Appendix C

Master Resource Management Plan

Chapter 1
Introduction

This Draft Master Resource Management Plan (Draft Master RMP) is a guidance document for the proposed preservation areas included within the 2011 Pebble Beach Company (PBC) Project (Project) in the Del Monte Forest. It is part of the Project and intended to provide guidance for the application of specific mitigation measures identified in the Draft Environmental Impact Report (DEIR), prepared for the Project by Monterey County (County) in compliance with the California Environmental Quality Act (CEQA) review process and for resource management of the proposed preservation areas. This Draft Master RMP was prepared by ICF International, Inc. (ICF) under contract to the County.

Contents of the Draft Master RMP

The contents of the Draft Master RMP are briefly described below:

Chapter 1 - *Introduction*
This chapter provides an introduction to the Draft Master RMP and identifies the purpose and defines terms and acronyms used.

Chapter 2 - *Administrative Implementation*
This chapter presents the structure and roles of those parties responsible for implementation of the Draft Master RMP. It also includes the process of annual work plan development, monitoring, and reporting.

Chapter 3 - *Habitat Management*
This chapter discusses management goals and actions according to the habitat type. Management actions for these habitats constitute mitigation measures from the EIR and recommendations from resource reports and plans submitted by PBC.

Chapter 4 - *Special-Status Species Management*
This chapter includes management goals and actions specific to certain special-status plant and wildlife species.

Chapter 5 - *Site-Specific Resource Management*
This chapter includes specific management goals and actions within preservation areas included in the 2011 PBC Project. The development and preservation areas coincide to those listed in the EIR.

Chapter 6 – *Bibliography and References*
This chapter includes a bibliography of material referenced in this document and additional material relevant to resource management is provided to assist preparation of the site-specific resource management plans (SSRMPs).

Purpose of the Draft Master RMP

The primary purpose of the Draft Master RMP is to establish a framework to guide the preparation of the subsequent Site-Specific Resource Management Plans (SSRMPs) required for mitigation identified in the DEIR. The Draft Master RMP does not constitute a stand-alone mitigation measure independent of the mitigation measures identified in the DEIR. Additionally, it should be noted that it is not the purpose of the Draft Master RMP or the SSRMPs to guide construction mitigation measures to be implemented during the construction period such as erosion control or tree removal specifications, although some of the resource management measures in this document will commence prior to and during construction itself. PBC is responsible for implementing all adopted mitigation measures and permit conditions regarding construction, regardless of whether they are mentioned in this document.

The SSRMPs will tier off the guidance in this document and will include specific resource management methods, schedules, and monitoring to be included in the mitigation. The SSRMPs will be prepared by a third-party consultant under contract to Monterey County, reviewed by an interagency advisory team, the Resource Management Team (RMT), and approved by Monterey County. Each SSRMP will include a schedule of all the monitoring actions and contingencies, which shall occur over the minimum 20-year monitoring timeframe. These schedules will be cross-referenced into a master schedule of all the biological monitoring actions required for the proposed project.

Following approval of the SSRMPs, PBC will be responsible for preparation of an Annual Work Plan to implement the SSRMPs. A third-party consultant under contract to Monterey County shall independently monitor work plan implementation and prepare an Annual Monitoring Report. The Work Plan and the Annual Monitoring Report will be reviewed by the RMT and approved by Monterey County. The PBC is responsible for 20 years of resource management and for paying for the third-party monitor for this period, at which time the need for continued management and monitoring will be re-evaluated by Monterey County. In concept, if the finalized success criteria are met for resource management for all preservation areas, there would have been success in maintaining the sensitive resources in the preservation areas for 20 years, At that point, PBC would still be responsible for continued resource management (and providing a financial assurance to ensure resource management is conducted), but may be allowed at that point to monitor resource management itself with a reduction in annual reporting and work plan requirements, The County would retain the authority to periodically inspect, require reporting on continued management activities, and the ability to require remedial action, as needed.

Resource management responsibilities are further described in Chapter 2 and are summarized as follows:

- **Pebble Beach Company**
  - Funding and implementation of all required resource management for minimum 20 years
  - Preparation of Annual Work Plans for minimum 20 years
  - Funding of Third-Party Consultant preparation of SSRMPs
  - Funding of Third-Party Consultant monitoring for minimum of 20 years
  - Funding and implementation of resource management in perpetuity as determined at 20-year review milestone

- **Resource Management Team**
  - Review of SSRMPs
  - Review of Annual Work Plan and Monitoring Reports
- **Third-Party Consultant(s) to Monterey County**
  - Preparation of SSRMPs
  - Monitoring of resource management for minimum 20-year period
  - Review of Annual Work Plan
  - Preparation of Annual Monitoring Report
- **Monterey County**
  - Approval of Final Master RMP
  - Approval of SSRMPs
  - Approval of Annual Work Plan and Annual Monitoring Reports
  - Periodic reporting to the Board of Supervisors, as, and if necessary
  - Determination of resource management and monitoring needs at end of minimum 20 –year period
  - Periodic oversight, as needed, in post-20 year period.

The Draft Master RMP was developed based on information from the ecological management implementation plan (EMIP) developed for a predecessor to the proposed project, the Open Space Advisory Committee (OSAC) plan adopted for the Del Monte Forest (as updated), biological resources studies conducted to date, prior resource management plans prepared by PBC for a predecessor to the proposed project, mitigation identified in the project EIR, and ICF's professional judgment.

Definitions

The following definitions apply within this implementation plan. Not all definitions are precisely equivalent to those that may be used in other documents.

- *Absolute cover* - The total aerial and basal cover (the latter inferred, in the case of rhizomatous plants) of all vegetation present, not to exceed 100% (even where foliage overlaps).
- *Dune substrate* - windblown fine sand of the narrow particle size class that typically composes dunes; thus, including little or no material that is either light enough to be removed entirely (silt), or too heavy to be transported within a typical sand dune. Other soil materials are either unsuitable or much less suitable for use in dune habitat creation.
- *Non-native* - A species that is not believed to have been present prior to the advent of European humans in this area, which has become naturalized (reproduces without human intervention) and/or is commonly planted. Some, but not all, naturalized species are considered weeds.
- *Relative cover* - The proportion of the absolute, or total, vegetative cover that is contributed by a particular species or circumscribed group of species.

- *Seral stage* - The stage in ecological succession from recently colonized, seeded, or planted soil ("early") through the mature plant community ("late").
- *Special-status species*[1] - Those species identified in the project EIR as meeting the CEQA definition of "rare" including:
  - species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) (Title 50, Code of Federal Regulations [CFR], Section 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register [FR] for proposed species);
  - species that are candidates for possible future listing as threatened or endangered under ESA (67 FR 40657, June 13, 2002);
  - species that are federal species of concern;
  - species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (Title 14, California Code of Regulations [CCR], Section 670.5;
  - plants listed as rare under the California Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.);
  - plants with a California Rare Plant Rank of 1B (CRPR 4 species were included as special-status species if they were identified as ESHAs in Appendix A of the 1984 LUP);
  - species that meet the definitions of rare or endangered under the State CEQA Guidelines, Section 15380;
  - species listed as ESHAs in Appendix A of the 1984 Del Monte Forest LUP;
  - animals fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and
  - Animal species of special concern to the California Department of Fish and Game (Remsen 1978 [birds]; Williams 1986 [mammals]; and Jennings and Hayes 1994 [amphibians and reptiles]).
- *Surrounding forest* - Forest that immediately adjoins a gap site, within a distance of up to 500 feet. A "surrounding forest" does not necessarily include the entirety of the forest within a given habitat preservation area.
- *Total cover* – Same definition as Absolute cover.
- *Weeds* - Any invasive non-native plant species identified in the Del Monte Forest as problematic including iceplant (*Carpobrotus edulis* and *C. chilense*), pampas grass (*Cortaderia jubata*), acacia (*Acacia longifolia* and *A. verticillata*), gorse (*Ulex europaeus*), kikuyu grass (*Pennisetum clandestinum*), and French broom (*Genista monspessulana*), and any species listed on the latest version of the California Invasive Plant Council's list of "Exotic Pest Plants of Greatest Ecological Concern in California."

[1] This Draft Master RMP does not mandate management measures for every special-status species that may occur within the Project preservation areas. The Draft Master RMP incorporates management measures where required by mitigation identified for project significant effects.

Chapter 2

Administrative Implementation

This chapter describes the administration procedures implementing resource management, including the following:

- Funding Guarantee
- Roles and Responsibilities
- Preparation, Review, and Approval of the SSRMPs
- Preparation, Review, and Approval of the Annual Work Plan
- Preparation and Review of the Annual Monitoring Plan

2.1 Funding Guarantee

Upon approval of the SSRMPs by Monterey County, the PBC shall record a written guarantee to fulfill all required resource management actions contained in the SSRMPs against the real property proposed for development that will remain as PBC owned property[2]. This obligation shall include the Company's guarantee to provide all funding for the implementation of the SSRMPs including the actions to be conducted by the PBC[3], the third-party consultant, and Monterey County as part of the SSRMP implementation. Said guarantee shall provide a mechanism enabling the County to collect on a lien in the event that the Company fails to meet its funding obligations pursuant to the requirements contained herein.

[2] This would include the portions of the following areas included in PBC's 2011 project: portions of The Lodge at Pebble Beach, portions of The Inn at Spanish Bay including the new employee parking lot in Area B, Area M Spyglass Hotel (if a hotel is ultimately developed at this location), the Pebble Beach Equestrian Center and Special Events area, and the Pebble Beach Driving Range (relocated to Collins Field).

[3] Including peer review of applicant reports when determined to be necessary by the County.

2.2 Roles and Responsibilities

Monterey County

As the CEQA lead agency, Monterey County, specifically the Planning Department, shall be responsible for administrative oversight, including approval of the SSRMPs, the annual work plans and monitoring reports.

Resource Management Team

An interagency team to be known as the Resource Management Team (RMT) will review the SSRMPs, the annual work plans, and annual monitoring reports and provide input to Monterey County for consideration in approval of same. The RMT will include the California Department of Fish and Game (DFG), California Coastal Commission (CCC), the U.S. Fish and Wildlife Service (USFWS), the Fire Protection arm of the Pebble Beach Community Services District (PBSCD/CDF), the Pebble Beach Open Space Advisory Committee (OSAC), the Monterey County Planning Department (County), Del Monte Forest Foundation (DMFF), and other agencies, organizations, and scientific experts as deemed necessary by Monterey County.

The County is the approving agency with one exception: PBCSD/CDF shall jointly be responsible for review and approval of plans for any proposed prescribed burns and vegetation management for fuel reduction.

Resource Management Plan Consultant

A third-party consultant will prepare the SSRMPS, conduct monitoring, and prepare annual monitoring reports under contract to Monterey County.

Property Owner Responsibility

The PBC or its successors in ownership of the preservation areas defined in the Draft Master RMP shall be responsible for funding and implementation of resource management in the field. The PBC shall prepare and submit annual work plans to the County and RMT for review and approval and shall implement the approved work plans for a minimum of 20 years. After 20 years, the County will review the need for resource management and further monitoring and reporting. If all final success criteria met, then requirements for monitoring and reporting may be relaxed. The PBC shall be responsible for resource management of the preservation areas for the first 20 years as required by the approved Final Master RMP and the SSRMPs. The PBC shall be responsible for resource management of preservation areas in perpetuity based on the resource management needs identified at the end of the minimum 20-year period.

2.3 Site-Specific Resource Management Plans

The Site-Specific RMPs will be prepared by a third-party consultant under contract to Monterey County utilizing the guidance in this Draft Master RMP.

As shown in Table C-1, combined SSRMPs shall be prepared for the following areas listed below:

- Signal Hill Dune – SSRMP for the Signal Hill Dune Preservation Area in Area M.
- Area NOUV – Combined SSRMP for the contiguous preservation areas in Areas N, O, U, and V and the preserved occurrence of Pacific Grove clover in Collins Field (if the in-situ preservation mitigation option is selected).
- Area B & C – Combined SSRMP for Preservation Area B and C.
- Huckleberry Hill Natural Habitat Area (HHNHA) and Contiguous Areas - combined SSRMP for contiguous areas including HHNHA/SFB Morse Preserve, Preservation Areas F-1, F-3, G, H, I-2 and Corporation Yard and possibly a portion of Area D.
- Lower Seal Rock Creek Area - combined SSRMP for Preservation Areas I-1, J, K and L and management of Hickman's potentilla and Pacific Grove clover in Indian Village.
- Preservation Area PQR.

The third-party consultant shall prepare SSRMPs for the areas identified above that include the following for each management area:

- Resources to be Managed
- Management Goals
- Management Mandates
- Designated Management Subareas
- Specific Management Actions by Subarea, Including Timing
- Control/Reference Sites
- Monitoring Methods and Timing
- Site-Specific Success Criteria
- Contingency/Remedial Actions
- Adaptive Management Actions

The draft SSRMPs shall be submitted to Monterey County, the RMT, and the PBC for review. After considering the input of the RMT and the PBC, Monterey County shall direct the preparation of the final SSRMPs and approve the final SSRMPs.

Table C-1. Summary of Proposed Preservation Areas and Site Specific RMPs

Preservation Area	Combined SSRMP	New Dedication Area (acres)	New Conservation Easements (acres)
Area B	B&C	19.45	0.29
Area C	B&C	29.05	0.83
Area D	HHNHA/SFB Morse	7.00 (1)	0
Area F-1	HHNHA/SFB Morse	9.77	0.47
Area F-3	HHNHA/SFB Morse	16.81	0.31
Area G	HHNHA/SFB Morse	59.97	0.56
Area H	HHNHA/SFB Morse	49.81	1.08
Indian Village	Lower Seal Rock	N/A (2)	N/A (2)
Area I-1	Lower Seal Rock	38.16	0.66
Area I-2	HHNHA/SFB Morse	0.28	0
Area J	Lower Seal Rock	5.58	0.47
Area K	Lower Seal Rock	4.7	1.14
Area L	Lower Seal Rock	8.51	0.74
Area M	Signal Hill Dune	34.12	0
Area N	NOUV	48.87	0
Area O	NOUV	19.5	0.48
Area PQR	PQR	245.89	0
Area U	NOUV	16.69	0.75
Area V	NOUV	12.56	0.2
Pacific Grove clover at Collins Field	NOUV	N/A (3)	0.20 (3)
Corporation Yard	HHNHA/SFB Morse	6.96	0

Notes:

(1) 7 acres of Area D may be required to be dedicated per Mitigation Measure BIO-B1 (C) but mitigation may instead be at the Old Capitol or Aguajito sites.

(2) Indian Village is owned in fee by the Del Monte Forest Foundation. Mitigation Measure BIO-D4 requires management of the Pacific Grove clover occurrence to minimize indirect effects. Mitigation Measure BIO-D6 requires measures to avoid impact and preserve the Hickman's potentilla.

(3) Mitigation Measure BIO-D3 requires either preservation and management of the Pacific Grove clover occurrence at Collins Field or establishment/enhancement of 0.20 acres of Pacific Grove clover at another location on the Monterey Peninsula.

SSRMPs must be approved prior to the issuance of grading permits for corresponding development projects as described below:

- Signal Hill Dune SSRMP – Required prior to the first grading permit for the Spyglass Hill Hotel or residential development at Area M.
- Area NOUV SSRMP – Required prior to the first grading permit for the relocation of the Driving Range, construction at the equestrian center or special events area, or residential construction at Area U or V.
- Area B & C SSRMP –Required prior to the first grading permit for proposed improvements at the Inn at Spanish Bay.
- Huckleberry Hill Natural Habitat Area (HHNHA) and Contiguous Areas SSRMP – Required prior to the first grading permit at the Corporation Yard, Area F-2, or Area I-2.
- Lower Seal Rock Creek Area SSRMP – Required prior to the first grading permit for residential development at Area J, K, or L.
- Preservation Area PQR – Required prior to the first grading permit for proposed development at the Lodge at Pebble Beach.

2.4 Annual Work Plans

The Annual Work Plan (AWP) is the implementing mechanism for the SSRMPs. The AWP will identify the resource management activities to be performed within a specific management area for the upcoming period. The AWP shall be submitted annually for the first five years and every other year after the first five years. The requirement shall remain in force for a minimum duration of 20 years. The SSRMPs will establish the types and pacing of habitat management activities for implementation through the AWP. This pacing will be based upon the assumptions of project phasing that are made at project approval.

The draft AWP shall be submitted by PBC to the County, the RMT, and the third-party consultant by November 1 of each year. County, RMT, and consultant comments are due the following December 1. The PBC shall incorporate comments and County direction in the Final AWP to be submitted the following January 1. The first Annual Work Plan shall be submitted for approval prior to issuance of the first grading permit for the project.

The PBC will be responsible for all resource management efforts on the PBC-owned properties and on all areas identified above. The PBC shall be responsible for ensuring that the measures contained within the Annual Work Plan are completed by the stated completion dates.

The transfer of any of the parcels subject to the requirements of a SSRMP shall only be made if binding restrictions and guarantees are in place, which insure the SSRMP can be practically implemented and the funding for the work will continue for the minimum period or 20 years. The Planning Director must review and approve the restrictions and/or guarantees prior to any transfer.

At a minimum, the following elements shall be included in the Annual Work Plan:

- resource management actions for the upcoming period by habitat, species, and location including estimates of materials, staffing, permitting needs and cost estimates;
- a map on an aerial photograph identifying the location of all proposed activities;

- cumulative summary of previous annual requirements and actions;
- summary of effectiveness of previous actions (from the annual monitoring reports);
- progress report toward completion of SSRMP overall requirements and mitigation fulfillment;
- a preferred schedule with notations where changes may be appropriate due to climatic or other uncontrollable circumstances.

The draft annual work plan shall be reviewed by the RMT and the third-party consultant responsible for monitoring.

After consideration of these comments, Monterey County shall request the PBC to incorporate changes into the final AWP. The PBC shall incorporate these requests or show why such amendments or additions are infeasible or inappropriate. The final AWP shall be submitted to the County for final approval.

After approval of the final AWP, the PBC may request revisions or amendments in writing to Monterey County, which shall have sole authority to authorize such revisions.

2.5 Annual Monitoring Reports

An annual monitoring report (AMR) shall be prepared by a third-party consultant under contract to Monterey County that addresses resource management progress and helps to inform the annual work plan actions.

The AMR shall include:

- monitoring activity and results;
- the type, amount, and location of resource management that occurred and the quality and success of the management actions for the target habitat, species, or location based on the monitoring results;
- evaluation of site-specific consistency with the specific success criteria contained in the SSRMPs;
- evaluation of the overall successes and deficiencies in the resource management actions to date;
- recommendations to address resource management deficiencies or to enhance success to be incorporated into the upcoming Annual Work Plan; and
- recommendations for any proposed changes in monitoring activity, methods, and implementations for the upcoming period.

The draft AMR shall be submitted for County approval annually by September 1. The County shall provide comments to the PBC and the consultant by the following October 1 after consulting with the RMT. The PBC shall incorporate comments into the draft annual work plan for the following calendar year or show why amendments or additions were considered infeasible, or inappropriate.

After each fifth-year increment, the Planning Director shall report to the Board of Supervisors regarding progress of the resource management program overall.

As described for the Annual Work Plan, the PBC shall be responsible for funding the portion of the AMR relevant to their properties.

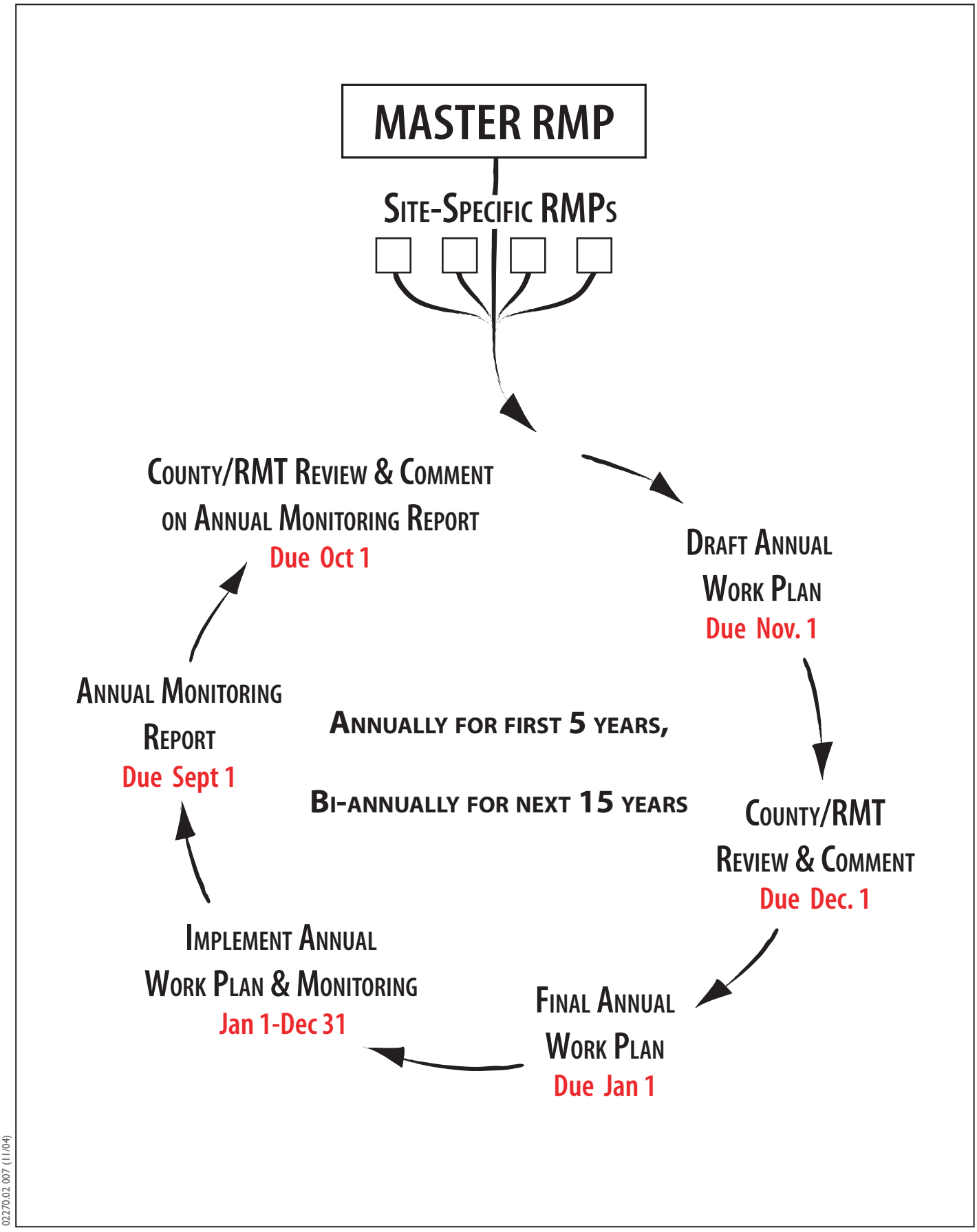

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Figure 1
Master RMP: Annual Monitoring and Reporting Cycle

Chapter 3
Habitat Management

Goals, actions, monitoring, and success criteria for overall habitat management are discussed below for the following habitats. Resource management for specific species is discussed in Chapter 4.

- Monterey Pine Forest
- Monterey Pygmy Forest
- Coastal Dune
- Wetland and Riparian Habitat

3.1 Monterey Pine Forest Habitat

The following is based on the Draft EIR (Monterey County 2011), *the Management Plan for Del Monte Forest Open Space Property* (LSA 1983), and the following documents prepared for the Del Monte Forest Development and Preservation Plan (DMF/PDP): the *Ecological Management Implementation Plan* (EMIP) (Monterey County and Ecosynthesis 1998), the DMF/ PDP *Ecological Management Plan* (PBC 2001), the DMF/PDP *Forest Management Plan* (Webster 2002), and the DMF/PDP *Monterey Pine and Monterey Pine Forest Habitat Report* (Zander Associates 2002).

Goals

- To provide for Monterey pine seedling regeneration and ecological succession within forest preserve areas.
- To provide for the maintenance of populations of special-status species, and of populations of other plant and wildlife species that are dependent upon habitats of limited occurrence.
- To provide for the long-term maintenance of regional biodiversity in the Del Monte Forest area.
- To effectively reduce the incidence of invasive non-native species and preserve habitat for endemic species.

Management policies for Category IV, open space forest habitat, outlined in the OSAC Management Plan (LSA 1983) include the following and apply to all preserve areas with forest habitat.

- Manage open forested areas to maintain the existing forest character, generally improve stand condition, and encourage a diverse understory.

- Where necessary and feasible to protect the forest cover, treat existing or potential disease and insect infestations.
- Perform necessary measures to assure human health and safety. These may include removal of hazardous trees and fuel management.
- Where applicable, generally apply the principles of urban forest management employed by the U.S. Forest Service and California Department of Forestry in similar environments. This may include use of prescribed burns.
- Eliminate invasive exotic species.

Actions

- **Gap Phasing** - Gap creation to promote forest succession. Gap phasing is not required as mitigation for the 2011 PBC's project but can be used as a management tool. Selective removal of trees, with an emphasis on trees which are diseased, moribund, unsafe, or otherwise damaged, in relatively small areas to expand existing openings in the forest with the goal of increasing light and space to encourage natural regeneration (Source = DMF/PDP EMP, PBC's DMF/PDP RMP Framework).
- **Understory Treatment** - Although prescribed burns are ecologically desirable for inducing forest succession, fire will not normally be the management tool of choice in most cases for public safety reasons. Mechanical and other methods can be used to control competing vegetation with created gaps and other areas to assist in the successful establishment of Monterey pine (Source = DMF/PDP EMP, PBC's DMF/PDP RMP Framework).
- **Seed Dispersal** - Pine seeds from site-specific collections can be scattered in forest areas, especially in created gaps, that have been demonstrated to have low regeneration rates. Seeds should be typically sown in winter when conditions are optimal for germination and growth (Source = DMF/PDP EMP, PBC's DMF/PDP RMP Framework).
- **Replanting of trees** – Tree replanting is not required as mitigation for the 2011 PBC's project, but can be used as a management tool where needed to preserve forest health. Where replanting is proposed, Monterey pine from on-site native seed stock shall be planted in restoration, enhancement, and landscapes areas and in other areas determined appropriate on a site-specific basis. Gowen cypress, Bishop pine, willows and other native trees may also be introduced into appropriate areas. Planting stock must be derived from healthy, mature local trees, preferably growing more than 500 feet from known non-local plantings. A qualified forester or biologist shall make selection of suitable trees for planting stock. Seed sources shall be stands that exhibit characteristics similar to those in the target planting areas. Treatment of understory, duff, and/or soil shall be carried out at replanting locations as necessary to maximize the vigor and long-term success of mitigation plantings (Source = DMF/PDP EMP, PBC's DMF/PDP RMP Framework).
- **Tree Removal** – Where tree removal is conducted as part of the resource management effort (such as for gap phasing), the following shall be implemented.
  - Nesting raptor surveys shall be conducted prior to tree removal and 100' buffers during breeding season provided for occupied raptor nests (per Mitigation Measures BIO-I1).
  - Removal and disposal techniques for Monterey pine trees infected with pitch canker shall follow principles delineated by the Pitch Canker Task Force (per Mitigation Measures BIO-J1).
  - As part of the development of site-specific RMPs, assessments shall be conducted for the symptoms of sudden oak death and the presence of the pathogen *Phytophthora ramorum*. If

infection is identified within development areas, the maximum retention of uninfected coast live oaks will be incorporated into the site-specific FMPs and RMPs. If any infected oaks are identified within areas of oak removal, removal and disposal activity and techniques shall incorporate current best management and control recommendations for pathogen control from the California Oak Mortality Task Force (per Mitigation Measures BIO-J1) and as directed by the County Agricultural Commissioner.

- **Replanting of Understory Vegetation** - Common herbs and shrubs should readily colonize created gaps and other forest areas, and thus understory focus should be focused on special-status plant species. (Source = DMF/PDP EMP, PBC's DMF/PDP RMP Framework).

- **Soil salvage** - Within development areas, surface soils and duff layers supporting native vegetation, seedlings and soil microflora and fauna may be salvaged prior to ground-disturbing activities and used in restoration and landscape areas where appropriate on a site-specific basis (Source = DMF/PDP EMP, PBC's DMF/PDPRMP Framework).

- **Retention of snags** - Large standing dead trees, snags, fallen logs, and brush piles shall be retained where compatible with safety, aesthetic concerns and disease management efforts (Source = DMF/PDP EMP, PBC's DMF/PDPRMP Framework).

- **Erosion/Siltation Control** - Erosion and siltation control along trails, fire roads, pathways, and drainages shall be conducted in preservation areas including minor recontouring, creation and maintenance of water bars, revegetation, silt fencing, matting and/or other measures to stop, slow, or redirect surface water flow where it may cause localized or downstream environmental degradation (Source = DMF/PDP EMP, PBC's DMF/PDPRMP Framework).

- **Non-Native Invasive Species Control** - Periodic weed control surveys shall be conducted by a qualified botanist based on the level and type of weed infestation present. Periodic weed control shall be conducted based on the level and type of weed infestation present. More frequent surveys and removal shall be required if necessary to control infestation from further spread and to meet the performance criteria developed in the SSRMP. Annual weed control work plans shall be reviewed by qualified biologist. Weed control methods include manual, mechanical, and appropriate chemical or other means of control as determined by the specific weed species, infestation level, and sensitivity of surrounding biological resources. Weed control protocols for cleaning of clothing, shoes, and equipment to prevent inadvertent spread of weed seed shall be identified in the SSRMP. Education of workers conducting weed control shall be conducted to avoid inadvertent adverse effects to special-status species or sensitive vegetation areas. Specific goals for control of weeds (for example: complete eradication, maintenance of levels below a specified percentage relative cover, removal of all reproductive individuals) depending on the weed species and the surrounding biological resources shall be identified in the SSRMP.

- **Special-Status Species** - Resource management as specified in Chapter 4 of this document.

- **Adaptive Management** – As necessary, adaptive management techniques may be necessary to protect and maintain the Monterey pine forest resource that may not be articulated in this document. There is extensive literature on the preservation of Monterey pine forest (such as Rogers 2002 and others) that can be consulted to examine other methods and treatments for preservation.

Monitoring

The monitoring element for Monterey pine forest shall be developed within the SSRMPs and implemented by the third party consultant who shall be familiar with the Monterey pine forest habitat and local biological resources. Overall guidelines for monitoring methodology and quantitative performance criteria are specified below, but may be modified with Monterey County approval over time based on consideration of input from the RMT and the third-party monitoring consultant:

- **Monterey pine forest health** - Monitoring of preservation and management areas shall occur annually in May or June. Monitoring plot size and quantities shall be identified in the SSRMPs. The ten most abundant species shall be recorded (qualitative visual judgment) in the shrub and herbaceous strata, noting which species exceed 10% relative cover. Also, record pitch canker effects by approximate percentage of seedlings, saplings, and canopy trees affected by branch tip death and bole cankers (extruding pitch) (Source = EMIP).
- **Tree replanting** - The third-party consultant shall monitor any replantings annually during the first 5 years, and every 5 years thereafter up to 20 years as part of the overall monitoring plan. Monitoring can occur in combination with annual Monterey pine forest health monitoring. Sample plots shall be 10 feet wide and shall extend over the longest dimension of each monitored planted area. Within these plots, census all saplings older than one year by height classes (0-2 feet, 2-6 feet, and taller than 6 feet). Report census data and determine average number of individuals per acre (Source = EMIP).
- **Weed Control** - Annual monitoring of weed control areas for effectiveness.
- **Revision of Monitoring Regime** - Quantitative monitoring criteria shall be refined periodically on the basis of additional data from natural habitat areas, changes in forest ecology related to pitch canker, or information derived from this resource management effort (Source = EMIP).

Success Criteria

Success criteria for each managed area shall be articulated within the SSRMPs based on these overall criteria:

- **Forest Health** - Maintenance of overall ecological health of Monterey pine forest, including both understory and overstory relative to baseline at time of issuance of grading permits. Quantitative/qualitative criteria shall be identified in the SSRMP (Source = Draft Master RMP) pursuant to findings made by the RMT. This determination shall be finalized within the first ten years of project approval.
- **Weed Control** - Control of non-native invasive weeds such that these species do not substantially invade additional areas or hamper other management goals. Control of non-native invasive weeds within the site-specific success criteria. Quantitative criteria to be identified in SSRMP.
- **Special Status Species**. Success as defined in Chapter 4 of this document.

3.2 Monterey Pygmy Forest Habitat

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983), and the following documents prepared for the DMF/PDP: the DMF/PDP Final EIR (Monterey County 2005), the *Ecological Management Implementation Plan* (EMIP)(Monterey County and Ecosynthesis 1998), the DMF/PDP *Ecological Management Plan* (PBC 2001), the DMF/PDP *Special Status Species Report* (Zander Associates 2001), the DMF/PDP *Forest Management Plan* (Webster 2002), and the DMF/PDP *Monterey Pine and Monterey Pine Forest Habitat Report* (Zander Associates 2002).

Goals

- Extant Monterey pygmy forest shall be protected from substantial disruption due to the proposed project development
- Where required by project mitigation (see discussion of former shooting range below), Monterey pygmy forest shall be restored within the Huckleberry Hill Natural Habitat Area.

Management policies for Category II, protected natural reserves, outlined in the OSAC Management Plan (LSA 1983) include the following and apply to all preserve areas with Monterey pygmy forest habitat.

- Foster long-term retention of the Gowen cypress/Bishop pine area diversity by enlarging the SFB Morse Botanical Reserve.

Actions

- **Restoration of former shooting range in HHNHA** – Per Mitigation Measure BIO-D6, restoration of 1.6 acres of Gowen Cypress/Bishop pine forest at the former shooting range within HHNHA shall be conducted. The first step will be elimination of existing non-native vegetation and native species that do not occur within the adjacent undisturbed native forest though slashing, uprooting or targeted herbicide application. Restoration may need to be phased in order to control non-native invasive species colonization. Gowen cypress and Bishop pine seedlings grown from Huckleberry Hill stock shall be outplanted in the fall with the objective of having sapling densities of at least 400 per acre (or as determined during SSRMP development). Initial planting densities will be 10 to 30% higher than target density (exact percentage to be determined in SSRMP). Replacement plantings and contingent actions shall be carried out in accordance with monitoring of success criteria. (Source = EMIP, DMF/PDP Special Status Species Report).
- **Erosion Control** - Implement an annual program of erosion control and trail maintenance along trails in the HHNHA. Monitor trails and trail crossings of drainages during the wet season, temporarily close single-track trails and other HHNHA trails to equestrian traffic when monitoring identifies that a substantial erosion potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and sedimentation from subsequent storm events. The PBC shall develop a protocol for implementing monitoring, temporary trail closures, and periodic maintenance that will be incorporated into the HHNHA RMP. Any temporary trail closures should be coordinated between the PBC, the Pebble Beach Equestrian Center, and the Pebble Beach Riding and Trail Association.

- **Restoration of Unsurfaced Road Segments in HHNHA** - Where unused roads are to be permanently closed within the Gowen cypress/Bishop pine forest, these areas shall also be restored by similar methods described for the former shooting range. Soils may need to be ripped to a depth of 6 - 12 inches for decompaction prior to planting. Erosion control measures shall also be applied where warranted to promote restoration and protect water quality (Source = DMF/PDP Special Status Species Report).
- **"Social" trail closure** - Permanently close and revegetate all informal "social" trails in the HHNHA. Prohibit to the maximum extent feasible the potential use of designated HHNHA trails by bicyclists and motorcyclists by placing signage at every trailhead stating the prohibition of use by bicycles and motorcycles, and by placing physical barriers that would be difficult for bicyclists and motorcyclists to cross easily, but would allow pedestrian and equestrian crossing. Examples of such a barrier would be wooden barriers 18 to 20" high at trailheads and at entrances to single-track trails.
- **Environmental Education** - Incorporate environmental education about the sensitive resources of the HHNHA to all trail users and attendees at special events including measures that individuals can implement to lower their impact such as crossing drainages at marked crossings and staying on designated trails.
- **Weed Control** - Conduct at least annual (and more frequent if necessary) weed control surveys of the HHNHA (both along trails and off trails) and use manual, mechanical, and appropriate chemical or other means of control where infestation of weeds is identified.

Monitoring

- **Restoration Area** - The third-party consultant shall monitor the restoration area annually during the first 5 years, and every 5 years thereafter up to 20 years as part of the overall monitoring plan Monitoring shall be conducted in October or November. Monitoring shall be conducted in at least 20% of the total restored habitat area, with proportionate representation of restored roads and the skeet-shooting area. Within the monitored area, census saplings by the same size classes as for Monterey pine gap-phased areas (Source =EMIP).
- **Residential buffers** - Conduct annual monitoring of landscaping encroachment.
- **Trail closures/controls** - Periodic monitoring of closed social trails and other HHNHA trails to identify compliance with barriers to equestrians, mountain bicycles, and motorized cycle use.
- **Erosion** - Periodic wet season monitoring in HHNHA of problem areas and of erosion control measure locations.
- **Weed control** - Annual monitoring of weed control areas for effectiveness (quantitative criteria to be identified in SSRMP).

Success Criteria

- **Restoration Area** - The 5-year success criterion is the survival of 400 saplings per acre (or as determined during SSRMP and approval), extrapolated from the monitored area (Source = EMIP).
- **Residential buffers** - No landscaping encroachment within buffer area.
- **Erosion** - Control of sedimentation into Sawmill Gulch and maintenance of trail integrity (Source =Draft Master RMP).

- **Trail closures/controls** - Natural recolonization of closed social trails. Reduced illegal motorcycle and mountain bike activity.
- **Weed control** - Control of non-native invasive weeds such that these species do not invade additional areas or hamper other qualitative management goals. Control of non-native invasive weeds within the site-specific success criteria (quantitative criteria to be identified in SSRMP).

3.3 Coastal Dune Habitat

Coastal Dune habitat is found within two preservation areas: Signal Hill Dune Preservation Area and the westernmost portion of Area L. A comprehensive suite of resource management measures have been developed for the Signal Hill Dune Preservation Area. These measures are site-specific and thus are described in Chapter 5. Regarding Area L, the only applicable resource management measure is control of non-native invasive species, which is described in Chapter 5.

3.4 Wetland and Riparian Habitat

The following is derived from the DMF/PDP Final EIR (Monterey County 2005), the *Ecological Management Implementation Plan* (EMIP, Monterey County and Ecosynthesis 1998), the DMF/PDP *Best Management Practices Plan* (Questa 2003) the DMF/PDP *Wetlands Report* (Wetlands Research Associates 2001), the DMF/PDP *Watershed Hydrology Phase II Report* (Balance Hydrologics, 2003), the PBC's DMF/PDP pre-construction notice (PCN) for restoration work (Wetland Research Associates 2003), and the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983).

Goals

The overall management goals related to wetlands and riparian areas in preservation areas are:

- reduce degradation caused by erosion and siltation within the watershed;
- protect native plant communities through an active program of invasive species control within the wetlands and riparian areas;
- provide habitat for sensitive species, if appropriate and known to occur within the area; and
- create additional habitat to compensate for project loss of wetlands.

Management policies for Category VIII, riparian and wetland habitat outlined in the *OSAC Management Plan* (LSA 1983) include the following and apply to areas with wetland and riparian habitat:

- manage for protection of hydrologic cycle, avoidance of sedimentation, and maintenance of efficient flows, and to protect from urban runoff;
- manage for continuing maintenance of seasonal and perennial pools, seepage, and marshy areas along drainage courses, unless they present clear public health hazards, and edge areas between habitats;
- maintain 100' setback from stream course banks to any permanent structure; and
- activity requiring riparian vegetation alteration or filling shall be minimized, and shall be accompanied by appropriate mitigation measures.

Actions

Wetlands Adjacent to Development Areas

There are wetlands in Preservation Areas J, K, L, U and V that are adjacent to residential development (and equestrian center activity). The following measures are required to assure retention of wetland function and values in wetlands adjacent to proposed development.

Maintain Wetland Hydrologic Balances

The quantity and timing of stormwater flows will be retained to each of the wetlands in the preservation areas J, K, L, U, and V that are adjacent to residential development and their respective storm drainage systems including the following actions:

- installation of interceptor drains for areas causing additional runoff to wetlands;
- design of stormwater drainage systems to include detention and/or retention facilities to limit peak runoff rates so that they do not exceed pre-project conditions;
- maintenance of the hydrologic continuity of each wetland to its watershed;
- avoidance of change in timing or quantity of stormwater inflow to the wetland;
- prevention of sub-surface trench water capture through baffle design.
- use of ditch plugs near wetlands to support/maintain shallow groundwater flow to wetlands; and
- maintenance of buffers around wetlands to protect existing hydrologic connection with immediately adjacent groundwater infiltration and seepage patterns.

The PBC shall prepare an estimated post-construction water balance for all wetlands affected by the Proposed Project that incorporates all Proposed Project alterations (grading, slope, vegetation cover, impervious surfaces, drainage infrastructure, etc.). Site-specific prescriptions for each wetland will be identified in final plans as necessary to maintain existing wetland hydrologic function, and the water balance will demonstrate the effectiveness of these prescriptions. Both the water balance and the final site-specific prescriptions shall be submitted to the Planning Department for inclusion in the Draft SSRMPs. The Director of Planning, subject to review by a third party consulting hydrologist funded by the PBC, shall consider consultant findings, and approve the water balance and site-specific prescriptions prior to finalization of the SSRMPs and prior to the issuance of any project grading or building permits on a project-by-project basis (Source = DMF/PDP Watershed Hydrology Phase II report, DMF/PDP BMP Plan, DMF/PDP Wetlands Report).

Maintain and Enhance Water Quality

Wetlands receive both natural watershed flows as well as golf course and residential area runoff.

Natural watershed seasonal drainage water, which currently is the primary water source of many of the wetlands in recreational parcels, will be maintained with certain restrictions. Water from undeveloped off-site sources will not require treatment and may be directed to existing wetlands without interruption.

Water from large irrigated turf areas (such as golf courses) with high potential for pesticide/herbicide content will be treated using vegetated drainage ditches, grassy swales, or other biofiltering systems (such

as the buffer zone) prior to entering wetlands.

Where surface drainage flows across large paved areas, such as parking lots, it will first be routed to water quality enhancement ponds or detention basins. Detention slows the flow of water downslope, reducing the risk of erosion in downstream wetlands. Detaining water also allows particulates to settle out and affords time for other pollutants to undergo natural degradation.

Media infiltration such as catch basin filter inserts may also be used to intercept runoff from parking areas and roads. Where space permits, vegetated swales will be utilized to filter out sediments and stormwater pollutants as they remove a higher percentage of contaminants than filter inserts. Swales may be incorporated into the median strip landscaping; or may be constructed adjacent to the pavement. Bi-monthly sweeping of paved surfaces during the dry season will be conducted to decrease the build-up of pollutants. Sweeping will increase frequency to once per week during the month immediately prior to the expected rainy season to remove the majority of soluble pollutants before the first seasonal storm.

Where surface drainage crosses small paved areas, such as roads, it will either be directed through culverts under the road to prevent absorption and transportation of hydrocarbon contaminants into the drainage system, or if flow cannot be re-directed, it will not flow across paved surfaces directly into any wetland or directly into a subsurface pipe with an outfall into a wetland, but instead will be sent into a vegetated drainage ditch, grassy swale, or other biofiltering system (such as the buffer zone) prior to entering wetlands. In all cases, water piped to wetlands will be released through diffusers within the buffer zone to slow and spread the flow. In addition to improving water quality, the use of diffusers will decrease erosion to downslope wetlands. (Source = Watershed Hydrology Phase II report, BMP Plan, Wetlands Report)

Invasive Species Control

An active management program will be implemented to eradicate, either by mechanical methods or through use of herbicides, aggressive plant species such as cape ivy, broom, mattress vine, acacia, pampas grass and calla lily. This program will be accompanied by revegetation, and restoration if needed, within the affected areas to assure that long-term restoration of a balanced native community is being achieved (Source = DMF/PDP Wetlands Plan). This effort will be part of the overall invasive species control program described in Section 3.1 for Monterey pine forest.

Public Access Control

While public enjoyment of Open Space areas will be promoted, human access must be limited in sensitive habitat areas such as wetlands. Existing trails through or in close proximity to wetlands will be elevated onto boardwalks to prevent trampling of wetland vegetation and decrease erosion. In other areas, fencing will be used to prevent entrance into adjacent wetland habitats. Some trails or other public areas may periodically be closed to protect seasonal breeding habitat for wildlife, or to prevent excess erosion during the rainy season when potential for damage is greatest. Some poorly-designed or badly-damaged trails may be slated for removal to allow the habitat to recover (Source = DMF/PDP Wetlands Plan).

Wetlands and Riparian Management in Preservation Areas

Management of wetlands and riparian areas in preservation areas that are not adjacent to proposed development including erosion and siltation control, invasive species control, species habitat enhancement and wetland creation proposals are described below.

Erosion and Siltation Control

A program of preventive maintenance and rehabilitation will be undertaken to repair and, if needed, to restore drainages and wetlands within the preserved areas. An initial assessment will be conducted of each drainage by qualified personnel approved by the County. Areas of excessive erosion will be mapped and an analysis of the causes of that erosion will be completed. Possible actions include fire road and culvert re-design, removal or elevation of existing trails on boardwalks through or adjacent to wetlands, placement of check dams using natural materials (logs, woody debris, and native rock), bank stabilization using biotechnical measures such as willow plantings and natural fiber matting, and realignment of stream beds to provide meanders and other natural energy dissipating features.

Where erosion has affected downstream drainages and wetlands, excavation and removal of excess sediment may be necessary. This will only be done following implementation of erosion control measures in the watershed. A wetland restoration specialist will identify those wetland areas that have been adversely affected by erosion, evaluate possible restoration alternatives and develop an overall restoration plan (Source = DMF/PDP Wetlands Plan).

Invasive Species Control

An active management program will be implemented to eradicate, either by mechanical methods or through use of herbicides, aggressive plant species such as cape ivy, broom, mattress vine, acacia, pampas grass and calla lily. This program will be accompanied by revegetation, and restoration if needed, within the affected areas to assure that long-term restoration of a balanced native community is being achieved (Source = DMF/PDP Wetlands Plan). This effort will be part of the overall invasive species control program described in Section 3.1 for Monterey pine forest.

Creation of Wetlands to Offset Project Loss

The proposed project includes 0.06 acres of fill in wetlands. PBC will be required to create at least 0.06 acres of new wetlands to compensate for this loss. If these wetlands are created within preservation areas covered by this Master RMP, then the wetlands shall be created, monitored for success, and maintained consistent with management of other wetlands.

Monitoring

Wetlands Adjacent to Development Areas

- **Erosion and Siltation Control** - Wetlands shall be monitored annually for three years after the implementation of any erosion and siltation controls to evaluate their effectiveness and identify the need for potential remedial action (Source =DMF/PDP Wetlands Plan).
- **Wetland Hydrology** - Post-project hydrology and water balance conditions at project site wetlands adjacent to proposed development in preservation areas J, K, L, U, and V shall be monitored by the third-party consultant and reported in the AMR. The objective of monitoring is to assess if project construction/operation has resulted in significant changes to wetland hydrology. Monitoring shall include assessment of water balance conditions. Monitoring shall continue for at least 7 years, or include observations from a wet year (~where annual precipitation is +1 standard deviation [SD] of mean annual precipitation, and a dry year (-1 SD of mean annual precipitation). Reporting of annual

monitoring conditions shall include recommendations for adaptive management actions if steps are needed to support/sustain wetland hydrologic functioning.

- **Invasive Species Vegetation Cover** - Wetlands shall be periodically monitored as part of the overall invasive species control program to be articulated for each geographic area in the SSRMP.
- **Public Access Control -** Wetlands adjacent to recreation areas and trails shall be periodically monitored to identify possible effects of encroachment by public access and the potential for additional temporary or permanent access controls. Deficiencies in controls shall be identified in the AMR for remedy in the subsequent AWP.

Wetlands in Preservation Areas

- **Erosion and Siltation Control** - Initial identification of erosion and siltation problem areas shall be done upon initiation of resource management. Wetlands and riparian areas shall be monitored annually for three years after the implementation of any erosion and siltation controls to evaluate their effectiveness and identify the need for potential remedial action (Source =DMF/PDP Wetlands Plan).
- **Invasive Species** - Wetlands and riparian areas shall be periodically monitored as part of the overall invasive species control program to be articulated for each geographic area in the SSRMP.
- **Habitat for Sensitive Species -** Where habitat is enhanced for sensitive species within wetland and riparian areas, these areas shall be monitored annually for three years after the enhancement to evaluate effectiveness and to identify the need for potential remedial action.
- **Wetland Creation -** Monitoring of any created wetlands shall focus on hydrology and establishment of native vegetation. Monitoring shall be done until success criteria are met for three consecutive years.

Success Criteria

Wetlands Adjacent to Development Areas

- **Avoidance of wetland fill**
  - Avoidance of inadvertent fill except for the two proposed fill areas in Area L and Area U.
- **Wetland Hydrology**
  - Groundwater saturation within the upper six inches to be similar to reference wetlands upstream of the restoration areas.
  - Post-construction water balance to be similar to pre-construction water balance including flow, seasonality, and hydroperiod. Specific monitoring criteria to be identified in the SSRMPs.
  - Criteria to be met within 3 years of restoration.
- **Invasive Species/Vegetation Cover**
  - Quantitative criteria to be identified in SSRMPs

- **Public Access Control**
  - No substantial degradation from recreational access in wetland areas as measured by the criteria above (Source = DMF/PDP PCN, DMF/PDP Wetlands Plan).

Wetlands in Preservation Areas

- **Erosion/Siltation Control** - Specific performance criteria shall be developed and incorporated into the SSRMPs
- **Invasive Species Control**- Less than 10 percent by invasive non-native plant.
- **Wetland Function Protection and Enhancement (for created wetlands)**
  - Greater than 80 percent overall plant cover in both wetland and buffer areas.
  - Greater than 50 percent cover by native wetland plant species within wetlands areas.
  - Quantitative criteria to be identified in SSRMPs

Contingency/Remedial Actions

Contingency actions in the event that monitoring documents failure to meet the success criteria include:

- **Hydrology** - Drainage system modifications and regrading.
- **Wetland Protection and Function** - Supplemental planting and/or regrading.
- **Wetland Creation** - Contingency actions are supplemental planting, redesign, and/or supplemental water and/or regrading.

Chapter 4
Special-Status Species Management

This chapter identifies the resource management prescriptions identified for certain special-status species to be implemented within the habitat management element.

4.1 Special-Status Plant Species

Dune Special Status Species

Resource management prescriptions for special-status plant species found within the Signal Hill Dune Preservation Area are described below in Chapter 5 as site-specific measures.

Gowen Cypress

The goals, actions, monitoring, and success criteria for resource management related to Gowen cypress in preservation areas are included in the description of resource management for Monterey pygmy forest in Section 3.2 above.

Hickman's Onion

The following is derived from the Draft EIR for the 2011 PBC Project (Monterey County 2011), the *Ecological Management Implementation Plan* (County of Monterey and Ecosynthesis 1998) and the DMF/PDP *Special Status Species Report* (Zander 2001).

Goals

- Protect existing populations within preservation areas

Actions

- **In-situ management** - Existing occurrences require little management as long as natural vegetation, soils, and drainage patterns are maintained (Source = DMF/PDP Special-Status Species Report). Non-

native invasive species control and erosion control measures described elsewhere in this document shall be conducted as needed to maintain Hickman's onion occurrences.

Monitoring

- **In-situ management** - Periodic (minimum of once every five years up to the 20 year minimum period), general mapping of Hickman's onion shall be conducted to evaluate the extant range and extent of occurrences within preservation areas (Source = Draft Master RMP).

Success Criteria

- **In-situ management** - Existing occurrences within preservation areas shall be sustained so that they do not vary more than 20% than existing (pre-project) extent and range, unless the change is identified to be unrelated to resource management efforts (Source = Draft Master RMP).

Hickman's Potentilla

The following is derived from the Draft EIR for the 2011 PBC Project (Monterey County 2011) and the USFWS 5-Year Review for this species (USFWS 2009).

The Indian Village population occurs on approximately 0.25 acre of habitat, has ranged between 5 and 35 plants and is presently (as of 2008) limited to only 11 plants. The population is within a fenced exclosure with no vegetation management.

Goals

- Protect existing population in its current location.

Actions

- **Drainage** – PBC shall demonstrate that the drainage design for Residential Area L will not increase flows to the Indian Village due to new impervious surfaces and new residential irrigation. The final design will be reviewed and approved by Monterey County prior to issuance of the first building or grading permit for Area L.
- **Site Management** - With the approval of the Del Monte Forest Foundation (property owner), PBC will improve management of the existing population as follows:
  - Move and/or consolidate all active recreation activities (picnicking, events, outdoor education etc.) to one area. If recreation can be better controlled, grassland on site could recover and Hickman's potentilla would have a better chance to establish. All designated habitat will be fenced off from pedestrian and equestrian traffic. Signage will be used to inform site users to avoid sensitive habitat areas.
  - The site will be managed to keep grasses from outcompeting Hickman's potentilla and to prevent Monterey pines from creating excessive shade. An adaptive management program should be

applied that would test light, mowing, and grazing as possible vegetation management techniques.

- Herbivory will be managed by fencing of the population to prevent deer and large animal access. The site and adjacent areas will also be managed for slugs, snails, voles, gophers, and mice (as feasible) to reduce predation.
- The applicant will continue and expand efforts to reduce hydrologic effects of year-round flows from the Spyglass Hill Golf Course. One possible approach may be to intercept flows from the golf course and redirect them to enter the new storm drain along the new access road for new residences in Area L. This may require a resizing of the storm drain to handle the additional drainage.

- **SSRMP** - A SSRMP for the Indian Village meadow, describing these measures, that has been approved by the Del Monte Forest Foundation will be provided to Monterey County for review and approval prior to issuance of the first building or grading permit for residential development at Areas J, K and L. Monterey County will circulate and consider comment from the RMT prior to approval of the plan.

Monitoring

- Annual monitoring of the existing Hickman's potentilla population and its habitat will be conducted for a minimum of 10 years, with monitoring every three years thereafter out to the 20-year minimum monitoring period to demonstrate that the population is self-sustaining.
- Following demonstrated initial success, the population shall be monitored every three years over a nine year-period to demonstrate sustained success. The applicant shall be responsible for funding monitoring by an independent third-party and management of this area for the minimum 20-year period, and for additional time if determined necessary by Monterey County to sustain this species.

Success Criteria

- As noted above, the goal of resource management is to sustain the existing occurrence and to maintain if not increase the number of individuals. However, it is recognized that the existing population is already in an imperiled state with such low numbers. Thus, while the goal is for a self-sustaining population, the measure of success is a good-faith effort to complete the actions noted above for the benefit of this species.

Hooker's and Sandmat Manzanita

The following is derived from the *Ecological Management Implementation Plan* (County of Monterey and Ecosynthesis 1998) and the DMF/PDP *Special Status Species Report* (Zander 2001).

Goals

- Include species within any proposed Monterey pine forest gap or restoration areas where consistent with local vegetation patterns.
- Protect existing populations within preservation areas

Actions

- **In-situ management** - Existing occurrences require little management as long as natural vegetation, soils, and drainage patterns are maintained. Non-native invasive species control and erosion control measures described elsewhere in this document shall be conducted to help maintain Hooker's and sandmat occurrences (Source = DMF/PDP Special-Status Species Report).

Monitoring

- **In-situ management** - Periodic (minimum of once every five years up to the 20 year minimum management period), general mapping of Hooker's manzanita and sandmat manzanita shall be conducted to evaluate the extant range and extent of occurrences within management areas.

Success Criteria

- **In-situ management** - Existing occurrences within preservation areas shall be sustained so that they do not vary more than 20% than existing (pre-project) extent and range, unless the change is identified to be unrelated to resource management efforts.

Monterey Clover

The following is derived from the *Ecological Management Implementation Plan* (County of Monterey and Ecosynthesis 1998) and the DMF/PDP *Special Status Species Report* (Zander 2001).

Goals

- Protect existing populations within preservation areas

Actions

- **Prescribed burning proposal** - Prepare a proposal for a small-scale experimental prescribed burn within a portion of the Monterey clover occurrence in Area G as part of the SSRMP for the expanded HHNHA and submit to CDFG, USFWS, and PBCSD/CDF, and Monterey County (Source = DMF/PDP Special Status Species Report and Draft Master RMP).

- **Prescribed burn test** - If approved by Monterey County, DFG, USFWS, and PBCSD/CDF, conduct the experimental prescribed burn and monitor results (Source = DMF/PDP Special Status Species Report and Draft Master RMP).
- **Prescribed burn application** - If monitoring indicates effectiveness of experimental burn, expand proposal for prescribed burn where feasible, controllable, and safe in other Monterey clover locations within the expanded HHNHA area and submit to the same agencies for approval. If approved, conduct prescribed burns in the approved areas at the recommended frequency identified will be the responsible of the PBC to conduct in perpetuity as needed to maintain clover occurrences (Source = DMF/PDP Special Status Species Report and Draft Master RMP).

Monitoring

- **Prescribed burn test** - If approved, monitor test area for Monterey clover regeneration annually for five years after the burn in terms of relative cover and density compared to control sites, and make recommendation for frequency for management of prescribed burn areas.
- **Prescribed burn application** - If approved, monitor application areas for Monterey clover regeneration annually for five years in terms of relative cover and density compared to control sites. Recommend adjusted frequency for management of prescribed burn areas as monitoring identifies.

Success Criteria

- **In-situ management** – If prescribed burn is allowed, then existing occurrences within preservation areas shall be sustained so that they do not vary more than 20% than existing (pre-project) extent (as best estimated) and range, unless the change is identified to be unrelated to resource management efforts.
- **Prescribed burns** - Success criteria for the purposes of evaluating effectiveness of prescribed burns shall be developed during preparation of the SSRMP for the expanded HHNHA area and may be adjusted based on monitoring of the prescribed burn test.

Pacific Grove Clover

A small population of Pacific Grove clover, consisting of several hundred plants in a 0.2-acre stand of annual grassland habitat outside of the managed turf area, is present at the west end of Collins Field as of 2011. There is also an occurrence within the open meadow in Indian Village (Source = Draft EIR for the 2011 PBC Project).

Goals

- Collins Field: Protect existing population in its current location or create/enhance a 0.2 acre compensation area for this species within another preservation area in the Monterey Peninsula.
- Indian Village: Maintain existing population.

Actions

- **Collins Field Preservation Option**
  - Conduct a preconstruction survey to identify the location and extent of the occurrence at Collins Field.
  - Avoid the Pacific Grove clover occurrence by installing protective fencing prior to construction. A 4-foot-tall, brightly colored (usually yellow or orange), synthetic-mesh fence (or an equivalent approved by the County) will be installed before construction equipment is allowed to be moved onto the site and before construction activities take place. No construction activities, including grading, will be allowed until this condition is satisfied. No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the County has inspected and approved all temporary construction fencing. The temporary fencing will be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment will be allowed within fenced areas. All construction activities will be restricted from this fenced area. The contractor may remove the fencing only after all construction activities have been completed.
  - Define specific management and enhancement methods for the Pacific Grove clover population and incorporate these methods into the SSRMP, annual workplan, and monitoring report.
- **Off-site Compensation Option**
  - The Applicant will hire a qualified biologist to identify a suitable location on the Monterey Peninsula (preferably in the Del Monte Forest) to recreate a new population of Pacific Grove clover and/or enhance an existing population (such as the population at Indian Village) to expand the occupied habitat area by a minimum of 0.20 acre over existing conditions as follows.
  - Plans for such creation or enhancement shall be submitted for review and approval by Monterey County and by DFG prior to the issuance of a building or grading permit for the relocated Driving Range. The selected site must either be already permanently preserved (by ownership in fee by an approved preservation organization like the DMFF or control of a conservation easement) or shall be preserved through a new conservation easement.
  - The applicant shall create and/or enhance existing populations to increase the occupied habitat area by a minimum of 0.20 acre compared to existing conditions. The applicant shall demonstrate success at expanding Pacific Grove clover occupied habitat prior to any disturbance of the existing population at Collins Field.
  - Define specific management and enhancement methods for the Pacific Grove clover population and incorporate these methods into a SSRMP, annual workplan, and monitoring report.
- **Indian Village Resource Management**
  - With the approval of the Del Monte Forest Foundation (property owner), PBC will manage the existing Pacific Grove clover population at Indian Village to ensure its survival. The site population will be monitored periodically to examine potential changes over time. Alterations to current disturbance regimes should be cautiously attempted. Disturbance regimes should be gradually transitioned toward controlled disturbance management. Fencing of the population will not be required if monitoring shows the population to be stable over time.
  - Management measures for this population that have been approved by the Del Monte Forest Foundation will be incorporated into the SSRMP for Lower Seal Rock Creek and provided to Monterey County for review and approval prior to issuance of the first building or grading permit

for residential development at Areas L. Monterey County will circulate and consider comment from DFG and the rest of the RMT prior to approval of the plan.

Monitoring

- Annual monitoring of the existing Pacific Grove clover populations at Collins Field (or the off-site compensation site) and at Indian Village will be conducted for a minimum of 5 years, to demonstrate that the population is self-sustaining.
- Following demonstrated initial success, the population shall be monitored every three years over a nine year-period to demonstrate sustained success. The applicant shall be responsible for funding monitoring by an independent third-party and management of the Collins Field population (or the off-site compensation site) and the Indian Village occurrence area for the minimum 20-year period, and for additional time if determined necessary by Monterey County to sustain this species.

Success Criteria

Under the Collins Field preservation option:

- Existing occurrences within preservation areas shall be self-sustaining at or above the existing extent and number of individuals,

Under the off-site compensation option:

- After 10 years of monitoring, the area of occupied habitat shall be self-sustaining and 0.2 acre greater than prior to the start of enhancement, allowing for year-to-year variation due to climatic conditions.

For Indian Village:

- After 10 years of monitoring, the area of occupied habitat shall be self-sustaining allowing for year-to-year variation due to climatic conditions.

Pine Rose

The following is derived from the Draft EIR for the 2011 PBC Project (Monterey County 2011).

Goals

- Salvage of pine rose within development areas where retention is infeasible and replanting within preservation areas.

Actions

- **Salvage and Replant** - Remove and replant pine rose where avoidance is not feasible. Pine rose plants that cannot be avoided will be salvaged for replanting in adjacent areas as part of resource management.

- **Restore Species in Concert with Forest Management** - Incorporate proposals for restoration of this species to suitable sites into the SSRMPs and Annual Work Plan.

Monitoring

- **Replantings** - Periodic monitoring (once every year for the first five years) shall be conducted of replanted pine rose plants

Success Criteria

- **Replantings** - If periodic monitoring identifies that more than 50% of initial construction period replantings have failed to be self-sustaining after 5 years, additional replantings and monitoring shall be conducted until replanted pine rose plants, representing at least 50% of the initially removed pine rose plants, are self-sustaining after 5 years of their planting.

Yadon's Piperia

The source for this section is the Draft EIR for the 2011 PBC's Project (Monterey County 2011), the Memorandum of Understanding (MOU) between USFWS and PBC regarding Yadon's Piperia (USFWS-PBC, 2007), and ICF's professional judgment.

Goals

- Sustain existing occupied habitat for Yadon's piperia in preservation areas.

Actions

PBC shall be required to manage preservation areas to sustain the existing piperia populations and reduce potential indirect effects of existing and proposed development. These efforts shall be concurrent and complementary with the related resource management for the Monterey pine forest and other related habitat.

PBC shall implement the resource management measures identified in the final SSRMP for each managed site. These measures shall include the following, as appropriate, for the managed sites unless the RMT determines that alternative measures would be more effective to sustain Yadon's piperia:

- **Invasive Species Management.** PBC will follow a systematic program of invasive, non-native plant species eradication and control targeted on species that encroach into occupied piperia habitat (genista, pampas grass, acacia, iceplant, and others). The program will employ both physical and chemical means of eradication. The eradication methods will be designed to avoid or minimize effects to piperia. PBC will conduct an annual assessment of encroachment by invasive, non-native species into known piperia habitat to establish a treatment schedule and follow-up with periodic visit to treatment areas to evaluate program effectiveness throughout the year (Source = USFWS-PBC 2007).

- **Trail Management.** PBC will maintain, sign, and direct use of designated trails to reduce the potential for informal access through areas known to support Yadon's piperia. Any new trail alignments will avoid occupied piperia habitat to the greatest extent possible. PBC will install and maintain vehicle barriers at key locations to reduce the potential for off-road vehicle/BMX/mountain bike access (Source = USFWS-PBC 2007). PBC will close and restore all informal trails within existing piperia habitat.

- **Control Runoff and Erosion.** PBC will manage stormwater runoff from roads, building areas trails, and other impervious surfaces to reduce effects on known piperia habitat areas. PBC will repair erosion gullies on trails and in other areas as determined necessary through periodic site inspections (Source = USFWS-PBC 2007).

- **Regulation (Seasonally) Mowing & Clearing Activities**. PBC will regulate mowing, understory clearing and fuel load reduction in known areas of occupied piperia habitat to avoid or minimize removal of flowering and seed stalks during the summer and early fall months of the year (Source = USFWS-PBC 2007).

- **Remove Encampments**: PBC will remove encampments and other unauthorized use in areas that could affect piperia habitat. Regular patrols will occur to reduce the potential for reestablishment of encampments (Source = USFWS-PBC 2007).

- **Debris Removal**: PBC will remove debris and trash that may appear in known piperia locations. Regular patrols and landowner education will reduce the potential for dumping of trash and debris (Source = USFWS-PBC 2007).

- **Educate Landowners/Utility Works/ Golf Course Personnel**: PBC will develop Best Management Practices for golf course boundaries adjacent to occupied Yadon's piperia habitat and will pursue a program of landowner, utility worker, and golf course personnel education to inform those parties about the sensitivities of living and working in areas adjacent to piperia habitat (Source = USFWS-PBC 2007).

- **Conduct Regular Patrols**: PBC Resource Management and Security personnel will conduct regular patrols of PBC lands, paying particular attention to unauthorized access, encampments, dumping and other activities that could affect occupied piperia habitat. (Source = USFWS-PBC 2007).

- **Manage Access.** Protect the populations adjacent to existing golf courses (preservation parcels at Areas K and L) from unintended disruptions by pedestrians and golfers by fencing the perimeter of the forested open space areas if pedestrian traffic could affect such areas. Temporary protective fencing will be particularly important during large golf tournaments and during the species' blooming and fruiting period if pedestrian traffic could affect such areas. The fencing (temporary or permanent) must be tall enough to deter golfers from entering the forested area but designed to allow wildlife movement.

- **Support Research-Oriented Management.** PBC will continue to support research directed toward increased understanding of beneficial piperia habitat management and enhancement methods (USFWS-PBC MOU 2007). PBC will fund research into Yadon's piperia plant dynamics (up to a maximum of $25,000 per year or such greater amount as mutually agreed upon between PBC, Monterey County, and USFWS) if monitoring of preservation areas indicates substantial diminishment of existing plant populations in preservation areas. If populations are shown through monitoring to be stable over time, then enhancement activities beyond the activities described above are not required. If populations are shown through monitoring to be substantially declining over time, then enhancement activities beyond the activities described above, will be required which may include protection against herbivory, increased invasives management, vegetation management, or other adaptive management actions. The prior TEAM plan prepared by Ecosystems West

(Ecosystems West 2004) and subsequent work provides useful input to the identification of research-oriented adaptive management approaches, as needed, for this task.

- **Annual Report**: As part of annual reporting, PBC will provide an annual summary of management activities conducted over the course of the year to document actions taken, and where applicable success (Source = USFWS-PBC 2007).

Monitoring

- **Resource Management** - Monitor existing piperia populations within preservation areas every three years for ten years, and then every 5 years throughout a 20-year period. Monitoring protocols shall be developed as part of an adaptive management program within the site-specific resource management plans that link monitoring results to implementation of changes in management activities.

Success Criteria

The primary success criteria are to conserve and maintain Yadon's piperia in the preservation areas. The approximate acreage of Yadon's piperia occurrences within each preservation area shall be roughly similar as that extant in 2011 at the end of the 20-year monitoring period.

4.2 Special-Status Wildlife Species

California Red-Legged Frog

The following is derived from the Draft EIR for the 2011 PBC Project, the DMF/PDP *Wetlands Report* (WRA 2001), the DMF/PDP *BMP Plan* (Questa 2001), and the DMF/PDP *Pre-Construction Notification* for wetland restoration (WRA 2003).

Goals

- Creation of additional breeding habitat within lower Seal Rock Creek
- Control of indirect water quality effects

Actions

- **Incidental Take Authorization** - The applicant shall obtain an incidental take authorization under the federal Endangered Species Act (ESA) from USFWS (either through Section 10 or Section 7 processes) and will incorporate all measures required by USFWS into the SSRMPs. The incidental take permit (ITP) or final Biological Opinion shall be obtained prior to the issuance of any grading permit, approval of any final map for Areas J, K, L, U or V or approval of the SSRMPs.

- **Construct and maintain new breeding habitat** - Design new breeding habitat by creating three new ponds along Seal Rock Creek in accordance with criteria to establish CRLF habitat characteristics as follows:
  - Water depth: ponded water depth should be at least 3 feet with water present through July, drying down completely every other year in August–October.
  - Planting locations: a fringe of native species should be planted around the ponds' perimeter, with a mix of native bullrush and spikerush.
  - Replanting should occur if success criteria are not met for planting survival.
  - Sediment removal should be conducted, if required to maintain ponded water depth.
  - These standards should be reviewed during federal biological opinion development to verify that they are adequate. Any adjustments as a result of the BO shall be included in the SSRMP.

Monitoring

- **CRLF Breeding Ponds -** Monitoring in Seal Rock Creek breeding ponds will focus on hydrology and establishment of native vegetation. The minimum monitoring period should be 5 years after planting. A survival rate of 75% after 5 years should be attained before monitoring ceases.

Success Criteria

- **CRLF Breeding Ponds -** Created ponds will be determined successful if performance criteria are met for three consecutive years. Minimum performance criteria include (Source = DMF/PDP PCN):
  - Ponds hold water through the month of July;
  - Greater than 80 percent cover by native emergent wetland vegetation along 50 percent of the pond margins;
  - Zero percent plant cover in pond interior;
  - Greater than 80 percent overall plant cover in buffer areas; less than 10 percent cover by invasive non-native plant species.
  - Criteria to be met within 3 years of restoration.

Contingency/Remedial Action

- **Hydrology** - If hydrology performance criteria are not met within three years, the re-design of the ponds and/or addition of supplemental water may be required.
- **Vegetation** - If vegetation performance criteria are not met within three years, supplemental plantings may be required as recommended by a wildlife biologist and approved by Monterey County Ponds may be surveyed for CRLF for information purposes; however, frogs do not need to be observed for the created ponds to be determined successful (Source = DMF/PDP PCN).

Pallid Bats

The following is derived from the Draft EIR for the 2011 PBC Project (Monterey County, 2011) and the DMF/PDP *Special Status Species Report* (Zander 2001).

Goals

Retention of habitat for pallid bats within retained forest areas.

Actions

- **Retention of dead trees and snags –** The SSRMPs shall include requirements that dead trees or snags be left, wherever feasible, in retained habitat in development areas and in preservation areas for pallid bats (Source = Draft EIR).
- **Tree Removal BMPs** – Trees will be monitored for presence of bats in trees to document characteristics of those trees for management. Where bats are present and removal can be delayed outside of breeding season, removal should occur outside of the breeding season. If removal can be avoided, it should be done (Source = DMF/PDP Special Status Species Report, Draft Master RMP).

Monitoring

- **Tree Removal BMPs** – All proposals for removal of dead trees or snags shall be reviewed by the third-party monitoring consultant prior to removal (Source = Draft Master RMP). Any disagreements between the consultant and the land owner shall be resolved by the County.

Success Criteria

- **Tree Removal BMPs** – Avoidance of removal during bat breeding season and minimization of removal of dead trees and snags where feasible (Source = Draft Master RMP).

Monterey Dusky-Footed Woodrat

The following would be required for any restoration or resource management activities in wooded terrain near riparian areas in Areas J, K, L or PQR to avoid disturbance to woodrats or their nest.

- Prior to any restoration activities in wooded terrain near riparian areas conduct a predisturbance survey for woodrats and woodrat nests where there is potential for disturbance. This survey will be conducted by a qualified third-party consultant under contract to the County and will include the following steps:

- The survey will be conducted during the winter prior to disturbance activity when visibility is improved due to dormancy of poison oak.
- The biologist will identify and flag all woodrat nests. If nests are determined to be occupied, each woodrat will be relocated to suitable habitat in consultation with DFG. If young are observed in a nest, nesting material will be replaced until the young have been weaned. Following weaning, the nest will be dismantled and relocated to suitable habitat.
- During ground-disturbing activities, all woodrat nests will be avoided. A qualified biologist will be present and will have the authority to temporarily stop activities if woodrats or woodrat nests are found, and until such woodrats or woodrat nests can be successfully relocated, as described above.

Chapter 5
Site Specific Resource Management

This Chapter describes draft site-specific resource management prescriptions to be implemented in the context of the habitat management and special-status management measures described above. Further site-specific measures will be elaborated based on the guidance in this document at the time of preparation of the Site-Specific RMPs (SSRMPs). As an example, while weed control measures are articulated in this document as part of the overall resource management plan, specific site success criteria for weed control will need to be identified in the SSRMPs.

Habitat management measures shall be identified in the SSRMP based on the guidance in Chapter 3. Special-status species management shall be identified in the SSRMPs based on the guidance in Chapter 4. Other site-specific resource management measures shall be identified based on the guidance in this chapter.

If additional measures not mentioned in this document are required pursuant to the adopted Final EIR or adopted permit conditions, this document shall not limit the application of those additional measures. While subsequent adopted permit conditions may increase the resource management measures, they shall not be less stringent than the measures identified in this document, or in the Final EIR, unless subsequent CEQA review by Monterey County determines that (a) alternative measures have been adopted that are equally effective to mitigate project significant effects as the measures included in this document; or (b) the measures in this document are not necessary to mitigate significant project effects due to the development of substantive new resource information not available at the time of the preparation of this document.

5.1 Signal Hill Dune Preservation Area

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County, 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983), the *Biological Resources Review*, for the current project (Zander Associates 2010) and the following prior reports: DMF/PDP *Biological Resources of the Del Monte Forest Coastal Dunes Report* (Zander Associates 2001), and the *Ecological Management Implementation Plan* (Monterey County and Ecosynthesis 1998).

Goals

- Permanent protection of dune habitats.
- Increase of habitat values.
- Elimination of invasive exotic plants as feasible.
- Revegetation with native plant materials.
- Direction of recreational access.
- Creation of compatible adjacent environments.
- Management of adjacent uses.

Management policies for Category II, protected natural reserves, outlined in the OSAC Management Plan (LSA 1983) include the following and apply to all preserve areas with dune habitat.

- Manage for preservation of conditions that are favorable for sustaining rare plant associations or typical forest community examples;
- Manage boundary areas to prevent external influences from adversely affecting plant vigor;
- Eliminate invading exotic species; and
- Protect and enhance remnant dunes.

Actions

Dune Restoration

Dune Stabilization

To stabilize the dunes and prevent large-scale movement of sand by prevailing onshore winds, various methods of temporary or permanent protection may be necessary, depending on existing vegetative cover, exposure, management area and management objectives. These measures may include, but are not necessarily limited to, crimped or plugged rice straw, snow fences, jute netting, temporary overheard irrigation and vegetative windbreaks composed of appropriate native strand or dune scrub species. Application of these dune stabilization measures will vary with the particular management area (see site-

specific discussion below); areas of newly created dune landforms; and areas of large-scale non-native species eradication will need more protection than already existing relatively stabilized areas. Vegetative breaks may need to be planted one or more years prior to removal of iceplant, European beach grass or other stabilizing non-native vegetation. Straw crimping or installation of snow fencing can have more rapid results in areas of shifting sands (Source = DMF/PDP Dunes Report).

Revegetation

Restored dune areas will be revegetated with planting mixtures generally mimicking the plant composition of the vegetation types mapped for the Signal Hill Dune. The need and timing for introduction of plant materials into an area will vary with the objectives of each designated management area (see site-specific discussion below) and will be closely tied to the non-native species eradication schedule. Plant materials such as seeds, cuttings, root divisions, seedlings, and whole plants, will be collected from on-site Signal Hill Dune stock and either applied directly or propagated in the PBC native plant nursery until such time as outplanting can be completed with optimum success. The need for supplemental irrigation, fertilization or other relatively high maintenance plant establishment techniques will be reduced in most management areas by the use of appropriate native species at an appropriate life stage introduced at an appropriate time of year. However, in those areas requiring more aggressive restoration/establishment, such as formerly mined substrates or created dune landforms, supplemental irrigation, fertilization and other standard landscaping practices may be necessary (Source = DMF/PDP Dunes Report).

Contingent upon permission from the California Department of Fish and Game for the collection of seeds, restored dune habitat shall be supplemented with salvaged or propagated seeds or individuals of special-status dune plant species such as Tidestrom's lupine, sand gilia, Monterey spineflower, and beach layia. For each of the special-status species, at least two colonies will be established by distributing seed collected from the existing occurrences, supplemented by seed from individuals propagated in the nursery. The number of seeds to be collected will be limited to a small percentage of the fruits from any one plant. Scarification prior to propagation or distribution in the field will be applied as appropriate to each species (Source = DMF/PDP Dunes Report).

As part of the seed collection effort proposed for special-status plants, the PBC shall limit collection to no more than 10% of the fruits from any one plant and no more than 5% of the total seed production from an occurrence in any one year.

Rare plant dune restoration areas within the ESHA area shall be located away from the perimeter of the proposed Area M Spyglass Hotel or Area M residential units and the perimeter of designated trails unless such areas would not be affected by the movement of trail users.

Weed Control

Non-native species relevant to the Signal Hill Dune area are iceplant, European beach grass, ripgut brome, acacia, French broom, and pampas grass. Eradication and control of these non-native species will be accomplished by a combination of chemical and mechanical means. Chemical removal is best done with a glyphosate-based herbicide such as Roundup. Broadcast spraying may be acceptable in areas where the target species produce almost the entire vegetative cover, where special measures are not needed to protect native plants and where the risk of native plant loss due to drift of spray into non-target

areas is minimal (Source = DMF/PDP Dunes Report).

Where native plants occur at a high enough density in treatment areas, spot spraying or manual removal (hand-weeding) will be necessary (Source = DMF/PDP Dunes Report).

The dead plants and debris may be left in place as mulch and wind protection, or may be removed by hand to minimize the source of nutrients for non-native species. The determination of removal or non-removal of organic debris will be made on the basis of the target vegetative cover and monitoring (Source = DMF/PDP Dunes Report).

Access Control

Control of pedestrian and equestrian traffic in the Signal Hill Dune area shall be implemented by designation of trails, closure of informal trails, use of barriers, signage, and environmental education. As a component of the restoration program, a formalized trail system through the Signal Hill Dune will be established and maintained. The Green Trail, or its equivalent, will remain as the main thoroughfare through Signal Hill Dune and will continue to accommodate both pedestrians and equestrians. However, equestrian use will be directed to areas that can withstand, or have been designed to withstand, constant trampling. More permanent (possibly structural) dune stabilization techniques, such as erosion blankets, jute netting, or snow fencing may be applied on some of the more pronounced eroded slopes along the trail. Barriers such as post and cable or split rail fencing may need to be installed to keep horses and their riders on the designated trail. Parallel boardwalks for pedestrians may also have to be installed in some areas. In addition, pedestrian boardwalks through other parts of Signal Hill Dune will be considered to direct foot traffic through the dunes, allowing for the restoration of unplanned trails and further protection of dune habitat. Restored trails and habitat restoration areas shall be designated by signage and/or barriers, which would become progressively more stringent as necessary (Source = DMF/PDP Dunes Report).

Permanent physical barriers shall be constructed between the edge of the proposed Area M Spyglass Hill Hotel or Area M residential areas and all portions of the Dune ESHA to prevent all direct access. Permanent physical barriers shall also be constructed along the edge of the “Green Trail” and other portions of the Dune ESHA as necessary to prevent pedestrians from use or creation of informal trails in the remnant dune area. The barriers shall be a minimum of 42 inches high, and shall be constructed in a manner that discourages pedestrians from crossing the barrier.

Irrigation Control and Drainage

Irrigation systems will be designed to ensure that, under windless conditions, restored dune habitat is not subject to substantial overspray. Drainage improvements will direct run-off from roads and paved surfaces away from dune habitat. Drainage improvements within the adjacent Spyglass Hill Golf Course will be located entirely within the golf course, not dune habitat.

Actions by Management Area

Management areas have been delineated in the DMF/PDP Dunes Report (Zander 2001) within the Signal Hill Dune/Spyglass Pit area to address site-specific dune restoration, enhancement and management

objectives particular to each area. The management objectives for each area will be used to develop a set of specific management prescriptions and performance standards to be implemented by the PBC in perpetuity, monitored by the third-party consultant during the 20-year resource management period, and likely self-monitored by PBC after 20 years. These management objectives are intended as guidelines and not as fixed criteria. As experience with dune restoration and management techniques in the area increases over time, these objectives may be adapted through proposal in Annual Work Plans in response to new techniques, information and/or changing circumstances. Please refer to the DMF/PDP Dunes report for further details about coastal dunes in the project area.

Dune Crest & Upper Slopes of Signal Hill Dune

The systematic removal of iceplant by both chemical and mechanical means is a priority for this management area. Other non-native species should also be eliminated over time but the reduction in the amount of cover of iceplant will provide opportunity for the recolonization and establishment of natives that currently occupy the dune crest area and contribute significantly to its stability and habitat values. Because of the relatively dense cover and reduced exposure throughout most of this area, aggressive dune stabilization measures are not as critical as in other areas. Similarly, the need for the introduction of plant materials for revegetation is reduced because of the ample source material for natural recruitment and recolonization once competition from iceplant is reduced. More exposed, open sand areas on the dune crest and upper flanks may require modification to this management approach following principles similar to those for the south slope and west slope of Signal Hill Dune (see below).

Equally important for this management area is the definition and management of access, particularly associated with the Green Trail and its branches through the dune crest. Main trails should be clearly delineated and maintained while unplanned footpaths, eroded areas and blowouts should be eliminated and restored to dune habitat. Pedestrian and equestrian traffic should be actively directed onto designated trails using a combination of signs, barriers and boardwalks through more sensitive dune sand areas. An official trail map of Signal Hill Dune and informative materials describing its sensitivity should be available at key entrance points to the dune.

South Slope of Signal Hill Dune

As with the Dune Crest management area, and all other areas of natural sandy substrates on Signal Hill Dune, eradication of non-natives is a priority. In addition to iceplant European beach grass also poses a problem in this area, especially at the interface between the dune edge and the Cypress Point Golf Course. Blanket application of herbicide is not recommended in this management area because of the frequent association of coastal scrub and dune species, including special-status species, with iceplant, beach grass and other invasives. Except where large masses of iceplant are clearly dominant, spot-spraying or hand removal are the preferred methods of removal. Dead material can remain as mulch in heavier coastal scrub-dominated areas, but should be removed in more open sandy and dune strand areas. Active re-introduction of appropriate native plant materials should occur in areas where non-natives have been removed, but natural colonization should be the preferred method of vegetation establishment in this management area. Some introduction of special-status species, propagated from site-specific source material, could be considered. Periodic control and maintenance of eroded areas and blowouts will also be required in this area, but major stabilization or structural improvements should not be necessary due to the area's limited accessibility and relatively better protection from the prevailing winds. Directional signage along the Green Trail at the top of the management area should be provided to control cross-country traversing through the area.

West Slope of Signal Hill Dune

Eradication of non-natives, primarily iceplant, is also a priority here. Broadcast spraying is acceptable where iceplant mats occupy otherwise barren sandy substrates, but stabilization measures, such as early

establishment of vegetative windrows and straw crimping, should be planned into the eradication program to prevent the movement of sand in the absence of the stabilizing effects of iceplant. Spot-spraying or hand removal will be necessary where coastal scrub and dune species mix with iceplant. As in the South Slope management area, dead material can remain as mulch in heavier coastal scrub-dominated areas, but should be removed in more open sandy and dune strand areas. Active re-introduction of appropriate native plant materials including dune stabilizing species suited to more open sand areas like beach sagewort (*Artemisia pycnocephala*), beach knotweed *(Polygonum paronychia*), dune bluegrass *(Poa douglassii*) and special-status species such as Menzies' wallflower and Tidestrom's lupine should occur in areas where non-natives have been removed.

Trail identification and maintenance through this area is important. With the Green Trail passing directly through the area and its frontage along Signal Hill Road, the West Slope management area is subject to inappropriate access and trail degradation. The Green Trail, especially at its upper entrance to the area, needs some structural improvement to arrest the gullying and erosion associated with it. Iceplant that currently stabilizes the slopes of this section of trail should be replaced by both a combination of structural erosion controls, such as matting, snow fencing, and wooden retaining walls and hardy coastal scrub vegetation, such as mock heather (*Ericameria ericoides*) and dwarf coyote brush (*Baccharis pilularis*). Other trails through the area should be clearly designated and an interpretive boardwalk trail could be developed off of Signal Hill Road or Spyglass Hill Golf Course. Periodic control and maintenance of eroded areas and blowouts will also be required in this area.

Northwest Sand Swale

Removal of iceplant and other non-native invasive species and sand stabilization are the key management objectives of this area. Broadcast spraying in most of the area is the method of choice since very little native dune habitat remains. Even in those areas known to support special-status plants, such spraying can be completed prior to their emergence in the spring or after they have completed their life cycle in the summer without substantial consequences on the populations. Sand stabilization, however, must be considered prior to implementation of the spraying program. Without iceplant, sand movement in this area could be damaging. Straw crimping and seeding with an appropriate native nurse crop, such as beach sagewort, may be an appropriate method for both sand stabilization and introduction of native dune species in this management area. Vegetative windrows with woody materials, such as mock heather and coyote brush, could also help stabilize the area. Supplemental irrigation and possibly overhead spray may be necessary to keep the sand moist until vegetation is established. A combination of methods and techniques may be applied and adapted in response to interim results. Debris, including clay shards from the gun club, should also be removed in this area. Because of its inherent instability, no pathways or trails should be routed through the area, but viewing platforms above the area may be created to overlook this area.

Northwest Disturbed Dune

Non-native species eradication in this management area will be difficult because of the mixed vegetation that has colonized the area since abandonment of the mining operation. On one hand, physical removal of large acacia trees and chemical removal of large clumps of iceplant and pampas grass will be relatively straightforward and should proceed as a first step. On the other hand, pioneering elements of both dune strand and dune scrub vegetation along with Monterey pines have begun to colonize the area. In addition, both Tidestrom's lupine and beach layia occur on remnant dunes in the area. Consequently, spot spraying or hand removal of non-natives is the preferred method of non-native plant control.

While sandy substrates presumably once characterized the entire area, reestablishing this condition throughout the area would probably not be feasible and would likely create more problems than it would resolve. The theme for this management area should remain as a coastal scrub-dominated habitat with

pioneering species and Monterey pines comprising the dominant vegetation. An active plant establishment program along those lines should be developed for the area. In addition, various soil treatment/scarification techniques should be evaluated and revegetation measures adopted in response to those techniques.

Avoidance of Legless Lizard during restoration

The applicant will hire a qualified biologist to conduct pre-restoration surveys and monitoring to protect legless lizard. Prior to restoration activities in or near remnant dune areas the biologist will conduct a pre-disturbance survey for legless lizards where there is potential for disturbance. The survey will be done within 48 hours before ground disturbing activities.

This survey will include the following steps:

- Systematic subsurface searching (legless lizards are fossorial [burrowing]).
- Staking the limits of the survey areas and fencing them with small-mesh construction fencing, buried to a minimum depth of 6 to 10 inches below grade to reduce the likelihood of lizards reentering the construction zone.
- Capture and release of found legless lizards into nearby remnant dune areas designated by the project biologist.

During ground-disturbing activities, a qualified biologist will be present and will have the authority to temporarily stop construction activities if legless lizards are found, and until such legless lizards can be successfully relocated.

Monitoring

Monitoring shall be done annually by an independent consultant under contract to Monterey County as part of the implementation of the SSRMP for this location. Monitoring of the Dune ESHA will be conducted annually for the first ten years and then at five-year intervals after ten years up to the minimum 20 year period and shall include:

- native vegetation;
- non-native species;
- access controls and trail use; and
- the indirect effects on the Dune ESHA, in particular on the edge of the Dune ESHA directly adjacent to the Proposed Resort Hotel/Residential Lots.

Monitoring for special-status dune species shall be done April through June (specific timing may vary year to year) annually until the success criteria are met. Monitoring shall record the location and total number of individuals that occur within newly established populations (Source = EMIP).

Percent cover data for plants will be collected from permanent transects located in each management area to cover all habitat types from the coastal scrub through the coastal strand habitat to Monterey pine forest.

The location, length and spacing of these transects and exact methods of data collection shall be developed as part of a baseline assessment for the SSRMP. This baseline assessment will document existing conditions, establish transect locations, develop a restoration schedule and generally set the standards for subsequent monitoring and reporting (Source =DMF/PDP Dunes Report).

Success Criteria

The following criteria will be used to determine restoration success:

- absolute cover at least 70% that of a suitable reference site, or of an offsite natural dune with vegetation composed of similar species to those used in dune habitat revegetation;
- quantitative criteria for nonnative species and invasive species to be determined during SSRMP development and approval;
- at least 70% of native species characteristic of dunes or dune scrub as are found in the reference site(s);
- dominance of the dune vegetation by at least three of the five native species of highest relative cover on the reference sites; and
- establishment of two additional subpopulations of each of the four special-status species, of at least 250 individuals each or the average (by species) found in the separate occurrences lying within 100 feet of the development boundary, whichever is less (Source EMIP).

Restoration activities shall be conducted until the performance criteria are met in three out of five successive years after completion of restoration activity. After the performance criteria are met, the PBC shall be responsible for periodic monitoring on a frequency no greater than every five years. If periodic monitoring identifies that the dune habitat within the preservation area no longer meets the restoration performance criteria, then remedial activity including the restoration measures in the dune plan shall be conducted until the performance criteria are met again in three out of five successive years.

5.2 Areas N, O, U, and V Preservation Areas

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County, 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983) and the *Ecological Management Implementation Plan* (Monterey County and Ecosynthesis 1998).

Goals

- Maintenance of extant Monterey pine forest health
- Maintenance and persistence of the Yadon's piperia population.
- Survival of Pacific Grove clover in Collins Field (if on-site preservation option selected).
- Maintenance of functions and values of wetlands.
- Maintenance of other special-status species in the context of forest management.
- Control of non-native invasive species.

All forest habitat in open space areas shall be managed according to Category IV policies of the OSAC Management Plan (LSA 1983).

Actions

- **Monterey pine forest maintenance** – The extant forest shall be maintained in accordance with the habitat prescriptions for Monterey pine forest in Chapter 3 including control of non-native invasive plant species. The SSRMP shall establish specific management goals for this area.
- **Yadon's piperia –** The existing Yadon's piperia population will be maintained as described in Chapter 4.
- **Pacific Grove clover –** If the on-site preservation option is selected, the existing population shall be maintained as described in Chapter 4.
- **Wetlands** – The existing wetlands shall be managed and monitored as described in Chapter 3.
- **Special-status species** – The existing Hooker's manzanita occurrences shall be monitored as described in Chapter 4. Dead trees and snags shall be retained where feasible as pallid bat habitat as described in Chapter 4.
- **Erosion Control and Trail Maintenance** – An annual program of erosion control and trail maintenance shall be implemented. Permanently close and revegetate all informal "social" trails. Monitor trails and trail crossings of drainages during the wet season, temporarily close single-track trails and other trails when monitoring identifies that a substantial erosion potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and sedimentation from subsequent storm events.

Monitoring

- **Monterey pine forest and special-status plants** - Site-specific monitoring regimes will be developed in the SSRMP based on the guidance described in this document for Monterey pine forest, Yadon's piperia, Pacific Grove clover, Hooker's Manzanita,and wetlands.

Success Criteria

Site-specific success criteria will be developed in the SSRMP based on the guidance described in this document for Monterey pine forest, Yadon's piperia, Pacific Grove clover and other special-status species.

5.3 Preservation Areas B and C

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County, 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983), the DMF/PDP *Monterey Pine and Monterey Pine Forest Habitat* report (Zander 2002) and the *Ecological Management Implementation Plan* (Monterey County and Ecosynthesis 1998).

Goals

- Maintenance of forest health
- Maintenance and persistence of the Yadon's piperia population.
- Protection and enhancement of wetland and riparian functions and values.

All forest habitat in open space areas shall be managed according to Category IV policies of the OSAC Management Plan (OSAC 1983).

Actions

- **Monterey pine forest** - Landscape management guidelines and appropriate forest maintenance standards, especially regarding the use of native landscape materials and controlling the establishment and spread of non-native invasive plant species like French broom, will be established in these areas (Source = DMF/PDP Monterey Pine Forest Report). These areas shall also be managed in accordance with the guidance in Chapter 3.
- **Yadon's piperia –** The existing Yadon's piperia population will be maintained as described in Chapter 4.
- **Wetlands and Riparian Areas**– Shall be managed as described in Chapter 3 for wetlands and riparian areas.
- **Pallid Bats** - Dead trees and snags shall be retained where feasible as pallid bat habitat as described in Chapter 4.
- **Erosion Control and Trail Maintenance** – An annual program of erosion control and trail maintenance shall be implemented. Permanently close and revegetate all informal "social" trails. Monitor trails and trail crossings of drainages during the wet season, temporarily close single-track trails and other trails when monitoring identifies that a substantial erosion potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and sedimentation from subsequent storm events.

Monitoring, Success Criteria, and Contingency/Remedial Actions

Site-specific monitoring regimes, success criteria, and contingency actions will be developed in the SSRMP based on the guidance described in this document for Monterey pine forest, Yadon's piperia, riparian areas, and pallid bats.

5.4 Huckleberry Hill Natural Habitat Area and Contiguous Areas

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County, 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983), the DMF/PDP *Monterey Pine and Monterey Pine Forest Habitat* report (Zander 2002) and the *Ecological Management Implementation Plan* (Monterey County and Ecosynthesis 1998).

This SSRMP shall cover the contiguous areas including HHNHA/SFB Morse Preserve, Preservation Area F-1, Preservation Area F-3, Preservation Area G, Preservation Area H, the Corporation Yard Preservation Area, and the small preservation area at Area I-2 adjacent to Preservation Area H. If a portion of Area D is preserved as part of Mitigation Measure BIO-B1 (C), then it would be included in this SSRMP as well.

Goals

- Maintenance of Monterey pine forest health
- Maintenance and enhancement of Monterey pygmy forest
- Management of Monterey clover occurrence
- Maintenance and persistence of Yadon's piperia
- Protection of other special-status plant species
- Erosion control and access control consistent with resource protection
- Protection of wetland and riparian functions and values
- Environmental education

All forest habitat in open space areas shall be managed according to OSAC Category IV policies and riparian and wetland habitat in accordance with OSAC Category VII policies for Category VIII (LSA 1983).

Actions

- **Monterey pine forest** – Shall be managed as described in Chapter 3.
- **Monterey pygmy forest** – Shall be enhanced and managed as described in Chapter 3, including restoration of Gowen cypress/Bishop pine in the designated area.
- **Monterey clover** – Shall be managed as described in Chapter 4.
- **Yadon's piperia** – Yadon's piperia habitat shall be managed as described in Chapter 4.
- **Other special status species** – Extant occurrences of other special-status species (Hooker's manzanita, pine rose, sandmat manzanita) shall be periodically monitored as part of pine forest monitoring and as described in Chapter 4. Dead trees and snags shall be retained where feasible as pallid bat habitat as described in Chapter 4.

- **Wetlands/Riparian Areas** – Manage wetlands and riparian areas in accordance with the guidance in Chapter 3 of this document.
- **Erosion Control and Trail Maintenance**
  - Implement an annual program of erosion control and trail maintenance along trails in the HHNHA and contiguous areas.
  - Monitor trails and trail crossings of drainages in HHNHA during the wet season, temporarily close single-track trails and other HHNHA trails when monitoring identifies that a substantial erosion potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and sedimentation from subsequent storm events. The PBC shall develop a protocol for implementing monitoring, temporary trail closures, and periodic maintenance that will be incorporated into the HHNHA and Contiguous Areas SSRMP. Trail closures should be coordinated between the PBC, the Pebble Beach Equestrian Center, and the Pebble Beach Riding and Trail Association.
  - Permanently close and revegetate all informal "social" trails in the HHNHA and Contiguous Areas.
  - Further hinder the potential use of designated HHNHA trails and the Green Trail by bicyclists and motorcyclists by placing physical barriers that will be difficult for bicyclists and motorcyclists to cross easily, but will allow pedestrian and equestrian crossing) such as wooden barriers 18 to 20" high at trailheads and at entrances to single-track trails, and place signage at every trailhead stating the prohibition of bicycles and motorcycles.
- **Weed Control** - Conduct, at least annually, weed control surveys of the HHNHA, both along trails and off trails, and use manual, mechanical and appropriate chemical or other means of control where infestation of weeds is identified. Annual weed monitoring should include targeted monitoring in areas of heavy use within the Monterey pygmy forest to examine if trail use may be resulting in substantial spread of non-native invasive plant species or substantial change in native vegetation composition along trails. Weed control, or other measures shall be implemented, as necessary to avoid substantial change in native Monterey pygmy forest vegetation.
- **Monitoring for Feral Colonies**. In cooperation with Monterey County Animal Services or other organizations, monitor the HHNHA for feral animals (i.e. dogs, cats) and remove any feral colonies to protect native wildlife.
- **Environmental Education** - Incorporate environmental education about the sensitive resources of the HHNHA to all trail users including measures that individuals can implement to lower their impact such as crossing drainages at marked crossings, staying on designated trails, controlling pets (including keeping cats indoors and dogs on leash), avoiding spread of non-native invasive species, and directing lighting inward (as opposed to outward into adjacent preservation areas).

Monitoring, Success Criteria, and Contingency/Remedial Actions

Site-specific monitoring regimes will be developed in the SSRMP based on the guidance described in this document for Monterey pine forest, Monterey pygmy forest, Yadon's piperia, Monterey clover, other special-status species, wetlands and riparian areas, erosion control, access control, invasive species and trail management.

5.5 Lower Seal Rock Creek Area

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County, 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983), the DMF/PDP *Monterey Pine and Monterey Pine Forest Habitat* report (Zander 2002) and the *Ecological Management Implementation Plan* (Monterey County and Ecosynthesis 1998).

A combined SSRMP shall be prepared for areas within the lower Seal Rock Creek Watershed including Preservation Area I-1, J, K, and L. The management of the adjacent Indian Village populations of Hickman's potentilla and Pacific Grove clover shall also be included in this SSRMP.

Goals

- Maintenance of forest health
- Maintenance of dune habitat
- Protection of wetland and riparian functions
- Maintenance and persistence of Yadon's piperia
- Creation of additional breeding ponds for California red-legged frog in or adjacent to Seal Rock Creek and/or its tributaries
- Preservation of the Hickman's potentilla population in Indian Village
- Preservation of the Pacific Grove clover population in Indian Village
- Maintenance of other special-status species

All forest habitat in open space areas shall be managed according to OSAC Category IV policies, dune habitat according to OSAC Category II policies, and riparian and wetland habitat in accordance with OSAC Category VII policies for Category VIII (LSA 1983).

Actions

- **Monterey pine forest** – All Monterey pine forest shall be managed in accordance with the guidelines in Chapter 3 including invasive species management.
- **Remnant Dune Habitat** – Remnant dune habitat in the western portion of Area L shall be managed according to Category II policies of the OSAC Management Plan.
- **Wetlands/Riparian Areas** – Manage these areas in accordance with the guidance in Chapter 3, the DMF/PDP Wetlands Plan and the Management policies for Category VIII (riparian and wetland habitat) outlined in the *OSAC Management Plan* (LSA 1983)
- **Yadon's piperia** – Yadon's piperia habitat shall be managed in accordance with the guidance in Chapter 4.
- **Hickman's potentilla –** Hickman's potentilla habitat shall be managed in accordance with the guidance in Chapter 4.

- **Pacific Grove clover –** Pacific Grover clover habitat shall be managed in accordance with the guidance in Chapter 4.
- **California red-legged frog** – Three breeding ponds shall be created and maintained along Seal Rock Creek as described in Chapter 4.
- **Other special-status species -** Hickman's onion, pine rose, and Hooker's manzanita shall be monitored as described in Chapter 4. Dead trees and snags shall be retained where feasible as pallid bat habitat as described in Chapter 4. Restoration activities shall comply with woodrat protections described in Chapter 4.
- **Erosion Control and Trail Maintenance** – An annual program of erosion control and trail maintenance shall be implemented. Permanently close and revegetate all informal "social" trails. Monitor trails and trail crossings of drainages during the wet season, temporarily close single-track trails and other trails when monitoring identifies that a substantial erosion potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and sedimentation from subsequent storm events.
- **Environmental Education** - Provide environmental education about the sensitive resources for new residents of Areas J,K and L including measures that individuals can implement to lower their impact such as staying on marked trails, crossing drainages only at marked crossings, and avoiding the introduction of invasive species

Monitoring, Success Criteria, and Contingency/Remedial Actions

Site-specific monitoring regimes, success criteria, and contingency/remedial actions will be developed in the SSRMP based on the guidance described in this document for Monterey pine forest, dune habitat, wetlands/riparian areas, Yadon's piperia, other special-status species, and California red-legged frog.

5.6 Preservation Area PQR

The following is based on the Draft EIR for the 2011 PBC Project (Monterey County, 2011), the *Management Plan for Del Monte Forest Open Space Property* (LSA 1983), the DMF/PDP *Monterey Pine and Monterey Pine Forest Habitat* report (Zander 2002) and the *Ecological Management Implementation Plan* (Monterey County and Ecosynthesis 1998).

Goals

- Maintenance of forest health
- Maintenance and persistence of Yadon's piperia
- Protection of wetland and riparian functions and values
- Maintenance of other special-status species

All forest habitat in open space areas shall be managed according to OSAC Category IV policies and riparian and wetland habitat in accordance with OSAC Category VII policies (LSA 1983).

Actions

- **Monterey pine forest** - All Monterey pine forest shall be managed in accordance with the guidelines in Chapter 3 including annual (and more frequent if necessary) weed control surveys and use manual, mechanical, and appropriate chemical or other means of control where infestation of noxious weeds is identified.
- **Wetlands/Riparian Areas** – Manage these areas in accordance with the guidance in Chapter 3 and the Management policies for Category VIII (riparian and wetland habitat) outlined in the *OSAC Management Plan* (LSA 1983)
- **Yadon's piperia** – Yadon's piperia habitat shall be managed in accordance with the guidance in Chapter 4.
- **Hickman's onion** – Hickman's onion shall be managed in Area PQR as described in Chapter 4.
- **Other special-status species** – Other special status species (Hooker's manzanita, sandmat manzanita) shall be monitored as described in Chapter 4. Dead trees and snags shall be retained where feasible as pallid bat habitat as described in Chapter 4. Restoration activities shall comply with woodrat protections described in Chapter 4.
- **Erosion Control and Trail Maintenance** – An annual program of erosion control and trail maintenance shall be implemented. Permanently close and revegetate all informal "social" trails. Monitor trails and trail crossings of drainages during the wet season, temporarily close single-track trails and other trails when monitoring identifies that a substantial erosion potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and sedimentation from subsequent storm events.

Monitoring, Success Criteria, and Contingency/Remedial Actions

Site-specific monitoring regimes, success criteria, and contingency/remedial actions will be developed in the SSRMP based on the guidance described in this document for Monterey pine forest, Yadon's piperia, other special-status species, wetlands, and Hickman's onion.

Chapter 6
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Appendix C.1
Resource Maps

The Resource Maps from Appendix F of the Draft EIR will be included in the Master RMP when finalized at the time of the Final EIR.

Appendix C.2
Site Descriptions

The Site Descriptions from Appendix F of the DEIR will be included in the Master RMP when finalized at the time of the FEIR.