co. expansion plan. A number of our members have attended the meetings held in the past year, have walked most of the sites of the proposed projects in Del Monte Forest, and also participated on Dec. 14 in a field trip to the primary areas of environmentally sensitive habitat that would be affected by the construction. While we recognize that this plan has fewer impacts than the previous plan that was denied by the Coastal Commission, we do have the following concerns.

10-01

Our overriding concern is the preservation of native Monterey Pine habitat, which is recognized as an Environmentally Sensitive Habitat Area (ESHA) and given special protection under the California Coastal Act. It is particularly precious where it supports high quality rare and endangered plant and animal species. In the past we have been able to defend ESHA from inappropriate development because of the strong policies in the Coastal Act. We are worried that approval of the Land Use Plan Amendment separately, as proposed in the schedule, could undermine this crucial policy by essentially creating "sacrifice areas" that would establish a precedent that could be applied to other ESHA sites. In a "best outcome" setting, development would be confined to degraded areas, while the pristine areas would be protected. However, we recognize that an effort has been made to create trade-offs that preserve large areas (20 acres or more) of high quality habitat in exchange for converting smaller areas of lesser habitat to permanent development. It is important to make it clear that this is a unique situation that is resulting in extensive permanently protected and maintained preserves.

10-02

We continue to have specific issues in certain areas, for example our principal concern involves Areas K and L near the Indian Village rare plant preserve. There is a high-quality forest above and around the preserve supporting extensive stands of the endangered Yadon's Piperia that not only is an outstanding example of ESHA, but also is situated so that the topography affords some protection to the preserve below; but once the area is developed, that buffer may be substantially weakened. Changes in the hydrology could have an adverse impact on the endangered Hickman's Potentilla and encourage invasive nonnatives, while residential proximity creates a long list of potential impacts. We would recommend Option B to move the lots from K and L to F-2 and I-2, or one of the other options adjusting lot lines to protect Yadon's Piperia. We urge that at the very least the two lots that most closely affect the preserve be eliminated or relocated as recommended in one of the other alternatives. In that case, the remainder of the lots in subdivision L would need to have a definite building envelope, fences, and clear deed restrictions to preserve the habitat outside the envelope. This requires funding for inspections and enforcement. Unfortunately such agreements in the past have not worked in many cases where valuable drought-tolerant native habitat has been replaced by high-water use exotic landscaping. Nevertheless, wherever feasible, lot lines should be adjusted as suggested in the plan to protect Yadon's Piperia.



enhancing preserved areas. Those of us who are concerned about this issue have (or should have) learned from past developments that careful management is essential to keep invasive non-native plant species from colonizing these preserved areas, which can also be damaged by human carelessness, disease, natural disasters, etc. Funding for management plans, maintenance, inspections, education of employees, enforcement, operation of the native plant greenhouses and other related activities needs to have high priority. We would ask and expect that a Resource Management Team or whatever group is

established to oversee these matters include independent native plant experts. In the past there have been serious problems on following through on conditions of approval, most notably at Spanish Bay. We feel it is important to avoid that outcome this time.

One of the most galling examples of inadequate management in the past has been the repeated mowing of Yadon's Piperia along road edges in the forest, presumably for fire safety, but totally unnecessary and destructive. When we called these events to the attention of management, we were told it was done in error and would be corrected by better employee training. When it happened again, there were more apologies and similar prom-

ises; but it is very disheartening to those of us who try to assure that landowners make good faith efforts to follow the rules protecting our endangered natural resources.

This brings up an area of special concern: the over-arching importance of maintaining and

10-05

Finally, we remain very concerned at the over-all loss of Monterey Pine habitat, particularly that containing rare, threatened or endangered plants. We recall that additional mitigations at the Old Capital and Aguajito sites (both owned by PBCo. and located outside the Coastal Zone) were proposed during discussions of the previous plan. We realize that the Coastal Commission staff is only involved in the Coastal Zone planning and was primarily interested in protecting ESHA, but we urge that additional mitigations for the loss of open space and Monterey Pine habitat be considered in those areas, particularly the undevelopable slopes adjoining Jacks Peak Park.

10-06

We also wish to support the comments by Robert Hale, Secretary of our chapter, who has led many field trips in Del Monte Forest and has been able to study the documents in considerable detail.

10-07

Sincerely yours.

Mary Ann Matthews Conservation Chair





Post Office Box 1876, Salinas, CA 93902 Email: LandWatch@mclw.org Website: www.landwatch.org Telephone: 831-759-2824 FAX: 831-759-2825

January 9, 2012

Monterey County Planning Department 168 West Alisal Street, 2nd Floor Salinas, CA 93901 CEQAComments@co.monterey.ca.us

Dear Staff:

LandWatch Monterey County has reviewed the project which is for build-out of the remaining undeveloped Pebble Beach Company (PBC) properties in the Del Monte Forest Local Coastal Plan (LCP) area. The project includes the following major activities:

- Expanding meeting facilities by 13,815 sq. ft.
- Adding 195 guest units.
- Constructing a two-level 224-space parking facility and 285-space parking lot.
- Collins Field-Equestrian Center: relocating driving range to Collins Field, constructing golf academy, demolishing existing equestrian center and constructing a new center.
- Adding 28,797 sq. ft. of commercial space.
- Creating 98 residential lots.
- Road improvements at SR1/SR68/17; Congress Road/17 Mile Drive; Congress Road/Lopez Rd; Lopez Road/Sunridge Rd and Portola Rd/Stevenson Drive.
- Trail and infrastructure improvements.
- Preserving 635 acres of dedication and conservation areas.
- Removing about 5,500 Monterey Pines, 952 Coast Live Oak and 35 other tree types for a total of 6,500 to 6,700 trees.
- Over 125 amendments or deletions to the Del Monte Forest LCP.

In addition to the proposed project, changes to the Poppy Hills Golf course are proposed including removal of 533 trees under a separate application.

Our comments follow:

1. The DEIR should address why the proposed project is being processed separately from the Poppy Hills Golf course project. Since the combined projects would require removal of over 7,000 trees and generate significant greenhouse gas emissions, they should be processed together. At a minimum, the cumulative impacts of both projects must be addressed, and the revised environmental documents for both projects should be re-circulated.

11-01

2. Air Quality

A. P. 3.2-17 and 3.2-28. The methodology for determining project consistency with the 2008 AQMP was changed in September 2011. See the MBUAPCD website for the revised Consistency Procedure 4.0. Under the new procedure, project dwelling units are added to base year units and approved and unconstructed dwelling units for unincorporated Monterey County. This number is then compared to the number of units forecast by AMBAG at the year of build-out. Please identify the approved and unconstructed projects in your response.

11-03

B. Table 3.2-6, p. 3.2-19. The title identifies emissions as lbs/day, yet the table itself indicates lbs/year. This inconsistency should be clarified.

11-04

C. P. 3.2-25. The DEIR finds the impact of diesel exhaust emissions on sensitive receptor would be significant for construction at all project development sites, except Area M Spyglass Hill and the Residential Lot Subdivision at the Corporation Yard, where the impact would be less than significant. The proposed mitigation measure (AQ-D1) would require the applicant to ensure that construction contractor(s) retrofit and install diesel particulate filters (DPFs) capable of achieving an 85% reduction in PM10 exhaust emissions (Tier 3) on all off-road construction equipment and diesel oxidation catalysts and Tier 3 DPFs on all on-road soil hauling. The DEIR finds this measure would reduce impacts to less than significant. Data should be provided that substantiate this finding.

11-05

3. Biological Resources

A. The DEIR recommends numerous mitigation measures to address impacts on biological resources. We support these recommendations and urge that they be included as project conditions.

11-06

4. Traffic

A. P. 3.11-11. The proposed project would amend the LUP to delete Policy 113 which follows in part:

The Resource Constraint Area designation shall be removed only when water and sewer capacity sufficient to serve such development becomes available and that highway capacity and circulation solutions have been agreed upon and adopted. Until such time that resource problems are solved, there shall be no development other than existing lots of record.

11-07

The DEIR addresses traffic circulation problems existing at the time the LUP was adopted and finds these problems have been addressed. This finding is intended to support deletion of Policy 113. However, the DEIR finds that the proposed project would add substantial traffic to intersections in Del Monte Forest and the immediate vicinity; decrease acceptable levels of service to unacceptable levels or worsen existing unacceptable levels of service; and have both project level and cumulative significant and unavoidable impacts. P. 3.11-2 The DEIR also finds the project would add traffic to regional highway sections that are projected to operate at unacceptable levels of service and would add traffic to a highway ramp projected to operate at an unacceptable level of service. These impacts are found to be unavoidable and significant at the project level and cumulatively. Based on

findings in the DEIR, deletion of Policy 113 is not supported, and in fact, its deletion would have significant unavoidable impacts.

11-07 cont'd

B. The DEIR identifies significant and unavoidable project level and cumulative impacts on regional roadways. While the DEIR states the applicant will contribute its fair share of regional impact fees, impacts are found to be significant and unavoidable until such time as proposed mitigation measures are implemented. Further, the DEIR identifies proposed regional transportation projects that do not have funding in the foreseeable future and finds the project's contribution to regional fees will not mitigate significant impacts.

11-08

We note that previous EIRs prepared for the County have made different findings, notably that regional traffic impacts would be mitigated with payment of regional impact fees. The analysis for this project is consistent with CEQA requirements regarding mitigation measures, and we support this updated approach for analyzing regional traffic impacts and mitigation.

5. Water Supply

A. P. 3-2.2. The DEIR finds that water is available for the project through 2016; after that time, additional water would be needed from new sources. It finds that a significant and unavoidable impact on water supplies if the Regional Project is not built by then. It also finds that regional water supply infrastructure and operations would have secondary environmental impacts. Mitigation measures are not identified for these impacts.

As noted above, Policy 113 which addresses traffic, water and sewer capacities would be deleted. According to the DEIR, the proposed substitute LCP Amendment prescribes that development in the Del Monte Forest can only be approved if it is first clearly demonstrated that the development will be served by an adequate, long-term public water supply, and where such development incorporates all necessary measures to assure no net increase in water demand from Cal-Am sources where extraction is leading to resource degradation. The only exception would be the remaining portion of the applicant's water entitlement consistent with the SWRCB Cease and Desist Order. The specific LCP amendment language is not provided in the DEIR. However, the DEIR states:

New text describes that concept plan development can use water from the Pebble Beach Water Entitlement and that adequate water is available to meet expected demand. P. 2-36.

As noted above, there is not a long-term water supply available to serve the project. The inconsistency between this finding and the statement on P. 2-36 should be addressed.

6. Climate Change

A. The DEIR attempts to use the County's GHG emission reduction policy (OS-10.11) described in the 2010 Monterey County General Plan to address the project's impact on climate change. The DEIR states:

On the county level, the County has identified its 2020 target to be to reduce GHG emissions by 15% below 2005 levels by 2020. The County 2005 emissions of approximately1.71million MT CO2e are projected to increase to1.91 million MT CO2e by 2020, which is an increase of approximately 11%. Using the draft inventory data, the county's target would correspond to 1.5 million MT CO2e, which is approximately 24% below 2020 BAU conditions. *Typos not added*. P. 3.4-14

11-10

The source of the 2005 and 2020 emission inventory is not provided in either the DEIR or the Air Quality and Climate Change Appendix. The 2009 AMBAG Update shows the 2005 GHG emission inventory at 1.3 million MT CO₂e (excludes pass-through traffic). AMBAG has not prepared an updated 2020 forecasts. (Telecom 12/15/11, Chris Sentieri, AMBAG). The DEIR should use up-to-date data and revise its analysis accordingly.

B. For purposes of the DEIR, project level GHG emissions are considered significant if they are more than 76% of unmitigated emissions level. If project level emissions are reduced by more than 24%, they would not be significant. P. 3.4-15.

If project levels emissions are accounted for in the 2020 emission forecast for Monterey County, this approach would be consistent with the adopted County policy. However, the DEIR does not address consistency between project level emissions and the 2020 forecast of 1.91million MT CO₂e.

11-11

The DEIR finds the project would emit between 4,056 to 5,468 MT CO₂e in excess of baseline and that with mitigation, emissions would be reduced by more than 24% and would have less than a significant impact. If these emissions are in excess of the 2020 Monterey County forecast, they would have an unavoidable and significant cumulative impact on climate change.

C. Instead of using the method described above, guidelines adopted by the BAAQMD should be used to address climate change. While MBUAPCD has not approved GHG thresholds of significance, it has draft guidelines under preparation. These guidelines are similar to those adopted by the BAAQMD. The DEIR states:

11-12

The State CEQA Guidelines do not define the amount of GHG emissions that would constitute a significant impact on the environment. Instead, they leave the determination of the significance of GHG emissions up to the lead agency and authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts,

	provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines 15064.4[a], 15064.7[c]). P. 3.4-14 Since neither the County of Monterey nor MBUAPCD have established thresholds of significance nor has the County identified an approach pursuant to these CEQA Guidelines, we believe the methodology adopted by the BAAQMD should be used to estimate the impact of GHG emissions on climate change.	11-12 cont'd
D.	The adopted BAAQMD threshold of significant for land use projects is	Ţ
	4.6 metric tons CO ₂ e/year/service pop	11-13
	Using this threshold, the project may have a significant and unavoidable cumulative impact on climate change.	
E.	Emissions from disposal of the 6,000 plus trees are averaged over a 100 year period. Since development would occur at a much more rapid rate, the use of a 100 year average should be justified (Table 3.4-8). Also, the emission estimate is based on the assumption that the trees will be chipped (p. 3.4-23). Since there is no condition requiring chipping and since burning is the other disposal method, the estimate of emissions from disposal should be revised to reflect both burning and chipping.	11-14
F.	The DEIR includes a mitigation measure to validate the greenhouse gas emission offset value of preserving 598 acres of Monterey pine forest. P. 3.4-27. It states that the existing LCP designates most of these areas for development. The DEIR further states, "For project to qualify[for the Climate Action Reserve], it must be demonstrated that the project has a feasible and realistic potential for development and loss of the forested lands that would occur in the long run without the proposed preservation."	11-15
	Policy 113 as described above would limit development on these acres into the foreseeable future.	
G.	Also, the methodology for evaluating impacts on climate change from the Pebble Beach Company project and the Poppy Hills Golf course project are inconsistent. This discrepancy should be addressed.	11-16
Alterr	natives Analysis	
A.	The DEIR indicates that residential development has the greatest impacts on biological resources. Up to 4,605 Monterey Pines would be removed by residential lot subdivisions. P. 3.4-20.	11-17
	Three Clustered Development and three Reduced Development Alternatives are evaluated. All alternatives are identified as meeting most of the project objectives. Table 5-1.	

7.

	All three Clustered Development Alternatives (1A-1C) would include 90 residential units and 18 units of inclusionary housing. All would reduce impacts to the Monterey Pine Forest and Yadon's piperia over the proposed project. Alternative 1C is identified as reducing Monterey Pine Forest acres by 3.49 and Yadon's piperia by 3.3 acres. P. 5-13. However, these data conflict with data inTable 5-6 which show a total of 9.00 fewer acres of Yadon's piperia affected for a total of 12.49 acres.	11-18
	Three Reduced Development Alternatives (2A-2C) would include fewer residential and inclusionary housing units. Alternative 2A would reduce impacts on Monterey Pine Forest by 8 acres and Yadon's piperia by 4 acres; Alternative 2B would reduce impacts by 14 acres and 4 acres, respectively; Alternatives would reduce impacts by 24 acres and 7 acres respectively.	11-19
	Alternative 2C is identified as the Environmentally Superior Alternative . P. 5-35. However, the text states, "the environmentally superior "action" alternative is Alternative 2C (Clustered Development Alternative C)". (emphasis added). The Clustered Development Alternative is 1C. Is the referenced alternative 1C or 2C?	11-20
В.	Reducing the number of trees to be removed would affect estimates of GHG emissions. The impact on GHG emissions should be quanitified for each of the residential alternatives.	11-21
C.	The DEIR finds that a roundabout at the SR 68/SR 1/17-Mile Drive Interchange would not address significant impacts. PP. 5-6 and 5-26. Given the potential of significant cumulative impacts on climate change as addressed above, a roundabout at that interchange would reduce GHG emissions as well as ozone precursor emissions.	11-22
D.	Existing comparative studies of signalized intersections versus roundabout intersections indicate substantial reductions in vehicle emissions especially during the A.M. and P.M. peak hours when heavy traffic occurs. The basis for the vehicle emissions reduction is that roundabouts allow continuous vehicle flow and no, or very little, vehicle stops. Studies show that modern roundabouts have less delay, queing and stopping than standard signalized intersections. In one comparative analysis between the two types of intersections, as reported in <i>Impact of Modern Roundabout on Vehicular Emissions</i> , the conclusions are as follows: • There was a (21 percent to 42 percent) decrease in the Carbon Monoxide (CO) emissions (Kg/hr) for the AM and PM periods after the installation of a modern roundabout. • There was a (16 percent to 59 percent) decrease in the Carbon Dioxide (CO2) emissions (Kg/hr) for the AM and PM periods after the installation of the control o	11-23
	(CO2) emissions (Kg/hr) for the AM and PM periods after the installation of modern roundabout.	

When vehicles are idle in a queue they emit about 7 times as much carbon monoxide (CO) as vehicles traveling at 10 mph. Source: refer to footnote #2.

http://www.ctre.iastate.edu/pubs/midcon2003/MandavilliRoundabouts.pdf;
https://www.dot.ny.gov/main/roundabouts/files/Emissions_Reduction.pdf

- There was a (20 percent to 48 percent) decrease in the Oxides of Nitrogen (NOx) emissions (Kg/hr) for the AM and PM periods after the installation of modern roundabout.
- There was a (18 percent to 65 percent) decrease in the Hydrocarbons (HC) emissions (Kg/hr) for the AM and PM periods after the installation of modern roundabout.
- Reduction in delays, queues and proportion of vehicle stopped at the
 intersection in the case of roundabouts suggest that roundabouts enhanced the
 operational performance of the intersections and account for the reduction in
 vehicular emissions.
- Since all the locations had a range of different traffic conditions, it is
 reasonable to suggest that a modern roundabout may be the best intersection
 alternative to reduce vehicular emissions for several other locations in Kansas
 with similar ranges of traffic volumes.
- E. The DEIR reports that the LOS improves with roundabouts for the 2015 and 2030 conditions as compared to the signalized intersections. PP 5-32; Table 5-4
- F. The DEIR reports substantially less vehicle queues with the roundabout for 2015 and 2030 conditions as compared to signalized intersections. PP 5-33; Table 5-5
- G. In addition to the superiority of roundabouts in reducing greenhouse gas emissions there are other significant advantages to roundabouts. Roundabouts have resulted in a 90 percent reduction in fatal and incapacitating accidents, regardless of the lack of familiarity by drivers with this type of intersection design. As compared to signalized intersections, injury accidents are reduced by 76 percent and overall intersection accidents are reduced by 35 percent because there are substantially fewer collision points in the design of a roundabout.

The deaths in Monterey County that are the result of vehicle collisions at standard, all-way stop-controls such as signalized intersections can be eliminated by constructing roundabouts.

Roundabouts perform more favorably when compared to conventional intersections in terms of improved safety, increased capacity, reduced overall delay, and improved aesthetics. This is because they have specific design and traffic control features including yield control for entering traffic, channelized approaches, and appropriate curvature to ensure safe travel speeds. They are self regulating as to speed and access to the intersection by the drivers. Roundabouts are also more cost effective in that they preclude the cost of signalization and maintenance of signals, and they reduce society's overall insurance costs through fewer accidents and fewer deaths and incapacitating injuries.

Thank you for the opportunity to review the document.

Sincerely,

Amy L. White Executive Director

11-23 cont'd

11-24

Lawrence, Laura x5148



From: Beverly Bean [beverlygb@gmail.com]
Sent: Saturday, January 07, 2012 4:56 PM

To: cegacomments

Subject: MND FOR POPPY HOLDINGS INC. AND DEIR FOR THE PEBBLE BEACH COMPANY PROPERTIES IN THE DEL

MONTE FOREST LCP

January 7, 2012

Monterey County Planning Department

168 West Alisal Street, 2nd Floor

Salinas, CA 93901

CEQAComments@co.monterey.ca.us

SUBJECT: MND FOR POPPY HOLDINGS INC. AND DEIR FOR THE PEBBLE BEACH COMPANY PROPERTIES IN THE DEL MONTE FOREST LCP

Dear Staff:

The League of Women Voters of the Monterey Peninsula has reviewed the environmental documents for the Pebble Beach Company (PBC) project which includes over 125 amendments to the Del Monte Forest LCP and the Poppy Hills Golf course project. While the Pebble Beach Company is the applicant for both projects, they are being processes separately with two different environmental documents.

12-01

By chopping up the project into pieces, the totality of environmental impacts of the two projects is not evaluated. For example, the PBC project would remove up to 6,700 Monterey Pine trees. The Poppy Hills Golf course project would remove 533 trees. Both projects include significant emissions during the construction phase with potential health impacts from diesel exhaust emissions. In terms of climate change, the PBC project would emit up to 5,469 MT CO₂e while the Poppy Hills project would emit 2,227 tons of CO₂ over the life of the project. While the second project's impact may not be significant, when considered with the first, the total may be significant and require a larger amount of mitigation.

In addition to piecemealing the proposed projects in the Del Monte Forest, the two environmental documents use different methodologies for addressing impacts on climate change. Finally, neither environmental document includes the impacts of both projects in any of the cumulative impact analyses.	
We request that the projects be considered together and that one environmental impact report be prepared for all of the activities currently proposed by the Pebble Beach Company. The revised document should be re-circulated for public review and comment.	12-05
Thank you for the opportunity to review the documents.	
Sincerely,	
Beverly Bean	
President	

MPFW-1

Post-It* Fax Note 7671	Date 1. 9. 2012 pages 3
To Joe Sidor	From Nedeff
Co. Dept. Planning Dept	co. Mond. Pine Watch
Phone # 755 - 5262	Phone # 659-4252
Fax# 757-9516	Fax# 659-4230



MONTEREY COUNTY PLANNING DEPARTMENT

January 6, 2012

Monterey County Resource Management Agency Planning Department 168 West Alisal Street, 2nd Floor Salinas, CA 93901

SUBJECT:

Draft EIR, Pebble Beach Company Project

PLN 100138

SCH # 2011041028

To Whom It May Concern:

The Monterey Pine Forest Watch submits the following comments on the Draft Environmental Impact Report for the Pebble Beach Company build-out project in Del Monte Forest.

1. Area M, Spyglass Hill: Both Option 1 (Visitor Serving), or Option 2 (Residential Lot Subdivision) are depicted on project maps adjacent to extensive and biologically significant dune ecosystems. We are concerned about the protection of the ecologically sensitive dune and Monterey Pine Forest edge habitat immediately adjacent to the proposed development area. Prior to any construction activity, we recommend that permanent barrier fencing be placed to protect the dune/forest ecotone and that pedestrian boardwalks be installed to direct walkers through the fragile habitat. Interpretive panels with information about the sensitive dune plants, birds and wildlife would be helpful to educate and enlist the cooperation of visitors to remain on designated pathways.

13-01

2. Area L, Indian Village: The subdivision proposed adjacent to the Indian Village may have significant negative environmental impacts on the wet meadow habitat supporting the federally endangered Hickman's cinquefoil (Potentilla hickmanii), an extremely rare plant known from only two very small areas along California's Central Coast. The hydrology of the wet meadow ecosystem that hosts the rare cinquefoil may be jeopardized by the residential land use proposed in the surrounding "watershed" area of the wet meadow habitat. Any change in subsurface groundwater flow, or surface runoff may alter the unique environmental conditions the rare cinquefoil requires to remain viable. We recommend that all lots in this particular subdivision area be eliminated in favor of a protected buffer of Monterey Pine Forest habitat surrounding the Indian Village site.

13-02

Pebble Beach Build-Out DEIR January 6, 2012 Page 2

3. <u>Corporation Yard</u> : We have concerns about the proposed development of residential lots in the existing Corporation Yard. This potential subdivision would essentially create a development zone surrounded by protected lands of the SFB Morse Reserve and Huckleberry Hill Natural Area. We suggest that the "inholding" of potential development be removed from the list of proposed residential development sites and that this open area be restored to Monterey Pine Forest habitat to buffer and expand the adjacent biologically significant open space.	13-03 cont'd
4. QUESTION: The Draft Environmental Impact Report pertains only to Pebble Beach Company holdings in Del Monte Forest. Are the same sort of environmental protections and protocols that are proposed for the Pebble Beach Company project also going to be applicable to non-Company holdings, like Poppy Hills and the Monterey Peninsula Country Club, in the future?	13-04
5. General Habitat Recommendations from our November 8, 2011 correspondence: A. A long-term, comprehensive eradication program addressing non-native, undesirable plants should be implemented and monitored as a condition of project approval. B. Preservation and enhancement of special habitat areas, including Maritime	13-05
Chaparral, Coastal Prairie, Dunes, Wetlands and Monterey Pine Forest, should be a long-term maintenance commitment noted as a condition of project approval. C. Preservation and enhancement of the many special status plants and wildlife species	13-06
project approval.	13-07
D. The preservation of unique ecological staircase habitats noted by consultants from Jones and Stokes in their 1994 reports should be considered when locating construction sites. E. Forest edges and ecotone areas should be preserved, for example at the margin of	13-08
coastal dune and pocket meadow habitats, because they provide the requisite space required for Monterey Pine Forest habitats to expand and contract in response to changing environmental conditions.	13-09
F. We recommend that baseline biological surveys be conducted of all preservation sites, as well as special status plants and animals so that potential project impacts and environmental changes can be adequately monitored.	13-10
G. We support the suggested 4:1 planting mitigation ratio for previous Pebble Beach Company projects forwarded by the California Department of Fish and Game for significant plant species, including Monterey pine and coast live oak trees, removed as a result of project implementation. Replacement trees should be propagated from local seed sources and monitored for survival.	13-11

Pebble Beach Build-Out DEIR January 6, 2012 Page 3

NIKKI Neder

H. Permanent conservation of the Pebble Beach Company holdings in the Aguajito area adjacent to Jacks Peak Park should be considered as a component of the mitigation package implemented for the final Del Monte Forest build-out plan.

13-12

Thank you for the opportunity to provide comments on this significant development proposal.

Sincerely,

Nicole Nedeff Secretary

MPFW-2

DECEIVED JAN 12 2012 MONTEREY COUNTY PLANNING DEPARTMENT

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APPLICANT SUBMITTAL

PLANNING COMMISSION MEETING

December 14, 2011

169 West Alisal

Salinas, California

CHAIR: Paul Getzelman

VICE-CHAIR: Amy Roberts

SECRETARY: Mike Novo

COUNTY COUNSEL: Wendy Strimling

COMMISSIONERS:

15 Paul C. Getzelman

Cosme Padilla

Jay Brown

18 Aurelio Salazar, Junior

19 Amy Roberts

Jose Mendez

21 Luther Hert

22 Martha Diehl

Don Rochester

Keith Vandevere

25

23

24

so	upset	tir	ıg '	to	one	council	member	that	they	put	on	agenda
an	item	to	cl	ose	the	e Carmel	/Pebble	Beach	gate	e.		

So we did have interest in what Pebble Beach was doing.

This project is a master plan, and we will know over the next decade or two where Pebble Beach is going with what they want to do. It's going to be right there in writing. We'll hopefully pass it.

That is so important to the surrounding communities and the residents of Pebble Beach to know exactly what their company's planning to do and where they're going with their plans.

So I support this totally and hope that you move expeditiously on it.

Thank you for your time.

CHAIR GETZELMAN: Thank you, Mr. White.

MS. JOYCE STEVENS: Good morning, Commissioner.

I'm Joyce Stevens, and I'm representing the Monterey Pine Forest Walk. And this is a rerun for me, because I also spoke at the November hearing. But here we go.

The Monterey Pine Forest Walk is very appreciative of the years of negotiation from 2007 to 2009 between the California Coastal Commission under the leadership of Peter Douglas, great guy, and the executives

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This careful compromise resulted in major improvements to a very complicated project. In fact, this project began decades ago. I first heard about it in the 1970s when the proposal was for thousands of units, no preserved areas, and, naturally, a golf course.

Now, after incremental deletions, we have a much better project with 240 hotel rooms, 90 housing units, 635 acres of preserved land, and, best of all, no golf course. These deletions removed major ESHA and other environmental problems.

We do however, have some generic concerns that would further enhance the project.

One, an eradication program of non-native invasive plants should be undertaken on a long-term basis.

Two, preservation of special natural plant communities, including Maritime Chaparral, Coastal Prairie, Dunes and wetlands should be a permanent part of a maintenance commitment.

Three, there are many special status plants and special status wildlife species that require serious permanent protection.

Four, the unique ecological staircase described by Jones and Stokes in their 1994 report should be taken into consideration when locating construction sites.

14-01 cont'd

14-02

14-03

14-04

1	Five, because of forest edges, such as at dune	T
2	boundaries they allow the Monterey Pine Forest to	14-06
3	expand and contract naturally they should be kept in a	
4	natural state.	1
5	Six, baseline studies and regular monitoring for	T
6	all special habitats and species are recommended with	14-07
7	follow-up restoration as required.	
8	Seven, residential development planned for the	T
9	Corporation Yard should, preferably, not encroach on the	14-08
10	Monterey Pine Forest.	1
11	Additional mitigation habitat could be found in	T 14-09
12	Pebble Beach Company's Jacks Peak property.	
13	And we do recommend the acceptance of this LCP	14-10
14	Amendment.	I
15	Thank you very much.	
16	CHAIR GETZELMAN: Thank you, very much. Miss	
17	Stevens.	
18	Miss Stevens, you have that all written out.	
19	Would you like to submit that for the record?	
20	MS. JOYCE STEVENS: Well, if you	
21	CHAIR GETZELMAN: It's up to you.	
22	MS. JOYCE STEVENS: Sure.	
23	CHAIR GETZELMAN: If you'd like to.	
24	Thank you very much.	
25	MR. BRETT SILVESTRI: Good morning, Mr. Chair,	

1 STATE OF CALIFORNIA SS. 2 COUNTY OF MONTEREY 3 4 The foregoing proceedings were held before me, 5 LISA A. YORK MEESKE, a Certified Shorthand Reporter for 6 the State of California. 7 Said proceedings were taken at the time and place 8 previously stated. 9 The proceedings were taken by me in shorthand at 10 the time and place therein named and thereafter, under my 11 direction, transcribed into longhand. 12 IN WITNESS WHEREOF, I have hereunto set my hand 13 14 15 16 SHORTHAND REPORTER CERTIFIED 17 FOR THE STATE OF CALIFORNIA 18 19 20 21 22 23 24 25



SKYLINE FOREST NEIGHBORHOOD ASSOCIATION

3 January 2012

Mr. Joseph Sidor, Associate Planner Monterey County Resources Management Agency Planning Dept 168 W. Alisal St. 2nd Floor Salinas, CA 93901

Re: Comments on Draft EIR - Pebble Beach Company Project (DMFP), file # PLN100138

Dear Mr. Sidor;

The Monterey Skyline Forest Neighborhood Association strongly supports the Round-a-Bout Alternative in the Highway 68 (Holman Highway) Widening Project and is opposed to a proposal requiring additional traffic lanes and increased signalization at the Highway 1/Highway 68 intersection. Accordingly, we have the following traffic-related comments on the Pebble Beach Company Del Monte Forest Project (DMFP) draft EIR (DEIR):

15-01

1. On page 2-15, Pebble Beach proposes to mitigate traffic impacts by way of phase 1-B Roadway Improvements as a sub-set of TAMC and AMBAG plans for a Highway 68 Widening Project. The DEIR further alludes to a CALTRANS PSR completed in 2000 as the basis for the Widening Project. It is our position, however, that the year 2000 PSR is now out of date. In particular, it predated currently available design criteria for round-a-bouts, which will likely result in a major revision of the Widening Project design. The City of Monterey, as lead agency for the Widening Project, currently supports the safety, environmental, and cost advantages of incorporating a round-a-bout at the SR 1/SR 68 intersection.

15-02

2. We believe the adoption of Alternative 5 (Round-a-Bout) would allow the transportation network to mitigate many of the traffic impacts of the DMFP, as well as from existing congestion, without a second eastbound lane on SR 68, without a third lane on the SR 1 off-ramp, without a second right turn lane from SR 68 southbound, utilizing smaller retaining walls, and with far less air quality and environmental impacts - not to mention substantially improving traffic safety.

15-03

3. Fehr & Peers notes in Appendix E that the DMFP will have <u>unmitigated</u> traffic impacts on the SR 68/Skyline Forest Drive intersection. It contends that the LOS F problem can only be resolved with a traffic signal at the intersection (Auto Mitigation 1). We believe that the impact can be mitigated with the construction of the Round-a-Bout Alternative. Our conclusion is based on our previous

SKYLINE FOREST NEIGHBORHOOD ASSOCIATION

letter in which we disagreed with the Nov 2003 Skyline Traffic Study conclusion that a mere 20% of the traffic passing through the neighborhood is heading to another destination. Our observations conclude the percentage to be 50% or better during the morning and afternoon rush hours.

15-04 cont'd

4. We further disagree that the intersection problem is due to left turning traffic from Skyline Forest Drive onto SR 68. Our observation is that the left turn from SR 68 (largely bypass traffic) onto Skyline Forest Drive is the cause of the problem. As left-turning traffic queues up on SR 68 during rush hour, it prevents drivers out of Skyline (largely local traffic) from turning left (east) into the refuge lane. The best solution to that problem is to keep eastbound traffic moving on SR 68 so drivers have less incentive to bypass through the neighborhoods. That will only happen with a round-a-bout at the SR 1/SR 68 intersection.

15-05

5. Fehr & Peers also notes that the impacts on the Carmel Hill Professional Center will be <u>unmitigated</u>. We do not accept that conclusion. As noted in the Skyline Forest letter to CALTRANS dated Dec 6, 2006, the impacts can be mitigated if CHOMP & Pebble Beach would provide an at-grade crossing of Scenic Rd between CHOMP and its Professional Park. This would eliminate the need for left turns into or out of the Professional Park as well as the U-turns at the CHOMP entrance. Neither would be required since eastbound access from Highway 68 to the Professional Park, as well as eastbound egress, would be via the Scenic Rd. crossing and the CHOMP /SR 68 intersection. A second alternative is to limit out-bound traffic to right turn only onto Holman Highway, followed by a u-turn at CHOMP for drivers heading toward Highway 1. Accordingly, we are opposed to the installation of a traffic signal at the Holman Highway/Professional Center intersection.

15-06

6. We have also noted that the current signal at CHOMP remains red to both directions of SR 68 traffic when congestion causes eastbound cars exiting CHOMP to stop over the detector loops. This unnecessarily halts traffic on SR 68 in both directions backing cars into the SR 1/SR 68 intersection as well as into the Skyline/SR 68 intersection. This problem can best be addressed by the Round-a-Bout Alternative which can keep vehicles moving thereby preventing them from stopping over the loops.

15-07

7. The section of the DEIR discussing Alternative 5 (pg 5-25), is inadequate in several ways.

15-08

-First, it attempts to compare the Round-a-Bout Alternative, including bike route facilities, with a widening project (including Phase 1-B) that does not. This is comparing apples & oranges! A Phase 1 of the Round-a-Bout Alternative, without bike facilities, should be used in the comparative analysis.

15-09

-Second, the DEIR does the same thing when it compares the DMFP Phase 1B project with a full build out of the Widening Project inclusive of Alternative 5 (pg 5-26) - more apples and oranges!

SKYLINE FOREST NEIGHBORHOOD ASSOCIATION

- Third, The discussion makes extensive use of the phrase "slightly less" and "similar" in comparing benefits of the Round-a-Bout Alternative with the DFMP project with no evidence to back up those rosy assertions. The Climate Change impact (pg 5-29) is just the most obvious example. The DEIR attempts to equate the well recognized air quality advantages of a round-a-bout with stop & go traffic at a signalized intersection by contending the DFMP will obtain the same results by some combination of "..design features, replanting/or offset purchases.. or .. greenhouse gas emission offset of preserving Monterey Pine forest…"

15-10

- -Fourth, similar rosy assertions in the Air Quality; Aesthetics; Geology, Seismology, and Soils; Land Use and Recreation; Noise and Vibration; and Transportation and Circulation sections are equally suspect.
- 8. Tables 5-4 and 5-5 of the DEIR and the associated discussion clearly indicate the advantages of Alternative 5 over the current Widening Project plan and related Phase 1B. Although we understand that it is not the responsibility of the PBC to design or fully fund the complete Widening Project, PBC has a responsibility under Phase 1B to mitigate the DMFP impacts on the Skyline Forest Neighborhoods (TRA-C1) as well as the SR 68 highway ramp (TRA-C3). We believe both can be adequately addressed by construction of the round-a-bout at SR 1/ SR 68.

15-11

9. As noted in the DEIR, CALTRANS may need to approve a design exception to accomplish these mitigations, and TAMC will need to support a final design incorporating the round-a-bout. We are confident that all parties involved can work together to accomplish that objective. If so, the Skyline Forest Neighborhood should have no further objections to the Pebble Beach Del Monte Forest Project.

15-12

Sincerely.

James M. Cullem P.E. Chairman Skyline Traffic & Safety Committee

Cc: Skyline Forest Neighborhood Association Board Rich Deal, P.E., City of Monterey Traffic Engineer

LAW OFFICES OF MICHAEL W. STAMP

Facsimile (831) 373-0242 479 Pacific Street, Suite 1 Monterey, California 93940 Telephone (831) 373-1214

January 9, 2012

Via Email and Facsimile
Mike Novo, Planning Director
Joseph Sidor, Associate Planner
Monterey County Resource Management Agency
Planning Department
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

Re: Pebble Beach Company Project (PLN100138)

Comments on the Draft Environmental Impact Report

Dear Mr. Novo and Mr. Sidor:

This Office represents The Open Monterey Project, which makes the following comments on the Draft EIR for the Pebble Beach Company (PBC) project.

The Notice of Preparation and Project Description

The Notice of Preparation and Project Description are deficient because they did not mention the inclusionary housing that is required to be built under County ordinance. The inclusionary housing will be another 15 or 20 residential units that will be built as part of this project and that will have environmental impacts.

16-01

Water

The DEIR water analysis fails to adequately investigate, disclose or consider the impacts of water use by the mandatory inclusionary housing, or how to mitigate those impacts. Whether that mandatory housing is built onsite or offsite, it is a part of this PBC project and must be evaluated now, as part of the PBC project environmental review. The failure of the DEIR to include this information renders if deficient under CEQA. The information should be included and the DEIR should be recirculated.

16-02

It appears that when the water demand by the mandatory affordable housing is properly evaluated and included, the total project water demand will exceed any available supply, including the so-called PBC entitlement.

16-03

To the extent that PBC proposes to satisfy its inclusionary housing requirement through developing offsite housing or through paying an in lieu fee for the County to develop offsite housing or through any other proposal that includes any housing outside of the Forest, there is no water available for that non-Forest housing. According to the County ordinance and County staff, any offsite housing would have to be in the Coastal

area or at least on the Monterey Peninsula. No water is available for such housing, due to the overdrafting of the Carmel River and the Seaside basin, and the SWRCB Order 95-10 and Cease and Desist Order, and the Seaside Basin adjudication. The DEIR failed to evaluate these important issues.

16-04 cont'd

Under the Approved PBC Water Entitlement, "Benefitted" Properties are All within Del Monte Forest

The issue of which properties would benefit from the PBC entitlement has been highly controversial and heavily debated by the public before the public agencies. MPWMD rules prohibit use of the PBC entitlement outside the Del Monte Forest. This EIR anticipates modification of those MPWMD rules to allow use of the entitlement outside the Forest, including for the purpose of meeting the project's inclusionary housing requirement under County ordinance. Because that modification is foreseeable, and it is a part of this project, the environmental review of that proposed modification should have been included in this Draft EIR. This Draft EIR does not contain the significant information as to the impacts of using the entitlement outside the Forest. The information should be included and the Draft EIR should be recirculated.

To the extent that PBC proposes to use any of its entitlement outside the Forest, that proposal triggers a new EIR under MPWMD Rule 28-B.1. (See Sixth District Court of Appeal decision in Save Our Carmel River v. Monterey Peninsula Water Management District (2006) 141 Cal.App.4th 677.)

16-05

MPWMD Rule 28-B.1 states in key part as follows:

Due to the District's ongoing concern about the viability of the available water supply and the possibility that water transfers may result in additional water usage, water transfers shall be approved by the Board of Directors, subject to the other provisions of this Rule, if the transfer will not have an adverse impact on the water supply. In exercising its discretion, the Board of Directors shall consider the impacts of the application under consideration, as well as the cumulative impacts of other transfers, on the water supply.

Under the rule, the transfer may occur only "if the transfer will not have an adverse impact on the water supply." The DEIR concludes that the PBC project as a whole will have potentially significant and unavoidable impacts on water. The transfer of PBC entitlement water for use outside the Forest would exacerbate those impacts.

To the extent that PBC proposes to use any of its entitlement outside the Forest, that use is prohibited by MPWMD adopted ordinances and rules, including the ordinances that approved or modified the PBC entitlement. Any such proposal would require revision of the MPWMD rules, which is a known and foreseeable result of the proposal. Any such revision of MPWMD rules or ordinances would require environmental review. Therefore, such environmental review must be performed now, as part of this EIR, in order to avoid piecemealing.

16-05 cont'd

MPWMD Rules Require 15% Reduction in Any PBC Entitlement Transferred for Use Outside the Forest

Pursuant to MPWMD Rule 25.5, only 85 percent of the water use capacity is actually transferred in a water credit transfer. Therefore, any water credit is subject to a 15 percent reduction and reservation by the MPWMD. The actual amount transferred would have to account for this mandated reduction. The DEIR does not address this issue, which is a foreseeable part of the proposed use of water outside the Forest.

16-06

County Settlement Agreement with Leeper/Save Our Peninsula Committee Mandates EIR for Use of PBC Entitlement Outside the Forest

To the extent that PBC proposes to use any of its entitlement outside the Forest, that proposal triggers an EIR under the 2002 settlement agreement between Ed Leeper and Save Our Peninsula Committee and the County of Monterey.

That settlement agreement states in key part as follows.

2. No County Approvals Based on Water Credit Transfers.

a. Prohibition of Transfers. Existing County policy prohibits the transfer of water credits in connections with County development approvals. Further, County agrees that no water requirement, proof of water supply, or other condition or criteria of approval for any land use approval within that part of the County that is subject to the jurisdiction of the Monterey Peninsula Water Management District may include or be premised in whole or in any part upon a water supply that results from or is based in any part on any water saving mechanism as defined below without County first requiring the preparation and certification of a legally adequate Environmental Impact Report ("EIR"). Such an EIR must analyze potential environmental impacts

of the use of the water saving mechanism, including all cumulative impacts and all growth-inducing impacts.

...

For purposes of this Agreement, "water saving mechanism" is broadly construed to include proposals to transfer, move, or transport any water credit, water factor, water use, historic water use, water, capacity, or water entitlement, and which proposes to be based in part upon any claimed water reduction, retrofit, offset, relinquishment, sale or lease of water savings. . . .

16-07 cont'd

b. Environmental Impact Report. The EIR referenced above shall be a stand alone EIR, and not part of any other specific project approval EIR. The EIR shall include potential impacts from water saving mechanisms. The EIR shall include such matters as cumulative and growth inducing impacts relating thereto, the impacts of State Water Resources Control Board Order 95-10, the need to provide water to the Carmel aquifer, and the legal basis for each of the water saving mechanisms.

SWRCB: Order 95-10 and the Cease and Desist Order

Although the use of the PBC entitlement may not be subject to Order 95-10 requirements, the use of water under the PBC entitlement is subject to the Cease and Desist Order (CDO). Given those restrictions, the DEIR fails to adequately evaluate the direct, indirect, and cumulative impacts of water use, or to adequately mitigate for those impacts, or to consider alternatives.

16-08

As of now, the litigation over the CDO is still not resolved. This ongoing uncertainty should be disclosed and discussed.

The DEIR Fails to Adequately Disclose or Analyze the Impacts of the PBC Proposal to
Use its Water Credits, Valued at \$250,000 per Acre Foot, as part of its
Affordable Housing In Lieu Fees, instead of Providing On-site Housing

To the extent that PBC proposes to use water credits as part of its in-lieu fee for inclusionary housing, that proposal should be evaluated in the EIR. The proposal does not satisfy the intent, goals, or language of the County inclusionary housing ordinance.

16-09

The actual amount of proposed and potential reduction for the in-lieu fee should be quantified and analyzed in the EIR. The proposed and potential remaining fees and water should be evaluated, because it is probable and foreseeable that the water could

not be used outside the Forest, or could produce far less affordable housing than required or anticipated by the County ordinance.

│ 16-09 │ cont'd

According to its letter to the County, PBC values its water credits at \$250,000 per acre foot. Is that the value that the County will place on the water credit? If not, what value will be placed, and by whom, and by what method? These are policy decisions that have potential environmental impacts and that implicate the EIR analysis of project consistency with County ordinances. They should be evaluated in the EIR. The determinations may affect how much housing can be built, and where, and when, which affect compliance with the County ordinance and the policies applicable within the Coastal Zone and within the large portions of the Del Monte Forest that are not located in the Coastal Zone.

16-10

PBC characterizes its entitlements as "rights to water service." (PBC letter to Marti Noel and Joseph Sidor, County of Monterey, April 18, 2011, attachment, p. 5.) Does the EIR preparer agree with this characterization? How the entitlement is characterized may have an impact on the analysis of water demand, water supply, and water rights.

16-11

Water Demand

The DEIR is inadequate in its analysis of water demand of inclusionary /affordable housing that must be built to comply with the County ordinance. It is also deficient in its discussion of whether there is sufficient water in entitlement, even if the MPWMD rules are changed to allow entitlement water to be used outside the Forest.

16-12

All the DEIR water demand estimates are questionable, because they use average use of all houses in the Forest. In fact, the actual use of newer houses – those built in the last ten years – are much higher than average, and much higher than the figures used in the DEIR. The MPWMD allocates water to new development in Pebble Beach based on fixture unit methodology of that particular development, not on the basis of an average use such as the DEIR analysis suggests. The per-house MPWMD allocation is higher than the DEIR water demand analysis suggests, especially when the MPWMD makes an allowance for exterior landscaping irrigation. This means that the DEIR analysis of water demand impacts and water supply impacts is deficient.

16-13

The project proposes to transfer a water entitlement from the Forest for use outside of the Forest for affordable housing. The DEIR fails to disclose and discuss the fact that MPWMD studies do not show a reduction in actual water use, even after accounting for 15% paper reduction. To the contrary, transferring water seems to lead to a higher water use at the destination site than originally estimated. (See discussion in SOCR v. MPWMD (2006) 141 Cal.App.4th 677, 685-686, 705 and MPWMD records.)

document.

There are no conditions or parameters that would limit or "cap" the actual direct water demand to what is suggested in Table 3.12-7, "Direct Water Demand of Proposed Project." Without that cap, the actual future water use could be unlimited. If 16-15 the actual water demand for any one feature of the project goes over the amount estimated for that feature, what mitigations are proposed? The County's water use estimates in EIRs are woefully inaccurate, as shown in documents in the County's possession, the MPWMD's possession and as briefed in various cases in Monterey Superior Court. In this case, what investigative research 16-16 was done to prepare Appendix H? What actual documents were reviewed by the EIR preparer in order to determine actual water use of homes constructed in the Forest in the last ten years, or the last twenty years? This EIR should consider mitigations requiring prompt public access to all actual water use records by each property that uses any PBC water entitlement, in order to allow for accountability of the water use estimates in the EIR. There is no analysis of the water demand presented by the affordable housing that would foreseeably be built as part of or as a result of this project. All such demand 16-18 should be included in the water demand calculations. This will be new information, which means that the DEIR should be recirculated. Table H.2-1C-3, "Project Changes in Cal-Am Withdrawals from the Carmel River," is missing at least two key figures, which have the error "REF!" instead of a figure. Neither the DEIR nor its appendices reveal the size of each of the proposed lots, or the estimated size of the development for each lot. This information is relevant 16-20 because it would provide an indication of how much water each of the lots would use. The information should be provided in the recirculated DEIR. The water demand analysis is hidden away in Appendix H. To make matters worse, the key table, Table H.2-2B, "Potable Water Use of Proposed Project Average Year" is in font of approximately this size: Table H.2-28. Potable Water Use of Proposed Project Average Year. All of the 16-21 information in the table is in a font of the same tiny proportions, which makes it essentially impossible for the public or decisionmakers to read. The EIR fails as an informational

The water demand analysis is based on an unreliable source called "WWD 2011." That document is unreliable. The WWD 2011 assumptions of 1.0 and 0.8 for future lots are unsupported.

The WWD 2011 table is different from the Table H.2.2B that purports to rely on the WWD 2011 table. The WWD 2011 table uses an undefined and ambiguous symbol 1.0 AF per lot that is +/- 1.0 acre, and that it used 0.5 AF per lot that is +/- 0.5 acre. That is different from the DEIR Table H.2-2B that uses 1.0 AF per lot that is ">= 1.0 acre," and uses 0.5 AF per lot that is ">= 0.5 acres." Each of the symbols should be explained. "Greater than" one acre is not the same as "more or less" one acre.

16-23

As proposed, there is no limit to the amount of water that any proposed lot could use. Lots that are each estimated to use 0.5 AF or 1.0 AF could in reality use 2.0 or 3.0 AF each , or an unlimited amount, with impunity. That would cause unanalyzed and unmitigated significant impacts, bot direct and cumulative. The DEIR failed to investigate or mitigate these foreseeable impacts.

16-24

Table H.2-2C "Other Entitlement Demand"

The use of the Del Monte Forest (DMF) average water demand for future single family dwelling (SFD) development is not reasonable because new SFD development has a much higher average use than existing SFD use in DMF, which includes older homes. This comment applies to the table entries for both "existing vacant lots" and "area X and Y."

16-25

Also, SFD development does not necessarily include caretaker homes, granny units, and guest houses, or the water demand associated with those uses.

16-26

The table's "Sources" cite three documents, but there is no citation within the table to any of the sources. The public is left to guess which information in the table came from which source. That is not adequate under CEQA.

16-27

The table's "Sources" cites "1) DMF residential development calculations - ICF." Those calculations are nowhere to be found in the DEIR. The public has no way of knowing what "calculations" those are, and based on what data. The information should be released and included in a recirculated DEIR. It would be too late, and would not comply with CEQA, if the County produces the information in the Final EIR, because that would avoid public scrutiny and comment on the information. These water demand claims are significant information under CEQA.

16-28

The table's "Sources" cites to "2) DMF Average from 1997 EIR for PBC Lot Program." That EIR cannot be relied upon. The EIR was not certified, and the data was not reliable when it was included in the EIR.

16-29

The Table's "notes" are cut off in its discussion of remaining entitlement. The information is missing, so the public is unable to comment on it.

The Table's statement that 117 AF have been sold to DMF Benefitted properties is inconsistent with the statements elsewhere that 130 AF have been sold (e.g., p. 3.12.7). Which figure is correct? The different figures change the analysis, potentially significantly. All information in the EIR should be internally consistent.

16-31

DEIR Lacks Adequate Analysis of Problems with Developing Affordable Housing Outside of the Forest

Whether developed by PBC, the County, or someone else, there are many significant challenges facing the development of affordable housing to comply with the County's ordinance. There simply may not be available land in the Monterey Peninsula or the Coastal zone to comply with the ordinance. If the housing cannot be constructed, the project would not comply with the ordinance, and this inconsistency with the adopted ordinance should be discussed in the EIR.

16-32

No Inclusionary Housing Exists In the Del Monte Forest Land Use Plan or Carmel Area Land Use Plan

No inclusionary housing has been developed under the County ordinance in the area covered by the Del Monte Forest Land Use Plan. No inclusionary housing has been developed under the County ordinance in the area covered by Carmel Area Land Use Plan, or the Big Sur Area Land Use Plan. This information was revealed by County staff in response to repeated questions during the County review of the failed Villas de Carmelo subdivision proposal in mid 2011.

16-33

The PBC proposal is to avoid any onsite inclusionary housing as part of this project. That proposal seems to be inconsistent with the LCP, the County ordinance, the County goals and policies applicable to the project, and good planning. The PBC project is foreseeably the last large project in the Coastal Zone in the Del Monte Forest and Carmel Area plan areas. Failing to place inclusionary housing in the Forest would mean that all such placement would evaporate in the foreseeable future. These issues have not been adequately analyzed in the DEIR.

16-34

Inclusionary Housing Within the Forest

At least one project alternative should evaluate on-site inclusionary housing within the Forest, because the County ordinance states that on-site inclusionary housing is strongly preferred, and because onsite inclusionary housing is good public policy.

16-35

Another project alternative should include placing at least half of the required inclusionary housing in the Forest.

DEIR Discussion of Entitlement is Not Accurate

At page 3.12-7, the DEIR claims as follows:

Ordinance 109 allowed Pebble Beach Company to sell up to 175 AF of the Company's remaining unused water entitlement to interested Del Monte Forest residential property owners, with the proceeds from such sales to be used to pay for Phase II. Since 2004, Pebble Beach Company has sold approximately 130 AF of its remaining 355 AF water entitlement to Del Monte Forest residents, of which such residents connected are using approximately 30 AF. Therefore there is approximately 225 AF of unused water entitlement for Pebble Beach Company and residents have 100 AF of unused water entitlement, for a total remaining unused water entitlement of 325 AF.

That claim, and the use of the term "unused water entitlement," are misleading. If 130 AF has been sold to residents, then that amount is "used," and PBC has only 225 AF left. The EIR discussion improperly merges the entitlement possessed by DMF residents with the entitlement possessed by PBC. As a result, the EIR discussion is confusing and misleading. PBC cannot use the entitlement that PBC sold to residents.

MPWMD's "MONTHLY ENTITLEMENT REPORT" (EXHIBIT 19-B to the December 2011 MPWMD Board meeting packet) states that as of the Month of November 2011, CAWD/PBCSD Recycled Water Project Entitlements included 237.437 AF for the Pebble Beach Co. It is misleading for the DEIR to suggest that 325 AF entitlement is available for this project, when it is not.

This is important because the DEIR repeats the purported claim of 325 AF in a misleading way. As one example, on page 3.12-31, in the DEIR section entitled "Ability to Supply Water for Project," the first sentence is "As described above under "Environmental Setting," there is a remaining unused water entitlement of 325 AFY." That statement is misleading because PBC's remaining entitlement is much less than 325 AF.

There is no water use shown in the DEIR charts for property in the project that is called open space. Is there a prohibition on water use for property designated as "open space"? Please explain, with citation to references. If property called "open space" can be developed with any water use, such as for a park, or landscaping, or any other use that involves water, then the DEIR is flawed because it has not included that water use in the water demand estimates. The DEIR should place a mitigation that precludes any potable water use on the property called open space.

16-37

"Collins Residence"

The DEIR discussion of the Collins residence is very confusing. It is referenced in the EIR as a credit for 1.0 AF, but there is no proof of the actual water demand. The DEIR's guess of 1.0 is merely a guess. That information is very easy to determine and obtain, and the EIR preparer should get the accurate information and reveal it. The information may change the analysis.

16-39

Regional Project

To the extent that the Regional Desalination Project is relied upon, that reliance is not reasonable. In December 2011, the Monterey Superior Court ordered the Marina Coast Water District to prepare a new EIR for the Regional Project. That information was not considered in the DEIR for the PBC project.

16-40

Landscaping

The DEIR discussion of landscaping and irrigation demand is deficient. The water demand for the revegetation and planting efforts as a result of the project should be investigated, quantified, and included in the recirculated DEIR. The water demand for exterior landscaping of all proposed project uses should be investigated, quantified, and included in the recirculated DEIR. In short, all water uses that will arise as a result of the PBC project should be investigated, quantified, and included in the recirculated DEIR.

16-41

Thank you for the opportunity to comment on the Draft EIR. Please place this Office on the distribution list for this project for all public hearings, updates, and notices under Public Resources Code section 21092.2.

Very truly yours,

LAW OFFICES OF MICHAEL W. STAMP

Molly Erickson

Hale

Robert Hale 813 Cypress Street Monterey, CA 93940 9 January 2012

Joseph Sidor Monterey County RMA Planning Department 168 W. Alisal Street Salinas, CA 93901

RE: Comments on DRAFT EIR for Pebble Beach Company Project, PLN100138

I have the following comments regarding the DEIR for the Pebble Beach Company Project, presently under consideration. This proposal is definitely an improvement over previous development plans over the last two decades. There are still a few areas of the proposed development that concern me that in that they impact directly or indirectly important habitat for endangered plant species. Portions of Area K harbor a high density piperia habitat and Area L encroaches upon the extraordinarily rare Potentilla hickmanii. In my view the project can be improved by consideration of the following comments:

17-01

1) Alternatives to the Project - Removal of several lots will provide for a securer preservation of the most important endangered plant habitat. Some lots in Area K, L and perhaps J are the areas that I am most concerned about impacts on endangered species habitat. Of the Alternatives listed, ALT 1B comes closest to my preference, but it is not necessary to eliminate all the lots. The lots in important habitat should be preserved and lots fit into more disturbed habitat. I also see no need to require inclusionary housing at the Corporation Yard. That can continue to be residential housing. Comments on Alternatives follow:

17-02

- a) ALT 1A, 2A Not preferred. Area J is a more fragmented area and with the exception of Lot 1 the impacts on dense piperia habitat is minimal.
- b) ALT 1B, 2B Closer But not all of K, L need be preserved which would minimize the number of lots to be fit in elsewhere. See my preferred next comment item.
- c) ALT 1C, 2C This puts more housing into Area L and unnecessarily tries to protect every occurrence of piperia in the project. A noble goal, but only the denser more separate occurrences need to be protected in the context of preservation of the larger habitats and populations
- 2) My Preferred Alternative Remove from Area K lots 2-4 and 8. Remove from Area L lots 6-10 and Area J reconfigure Lot 1 so that the north slope is placed in preservation. This will leave 9 units that could be relocated in the more disturbed Area F-2 or the Corporation Yard. No inclusionary housing needed in Pebble Beach. See comments 6-8 below for more discussion.

3) Area B - Employee Parking Lot Impact on Area B preservation area.

What will be the impact of lighting and the view of the Parking Lot from the western portion of the Preservation area? This impact could be significant if not designed properly. Please include similar language contained in mitigation requirements for the Corporation Yard development that require lights be shielded, directed away from and not visible in the Preservation area B.

17-04

Visibility of the lot could be reduced by constructing parking lot to be sunken below the elevation of the preservation area. There is currently a built up fire road that drops off into the parking lot. Perhaps a small barrier could be built.

17-05

The impact of construction disturbance spreading non-native plants into the preservation area is potentially significant. The fire road boundary is already quite overgrown with non-native invasive plants. Mitigation should be to require control of invasive nonnative plants at the edge of the preservation area.

17-06

4) Mitigation BIO-A1 establishes the need to implement resource management plans for maintaining and the biological resources. They are grouped by areas of contiguous habitat, for example are PQR. The DEIR does not recognize that there are existing open space areas managed by DMFF that border on two plan preservation areas at Seal Rock Creek and Area B,C. It is important to include these in the management plans as they are ecologically connected as a intact Monterey pine forest and non-native plants may easily spread into the Preservation areas. Include the following in:

17-07

- a) Area B, C The open space areas adjacent to Area B are currently dedicated open space resource areas and need to be managed together with Preservation area B. Better yet would be to coordinate with the Regional Park District for management of Rip Van Winkle park, too. Current invasive plants include English Ivy, Genista (broom), holly, veldt grass (Ehrharta erecta) amongst others. Excessive off trail use by dogs and people is also degrading portions of the area.
- b) Lower Seal Rock Creek The open space forest to the north of Indian Village Picnic site extending from the Dunes to Stevenson Drive is contiguous and makes up the majority of forest that Area L is part of, and should be managed in the Lower Seal Rock SSRMP.

5) Mitigation BIO-A1 requiring site specific management plans does not include the resource of native grasslands. Native Grassland habitat protection in SSRMPs is needed

to be addressed in the DEIR as a biological resource to be protected. Please include this resource to be managed in the SSRMPs. Coastal prairie and other native grasslands are an increasingly rare habitat type in California and Pebble beach contains several dominant grasslands under pine forest that range from dry to wet conditions. Sensitive plant species such as pine rose and endangered yadon's piperia often grow in grassland habitat. They can be easily degraded by non-native grasses both annual and perennial (veldt

17-08

They can be easily degraded by non-native grasses both annual and perennial (veldt grass). Protection and enhancement of open meadows such as the Spruance meadow and Indian village meadow as well as the native grass understory of the Monterey pine forest is critical to the health of these habitat resources.

6) Impact BIO-D1 concerns the removal or indirect impacts on approximately 8000 piperia plants on about 8 acres of habitat. The impact of the loss of critical habitat areas for the piperia is not considered in this DEIR, but is important for the survival of the endangered species. The proposed project will severely impact two areas of high density habitat that is not contiguous to other populations proposed for preservation. Smaller, isolated and less dense populations may not be as important, though the DEIR does state that an isolated population of 274 plants in Area B is important for critical habitat. In particular, development in Area K severely, directly and indirectly, impacts an area of several acres of habitat with over 5300 plants that is a separate from other populations. Therefore development of Area K is a significant impact that can not be mitigated as it is high density, disjunct population important for critical habitat in the recovery plan for Yadon's piperia. Area J also contains higher density piperia habitat. To preserve this important critical habitat reconfigure the project:

17-09

- a) RECONFIGURATION of Area K Delete Lots 2, 3, 4, and place them in the preservation parcels. This is the largest block of high quality (free from invasive weeds) piperia habitat and plants in Area K. Lot 8 also has a dense population and should be removed also due to it's proximity to a wetland. The other populations are in somewhat degraded condition from genista and more fragmented. Please analyze this as an alternative to the proposed project.
- b) RECONFIGURATION of Area J Lot 1 will directly and indirectly affect an area of piperia habitat that extends westward into a preservation parcel. Deletion of Lot 1 and adding this acreage to the preservation parcel will preserve a significant block of habitat for piperia. At least the northern half of the Lot 1 should be added to the adjacent preservation area
- 7) Mitigation BIO-D4, Regarding Impact of Area L development on nearby Potentilla hickmanii in Indian Village.

The impact identifies lots 6-10 and the road to them as having a significant impact on the drainage uphill from the Indian village habitat for the Potentilla. This plant occurs in only two populations in the world and deserves the highest level of protection. The Impact is not able conclude that effects on drainage can be ascertained and requires a certification prior to subdivision. Due to the rarity of the plant this mitigation leaves too much chance for adverse impacts and the impact is not mitigatable. Avoidance of development adjacent needs to be considered. Reconfigure to at least remove Lots 9 and 10 and place in the preservation parcel, as these seemed to be the lots located most directly up gradient from the meadow population. Removal of lots 6-10 and the access road to them would provide the highest level of protection.

17-10

8) Impact of Area L development on a large block of contiguous ESHA pine forest. The DEIR fails to identify that the 18 acre Area L is part of a much larger pine forest that stretches from the sand dunes at Bird Rock eastward to a golf course and

Stevenson Road. This appears to be a block of 80 to 100 acres that has a minimal passive open space recreational area at Indian Village surrounded by the larger preserved open forest space. Why is this substantial intact acreage of ESHA not being considered as an ESHA that is not suitable for development?. It meets all the requirements for important Monterey Pine ESHA. How were areas of ESHA selected that are allowed to be developed? What criteria did this larger lower Seal Rock EHSA forest that area L is contained within allow it to be designated developable? This would be another reason to minimize the impact on ESHA by allowing at the most development on lots 1-6.

17-11 cont'd

17-12

- 9) Mitigation Measure BIO-B3 which details additional elements for the HHNHA such as specifying closing and revegetating all informal social trails. There are some social trails that provide for a suitable extension to the designated fire roads system that would be suitable for hikers only. The HHNHA SSRMP should conduct an inventory of existing social trails and consider dedicating some of these that do not impact habitat for rare or sensitive plants. Many are mountain bike trails that are severely eroding and are mere shortcuts that need to be removed and rehabilitated. There a few trails that pass through pine forest and would add to the hiking network as hiking only trails. It would be good if there was some mechanism to decide which trails could remain.
- 10) Comments regarding Resource Management Plans in Appendix C follow:
- a) SSRMP for HHNNA It is important that this plan include removal of the large stand of invasive acacia and broom in the Sawmill Quarry borrow site. The presence of these plants will be a source for non-native plants to spread into the surrounding HHNNA. Completion of the Spanish Bay requirement to restore the quarry site, removing the non-natives and planting native pine understory plants will remove a festering wound in the HHNNA area. Another high priority area is the interface zone of the Corporation Yard development which also has established and introduced invasive plants into the HHNHA.

17-13

b) Please have the SSRMP's identify native grassland habitats as resources to be protected and include special monitoring to ensure control of non-native plant invasion.

c) Monitoring for potential impact from development activities. The SSRMPs contain provision to monitor for residential encroachment of ornamental plants into preservation areas. Land conversion such as housing and roadways is a major pathway for of all sorts of non-native invasive plants to become established. So monitoring must be changed to include the following:

17-15

Residential Encroachment: to monitor for non-ornamental and all non-native potentially invasive plants. One example would be veldt grass which becomes commonly established around houses.

Roadside Encroachment - Add an element for Roadside Encroachment to require 17-15 similar monitoring and control of non-native invasive plants, including grasses, along roadsides bounding preservation areas. d) Monitoring for invasive plants in all SSRMPs - Important to include all invasive plants that can impact the biological diversity and not just shrubby plants. Annual grasses are becoming more of a problem and are only effectively addressed when first appearing in an area. Problem grasses include: rattlesnake grass (Brizza maxima), rip 17-16 gut brome (Bromus diandrus), pampas grass, velvet grass (Holcus lanatus) in wet areas and most recently veldt grass (Ehrharta erecta) that is appearing and spreading more. Oxalis or Bermuda buttercup is also becoming an invasive plant in coastal Monterey County. e) Effective monitoring is extremely important, so that weed control work can be successful. Treated areas must be inspected on at least a quarterly basis to effective address re-sprouts of weeds or deal with other invasive plants such as grasses that may 17-17 come in upon the disturbance of the area to control the original weed. Protection of the habitats will only succeed with diligent monitoring and control efforts. Commitment of adequate staff and resources is vital f) Education component of SSRMP - should be a part of all the SSRMPs. Property owners should be informed of what kinds of plants they should not plant, how to recognize invasive weeds, how to report invasive weed problems, and how to receive help from Pebble Beach to remove the invasive plants. Most invasive weeds that occur in the preservation areas are also major problems for owner's yards. Pebble Beach 17-18 Company should offer informal outreach events to help property owners understand the unique native plants around them and the kinds of invasive weed threats that the Pebble Beach forest face. I think outreach to Robert Louis Stevenson School for volunteers to help monitor and combat weeds would be very valuable. Motivating and using volunteers will greatly leverage the monetary resources invested. g) Members of Resource Management Team (RMT). The California Native Plant Society, CNPS, with its knowledge of local plants and invasive plant issues would be a good organization to invite to participate on the Resource Management Team. Please include this in the section describing the RMT. h) In section 5 of Appendix C, where the individual SSRMP are described, I think it is important to add as a GOAL: To monitor for, remove and control non-native invasive plants. The long term health of many sensitive plants will be compromised if invasive 17-20 plants are allowed to dominate areas of the forest. It only takes a few years for nonnatives to become established in an area. Monitoring and removal/control of non-native invasive plants is as or more important as enhancing reproduction of the native plants. i) Will there be a process for the public to review Resource Management Plans (RMP) and annual work reports? – and more importantly a process whereby suggestions can be

submitted as to areas that need work such as weed control and suggest methods best to control?

11) Cumulative Impact BIO-B1(C) on Monterey Pine forest regionally - The DEIR uses an arbitrary 95% preservation of pine forest in the project plan area. Where does this figure come from? Why isn't there a requirement to at least offset the direct and indirect Monterey pine ESHA lost with at least equal acreage preservation of Monterey pine forest elsewhere, as in previous plans?

17-22

Pebble Beach Company has already entered into MOU to protect 99 acres of Yadon piperia habitat at the Old Capitol site and the Aguajito site (more than the Project develops) If the project directly destroys and indirectly modifies nearly 85 acres of Pine forest ESHA, why doesn't the project simply dedicate to preservation at least 85 acres in the regions Monterey Pine forest and not just an additional 7 acres? The Aguajito site provides more than enough acres.

17-23

Miscellaneous Comments:

12) Appendix F - for current condition of Area O. Fails to mention that much of area O has significant coverage of rattlesnake grass and genista bushes. There is no statement as to what impact these non-native plants are having on the extensive yadon's piperia population there. Please update biological discussion of Area O.

17-24

13) Is there anything in the Proposed Project that alters the condition for restoration of the Sawmill Gulch borrow site as a condition of Spanish Bay Development. This restoration has not yet been completed. Will this restoration condition be completed as part of the SSRMP for HHNA and surrounding parcels? Other than planting trees, the area was allowed to become largely overgrown with invasive acacia and broom. Restoration of a native pine understory does not appear to have been attempted, nor may it be possible with the prevalence of the weeds now.

17-25

14) For all mitigations - In general the DEIR has well thought out conditions imposed to ensure protection of the resources. Will there be adequate funding to provide for the personnel and resources needed to successfully comply with the mitigations?

17-26

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Pebble Beach Company has submitted a plan for development that is a much improved over the previous plan from 2007. While there are a lots in areas J, K and L that should not be developed, the plan has to a great degree maintained sizeable areas of forest and the integrity of the trail system. I look forward to the dedication of the preservation areas and am eager to help monitor and ensure that the biologically rich pine forests of Pebble Beach remain a tranquil retreat for nature lovers for many generations to come.

Scifres

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Via Electronic & US Mail

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RE: Comment to DEIR – Pebble Beach Company Project, Del Monte Forest Area (PLN 100138; State Clearinghouse No. 2011041028)

This firm represents Mr. and Mrs. Donald R. Scifres, owners and residents of the property located at 3310 17 Mile Drive, which is adjacent to the proposed Fairway One component of the Pebble Beach Company Project. This letter comments on the Draft Environmental Impact Report ("DEIR") prepared for the Pebble Beach Company Project (PLN 100138; State Clearinghouse No. 2011041028).

18-01

A. Noise

Although noise levels in excess of the applicable thresholds would likely be associated with the Fairway One commercial development when measured at the nearby residential receptor area, particularly at the 3310 17 Mile Drive property, the DEIR does not present a clear and comprehensive analysis of the anticipated noise impacts. Appendix G of the CEQA Guidelines requires the review of "exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies." The 1982 Monterey County General Plan cites the U.S. Environmental Protection Agency's ("USEPA") thresholds of 55 dB Ldn for outside and 45 dB Ldn inside for protection of general health and welfare. General Plan Policy 22.2.1 states that new development must conform to the

¹ The DEIR fails to explain the following conclusions found on Pages 3.9-3 and 3.9-4: "The General Plan's Noise Element contains planning guidelines relating to noise. It identifies goals and policies to support achievement of those goals, but it is not legally enforceable. The goals and policies contained in the General Plan apply throughout the jurisdiction. The Monterey County Noise Ordinance, part of the Monterey County Code, is legally enforceable." The DEIR conclusion concerning the Noise Element is contrary to law. The 1982 Monterey County General Plan sets forth the mandatory standards for environmental review of this Project (See, e.g., Endangered Habitats League v. County of Orange (200) 131 CA4th 777), and is at the top of the County's land use regulation hierarchy (Neighborhood Action Group for the Fifth Dist. v. County of Calaveras (1984) 156 CA3d 1176).

noise parameters established in Table 6. Table 6, which is included as Table 3.9-2 in the DEIR, sets forth Land Use Compatibility for Exterior Community Noise Environments. For low density single-family residential dwellings, such as those near the Fairway One Project, Table 6 establishes 50-55 dB as the normally acceptable outdoor noise range. While this is intended to be the noise range required to be met in the construction of new residences, given the apparent absence of any other General Plan standard for the range of noise level that commercial development can generate at an adjoining residential receptor, this range, mirroring the USEPA thresholds should be considered the relevant performance standard for the Fairway One project.

18-02 cont'd

The traffic noise exposure modeling in the DEIR for the road segment closest to the Fairway One Project, i.e., 17 Mile Drive South of Stevenson Drive, shows the existing noise level at 58 dB Ldn, which would increase with the Project. Both the baseline and "with project" noise levels are above the USEPA recommended levels referenced in the 1982 General Plan. Because noise is a "threat to physical and mental health" (P. 86, 1982 General Plan) and the baseline measurements are above those levels necessary to protect general health and welfare (P. 86, 1982 General Plan), any measurable level above the baseline must be considered significant. This is particularly important since the DEIR identifies "locations where people reside or where the presence of unwanted sound could adversely affect the use of land" as sensitive receptors. (P. 3.9-9, DEIR.)

18-03

To mitigate noise/health impacts, the 1982 General Plan sets forth several policies that should apply to the Fairway One Project. These include (1) Policy 22.2.5, which states that "the County, in accordance with Table 6, should require ambient sound levels to be less at night (10 p.m. to 7 a.m.) than during the day"; and (2) Policy 22.2.4, which requires the County to "specify working hours as part of the use permit for industries where on- and off-site noise is a concern to adjacent land uses."

Both the baseline and "with Project" noise levels are also within Noise Range II, Conditionally Accepted, of General Plan Table 6. Table 6 specifies that new development which falls within Noise Range II must prepare "detailed analysis of the noise reduction requirements" and include "noise insulation features" in the project design.

18-04

The General Plan policies and measures discussed in Table 6 should apply as mitigation measures for the Fairway One Project, which will not only address the significant noise/health impacts, but also make the Project consistent with the 1982 General Plan.

The DEIR also failed to adequately analyze interior noise and vibration impacts to nearby residential dwellings as a result of the Fairway One Project. The interior noise and vibration analysis must consider direct and cumulative; short (i.e., construction) and long term; and day and night time impacts. Events at the proposed Fairway One meeting facility must also be considered in the analysis. For determining the threshold of significance, the health-based standard of 45 dB should be

considered, consistent with the USEPA threshold cited in the 1982 General Plan. The Office of Planning Research's *Thresholds of Significance*, *Criteria for Defining Environmental Significance* recommends a health-based standard of significance for noise.

18-05 cont'd

Specific to noise generated from the on-site Fairway One parking lot, the DEIR concludes without discussion or evidence that "the noise from vehicle parking lot use is anticipated to be less than noise produced by passing vehicles". This bare conclusion cannot satisfy the requirement that the EIR serves as an informational document. (*Gray v. County of Madera* (2008) 167 Cal. App. 4th 1099, 1123.) The noise and vibration from the Project's parking lot which will be experienced by the nearby sensitive receptors, particularly during construction, meetings and events, may be more than those experienced from traffic on 17 Mile Drive. But the unsupported conclusion also misses the point. The threshold of significance is not whether the project noise, including the noise from the parking lot, is less than noise produced by passing vehicles. The appropriate question under CEQA is whether such noise, either directly or cumulatively, is above or below the applicable thresholds. As noted above, for the nearby residences, the threshold should be 55 dB for outside and 45 dB inside for protection of general health and welfare. More particularly, the standard should be expressed as dB(A), because industry practice is for community ambient noise levels to be measured in the A weighted sound pressure level. Further analysis, identification of appropriate thresholds and evaluation of feasible mitigation measures are necessary in order for it to comply with CEQA.

18-06

Finally, the closest monitoring site used to measure ambient noise levels (as shown on Figure 3.9-1 of the DEIR) is about 2,000 feet from the Fairway One Project. Due to distance of the ambient noise monitoring site from the Project, it is important to fully discuss in the body of the document the accuracy of the noise modeling, including uncertainty factors and margin of error. The DEIR is absent such discussion and fails, in that regard, to be a fully informational document.

18-07

In summary, the following are recommended to assess and address potentially significant noise/health impacts, and in order to achieve the necessary Project consistency with the 1982 General Plan:

18-08

- Perform direct and cumulative analyses of the potential for direct and cumulative interior and exterior noise and vibration impacts of the Fairway One Project upon the nearby residential dwellings, particularly at the adjacent 3310 17 Mile Drive property. Such analyses must include short term and long term and day and night time noise exposures.
- **18-09**

 Fully describe in the body of the DEIR the uncertainty factors and margin of error of the noise modeling.

Change the standard of significance to health-based standards of 55 dB(A) for outside
and 45 dB(A) for inside; establish that any measurable level above these health-based
thresholds is significant; and apply appropriate mitigation measures.

18-10

4) Establish lesser ambient sound levels at night (10 p.m. to 7 a.m.) than during the day as a mitigation measure, consistent with General Plan Policy 22.2.5.

18-1

 Specify operating hours for the new meeting facility as a mitigation measure, consistent with General Plan Policy 22.2.4.

18-12

B. Aesthetics

The Fairway One Project includes removal of mature landscaping, including 66 trees, and construction of two-story buildings. As applicable to this Project, the standard of significance set forth in the DEIR is as follows: "Substantial degradation of existing visual character, or quality of the site or surrounding area or incompatibility with the development scale and style of the surrounding area." (P.3.1-12, DEIR.) This standard of significance is consistent with the Del Monte Forest Land Use Plan/Local Coastal Programs ("LUP/LCP"), which states as follows: "Particular attention is to be given towards siting and planning development to assure compatibility with existing resources and adjacent land uses." (p. 48)

18-13

Although the above standard of significance is described in the DEIR, the DEIR fails to adequately review the incompatibility of this large commercial development adjacent to residential uses. For example, the DEIR failed to adequately analyze the land use incompatibility impacts resulting from the increase in the allowable building heights and the narrower setbacks with the Project's proposed planning and zoning amendment from LDR to GDC. Also, the simulations included in the DEIR do not include "before" and "after" stimulations from the vantage point of nearby residential dwellings. Without a fuller analysis of potential land use incompatibility impacts, the standard of significance is not properly applied. Because the Fairway One project includes land use plan amendments and rezoning, the EIR must include analysis of the potential impacts to nearby residences associated with the differences in development standards between a residential and commercial project.

18-14

The DEIR concludes without sufficient basis that: "Overall, the proposed development at The Lodge at Pebble Beach would generally appear similar to existing facilities in scale and visual character and would not substantially alter the area's existing visual character and quality. Therefore, this impact would be less than significant." Again, this bare conclusion cannot satisfy the requirement that the EIR serves as an informational document. The Project includes a 40-unit complex with parking, a parking structure, and a 2,100-square foot meeting facility, which would be considered incompatible with nearby single family residential dwellings. In order to address this significant incompatibility impact, the EIR should recommend detailed site-specific mitigation

measures of for landscape screening (such as requiring a landscape plan and establishing specific performance criteria) and exterior paint colors and materials for the Fairway One Project buildings in order to visually screen the Project from nearby residences. Moreover, the building heights and setbacks should be consistent with the current LDR zoning to lessen the impacts resulting from the Project's incompatible land uses.

18-14 cont'd

Additionally, to avoid substantial degradation of the existing visual character and quality of the surrounding area, all utility lines for the Project should be underground to hide them from public view, consistent with LUP Policy 53. More specifically, the proposed LUP amendment of this policy should not be allowed for the Fairway One Project due to its potential to substantially degrade the character and quality of this mixed residential/commercial setting.

18-15

In addition to the Project's incompatibility with adjacent land uses, the Project will create light pollution impacting the health of the nearby residents and the environment. Light pollution, particularly during the nighttime, has been known to cause significant health impacts. The scientific article enclosed as Exhibit "A", states that the increasing prevalence of exposure to artificial light at night has significant social, ecological, behavioral, and health consequences. This health impact has not been evaluated in the DEIR.

18-16

Although Mitigation Measure AES-C1 requires light and glare reduction measures in design plans and specification, it cannot be determined if the measures are sufficient to reduce their direct and cumulative health impacts to less than significant without reviewing a lighting plan as part of the analysis. Consequently, the mitigation should include precise performance standards for the lighting plan, including but not limited to the locations, types, numbers, and wattages of the exterior lighting fixtures in order to reduce this impact to less than significant.

18-17

In summary, the following mitigation measures should apply to the Project's potentially significant land use incompatibility, aesthetics and light pollution/health impacts:

18-18

- Specify with particularity performance standards for landscape screening to visually screen the Project buildings as viewed by the nearby residents, particularly the residents of the adjacent 3310 17 Mile Drive property.
- Specify with particularity performance standards for exterior paint colors and materials of all structures (including roofing materials) as required to minimize visibility of the buildings from nearby residences.
- Require all utility lines to be underground to hide them from public views consistent
 with LUP Policy 53 (i.e., a LUP amendment should not be allowed for the Fairway
 One Project).

 Require and specify with particularity performance standards for a lighting plan, including but not limited to locations, types, numbers and wattage of exterior lightning fixtures.

18-21

C. Parking, Traffic, Circulation and Associated Impacts

Although the DEIR states in a footnote (Footnote 5, Page 3.11-36) that parking is not considered a CEQA impact under the current guidelines, and the parking analysis is for information purposes only, the DEIR establishes a baseline, formally defines the standard of significance, includes an impact analysis, and applies mitigation measures for parking, and thus, the substantive provisions of CEQA apply irrespective of the conclusion in the footnote. The 1982 General Plan and the LUP/LCP policies also address parking, indicating that parking is a broader land use and environmental issue that requires attention.

18-22

The DEIR parking analysis is inadequate for the Fairway One Project. Of particular concern are (1) the high potential for impacts to the nearby residential use (such as at the 3310 17 Mile Drive property) due to increased demand for on-street parking and increased traffic associated with guests and visitors of the expanded lodge facilities; (2) idling delivery trucks, buses, and shuttles resulting in increased noise and toxic emissions exposure to nearby residents; and 3) circulation and traffic safety risks resulting from the placement of the exit driveway in close proximity to the residential driveway at 3310 17 Mile Drive. The Fairway One complex proposal consists of 40 guest units, and the project has a U-shape driveway that only provides 28 parking spaces. (P. 3.11-64, DEIR.) Although the DEIR notes that additional cars would be valet-parked at the new parking facility (P. 3.11-64, DEIR), there is no analysis of whether guests, visitors and employees may instead seek to park along 17 Mile Drive. It is reasonable to assume that the 28 on-site spaces, which are inadequate for the 40-guest unit complex under county codes, will be fully utilized and overflow demand may utilize the free and more proximately located parking situated on 17 Mile Drive as opposed to the more distant valet parking. This increased use may result in the impacts described above.

18-23

The proposed exit from the Fairway One complex is located close to the residential driveway at 3310 17 Mile Drive and may result in potentially significant circulation, traffic, noise and hazard emission impacts not fully evaluated in the DEIR. The EIR should evaluate the feasibility of reducing these impacts to less than significant with a redesign of the project driveway so it is not circular and the ingress and egress both occur where the present ingress is proposed (near the common boundary of the Beirne and Fairway One lots). This modification would also minimize noise impacts to the Scifres residence associated with guests exiting the Project site near the Scifres driveway entrance. Also, the use of the project driveway and 17 Mile Drive should be limited to avoid dangerous conditions for pedestrians and to limit emission exposure by nearby residents, particularly from idling taxis, trucks, buses and shuttles. As part of access control, only passenger

vehicles should be allowed in the project driveway on a routine daily basis and idling engines between the Project driveway and the residences on 17 Mile Drive should be prohibited to lessen these impacts.=.

18-24 cont'd

18-25

Under Impact TRA-F3 for parking conditions during special events, the DEIR concludes that the overall parking impact to the area is expected to remain the same with or without the project. There is inadequate discussion or information to support this conclusion for the Fairway One Project. A 40 unit hotel development on a commercial parcel will have a greater impacts than those associated with the existing Beirne residence. Additionally, the proposed 2,100-square foot meeting facility, any special event could further increase the overall parking demand over what was assumed in the DEIR. The parking space needs were calculated using the parking requirements set forth in section 20.58 of the Monterey County Code which are limited to "convention center, meeting hall, and exhibits." If the use of the project is not limited to only these uses in the application or by conditions of approval, then parking demand needs to be recalculated.

In summary, the following are recommended in order to address parking and its associated impacts:

18-26

- Modify the U-shaped driveway to provide for one ingress/egress point near the presently proposed ingress between the Beirne and Fairway One parcels.
- 2) Limit daily use of the driveway to passenger vehicles.

⊺18-27

 If the 2,100-square foot meeting facility will not be limited to "convention center, meeting hall, and exhibits", reevaluate parking demand and impacts.

18-28

4) Prohibit the parking or staging of vehicles with idling engines on 17 Mile Drive between the Project entrance and the residential driveway at 3310 17 Mile Drive.

18-29

D. Health Impacts

Under CEQA, a lead agency must make a finding of significance if a project's impacts may cause substantial adverse effects on human beings. (Pub Res C §21083(b)(3); 14 CCR §15065(a)(4).) Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people will be significantly affected. The adverse effects on human health associated with the Fairway One Project include noise, light pollution and vehicle emissions, particularly for the residents of 3310 17 Mile Drive. These potentially significant impacts to human health were not adequately evaluated in the DEIR. To mitigate the health impacts associated with noise, light pollution and vehicle emissions, the aforementioned mitigation measures for the Fairway One Project should be evaluated for feasibility and the ability to reduce potentially significant impacts to a level of insignificance.

Thank you for this opportunity to comment on the DEIR.

Respectfully submitted,

Mark A. Blum

Enclosure

cc: clients

Mark Stilwell, Executive Vice President/General Counsel

4846-1477-2238, v. 1

MINI REVIEW

The dark side of light at night: physiological, epidemiological, and ecological consequences

Abstract: Organisms must adapt to the temporal characteristics of their surroundings to successfully survive and reproduce. Variation in the daily light cycle, for example, acts through endocrine and neurobiological mechanisms to control several downstream physiological and behavioral processes. Interruptions in normal circadian light cycles and the resulting disruption of normal melatonin rhythms cause widespread disruptive effects involving multiple body systems, the results of which can have serious medical consequences for individuals, as well as large-scale ecological implications for populations. With the invention of electrical lights about a century ago, the temporal organization of the environment has been drastically altered for many species, including humans. In addition to the incidental exposure to light at night through light pollution, humans also engage in increasing amounts of shift-work, resulting in repeated and often long-term circadian disruption. The increasing prevalence of exposure to light at night has significant social, ecological, behavioral, and health consequences that are only now becoming apparent. This review addresses the complicated web of potential behavioral and physiological consequences resulting from exposure to light at night, as well as the large-scale medical and ecological implications that may result.

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Key words: cancer, endocrine disruptor, immune, light pollution, melatonin

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Received April 20, 2007; accepted May 29, 2007.

Introduction

Successful organisms must adapt to temporal, as well as spatial niches. Endogenous biological clocks allow individuals to anticipate and adapt to the daily light-dark cycles in their environments to optimally time metabolism, physiology, and behavior each day. Rodents in nontropical environments, for example, alter reproductive, metabolic [1], and immunological activities [2] based on changes in day length throughout the seasons. The timing of avian reproduction and molt also often depends upon seasonal changes in day length [3], and many species, including some birds [4,5], rodents [6], bats [7], and marine animals [8], adjust foraging activities according to changes in the lunar cycle. Aside from seasonal adjustments, there is marked circadian variation in physiological functions. In many species, including some birds, rodents, fish, and humans, for example, circulating concentrations of sex steroids [9-11] and glucocorticoids [12] vary with the light/dark cycle throughout the day, causing corresponding changes in reproductive activities [13] and metabolic functions [14].

Responses to natural light cycles result in an adaptive temporal organization in humans and other animals. With the invention and use of electrical lights, beginning about a century ago, this temporal organization has been dramatically altered. Light at night has significant social, ecological, behavioral, and health consequences that are only now becoming apparent. The extensive control that light-driven mediators exert upon multiple body systems, for example, creates numerous targets on which light-induced disruptions can act, resulting in a wide range of physiological changes and potentially serious medical implications. In a broader context, underpinning physiological mechanisms regulate a variety of behaviors, ranging from reproduction to foraging, creating expansive targets for light disruption. Assuming that adaptive processes have optimized the physiological and behavioral regulation of animals according to changing day lengths and circadian cycles, artificial changes in light cycles could have drastic fitness effects. This review summarizes the medical and ecological implications of exposure to artificial light at night, and related disturbances in normal seasonal and circadian physiological and behavioral functions.

Sources of light at night

Light pollution by urban development

Urban development has brought the need for artificial lighting of roadways, shopping centers, stadiums, and homes. Some of this light strays and scatters in the atmosphere, bringing about a brightening of the natural sky beyond background levels, called urban sky glow [15,16]. Light pollution has demonstrated effects on daily

human life. In 2001, the percentage of the world's population living under sky brightness higher than baseline levels was 62%, with the percentages of US and European populations exposed to brighter than normal skies lying at 99% [16]. In addition, >80% of the US population and 2/3 of the population in the European Union regularly experience sky brightness greater than nights with a full moon. In these cases, true night darkness is never experienced because the brightness is slightly higher than the typical zenith brightness at nautical twilight [16]. Since the 1960s, artificial lighting has gradually changed from an incandescent-bulb form, which consists of mainly low-level yellow wavelengths, to a high-intensity discharge (HID) form that contains blue wavelengths (reviewed in [17]). Retinal ganglion cells responsible for detecting light and suppressing melatonin production in humans are most sensitive to blue/violet light (~459 nm) [18]. In addition, studies on the action spectrum for human melatonin regulation indicate that exposure to incandescent lighting for <1 h can result in a 50% decrease in circulating melatonin levels, and exposure to even very low levels of blue spectrum light comparable in brightness to moonlight resulted in melatonin suppression in humans as well (reviewed in [17]). Thus, increasing levels of sky glow and exposure to street lighting can disrupt the 'natural' world to which the human body is currently adapted.

While humans live much of their lives based on artificially manipulated light cycles governed by electric lighting, wild species are entirely dependent upon and responsive to changes in natural day length. Thus, photic disturbances that alter the natural light cycle may have elevated physiological and behavioral effects in these species compared with humans. Many 'wild' or national parks are surrounded by or in close proximity to urban centers, causing increased incidence of sky glow over those areas

[15], thus exposing many wild species to an artificial and potentially disruptive light cycle.

Shift work

In addition to incidental light exposure resulting from night lighting, current society is experiencing an abolishment of 9-5 workdays in exchange for greater numbers of night shifts and resulting increases in productivity and profit. North American fast-food restaurants glean profits during the late night and early morning hours. In addition, in a survey conducted from 1985 to 2004, approximately 15% of surveyed American full-time wage and salary workers worked a shift other than a daytime schedule; over half of these workers reported that such hours resulted from 'the nature of the job' and not personal preference (US Dept. of Labor, Retrieved June 13, 2007 from http://www.bls.gov/ news.release/flex.pdf). Such trends not only exist in the USA, but also in Canada where approximately 30% of employed individuals work alternative shifts [19]; overall, in any urban society, an estimated 20% of people work alternative shifts [20]. Shift-workers live much of their lives out-of-phase with 'normal' local time, but often cannot completely adjust their circadian rhythms due to the changing schedules of the shift-work, and the necessary readjustment to rest days [20]. Thus, shift-workers are experiencing intentional exposures to light at night that could disrupt normal circadian physiological and behavioral rhythms.

Physiological and medical implications

The circadian pacemaker is responsible for organizing the timing of the entire body, spanning multiple body systems [21–24]. Light is detected by photoreceptive ganglion cells

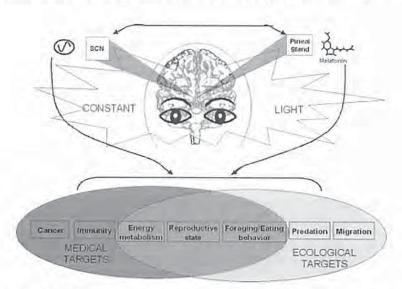


Fig. 1. Exposure to night-time lighting through urban sky glow and/or night shift work could mimic the documented physiological and behavioral effects associated with exposure to constant levels of light. These effects are complex and multi-tiered, and could have large-scale medical and/or ecological implications. Light detected by the retinal ganglial cells (RGCs) programs the suprachiasmatic nuclei (SCN), or the circadian pacemaker. The SCN exerts direct effects on several body systems and stimulates rhythmic melatonin secretion from the pineal gland. Melatonin acts as a transducer of light:dark information into additional physiological signals that results in downstream effects on many body systems. (arrows are not meant to represent exact anatomical locations).

(pRGCs) in the eye. A cluster of pRGCs form the retinohypothalamic tract that projects to and entrains a group of neurons that make up the circadian oscillators in the suprachiasmatic nuclei (SCN) [25], which control melatonin synthesis in the pineal gland. Melatonin is an indole-amine that is found throughout the animal kingdom and orchestrates changes in many physiological functions in response to variation in day length (reviewed in [26]), and the nightly duration of melatonin is the critical parameter responsible for transducing the effects of light on both the neuroendocrine axis and directly on individual body systems [27]. Exposure to extended periods of light alters melatonin levels in many species, including humans [28-31]. Thus, exposure to light at night could result in a variety of physiological effects, potentially mediated through varying levels of melatonin (Fig. 1). In addition, direct sympathetic control of physiological processes after variation in lighting conditions has been documented independently of melatonin synthesis [1]. Consequently, exposure to extended periods of light could alter physiological state through a variety of other mechanisms.

Disruptions of normal circadian timing can evoke a multitude of downstream effects, reorganizing the entire physiological state. Constant lighting conditions alter the rhythmicity of several hormones including prolactin [32], glucocorticoids [33,34], adrenocorticotropic hormone, corticotrophin releasing factor [35], serotonin [36], and melatonin [37]. Human exposure to a low-level incandescent bulb at night requires only 39 min to suppress melatonin levels to 50% [38]. Such changes in melatonin production and release regulates metabolism, immune function, and endocrine balances via the reproductive, adrenal, and thyroid hormone axes [27]. The ensuing effects of disrupted melatonin rhythms by chronic exposure to light at night are countless. In addition, the effects resulting from downstream consequences, such as sleeplessness, make the web of physiological changes resulting from constant light even wider. In the interest of space, the medical implications associated with sleep deprivation will not be considered in depth here. Recent work has largely focused on the potential link between exposure to artificial light at night and the prevalence of several cancers (see below). Such links, however, would likely result from a combination of upstream physiological effects originally triggered by the alteration of the circadian system, many of which could have drastic medical implications in addition to cancer. For example, melatonin and its metabolites have the ability to protect against oxidative stress and diseases resulting from oxidative attack (see below). Depression of melatonin could thus magnify the amount and results of oxidative damage. There is a need for a full understanding of the physiological and epidemiological impacts caused by increasing exposure to light at night through light pollution and shift work.

Metabolic disruption

Efficient energy metabolism is crucial to overall physiological function. Interruptions or difficulties with the efficiency of metabolic processes can result in a variety of disorders, including obesity, type II diabetes, and heart disease. There is an abundance of evidence illustrating an

effect of exposure to extended levels of artificial light both directly on metabolic processes, as well as on several of these epidemiological end-points.

Long-term exposure of rats to constant light had strong regulatory effects on metabolism, specifically on carbohydrate metabolism in the liver [39]. Experiments on broiler chickens demonstrated that constant light shifts metabolic efficiency; female broiler chickens reared in a constant light environment gained a significantly higher percentage of fat compared with controls reared on a 12 L:12 D light cycle. Male broiler chickens also gained significantly more weight when exposed to constant light, but the mechanism behind this effect differed (i.e. food intake was higher in males reared in constant light) [40]. Constant-light induced interruption in the nightly secretion of melatonin has also been shown to exert metabolic effects. Melatonin appears to affect body mass regulation, gut efficiency, metabolic rate, and nonshivering thermogenesis in some mammalian species (reviewed in [26]), and also improves ATP synthesis in the heart [41]. Thus, the basic processes associated with acquisition and utilization of energy are functionally altered after exposure to extended periods of artificial lighting.

Several studies suggest that humans are experiencing similar effects in response to artificial light exposure at night. For example, detrimental effects of shift work have been observed in carbohydrate and lipid metabolism, insulin resistance, hypertension, coronary heart disease, and myocardial infarction (reviewed in [42]). Such influences could result from either direct physiological effects of light exposure or indirect effects associated with a lack of sleep [42]. Sleep deprivation significantly alters endocrine and metabolic parameters associated with diabetes, obesity, and a cascade of other disorders [43]. On the other hand, melatonin levels, which reflect changes in light environment more directly, have been associated with coronary heart disease. For example, in a correlative study, patients with coronary heart disease had significantly lower melatonin concentrations at night compared with patients without heart disease [44]. Melatonin reduces the activity of the sympathetic nervous system and significantly reduces norepinephrine turnover in the heart, a potentially beneficial effect because norepinephrine and epinephrine accelerate the uptake of LDL cholesterol [45]. Because exposure to extended periods of low-level artificial night-time lighting decrease melatonin production in rodents [28,45] and humans (reviewed in [17]), the potential for a direct link between exposure to night-time light and metabolic disorders, such as heart disease, become clear. It remains to be determined the extent to which metabolic disorders reflect direct effects of light on circadian organizations or downstream processes such as sleep disruption.

Oxidative stress

Light exposure can also have indirect adverse effects through the promotion of oxidative stress, which can lead to a variety of other disorders, including damage to immune cells and other tissues in the body, elevated incidence of cancer, and an increase in the rate of physiological aging [46]. Exposure of living organisms to light and oxygen results in the production of toxic molecules, reactive oxygen

species, and photo-oxidants (reviewed in [47]). For example, rats maintained in constant light significantly increased lipid peroxidation in the liver, kidney, and brain [28]. Similarly, rats exposed to constant light significantly elevate levels of hepatic oxidative stress [48]. Oxidative stress is combated through numerous physiological mechanisms responsible for maintaining an oxidant:antioxidant balance within the body. Melatonin is a well-known antioxidant, playing a significant role in antioxidant defense and regulating antioxidant enzyme activity and production (reviewed in [49]). In humans, melatonin levels correlate with total antioxidant capacity of the blood [50]. Constant light reduces both melatonin levels and pineal weights to a minimum [28] and the pro-oxidative effects of constant light were preventable through simultaneous administration of melatonin [28]. Activity of glutathione peroxidase, an important antioxidant enzyme, decreased in rats maintained in constant light [28]. Similarly, constant light exposure reduces glutathione levels [51], suggesting a decrease in glutathione production as well. It is likely that suppression of melatonin in response to constant light exposure may at least partially mediate the regulation of glutathione peroxidase activity, as previous studies have shown that melatonin stimulates glutathione synthesis [52] and melatonin deficiency leads to decreased tissue glutathione peroxidase activity (discussed in [28]). Melatonin is unique in that the free radical scavenging capability extends to its secondary. tertiary, and quaternary metabolites, making it a highly effective antioxidant even at low concentrations (see [47] for review). Thus, decreased levels and durations of melatonin production resulting from exposure to constant lighting conditions may result in decrease in the level and duration of this potentially important antioxidant. Alternatively, influences of changing the light environment on oxidative stress could result from downstream consequences of resulting sleep deprivation as documented in the brains of rats [53]. Considered together, these documented reductions in melatonin concentrations in humans exposed to nighttime light suggest an elevated risk of oxidative stress and many related disorders after exposure to light pollution, shift work, or both.

Immunological modulation

Exposure of an individual to chronic artificial night-time lighting could alter immune function, through some combination of oxidative, neural, or endocrine pathways. Numerous examples across taxa are available. For example, housing Japanese quail (Coturnix coturnix japonica) in constant lighting conditions significantly suppressed both cell-mediated immune responses to a challenge with phytohemaggluttinin (PHA) and humoral responses to challenges with Chukar red blood cells (RBCs) [54]. Similarly, cockerels maintained in constant lighting conditions produced significantly fewer antibodies to a challenge with sheep RBCs and displayed significantly reduced delayed type hypersensitivity responses compared with controls maintained in 12 L:12 D lighting conditions [55]. In a mammalian model system, nocturnal light exposure suppressed the normal increase in cytotoxic activities of natural killer cells [56].

Because exposure to light at night is accompanied by a significant decrease in melatonin levels (see above), it is relevant to briefly discuss the potent effects that melatonin has on the immune system. The injection of Syrian hamsters with melatonin, or maintenance of hamsters in short photoperiods which increase melatonin levels resulted in increased splenic masses, total splenic lymphocyte counts, and macrophage numbers [57]. A number of studies have confirmed the existence of melatonin receptors in lymphatic tissue and on circulating cells of the immune system (reviewed in [26]). Although prevalence of splenic melatonin receptors typically fluctuate such that receptor numbers are low at night when melatonin levels are high, levels of binding sites during light at night remain high [58]. Melatonin has been reported to counteract drug or hormone-based immunosuppression and appears to have generally immunostimulatory properties (reviewed in [26]). Suppression of melatonin by exposure to light pollution or during shift work could suppress such immunostimulatory properties. On the other hand, constant light generally inhibits T-cell autoimmunity by eliminating melatonin [26], a potentially beneficial effect. Carrillo-Vico et al. provide an excellent review of the effects of melatonin on the immune system [59]. Based on these documented effects, the potential exists for artificial night-time light to have potent and multi-pathway modulatory effects on the immune system. Similar effects could result from decreases in sleep efficiency associated with exposure to constant levels of light. For example, in a study of humans, 40 h of wakefulness resulted in significant changes in several immune parameters, including a decrease in natural killer cell activity [60]. Sleep deprivation also activates the HPA axis in rats and alters subsequent responses to stress [61]. which could exert indirect effects on the immune system as well. Thus, through either direct endocrine effects or indirect sleep-related effects, exposure to light at night has the potential to significantly modulate immune function. leading to large-scale medical implications.

Cancer

Resistance to cancer is often accomplished through endocrine, antioxidant, and immunological processes. It is now apparent that all of these processes can be altered by exposure to light at night; evidence is mounting that forms links between extended exposure to light and the incidence of several cancers in both humans and animals. For example, the risk of developing breast cancer is up to five times higher in industrialized nations than in underdeveloped countries [62]. Current evidence suggests that high levels of artificial light at night in industrialized societies may play a role in cancer risk. Multiple studies have documented a link between night shift work and an increased incidence of breast cancer (reviewed in [63]). In a nationwide study of 7035 Danish women with confirmed primary breast cancer, at least half a year of predominantly work during the night increased the risk of breast cancer 1.5 fold [64]. Other studies of women involved in various types of work during the night have consistently demonstrated an up to threefold increase in the relative risk of breast cancer ([64], also see [65] for review). Although night shift work increased the incidence of breast cancer, an increased risk was also documented in individuals who reported not sleeping during the time of night when melatonin is typically elevated [66]. Importantly, there was an indication of increased risk in patients with the brightest bedrooms [66]. Although breast cancer is the most abundantly studied cancer type in relation to light at night and shift work, recent studies have begun examining links with other cancer types. For instance, in a study of 602 colorectal cancer cases among 78,586 women, it was determined that a rotating night shift at least three nights per month over at least 15 yr increases the risk of colorectal cancer [67]. Considered together, abundant evidence suggests that circadian disruption, and/or the changes in melatonin and other physiological systems may increase the risk of cancers.

Specific evidence of the role of light in tumor development was demonstrated in deer mice (Peromyscus maniculatus); mice maintained in long day lengths (16 L:8 D) were significantly more likely to develop tumors induced by 9,10dimethyl-1,2,benzanthracene (DMBA) compared with animals maintained in short day lengths (8 L:16 D) [68]. Indeed, 90% of animals in long day lengths developed tumors, whereas animals maintained in short day lengths developed none. More recent studies have demonstrated that exposure to extended dim light can have similar effects on tumor incidence and growth. Exposure to constant dim light (0.21 lux) significantly increased the growth of MCF-7-induced tumors and significantly increased the total tumor fatty acid uptake, linoleic acid uptake, and 13hydroxyoctadecadienoic acid (13-HODE) production (reviewed in [69]). Additionally, female rats with small DMBA-induced tumors were maintained in one of the four treatment groups, including a normal light cycle (12 L:12 D), a constant bright light cycle (24 h at 300 lux), a normal light cycle with a flash of bright light halfway through the dark period, and a normal cycle with low level incandescent lighting throughout the dark period [70]. Animals maintained in the normal light cycle (12 L:12 D) had significantly lower rates of tumor growth than all other treatments, and the animals experiencing dim light at night had the lowest survival probability. In summary, extended periods of exposure to even dim levels of light impair suppression of tumor development.

Both experimental and clinical reports suggest a link between cancer development and pineal function (reviewed in [26]). Under a majority of in vitro conditions, physiological levels of melatonin decrease the rate of cell proliferation, whereas elevated concentrations tend to be either cytostatic or cytotoxic (reviewed in [69]). Melatonin may shift the cell balance from proliferation to differentiation, and thus can prevent the proliferation of tumor cells. In addition, melatonin may promote apoptosis of cancer cells (reviewed in [69]). Pinealectomy accelerates the growth of transplanted melanoma in hamsters [71] and of transplanted Yoshida sarcoma in rats [72]. In addition, DMBAinduced mammary tumors grew more slowly in rats treated with melatonin when compared with control rats that did not receive melatonin ([73], reviewed in [74]). In a particularly elegant study, rats were implanted with either rat hepatomas or human breast cancer xenografts [62]. Resulting tumors were subsequently perfused in situ with human

blood collected from subjects during the daytime, during the night, or following exposure to 580 µW/cm2 of white fluorescent light at night. In addition, some of the blood collected from individuals exposed to night-time light was also supplemented with a synthetic form of melatonin. Proliferative activity, linoleic acid production, 13-HODE production, and tumor cAMP levels significantly decreased when tumors were exposed to blood taken from individuals during the night-time. This suppressive effect disappeared when tumors were exposed to blood from individuals who experienced night-time light, leaving proliferation levels similar to those perfused in blood from daytime individuals. Interestingly, when melatonin was added to blood from light-exposed individuals, tumor proliferation and activity was again suppressed [62]. These data suggest that melatonin exerts a direct effect on tumor growth and proliferation.

Constant light may act on cancer through direct actions of depressed melatonin levels or through secondary endocrine modulation associated with either light exposure resulting from light exposure and/or sleep disruption [63,65]. 'The melatonin hypothesis' suggests that reduced pineal melatonin secretion might increase the risk of breast cancer through an interaction with high levels of estrogen, a known promoter of breast tissue proliferation [75]. Melatonin suppresses estrogen secretion in several species of mammals [76]. Melatonin completely blocks estradiolinduced stimulation of breast cancer cell proliferation, and melatonin loses its antiproliferative effects unless cells are co-cultured with estradiol or prolactin [77]. As mentioned, melatonin acts as a potent antioxidant, and thus may normally protect against estradiol-induced oxidative damage that could result in cancer (reviewed in [78]). Alternatively, melatonin may prevent the estradiol-induced suppression of the cell-mediated immune response, providing immunological protection against cancer development (reviewed in [78]). Estradiol is also responsible for upregulating telomerase activity, and melatonin may inhibit these effects. Thus, suppression of melatonin after exposure to constant light would inhibit these anti-cancer effects. Despite this evidence, rats exposed to constant light did not increase serum estradiol concentrations [62,68]. Furthermore, ovariectomy and estrogen treatment did not affect tumor formation [68]. Thus, although the 'melatonin hypothesis' seems plausible, current evidence suggests that light exposure likely acts on tumor formation and growth through one or more alternative mechanisms.

Ecological implications

Physiological responses to artificial light exposure result not only in the medical conditions listed above, but also in large-scale ecological changes. Natural departures from the rhythmic light:dark cycle, such as changes in the lunar cycle and white nights in the artic region of the world, evoke a multitude of physiological and behavioral changes within animals experiencing them [79] (and see below). Because sky glow resulting from artificial lighting in urban environments can reach levels that exceed those seen in natural twilight [16], similar physiological and behavioral phenomena may result, altering reproductive activities, predator/

prey interactions, and even orientation capabilities. Such alterations in natural activities can result in large-scale ecological changes, and alterations in the survival of key species in the environment (See [80] for an excellent additional detailed review addressing ecological light pollution).

Reproduction

It has been well-established that the timing of breeding in wild animals could be altered by artificial lighting. For example, it has been known for centuries that domestic hens (Gallus domesticus) could be stimulated to lay more eggs during the winter by putting lights in the coops at night [81]. In one of the first studies of the effects of photoperiod on vertebrate biology, Rowan [82] exposed juncos (Junco hyemalis), maintained in outdoor aviaries in Edmonton, Alberta, to several minutes of electric illumination after the onset of dark each day (lights were illuminated at sunset) during the winter. Under these artificial lighting conditions, these birds came into reproductive condition despite the harsh Canadian winter temperatures. Thus, artificial lights were sufficient to adjust the reproductive phenotype of these birds to mimic summer-like conditions. Similarly, the initial demonstration that photoperiod regulates mammalian reproduction was reported for European field voles (Microtus agrestis) that received artificial illumination after the onset of dark [83]. Again, artificial illumination effectively mimicked natural light sources.

Given the level of control that variation in light cycles can exert on reproductive physiology and behavior, exposure to lighting durations beyond normal limits can impose disruptive effects on these processes. Melatonin, for example, has well-documented effects on reproductive behavior and physiology in many species [76], and exposure to extended periods of light depress production of pineal melatonin [28-31]. Such effects may mediate the documented changes in the reproductive systems of animals in response to extended exposure to light. For example, persistent exposure to constant dim light suspends estrous cycles in rats and induces persistent estrus [84]. Such disruption reduces fertility [80] by inhibiting periovulatory gonadotropin surges [85,86] and elevating plasma prolactin and estrogen concentrations [32,84,87]. Similarly, exposure of male South Indian gerbils (Tatera indica cuvieri) to constant light diminished reproductive efficiency, decreasing reproductive organ masses, epididymal sperm counts, and the proportion of ejaculating males [88]. Maintenance in constant light is a well-documented way of interrupting incubation in turkey hens, and results in significantly elevated prolactin concentrations in circulation [89] and trout exposed to either constant or 18 h of light advanced spawning up to 2 months compared with control fish exposed to ambient light [90]. Such changes in the timing of reproduction could disrupt synchrony of the breeding cycle in relation to changing environmental variables, such as temperature. In cases where sky brightness never gets below the level of a typical nautical twilight [16], reproductive disruption is a clear possibility for a number of species.

Evidence that light pollution and exposure to artificial lighting disrupts reproductive activities in the wild has been demonstrated in studies examining behaviors and activities associated with reproduction in a wide range of species. For example, artificial illumination influenced territorial singing behavior in mockingbirds (Mimus polyglottos); after mating, male mockingbirds only sang in artificially lighted areas, or during the full moon ([91]; reviewed in [80]). In frogs, male mating calls may be disrupted by artificial lighting, and female frogs Physalaemus pustulosus, are less selective about mate choice and mate earlier under increased lighting levels. It has been suggested that advancing reproduction is a method of avoiding predation due to extended exposure under well-lit conditions (reviewed in [80]). Black-tailed godwits (Limosa I. limosa) based their choices of nesting sites according to roadway lighting, choosing to nest approximately 300 m away from artificial roadway lighting (reviewed in [80]). Such disruptive effects of artificial lighting even extend into invertebrate animal classes. Female glowworms, for example, attract males with visual flashes that are less visible in lighted environments (reviewed in [80]). Interruptions in such critical reproductive behaviors mediated by exposure to artificial lighting could exert significant fitness consequences for a wide variety of animal species.

Foraging and predation

Predator-prey interactions are important determinants of many decisions made by animals, ranging from foraging behavior to mate choice (reviewed in [92,93]). It is well established that dynamics of predator-prey interactions change as a function of ambient light levels. For example, foraging behavior decreases during high lunar illumination in desert and temperate rodents [94,95], fruit eating bats (Artibeus jamaicensus) [96], small seabirds [93], and even in nonvisual predators, such as scorpions (Buthus occitanus) [97]. Light drives a number of animals to make activity decisions either directly by changing the risk of being seen by a predator (Predation Risk Hypothesis, reviewed in [93]) or indirectly by altering prey availability and thus changing the payoff of foraging during times of high illumination (Foraging Efficiency Hypothesis [98]). These ideas are not mutually exclusive and in some cases, illumination has both direct and indirect effects. For example, foraging efficiency of short-eared owls (Asio flammeus) increases in bright moonlight and, at the same time, the activity levels and foraging behavior of their prey, deer mice (P. maniculatus) decreases presumably to avoid the increased risk of being eaten in a highly illuminated environment [94]. Similarly, variation in light levels produces a significant shift in the capture rates of prey by the lined seahorse (Hippocampus erectus Perry) [99]. Thus, changes in illumination levels affect not only the behaviors of predators, but also the behaviors of their prey as well as any other species directly linked to their prey. Such a phenomenon could result in large-scale ecosystem changes (see [80] for review).

In some parts of the world, sky brightness resulting from urban sky glow is even greater than nights with a full moon [16]. Thus, if natural lunar cycles exert such dramatic effects on predator-prey interactions, then artificial light resulting from sky glow could have equal, if not more dramatic, changes on ecological dynamics. Indeed, artificial lighting exerts strong effects on foraging behavior and predation. For example, artificial illumination increased the predatory risk for and reduced foraging behavior in three rodent species, including the Arizona pocket mouse (Perognathus amplus), Bailey's pocket mouse (Perognathus baileyi), and Merriam's kangaroo rat (Dipodomys merriami) [100]. Similar results were obtained in additional species of desert rodents [6] and artificial illumination also affects the foraging behavior of petrels [98].

In some cases, high levels of illumination are purposely used by animals to aid foraging abilities. Foraging northern bats (Eptesicus nilssoni) in Sweden are attracted to illuminated roadways in the Spring [101]. The numbers of insects congregating and bats foraging around three types of street lamps was monitored in one study [102]: 125 W Hg lamps which give off a bluish-white light, 100 W high pressure Na lamps which give off a light orange light, and 100 W low pressure Na lamps which give off a deep orange light. Insects were most abundant around the bluish-white light, and also significantly abundant around the light orange light, whereas insect numbers around the deep orange light were similar to lamps that were turned off. Additionally, several bat species foraged more in the areas illuminated by the bluish-white and light orange lights [103]. Thus, bright streetlamps emitting light in the blue wavelengths draws many insects towards a high risk of predation, and abundance of these lighting sources could result in a change in the survival and propagation of many insect species. The mechanistic basis for such changes in foraging behaviors remains elusive for most species. In some species of birds, constant lighting may alter foraging activities through the alteration of natural melatonin rhythms [104] and melatonin has also been shown to regulate food intake in mammals (reviewed in [26]). Thus changes in melatonin levels and/or other physiological signals resulting from constant light exposure may regulate foraging behavior in other species as well. The implications for large-scale ecological impacts resulting from artificial illumination in this manner are clear.

Migration and orientation

Migration is a critical event in the lives of many animals and is often necessary for successful reproduction and survival. Changes in ambient illumination drive migration patterns in a variety of species [82,103,105–107]. Silver eels (Anguilla anguilla L.), for example, exhibit 'light shyness' because they cease 'running' (migrating) when lunar illumination levels are high [108]. In salmonid fishes, exposure to the new moon triggers a thyroxine surge that is thought to trigger the onset of migration towards the sea [109]. Many aquatic invertebrates exhibit 'diel vertical migration', movement up and down the water column, according to changes in lunar illumination; some species of zooplankton and shrimp avoid surface water layers in response to light dimmer than that of a half moon (reviewed in [80]).

Exposure to sky glow and artificial lighting that is currently common can have severe effects on the migratory patterns of animals. Changes in migration patterns in

response to artificial light exposure were documented long ago in crows (Corvus brachyrhynchos) [82] and in some cases, migrating birds become attracted to and disoriented by artificial night lighting (reviewed in [80]). Silver eel (Anguilla anguilla L.) exposed to underwater electric lighting ceased migrating [107] and disruption of the circadian clock of monarch butterflies (Danaus plexippus) interfered with their orientation direction during migration [103]. Exposure of the zooplankton Daphnia to urban light pollution in the wild decreased the magnitude of migratory movements and the number of migrating individuals [106]. One markedly disruptive form of light pollution interference is the effect of artificial light on hatchling sea turtles. After hatching, sea turtles orient themselves towards the sea using a visual cue - they move away from the shadowy backdrop of the low sand dunes. Artificial lighting associated with beachfront urbanization removes that visual cue and disorients the young sea turtles [110].

The mechanistic basis behind such changes in migratory patterns and behaviors remains to be elucidated; however, studies in birds have shown that melatonin plays a crucial role in the timing and orientation aspects of avian migration [111,112]. Thus, changes in migratory behavior may result from alterations in melatonin levels or other circadian and seasonally based physiological signals. Changes in the timing and/or efficiency of migration and general orientation can be detrimental in terms of both survival and reproduction. Even low levels of artificial lighting effectively mimic the natural influences of the lunar cycle. Urban sky glow causes sky brightening long distances from the original lighting source, potentially affecting migrating individuals kilometers away [15]. Such large-scale changes could have drastic ecological impacts.

Future directions

Irregular light/dark patterns are now being considered as endocrine disruptors [45]. Indeed, the material summarized in this review illustrates a multitude of physiological effects, most of which occur through endocrine pathways after exposure to extended periods of light. Should exposure to light be regulated as endocrine disrupting compounds in the environment? Proposals have been put forth to decrease levels of urban sky glow through light shields, reduction in the number of lights, as well as through an adjustment of the color spectrum produced by external lighting towards low-level red lighting and away from the highly disruptive high-energy blue lighting. It is clear that increasing levels of urban sky glow can have serious medical and ecological repercussions (Fig. 1). Additionally, elevated numbers of night shifts worked could result in large-scale incidences of metabolic disorders, immunosuppression, oxidative stress, and cancer. Future work should examine both the epidemiological end-points associated with exposure to light pollution and circadian disruption, as well as the endocrine mediators that may be involved. A thorough understanding of the mechanisms by which exposure to unnatural patterns of light may alter specific components of physiology and behavior could be useful towards the implementation of plans to combat large-scale medical and ecological

disruptions associated with disturbances in the natural light cycle.

Acknowledgements

We would like to thank L. Martin, B. Trainor, and Z. Weil for help with valuable comments on this manuscript. This work was funded by NIH grants MH57535 and MH66144 and NSF grant IBN04-16897. KJ Navara was supported by NRSA T32 AI055411.

References

- BARTNESS TJ, DEMAS GE, SONG CK. Seasonal changes in adiposity: the roles of the photoperiod, melatonin and other hormones, and sympathetic nervous system. Exp Biol Med 2002; 227:363-376.
- NELSON RJ, DEMAS GE. Seasonal changes in immune function. Q Rev Biol 1996; 71:511-548.
- DAWSON A, KING VM, BENTLEY GE et al. Photoperiodic control of seasonality in birds. J Biol Rhythms 2001; 16:365– 380.
- BRIGHAM MR, BARCLAY RMR. Lunar influence on foraging and nesting activity of common poorwills (*Phaluenoptilus* nuttallii). Auk 1992; 109:315-320.
- BRIGHAM MR, GUTSELL RCA, GEISER F et al. Foraging behavior in relation to the lunar cycle by Australian owletnightjars Aegotheles cristatus. Emu 1999; 99:253-261.
- KOTLER BP. Risk of predation and the structure of desert rodent communities. Ecology 1984; 65:689-701.
- GANNON MR, WILLIG MR. The effect of lunar illumination on movement and activity of the red fig-eating bat (Stenoderma rufum). Biotropica 1997; 29:525-529.
- HORNING H, TRILLMICH F. Lunar cycles in diel prey migrations exert a stronger effect on the diving of juveniles than adult Galapagos fur seals. Proc R Soc Lond B 1999; 266:1127-1132.
- GUCHHAIT P, HALDAR C. Circadian rhythms of melatonin and sex steroids in a nocturnal bird, Indian spotted owlet Athene brama during reproductively active and inactive phases. Biol Rhythm Res 1999; 30:508-516.
- LAMBA VJ, GOSWAMI SV, SUNDARARAJ BI. Circannual and circadian variations in plasma levels of steroids (cortisol, estradiol-17beta, estrone, and testosterone) correlated with the annual gonadal cycle in the catfish, Heteropneustes fossilis (Bloch), Gen Comp Endocrinol 1983; 50:205-225.
- PLYMATE SR, TENOVER JS, BREMNER WJ. Circadian variation in testosterone, sex hormone-binding globulin, and calculated non-sex hormone-binding globulin bound testosterone in healthy young and elderly men. J Androl 1989; 10:366-371.
- ATKINSON HC, WADDELL BJ. Circadian variation in basal plasma corticosterone and adrenocorticotropin in the rat: sexual dimorphism and changes across the estrous cycle. Endocrinology 1997; 138:3842-3848.
- WADA M. Circadian rhythms of testosterone-dependent behaviors, crowing and locomotor activity, in male Japanese quail. J Comp Physiol A 2004; 158:17-25.
- DINNEEN S, ALZAID A, MILES J et al. Metabolic effects of the nocturnal rise in cortisol on carbohydrate metabolism in normal humans. J Clin Inves 1993; 92:2293-2290.
- Albers S, Duriscoe D. Modeling light pollution from population data and implications for National Park Service lands. George Wright Forum 2001; 18:56-68.

- CINZANO P, FALCHI F, ELVIDGE C. The first world atlas of the artificial night sky brightness. Mon Not R Astron Soc 2001; 328:689-707.
- PAULEY SM. Lighting for the human circadian clock: recent research indicates lighting has become a public health issue. Med Hypotheses 2004; 63:588-596.
- THAPAN K, ARENDT J, SKENE DJ. An action spectrum for melatonin suppression: evidence for a novel non-rod, noncone photoreceptor in humans. J Physiol 2001; 535:261-267.
- SHIELDS M. Shift work and health. Health Rep 2002; 13:11-33.
- RAJARATNAM S, ARENDT J. Health in a 24-h society. Lancet 2001; 358:999-1005.
- LEHMAN MN, SILVER R, GLADSTONE WR et al. Circadian rhythmicity restored by neural transplant. Immunocytochemical characterization of the graft and its integration with the host brain. J Neurosci 1987; 7:1626-1638.
- MOORE RY, EICHLER BV. Loss of a circadian adrenal corticosterone rhythm following suprachiasmatic lesions in the rat. Brain Res 1972; 438:374-378.
- SHIBATA S, MOORE RY. Electrical and metabolic activity of the suprachiasmatic nucleus neurons in hamster hypothalamic slices. Brain Res 1988; 438:374-378.
- STEPHAN FK, ZUCKER I. Circadian rhythms in drinking behavior and locomotor activities are eliminated by hypothalamic lesions. PNAS 1972; 69:1583-1586.
- PROVENCIO I, COOPER HM, FOSTER RG. Retinal projections in mice with inherited retinal degeneration: implications for circadian photoentrainment. J Comp Neurol 1998; 395:417– 439.
- Nelson RJ, Drazen DL. Melatonin mediates seasonal adjustments in immune function. Reprod Nutr Dev 1999; 39:383-398.
- PRENDERGAST BJ, NELSON RJ, ZUCKER I Mammalian seasonal rhythms: behavior and neuroendocrine substrates. In:
 Hormones Brain and Behavior. Pfaff DW, ed. Elsevier Science, San Diego, CA, 2002; pp. 93-156.
- BAYDAŞ G, ERÇEL E, CANATAN H et al. Effect of melatonin on oxidative status of rat brain, liver, and kidney tissues under constant light exposure. Cell Biochem Funct 2001; 19:37-41.
- FALCON J, MARMILLON JB, CLAUSTRAT B et al. Regulation of melatonin secretion in a photoreceptive pineal organ: an in vitro study in the pike. J Neurosci 1989; 9:1943–1950.
- YAMADA H, OSHIMA I, SATO K et al. Loss of the circadian rhythms of locomotor activity, food intake, and plasma melatonin concentration induced by constant bright light in the pigeon (Columba livia). J Comp Physiol A 1988; 163:459– 463.
- Zeitzer JM, Dijk D, Kronauer RE et al. Sensitivity of the human circadian pacemaker to nocturnal light: melatonin phase resetting and suppression. J Physiol 2000; 526:695-702.
- VATICON MD, FERNANDEZ-GALEZ C, ESQUIFINO A et al. Effects of constant light on prolactin secretion in adult female rats. Horm Res 1980; 12:277-288.
- LEPROULT R, COLECCHIA EF, L'hermite-Balé R et al. Transition from dim to bright light in the morning induces an immediate elevation of cortisol levels. J Clin Endocrinol Metab 2001; 86:151-157.
- SCHEVING LE, PAULY JE. Effect of light on corticosterone levels in plasma of rats. Am J Physiol 1966; 210:1112-1117.
- FISCHMAN AJ, KASTIN AJ, GRAF MV et al. Constant light and dark affect the circadian rhythm of the hypothalamicpituitary-adrenal axis. Neuroendocrinology 1988; 47:309–316.

- SNYDER SH, ZWEIG M, AXELROD J et al. Control of the circadian rhythm of serotonin content in the rat pineal gland. PNAS 1965; 53:301-305.
- SCHERNHAMMER ES, KROENKE CH, DOWSETT M et al. Urinary 6-sulfatoxymelatonin levels and their correlation with lifestyle factors and steroid hormone levels. J Pineal Res 2006; 40:116-124.
- SCHULMEISTER K, WEBER M, BOGNER W et al. Application of melatonin action spectra on practical lighting issues. In: Final Report. The Fifth International LRO Lighting Research Symposium, Light and Human Health, November 3-5, 2002. Report No. 1009370. Palo Alto, CA: The Electric Power Research Institute, 2004; pp. 103-114.
- MUSTONEN AM, NIEMINEN P, HYVARINEN H. Effects of continuous light and melatonin treatment on energy metabolism of the rat. J Endocr Invest 2002; 25:716-723.
- ROBBINS K, ADEKUNMISI AA, SHIRLEY HV. The effect of light regime on growth and pattern of fat accretion of broiler chickens. Growth 1984; 48:269-277.
- RODRIGUEZ MI, CARRETERO M, ESCAMES G et al. Chronic melatonin treatment prevents age-dependent cardiac mitochondrial dysfunction in senescence-accelerated mice. Free Radic Res 2007; 41:15-24.
- HAUS E, SMOLENSKY M. Biological clocks and shift work: circadian dysregulation and potential long-term effects. Cancer Causes Control 2006; 17:489-500.
- BASS J, TUREK FW. Sleepless in America: a pathway to obesity and the metabolic syndrome? Arch Intern Med 2005; 165:15– 16.
- BRUGGER P, MARKTL W, HEROLD M. Impaired nocturnal secretion of melatonin in coronary heart disease. Lancet 1995; 345:1408
- BULLOUGH JD, REA MS, FIGUEIRO MG. Of mice and women: light as a circadian stimulus in breast cancer research. Cancer Causes Control 2006; 17:375

 –383.
- REITER RJ, TAN DX, OSUNA C et al. Actions of melatonin in the reduction of oxidative stress. J Biomed Sci 2000; 7:444– 458
- TAN DX, MANCHESTER LC, TERRON MP et al. One molecule, many derivatives: a never-ending interaction with melatonin with reactive oxygen and nitrogen species? J Pineal Res 2007; 42:28–42.
- CRUZ A, PADILLO FJ, GRANADOS J et al. Effect of melatonin on cholestatic oxidative stress under constant light exposure. Cell Biochem Funct 2003; 21:377-380.
- RODRIGUEZ C, MAYO JC, SAINZ RM et al. Regulation of antioxidant enzymes: a significant role for melatonin. J Pineal Res 2004; 36:1-9.
- BENOT S, GOBERNA R, REITER RJ et al. Physiological levels of melatonin contribute to the antioxidant capacity of human serum. J Pineal Res 1999; 27:59-64.
- TÚNEZ I, MUÑOZ M, FEIJOO M et al. Melatonin effect on renal oxidative stress under constant light exposure. Cell Biochem Funct 2003; 21:35-40.
- URATA Y, HONMA S, GOTO S et al. Melatonin induces gamma-glutamylcysteine synthetase mediated by activator protein-1 in human vascular endothelial cells. Free Radic Biol Med 1999; 27:838-847.
- D'almeida V, LOBO LL, HIPOLIDE DC et al. Sleep deprivation induces brain region-specific decreases in glutathione levels. Neuroreport 1998; 9:2853–2856.
- MOORE CB, SIOPES TD. Effects of lighting conditions and melatonin supplementation on the cellular and humoral

- immune responses in Japanese quail Coturnix coturnix japonica. Gen Comp Endocrinol 2000; 119:95-104.
- Kirry JD, Froman DP. Research note: evaluation of humoral and delayed hypersensitivity responses in cockerals reared under constant light or a twelve hour light: twelve hour dark photoperiod. Poult Sci 1991; 70:2375-2378.
- OISHI K, SHIBUSAWA K, KAKAZU H et al. Extended light exposure suppresses nocturnal increases in cytotoxic activity of splenic natural killer cells in rats. Biol Rhythm Res 2006; 37:21-35.
- VAUGHAN MK, HUBBARD GB, CHAMPNEY TH et al. Splenic hypertrophy and extramedullary hematopoiesis induced in male Syrian hamsters by short photoperiod or melatonin injections and reversed by melatonin pellets or pinealectomy. Am J Anat 1987; 179:131-136.
- REFII-EL-IDRISSI M, CALVO JR, GIORDANO M et al. Specific binding of 2-[1251]iodomelatonin by rat spleen crude membranes: day-night variations and effect of pinealectomy and continuous light exposure. J Pineal Res 1996; 20:33-38.
- CARRILLO-VICO A, GUERRERO JM, LARDONE PJ et al. A review of the multiple actions of melatonin on the immune system. Endocrine 2005; 27:189-200.
- MOLDOFSKY H, LUE FA, DAVIDSON JR et al. Effects of sleep deprivation on human immune function. FASEB J 1989; 3:1972-1977.
- MEERLO P, KOEHL M, VAN DER BORGHT K et al. Sleep restriction alters the hypothalamic-pituitary-adrenal response to stress. J Neuroendocrinol 2002; 14:397

 402.
- 62. BLASK DE, BRAINARD G, DAUCHY R et al. Melatonindepleted blood from premenopausal women exposed to light at night stimulates growth of human breast cancer xenografts in nude rats. Cancer Res 2005; 65:11174-11184.
- SCHERNHAMMER E, SCHULMEISTER K. Melatonin and cancer risk: does light at night compromise physiologic cancer protection by lowering serum melatonin levels? Br J Cancer 2004; 90:941-943.
- Hansen J. Increased breast cancer risk among women who work predominantly at night. Epidemiology 2001; 12:74

 –77.
- HANSEN J. Light at night, shiftwork, and breast cancer risk.
 J Natl Cancer Inst 2001; 93:1513–1515.
- DAVIS R. Light exposure and breast cancer. Epidemiology 1991; 2:458–459.
- SCHERNHAMMER E, LADEN F, SPEIZER FE et al. Rotating night shifts and risk of breast cancer in women participating in the nurses' health study. J Natl Cancer Inst 2001; 93:1563– 1568.
- NELSON RJ, BLOM J. Photoperiodic effects on tumor development and immune function. J Biol Rhythms 1994; 9:233-249.
- BLASK DE, SAUER L, DAUCHY R. Melatonin as a chronobiotic/anticancer agent: cellular, biochemical, and molecular mechanisms of action and their implications for circadianbased cancer therapy. Curr Top Med Chem 2002; 2:113-132.
- Cos S, Mediavilla D, Martinez-Campa C et al. Exposure to light-at-night increases the growth of DMBA-induced mammary adenocarcinomas in rats. Cancer Lett 2006; 235:266-271.
- DAS GUPTA TK, EL-DOMEIRI AA. The influence of pineal ablation and administration of melatonin on growth on growth and spread of hamster melanoma. J Surg Oncol 1976; 8:197-205.
- LAPIN V, FROWEIN A. Effects of growing tumors on pineal melatonin levels in male rats. J Neural Transm 1981; 52:123– 136.

- TAMARKIN L, COHEN M, ROSELLE D. Melatonin inhibition and pinealectomy enhancement of 7,12-dimethylbenz(a)anthracene induced mammary tumors in the rat. Cancer Res 1981; 41:4432-4436.
- BARTSCH C, BARTSCH H. The anti-tumor activity of pineal melatonin and cancer enhancing life styles in industrialized societies. Cancer Causes Control 2006; 17:559-571.
- ANISIMOV V, BATURIN D, POPOVICH I et al. Effect of exposure to light-at-night on life span and spontaneous carcinogenesis in female CBA mice. Int J Cancer 2004; 111:475-479.
- REITER RJ. The pineal and its hormones in the control of reproduction in mammals. Endocr Rev 1980; 1:109-131.
- BLASK DE, HILL SM. Effects of melatonin on cancer: studies on MCF-7 human breast cancer cells in culture. J Neural Transm Suppl 1986; 21:433-439.
- SANCHEZ-BARCELO E, Cos S, MEDIAVILLA D et al. Melatoninestrogen interactions in breast cancer. J Pineal Res 2005; 38:217-222.
- REIERTH E, VAN't Hof T. Seasonal and daily variation in plasma melatonin in the high-arctic Svalbard Ptarmigan (Lagopus Mutus Hyperboreus). J Biol Rhythms 1999; 14:314—319.
- LONGCORE T, RICH C. Ecological light pollution. Front Ecol Environ 2004; 2:191–198.
- BURGER JW. A review of experimental investigations on seasonal reproduction in birds. Wilson Bull 1949; 61:211-230.
- ROWAN W. Relation of light to bird migration and developmental changes. Nature 1925; 115:494

 495.
- BAKER JR, RANSON RM. Factors affecting the breeding of the field mouse (*Microtus agrestis*). Part 1. Light. Proc R Soc Lond 1932; 110:313-323.
- FISKE VM. Effect of light on sexual maturation, estrous cycles, and anterior pituitary of the rat. Endocrinology 1941; 29:187-196.
- LAWTON I, SCHWARTZ NB. Pituitary-ovarian function in rats exposed to constant light: a chronological study. Endocrinology 1967; 81:497-508.
- MCCORMACK CE, SRIDARIAN R. Timing of ovulation in rats during exposure to constant light: evidence for a circadian rhythm of luteinizing hormone secretion. J Endocrinol 1978; 76:135-144.
- PIACSEK BE, MEITES J. Reinitiation of gonadotropin release in underfed rats by constant light or epinephrine. Endocrinology 1967; 81:535-541.
- THOMAS BB, OOMMAN MM. Constant light and blinding effects on reproduction of male South Indian gerbils. J Exp Zool 2001; 289:59

 –65.
- PROUDMAN JA, OPEL H. Turkey prolactin: validation of a radioimmunoassay and measurement of changes associated with broodiness. Biol Reprod 1981; 25:573-580.
- Duston J, Bromage N. Photoperiodic mechanisms and rhythms of reproduction in the female trout. Fish Physiol Biochem 1986; 2:35-51.
- DERRICKSON KC. Variation in repertoire presentation in northern mockingbirds. Condor 1988; 90:592-606.
- LIMA SL. Putting predators back into behavioral predatorprey interactions. TREE 2002; 17:70-75.

- MOUGEOT F, BRETAGNOLLE V. Predation risk and moonlight avoidance in nocturnal seabirds. J Avian Biol 2000; 31:376–386.
- CLARKE JA. Moonlight's influence on predator/prey interactions between short eared owls (Asio flammeus) and deermice (Peromyscus maniculatus). Behav Ecol Sociobiol 1983; 13:205-209.
- DALY M, BEHRENDS PR, WILSON MI et al. Behavioural modulation of predation risk: moonlight avoidance and crepuscular compensation in a nocturnal desert rodent, *Dipodo*mys merriami. Anim Behav 1992; 44:1-9.
- MORRISON DW. Lunar phobia in the neotropical fruit bat, Artibeus jamuicensus (Chiroptera: Phyllostomidae). Anim Behav 1978; 26:852-855.
- SKUTELSKY O. Predation risk and state-dependent foraging in scorpions: effects of moonlight on foraging in the scorpion Buthus occitunus. Anim Behav 1996; 52:49-57.
- IMBER MJ. Behaviour of petrels in relation to the moon and artificial lights. Notornis 1975; 22:302-306.
- JAMES PL, HECK KL Jr. The effects of habitat complexity and light intensity on ambush predation within a simulated seagrass habitat. J Exp Mar Biol Ecol 1994; 176:187-200.
- Brown JS, Kotler BP, Smith RJ et al. The effects of owl predation on the foraging behavior of heteromyid rodents. Oecologia 1988; 76:408-415.
- RYDELL J. Seasonal use of illuminated areas by foraging northern bats Eptesicus nilssoni. Ecography 1991; 14:203–207.
- RYDELL J. Exploitation of insects around streetlamps by bats in Sweden. Funct Ecol 1992; 6:744-750.
- FROY O, GOTTER AL, CASSELMAN AL et al. Illuminating the circadian clock in monarch butterfly migration. Science 2003; 300:1303.
- 104. TARLOW EM, HAU M, ANDERSON DJ et al. Diel changes in plasma melatonin and corticosterone concentrations in tropical Nazca boobies (Sula granti) in relation to moon phase and age. Gen Comp Endocrinol 2003; 133:297-304.
- GAL G, LOEW ER, RUDSTAM LG et al. Light and diel vertical migration: spectral sensitivity and light avoidance by Mysis relictu. Can J Fish Aquat Sci 1999; 56:311-322.
- MOORE MV, PIERCE SM, WALSH HM et al. Urban light pollution alters the diel vertical migration of *Daphnia*. Verh Int Verein Limnol 2000; 27:1-4.
- PETERSEN CGJ. The influence of light on migrations of the eel.
 Rep Danish Bio Stat 1906; 14:2-9.
- 108. Lowe RH. The influence of light and other factors on the seaward migration of the silver eel (Anguilla anguilla L.). J Anim Ecol 1952; 21:275-309.
- GRAU EG, DICKHOFF WW, NISHIOKA RS et al. Lunar phasing of the thyroxine surge preparatory to seaward migration of salmonid fish. Science 1981; 211:607-609.
- SALMON M, WITHERINGTON BE. Artificial lighting and seafinding by loggerhead hatchlings: evidence for lunar modulation. Copeia 1995; 4:931-938.
- GWINNER E. Circadian and circannual programmes in avian migration. J Exp Biol 1996; 199:39

 –48.
- SCHNEIDER TS, THALAU HP, SEMM P et al. Melatonin is crucial for the migratory orientation of pied flycatchers (Ficedula hypoleuca pallus). J Exp Biol 1994; 194:255-262.



January 9, 2012

Mr. Joseph Sidor, Associate Planner
Monterey County Resource Management Agency
- Planning Department
168 West Alisal Street, 2nd Floor
Salinas, CA 93901

Re: Del Monte Forest Plan, County File PLN100138

Draft Environmental Impact Report, State Clearinghouse No. 2011041028

Dear Joe:

On behalf of the applicant, Pebble Beach Company ("PBC"), I am pleased to submit the following comments on the DEIR as prepared by ICF International. Overall, we found the DEIR to be thorough in its scope and comprehensive in its environmental analysis. We appreciate the hard work that both ICF and the County have put into its preparation.

19-01

Our specific comments on each chapter of the DEIR are as follows:

Executive Summary:

ES Comment 1: p 4-3, Table ES-1. We acknowledge footnote a, but would like to clarify that in the square footage reference for The Inn at Spanish Bay, a portion of the 4,155 sf of support/circulation space is actually an expansion of existing meeting space, as shown on Figure 2.9. The amount is approximately 1,800 sf. Additionally, a portion of the 4,660 sf mentioned as new meeting space is actually support/circulation space – about 660 sf. The total estimated square footage remains accurate at 8,815.

19-02

ES Comment 2: Page ES-14, Line 6-8: This sentence should be corrected to state that "The State Water Resources Control Board (SWRCB) is requiring Cal-Am to cease extracting water above its legal rights from the Carmel River by 2017...."

19-03

ES Comment 3: Page ES-14, Footnote 3. The date in the last sentence should be updated from 2011 to 2012.

19-04

ES Comment 4: Page ES-20, Table ES-4. The reference to a Footnote "1" should be changed to "a" in the column "Reduces Impacts to Less than Significant".

ES Comment 5: Following Page ES-20, Table ES-5: Under Alternative 4, the reference should be to 285 spaces, rather than 290 spaces.

19-06

ES Comment 6: Page ES-24, lines 9-15: the reference to existing lots of record states "perhaps as many as 41 units overall, of which only 20 would be in areas considered ESHA". For the record, PBC has been issued 41 certificates of compliance for 41 lots, but we have the potential to obtain certificates of compliance for up to an additional 44 lots, for a total of 85. That would make the impacts of the No Project Alternative more significant than suggested in this analysis, and potentially more significant than the proposed project depending on where the existing lots of record are recognized. Additionally, the reference to 76 lots being in areas that are considered mostly or entirely ESHA is inaccurate, particularly with respect to the portions of Area U and V planned for 7 and 14 lots, respectively. Lots are only planned in these areas within existing developed areas (one used as part of the Equestrian Center, the other the existing Pebble Beach Driving Range). The other areas are small, fragmented areas on existing golf courses, and arguably fall outside the definition of ESHA.

19-07

Chapter 1 - Introduction:

No comments.

Chapter 2 - Project Description:

Project Description Comment 1: Page 2-6, Table 2.2: Same comment as ES Comment 1.

Project Description Comment 2: Page 2-12, Lines 3-9. Same comment as ES Comment 1.

<u>Project Description Comment 3</u>: Page 2-13, line 1; The proposed development site consist of two development parcels totaling 8.58 acres and one preservation parcel of 0.80 acres.

Project Description Comment 4: Page 2-14, line 16; Open space parcels would total 12.07 acres [19-11]

Chapter 3 - Environmental Setting, Impacts, and Mitigation Measures

Environmental Setting Comment 1: Page 3-4, Lines 20-23: Minor technical point – The existing LUP allows 270 rooms at The Inn at Spanish Bay; 269 have been built. So one additional room would be allowed under the existing LUP, rather than zero. Same comment to Table 3-2.

19-12

Section 3.1 – Aesthetics:

<u>Aesthetics Comment 1</u>: Page 3.1-14, Lines 3-9. We disagree that the proposed Fairway One structures would create any inconsistencies with the visual character of The Lodge or as observed from 17-Mile Drive. While the proposed new buildings would differ from the existing buildings on the site to be demolished, the proposed new buildings would be consistent with other existing buildings at The Lodge and with the overall visual character of the Del Monte

Forest as viewed from 17-Mile Drive. The Forest has many different architectural styles that are represented, so the different style represented by the proposed golf cottages (versus existing structures on the site) would be entirely consistent with other styles both at The Lodge and elsewhere in the Forest. Finally, when proposed landscaping at the site matures, the proposed buildings would be substantially screened from 17-Mile Drive and therefore have no significant impact on views from 17-Mile Drive.	19-13 cont'd
Aesthetics Comment 1: Page 3.1-15, Lines 6-10. Same comment as Aesthetics Comment 1.	-
Aesthetics Comment 1: Page 3.1-19, Lines 1-3. This proposed portion of Mitigation Measure AES-A1 should be deleted, for the reasons stated in Aesthetics Comment 1.	19-14
Section 3.2 – Air Quality:	
Air Quality Comment 1: Table 3.2-7. PM 10 Emissions failed to total at the bottom of column 3/15.	19-15
Air Quality Comment 2: Table 3.2-8. PM 10 Emissions failed to total at the bottom of columns 9/12 and 10/12.	
Section 3.3 – Biological Resources:	
Bio Comment 1: Page 3.3-7, Line 14. Take authorization can be obtained either through an incidental take permit or a consultation process, but this sentence only references the take permit. To be accurate, we therefore suggest that the reference be changed to "take authorization" instead.	- 19-16 -
Bio Comment 2: Page 3.3-10, Lines 3&4. The last sentence should be revised to read "The consultation may cover the entire Project or may be limited to only those parts of the Project involving federal jurisdictional wetlands."	19-17
Bio Comment 3: Page 3.3-17, Lines 8-10. Need to clarify that drainages potentially requiring DFG streambed alteration agreements are not necessarily streams or riparian habitats (Area I-2, Area U, Area L).	- 19-18 -
Bio Comment 4: Page 3.3-25, Lines 9-16. Clarify that these drainages are not considered wetlands. They are considered "other waters of the United States" (see also lines 31 & 32 on this page). Also need to clarify that Coastal staff (Dr. Dixon) called the small (0.03ac) depression in the horse paddock in Area U a wetland, not the ditch that flows to Drake Road. The Corps dismissed the isolated depression but considered the ditch "other waters of the United States."	19-19
Bio Comment 5: Page 3.3-33, following line 24. The DEIR should discuss the Yadon's piperia MOU between USFWS and PBC in this section (even though mentioned generally in Section D, pp. 3.3-54 through 3.3-59). This MOU represents a significant milestone in the cooperative arrangement between PBC and USFWSFWS, and is intended to assure the long-term protection of the species in the DMF.	19-20

Bio Comment 6: Page 3.3-41, Lines 3 & 4. The "wetland" impact discussion in areas L and U needs to be clarified, as followed: Area L supports a linear (226 ft or 0.003 ac) drainage ditch ("other waters of the US") and a small seasonal wetland depression (0.011 ac) for a total of 0.014 ac of Corps and Coastal Act jurisdictional area. Only a small part of these features will be filled – less than 0.014 ac. Area U also supports a linear (110 ft or 0.006 ac) drainage ditch ("other waters of the US") and a 19-21 small depression (0.03 ac) that the Corps determined was not jurisdictional, but Coastal staff (Dr. Dixon) called a wetland. So the total fill in Area U will be 0.036, but only 0.006 will be Corps jurisdictional area. Thus, the statement in the text on this page should read: "The proposed project would result in the removal or fill of up to 0.02 acres of Corps jurisdictional waters and wetlands at Area L and Area U. A small (0.03 ac) depression, considered a wetland by Coastal Commission staff, would also be filled in Area U, increasing the total fill to 0.05 acres (not 0.06 as currently noted in the DEIR). All similar references should be corrected. Bio Comment 7: Page 3.3-42, Line 20. We would recommend that the Del Monte Forest Foundation and/or the Open Space Advisory Committee be included as acceptable entities to prepare the SSRMPs. Bio Comment 8: Page 3.3-48, line 7; type conversion of 5.17 4.43 acres of Monterey Pine forest. 19-23 See table 3.3-6 Bio Comment 9: Page 3.3-48, line 9; easement on 8.51 9.25 acres of Monterey Pine forest... See table 3.3-6 Bio Comment 10: Page 3.3-48, line 27; add Area J and Area K Bio Comment 11: Page 3.3-52, Line 12. Change 0.06 to 0.05. See Bio Comment 6 above. Bio Comment 12: p. 3.3-52, Line 17. The drainages in these areas are not classified as wetlands, but other waters of the US. See Bio Comment 6 above. Bio Comment 13: Page 3.3-52, Line 28. Change 0.03 acre to 0.014 acre. See Bio Comment 6 19-28 above. Bio Comment 14: Page 3.3-52, Line 31. Revise to read: "An approximately 0.03 acre depression considered a wetland by Coastal staff and a 110 linear foot drainage ditch considered waters of 19-29 the United States by the Corps would be filled for residential development in Area U." See Bio Comment 6 above.

19-30

Bio Comment 15: Page 3.3-53, line 8; should read Area H, not Area G

Bio Comment 16: Page 3.3-70, Line 20. We recommend changing the word "must" to "may" because the statement as written implies that there are no alternatives for frog movement in these areas. Bio Comment 17: Page 3.3-71, Line 23. CRLF surveys are typically conducted in and directly adjacent to aquatic sites. Finding frogs in upland habitats 300 feet away from aquatic habitats is virtually impossible (without radio tagging). We would recommend that the surveys be limited to 19-32 areas directly adjacent to aquatic areas. Additionally, the requirement that the Corporation Yard be fenced during construction to exclude red-legged frog is unnecessary – there are no aquatic areas near the Corporation Yard that could lead to red-legged frogs being on-site. Bio Comment 18: Page 3.3-71, Line 38. The proposed language is too restrictive. We need to be able to create new breeding ponds in areas other than those listed if that works better biologically. Suggest "create new breeding ponds within the Seal Rock Creek watershed in areas determined suitable by a qualified biologist." Bio Comment 19: Page 3.3-72, Line 4. The proposed language is too restrictive. According to Mike Zander, PBC's biologist, requiring a guarantee that ponds will dry down completely every other year in August-October would be infeasible and would react significant design/management difficulties. Bio Comment 20: Page 3.3-81, Lines 28-29. Please correct the referenced dates on the following page (3.3-82, lines 3, 14 & 19) to be consistent with the dates here. The period should be from July 1st and Feb 28th in all locations. 19-36 Bio Comment 21: Page 3.3-89, Line 40. Change 0.06 to 0.05. See Bio Comment 6 above.

Section 3.4 - Climate Change:

No comments.

Section 3.5 - Cultural Resources:

<u>Cultural Resources Comment 1</u>: Page 3.5-14, Lines 15-27. We presume that the intent of MM CR-B1 is to require training only for grading construction workers, versus other construction workers. Please clarify if considered necessary. We also think the requirement should be limited to forepersons and field supervisors. Attempting to train all hourly grading workers would be unreasonable and difficult to implement for hourly workers who would be under the direct control of forepersons and field supervisors anyway.

19-37

<u>Cultural Resources Comment 2</u>: Page 3.5-16, Lines 10-11. Same comment as Cultural Resources Comment 1 above.

Section 3.6 - Geology, Seismicity, and Soils:

Geo Comment 1: Page 3.6-2, Table 3.6-1. Under GSS-D3, we are unaware of any unconsolidated fill at The Inn at Spanish Bay, and believe that this column should be changed to no impact or not applicable to this development site.	19-38
Geo Comment 2: Page 3.6-19, Line 8. The reference to The Inn at Spanish Bay should be deleted. See Geo Comment 1 above.	
Geo Comment 3: Page 3.6-19, Line 9. The reference to Conference Center Expansion should be corrected to Area M Spyglass Hotel/Lots.	19-39
Geo Comment 4: Page 3.6-19, Lines 19-21. This discussion of Area K should be moved under the prior section relating to slope stability and the heading changed accordingly, as there is no fill in Area K, but there are steep cutbanks.	19-40
Geo Comment 5: Page 3.6-21, Line 28. The reference to Section 3.4 should be changed to Section 3.7.	19-41
Geo Comment 6: Page 3.6-23, Lines 3-4. The reference to Conference Center Expansion at The Inn at Spanish Bay should be deleted. See Geo Comment 1 above.	
Geo Comment 7: Page 3.6-25, Lines 28-29. The references to Conference Center Expansion and New Guest Cottages at The Inn at Spanish Bay should be deleted. See Geo Comment 1 above.	19-42
Sation 2.7 Harbora and Water Oralitan	

Section 3.7 - Hydrology and Water Quality:	
Hydro Comment 1: Page 3.6-6, Table 3.6-2. Confirm that that developments sites column includes all development areas. Same comment on Table 3.6-3 on pages 3.6-10 to 11. Additionally, references to "MR" should all be "MH/MR.	19-43
Hydro Comment 2: Page 3.7, Lines 10-11. Add "waters of the United States" after "wetlands" and change the reference from 0.06 to 0.05 acres. See Bio Comment 6 above.	19-44
	19-45
Hydro Comment 4: Page 3.7-20, line 19; site is contained within the Fan Shell watershed with a small portion within the Carmel Bay ASBS watershed	19-46
Hydro Comment 5: Page 3.23, Line 14. The total run-off figure of 21,798 cubic feet seems high for 2.73 acres of impervious surface in comparison to other areas. For example, the New	19-47

Employee Parking for The Inn at Spanish Bay has a comparable amount of new impervious surface, 2.64 acres, yet the total run-off figure is only 8,377 cubic feet. See page 3.7-22, Line 27-28.	es 19-47 cont'd
Hydro Comment 6: Page 3.7-25; footnote numbers incorrect	Ţ
Hydro Comment 7: Page 3.7-26; footnote numbers incorrect	19-48
Hydro Comment 8: Page 3.7-27; footnote numbers incorrect	
Hydro Comment 9: Page 3.7-30, line 29; would increase by 36.69 acres (0.70% of the total ar of Pebble Beach). Overall revised number was not reflected in the Drainage report addendum WWD, September 21, 2011	
Hydro Comment 10: Page 3.7-34-35, Mitigation Measure HYD-C3. The Collins Field is an existing turfed area that is already maintained for golf practice and other occasional recreation uses. As a result, the movement of the existing PB Driving Range to this location presents no significant change in usage or in maintenance practices. Consequently, there is no basis for adding this proposed mitigation measure to this site, and the measure should be deleted.	
Hydro Comment 11: Page 3.7-35, line 33; would increase by 36.69 acres (0.70% of the total a of Pebble Beach). Overall revised number was not reflected in the Drainage report addendum WWD, September 21, 2011	
Section 3.8 - Land Use and Recreation:	
<u>Land Use Comment 1</u> : Page 3.8-14, line 11. The proposed development site consist of two development parcels totaling 8.58 acres and one preservation parcel of 0.80 acres.	19-52
Land Use Comment 2: Page 3.8-14, line 24; Area K also includes 4.70 (2.84+1.86, same as page 2-14) acres of land to be dedicated	age 19-53
Land Use Comment 3: Page 3.8-14, line 38; would also include 12.07 acres (8.33 + 1.01+2.73 of open space	3)] 19-54
Land Use Comment 4: Page 3.8-15, line 26; open space, totaling 2.91 (2.43+.48) acres, and a 12.56-acre	19-55
Land Use Comment 5: Page 3.8-16, line 11; 6.96 acres preservation parcel	 19-56
Land Use Comment 6: Page 3.8-17, line 3; existing intersection by providing a left-turn channal realigning to eliminate	nel] 19-57
<u>Land Use Comment 7</u> : Page 3.8-17, line 15; There would be 0.25 miles of new trails, and the balance of 2.15 miles would result from relocating (see page 2-17)	19-58

<u>Land Use Comment 8</u>: Page 3.8-24, line 21; Create 0.40 mile of new trails with 0.15 mile on existing dirt fire road (see page 2-17).

19-59

Section 3.9 – Noise and Vibration:

No comments.

Section 3.10 - Public Services and Utilities:

No comments.

Section 3.11 – Transportation and Circulation:

<u>Traffic Comment 1</u>: Page 5-32, Table 5-4. This table should also include the intersection Level of Service for the 2015 No Project scenario i.e., without Del Monte Forest Plan. According to Table 3.11-25 (Section 3.11, page 3.11-52) the AM peak hour LOS in 2015 without the project is F with 105.7 seconds of delay. According to Table 3.11-26 (Section 3.11, page 3.11-54), the PM peak hour LOS is E with 79.0 seconds of delay.

19-60

With this added information to the table, it clearly shows that the road improvements proposed with the Del Monte Forest Plan improve traffic operations over a scenario without the project.

<u>Traffic Comment 2</u>: Page 5-33, Table 5-5. This table should also include the intersection vehicle queues for the 2015 No Project scenario i.e., without Del Monte Forest Plan. According to the October 2011 traffic study completed by Fehr & Peers (Table 10-2, page 100), the 95th percentile vehicle queue for eastbound Highway 68 approaching the Highway 1 intersection would be 3,874 feet in the AM peak hour and 4,078 feet in the PM peak hour.

19-61

With this added information to the table, it clearly shows that the road improvements proposed with the Del Monte Forest Plan substantially reduce the expected vehicle queues without the project on eastbound Highway 68 approaching the Highway 1 intersection; by about 45% in the AM peak hour and about 50% in the PM peak hour.

<u>Traffic Comment 3</u>: Page 5-34, Lines 6-11. PBC acknowledges that the roundabout at the Highway 68/Highway 1 intersection (depicted in Figure 5-1) performs better than the Caltrans approved Highway 68 Widening Project in terms of intersection Level of Service and vehicle queuing. However, Pebble Beach Company has serious concerns regarding its feasibility.

As noted in the text, the roundabout maintains an existing design deficiency identified by Caltrans i.e., locating an intersection (17 Mile Drive) on an on-ramp to southbound Highway 1. This design deficiency was raised by Caltrans during preparation of the Project Study Report for the Highway 68 Widening Project which was completed by the City of Monterey during 2002/07. During that time, the City of Monterey was unsuccessful in obtaining the mandatory design exception from Caltrans to maintain the existing design deficiency. Instead, the traffic movements between Highway 68 and 17 Mile Drive were required to be physically separated from the movements to Highway 1. That requirement ultimately led to the Highway 68 Widening Project with a 5-leg intersection at the Highway 1 off-ramp intersection.

Furthermore, several alternatives were considered in the Project Report for the Highway 68 Widening Project including roundabout alternatives. These alternatives were dismissed by Caltrans District 5. There is no supporting evidence that Caltrans District 5 will support the current roundabout design (depicted in Figure 5-1) since it violates the mandatory design exception. Furthermore, the roundabout not only needs approval from Caltrans District 5 but it also needs to be approved by Caltrans Headquarters in Sacramento.

19-62 cont'd

Caltrans approved the Project Report for the Highway 68 Widening Project. The Transportation Agency of Monterey County (TAMC) website also indicates that the project is environmentally cleared. Refer to this website

http://www.tamcmonterey.org/programs/hwyproj/pdf/Roadway 05 Peninsula Projects.pdf

PBC identified a constructible phase of that Highway 68 Widening Project that would improve traffic operations over the current conditions as well as conditions with the development proposal. PBC then incorporated that phased project into the Del Monte Forest Plan to ensure that the community could achieve an improved condition until such time that funding is available to construct the entire widening project. The Community Hospital of Monterey Peninsula (CHOMP) took a similar approach with the City of Monterey in 2008 by constructing a phase of the Highway 68 Widening Project at the entrance to their hospital.

19-63

Pebble Beach Company estimates that the phased project will cost about \$4 million to design and construct. The Del Monte Forest Plan is estimated to contribute 3.11 percent or \$778,000 (DEIR Section 3.11, page 3.11-57, line 29).

In conclusion, PBC firmly believes that the roundabout design (depicted in Figure 5-1) is not feasible because Caltrans previously declined to approve the needed mandatory design exception. In addition, as a private entity, PBC is at a disadvantage over local public agencies such as Monterey County, TAMC, and the City of Monterey to reach agreeable terms with Caltrans.

19-64

Section 3.12 - Water Supply and Demand:

As we understand the reasoning and conclusions of the Water Supply and Demand section, the DEIR begins by utilizing as the "baseline" the "normal" CEQA position of the existing conditions as of the time the notice of preparation was published for the EIR (2011). It recognizes the legal validity of the Pebble Beach Water Entitlement ("PBWE") of 365 acre feet annually ("AFA") initially granted to Pebble Beach Company ("PBC") and now held by PBC and a number of other Del Monte Forest landowners, all pursuant to a series of agreements between PBC and the Monterey Peninsula Water Management District ("MPWMD") related to the funding of the highly successful Carmel Area Wastewater District ("CAWD") – Pebble Beach Community Services District ("PBCSD") Wastewater Reclamation Project (the "Reclamation Project"). The Reclamation Project is now providing on average approximately 1,000 AF of recycled water to irrigate the eight Del Monte Forest golf courses and other open spaces, replacing and conserving 1,000 AF of potable water from Cal-Am sources previously utilized for this irrigation. The DEIR recognizes the effect of State Water Resources Control Board ("SWRCB") Cease and Desist Order 2009-0060 (the "CDO") which allows the holders of the PBWE to connect to the Cal-Am system and be served with withdrawals from the Carmel

River, over and above the limits otherwise imposed by the CDO, until December 31, 2016. Thus, insofar as water supply is concerned, water is available to serve the Project and there is no significant effect.

19-65 cont'd

On and after January 1, 2017, the holders of the PBWE are still legally entitled to connect to the Cal-Am system, but Cal-Am may serve the PBWE only with legal withdrawals from the Carmel River and other sources. If a Regional Water Project ("RWP") is completed and operational by January 1, 2017, there will be no significant impact because the RWP will provide additional water supply sufficient to serve the PBWE for the Project and all other customers in the Cal-Am system without water rationing or other cutbacks in service. However, if a RWP is not completed and operational by January 1, 2017, then serving the new connections of the PBWE thereafter will require further water rationing among existing Cal-Am customers (including existing PBWE customers), and this impact is considered. There is no mitigation assignable to PBC for this significant effect, which makes it unavoidable, because PBC through its funding of the Reclamation Project has already contributed its proportionate share to the mitigation – and constitutional principles enunciated in the U.S. Supreme Court cases of Nollan v. California Coastal Commission and Dolan v. City of Tigard preclude imposing additional mitigation burdens on PBC.

19-66

The effects on Water Infrastructure Capacity are similar. Until January 1, 2017, there are no significant effects because the Project with the PBWE can be served with permitted diversions from the Carmel River and no additional infrastructure is needed. After January 1, 2017, however, a RWP will need to be built to serve existing demand and the increase in demand from the Project. The amount required to serve the Project is interpolated from the existing demand amount utilized for planning the Coastal Water Project, so no increase in capacity is required to serve the Project and thus there are no significant effects in this regard. However, because a RWP is assumed to have secondary and significant unavoidable environmental impacts as found in the PUC EIR for the Coastal Water Project, the impacts are the same for the Project.

19-67

With respect to the effects on Carmel River Biological Resources, because the Project will result in increased withdrawals through 2016 and such increased withdrawals would have deleterious effects on the biological resources of the Carmel River, the Project's effects are significant and unavoidable. However, after 2017, the Project demand would not change the already SWRCB-mandated reductions in Carmel River withdrawals, and the Project's effects would not be significant.

19-68

With respect to cumulative impacts, adding the unused portion of the PBWE for other owners and other cumulative demand, the effects would be the same as described above for the Project.

19-69

Initially, we recognize that the water supply for this Project involves complex facts and issues. Thus, the DEIR has been forced to make various assumptions and engage in a certain amount of forecasting. We believe the DEIR has done a commendable and quite thorough job on its analysis of the issues, and none of our comments indicating some disagreements are intended to detract from our respect for the job done.

Our first and most important comment is on the selection of the "baseline." While the CEQA Guidelines state that the baseline will "normally" constitute the physical conditions at the time the EIR notice of preparation is published, the distinctive circumstances of the water supply for this project are not "normal," They not only justify, but in fairness and accuracy require, a departure from a "normal" baseline. The CEQA Guidelines clearly contemplate exceptions in untypical cases, and the selection of an earlier baseline is supported by recent case law in the context of water.

In Cherry Valley Pass Acres & Neighbors v. City of Beaumont, 190 Cal App. 4th 316, decided in November of 2010, the court held that the quoted section of the CEOA Guidelines "necessarily contemplates that physical conditions at other points in time may constitute the appropriate baseline or environmental setting" (at p. 336, emphasis in original) and that "an agency enjoys the discretion to decide ... exactly how the existing physical conditions without the project can most realistically be measured." (at pp. 336-337, emphasis ours). In the Cherry Valley case, the EIR utilized the adjudicated right of a party to draw 1,484 AFA employed while an egg farm was operating as the baseline, rather than the 50 AFA the party was actually using after the egg farm ceased operations when the EIR was prepared. The court held that this was a proper baseline; the party still retained the right to pump 1,484 AF, and this amount reflected the "real conditions" on the ground" and was not a "hypothetical" amount even though the use was earlier in time. The situation with respect to the state of the Carmel River and the PBWE is remarkably similar. keeping in mind that the task is to "decide exactly how the existing physical conditions without the project can most realistically be measured." Prior to the PBWE, approximately 1,000 AF more water was being withdrawn from the Carmel River to irrigate Del Monte Forest open spaces than is presently being withdrawn. Beginning in 1994 through 2007, the Reclamation Project reduced that amount by an average of 706 AFA. Since 2007, the savings has been incrementally increased to 1,000 AFA today. The Reclamation Project was made possible entirely by PBC's funding of the project. Such funding would not have been provided by PBC unless it had been granted the PBWE; and PBC would not have acquired the PBWE except for its plans for development of its Del Monte Forest properties and with the assurance that the PBWE could in fact be used for such purpose. Stated differently, the development of PBC's Del Monte Forest land, now proposed by this Project, is the sine qua non of the savings/reduction of 1,000 AF in Carmel River withdrawals. Without the prospective development of PBC's Del Monte Forest land, there would be no Reclamation Project and no reduction of 1,000 AFA of withdrawals from the Carmel River. Thus, the existing physical conditions without the PBC Project are "most realistically measured" by considering the environmental setting before the savings/reduction of a minimum of 700 AFA in Carmel River withdrawal.

Utilizing an appropriate baseline of the pre-Reclamation Project existing conditions prior to the Project, which would be the year (1993) just prior to commencement of its operation, one would find that for each relevant environmental effect, there is a <u>reduction</u> in impacts and a <u>net benefit</u> to the Carmel River from the Project. The PBWE of 365 AFA (with another 15 AFA to Lohr and Griffin for a total of 380 AFA) <u>directly caused</u> a reduction of <u>approximately 700AFA</u> initially of withdrawals from the Carmel River (13 year average through 2007).

In many respects, utilization of the 1993 baseline of existing conditions is only a different way of saying that PBC is not responsible, under the constitutional limitations of the *Nollan* and *Dolan*

Supreme Court decisions, for any further mitigation for increased water use/withdrawals over a 2011 baseline because PBC has already paid its proportionate share of such mitigation through its funding of the Reclamation Project; this is the conclusion of the DEIR. But using a 1993 baseline is more accurate, because PBC has not only paid for the Reclamation Project, but its funding in anticipation of development of its Del Monte Forest Land (of which the Project is the latest iteration) unquestionably <u>caused</u> the Reclamation Project and the resultant water savings that have benefitted the community for over 17 years now.

19-71 cont'd

In summary, since all significant effects noted in the DEIR derive from an <u>increase</u> in water use above the "baseline" of 2011 (which is after all of the savings from the Reclamation Project have been realized), utilizing a proper baseline of the pre-Reclamation Project operation as noted above would produce no significant effects whatsoever.

Even if one accepts a 2011 baseline as appropriate, we take issue with certain of the assumptions, analysis, and conclusions of the DEIR. First, the assumption that the Project may be served only with withdrawals from the Carmel River is inaccurate. The two main sources for Cal-Am are the Carmel River and the Seaside Coastal Sub-Basin, although other smaller sources (e.g., aquifer storage and recovery) are also contributory. This water is fungible, however, in the sense that, once supplied to the Cal-Am system, water is commingled and then distributed out over the system as a whole. Thus, water to serve the PBWE may come from any source available to Cal-Am, not just the Carmel River. One should not confuse an exclusivity of source from the Carmel River to serve the PBWE with the impact on the Carmel River of serving the PBWE.

19-72

Second, the DEIR should recognize that any impacts attributable to a RWP not being completed by January 1, 2017 are short-term impacts. The completion of a RWP that will replace the water illegally withdrawn by Cal-Am from the Carmel River and supply water to the full extent of the PBWE is neither speculative nor uncertain. Cal-Am is subject to a State order (the CDO) and likely other laws that require this result. Therefore, for purposes of CEQA, a RWP should be viewed as a certainty. The timing of its completion and operation may presently be uncertain, but given the regulatory, economic, and social exigencies of remedying the present situation, if not accomplished by January 1, 2017, a RWP of some kind would be completed in a matter of a few years thereafter.

19-73

More specific comments are set forth below.

Water Supply and Demand Impacts

We believe the effects of the Project's use of 135 AFA as of January 1, 2017 (even assuming that full amount would be used by then, which is highly doubtful) on intensified rationing would be negligible and insignificant. Without considering use of the PBWE, the CDO already requires incremental cutbacks that may induce rationing, and as of the beginning of 2017 (as is acknowledged in the subsection on impacts on Carmel River Biological Resources) the SWRCB-mandated cutback is so severe that 135 AFA would be a negligible percentage contributing to the rationing need. Assuming Cal-Am withdrawals from the Carmel River to coincide with its 3,376 AFA of legal water rights in 2017 with no RWP, Table 3.12-10 lists a reduction of -7,782 AFA under average rainfall years over 2011 conditions. The Project would contribute only an additional 47 AFA to the rationing load that achieves this -7,782 AFA reduction, or 0.6%.

While the impacts of severe rationing may indeed be significant and unavoidable, they are not caused by the Project, and the Project's contribution to those impacts is so miniscule that it cannot be described as a significant and unavoidable impact of the Project. The same is true for cumulative impacts, where the cumulative demand from the PBWE would approximately 98 AFA (see Table 3.12-14), or 1.25%.

19-74 cont'd

Water Infrastructure Capacity

The DEIR correctly concludes that the Project will not of itself create the need for any increase in capacity of a RWP, either before or after January 1, 2017 or under cumulative conditions. The DEIR concludes, however, that because the PBWE amount necessary to meet the Project and other cumulative demand is included in existing demand that a RWP must accommodate, and the RWP as analyzed in the CPUC final EIR found that there were significant and unavoidable impacts in certain areas, those impacts are significant and unavoidable impacts of the Project, and cumulative conditions. Again, even assuming full use of the PBWE as a part of existing demand that must be provided for over-and-above 2017 supply, that amount is miniscule and an insignificant contribution to the overall demand creating the need for a RWP and thus the significant impacts of a RWP. It cannot fairly be said to be a significant impact of the Project, and should not be characterized as such.

19-75

Carmel River Biological Resources

The DEIR finds that, after January 1, 2017, there would be no significant impact to the biological resources of the Carmel River because the SWRCB order "caps" the amount that Cal-Am can withdraw from the river at Cal-Am's 3,376 AFA legal rights, and providing water to the Project would not change that amount. The DEIR finds, though, that there would be a significant and unavoidable impact on such resources prior through the end of 2016 because the Project would require increased withdrawals from the Carmel River over 2011 existing conditions. That is hardly apparent, however. In fact, the SWRCB orders are requiring Cal-Am to reduce its withdrawals incrementally from 2009 on, so withdrawals even with the amount of the PBWE will be less than 2011 conditions. And, as a corollary, the withdrawals allowed by the SWRCB orders until 2017, over and above Cal-Am's legal rights of 3,376 AFA, are far greater than the withdrawals for the Project. The lowest amount of these SWRCB permitted withdrawals (without legal right) is 5,942 AFA in 2016-17 according to the CDO. Again, the additional withdrawals for the Project, 145 AFA maximum, are an insignificant amount of the total permitted withdrawals (without legal right) until 2017 – 2.44 % to be exact. Again, while the total amount of allowed withdrawals may be causing significant adverse impacts to the biological resources of the Carmel River, the PBWE withdrawals for the Project, individually and on a cumulative basis, by themselves are not causing those impacts, and are making a negligible contribution to the overall withdrawals causing the impacts. Thus, the effects of the Project are insignificant, and should be stated as such.

19-76

Other Considerations

Some of the assumptions regarding water use and regulatory outcome intensify the effects the DEIR perceives from the use of the PBWE in ways that are unrealistic. For example, the DEIR assumes that all of the PBWE will actually be in use at the relevant times in its analysis, which as a factual matter is virtually impossible. The construction /implementation schedule for the Project alone anticipates incremental development through the year 2022, and for the residential

component this schedule includes only subdivision of the land for sale of lots, not the construction of the homes which will actually use the water. Based on historical development patterns in the Del Monte Forest, construction of homes is expected to take place over a much more extended time period – more on the order of 20 to 30 years. Also, PBC's experience is that, with respect to the portion of the PBWE that has been purchased by other residential homeowners in Del Monte Forest, many have done so without any present intention of using the water in the immediate future but rather to "bank" the water for future needs. These "needs" may or may not occur for many years, if ever.

19-77 cont'd

Finally, modifications to the CDO which would alter many of the DEIR's conclusions are certainly possible. Presently there is litigation pending in the Santa Clara County Superior Court brought by Cal-Am, MPWMD, and other parties against the SWRCB, and include PBC as a real party in interest. The outcome of this litigation, through settlement or trial, may materially modify the terms of the CDO. One logical modification would be to make the ability of Cal-Am to serve the PBWE with diversions from the Carmel River, over-and-above the limitations of the CDO, co-terminus with the completion of a RWP. That was clearly the intent of the CDO Decision, since Cal-Am represented, and the SWRCB and all parties relied on such representation, that a RWP would be completed by January 1, 2017.

19-78

Chapter 4 - Other CEQA-Required Sections:

Other Section Comment 1: Table 4.1, Significant and Unavoidable Impacts, and Pages 4.6 to 4.7. See PBC Comments on Water Supply Chapter.

19-79

<u>Chapter 5 – Alternatives:</u>

We have no material comments on the Alternatives section not already included in our comments on other sections. The DEIR is correct that there are multiple options for considering alternatives to the clustered and reduced-density residential designs. The DEIR has selected a reasonable range of alternatives on these options, from which conclusions can also be made about other possibilities. The DEIR has selected a reasonable range of alternatives as well for the other Project elements considered in the Alternatives section. We are withholding judgment at this time on whether any of these alternatives would, in fact, be feasible, if selected. We do appreciate the comprehensive discussion.

19-80

We appreciate the opportunity to provide our comments. If you have any questions, please call me at 831-625-8449.

Sincerely,

PEBBLE BEACH COMPAN

Mark Stilwell

Executive Vice President, Real Estate

Bringing you HOPE -

Helping Our Peninsula's Environment

Box 1495, Carmel, CA 93921 831/624-6500 Info7 at 1hope.org www.1hope.org

Monterey County Supervisors Coastal Commission

January 25, 2012

PBC & Monterey County "Planning" Still can't get it right after 5 major tries.

Pebble Beach Forest Destruction Project (Version 5) And affiliated Zoning Changes Violate CEQA in 12 ways

With all due respect, HOPE must object to the project and the purported environmental review of the current Pebble Beach Company Forest Destruction Project.

Trustees 2012

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Founding Trustees

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Science Advisors
The late Herman Medwin,
Ph.D. - Acoustics

Susan Kegley, Ph.D.

- Hazardous Materials & Pesticides
Arthur Partridge, Ph.D.

Forest Ecology

20-01

Here are the legal, rationale, physical, environmental harms and problems the project faces --

1. Water: Though PBC correctly calls it an "entitlement" PBC falsely implies they obtained a "right" to 360 acre feet of water to use for development. They have no right to that water - because the agency that "gave" them the water" had no authority or right to do so.

This claim is not unlike the for-profit companies who will sell you the "right" to name a star - that is wholly unrecognized by the International Astronomical Union. Those companies have no recognized "right" to sell you a star name.

The PBC so called "water entitlement" arises out of water given to them by an agency that had no legal right or authority to give water away. This "science fiction" claim has not yet been decided by a court.

This is highly important because all residents of the Monterey Peninsula are laboring under a genuine Water Emergency first declared by The Monterey Peninsula Water Management District in 1998.

The State Water Resources Control Board, Per Order No. 95-10, issued in 1995, ordered California-American Water Company to reduce 70 percent of its pumping of the Carmel River Alluvial Aquifer. This means that two-thirds of all water coming out of our drinking water faucets is illegally pumped water.

20-02

20-03

Founded in 1998, and known for helping with hundreds of environmental and democracy successes including stopping both "Dirty Harry" and "The Terminator," <u>H.O.P.E.</u> is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.

In addition, three major changes have occurred since the PBC project was first filed in 1999 and then rejected by the Coastal Commission in June 2007.

20-04

2. <u>Traffic</u>: Event Traffic inside the Forest has dramatically worsened because the Coastal Commission (gently reminded by HOPE annually for a decade) finally forced PBC to permanently close the Haul Rd.

20-05

Now most Golf Event Traffic must use the Highway 1 gate - instead of the Haul Rd as they did heavily until a few years ago. Now during Golf Events using roads inside the Forest is much more congested and has many more detours and outright prohibitions. The Purported EIR failed to recognize this.

20-06

• (Why has No Golf event in Pebble Beach ever had to obtain a Coastal Permit? If an individual holds an outside event with more than 50 people - we have to at least get a county permit.)

T 2∩₋∩7

3. <u>Lots</u>: PBC has only provided evidence of only 43 lots of record - but they claim they have 90.

20-08

4. <u>Endangered Species</u>: Due to the Coastal Act (and the Commission decision) and its mutual support of Endangered species laws - PBC must <u>avoid</u>, not just minimize, <u>harm</u> to Native Monterey pine forest which is vital habitat for Yadon's piperia and two dozen other formally protected endangered species.

Other problems include:

5. <u>Removing Zoning for Resource Protection</u> - B-8 Zoning - Contradicted by, and Not Supported by Evidence.

20-09

As noted above our community is out of water and suffers daily gridlock. Yet this proposal to remove the protective B-8 zoning - claims those problems do not exist or are somehow irrelevant to this proposal.

6. Piecemealing: Separating Dual Projects by same applicant (Poppy Hills and PBC)

The two projects: Poppy Hills and todays' PBC Forest Destruction Plan -

- are processed by the same agency,
- are adjacent to each other,
- destroy huge amounts of imperiled Monterey pines and their habitat for endangered species.
- yet the two projects are separated and the purported environmental analyses use different significance thresholds and methods for CEQA purposes.

This is a text book definition of piece-mealing - which is forbidden by CEQA

1

HOPE requests that the County -

- 1. Please fix these errors in the EIR, then when legally adequate re-circulate the EIR.
- 2. Include the Coastal Commission's (June 2007) Denial of this earlier version of this project, and its findings and all of its evidence be made a part of this administrative record, this hearing and considered.
- 3. Include the Coastal Commission Staff Report on the proposed (and since withdrawn) Pebble Beach Driving Range Expansion (A-3-MCO-98-085) dated 5/25/99 which recommended that the Commission find that substantial issues exist with regard to the loss of native Monterey pine habitat, substantial evidence of listed endangered species (Yadon's Piperia and Hickman's Onion) lined the area and the need for an update of the Del Monte Forest LCP.
- 4. Include the May 19, 1999 and October 28, 1999 Coastal Commission Letters to Monterey County Planning Director William Phillips regarding the proposed Pebble Beach Lot Program and its relation to 1) the Coastal Act definition of Environmentally Sensitive Habitat Area (ESHA), 2) ESHA Avoidance v CEQA Mitigation, 3) In situ preservation of Pinus Radiata (Monterey Pine) forest, 4) Wetlands delineation.
- 5. Add a document called "Final EIR" to the County website. There is still no such document available as of this morning of the hearing (Wednesday, January 25, 2012).

Finally, HOPE would like to let you in on a Huge Secret --

If Monterey County prepared a legally adequate EIR that illuminated the genuine environmental harm done by the proposal, rather than twisting and hiding reality, *HOPE would have nothing to litigate*.

This would ease the burden on County staff and save PBC lots of money and years of effort.

Thank you,

-David Dilworth for the Board of Trustees Helping Our Peninsula's Environment

Note 1:

Unfortunately we have learned over decades of attending County meetings that it is a waste of the public's time to speak to Supervisors at the podium. Kind of like looking for living dinosaurs, Gravity Waves or Cosmological Dark Matter, we have yet to detect a single instance of the Supervisors responding in any way to public interest concerns.

That is why we no longer waste our time participating in your "<u>Hear</u>ings" - because even when we have to get a Court to order you to do it properly - you still don't "hear" us.

Founded in 1998, and known for helping with hundreds of environmental and democracy successes including stopping both "Dirty Harry" and "The Terminator," <u>H.O.P.E.</u> is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.

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20-11

20-12

20-13

20-14

20-15

20-16

Note 2:

Water Conservation Ignored

What water conservation methods are all PBC's 7 golf courses using?

- Does PBC compact their soil? (No. Yet, compacting alone has reduced water use by as much as 49%.)
- Do PBC golf courses get watered only when needed or on a clock schedule? (Hint Spanish Bay and PBC operate on a clock causing shallow rooting and increases water need.)
- Does PBC water deeply and infrequently? (No.)
- Did PBC lower their mowing height? (No.)
- Does PBC use dull moving blades? (Not on purpose ;-)
- Did PBC reduce fertilizer use to save water? (No.)

According to the US Golf Association all these methods significantly reduce water use.

HOPE and this project:

HOPE is the organization that lead the successful 15 year effort to protect the native Monterey pine forest from PBC's chainsaws. The effort succeeded when the Coastal Commission rejected Supervisor Dave Potter's motion to approve the project (8-4) in 2007.

HOPE is the only group which filed a lawsuit against the project; who attended and participated in every one of the <u>hundreds of meetings</u>, lead hundreds of people on ecosystem tours of the native Monterey pine forest, and who provided written objections with the best available science at every one of the dozens of comment opportunities over the 15 year timespan when the first version of the project was announced in 1992.

And of course HOPE is the group that was able to persuade "Mark Twain" himself to testify on behalf of the endangered red-legged frogs at a Coastal Commission hearing.

20-18





January 18 2012

Monterey County Planning Department 168 West Alisal Street, 2nd Floor Salinas, CA 93901

CEQAComments@co.monterey.ca.us

SUBJECT:

MND FOR POPPY HOLDINGS INC. AND DEIR FOR THE PEBBLE BEACH COMPANY

PROPERTIES IN THE DEL MONTE FOREST LCP

Dear Staff:

The League of Women Voters of the Monterey Peninsula has reviewed the environmental documents for the Pebble Beach Company (PBC) project which includes over 125 amendments to the Del Monte Forest LCP and the Poppy Hills Golf course project. It has come to our attention that our earlier letter on these projects incorrectly stated that the Pebble Beach Company is the applicant for both projects. Although there are two separate applicants, our overall concern remains the same.

21-01

The environmental documents for the projects do not account for the cumulative impact of both projects. For example, the PBC project would remove up to 6,700 Monterey Pine trees. The Poppy Hills Golf course project would remove 533 trees. Both projects include significant emissions during the construction phase with potential health impacts from diesel exhaust emissions. In terms of climate change, the PBC project would emit up to 5,469 MT CO₂e while the Poppy Hills project would emit 2,227 tons of CO₂ over the life of the project. While the second project's impact may not be significant, when considered with the first, the total may be significant and require a larger amount of mitigation. Finally, the two environmental documents use different methodologies for addressing impacts on climate change.

21-02

21-03

We request that the two environmental documents address the totality of the impacts of both projects on the environment, use consistent methodologies for addressing climate change and that these documents be recirculated for public review and comment.

21-04

Thank you for the opportunity to review the documents.

Sincerely,

Beverly Bean President

Blum-1

-----Original Message-----

From: Mark Blum [mailto:MBlum@horanlegal.com]

Sent: Tuesday, March 20, 2012 12:21 PM

To: Sidor, Joe (Joseph) x5262

Subject: Pebble Beach Company Project

Joe,

There is a riparian drainage channel located between the Fairway One parcel and the Scifres property. I reviewed the DEIR and Appendices,

and did not see this area identified or evaluated for ESHA/riparian values. As a consequence, I presume there are no mitigation measures

recommended in the EIR for setbacks from this channel. Do you know whether this channel has been evaluated and determined not to be

a riparian corridor, and if so, where would that analysis be found?

Thank you, Mark

Mark A. Blum



Horan Lloyd A Professional Corporation 499 Van Buren Street P.O. Box 3350 Monterey, CA 93942-3350

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Of Counsel
JEROME F. POLITZER:
SEAN FLAVIN
JACQUELINE M. PIERCE

LAURENCE P. HORAN (1929-2012) OUR FILE NO. 6504.01

March 28, 2012

VIA ELECTRONIC & REGULAR MAIL

Dan Carl
California Coastal Commission
Central Coast District Office
725 Front Street, Suite 300
Santa Cruz, CA 95060-4508

RE: Monterey County LCP Amendment No. MCO-1-12 (Del Monte Forest LCP update and Pebble Beach Company Concept Plan)

Dear Mr. Carl:

This firm represents Mr. and Mrs. Donald R. Scifres, owners and residents of the property located at 3310 Seventeen Mile Drive, Pebble Beach (Monterey County APN 008-423-004). The Scifres' parcel and residence ("Scifres' Parcel") is located adjacent to the proposed Fairway One project, a component of the Pebble Beach Lodge expansion in the Pebble Beach Company Concept Plan.

One of the two parcels comprising the proposed Fairway One project is known as the Beirne Parcel (Monterey County APN 008-423-002). The Scifres' Parcel is located adjacent to the Beirne Parcel. Both the Scifres' Parcel and the Beirne Parcel are presently designated and classified for residential use, which is consistent with the underlying private land use restrictions in existing private deed restrictions. The Del Monte Forest LCP Update and Pebble Beach Company Concept Plan, if approved, would re-designate and rezone the Beirne parcel to Coastal General Commercial, as a first step towards the construction and operation of a proposed commercial hotel adjoining the Scifres' residence.

Similar circumstances previously arose in connection with the Pebble Beach Company's Casa Palermo project and resulted in a 1997 agreement between the Del Monte Forest Neighborhood Preservation Association and Pebble Beach Company (the "NPA Agreement", copy attached). Under the NPA Agreement, Pebble Beach Company may not operate the Beime Parcel for any uses other than residential, open space, landscaping and/or access. However, if the

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Company first obtains the written consent of the owners of the Scifres' Parcel, then it may conduct hotel and spa use or golf course use on the Beirne Parcel, provided they are ancillary to the Pebble Beach Lodge. The Scifres have not provided their consent to Pebble Beach Company under the NPA Agreement.

The NPA Agreement is premised on various existing deed restrictions that include, among others: (1) prohibitions of conduct of trade or business; and (2) limitations on use to private single family residential purposes as set forth in said deeds ("Deed Restrictions"). In the NPA Agreement, Pebble Beach Company has forever quitclaimed to the owners of the Scifres' Parcel all rights to terminate the Deed Restrictions affecting the Scifres' Parcel.

The Scifres have identified numerous potential adverse effects upon themselves and their property associated with the proposed Fairway One Project. The Scifres are in ongoing negotiations with Pebble Beach Company regarding modifications to the Fairway One Project and associated issues in an effort to address their concerns. Many of these effects are impacts recognizable under CEQA and are referenced in my letter to County planner Joe Sidor dated January 09, 2012 (copy attached). Other significant adverse effects upon the Scifres may not necessarily be cognizable under CEQA, but nevertheless must be resolved to the Scifres' satisfaction before they will provide the consent Pebble Beach Company desires under the NPA Agreement.

23-01 cont'd

The land use re-designations and zoning re-classifications which are part of the Del Monte Forest LCP update and Pebble Beach Company Concept Plan would commit future uses of the Beirne Parcel to commercial uses. Such action, or the implementation of such commercial uses, would violate both the NPA Agreement and the Deed Restrictions absent the Scifres' prior written consent. Consequently, the Scifres object to the proposed land use re-designations and zoning re-classifications for the Beirne Parcel at this time. This objection is legally premised on the NPA Agreement, the Deed Restrictions and the CEQA equivalency process under the Coastal Act and the Coastal Commission's regulations.

From an environmental review standpoint, the LCP amendments are but one component of the larger Pebble Beach Company project application PLN100138, presently pending before Monterey County. Consequently, the actions requiring environmental review by the Coastal Commission include not only the Del Monte Forest LCP update and Pebble Beach Company Concept Plan, but also the proposed Pebble Beach Company build-out of the Del Monte Forest pursuant to application PLN100138.

23-02

Monterey County has incorrectly determined that the LCP amendment component of the larger Pebble Beach Company Project is statutorily exempt from CEQA, while the balance of the project is subject to CEQA. Although an LCP amendment standing alone may be exempt under CEQA Guidelines section 15265, that exemption is not applicable here, where the scope of the activity as a whole which constitutes the larger Pebble Beach Company Project is greater than just the LCP amendment and the Concept Plan components. Therefore, the County cannot rely

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on this exemption to relieve it of its responsibility to undertake an EIR for the entire Pebble Beach Company Project. (See Association for a Cleaner Environment v. Yosemite Community College District (2004) 116 Cal.App.4th 629, 640) [CEQA exemptions which might otherwise have been applicable to activities comprising parts of project did not apply because scope of entire project was greater than scope of exempt activities.] Nor is the Pebble Beach Company Project analogous to the circumstances in Surfrider Foundation v. California Coastal Commission (1994) 26 Cal.App.4th 151, where the court found that exemptions were applicable only because the combined exemptions applied to the entire scope of the activity in question. Consequently, the County's EIR for PLN100138, and the Coastal Commission's CEQA equivalency review, must include both the proposed LCP amendments and the larger Pebble Beach Company Project, in order to avoid an improper "piecemealing" of environmental review.

23-03 cont'd

Thank you for your thoughtful consideration.

Respectfully submitted,

Mark A. Blum

MAB:mh

Enclosures

Cc: Clients

Mark Stilwell Joe Sidor