

FINDINGS AND RECOMMENDATIONS ON THE ISSUANCE OF INCIDENTAL TAKE PERMITS FOR THE INTERIM-PROGRAMMATIC HABITAT CONSERVATION PLAN FOR THE ENDANGERED MOUNT HERMON JUNE BEETLE AND BEN LOMOND SPINEFLOWER, SANTA CRUZ COUNTY, CALIFORNIA

I. DESCRIPTION OF PROPOSED ACTION

The U.S. Fish and Wildlife Service (Service) proposes to issue Incidental Take Permits (ITPs or Permits) to the County of Santa Cruz (County) and the City of Scott's Valley (City)(Applicants) under the authority of section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (Act). ITPs issued pursuant to the Interim-Programmatic Habitat Conservation Plan for the Endangered Mount Hermon June beetle (IPHCP) would expire when the Sandhills Regional Habitat Conservation Plan (HCP) is finalized, when the total amount of habitat disturbance authorized under the ITPs reaches 139 acres, or when 5 years have elapsed since issuance of the ITPs, whichever occurs first.

The documents used in the preparation of this statement of findings and recommendations are the IPHCP (Service 2011) and associated biological opinion (Service 2011). This document is incorporated by reference as described in 40 CFR 1508.13.

The Service, the County, and the City have developed the IPHCP which is intended to cover small development projects proposed in areas with existing, dense residential development that are likely occupied by the Mount Hermon June beetle (*Polyphylla barbata*) and Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*). (The Service is working with the County and City to develop a long-term Sandhills Regional HCP, which is expected to be completed in 3 to 5 years.) If all permit issuance criteria are met, the Service would issue ITPs to the City and County. The City and County could then extend take coverage under those ITPs to landowners (project proponents) proposing small development projects, provided the landowners follow the application instructions established by the City and County (in accordance with the IPHCP) and sign a Certificate of Inclusion (see Appendix C of the IPHCP).

Under the proposed action and Permit numbers: TE43708A (City) and TE44928A (County), the Applicants would extend take coverage to eligible project proponents on up to 139 acres for projects implemented under the IPHCP. The City, County, and Service have designated 10 Project Units for the IPHCP. The Project Units occur within the vicinity of Mount Hermon, Scotts Valley, Felton, and Ben Lomond and range in size from 3.2 to 373 acres; collectively comprising 1,693.2 acres (including roads and common areas). To be considered eligible under the IPHCP, a proposed project must be located within a designated Project Unit and also meet all of the eligibility criteria described below.

- Project is residential.
- Project is located on a parcel that is 1.5 acres or less in size.
- Project would result in ground disturbance of Zayante soils.

- Development envelope for the project, when combined with the development envelope for any project previously implemented on the same parcel using the IPHCP and the ITP, will not exceed 15,000 square feet (0.34 acre). For the purposes of the IPHCP, development envelope is defined as: Any portion of the project site that will undergo ground disturbance such as the following activities: Grading (excavation and/or fill); land clearing; building; paving; installation of landscaping; or deposition of refuse or debris in relation to a discretionary permit.
- Proposed development is one or more of the following project types that requires a City or County discretionary or building permit that involves ground disturbance. Examples include: Single family dwelling, guest cottage (or accessory dwelling unit) attached or detached garage; shed; storage building room addition remodels that involve ground disturbance septic system installations and upgrades that involve new ground disturbance.

To mitigate for incidental take at the project site, project proponents will secure conservation credits for the Mount Hermon June beetle at a ratio of 1:1 in terms of area disturbed to number of credits (e.g., a project with a 0.1-acre disturbance envelope will mitigate by securing 0.1 acre of conservation credits for the Mount Hermon June beetle) at a Service-approved Sandhills conservation bank. Project proponents must also commit to implement avoidance and minimization measures (described below in section IV.2) for each project.

Biological Goals and Objectives

The Applicants have identified specific biological goals and objectives for the Mount Hermon June beetle and Ben Lomond spineflower in the IPHCP. These biological goals and objectives are meant to minimize adverse effects of IPHCP covered activities on the Mount Hermon June beetle and Ben Lomond spineflower, as well as conserve suitable habitat through the purchase of conservation credits at a Service-approved Sandhills conservation bank. The biological goals and objectives are found within section 5 of the IPHCP.

Monitoring and Reporting

The IPHCP outlines three types of monitoring that will be implemented: 1) Compliance monitoring will be used to track project proponent's compliance with the requirements specified in the IPHCP, Implementing Agreements, and ITPs; 2) effects monitoring tracks the impacts of the covered activities on the covered species; and 3) effectiveness monitoring tracks the progress of the conservation strategy in meeting the biological goals and objectives of the IPHCP. In addition, the proposed management activities will be monitored at a Service-approved conservation bank. A detailed description of the monitoring plan can be found in section 5.3 of the HCP.

The City and County will submit annual reports to the Service documenting the results of that year's covered activities and must include updated information on the proposed project and extent of Zayante soils disturbed, photographs, and information on adherence to the minimization and mitigation measures outlined in the IPHCP. A more detailed description of the reporting requirements is found in section 5.4 of the HCP.

Adaptive Management

No adaptive management strategies have been identified in the IPHCP. All adaptive management strategies that may be needed have been developed and will be carried out by the Ben Lomond Sandhills Preserve, which is managed by the Zayante Sandhills Conservation Bank, or by other participating Service-approved Sandhills conservation banks.

Changed and Unforeseen Circumstances

The Applicants have provided measures to address changed and unforeseen circumstances within the IPHCP. The Applicants identified the listing of new species and the discovery of other listed species on the property as changed circumstances. A portion of the fees paid to purchase conservation credits within the Ben Lomond Sandhills Preserve include contingency funds to cover the costs of unexpected repairs, or habitat restoration that may be required as a result of any natural disasters occurring at the off-site conservation bank. Management responses and funding for the changed circumstances that could occur on mitigation lands (e.g., fire or invasive species) have already been considered and addressed in the in the Conservation Bank Agreement and the Adaptive Management and Monitoring Plan supporting the establishment of the Zayante Sandhills Conservation Bank.

Pursuant to the "No Surprises" rule (69 Federal Register (FR) 71723), as codified in 50 CFR, sections 17.22(b) and 17.32(b), the Service will not require additional land, water, or other natural resources without the consent of the Applicants in the event that unforeseen circumstances occur, provided the IPHCP is being properly implemented. If the Service determines that an unforeseen circumstance has occurred and that additional land, land restrictions, or financial compensation beyond that required under the IPHCP is needed to conserve the Plan Species, then the Applicants will not be obligated to provide the additional measures without their consent. Pursuant to 50 CFR 17.22(b)(8) and 17.32(b)(8), the Service retains the authority to revoke a Permit, in response to an unforeseen circumstance or otherwise, if we find that continuation of the take authorized under the Permit, would appreciably reduce the likelihood of the survival and recovery of a listed species.

Consistent with the "No Surprises" rule, the IPHCP also identifies changed circumstances that can reasonably be anticipated and describe the responses to such changes that will be carried out by the Applicants. The Applicants provide measures to address changed and unforeseen circumstances within the IPHCP. The Applicants identified the listing of new species and the discovery of other listed species on the property as changed circumstances. If a new species that is not covered by the IPHCP but that may be affected by activities covered by the IPHCP is listed under the Act during the term of the Permit, the Permit may be reevaluated by the Service and the IPHCP covered activities may be modified, as reasonable, to ensure that the activities covered under the IPHCP will not result in take of the newly listed species. The Applicants will implement reasonable modifications to the IPHCP covered activities identified by the Service as necessary to avoid the

likelihood of take of the newly listed species. The Applicants will continue to implement reasonable modifications until such time as the Applicants have applied for and the Service has approved an amendment of the Permit, in accordance with applicable statutory and regulatory requirements, to cover the newly listed species or until the Service notifies the Applicants in writing that modifications to the IPHCP covered activities are no longer required to avoid the likelihood of take of the newly listed species. If the Service, in consultation with the Applicants, determines that the project-related activities cannot be modified to avoid take of a species not covered under the IPHCP, then the Applicants will cease any activities that may result in take of any species not covered under the IPHCP until a permit amendment has been issued.

Changes between the Draft and Final HCP

The date on the cover sheet of the IPHCP has been changed from January 2011 to June 2011.

Section 7.1, 2nd sentence of 2nd paragraph has been changed to read, “Management responses and funding for the changed circumstances that could occur on mitigation lands (e.g., fire or invasive species) have already been considered and addressed in the in the Conservation Bank Agreement and the Adaptive Management and Monitoring Plan supporting the establishment of the Zayante Sandhills Conservation Bank.”

II. ANALYSIS OF EFFECTS

The Service has determined that the impacts likely to result to the Mount Hermon June beetle and Ben Lomond spineflower from the proposed action will be minimized and mitigated to the maximum extent practicable by measures described in the IPHCP and the associated Permits. The effects of the proposed action on the Mount Hermon June beetle and Ben Lomond spineflower are fully analyzed in the IPHCP and the Service’s biological opinion, which are incorporated by reference. A summary of the analysis is provided below.

The Mount Hermon June beetle is restricted to Zayante sands soils (Bowman and Estrada 1980) derived from ancient sand deposits, known as the Santa Margarita formation (Marangio and Morgan 1987), which are found in the Scotts Valley-Mount Hermon-Felton-Ben Lomond area of the Santa Cruz Mountains. The Mount Hermon June beetle was originally listed as an endangered species because of historical loss of habitat and several actual or potential future actions that could further reduce the amount of suitable habitat that supports the species. Throughout most of its range, the primary threats to the species are loss of habitat from sand mining and urbanization, and habitat degradation due to invasive plants and unnatural succession. In addition, land uses such as agricultural conversion and recreation (e.g., hiking, horseback riding, mountain biking, and off-road vehicle use) have resulted in loss or degradation of habitat.

The Ben Lomond spineflower is restricted to sandy soils of the Zayante series and is endemic to the Zayante Sandhills of Santa Cruz County. The plant is often found in association with the sand

parkland plant community, but can occur in non-parkland areas that have the appropriate soils and microhabitat characteristics. The core of current and historical populations of the species occurs in the vicinity of Mount Hermon, Felton, Ben Lomond, Zayante, and Scotts Valley. Past and current sand mining from five quarries has resulted in the permanent removal of habitat for the Ben Lomond spineflower. Residential and commercial development has reduced the amount of habitat for the Ben Lomond spineflower. Recreational use of habitat also threatens the Ben Lomond spineflower throughout its range. Because the Ben Lomond spineflower is shade intolerant, it may benefit from low-level disturbance that would maintain the open habitat it needs. Therefore, the plant may tolerate light recreational use; however, overuse by motorized bikes, equestrians, and pedestrians can result in erosion of sandy soils, and create inhospitable conditions for the Ben Lomond spineflower.

Implementation of projects covered by the IPHCP could result in the permanent loss of 139 acres of habitat for the Mount Hermon June beetle and Ben Lomond spineflower. This effect will be mitigated through the requirement to secure an equal ratio of conservation credits to the area of impacts for the Mount Hermon June beetle and Ben Lomond spineflower at a Service-approved conservation bank.

All life stages of the Mount Hermon June beetle and Ben Lomond spineflower may be killed or injured by project-related activities. Specifically, workers may injure or kill all life stages of either species by trampling, digging, grading, or other construction related activities. Transient adult Mount Hermon June beetles may be attracted to exposed, sandy soils in the proposed project areas during the species' flight season (evening hours between approximately May 15 and August 15), and could be susceptible to crushing or further disturbance by workers conducting project-related activities. Adult Mount Hermon June beetles are distracted by light during the night, which can disrupt breeding activity. Adult Mount Hermon June beetles emerge from under the soil surface to attract and locate mates. Turf grass, dense ground cover plants (e.g., ivy), weed matting, aggregate, and mulch can degrade habitat for the Mount Hermon June beetle by inhibiting their ability to burrow into the soil or emerge from it.

Measures required under the IPHCP by the Applicants are intended to minimize these threats. They include: 1) avoiding native plants to the greatest extent feasible; 2) conducting ground-disturbing activities between August 15 and May 15 (outside of the species flight season) to the greatest extent feasible; 3) if project activities must be conducted between May 15 and August 15, exposed disturbed soils will be covered with appropriate materials each evening at the beginning of the flight season, regardless of when project activities commence within the flight season. This measure will ensure that project activities avoid or minimize adverse impacts to Mount Hermon June beetles that may disperse through the project area; 4) reducing the amount of outdoor lighting, shielding light fixtures to reduce illumination of surrounding areas, or using light bulbs that do not attract insects; and 5) incorporating landscaping elements that do not degrade habitat for the Mount Hermon June beetle, to the greatest extent feasible, as determined by the City and County.

The conservation strategy of the proposed project will benefit the Mount Hermon June beetle and Ben Lomond spineflower. Additionally, up to 139 acres of habitat will be managed and preserved for the Mount Hermon June beetle and Ben Lomond spineflower at the Ben Lomond Sandhills Preserve. These mitigation efforts will contribute to the long-term recovery efforts for the Mount Hermon June beetle and Ben Lomond spineflower.

III. PUBLIC COMMENT

The Service published a NOA of the IPHCP and receipt of an application for an incidental take permit by the Applicants for the proposed action in the Federal Register on March 20, 2011 (76 FR 17664). Publication of the NOA initiated a 60-day public comment period. The NOA, implementing agreements for the City of Scotts Valley and County of Santa Cruz, the environmental assessment, and the draft IPHCP were made available in the Service's Ventura Fish and Wildlife Office and via the internet.

The Service did not receive any comment letters in response to the Notice of Availability.

IV. INCIDENTAL TAKE PERMIT ISSUANCE CRITERIA - ANALYSIS AND FINDINGS

Section 10(a)(2)(A) of the Act specifically mandates that "no permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefore submits to the Secretary a conservation plan that specifies--(i) the impact which will likely result from such taking; (ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps; (iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and (iv) such other measures as the Secretary may require as being necessary or appropriate for the purposes of the plan."

Section 10(a)(2)(B) of the Act mandates that the Secretary shall issue a permit if he finds "...after opportunity for public comment, with respect to a permit application and the related conservation plan that---(i) the taking will be incidental; (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (iii) the applicant will assure that adequate funding for the plan will be provided; (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (v) the measures, if any, required under subparagraph (A)(iv) will be met; and the Secretary has received such other assurances as may required that the plan will be implemented..."

The IPHCP contains all elements specified in section 10(a)(2)(A) of the Act. With regard to this specific Project, Permit action, and section 10(a)(2)(B) requirements, the Service makes the following findings:

1. The taking will be incidental.

Take of the Mount Hermon June beetle within eligible IPHCP covered areas will be incidental to the otherwise lawful implementation of the IPHCP, including the approval and implementation of small development projects within the IPHCP boundaries, and not the purpose of, these lawful activities.

2. The Applicants will, to the maximum extent practicable, minimize and mitigate the impacts of taking listed species.

The Service finds that the IPHCP contains measures that will minimize and mitigate the impacts of the take of Mount Hermon June beetles and disturbance to Ben Lomond spineflowers from projects implemented under the IPHCP, to the maximum extent practicable. The IPHCP also represents the most practicable alternative to minimize and mitigate the impacts to the species. Under the provisions of the IPHCP, the impacts of take will be minimized, mitigated, and monitored through the following measures for the proposed project:

a) avoiding native plants to the greatest extent feasible; b) conducting ground-disturbing activities between August 15 and May 15 (outside of the species flight season) to the greatest extent feasible; c) if project activities must be conducted between May 15 and August 15, exposed disturbed soils will be covered with appropriate materials each evening at the beginning of the flight season, regardless of when project activities commence within the flight season. This measure will ensure that project activities avoid or minimize adverse impacts to Mount Hermon June beetles that may disperse through the project area; d) reducing the amount of outdoor lighting, shielding light fixtures to reduce illumination of surrounding areas, or using light bulbs that do not attract insects; and e) incorporating landscaping elements that do not degrade habitat for the Mount Hermon June beetle, to the greatest extent feasible, as determined by the City and County.

Implementation of authorized projects covered by the IPHCP could result in the permanent loss of 139 acres of habitat for the Mount Hermon June beetle and Ben Lomond spineflower. This effect will be mitigated through the requirement to secure an equal ratio of conservation credits to the area of impacts for the Mount Hermon June beetle and Ben Lomond spineflower at the Ben Lomond Sandhills Preserve of the Zayante Sandhills Conservation Bank. Impacts to the Mount Hermon June beetle and Ben Lomond spineflower associated with implementation of the IPHCP are expected to be low as the maximum loss of 139 acres of Sandhills habitat represents only 5 percent of the estimated remaining Sandhills habitat (2,800 acres), eligible project sites are located in areas that have been previously developed, much of the habitat affected is degraded, and this

habitat has limited long-term conservation value. Although the loss of a maximum of 139 acres of Sandhills habitat would be permanent, the IPHCP requirement to purchase an equal ratio of conservation credits to the area of impacts at the Ben Lomond Sandhills Preserve more than offsets the impacts of the proposed project, given that the habitat to be protected is managed by the Zayante Sandhills Conservation Bank and is of exceptionally high conservation value for the Mount Hermon June beetle and Ben Lomond spineflower. The Service believes the conservation measures effectively compensate for the level of take and therefore we find the IPHCP minimizes and mitigates the effects of the taking of the Mount Hermon June beetle and Ben Lomond spineflower to the maximum extent practicable.

3. The Applicants will ensure that adequate funding for the IPHCP and procedures to deal with unforeseen circumstances will be provided.

The County and the City have instituted a new sandhills application-processing fee, in the amount of \$321.00 for the County and \$274.00 for the City, to cover the costs of performing anticipated tasks detailed in section 6.3 in the IPHCP. The County anticipates that about five to ten building applications will be submitted annually for projects within the IPHCP area. This would generate an estimated \$1,600.00 to \$3,200.00 in annual revenues during the five-year permit term. The City estimates about six to twelve building permit annually for projects within the IPHCP in the City of Scotts Valley. This would generate an estimated \$1,370.00 to \$3,288.00 in annual revenues during the five-year permit term. If the revenue received through the \$321.00 application-processing fee is insufficient to meet the costs of implementing the IPHCP, the County will increase the fee and/or absorb the additional costs using base resources. The County is committed to ensuring that the IPHCP is properly and fully implemented, and understands that the ITP will be suspended or revoked if it does not fully comply with its terms and conditions. The City of Scotts Valley will follow the same approach as the County.

Mitigation costs for covered activities (i.e., purchasing conservation credits as outlined throughout this document and Section 5.2.2.2 of the IPHCP) will be borne by landowners proposing to implement covered activities under the IPHCP. Because mitigation must be provided before covered activities are permitted and implemented, the IPHCP is based on a pay-as-you-go approach to mitigation, and adequate funding for mitigation is thereby assured. The costs of managing and monitoring mitigation lands at the Zayante Sandhills Conservation Bank have already been addressed and assured through the various documents approved by the Service in establishing the conservation bank. For this reason, the IPHCP does not address costs or funding assurances for managing or monitoring mitigation lands.

In the event of suspension or revocation, the Applicants' obligations under the IPHCP would continue to the extent that the Service determines that take of the Mount Hermon June beetle occurred under the Permit but was not fully mitigated in accordance with the IPHCP. In such an event, mitigation measures would be implemented until the take has been mitigated to the maximum extent practicable.

Pursuant to the Service's "No Surprises" regulations [50 CFR 17.22(b)(5) and 17.32(b)(5)], the IPHCP includes procedures to deal with unforeseen circumstances. In the event of unforeseen circumstances affecting the Plan Species, the Applicants would not be required to provide the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed upon for the species covered by the IPHCP without their consent; provided that proper implementation of the IPHCP has occurred.

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

The Act's legislative history establishes the intent of Congress that this issuance criterion is identical to a finding of "not likely to jeopardize" under section 7(a)(2) (see 50 CFR 402.02). As a result, approval of the Applicants' permit applications has also been reviewed by the Service under section 7 of the Act. The biological opinion concluded that the approval of the Applicants permit application is not likely to jeopardize the continued existence of the Mount Hermon June beetle. These conclusions were based on the following:

1. Measures that would minimize the effects of the project on both species have been incorporated into the IPHCPs conservation plan.
2. Project proponents would be preserving Mount Hermon June beetle and Ben Lomond spineflower habitat in perpetuity through the purchase of conservation credits at a Service-approved Sandhills conservation bank.
3. The maximum loss of 139 acres of Sandhills habitat represents only 5 percent of the estimated remaining Sandhills habitat (2,800 acres).

5. Other measures, required by the Director of the Service as necessary or appropriate for purposes of the EA/IPHCP, will be met.

The Service will condition the Permits to require annual reporting and an Implementing Agreement with the Applicants will be signed. The IPHCP incorporates all other elements determined by the Service to be necessary for approval of the IPHCP and issuance of the Permits.

6. The Service has received the necessary assurances that the IPHCP will be implemented.

Compliance with the IPHCP is a condition of the permits. The authorities of the permits are a primary instrument for ensuring that the IPHCP will be implemented. The Applicants understand that their failure to comply with the IPHCP will result in having their permit suspended and/or revoked, making them vulnerable to an ESA section 9 violation. The purchase of conservation

credits in the Ben Lomond Sandhills Preserve by the project proponents assure that the effects of the project will be mitigated through the conservation and management of the preserve in perpetuity.

V. ALTERNATIVES

Two alternatives to the proposed Project were included in the IPHCP and considered by the Service. The alternatives are the following: (1) No Action; and (2) Reduced Project.

Under the No Action alternative, the County and City would not prepare and HCP, seek ITPs, or extend any take authorization to individual landowners under their jurisdiction. As a consequence, landowners who own property supporting Mount Hermon June beetle habitat would need to individually apply for an incidental take permit so as not to be in violation of section 9 of the Act. As a result, many projects in areas containing Sandhills habitat may not be implemented or would be implemented only after the regional HCP is approved. Other projects would likely be implemented without minimization or mitigation measures because of a lack of information about the Mount Hermon June beetle or the requirements of the Act. If projects are not implemented, incidental take of the Mount Hermon June beetle associated with a proposed project would be avoided. However, overall impacts to the Mount Hermon June beetle would likely be greater in the absence of this IPHCP and associated ITPs because of the number of projects that would be conducted without minimization and mitigation measures. For all of these reasons, the No Action Alternative was rejected.

Under the Reduced Project alternative, the total amount of development that would be covered under the plan would be 100 acres (instead of 139 acres), yet the maximum disturbance footprint would remain at 15,000 square feet per parcel. This would limit construction-related impacts to the Mount Hermon June beetle and Ben Lomond spineflower under the plan by reducing the loss of habitat for the species by 39 acres, or 1.5 percent of the remaining sandhills habitat, however a section 10(a)(1)(B) permit would still be needed. Although the Reduced Project Alternative would only cover 100 acres of impacts from development, this alternative would not substantially change the amount of potential take of the covered species because landowners could still apply for their own ITP with the Service to develop their parcel. Rather, this Alternative unnecessarily reduces opportunities for landowners to participate in a streamlined approach to comply with the Act when developing their parcel. In addition, the benefits of reducing adverse impacts to the Mount Hermon June beetle and Ben Lomond spineflower, and reducing the degradation of the species' habitat, would be outweighed by the corresponding reduction in compensatory mitigation in an area containing high quality contiguous habitat for the covered species. For these reasons, the Reduced Project alternative was rejected.

VI. GENERAL CRITERIA AND DISQUALIFYING FACTORS - ANALYSIS AND FINDINGS

The Service has no evidence that the permit applications should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b)-(c).

VII. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, the Service finds that the applications meet permit issuance criteria per 50 CFR 17.22 (b) and intends to issue permit number TE44928A to the County and TE43708A to the City, for the incidental taking of the Mount Hermon June beetle.

10.27.2011
Date

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