COUNTY OF SANTA CRUZ

0275

PLANNING DEPARTMENT
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KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

July 19, 2011

AGENDA: August 2, 2011

Board of Supervisors
County of Santa Cruz
701 Ocean Street
Santa Cruz, CA 95060

SUBJECT: Sandhills Interim Programmatic Habitat Conservation Plan and Incidental Take Permit

Members of the Board:

For a number of years, the Planning Department has been working with the U.S. Fish and Wildlife Service (USFWS) and City of Scotts Valley on an Interim Programmatic Habitat Conservation Plan (IPHCP) for a portion of the Zayante Sandhills. The purpose of this letter is to present your Board with the final Sandhills IPHCP (Attachment 1) and associated Implementing Agreement between the County of Santa Cruz and USFWS (Attachment 2). Should your Board choose to adopt the IPHCP and enter into this agreement, USFWS will issue the County an Incidental Take Permit (ITP) (Attachment 3) for the Mount Hermon June beetle. Property owners within a portion of the Sandhills that meet certain eligibility requirements can then request coverage under the County's ITP to comply with the Federal Endangered Species Act (ESA) and supporting regulations.

BACKGROUND

The Sandhills ecosystem occurs only in Santa Cruz County, in association with the Zayante sand soil series. Zayante soils are limited geographically and, in general, are found only in portions of the San Lorenzo Valley, Bonny Doon area, and the City of Scotts Valley. The Sandhills ecosystem supports a number of federally listed endangered species, including the Mount Hermon June beetle, Zayante band-winged grasshopper, Santa Cruz wallflower, Ben Lomond spineflower, and Santa Cruz cypress. The Sandhills also support the last known population of Santa Cruz kangaroo rat and other rare plants and animals. Accordingly, this ecosystem is also protected under the County Sensitive Habitat Protection Ordinance (County Code Chapter 16.32).

For these reasons, property owners in the Sandhills face a unique set of challenges when attempting to develop their parcels. To date, each property owner has had to submit an individual Habitat Conservation Plan (HCP) to USFWS to satisfy ESA requirements. There are only two biologists recognized by USFWS with the necessary expertise to prepare these HCPs. In addition, until 2008, it was very difficult to mitigate the impacts of development in the Sandhills in a meaningful way. Each property owner had to develop a mitigation plan; and there was no cost effective, cohesive way to promote conservation of this unique ecosystem.

As you may recall, USFWS and your Board addressed the latter problem by entering into agreements with the Zayante Sandhills Conservation Bank. This is a private venture run by a California limited liability company. The Conservation Bank purchased a Sandhills parcel in Ben Lomond (APN 072-262-74), which must be managed in perpetuity according to a management plan prepared by Sandhills experts and approved by USFWS. The cost of acquiring and managing the preserve is being financed through an endowment, which is funded from the sale of conservation credits. Property owners can purchase these credits to mitigate the impacts of development in the Sandhills. This has provided a relatively cost effective mitigation option that benefits the ecosystem through conservation and management of a large tract of habitat, rather than multiple, small and disconnected mitigation sites.

The next step to assist property owners in the Sandhills, and further promote conservation of this ecosystem, is to consider entering into the agreement to implement the IPHCP. The City of Scotts Valley, which has jurisdiction over a portion of the Sandhills, is also considering entering into an agreement for Sandhills parcels within the city limits. While the IPHCP does not apply to all of the Sandhills, it does encompass over 3,600 Sandhills parcels that likely support the Mount Hermon June beetle. Property owners of these parcels that meet certain eligibility requirements would have the option of seeking coverage under the County's and City's ITPs to satisfy Federal ESA requirements. At least some of these parcels also provide habitat for the Ben Lomond spineflower. While USFWS does not issue ITPs for listed plants, this species is also addressed in the IPHCP and would benefit from its implementation.

SANDHILLS IPHCP ELIGIBILTY REQUIREMENTS AND COUNTY RESPONSIBILITIES

The IPHCP area consists of ten project units (Attachment 1, page 21). In order to be eligible for coverage under the IPHCP and County's and City's ITPs, the parcel to be developed must be located within one of these units. In addition, the parcel must be 1.5 acres or less in size, the proposed development must be residential in nature, the total amount of habitat disturbance cannot exceed 15,000 square feet per parcel, and the project must first incorporate appropriate measures to avoid and minimize development-related impacts. For any project outside of the ten project units, the Board currently has the authority to grant an applicant the ability to purchase credits from the Conservation Bank to satisfy the County's Sensitive Habitat Ordinance. To date, the Board has approved this use for four residential projects and two Public Works projects.

In order to obtain an ITP for the Mount Hermon June beetle, the County (and City) must be willing to assume responsibility for ensuring that projects covered under the ITP comply with the minimization and mitigation measures included in the IPHCP (Attachment 1, page 54-56). This entails monitoring and tracking projects for compliance and, when necessary, enforcing the terms and conditions of the IPHCP and ITP. Annual reports must also be submitted to USFWS.

Planning Department staff already perform most of the tasks necessary to fulfill this responsibility in conjunction with implementing the County's Sensitive Habitat Protection Ordinance. Only a few additional duties, such as satisfying USFWS reporting requirements, would be new. The Planning Department can accommodate performing these limited tasks with existing staff and revenues, including the Sandhills application-processing fee that your Board approved in 2008. The Operating Agreement your Board approved in January of 2008

(Attachment 4) states that the Board can approve the use of credits for any project outside of the IPHCP area, such as commercial projects or subdivisions. Staff currently makes recommendations to the Board regarding the use of credits to satisfy the Sensitive Habitat Ordinance for all projects that do not meet the eligibility requirements under the IPHCP. While this system works fairly well, it can cause some delay in the issuance of a permit for a small residential project, particularly during the summer months when the Board is on recess. This process can be made more efficient if the Board grants authority to the Planning Director to approve the use of credits for the small projects that are residential in nature. The Board would maintain the authority to allow the use of credits for commercial projects and subdivisions.

ENVIRONMENTAL REVIEW

The Sandhills IPHCP and Implementing Agreement were subject to review under both the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). An Environmental Assessment (EA) and Record of Decision were prepared pursuant to NEPA by the USFWS, and an Initial Study and Negative Declaration (Attachment 5) were prepared pursuant to CEQA by County staff. While USFWS elected to prepare the EA separately from the Initial Study (rather than producing a combined document), the two processes were closely coordinated.

The CEQA review concluded that implementing the IPHCP would not result in any significant adverse impacts. Projects covered by the County's ITP will have to comply with all applicable General Plan policies, zoning regulations, and other local ordinances. There is nothing in the Sandhills IPHCP that modifies existing federal, state or local development requirements. Implementing the IPHCP will, however, streamline the project review process and provide a relatively cost effective way for many Sandhills property owners to ensure that their projects conform to Federal ESA regulations.

The Initial Study was sent to the State Clearinghouse and circulated for public review on April 6, 2011. The 30-day review period ended May 5, 2011 without any public comments submitted.

CONCLUSION

To date, property owners have faced two major difficulties obtaining approval for development projects in the Sandhills. The first obstacle was lack of a reasonable mitigation option to compensate for project impacts. Establishment of the Conservation Bank, and formal operating agreements between the Bank and both USFWS and the County, has provided landowners with a relatively affordable mitigation option through the purchase of conservation credits.

The second difficulty has been procedural in nature and involves obtaining the necessary authorization from USFWS. To date, each property owner has had to bear the cost of hiring a qualified expert to prepare an individual HCP for his/her project proposal. Once that has been accomplished, budgetary and staff limitations have made it difficult for USFWS to review and approve individual HCPs as quickly as the Service would like to. If your Board elects to implement the IPHCP and assume the responsibilities under the ITP, it will benefit many Sandhills property owners by: 1) eliminating the cost of hiring an expert to prepare an individual HCP, and 2) making it easier for property owners to satisfy Federal ESA

requirements. As long as landowners comply with the terms of the IPHCP and County's ITP, their developments will conform with both Federal ESA regulations and the County's Sensitive Habitat Protection Ordinance.

Further, if your Board authorizes the Planning Director to approve the use of credits for small residential projects outside of the IPHCP area, the process for small landowners in that situation can be streamlined as well, with no negative impacts on Sandhills habitat. Staff proposes that the use of credits for commercial projects and land divisions would still require Board approval.

Helping Sandhills property owners satisfy federal and local requirements will also advance conservation of this unique ecosystem by limiting habitat loss and promoting compliance with project mitigation measures. The IPHCP, Implementing Agreement, and associated ITP represent a "win – win" opportunity for both the Sandhills ecosystem and thousands of County residents.

It is therefore RECOMMENDED that your Board take the following actions:

1. Adopt the CEQA Negative Declaration;

2. Enter into the Sandhills IPHCP Implementing Agreement with the USFWS;

3. Authorize the Planning Director to approve the use of credits from the mitigation bank for small residential projects outside of the IPHCP area,

4. Direct the Planning Director to negotiate with the principals of the Zayante Sandhills Conservation Bank to amend the operating agreement to include authority to approve all small residential projects.

Sincerely,

Kathy M. Previsich
Planning Director

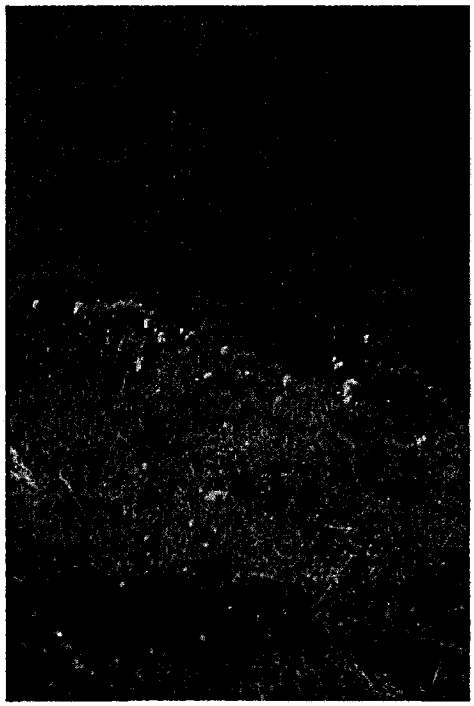
RECOMMENDED:

SUSAN A. MAURIELLO
County Administrative Officer

KMP:PL: CS & MJ\G:\Board Letters\Pending

Interim-Programmatic Habitat Conservation Plan

for the Endangered Mount Hermon June Beetle and Ben Lomond Spineflower



Prepared for:

Citizens of the City of Scotts Valley and County of Santa Cruz
Proposing Small-Scale Residential Development Projects in the Zayante Sandhills,
Santa Cruz County, California

Prepared by:

U.S. Fish and Wildlife Service, Ventura, California; Santa Cruz County;
and City of Scotts Valley

January 2011

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EXECUTIVE SUMMARY

Numerous private landowners in the two local jurisdictions of the Sandhills region (i.e., the City of Scotts Valley [City] and County of Santa Cruz [County]) are interested in applying for a permit pursuant to section 10(a)(1)(B) of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (Act), from the U.S. Fish and Wildlife Service (Service) for incidental take of the federally endangered Mount Hermon June beetle (*Polyphylla barbata*). These landowners have proposed projects on sites that are likely occupied by Mount Hermon June beetles and the federally endangered Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*). Therefore, the Service has recommended that the City and County work together to apply for incidental take permits and develop a regional programmatic habitat conservation plan (HCP) for the Sandhills. This would provide a high level of conservation for these species and other rare species associated with this habitat. The regional HCP would streamline the local, state, and Federal permitting processes associated with these species and their habitat. However, the City and County will likely need 3 to 5 more years to complete a regional HCP. Consequently, the Service worked with the City and the County to develop this interim programmatic habitat conservation plan (IPHCP) for the Mount Hermon June beetle and Ben Lomond spineflower for small development projects proposed in areas with existing, dense residential development. This IPHCP will be in effect for 5 years following the issuance of the requested incidental take permits; the regional HCP is completed by the City and County; or the limit of habitat modification (i.e., the limit on the number of acres of Zayante soils that may be affected) specified in the IPHCP is reached, whichever occurs first.

This IPHCP covers certain eligible small development projects (e.g., single family dwelling, garage, room addition, etc.) in densely developed residential neighborhoods that support habitat for the Mount Hermon June beetle and Ben Lomond spineflower. This IPHCP is intended to support issuance of two incidental take permits (ITPs) under section 10(a)(1)(B) of the Act that would authorize the County and the City take of the Mount Hermon June beetle resulting from such activities. The County and the City would then extend their take coverage through Certificates of Inclusion to eligible land owners within their jurisdiction needing incidental take authorization associated with their small development projects. To be eligible for coverage under the IPHCP and the ITPs, a proposed small development project must: (1) require a County or City discretionary or building permit that involves ground disturbance; (2) be residential in nature; (3) be within 1 of 10 identified "Project Units;" (4) be located within a parcel that is less than or equal to 1.5 acres; (5) involve no more than 15,000 square feet of development activity and associated ground disturbance on a single parcel; and (6) incorporate the minimization measures described in Section 5.2 of this IPHCP. Projects that meet these eligibility requirements can be covered by the IPHCP and ITPs, and are thereby the proposed "Covered Activities" referred to in this IPHCP.

The 10 Project Units within the IPHCP boundary were identified within the communities of Ben Lomond, Felton, Mount Hermon, and Scotts Valley. These Project Units range in size from 3.2 to 373 acres. Project Units include parcels in the vicinity of the Rollingwoods neighborhood, the Whispering Pines neighborhood, east and west Scotts Valley, Green Valley, Mount Hermon, Zayante Road, and Ben Lomond.

This IPHCP includes an operating conservation program that defines specific minimization and compensatory mitigation measures that apply to all Covered Activities.

Compensatory mitigation requirements include the following alternative measures:

1. Secure conservation credits at a ratio of 1:1 in terms of area of disturbance envelope to the areal amount of credits (e.g., a project with a 500-square-foot disturbance envelope will mitigate by securing 500 square feet of conservation credits) at the Ben Lomond Sandhills Preserve of the Zayante Sandhills Conservation Bank; or

2. Secure conservation credits at a ratio of 1:1 in terms of area of disturbance envelope to numbers of credits (e.g., a project with a 0.1-acre disturbance envelope will mitigate by securing 0.1 conservation credit) at another Service-approved conservation bank, which also has an Operating Agreement with the County if the parcel is within the County's jurisdiction.

Required minimization measures include all of the following:

1. Avoid impacts to native Sandhills plants to the greatest extent feasible, consistent with the purpose of the Covered Activity;

2. Minimize construction-related ground disturbance during the growing season of the Ben Lomond spineflower and adult flight period of the Mount Hermon June beetle (May 15 through August 15);

3. If scheduling ground disturbance to avoid the May 15 to August 15 time frame is not possible during construction, cover recently disturbed areas each evening during that period.

4. Minimize landscaping elements that degrade habitat, as determined by the City or County and as consistent with the Covered Activity; and

5. Minimize use of exterior night lighting that attracts insects during the flight period of the Mount Hermon June beetle (May 15 through August 15).

The 10 Project Units encompass a total of 1,693.2 acres. However, this acreage figure includes roads, common areas, and a substantial amount of existing development. Within this area, a maximum of 139 acres could be developed under the IPHCP. Compensatory mitigation for development will be funded by landowners proposing to implement Covered Activities. Mitigation must be ensured before Covered Activities are implemented; therefore, the IPHCP is based on a pay-as-you-go approach to mitigation. The Ben Lomond Sandhills Preserve of the Zayante Sandhills Conservation Bank (i.e., mitigation option number one outlined above) is comprised of 22.8 acres of high quality Sandhills habitat, including 22.4 acres of prime habitat for the Mount Hermon June beetle. The IPHCP also includes an option to purchase credits at another approved conservation bank. Regardless of the mitigation option selected for a given

Covered Activity under the IPHCP, mitigation will precede, and be compensatory for, the impacts of the take that results from a Covered Activity.

Eight appendices are included with this document to aid in reading, interpreting, and using this IPHCP. Appendix A includes a list and definitions of terms used throughout this document. Appendix B includes maps for each of the project units. These maps are intended for use by landowners to locate the approximate location of a parcel and determine whether a parcel lies within the IPHCP unit boundaries. Appendix C is the Certificate of Inclusion that each landowner will sign with the City or County in order to obtain incidental take coverage and commit to compliance and mitigation according to the IPHCP. Appendix D is a Sandhills IPHCP Eligibility Checklist. Appendix E is a template for a Landowner's Sandhills IPHCP Monitoring Report. Appendix F is a list of plant species that are native to the Sandhills. Appendix G is the Implementing Agreement, which clarifies and formalizes the respective responsibilities of all parties involved in the implementation of the IPHCP.

Chapter 1. Introduction

1.0 Project Background

The Sandhills are biological communities found only in central Santa Cruz County on inland outcrops of Zayante sand soil. These soils, which are derived from marine sediments deposited over than 15 million years ago when the region was under an ancient sea. Due to the hot, dry conditions created by the coarse grained Zayante soil, the Sandhills support unique assemblages of plants and animals found nowhere else in the world. These assemblages include seven species that are endemic to (occur exclusively in) the Sandhills.

The endemic Sandhills species are naturally rare due to their limited geographic range (central Santa Cruz County) and narrow habitat specificity (Zayante soils). Mining and development have converted an estimated 40 percent of Sandhills habitat, while the remaining fragmented habitat is being degraded by exotic plant species, intensive recreation, and the exclusion of wildfire. As a result, four Sandhills species have been listed by the United States Fish and Wildlife Service (Service) as federally endangered under the Federal Endangered Species Act of 1973, as amended (Act), and Sandhills habitat is one of the rarest biological communities in the lower 48 United States.

The Service listed the Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*) and Mount Hermon June beetle (*Polyphylla barbata*) as federally endangered in 1994 and 1997, respectively, under the Act (59 Federal Register (FR) 5499; 62 FR 3616). The Mount Hermon June beetle (Figure 1) and Ben Lomond spineflower (Figure 2) are associated with sandy soils in the Zayante series. The Zayante soil series supports habitat known as the Zayante or Santa Cruz Sandhills (Sandhills) found in and near the communities of Mount Hermon, Scotts Valley, Felton, Olympia, and Ben Lomond in Santa Cruz County, California (Figure 3). The Mount Hermon June beetle and Ben Lomond spineflower occur on additional islands of Zayante sands in the vicinity of the community of Bonny Doon in Santa Cruz County. Both species are threatened by sand mining, urban development, invasion of nonnative plant species, intensive recreation, and fire suppression.

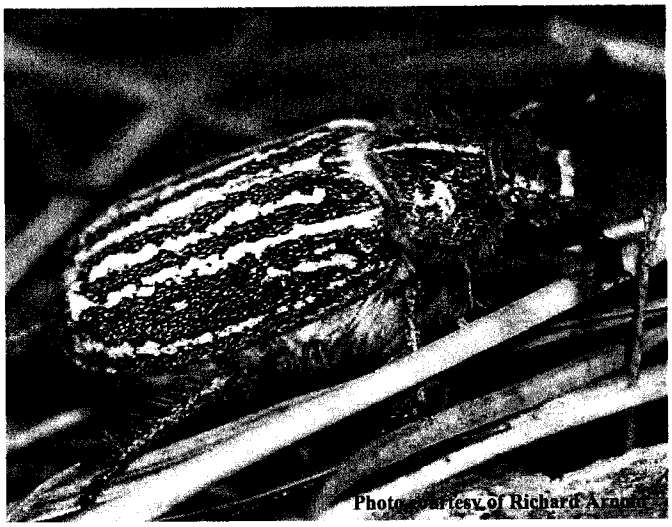
Biologists have conducted surveys for the Mount Hermon June beetle and Ben Lomond spineflower in association with proposed residential and commercial development, scientific research, and monitoring programs for existing conservation plans. Results from these surveys have increased our awareness and understanding of the range, distribution, and habitat requirements of both species. These surveys confirm that the Mount Hermon June beetle and Ben Lomond spineflower are restricted to Sandhills habitat, which is found only on soils of the Zayante series in central Santa Cruz County, California. In this region, surveyors have detected Mount Hermon June beetles and Ben Lomond spineflower in areas of dense residential and commercial development.

Numerous private landowners have proposed projects on sites that are likely occupied by the Mount Hermon June beetle and Ben Lomond spineflower. To comply with the Act, the Service advises all private landowners proposing activities that may result in injury or mortality of

federally listed animals to prepare a habitat conservation plan (HCP) and apply for an incidental take permit (ITP). The Service recognizes that developing an HCP and permit application can be a difficult, time-consuming, and costly process for landowners. Therefore, the Service has recommended that the two local governments with jurisdiction in the Sandhills region, the City and County, work together to develop a regional HCP for the Sandhills. A regional HCP would provide a high level of conservation for the Mount Hermon June beetle, Ben Lomond spineflower, and other rare species associated with this habitat. Additionally, a regional HCP would make the permit process easier on local residents by shortening and simplifying the local, State, and Federal permitting processes associated with these species and their habitats.

Figure 1. Life Stages of the Mount Hermon June Beetle (*Polyphylla barbata*).

Adult Mount Hermon June beetle



Larval June beetle (*Polyphylla* sp.)

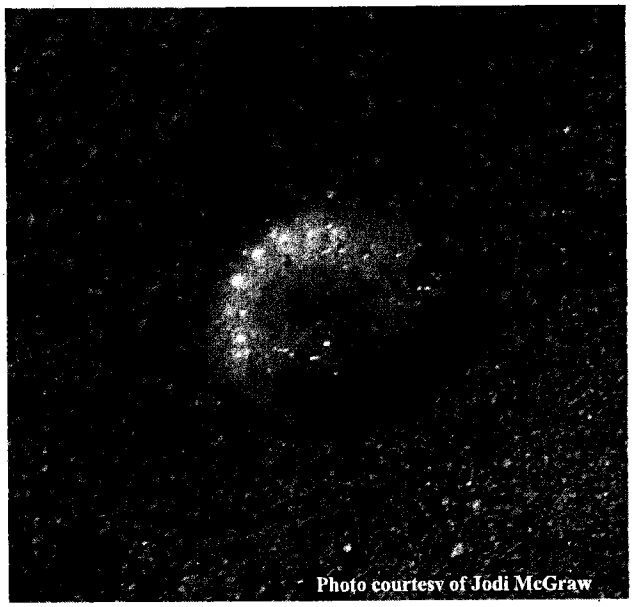
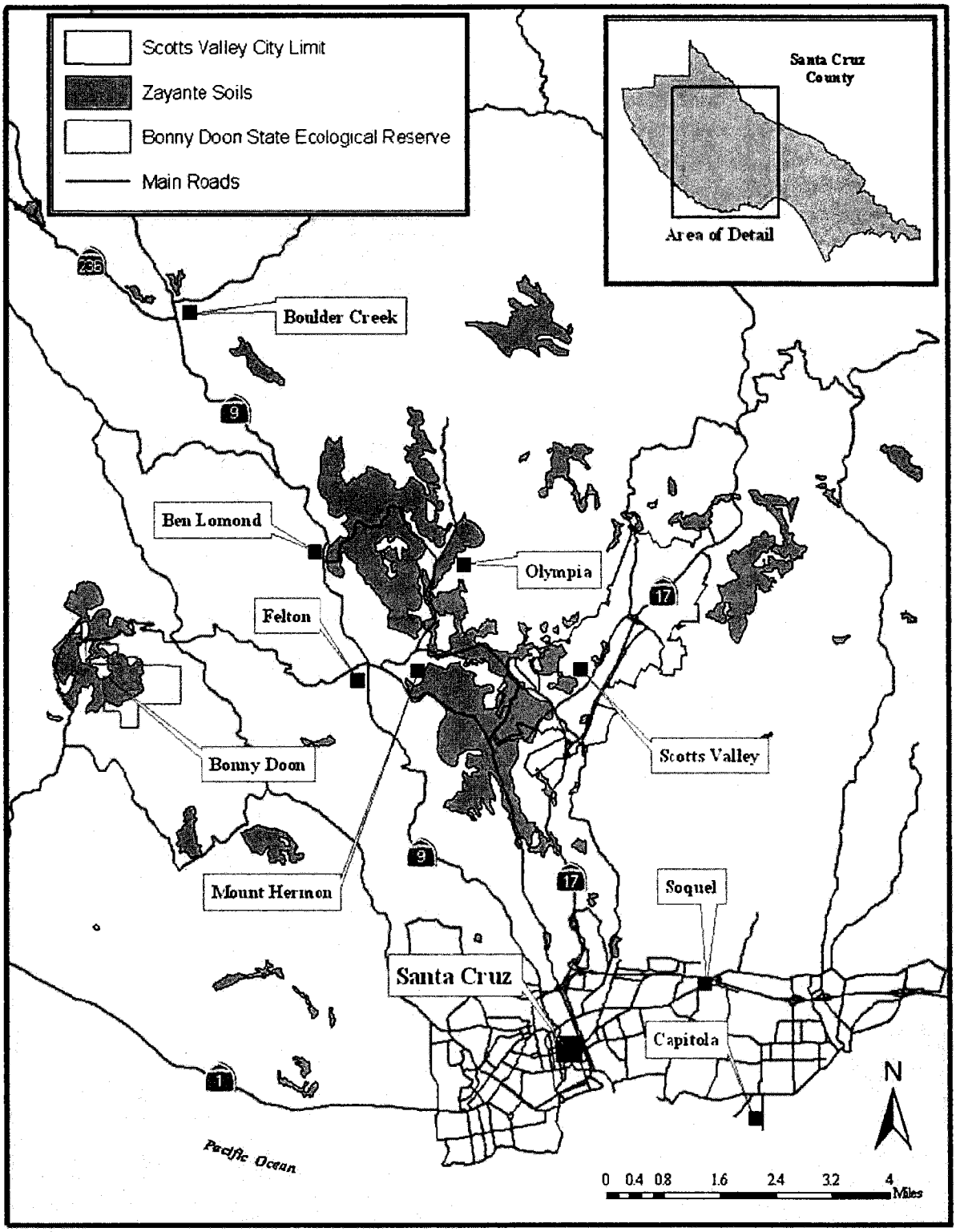


Figure 2. Ben Lomond Spineflower (*Chorizanthe pungens* var. *hartwegiana*).

Photo courtesy of Jodi McGraw

Figure 3. Zayante soils series and the general locations of Sandhills habitat, Santa Cruz County, California.



The Sandhills Regional HCP is not expected to be complete for another 3 to 5 years. Meanwhile, the Service, the County, and the City have developed this interim programmatic habitat conservation plan (IPHCP) for the Mount Hermon June beetle and Ben Lomond spineflower. As discussed in Chapter 2, this IPHCP 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 and Ben Lomond spineflower. Upon approval of this IPHCP, the Service would issue ITPs to the City and County. The City and County could extend take coverage under these ITPs to landowners proposing small development projects, provided the landowners follow the application instructions established by the City and County (in accordance with Chapter 6 of this IPHCP) and sign a Certificate of Inclusion (Appendix C). The City and County would review landowners' applications to ensure that the proposed projects are eligible "covered activities" under this IPHCP and would adhere to the IPHCP by including the measures identified in the IPHCP to minimize and mitigate the effects of their project on the Mount Hermon June beetle and Ben Lomond spineflower. Subsequently, landowners would sign a Certificate of Inclusion with the City or County if applications are complete and consistent with the IPHCP. By signing the Certificate of Inclusion and agreeing to incorporate and implement the IPHCP's minimization and mitigation measures, landowners would receive authorization to implement their proposed project under the ITPs issued to the City and County.

1.1 Scope of the Interim Programmatic HCP/Permit Duration

This IPHCP is intended as an interim document to be used by landowners who are proposing small residential development projects that will have minimal, but negative, impacts to the Mount Hermon June beetle and Ben Lomond spineflower (see Chapter 2 for eligibility requirements). The IPHCP will not cover any commercial development or larger residential projects. Minor land divisions within the jurisdiction of the County may be covered by the IPHCP after individual project review pursuant to the California Environmental Quality Act and with the approval of the County Board of Supervisors. The IPHCP is a short-term HCP and is not intended to cover larger development projects in the Sandhills area; rather, the regional HCP is intended to serve that purpose. Therefore, until the regional HCP is completed, landowners proposing projects not eligible for this IPHCP who do not wish to wait for the development of the regional HCP have the option to complete an individual HCP. The Service strongly recommends that landowners planning to develop individual HCPs contact the Ventura Fish and Wildlife Office at (805) 644-1766 to discuss regulatory requirements and anticipated time frames before beginning the development of an individual HCP.

1.2 Regulatory Framework

Landowners proposing development projects within the Sandhills are required to comply with a variety of environmental laws, regulations, and ordinances at the local, state, and Federal levels. The following section briefly summarizes these laws, regulations, and ordinances, and describes how they relate to the development and implementation of the IPHCP and the issuance of ITPs.

1.2.1 Federal Endangered Species Act

The Endangered Species Act of 1973, as amended (Act) provides for the protection and conservation of species of fish, wildlife, and plants that have been listed as threatened or endangered. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened animal species. Section 3(18) of the Act defines "take" to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Service regulations (50 CFR 17.3) define "harm" to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

The Act provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways: 1) through interagency consultation for projects with Federal involvement pursuant to section 7 of the Act; or 2) through the issuance of an ITP under section 10(a)(1)(B) of the Act. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity (50 CFR 17.3).

The majority of projects proposed in the Sandhills that may result in impacts to the Mount Hermon June beetle and Ben Lomond spineflower do not have a Federal nexus that would facilitate interagency consultation. Therefore, these project proponents must apply for an ITP to comply with the Act. An HCP must accompany the proponent's application for an ITP. The purpose of the HCP is to ensure that the authorized incidental take is adequately minimized and mitigated. Pursuant to 50 CFR 17.22(b)(1) and 17.32(b)(1), the required components of a HCP include:

(i) A complete description of the activity sought to be authorized;

(ii) The common and scientific names of the species sought to be covered by the permit, as well as the number, age, and sex of such species, if known;

(iii) A conservation plan that specifies:

(A) The impact that will likely result from such taking;

(B) What steps the applicant will take to monitor, minimize, and mitigate such impacts, the funding that will be available to implement such steps, and the procedures to be used to deal with unforeseen circumstances;

(C) What alternative actions to such taking the applicant considered and the reasons why such alternatives are not proposed to be utilized; and

(D) Such other measures that the Director may require as being necessary or appropriate for purposes of the plan;

In addition, incidental take permit issuance criteria, as described in 17.22 (b)(2) and 17.32 (b)(2) includes the flowing:

(A) The taking will be incidental;

(B) The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such takings;

(C) The applicant will ensure that adequate funding for the conservation plan and procedures to deal with unforeseen circumstances will be provided;

(D) The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild;

(E) The measures, if any, required under paragraph (b)(1)(iii)(D) of this section will be met; and

(F) He or she has received such other assurances as he or she may require that the plan will be implemented.

This IPHCP includes all the required components of an HCP. Landowners proposing small residential development projects in the Sandhills may participate in this IPHCP and receive authorization for incidental take of the Mount Hermon June beetle if: (1) their projects meet the eligibility requirements described in Chapter 2, and (2) they sign a Certificate of Inclusion with the City or County.

Protection of Plant Species Under the Act

Under the Act, protections for federally listed plants differ from the protections afforded to federally listed animals. Take of listed plant species is not prohibited under the Act and cannot be authorized under a section 10 permit. However, before the Service issues an incidental take permit, the effects on listed plants of issuing the permit must be analyzed because section 7(a)(2) of the Act requires that a Federal action must not jeopardize any listed species. Listed plant species may be included on an incidental take permit in recognition of the conservation benefit provided to them under an HCP. The Ben Lomond spineflower is proposed to be included on the permit in recognition of the conservation benefits provided to the species by this IPHCP. This species would also receive no surprises assurances under the Service's "No Surprises" regulations (50 CFR 17.22 (b)(5) and 17.32 (b)(5)).

1.2.2 National Environmental Policy Act (NEPA)

The National Environmental Policy Act of 1969, as amended (NEPA), requires that Federal agencies analyze and disclose the environmental impacts of their proposed actions. Issuance of an ITP is considered a Federal action, and is therefore subject to environmental analysis under NEPA. In addition to analyzing impacts to sensitive

species, NEPA requires that the Service analyze the impacts of issuance of the incidental take permit and carrying out of the proposed project on other environmental resources, including, but not limited to, air quality, water quality, and cultural and historical resources. Depending on the scope of a HCP, anticipated environmental impacts, and potential for public interest, the Service can comply with NEPA by completing an Environmental Action Statement, an Environmental Assessment, or an Environmental Impact Statement. For the IPHCP, the Service has completed an Environmental Assessment in compliance with the requirements of NEPA.

1.2.3 California Endangered Species Act

The California Endangered Species Act (CESA) provides for the designation of native species or subspecies of fish, wildlife, and plants as endangered or threatened (CESA Section 2062-2067). The Mount Hermon June beetle and Ben Lomond spineflower are not listed under CESA. Therefore, this IPHCP will not further address CESA permitting requirements.

1.2.4 California Environmental Quality Act

The California Environmental Quality Act (CEQA) (Pub. Res. Code §21000 seq.) requires state and local governmental agencies to complete an environmental review of discretionary projects that could impact environmental resources. CEQA differs from NEPA in that it requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented. The IPHCP will be reviewed by the City and County pursuant to CEQA before it is adopted.

1.2.5 Sensitive Habitat Protection Ordinance (County of Santa Cruz)

For properties in the unincorporated area of Santa Cruz County, the County oversees a Sensitive Habitat Protection Ordinance that is designed to minimize disturbance in sensitive habitats and to protect these areas for their genetic, scientific, and educational values. The County defines a "sensitive habitat" as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (County of Santa Cruz 1994). Sensitive habitats include, but are not limited to, areas where sensitive species live, areas necessary for the survival of sensitive species, and any location where disturbance is likely to lower population numbers. Based on the findings of a biotic review, the County may require the project proponent to avoid, minimize, and mitigate impacts to the sensitive habitat by: (1) limiting the portion of sensitive habitat to be disturbed; (2) recording a Declaration of Restriction to protect undisturbed portions of this habitat; (3) restoring portions of degraded sensitive habitat; and/or (4) restricting land uses. Sites that are occupied by the Mount Hermon June beetle and Ben Lomond spineflower are protected under the Sensitive Habitat Protection Ordinance. The Service anticipates that measures to avoid, minimize, and mitigate impacts to the Mount Hermon June beetle in the ITPs issued

pursuant to the IPHCP will overlap with requirements under the County's Sensitive Habitat Protection Ordinance. The County has sole authority to determine whether project proponents have complied with this Ordinance. However, the IPHCP's mitigation strategy is based on the preservation and long-term management of Sandhills habitat through the acquisition of mitigation credits, and should therefore be sufficient to fulfill the requirements of the Sensitive Habitat Protection Ordinance with respect to the Mount Hermon June beetle and Ben Lomond spineflower.

1.2.6 Tree Removal Ordinances

The County and City have adopted ordinances that protect a variety of trees, including some pine trees. Ponderosa pines (*Pinus ponderosa*) are a critical element of Sandhills habitat, and are the dominant species within Maritime Coast Range Ponderosa Pine Forest, a sensitive plant community endemic to the Sandhills.

The County has an ordinance in place to protect "significant trees" growing in the Coastal Zone. Because the areas of Sandhills habitat covered by this IPHCP are outside the Coastal Zone, ponderosa pines in the plan area receive no protection under this tree ordinance. However, Maritime Coast Range Ponderosa Pine Forest is identified as a sensitive habitat under the County's Sensitive Habitat Protection Ordinance. As described above, this ordinance restricts the removal of sensitive habitat, in this case ponderosa pines, without approval from the County.

In February 2002, the City updated an ordinance regarding tree protection regulations (City of Scotts Valley 2002). The purpose of the ordinance is to protect significant trees which are a valued resource to the community of Scotts Valley. Determination of which trees receive protection is based on: 1) location; 2) size; 3) requirements of permits approved by the City's Planning Department or Planning Commission; and 4) status as a "heritage tree." For example, the City's tree ordinance may protect some ponderosa pine trees that are designated heritage trees, grow near roadways, grow on slopes, or are large in size.

Projects receiving take coverage under the IPHCP must be situated to avoid impacting native Sandhills plant species (including native trees) to the maximum extent possible (see Chapter 5). Where complete avoidance is not feasible, projects covered by the IPHCP will be required to minimize impacts to native Sandhills plant species. Therefore, the Service does not anticipate that implementation of the IPHCP will result in the loss of any pines protected under the City's Tree Protection Ordinance. If landowners propose to remove or relocate any other type of tree, they should consult with the City or County to ensure compliance with local tree and sensitive habitat protection ordinances.

Chapter 2. Covered Activities

2.1 Identification of Project Units

This IPHCP covers only activities associated with small development projects proposed in densely developed residential neighborhoods that support habitat for the Mount Hermon June

beetle and Ben Lomond spineflower. A map that identifies the specific geographic areas covered by this IPHCP, referred to as the Project Units, is shown in Figure 4. Certain eligible projects (see Chapter 2.3) within the identified Project Units are the activities analyzed in this IPHCP and proposed for coverage under an incidental take permit (i.e., the proposed "Covered Activities").

The Project Units were designated based on the following criteria:

- *High likelihood of occurrence of the Mount Hermon June beetle and/or Ben Lomond spineflower.* The Project Unit must occur within the known distribution of the Mount Hermon June beetle and/or Ben Lomond spineflower and have habitat components characteristic of the Sandhills.

- *Residential neighborhoods.* Parcels within the Project Unit must be zoned for residential use by the County or City.

- *High percentage of parcels developed.* At least 80 percent of the parcels within the Project Unit must already be developed.

- *Small parcel sizes.* At least 90 percent of the parcels within the Project Unit must be less than 1.5 acres in size.

The Service used a Geographic Information System to identify Project Units that met these four criteria. Specifically, the known distributions of the Mount Hermon June beetle, Ben Lomond spineflower, Zayante soils, ponderosa pines, zoning designations, and occurrences of developed and undeveloped parcels within the City and County were mapped and evaluated. Using these maps, the Service identified Project Units for the IPHCP (Appendix B). Because soil types and plant assemblages change over a gradient, it was often difficult to identify distinct boundaries of areas that support Sandhills habitat. In such cases, the Service used existing roads, zoning changes, neighborhood boundaries, or topographical features to designate boundaries for the Project Units. Table 1 provides a general description of the 10 Project Units based on the criteria described above.

Figure 4. Project Units Covered under the IPHCP, Santa Cruz County, California.

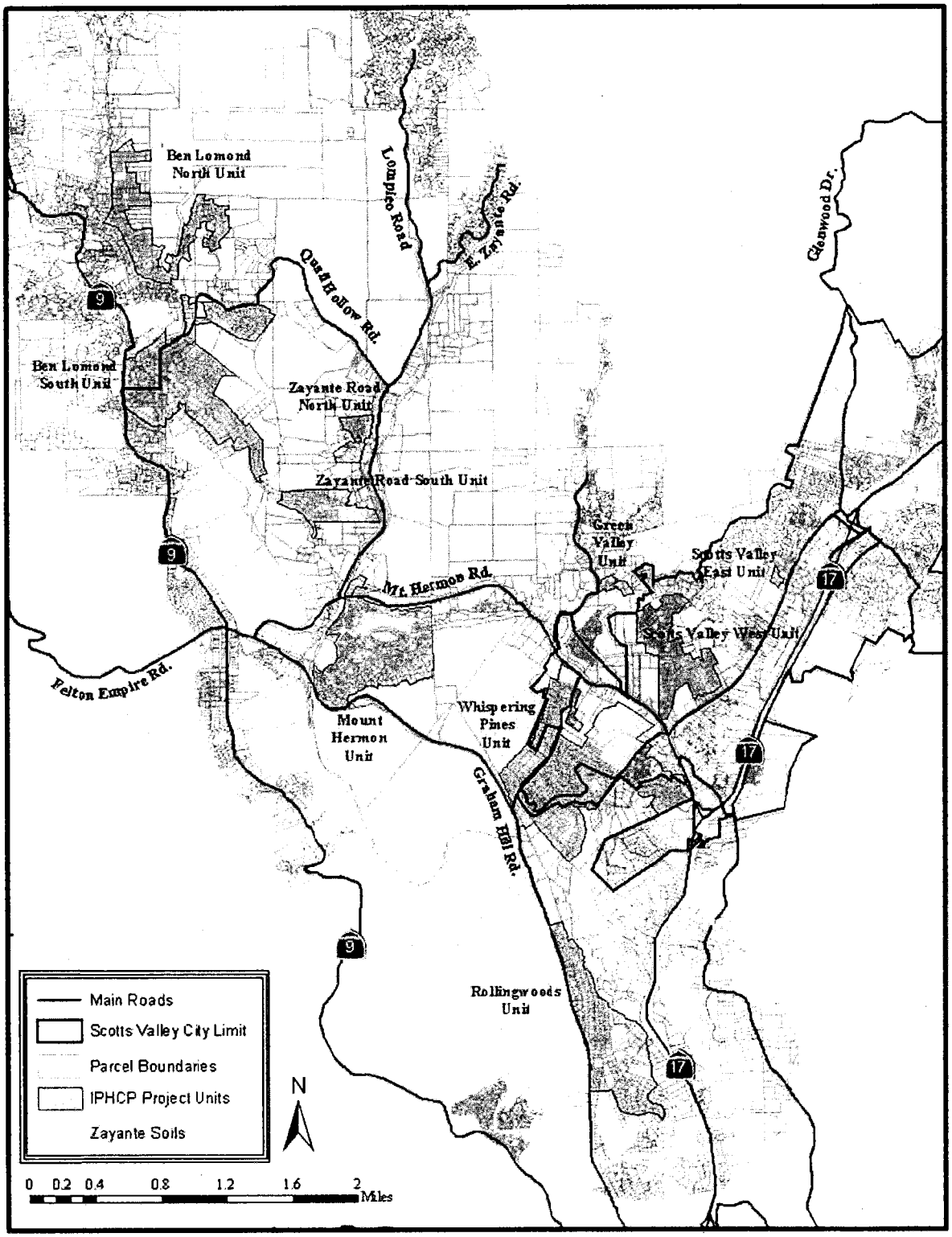


Table 1. Description of the 10 Project Units for the IPHCP.

Project Unit	Total Acreage of Unit/Total Acreage of Parcels Excluding Roads, Common Areas, etc.	Total Number of Parcels	Number of Parcels Less than or Equal to 1.5 acres	Number of Parcels Developed	Mean/ Median Parcel Size (acres)	Project Unit Jurisdiction
(1) Rollingwoods	184 / 163	351	339 (97%)	328 (93%)	0.46/0.32	County
(2) Whispering Pines Total[1]	373 / 329.57	892	875 (98%)	837 (94%)	0.36/0.23	County and City
Whispering Pines (County)	131 / 114	270	265 (98%)	249 (92%)	0.42 / 0.34	County
Whispering Pines (City)	242 / 224	622	610 (98%)	588 (95%)	0.36 / 0.22	City
(3) Scotts Valley East	3.2 /3.2	5	5 (100%)	5 (100%)	0.65/0.65	City
(4) Scotts Valley West[2]	109 /102.52	747	736 (98%)	620 (97%)	0.14/0.07	City
(5) Green Valley	9 /8.72	22	22 (100%)	19 (86%)	0.40/0.28	County
(6) Mount Hermon[3]	168 /123	534	526 (98%)	493 (92%)	0.32/0.17	County
(7) Zayante Road North	26 / 22.08	69	69 (100%)	58 (84%)	0.32 /0.21	County
(8) Zayante Road South	56 /49.91	78	78 (100%)	75 (96%)	0.64/0.39	County
(9) Ben Lomond North	132 /111	346	345 (99%)	320 (92%)	0.32 /0.28	County
(10) Ben Lomond South	260 /203.65	596	593 (99%)	530 (89%)	0.34/0.26	County
TOTALS:	1693.2 / 1,454.65	3,654	3,606 (99%)	3285 (90%)	0.39/0.29	County and City

1 - Sixteen developed parcels of the Whispering Pines Unit are common areas associated with multiple-unit housing. The mean parcel size for the Whispering Pines unit excludes mobile home parks.

2 - The Scotts Valley West Unit has 221 parcels less than 1.5 acres that are townhouses or condominiums. Twenty-eight of the developed parcels in this unit are common areas or parks associated with multiple-unit housing.

3 - Four developed parcels of the Mount Hermon Unit are common areas associated with multiple-unit housing. Additionally, the developed parcels include 29 non-profit camps, 1 tank site, and 1 mineral quarry.

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2.2 Description of Project Units

The City, County, and Service have designated 10 Project Units for the IPHCP (Appendix B). The Project Units occur within the vicinity of Mount Hermon, Scotts Valley, Felton, and Ben Lomond. The Project Units range in size from 3.2 acres to 373 acres. The 10 Project Units comprise 3,654 parcels, which collectively amount to 1,693.2 acres (including roads and common areas). Excluding roads and common areas, the 10 Project Units encompass 1,454.65 acres (Table 1).

2.2.1 Rollingwoods Unit (#1)

The Rollingwoods Unit encompasses 184 acres. It contains 351 parcels, 339 (97 percent) of which are 1.5 acres or less in size. The unit is bordered by Graham Hill Road to the west, Pasatiempo Drive to the south, Rollingwoods Drive to the north, and lower-density residential development to the east. This entire Project Unit is within the jurisdiction of the County.

2.2.2 Whispering Pines Unit (#2)

The Whispering Pines Unit is 373 acres. It contains 892 parcels, 875 (98 percent) of which are 1.5 acres or less in size. The unit is bordered to the northwest by the Hanson Quarry, to the southwest by Graham Hill Road and Hidden Glen Drive, to the northeast by the Valley Gardens Golf Course and Mount Hermon Road, and to the southeast by low-density residential development. Two large parcels occur along Mount Hermon Road in the northeast section of the unit. While these parcels appear large in size, they are actually densely developed with hundreds of mobile home units. Therefore, they are included in this Project Unit. The County has jurisdiction over 131 acres of this unit, while 242 acres of the unit are within the jurisdiction of the City.

2.2.3 Scotts Valley East Unit (#3)

The Scotts Valley East Unit is 3.2 acres in size. It contains 5 parcels, all of which are less than 1.5 acres in size. It is surrounded by larger, residentially developed parcels to the north, and commercial development to the west, east, and south. The unit is entirely within the jurisdiction of the City. Surveys have not been conducted in this Project Unit to conclusively document the presence of the Mount Hermon June beetle or Ben Lomond spineflower (Table 2). However, this Project Unit is included in the IPHCP because it meets all of the criteria for Project Unit identification outlined in section 2.1, including the presence of suitable habitat for the covered species (i.e., Zayante soils).

2.2.4 Scotts Valley West Unit (#4)

The Scotts Valley West Unit is 109 acres. It contains 747 parcels, 736 (98 percent) of which are 1.5 acres or less in size. The unit is bordered on the west by the Kings Village Shopping Center, to the southeast by Scotts Valley Drive and commercial properties, to the east by commercial and City properties, and to the north by undeveloped lands and

low density residential development. Condominiums, mobile homes, and apartment buildings comprise a large portion of this unit. The City has jurisdiction over the entire unit.

2.2.5 Green Valley Unit (#5)

The Green Valley Unit is 9 acres in size. It contains 22 parcels, all of which are less than 1.5 acres in size. The unit is bordered to the south by a large storage facility, to the west by Lockhart Gulch Road, and to the north and east by low- density residential development. This unit is entirely within the jurisdiction of the County.

2.2.6 Mount Hermon Unit (#6)

The Mount Hermon Unit is 168 acres in size. It contains 534 parcels, 526 (98 percent) of which are 1.5 acres or less in size. The unit is bordered to the south by property owned by the Mount Hermon Association that is used for a lodge and environmental education center. Hanson Quarry borders much of the eastern boundary of the unit. The unit is bordered by Graham Hill Road to the south, East Zayante Road to the east, and Mount Hermon Road to the north. This project unit is densely developed with small summer homes and cabins built in the early portion of the 1900s. Many of the homes are now being expanded and transformed into full-year residences. This unit is entirely within the jurisdiction of the County.

2.2.7 Zayante Road North Unit (#7)

The Zayante Road North Unit is 26 acres in size. It contains 69 parcels, all of which are less than 1.5 acres in size. This unit is bordered to the east by West Zayante Road and to the north, south, and west by low-density, residential development. This unit is entirely within the jurisdiction of the County.

2.2.8 Zayante Road South Unit (#8)

The Zayante Road South Unit is 56 acres in size. It contains 78 parcels, all of which are 1.5 acres or less in size. This unit is bordered to the east by West Zayante Road and to the north, south, and west by low-density, residential development. This unit is entirely within the jurisdiction of the County.

2.2.9 Ben Lomond North Unit (#9)

The Ben Lomond North Unit is 132 acres in size. It contains 346 parcels, 345 (99 percent) of which are 1.5 acres or less in size. This unit is bordered to the west by Glen Arbor and Brookside Roads, and to the east, north and south by lower-density, residential development. This unit is entirely within the jurisdiction of the County.

2.2.10 Ben Lomond South Unit (#10)

The Ben Lomond South Unit is 260 acres in size. It contains 596 parcels, 593 (99 percent) of which are 1.5 acres or less in size. This unit is bordered to the east by

Graniterock's Quail Hollow Quarry property and to the north, west and south by low-density residential development. This unit is entirely within the jurisdiction of the County.

2.3 Eligible Projects

The activities covered by this IPHCP are limited to small, residential development projects proposed in the Project Units described in Chapter 2.2, which are already densely developed. Appendix B includes detailed maps of the Project Units. To be an IPHCP Covered Activity, a proposed project must be located within a designated Project Unit and also meet all of the eligibility criteria described below.

Eligibility Criteria for Coverage Under the IPHCP

- 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 this IPHCP, development envelope is defined as:

  Any portion of the project site that will undergo ground disturbance such as the following activities[1]: 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

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[1] These activities are defined in more detail in Appendix A.

On a case-by-case basis, the Service and appropriate local jurisdiction may also approve for coverage under the IPHCP and ITPs other similar development projects that meet the eligibility requirements listed in the IPHCP.

2.4 Multiple Projects on a Single Parcel

Landowners may sign a Certificate of Inclusion to participate in the IPHCP and receive incidental take coverage under the ITP for more than one project on a single parcel, provided that the total development envelope on each parcel does not exceed 15,000 square feet (see Section 2.6). For instance, a landowner may receive authorization under the IPHCP and ITP for take associated with the construction of a single family dwelling with a detached garage, driveway, and sidewalks provided that the total (cumulative) development envelope associated with all of these projects does not exceed 15,000 square feet in size. Furthermore, landowners could receive incidental take coverage for one project, and then amend their Certificate of Inclusion at a later date to cover additional eligible projects. However, the total development envelope that can be covered for take under the ITP on any individual parcel may not exceed 15,000 square feet, regardless of whether the property changes ownership.

2.5 Project/Permit Duration

The City, the County, and the Service have developed this IPHCP as an interim plan available to private landowners while the Sandhills Regional HCP is under development. The ITP issued pursuant to this IPHCP will expire when the Sandhills Regional 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 ITP, whichever occurs first. Projects conducted under the City and County's ITPs (i.e., Covered Activities) must be completed before the ITPs expire.

2.6 Number and Location of Eligible Projects

The City and County have not designated a limit on the total number of eligible projects that can be covered under the IPHCP. Furthermore, the City and County have not designated a limit on the number of projects that can occur in any one project unit. However, a maximum of 139 acres of habitat for the Mount Hermon June beetle and Ben Lomond spineflower would be lost or degraded under the ITPs issued pursuant to this IPHCP. This figure represents approximately 8 percent of the total acreage within the 10 Project Units, a large portion of which is already developed. In addition, this figure (139 acres) is equal to 5 percent of the estimated amount of habitat that remains for the Mount Hermon June beetle (McGraw 2004b). The City and County will jointly maintain a database that tracks the total number of acres of habitat modification that each jurisdiction authorizes under the ITPs.

2.7 Exempt Projects

In certain cases, individual project sites within the Project Units may not harbor Zayante soils. If a landowner proposing a project within one of the Project Units believes that their parcel does not support Zayante soils (and thereby Sandhills habitat), then the landowner must obtain a written habitat evaluation from a qualified individual from, or recommended by, the County, City, or Service. In such cases, upon written concurrence from the Service that the subject

project site does not support Sandhills habitat, the project would be exempt from the minimization and mitigation requirements outlined in section 5.2 of this IPHCP. In such cases, the Service will ensure that the City and County are aware of and copied on the Service's written concurrence.

Chapter 3. Environmental Setting and Biological Resources

3.1 Environmental Setting

3.1.1 History

The IPHCP Project Units are located in the San Lorenzo River watershed in Santa Cruz County. The following provides a land use history as it is known for the general region. Specific uses discussed below may or may not have occurred in Sandhills habitat.

The area encompassing the San Lorenzo watershed was first inhabited by the Ohlone Indians, who lived in small villages and coexisted with the natural processes in the area. The discovery and naming of the San Lorenzo River by the Portola expedition in 1769 initiated the development of the watershed. Spaniards initially focused their development in the coastal grasslands for cattle ranching and agricultural farming in the watershed. Logging of the local forests was the major use of the San Lorenzo watershed from the 1860s through the 1890s.

Industrial activity in the San Lorenzo watershed has included extraction of mineral resources including lime, limestone, sand, gravel, and crushed rock. Beginning in the first half of the twentieth century, sand mining in the Sandhills, has occurred within six separate quarries. Three of these quarries completed mining prior to passage of the Surface Mining and Reclamation Act of 1975 (SMARA) and therefore were not subject to the reclamation requirements of that legislation: the Scotts Valley Quarry on Scotts Valley Drive, the Old Geyer Quarry at the end of Geyer Road in Scotts Valley, and the Old Kaiser Quarry within the present Olympia Well Field managed by the San Lorenzo Valley Water District (McGraw 2004b).

There are two sand quarry sites in the Sandhills, which are subject to SMARA, where mining activities have been completed and a reclamation plan must be implemented. These sites are Kaiser's Felton Sand Plant (Hanson Quarry) and the CEMEX/RMC (formerly Lonestar) Olympia Quarry. The third currently-active sand mining site, Graniterock's Quail Hollow Quarry, obtained permits (including an ITP issued pursuant to section 10(a)(1)(B) of the Act) in 1998 to quarry an area that is expected to take up to 50 years to complete.

Vegetation, wildlife, underground aquifers, soils, and drainage channels are permanently altered or eliminated by quarries. Quarries use a large amount of water for washing the quarried materials; this activity creates the potential for serious erosion and siltation problems.

Residential subdivisions within the Sandhills began to be developed between the late 1950s and early 1970s. Human population in the IPHCP area has increased dramatically in the past few decades. Data is lacking for population growth specific to most areas within the boundary of the IPHCP. However, over the 30-year period between 1970 and

2000, the population in the City of Scotts Valley increased from 3,621 residents to 11,385 residents and is forecasted to grow to 13,864 residents by 2015 (Santa Cruz Public Library 2003).

3.1.2 Climate

The Sandhills area has a mild, Mediterranean climate[2]. The average annual maximum and minimum temperatures are 73.8 and 43.5 degrees Fahrenheit, respectively. However, it is not uncommon to have temperatures in the 80's or 90's during summer months. The average total precipitation is 49.1 inches, ranging from 0.1 inch in July to 10.2 inches in January.

3.1.3 Topography, Geology, and Hydrology

The IPHCP Project Units occur on the western slope of the Santa Cruz Mountains, which have complex ridges that reach elevations of 2,000 to 3,400 feet and slopes between 40 and 60 percent. Topography of the area ranges from steep, mountainous hillsides to gently rolling valley grasslands. The Santa Cruz Mountains are primarily formed of igneous rock which has been overlain in places by marine sediments deposited by the ancient seas that once covered the area. The Zayante soils that formed from these marine sandstone deposits occur in scattered pockets throughout the San Lorenzo watershed. Zayante soils are endemic to Santa Cruz County and are deep, coarse textured, poorly developed, and well-drained (USDA Soil Conservation Service 1980).

Many hillside areas in the IPHCP project area are susceptible to landslides, especially in the San Lorenzo Valley area where steep slopes are present. Landslide deposits can be found in hillside areas near the western and eastern boundaries of the City of Scotts Valley and throughout the plan area (Rincon Consultants, Inc. 2001).

Faults in the Scotts Valley area include the Ben Lomond and Zayante Faults. The Ben Lomond Fault Zone is located between the cities of Santa Cruz and Scotts Valley, approximately 1 mile southeast of the City of Scotts Valley planning area. The Zayante Fault Zone, which is tied into the San Andreas Fault system, is located approximately 1.5 miles north of the City of Scotts Valley. Based on major historic earthquakes that have occurred along these and other faults in Santa Cruz County, the Zayante Fault is considered active or potentially active. Insufficient data is available to determine the status of the Ben Lomond Fault (Rincon Consultants, Inc. 2001).

The San Lorenzo River is the major drainage basin in northern Santa Cruz County. Major tributaries in the IPHCP area include Branciforte Creek, Bean Creek, Carbonera Creek, and Zayante Creek.

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[2] Climate data was obtained from The Santa Cruz Public Library website at the following address: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?cabenl+nca.

3.1.4 Vegetation/ Sandhills Habitat

Predominant vegetation of the Santa Cruz Mountains consists of coast redwood forest (Zinke 1988) and mixed evergreen forest (Sawyer et al. 1988). However, the coarse, low nutrient, sandy Zayante soils create a warmer and drier microclimate that supports uniquely adapted flora and fauna that are distinctly different from the surrounding forest and chaparral communities (Marangio 1985, Davilla 1990). The Zayante soils in the vicinity of the communities of Mount Hermon, Scotts Valley, Olympia, Felton, and Ben Lomond harbor a complex vegetation mosaic dominated by maritime coast range ponderosa pine forest and northern maritime chaparral (Griffin 1964, Holland 1986). These communities overlap to form an intergrading mosaic of habitats that are collectively referred to as "Zayante Sandhills" or "Santa Cruz Sandhills" (McGraw 2004b).

The Sandhills ecosystem supports a diverse assemblage of rare and endemic plant species and disjunct populations (Thomas 1961, Griffin 1964, Morgan 1983, McGraw 2004b). Ponderosa pines in the Sandhills are disjunct populations (i.e., physically separated from other populations) of the species. Ponderosa pines are occasionally interspersed with knobcone pines (*Pinus attenuata*) and, in the Bonny Doon region, with the federally endangered Santa Cruz cypress (*Cupressus abramsiana*). Northern maritime chaparral on Zayante soils is dominated by silver-leafed manzanita (*Arctostaphylos silvicola*), a species recognized by the California Native Plant Society (CNPS) as rare or endangered (CNPS List 1B). This manzanita may occur as monotypic stands or be mixed with California-lilac (*Ceanothus* sp.), *Adenostoma* sp., yerba santa (*Eriodictyon* sp.), and other shrub species (Morgan 1983, Marangio 1985, Lee 1994, McGraw 2004b).

The two primary types of Sandhills habitat are sand parkland and sand chaparral. Sand parkland is characterized by scattered ponderosa pine trees and an open understory consisting of herbaceous plants and few shrubs. Sand chaparral is more densely vegetated; this habitat type is typically dominated by silver-leafed manzanita but also consists of other shrub species and herbaceous plants.

In addition to the Mount Hermon June beetle and the Ben Lomond spineflower, the Sandhills support the federally endangered Zayante band-winged grasshopper, and the federally and state endangered Ben Lomond wallflower. The Sandhills also support another endemic CNPS 1B plant species, the Ben Lomond buckwheat (*Eriogonum nudum* var. *decurrens*). These species are not covered by the IPHCP. Unlike the Mount Hermon June beetle, the Zayante band-winged grasshopper has never been observed coexisting with dense development, and the Project Units do not contain habitat for this species. With the exception of three adjacent, undeveloped parcels in the Ben Lomond South Project Unit, the Ben Lomond wallflower is not known to occur within the Project Units. These parcels where the Ben Lomond wallflower occurs would not be eligible to participate in the IPHCP. Section 3.3 provides a more detailed discussion of the Zayante band-winged grasshopper and Ben Lomond wallflower.

More than 40 percent of the Sandhills is estimated to have been lost or altered due to human activities including sand mining, urban development, recreational activities, introduction of invasive plant species, and suppression of natural disturbance regimes such as fire (Marangio and Morgan 1987, Lee 1994). The four federally listed species associated with the Sandhills have been affected to varying degrees by these threats as described in more detail below. Sandhills habitat that supports the four federally listed species has been preserved through habitat conservation plans at Quail Hollow Quarry (110 acres; Graniterock Company 1998) and the Felton Plant owned by Hanson Aggregates (21.7 acres; Habitat Restoration Group 1999). In addition, the California Department of Fish and Game has protected Sandhills habitat that supports all four species at Quail Hollow County Park (Service 1998).

3.2 Listed Species Covered in the IPHCP

3.2.1 Mount Hermon June Beetle

3.2.1.1 Description and Conservation Status

The Mount Hermon June beetle is a member of the family Scarabaeidae (Insecta: Coleoptera). Adult males measure about 0.75 inch in length and females are slightly longer. The adult has a black head and dark brown elytra (leathery forewings) covered with brown hairs and stripes that are broken and irregular (Young 1988) (Figure 1). Larvae, eggs, and pupae of the species have not been identified or described. The Mount Hermon June beetle was listed as federally endangered on January 24, 1997 (62 FR 3509). Critical habitat has not been designated for this species.

3.2.1.2 Life History

Unless noted otherwise, the following life history information for the Mount Hermon June beetle is summarized from Arnold (2004a). The Mount Hermon June beetle is univoltine (i.e., has only one generation per year). The majority of the life cycle of the Mount Hermon June beetle occurs beneath the soil surface. To date, little research has been conducted on below-ground stages of the life cycle of the Mount Hermon June beetle including eggs, larvae, pupae, and portions of the adult stage. However, information can be inferred on these life stages from other species of *Polyphylla* that are well-studied. Presumably, the entire life cycle of the Mount Hermon June beetle takes 2 to 3 years to complete. Adult females lay eggs beneath the soil surface on, or in close proximity, to host plants. Eggs hatch into larvae that feed on roots of host plants. As the larvae grow, they molt from first to second, and finally third instars. Third instar larvae pupate below the soil surface, and eventually male and female adults emerge from pupae. Adult emergence and seasonal activity often begins in early June and continues through about mid-August (activity period). However, seasonal activity may vary from year to year depending on weather conditions.

During the activity period, adult Mount Hermon June beetles are active between approximately 7:00 p.m. and 10:00 p.m., with peak activity usually between 8:45 p.m. and 9:30 p.m. At dusk, adult males emerge from the sandy soils and fly up through herbaceous vegetation and shrubs. Once they reach the tops of the vegetation, they actively fly low to the ground in search of pheromones released by flightless females which emerge from the soil but remain on the surface of the ground. Mating occurs at the surface of the soil, and females retreat underground immediately thereafter where they presumably lay eggs. At the end of the flight period each evening, males burrow back into the soil, emerging repeatedly on subsequent evenings to search for mates until their nutrient reserves expire (Hazeltine 1993). Lifespan data from a brief capture-recapture study suggest that adult males live no longer than eight days (Arnold 2001a). Dispersal data from the same study indicate that most adult males have home ranges of less than a few acres. The maximum dispersal distance documented for adult male Mount Hermon June beetles is 923 feet (Arnold 2000). Similar data on lifespan and dispersal of females are lacking at this time because they are so infrequently observed.

3.2.1.3 Distribution and Habitat Requirements

The Mount Hermon June beetle has been found in association with Zayante sands and vegetation characteristic of the Sandhills (see Section 3.1.4). Additionally, adult Mount Hermon June beetles have been found in disturbed areas where remnants of Sandhills habitat still occur (Arnold 1999a). All documented observations of Mount Hermon June beetle reproduction are from sites that harbor Zayante soils. A limited number of observations of adult Mount Hermon June beetles have occurred on sandy soils in the immediate vicinity of, although not specifically on, Zayante soils (62 FR 3617). The observations that were not specifically on Zayante soils were in locations similarly characterized by sparsely vegetated sandy substrate with silver-leafed manzanita or ponderosa pine, and were of adult male Mount Hermon June beetles that had likely originated and dispersed from the adjacent Zayante soils due to attraction by lights (62 FR 3617).

While Polyphylla larvae are generally presumed to feed on grass and pine roots, analysis of Mount Hermon June beetle frass (fecal pellets) has documented the remains of angiosperms (flowering plants), pteridophytes (ferns and allies), and fungi in the digestive tracts of Mount Hermon June beetle larvae (Hill 2006). In addition, Hill (2006) has confirmed a close association between locations where the Mount Hermon June beetle occurs and various native Sandhills plant species, including ponderosa pines and Ben Lomond spineflower.

The Mount Hermon June beetle has been observed in approximately 150 locations in Sandhills habitat (Zayante soils) in the vicinity of Mount Hermon, Felton, Ben Lomond, Zayante, and Scotts Valley (Arnold 2004a). The species was also recently discovered in the Bonny Doon area (Arnold pers. comm. 2008). While the entire known range of the Mount Hermon June beetle encompasses a total

area of nearly 10,000 acres, suitable habitat for the endangered insect is only known to occur within approximately 2,800 acres of that total (McGraw 2004b). The precise amount of habitat which is currently occupied by the Mount Hermon June beetle is unknown.

3.2.1.4 Threats

Sand mining has resulted in the loss and fragmentation of habitat for the Mount Hermon June beetle. As discussed in Section 3.1.1, six quarry sites in the Sandhills are currently being excavated or have been excavated and abandoned in the past. Mining operators often excavate all of the Zayante sands, leaving only hard sandstone at the base of the quarries. Operators are required to grade the sides of quarries in a bench-like pattern to provide increased stability, and to then revegetate these areas. Preliminary surveys indicate that sandstone pits and benched areas with an absence of loose, sandy substrate do not support the Mount Hermon June beetle (Arnold 1999a; Arnold pers. comm. 2005).

Many ridges that historically supported Sandhills habitat have been developed into dense residential and commercial areas. Although much of the native vegetation in these developed areas has been removed, Zayante soils remain. Recent surveys indicate that Mount Hermon June beetles continue to inhabit many of these developed areas (Arnold pers. comm. 2005). Long-term population estimates are not available to assess whether the Mount Hermon June beetle is declining in these developed areas. However, development of the Sandhills has likely caused a decline of the Mount Hermon June beetle for the following reasons: (1) impervious surfaces including buildings, pavement, and some landscaped areas render habitat unuseable by the Mount Hermon June beetle; (2) outdoor lights attract adult male Mount Hermon June beetles, thereby disrupting breeding behavior; and (3) development and associated landscaping have reduced potential host plant populations.

Recreational use also threatens Sandhills habitat. Erosion of sandy soils results from recreational uses, including off- highway vehicles (OHV) (e.g., motorized dirt bikes), equestrian activities, and hiking. Excessive erosion can expose Mount Hermon June beetle eggs, larvae, pupae, and adults to the soil surface, causing dessication and increased predation. Additionally, erosion of sandy soils, particularly on steep slopes, exposes and may damage the roots of host plants. Observations of dead trees in areas subject to OHV use suggest that root damage may cause tree mortality.

A variety of invasive, non-native plant species found in the Sandhills may also threaten Mount Hermon June Beetle persistence. These non-native plants compete with native host plant species and render habitat conditions less suitable for the fossorial insect (McGraw 2004b).

Fragmentation of Sandhills habitat has likely inhibited genetic exchange between populations of the Mount Hermon June beetle, given that adult males disperse

only short distances and females are flightless. Habitat fragmentation may preclude natural recolonization of habitat following stochastic events such as fires, or predator or disease outbreaks, which could extirpate (eliminate) populations of the Mount Hermon June beetle.

3.2.1.5 Recovery Objectives

The recovery strategy for the Mount Hermon June beetle and other Sandhills species consists of the following objectives: (1) protecting Sandhills habitat from further development, mining, and recreational threats through purchase of conservation easements, fee title, or other means; (2) managing habitat to ensure ecosystem processes vital to the long-term survival of the Sandhills species are allowed to function; 3) conducting research to provide a greater understanding of what the Sandhills species require for long-term survival; (4) locating additional habitat/populations within the historic range of Sandhills species; and, (5) developing and implementing a public outreach program (Service 1998).

3.2.2 Ben Lomond Spineflower

3.2.2.1 Description and Conservation Status

The Ben Lomond spineflower was listed as federally endangered on February 4, 1997 (59 FR 499). Critical habitat has not been designated. The Ben Lomond spineflower is a small, annual herb of the buckwheat family (Polygonaceae). It can grow up to 10 inches high, but more typically grows no more than a few inches above ground. Flower clusters and associated structures are pink with small distinct heads. Whorls of bracts below the flowers are 0.06 to 0.09 inch long and have pink margins (Figure 2).

3.2.2.2 Life History

The Ben Lomond spineflower is a short-lived annual species. Seeds germinate in late fall after the first substantial rains. Plants form a basal rosette of leaves in the winter, bolt in late February and early March, flower between March and May, and then set seed between June and July (McGraw and Levin 1998, McGraw 2004a, McGraw 2004b). In open habitat, the Ben Lomond spineflower can reach seedling densities of hundreds to thousands per square meter (Kluse and Doak 1999; McGraw 2004b). When in bloom, the Ben Lomond spineflower often appears as a spreading mat of small, showy, pink flowers.

3.2.2.3 Distribution and Habitat Requirements

The Ben Lomond spineflower is endemic to the Sandhills and restricted to sandy soils of the Zayante series. Specifically, the Ben Lomond spineflower requires sandy soils in open, sparsely vegetated areas (McGraw and Levin 1998). The core of current and historical populations of the species occurs in the vicinity of Mount Hermon, Felton, Ben Lomond, Zayante, Scotts Valley, and Bonny Doon. Population sizes vary widely from year to year due to interannual variability in

climate, particularly rainfall (McGraw 2004b). No information is available regarding the current or historical number of populations.

3.2.2.4 Threats

Habitat loss due to sand mining and residential and commercial development has greatly reduced the amount of habitat for the Ben Lomond spineflower. In residential developments, populations of the Ben Lomond spineflower occur within backyards and along roadsides. These populations are highly susceptible to extirpation because they are small, fragmented, and isolated. One of the secondary effects of urban development is the introduction of non-native plants to adjacent intact habitat. The Ben Lomond spineflower is easily out- competed by non-native grasses, herbs, and woody vegetation. Furthermore, natural fire regimes have been suppressed resulting in increased vegetative cover and leaf litter (particularly from pine needles), and reduction of habitat for the Ben Lomond spineflower (McGraw 2004a, McGraw 2004b).

Recreational uses of habitat threaten 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. However, overuse by motorized bikes, equestrians, and pedestrians can result in erosion of sandy soils, and create inhospitable conditions for the Ben Lomond spineflower (McGraw 2004b).

3.2.2.5 Recovery Objectives

The overall recovery strategy for the Ben Lomond spineflower is the same as that described for the Mount Hermon June beetle in Section 3.2.1.5.

3.3 Non-covered Federally-Listed Sandhills Species

The Service does not expect the Zayante band-winged grasshopper or Ben Lomond wallflower to be adversely impacted by the Covered Activities described in this IPHCP because they have not been observed coexisting with dense development in urbanized areas, and therefore the City and County are not seeking coverage for these two species under the IPHCP. However, these two species are discussed below and in section 3.7 to provide information to landowners regarding additional sensitive species in Sandhills habitat, and to provide a basis for the decision to not cover these species in the IPHCP. In addition, the potential future discovery of these species in areas that are covered by this IPHCP is considered and addressed as a changed circumstance in section 7.1.2 of this IPHCP.

3.3.1 Zayante Band-winged Grasshopper

The Zayante band-winged grasshopper was listed as endangered on January 24, 1997 (62 FR 3509). The Zayante band-winged grasshopper is a member of the family Acrididae (Insecta: Orthoptera) (Figure 5). The distinguishing characteristics of the species are dark cross-bands on the forewings, pale yellow on the hindwings, blue lower legs, and

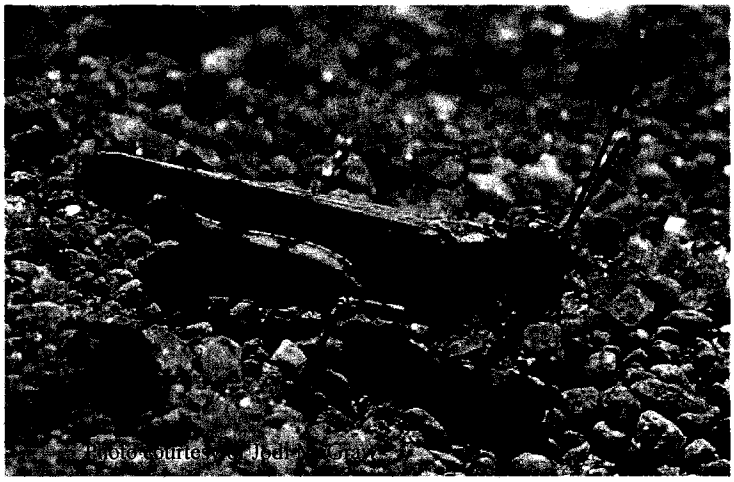
eye bands. Males range in length from 0.54 to 0.68 inch; females are larger, ranging in length from 0.78 to 0.85 inch (Otte 1984; Rentz and Weissman 1984).

The flight season for adult Zayante band-winged grasshoppers extends from late May through October, with peak activity during July and August (White 1993; Morgan 1994; Arnold 1999a,b). Individuals have been observed as late as November 11 (Arnold 2000). When flushed, individuals generally fly three to seven feet, producing a buzzing sound while in flight (Rentz and Weissman 1984). Band-winged grasshoppers often alight on bare ground and are conspicuous in flight because of their hind wing color and the buzzing sound made by the wings (Borror et al. 1976). Females presumably lay eggs in sandy areas close to the soil surface. No additional information on the life cycle of this species is available.

Sand mining and development have reduced and fragmented habitat for the Zayante band-winged grasshopper. Remaining habitat has been degraded by fire exclusion, exotic plants, and recreational use. Exclusion of fire has increased the density of shrubs and trees, which reduces the area of open sand habitat required by the Zayante band-winged grasshopper. In many habitat patches, non-native plant species, including French broom (*Genista monspessulana*), Portuguese broom (*Cytisus striatus*), and acacia (*Acacia* sp.), as well as non-native grasses and forbs, have reduced the amount of open habitat that remains (McGraw 2004b). Recreational uses (e.g., motorized dirt bikes, mountain bikes, and equestrian activities) further threaten the Zayante band-winged grasshopper by directly trampling or running over individuals; disrupting normal behavioral patterns including egg laying, mating, and feeding; and reducing host plant populations. Finally, genetic exchange among remaining populations is likely limited due to the short dispersal distance of the Zayante band-winged grasshopper and the fragmented nature of remaining habitat.

Unlike the Mount Hermon June beetle, the Zayante band-winged grasshopper has not been observed coexisting with dense development. Dense residential development and associated landscaping greatly reduce the amount of open, sparsely vegetated habitat. This habitat is critical for thermoregulation and completion of the insect's life cycle (Chu 2002, Arnold 2004b). Therefore, the Project Units do not contain habitat for the Zayante band-winged grasshopper.

Figure 5. The Zayante Band-winged Grasshopper (*Trimerotropis infantilis*).



The Service designated critical habitat for the Zayante band-winged grasshopper on February 7, 2001 (66 FR 9219). The primary constituent elements for the Zayante band-winged grasshopper are those physical and biological conditions that are essential for the primary biological needs of thermoregulation, foraging, sheltering, reproduction, and dispersal. The primary constituent elements are: (1) the presence of Zayante soils; (2) the occurrence of Zayante Sandhills habitat and associated plant species (e.g., scattered ponderosa pines and a wide array of annual and perennial herbs and grasses); and (3) certain microhabitat conditions, including areas that receive large amounts of sunlight, widely scattered tree and scrub cover, bare or sparsely vegetated ground, and loose sand (Arnold 1999a, 1999b).

The Service designated approximately 10,560 acres of land as critical habitat for the Zayante band-winged grasshopper (Figure 5). Of this area, 3,950 acres support Zayante soils. The remaining 6,610 acres of critical habitat are areas that were included due to insufficient mapping detail (i.e., includes roads, developed areas such as towns, housing developments, and other similar lands), although these areas with non-Zayante soils do not contain the primary constituent elements and therefore are not considered critical habitat for the species.

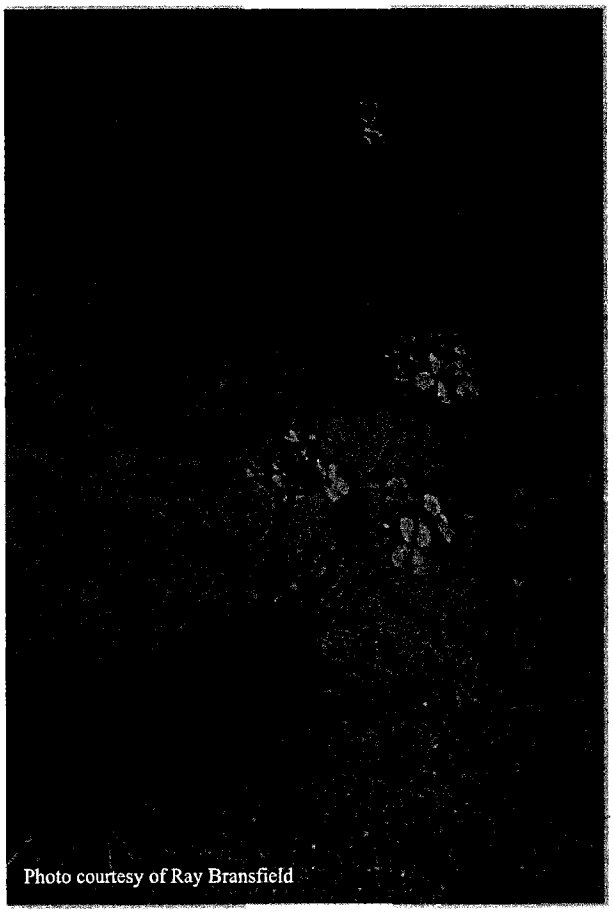
All of the Project Units for this IPHCP, with the exception of Scotts Valley East, occur within designated critical habitat of the Zayante band-winged grasshopper. The ITP issued in association with this IPHCP could result in the removal of 139 acres of Zayante soils within the critical habitat unit for the Zayante band-winged grasshopper. However, areas within the Project Units do not contain the primary constituent elements necessary to support conservation of the Zayante band-winged grasshopper. Specifically, buildings, pavement, and dense landscape vegetation associated with the existing development within the Project Units have removed the bare ground and loose soil conditions that are required by the Zayante band-winged grasshopper.

3.3.2 Ben Lomond Wallflower

The Ben Lomond wallflower was listed as endangered on February 4, 1994 (59 FR 5499). Critical habitat has not been designated for this species. The species is also listed as endangered by the State of California. The Ben Lomond wallflower, a member of the mustard family (Brassicacae), is a monocarpic, short-lived perennial herb that forms a basal rosette of leaves within its first year, then typically bolts and flowers the following spring. A low proportion of plants have been observed to complete their life cycle in a single year, while those growing in shade conditions often require 3 or more years to reproduce (McGraw 2004a,b).

When the Ben Lomond wallflower reproduces, it develops a raceme (i.e., flowers clustered in a terminal spike) consisting of deep yellow flowers with petals 0.5 to 1 inch in length. The fruit is a slender capsule that reaches 4 inches in length and is covered with hairs.

Figure 6. Ben Lomond Wallflower (*Erysimum teretifolium*).



The Ben Lomond wallflower is endemic to the Zayante Sandhills where it is found in open, sparsely vegetated areas. Although the largest populations of Ben Lomond wallflower occur in sand parkland habitat, the endangered plant is also found in canopy gaps within silver-leafed manzanita mixed chaparral and ponderosa pine forest (McGraw 2004a,b).

The Ben Lomond wallflower is threatened by the same factors as the Ben Lomond spineflower. Specifically, sand mining and development remove habitat for the Ben Lomond wallflower, while fire exclusion, exotic plant species, and recreation degrade the quality of its habitat (McGraw 2004b).

The Ben Lomond wallflower is currently known to occur in 17 populations near Scotts Valley, Ben Lomond, Felton, and Bonny Doon (McGraw 2004b). The Ben Lomond wallflower does not persist in residentially developed areas because it is a poor competitor with landscape plants that occur in these areas. Only two occurrences of the endangered plant are known from residential areas, both of which are in small patches of undeveloped, unlandscaped habitat (McGraw 2004b). One occurrence is located in a residential area consisting of large parcels that is not within any of the Project Units of the IPHCP. The second occurrence is within three adjacent, undeveloped parcels within the Ben Lomond South Project Unit of the IPHCP. Projects on the three parcels within the Ben Lomond South Project Unit where the Ben Lomond wallflower occurs would not be eligible to participate in the IPHCP. The remainder of the Ben Lomond South Project Unit and the other nine Project Units for the IPHCP are very unlikely to support other occurrences of the Ben Lomond wallflower.

3.4 Other Federally-Listed Species that Have the Potential to Occur in Proximity to the Project Units

A number of federally listed species occur in the San Lorenzo River watershed. Although they are not currently known to occur in any of the IPHCP Project Units, these species could potentially be discovered in the Project Units in the future. These species include the following:

- California red-legged frog (*Rana aurora draytonii*): occurs in an upper tributary to Zayante Creek;

- Ohlone tiger beetle (*Cicindela ohlone*): current known distribution includes at least one location within the City of Scotts Valley;

- Santa Cruz cypress (*Cupressus abramsiana*): five known populations occur in the Santa Cruz Mountains, four of which are in Santa Cruz County.

- Santa Cruz tarplant (*Holocarpha macradenia*): current known distribution includes at least seven populations in the vicinity of the cities of Santa Cruz and Soquel;

- Scotts Valley polygonum (*Polygonum hickmanii*): currently occurs exclusively in the northern Scotts Valley area; and

• Scotts Valley spineflower (*Chorizanthe robusta* var. *hartwegii*): currently occurs on four parcels in northern Scotts Valley.

3.5 General Habitat Characteristics within the Project Units

The Project Units are comprised primarily of Zayante soils. They support a mosaic of Sandhills communities including remnant patches of sand parkland, ponderosa pine forest, and Sandhills chaparral communities. Each of the Project Units supports habitat for the Ben Lomond spineflower and Mount Hermon June beetle.

3.6 Covered Species within the Project Units

Mount Hermon June Beetle and Ben Lomond spineflower habitat and populations have been observed in the 10 Project Units during prior surveys. Table 2 lists documented occurrences of the Mount Hermon June beetle in and near the 10 Project Units, while Table 3 lists known occurrences of the Ben Lomond spineflower. These records are summarized from reports on file at the Service's Ventura Fish and Wildlife Office, and from the BUGGY database maintained by Dr. Richard Arnold (Mount Hermon June beetle records only). Figure 7 illustrates the locations of these occurrences.

Table 2. Documented Occurrences of the Mount Hermon June Beetle in or near (within 0.25 mile of) (*italics*) the 10 Project Units

Project Unit	Location	Jurisdiction	Surveyor	Survey Year
Rollingwoods	La Canada Way	County	R. Morgan	1991
	Rollingwoods Drive	County	R. Arnold	2003
	Between Brookknoll School and Sims Road	County	W. Hazeltine	1993
	Pet Cemetery on Sims Road	County	W. Davilla	2002[a]
	Entrance to Henry Cowell State Park	County	R. Arnold	2003
	Near Sims and Graham Hill Roads	County	R. Arnold	2004
Whispering Pines	Bob's Lane	County	R. Arnold	2000
	Twin Pines Drive	County	C. Sculley R. Arnold	2000 2003
	Sugarpine Drive	County	W. Hazeltine R. Arnold R. Arnold	1993 2000 2001
	Lockewood Lane	City/County	W. Hazeltine R. Arnold R. Arnold	1993 2000 2001
	Estrella Drive	City	R. Arnold R. Arnold	2000 2001

Table 2. Documented Occurrences of the Mount Hermon June Beetle in or near (within 0.25 mile of) (*italics*) the 10 Project Units				
Project Unit	Location	Jurisdiction	Surveyor	Survey Year
	Collado Drive	City	R. Arnold R. Arnold	2000 2001
	LaCuesta Drive	County	D. Bland	1995
Scotts Valley West	Scotts Valley Drive & Bean Creek Road	City	W. Hazeltine	1993
	Scotts Valley Drive & Glen Canyon Road	City	W. Hazeltine R. Arnold	1993 2001
	Bean Creek Road (Creekside Estates)	City	D. Bland R. Arnold	1999 2002
	Blake Lane	City	R. Arnold	2002
Scotts Valley East	None (See Section 2.2.3)			
Green Valley	*Lockhart Gulch Road*	County	W. Hazeltine	1994
Mount Hermon	*Graham Hill Road (between Juvenile Center & Roaring Camp)*	County	R. Arnold	1999
	Mound & Lake Roads	County	R. Arnold	2001
	Conference Drive	County	R. Arnold	2001
	Forest Drive	County	R. Arnold	2001
	Lakeside Avenue	County	R. Arnold	2001
	Parkway Drive	County	R. Arnold	2001
	Pine Avenue	County	W. Hazeltine	1993
	Cellular Tower on Mt. Hermon	County	R. Arnold	1999-2005
	Hanson Quarry	County	R. Arnold	1999-2005[b]
Zayante North & Zayante South	McEnery Road	County	S. McCabe S. McCabe S. McCabe S. McCabe	1991 2000 2002 2004
	Newton Drive	County	R. Arnold	2003
	Olympia Quarry	County	R. Morgan R. Arnold	1998 2002
	Freeman Property (Hanson)	County	R. Arnold R. Arnold R. Arnold R. Arnold	1999 2001 2003 2005

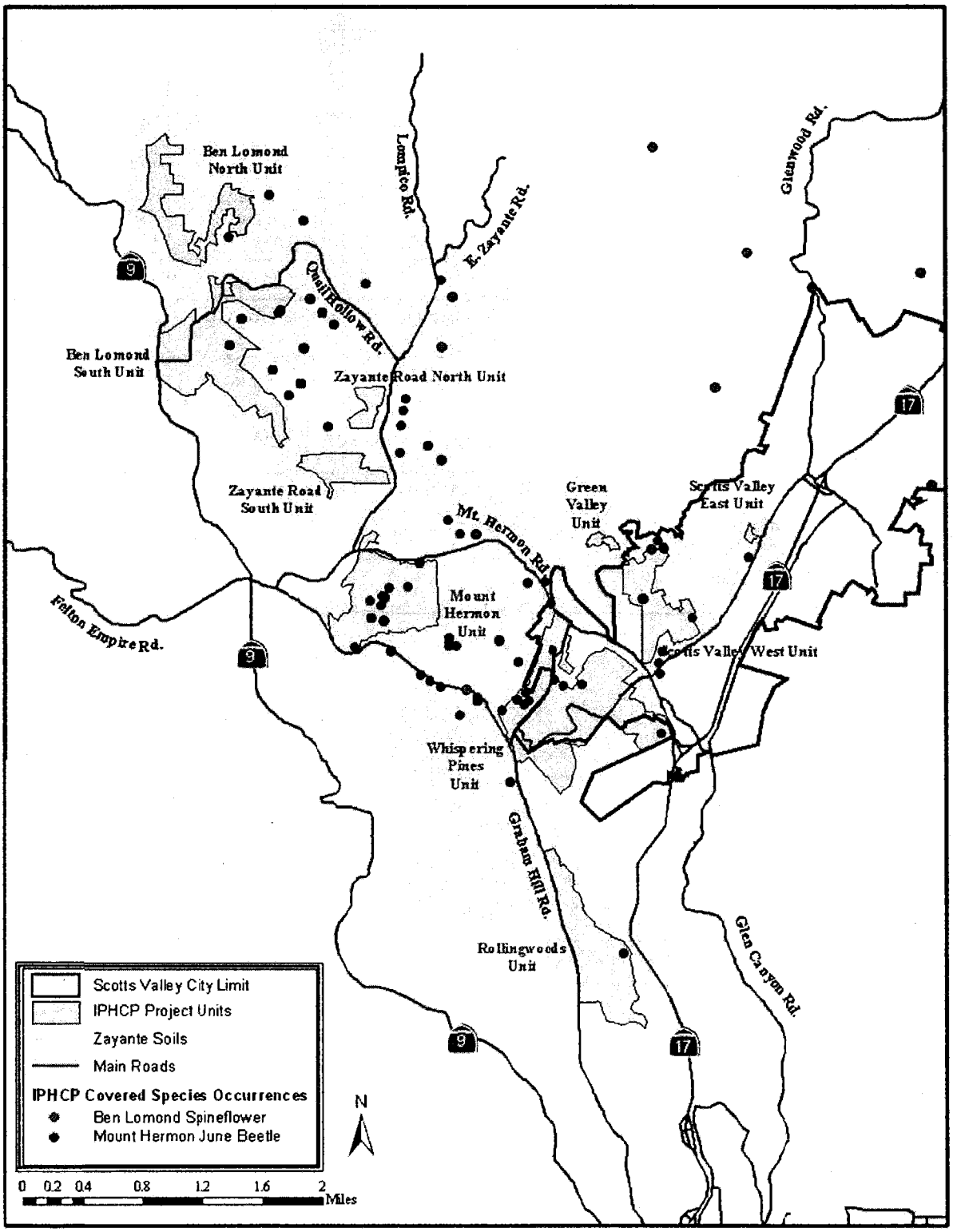
Table 2. Documented Occurrences of the Mount Hermon June Beetle in or near (within 0.25 mile of) (*italics*) the 10 Project Units				
Project Unit	Location	Jurisdiction	Surveyor	Survey Year
	Olympia Well Field (San Lorenzo Valley Water District	County	R. Arnold	2001
	Ferrari Property	County	R. Arnold	2000
Ben Lomond South	Morningside Drive	County	S. McCabe	1990
	Ridgeview Drive	County	S. McCabe W. Hazeltine	1990 1993
	Hihn Road	County	W. Davilla	2002
	Harvard Drive	County	W. Davilla W. Davilla W. Davilla W. Davilla	2000 2001 2003 2004
	Ben Lomond Sandhills Preserve	County	R. Arnold	2002
	Quail Hollow Quarry	County	R. Arnold R. Arnold R. Arnold R. Arnold	1999 2000 2002 2004
Ben Lomond North	*Marion Avenue*	County	R. Arnold	2001
	Pecho Avenue	County	W. Hazeltine	1993
	Quail Hollow County Park	County	R. Morgan W. Hazeltine	1995 1993

Footnotes: (a) Observation was of a *Polyphylla sp.*; species not confirmed.
(b) In accordance with the habitat conservation plan for the site (Habitat Restoration Group 1999), Mount Hermon June beetle surveys are conducted every other year (i.e., 1999, 2001, 2003, etc.) at Hanson Quarry.

Table 3. Documented Occurrences of the Ben Lomond Spineflower in or near (within 0.25 mile of) (*italics*) the 10 Project Units				
Project Unit	Location	Jurisdiction	Surveyor	Survey Year
Rollingwoods	La Canada Way	County	R. Morgan R. Arnold	1991 2005
	Pet Cemetery on Sims Road	County	W. Davilla R. Arnold	2002 2003
Whispering Pines	Bob's Lane	County	S. Schettler S. Schettler	1994 2000
	Worth Lane	County	S. Mayer	2001
	Estrella Drive	City	Central Coast Wilds	2000
Scotts Valley West	*Bean Creek Road (Creekside Estates)*	City	K. Lyons	2002
	Between Skypark Airport & Bean Creek Road	City	R. Morgan	1992
	Mt. Hermon Road	City	Chambers	1977
Scotts Valley East	None (See Section 2.2.3)			
Green Valley	*Geyer Quarry*	County	R. Arnold	2002
Mount Hermon	*Graham Hill Road (between Juvenile Center & Roaring Camp)*	County	R. Arnold USFWS USFWS	1999 2000 2001
	Mt. Hermon Association properties	County	USFWS USFWS USFWS R. Arnold	1991 2002 2003 2001
	Cellular Tower on Mt. Hermon	County	Habitat Restoration Group	1997
	Hanson Quarry	County	Habitat Restoration Group	1996
Zayante North & Zayante South	McEnery Road	County	R. Arnold	2003
	Newton Drive	County	R. Arnold	2003
	Olympia Quarry	County	USFWS	1991

Table 3. Documented Occurrences of the Ben Lomond Spineflower in or near (within 0.25 mile of) (*italics*) the 10 Project Units				
Project Unit	Location	Jurisdiction	Surveyor	Survey Year
	Freeman Property (Hanson)	County	R. Arnold USFWS	1999 2000
	Olympia Well Field (San Lorenzo Valley Water District	County	R. Arnold USFWS	2001 2002
	Ferrari Property	County	R. Arnold USFWS	2000 2000
Ben Lomond South	Eleana Drive	County	J. McGraw	2000
	Ben Lomond Sandhills Preserve	County	R. Arnold	2002
	Quail Hollow Quarry	County	J. McGraw	2004
Ben Lomond North	Sund Ave	County	J. McGraw	2005
	Manzanita Ave	County	J. McGraw	2005

Figure 7. Occurrences of the Mount Hermon June Beetle and Ben Lomond Spineflower in or near the 10 Project Units.



3.7 Other Federally Listed Species that May Occur in Proximity to the Project Units

3.7.1 Federally Endangered Zayante Band-winged Grasshopper and Ben Lomond Wallflower

During frequent site visits to the Project Units covered in the IPHCP over the past 5 years, biologists familiar with the Zayante band-winged grasshopper have never observed the species in densely developed areas (Sculley pers. comm. 2002; Arnold pers. comm. 2005; McGraw pers. comm. 2005). This species requires loose sand soil and bare or sparsely vegetated areas that receive large amounts of sunlight (Chu 2002, Arnold 2004b). These conditions are not found within the densely developed Project Units.

The Ben Lomond wallflower has been observed in two residential areas. One of these residential areas is located within the boundaries of an IPHCP Project Unit (McGraw 2004b, McGraw pers. comm. 2005).

Little data exist on the historic distribution of the Zayante band-winged grasshopper and Ben Lomond wallflower in the Sandhills. Presumably both species inhabited much of the sand parkland habitat within the Sandhills that has since been lost to sand mining and urban development. Development has resulted in suppression of the natural fire regime and subsequent encroachment of both native and non-native plants. Therefore, Sandhills habitat that historically was sparsely vegetated and had minimal cover has become densely vegetated with virtually no bare ground such as that required by the Ben Lomond wallflower or Zayante band-winged grasshopper. Habitat for these species is further reduced in urbanized areas by densely-located structures, turf grass, landscaping, and shading from trees and structures.

Based on the lack of appropriate habitat or any observations of these species, the Service has concluded that the Zayante band-winged grasshopper and Ben Lomond wallflower are not likely to occur in the project units covered in the IPHCP. Therefore, the IPHCP does not cover these species.

Chapter 4. Effects of Covered Activities

This chapter addresses the potential effects of the taking of the covered species from implementation of the Covered Activities. Direct impacts are assessed quantitatively in terms of acres of disturbance of Zayante soils; indirect impacts are assessed qualitatively. Implementation of the Covered Activities will result in take of the Mount Hermon June beetle.

4.1 Status of Covered Species in the Project Units

Existing populations of the Ben Lomond spineflower and Mount Hermon June beetle face numerous threats from ongoing activities associated with existing residential development in the project units. Approximately 90 percent of the total number of parcels in the 10 Project Units are developed, and the average parcel size is 0.39 acre. The Mount Hermon June beetle and Ben

Lomond spineflower are found around existing roads, sidewalks, and buildings, and in small vacant lots surrounded by residential development. Numerous ongoing activities associated with the existing residential development threaten these populations (Table 4), which are naturally small and may be susceptible to extirpation from random genetic, demographic, or environmental events. The small size of remaining undeveloped parcels within the Project Units limits opportunities for permanent conservation through acquisition or conservation easements of remaining habitat for both species. Given the ongoing threats and lack of conservation opportunities for the Ben Lomond spineflower and Mount Hermon June beetle occurring in the Project Units, the remaining habitat for these species in these areas is highly degraded and suboptimal.

Table 4. Threats to the Mount Hermon June Beetle and Ben Lomond Spineflower from Ongoing Activities in Residential Neighborhoods.

Activity	Potential Impact	
	Mount Hermon June Beetle	Ben Lomond Spineflower
Pedestrian use	Adults at soil surface crushed during adult activity period (summer evenings)	Plants and seeds crushed
Vehicular use	Fossorial life stages crushed	Plants and seeds crushed
Grading	Fossorial life stages exposed, injured, or killed	Plants and seeds injured or killed
Vegetation clearing	Fossorial life stages exposed, injured, or killed	Plants and seeds injured or killed
Pesticide use	Fossorial life stages injured or killed	Plants and seeds injured or killed
Irrigation	Fossorial life stages diseased or killed	Increased competition from exotic plants; facilitation of fungal pathogens; plants and seeds injured or killed
Installation of non-native landscaping	Fossorial life stages exposed, injured, or killed; potential food plants removed	Creation of inhospitable growing conditions for native plants due to increased competition from exotic plants; plants and seeds injured or killed
Fire suppression	Unknown	Creation of inhospitable growing conditions for native plants due to increased competition from exotic plants; increased leaf litter
Night lighting	Mate searching of adult males disrupted	Unknown
Existing buildings, walls, fences	Flying males injured, killed, flight paths disrupted	Seed dispersal and pollinator movement obstructed
Existing swimming pools	Flying males drowned or are	Seed dispersal obstructed

Activity	Potential Impact	
	Mount Hermon June Beetle	Ben Lomond Spineflower
	injured	
Native plant removal	Loss of potential food plants	Unknown
Digging by pets	Fossorial life stages exposed, injured, or killed	Plants and seeds damaged or killed

However, habitat within the Project Units does provide some long-term conservation value for the Mount Hermon June beetle and Ben Lomond spineflower. Though degraded, fragmented, and reduced in size, habitat within the 10 Project Units may support persisting populations, as many of the Project Units were developed more than 40 years ago. The Mount Hermon June beetle lives the vast majority of its life below ground. Therefore, it is possible that development within the Project Units, at least at the current level, might not cause extirpations of Mount Hermon June beetle populations in these areas. Indeed, the fact that Mount Hermon June beetles, which have a life cycle of 2 to 3 years, still inhabit these areas suggests that populations may be able to persist in the Project Units despite the current level of development.
It is likely that remaining habitat in the Project Units also provides connectivity between otherwise isolated populations of the Mount Hermon June beetle and Ben Lomond spineflower. Many of the Project Units are located adjacent to intact habitat that is being preserved and managed for long-term persistence of these species. Maintaining habitat and populations within the Project Units could allow migration between populations in these protected areas. Connectivity and migration can help maintain genetic diversity and facilitate natural recolonization of habitat following extirpations that might result from fire, disease, or other stochastic events (McGraw 2004b).

4.2 Take of / Adverse Impacts to the Covered Species Resulting from Covered Activities

Grading, land clearing, and construction activities associated with new development projects covered in the IPHCP will likely injure or kill plants and seeds of the Ben Lomond spineflower, and adults, larvae, pupae and eggs of the Mount Hermon June beetle. Construction of new buildings and associated infrastructure including driveways and sidewalks will permanently remove habitat (i.e., Zayante soils) for both species. Mount Hermon June beetle and Ben Lomond spineflower individuals that persist on a project site after construction activities would be threatened by ongoing use of the property (Table 4).

It is not possible to determine or accurately project how many individuals of each species would be injured or killed as a result of the Covered Activities. Comprehensive data describing the distribution and abundance of the Mount Hermon June beetle and Ben Lomond spineflower within the Project Units are not available. In addition, population densities of these species fluctuate annually such that the number of individuals impacted would depend on the year in which a given project is conducted. For these reasons, it is more tangible and biologically defensible to evaluate the impacts of the activities covered under this IPHCP in terms of degradation or destruction of habitat.

Take of the Mount Hermon June beetle authorized by the ITPs issued pursuant to this IPHCP would be defined in terms of the areal extent of the species' habitat, specifically Zayante soils, that is disturbed by the Covered Activities. Within the Sandhills communities that occur on Zayante soils, surveys have revealed that the Mount Hermon June beetle occurs within a broad array of microhabitats, including conditions associated with existing high density development. Ground disturbing activities that would be covered by the ITPs (see Section 2.3) negatively impact populations of the Mount Hermon June beetle in a variety of direct and indirect mechanisms (Table 4). Therefore, it is reasonable to assume that conducting these activities within Zayante soils in the Project Units will degrade or eliminate Mount Hermon June beetle habitat and injure or kill Mount Hermon June beetles.

The ITPs issued pursuant to this IPCHP would authorize the take of Mount Hermon June beetles that occur within 139 acres of Sandhills habitat in the Project Units. This acreage figure represents 5 percent of the estimated total amount (2,800 acres) of Sandhills habitat with documented occurrences of the Mount Hermon June beetle as of 2004 (McGraw 2004b). Approximately 510 acres of the 2,800 acres of Sandhill habitat are already protected from development given landownership and use of this area (i.e., Henry Cowell State Park, Quail Hollow Ranch County Park, and Gray Whale Ranch (McGraw, 2004b)).

Given that the IPHCP would cover projects that are yet to be proposed it is not possible to determine the exact locations of the habitat that would be lost. Based on locations of proposed projects to date, the City and County anticipate that some portion of habitat will be lost in each Project Unit. Habitat would be lost only on parcels that are equal to or less than 1.5 acres in size. A maximum of 15,000 square feet of additional habitat would be lost on any given parcel. However, the City and County anticipate that most projects covered under the IPHCP (e.g., swimming pools, garages, room additions, etc.) would be smaller and would each result in a loss of less than 15,000 square feet of habitat.

The degradation or loss of up to 139 acres of Sandhills habitat within the Project Units should not have a significant effect on the persistence of the Mount Hermon June beetle and Ben Lomond spineflower throughout the species' ranges. Existing populations of these species persist on and in exposed[3] Zayante soils around existing structures and other infrastructure and in vacant parcels. No more than 15,000 square feet of additional habitat would be lost on any given parcel. Additionally, these habitat losses will likely be distributed throughout the Project Units in rough proportion to the size of each unit. Given the amount and expected distribution of the habitat that may be lost, Mount Hermon June beetles and Ben Lomond spineflowers should continue to persist on and in exposed soils in each of the Project Units. Therefore, following implementation of the Covered Activities, each Project Unit will likely provide less habitat, but essentially the same quality of habitat, for the Mount Hermon June beetle and Ben Lomond spineflower.

While both species will likely continue to inhabit the Project Units in the short term, it is not possible to definitively predict whether these areas will support long term persistent populations

[3] Exposed soils are any soils not covered by a structure, pavement, or other impervious, permanent feature that would restrict plants from growing or insects from burrowing.

of the Mount Hermon June beetle and/or Ben Lomond spineflower. There are no historical data on populations of the species within the Project Units, precluding assessment of the effects of development on population density and trends. Initial development of the residential neighborhoods likely greatly reduced populations of both species. It is also likely that human habitation in these areas has caused further declines over the past several decades. Given that 90 percent of the parcels within the Project Units are already developed, it is unlikely that the additional habitat loss and other impacts from the projects covered under the IPHCP would be a substantial additional threat to the long-term persistence of the Mount Hermon June beetle and Ben Lomond spineflower.

4.3 Assessment of Take

The IPHCP must describe the level of incidental take of the Mount Hermon June beetle that would occur from Covered Activities in addition to describing and analyzing the impacts of the project on the covered species. Although the Federal Endangered Species Act does not address take of federally listed plants, this section evaluates effects on the Ben Lomond spineflower of issuing the requested ITPs; this evaluation is included to facilitate analysis of Covered Activity impacts through the NEPA and CEQA processes, and in the enforcement of the County's Sensitive Habitat Protection Ordinance. No take of, or adverse impacts to, any other federally listed or proposed species is anticipated to occur as a result of the Covered Activities.

Implementation of projects that meet the eligibility requirements and occur within the Project Units (i.e., the Covered Activities) would injure or kill adults, larvae, pupae, and eggs of the Mount Hermon June beetle. Therefore, the Covered Activities would cause take of the Mount Hermon June beetle either by directly killing individuals or in the form of harm through significant habitat modification or degradation (see Section 1.2.1). In addition, implementing Covered Activities could damage or kill plants and seeds of the Ben Lomond spineflower. The Service recommended that the loss or degradation of habitat within the Project Units should be limited to a maximum of 139 acres. This represents a small percentage (approximately 5 percent) of the species' remaining habitat, and includes only the most degraded and fragmented habitat remaining for the species.

The loss of Mount Hermon June beetle and Ben Lomond spineflower individuals within the IPHCP Project Units is not expected to compromise the long-term persistence of these species. Populations of these species occur within a variety of habitat areas that are protected from development, including Henry Cowell State Park, Quail Hollow Ranch County Park, the conservation areas of the Quail Hollow Quarry, the conservation areas of the Hanson Quarry, the preserve of the Zayante Sandhills Conservation Bank, and the Bonny Doon Ecological Reserve (Ben Lomond spineflower only).

4.4 Cumulative Impacts

Cumulative effects are those impacts of future tribal, State, and private actions that are reasonably certain to occur in the action area. Future Federal actions would be subject to the requirements established in section 7 of the Act and, therefore, are not considered cumulative to the proposed action. The County, City and Service are aware of a number of development projects that have been implemented in the action area by landowners who have not applied for

or obtained an ITP. This fact shows the need for this IPHCP in providing a streamlined mechanism for local residents to develop their land while legally complying with the Act. In these cases, the Service is uncertain as to the amount of Sandhills habitat that has been lost and the number of Mount Hermon June beetles and Ben Lomond spineflowers that have been killed or affected as a result of the development. As of the date of this IPHCP, the Service has issued approximately 10 ITPs for the Mount Hermon June Beetle, spanning a total of 22 acres in Santa Cruz County to landowners who did not qualify under the IPHCP because their parcels are either greater than 1.5 acres, did not fall within one of the IPHCP Project Units, otherwise did not meet the eligibility criteria described in Section 2.3, or landowners chose to do their own HCP.

Chapter 5. Operating Conservation Program

5.1 Biological Goals and Objectives

In 2000, the Service published a Final Addendum to the Habitat Conservation Planning Handbook, also known as the five-point policy (65 FR 35242). This policy requires the Service to ensure that all future HCPs include explicit biological goals and objectives. These goals and objectives should clarify the purpose and direction of the operating conservation program, create parameters for developing conservation measures, provide the rationale behind the terms and conditions of the incidental take permit, promote an effective monitoring program, and where appropriate, help determine the focus of an adaptive management strategy. Biological objectives are used to "step-down" the biological goals into manageable and, therefore, more understandable units.

In developing the biological goals and objectives for the IPHCP, the City, County, and Service evaluated the type, number, and location of activities covered by the IPHCP that could result in take of the Mount Hermon June beetle and adverse effects to the Ben Lomond spineflower (Chapter 4). Through this evaluation, it became apparent that take of the Mount Hermon June beetle and adverse effects to the Ben Lomond spineflower would occur from loss of habitat in and around neighborhoods with existing, dense residential development. Both the Mount Hermon June beetle and Ben Lomond spineflower occur in loose, sandy soils throughout these developed areas that are highly fragmented by structures such as roads, driveways, buildings, sidewalks, and fences.

Human activities create substantial threats to the Mount Hermon June beetle and Ben Lomond spineflower in developed areas (Table 11). Habitat within the IPHCP Project Units has been degraded as a result of prior development and continuing human habitation. Populations of the Mount Hermon June beetle and Ben Lomond spineflower in these areas will be further impacted by the implementation of Covered Activities.

Based on these considerations, an operating conservation program was developed that would minimize take of the Mount Hermon June beetle and adverse effects to Ben Lomond spineflower in the Project Units, and mitigate for these impacts at a larger off-site Sandhills habitat preserve. In accordance with this approach, the biological goals for the IPHCP are as follows:

Goal 1. Minimize take of the Mount Hermon June beetle and adverse effects to the Ben Lomond spineflower within the Project Units.

Objective 1.1 Avoid disturbance of Sandhills habitat whenever feasible, and when avoidance is infeasible minimize disturbance to Sandhills habitat.

Objective 1.2. Minimize ground-disturbing activities during the growing season of the Ben Lomond spineflower and adult flight period of the Mount Hermon June beetle (May 15 – August 15).

Objective 1.3. Minimize removal of native Sandhills plant species.

Objective 1.4. Minimize landscaping with turf grass, weed matting, aggregate, and mulch.

Objective 1.5. Minimize night lighting during the flight season of the Mount Hermon June beetle.

Goal 2. Protect habitat for the Mount Hermon June beetle and Ben Lomond spineflower at an off-site location of high long-term conservation value to the species.

Objective 2.1. Provide funds to protect, manage, and monitor habitat for the Mount Hermon June beetle and Ben Lomond spineflower at a Service-approved conservation bank(s).

5.2 Measures to Minimize and Mitigate Take

Section 10(a)(2)(B) of the Act requires that all applicants submit HCPs that "minimize and mitigate" the impacts of take authorized by an incidental take permit, and that issuance of the permit will not "appreciably reduce the likelihood of the survival and recovery of the species in the wild." In general, HCPs should include mitigation programs that are based on sound biological rationale, practicable, and commensurate with the impacts of the project on species for which take is requested. Additionally, the Service encourages applicants to develop HCPs that contribute to the recovery of a listed species. If the proposed project is expected to result in permanent habitat loss, then the mitigation strategy should include compensatory mitigation consisting of the permanent preservation of suitable habitat.

In accordance with these guidelines and the requirements of the Act, the IPHCP's Operating Conservation Program is intended to achieve its biological goals and objectives and to ensure that the impacts of Covered Activities on the Mount Hermon June beetle and Ben Lomond spineflower are minimized and mitigated to the maximum extent practicable.

Under the IPHCP, the take resulting from Covered Activities must be mitigated by permanently preserving and managing suitable habitat outside of the Project Units. Covered Activities will be limited to small "infill-type" projects in areas that contain previous development (i.e., the Project Units). Habitat for the Mount Hermon June beetle and/or Ben Lomond spineflower in the Project Units is fragmented and, in many cases, of reduced quality relative to larger contiguous,

undisturbed parcels. Therefore, protection in perpetuity of contiguous blocks of high quality habitat outside of the Project Units should compensate for the impacts of Covered Activities within the Project Units and should help ensure the long-term conservation of these species.

Because contiguous areas of high-quality habitat will be used to mitigate for impacts to fragmented, lower-quality habitat, the mitigation ratio for Covered Activities will be 1 to 1 in terms of the area of disturbance envelope to the number of conservation credits of mitigation responsibility (i.e., a landowner with a project that has a disturbance envelope of 0.1 acre will be required to mitigate by securing 0.1 acre of conservation credits for the Mount Hermon June beetle).

Specifically, in addition to implementing certain minimization measures, the impacts of Covered Activities must be mitigated by one of the following two methods: (1) acquire an appropriate number of Mount Hermon June beetle conservation credits from the Zayante Sandhills Conservation Bank; or (2) acquire an appropriate number of Mount Hermon June beetle conservation credits from another Service-approved conservation bank, which also has an Operating Agreement with the County if the parcel is within the County's jurisdiction..

5.2.1 Minimization Measures

The following measures are designed to minimize the direct and indirect effects of the Covered Activities on the Mount Hermon June beetle and Ben Lomond spineflower by decreasing injury and death of individuals, and by reducing habitat degradation. These minimization measures apply to all Covered Activities (i.e., activities authorized under the ITP).

5.2.1.1 Impacts to plants that are native to the Sandhills must be avoided to the greatest extent feasible, consistent with the purpose of the Covered Activity.

Projects will be located to avoid the Ben Lomond spineflower, ponderosa pine, and silver-leafed manzanita whenever feasible, as determined by the City or County. Where avoidance is not feasible, minimizing impacts to native Sandhills plant species will be required.

Implementation of these measures will minimize impacts to the Mount Hermon June beetle by maintaining host plants for the species. In addition, implementation of these measures will minimize impacts to the Ben Lomond spineflower by retaining individuals of the species whenever feasible.

5.2.1.2 Ground-disturbing activities associated with construction (e.g., vegetation clearance, grading, digging, etc.) must be minimized between May 15 and August 15 within the development envelope.

To the maximum extent feasible, the City and County will condition project approvals to avoid or minimize ground disturbance between May 15 and August 15.

Adult Mount Hermon June beetles actively search for mates and breed during the evenings for approximately 12-14 weeks, generally between May 15 and August 15. During this period, males and females may burrow into duff and soils at relatively shallow depths for protection during the daytime hours. This measure will minimize impacts to the Mount Hermon June beetle by avoiding disturbance of adults during the critical breeding season.

The Ben Lomond spineflower completes its annual life cycle between mid-October and early August. This measure reduces adverse impacts to the Ben Lomond spineflower by minimizing construction activities during a portion of its life cycle.

5.2.1.3 If construction-related ground disturbance associated with Covered Activities can not be scheduled to avoid the May 15 to August 15 time frame, participating landowners must ensure that areas that have been disturbed by construction activities are covered each evening during this time frame with tarps, landscape fabric, or other similar material. Only the immediate areas that have been recently disturbed must be covered in this manner between May 15 and August 15.

As described in section 5.2.1.2 above, adult Mount Hermon June beetles actively seek mates during the evenings between approximately May 15 and August 15. Following activity each evening, males may burrow into duff and soils for protection during the daytime hours. Under such circumstances, disturbed, sandy soils in a project area may attract Mount Hermon June beetles seeking shelter for the evening. This measure will minimize impacts to the Mount Hermon June beetle by preventing adults that may have emerged from Zayante soils near the project site from burrowing into disturbed areas on the project site and being injured or killed when project activities resume the following day.

5.2.1.4 Landscaping elements that degrade habitat must be minimized to the greatest extent feasible, as determined by the City or County, and consistent with the purpose of the Covered 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. This measure minimizes impacts to the Mount Hermon June beetle by limiting these landscaping elements where adults may emerge from beneath the soil surface.

This measure will minimize impacts to the Ben Lomond spineflower by limiting the installation of landscape materials that inhibit establishment, growth, and reproduction of the plant.

5.2.1.5 Indirect impacts to the Mount Hermon June beetle from project lighting must be minimized to the greatest extent feasible.

Project activities between May 15 and August 15 will not utilize night lighting during construction. In addition, projects constructed under the IPHCP (Covered Activities) will minimize the installation of outdoor lighting. Permanent outdoor lighting shall be minimized and shall be shielded by fixture design or other means to minimize illumination of surrounding areas. If outdoor lighting is a necessary result of the Covered Activity (e.g., security lighting or lighting for handicap access structures), light sources (bulbs) that do not attract insects (e.g., yellow or sodium vapor bulbs) will be used to the maximum extent feasible.

During the species' activity period (May 15 – August 15), male Mount Hermon June beetles fly to seek mates for a brief period beginning near dusk each evening. If these male Mount Hermon June beetles are attracted to artificial light sources, it may disrupt their reproductive behavior. This measure will minimize impacts to the Mount Hermon June beetle by avoiding potential interference with adult male Mount Hermon June beetle behavior during the breeding season.

5.2.2 Mitigation Measures

5.2.2.1 Planting of Native Sandhills Plant Species

To the maximum extent feasible, the City and County will require that any revegetation or landscaping activities associated with Covered Activities are conducted using locally-derived source material (i.e., seeds or cuttings) of plant species native to the Sandhills, with particular emphasis on the plant species identified in Appendix G of this IPHCP.

5.2.2.2 Securing Off-site Mitigation

Prior to beginning any ground-disturbing activities, the impacts of Covered Activities must be mitigated in one of the following ways:

1. Secure conservation credits for the Mount Hermon June beetle at a ratio of 1:1 in terms of acres of disturbance to numbers 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 the Zayante Sandhills Conservation Bank; or

2. Secure conservation credits for the Mount Hermon June beetle at a ratio of 1:1 in terms of acres of disturbance to numbers 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 another Service-approved conservation bank, which also has an Operating Agreement with the County if the parcel is within the County's jurisdiction.

5.3 Monitoring Program

Monitoring tracks compliance with the terms and conditions of an HCP, Implementing Agreement, and permit. There are three types of monitoring: (1) compliance monitoring tracks the permit holder's compliance with the requirements specified in the HCP, Implementing Agreement, and permit; (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 HCP. Monitoring provides information for making adaptive management decisions.

5.3.1 Compliance Monitoring: Completion of Minimization and Mitigation Measures

The City and County will monitor participating landowners' compliance with the terms of the IPHCP and ITPs using a combination of the monitoring reports for each Covered Activity and follow-up visits to project sites. This monitoring component will document total area of Zayante soils disturbance, and include a checklist of completed minimization and mitigation measures (e.g., lighting, landscaping, timing of construction activities, etc.). This compliance monitoring is guided by the IPHCP monitoring and mitigation strategy. A template compliance monitoring report for Covered Activities is provided in Appendix E. The City's and County's compliance monitoring strategy is further described under Section 5.3.2, below. Additional reporting requirements are described in Section 5.4.

5.3.2 Effects Monitoring: Tracking the Impacts of Covered Activities on the Covered Species

The City and County will monitor the effects of Covered Activities on the Mount Hermon June beetle and Ben Lomond spineflower by tracking the cumulative areal extent of Zayante sandy soils that is degraded or destroyed. The City and County will monitor and track the amount of Zayante soils disturbed by Covered Activities, as well as compliance with the terms of the IPHCP and ITPs, through the following process: City or County staff will fill out a monitoring report (Appendix E) for each Covered Activity prior to finalization of the building permit for the Covered Activity; each monitoring report will note the areal extent of habitat disturbance that is authorized on the subject parcel; the City and County will perform a follow-up visit to the project site for each Covered Activity to confirm the amount of habitat disturbed is consistent with the figure noted on the landowner's report. This follow-up site visit will enable the City and County to document the effects of the Covered Activities as well as confirm that the participating landowner is in compliance with the terms of the IPHCP and ITPs. This strategy will also enable a "hold" to be placed on a building permit, if necessary, to assure compliance with the provisions of the IPHCP and ITPs. As noted previously, the City and County will jointly maintain a database that tracks the total number of acres of habitat modification that each jurisdiction authorizes under its' ITP.

5.3.3 Effectiveness Monitoring: Achievement of Biological Goals and Objectives

It is important to ensure that the biological goals and objectives of the IPHCP are being achieved. The data obtained from the process described in Effects Monitoring section 5.3.2 will assist the City, County, and Service in assessing the effectiveness of the IPHCP. The County and City will review data from monitoring reports on an annual basis and prepare a report that describes: (1) the number of projects completed and the area of habitat affected in each of the Project Units; (2) landowner compliance with the avoidance and minimization measures; (3) area of compensatory mitigation secured; and (4) any observations of injured or dead Mount Hermon June beetles (including location, date, and numbers of individuals observed). This review process will be used to help ensure that the IPHCP's Operating Conservation Program is successful. More information relating to this annual report is outlined in Section 5.4 below.

5.4 Reporting

For each Covered Activity, the appropriate local jurisdiction (i.e., City or County) will fill out a compliance monitoring report. For projects implemented over the course of two or more years, the City or County will prepare and submit annual monitoring reports until the Covered Activities are completed. In order for the Service to accurately assess take levels and determine if the biological goals and objectives of the IPHCP are being met, each of the compliance monitoring reports 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 this IPHCP. A template monitoring report is attached as Appendix E.

The City and County will provide feedback to each participating landowner as necessary to ensure compliance with the IPHCP and the ITPs. The City and County will compile the individual compliance monitoring reports prepared during each calendar year, summarize the information in the reports, and provide an annual summary report to the Service. The Service may prepare a brief report to the City and the County assessing the status of the conservation program including the effectiveness of minimization measures and the success of off-site mitigation.

Chapter 6. Plan Implementation

The City and County would be the recipients of the ITPs based on the IPHCP, and would therefore be responsible for complying with both the ITPs and the IPHCP. A more detailed description of how the IPHCP would be implemented is provided in the Implementing Agreement (Appendix H); the Implementing Agreement would govern implementation of the IPHCP. In general, however, the City and County would implement the IPHCP by integrating the requirements of the IPHCP into the City's and the County's building permit programs.

The planning department of the City and the planning department of the County would assume the day-to-day responsibilities for implementation. As landowners submit applications for discretionary and building permits, each planning department would determine whether the proposed project is within a Project Unit and whether it is eligible for coverage under its' ITP. If the proposed project is within a Project Unit and would disturb ground by grading or other means, the planning department will notify the landowner that the proposed project may impact Zayante soils and may require an ITP from the Service. If the project is eligible for coverage under the IPHCP and the pursuant ITPs, the planning department will also explain the requirements for coverage and ensure that the landowner's application adheres to the IPHCP and the ITPs. If the landowner submits a complete application, including a signed Certificate of Inclusion, and has otherwise complied with all relevant terms of the IPHCP, as determined by the City or County, the City or County may extend coverage under its' ITP to the project. The project would then be a Covered Activity within the context of this IPHCP and incidental take resulting from the project would be authorized by either the City or County ITP.

6.1 Application Requirements

The City and the County will establish application requirements and procedures for Covered Activities generally as follows:

Step 1. Determine if the proposed project is within an IPHCP Project Unit.

The landowner should review the maps provided in Appendix B of this IPHCP.

a. If the parcel lies within 1 of the 10 Project Units, proceed to step 2.

b. If the parcel lies outside the boundaries of the 10 Project Units, the project site may still harbor Zayante soils and/or the Mount Hermon June beetle, Zayante band-winged grasshopper, Ben Lomond spineflower, or Ben Lomond wallflower. The City or County will notify the landowner that he or she should contact the Service to determine if the proposed project may take the Mount Hermon June Beetle and if an individual ITP may be necessary. This step will help ensure the landowner is not in violation of section 9 of the Act for a project that is otherwise a lawful activity.

Step 2. Determine if the proposed project will disturb Zayante soils.

Most projects within the IPHCP Project Units will occur on Zayante soils, which support Mount Hermon June Beetle habitat. However, due to the imprecision of soils map and the buffer that was applied using a Geographic Information System (GIS), some parcels within the IPHCP Project Units may not contain Zayante soils. Landowners who are uncertain as to whether their project will indeed impact Zayante soils can have their project area evaluated by a qualified individual from, or recommended by, the County, City, or Service. A list of personnel qualified to conduct these evaluations will be available from the City, County, or Service. If a written evaluation from a qualified individual concludes that the project site does not contain Zayante soils, and the proposed project is not likely to result in take of Mount Hermon June beetles, the landowner does not need to obtain incidental take coverage under the IPHCP. If the proposed project will disturb Zayante soils, the landowner must proceed to step 3.

Step 3. Complete checklist of eligibility requirements.

The landowner must provide information to the City or County that demonstrates their eligibility to be covered by the IPHCP and ITP. The landowner should use the template "Sandhills IPHCP Eligibility Checklist" in Appendix E of this document. If all requirements are met, proceed to step 4. If all requirements are not met and the proposed project is not eligible for coverage under the IPHCP and ITP, the City or County will recommend that the landowner contact the Service for information about individual incidental take permits. Additionally, the City or County may provide information about the regional HCP currently under development.

Step 4. Complete and Sign a Certificate of Inclusion.

The landowner must submit a signed Certificate of Inclusion with all necessary documentation in order to proceed. A template Certificate of Inclusion is provided in Appendix C of this IPHCP. To comply with the IPHCP, the landowner must submit the following documentation as part of their discretionary or building application submittal to the appropriate local jurisdiction (City or County):

1. Certificate of Inclusion;

2. Sandhills IPHCP Eligibility Checklist;

3. City or County Discretionary or Building Application; and

4. Project Plans (including development envelope).

5. Submit Proof of Mitigation

Prior to issuance of a discretionary or building permit from the City or County, the landowner or conservation bank must submit a Conservation Credit Sales Receipt.

6.2 Responsibilities

6.2.1 City and County Responsibilities

The City and County's implementation responsibilities include:

- Overseeing implementation of avoidance and minimization measures required by the IPHCP and ITP.

- Monitoring landowner compliance with the terms of each Certificate of Inclusion, the IPHCP, and the ITP.

- Creating and maintaining the database to track the areal extent of Zayante soils that is disturbed or modified by the Covered Activities, as authorized under the ITP.

- Training planning department staff to review permit applications for compliance with the IPHCP.

- Enforcing the terms and conditions of the IPHCP and ITP.

- Submitting Annual reports to the Service

6.2.2 Service Responsibilities

The Service will be responsible for providing timely advice and participation in consultations with the City and County under this IPHCP.

6.3 Implementation Costs and Funding

6.3.1 Costs Associated with Implementing the IPHCP

Santa Cruz County

County costs to implement the IPHCP are estimated to be $321.00 per certificate of inclusion application (i.e., building application). This estimate is based on the amount of time required for Planning Department staff to perform the additional tasks necessary to process building applications in the sandhills. While the County will minimize costs by incorporating implementation of the IPHCP into existing application review and permit issuance procedures, there will be several tasks that are unique to implementing the IPHCP. These include:

- Task 1 - Performing a second site visit at each parcel to confirm that temporary orange fencing has been installed to delineate the total ground disturbance area (1.0 hour of Resource Planner time for every application at $148.00/application);

- Task 2 - Ensuring that the appropriate number of conservation credits have been purchased to mitigate project impacts (0.5 hour of Resource Planner time for every application at $74.00/application);

- Task 3 - Conducting a third site visit, when necessary, to ensure that any errors or deficiencies in delineating the total ground disturbance area have been corrected and the appropriate number of conservation credits have been obtained (1.0 hour of Resource Planner time for 50% of the applications for an average of $74.00/application);

- Task 4 - Creating and maintaining a Certificate of Inclusion tracking system to document development projects within the IPHCP area (0.25 hour of Planning Technician time for every application at $25.00); and

- Task 5 - Preparing annual reports to USFWS to satisfy the County's reporting requirements (4.0 hours of Principal Planner time annually. For at least the first year to be absorbed by the County, after which to be included in the sandhills application-processing fee).

By totaling the costs to perform these tasks, the average additional cost to process an application in the sandhills is estimated to be $321.00. This total is calculated by adding: $148.00 (Task 1) + $74.00 (Task 2) + $74.00 (Task 3) + $25.00 (Task 4). These costs are based on 2008 billing rates, which will be subject to change over time due to inflation and other factors that affect County costs. When costs increase, Certificate of Inclusion fees will also increase accordingly to keep in step with costs.

City of Scotts Valley

City costs to implement the IPHCP are estimated to be $274.00 per certificate of inclusion application (along with the building application). This estimate is based on the amount of time required for Planning Department staff to perform the additional tasks necessary to process building applications in the sandhills. While the County will minimize costs by incorporating implementation of the IPHCP into existing application review and permit issuance procedures, there will be several tasks that are unique to implementing the IPHCP for the City. These include:

- Task 1 - Performing a second site visit at each parcel to confirm that temporary orange fencing has been installed to delineate the total ground disturbance area (1.0 hour of Senior Planner time for every application at $122.00/application);

- Task 2 - Ensuring that the appropriate number of conservation credits have been purchased to mitigate project impacts (0.5 hour of Senior Planner time for every application at $61.00/application);

- Task 3 - Conducting a third site visit, when necessary, to ensure that any errors or deficiencies in delineating the total ground disturbance area have been corrected and the appropriate number of conservation credits have been obtained (1.0 hour of Senior Planner time for 50% of the applications for an average of $61.00/application);

- Task 4 - Creating and maintaining a Certificate of Inclusion tracking system to document development projects within the IPHCP area (0.25 hour of the Senior Planner's time for every application at $30.00); and

- Task 5 - Preparing annual reports to USFWS to satisfy the City's reporting requirements (4.0 hours of Senior Planner time annually at $488 per year. For at

least the first year to be absorbed by the City, after which to be included in the sandhills application-processing fee).

By totaling the costs to perform these tasks, the average additional cost to process an application in the sandhills is estimated to be $274.00. This total is calculated by adding: $122.00 (Task 1) + $61.00 (Task 2) + $61.00 (Task 3) + $30.00 (Task 4). These costs are based on 2009 billing rates, which will be subject to change over time due to inflation and other factors that affect County costs. When costs increase, Certificate of Inclusion fees will also increase accordingly to keep in step with costs.

6.3.2 Funding Sources

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 the tasks noted above. 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.

The County Planning Department will maintain a tracking system of all sandhills building and discretionary applications that are submitted and all permits issued. While this tracking system will not be limited to the IPHCP area, all of the information required to track the IPHCP Certificates of Inclusion will be captured as part of this documentation. For example, the tracking system will record the number of certificates issued each year, the amount and location of sandhills habitat impacted by each project, and the number of conservation credits purchased from an approved conservation bank. The City of Scotts Valley will set up a program for tracking all sandhills building and discretionary applications that are submitted and all permits issued.

6.3.3 Funding Assurances

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.

6.3.4 Mitigation Costs

Mitigation costs for Covered Activities (i.e., purchasing conservation credits as outlined in Section 5.2.2.2) will be borne by landowners proposing to implement Covered Activities. 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.

6.4 Contact

Questions regarding implementation of this IPHCP should be directed to:

For properties outside the City, contact:

County of Santa Cruz Planning Department
701 Ocean Street, 4th Floor
Santa Cruz, California 95060
(831) 454- 3252 phone
(831) 454-2131 fax

OR

For properties within the City, contact:

City of Scotts Valley Planning Department
1 Civic Center Drive
Scotts Valley, California 95066
(831) 440-4630 phone
(831) 438-2793 fax

Chapter 7. Changed and Unforeseen Circumstances

Federal regulation [50 CFR 17.22(b)(2) and 17.32(b)(2)] requires that an HCP specify the procedures to address changed and unforeseen circumstances that may arise during the implementation of the HCP.

7.1 Changed Circumstances

Changed circumstances are defined as changes in circumstances affecting a species or geographic area covered by an HCP that can reasonably be anticipated by plan developers and the Service, and for which contingency plans can be prepared (50 CFR 17.3). If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and these additional measures are already provided for in the plan's operating conservation program (e.g., the conservation management activities or mitigation measures expressly agreed to in the HCP), then the permittee will implement those measures as specified in the plan. However, if additional conservation management and mitigation measures are deemed necessary to respond to changed circumstances and such measures are not provided for in the plan's operating conservation program, the Service will not require these additional measures absent the consent of the permittee, provided that the HCP is being "properly implemented" (properly implemented means the commitments and provisions of the HCP and the Implementing Agreement have been or are being fully implemented) except under extraordinary circumstances. Further, in cases where the status of a species worsens, the primary obligation for implementing additional conservation measures would rest on the Federal government, other government agencies, private conservation organizations, or other private landowners who have not yet developed an HCP.

Changed circumstances must be addressed for the entire plan area of an HCP; in other words, both the Project Units and potential mitigation lands must be considered. Management responses and funding for the changed circumstances discussed below have already been considered and addressed for the Zayante Sandhills Conservation Bank in the Conservation Bank Agreement and the Adaptive Management and Monitoring Plan supporting the establishment of the conservation bank. Adequate funding for responding to changed circumstances at the Zayante Sandhills Conservation Bank has been addressed through the inclusion of a contingency fund for such purposes (i.e., the Interim Management Account), and is also factored into the conservation credit purchase price. In the event another conservation bank offering conservation credits for the Mount Hermon June beetle (other than the Zayante Sandhills Conservation Bank) is approved by the Service, funding for changed circumstances would need to be assured by the conservation bank operators prior to Service approval. The following discussion of changed circumstances relates only to Sandhills habitat within the Project Units of the IPHCP.

7.1.1 Listing of New Species

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 ITPs, the permit will

be reevaluated by the Service. The IPHCP covered activities may be modified, as necessary, to ensure that the activities covered under the IPHCP are not likely to jeopardize or result in take of the newly listed species or adverse modification of any newly designated critical habitat. The County and City will implement the modifications to the IPHCP covered activities identified by the Service as necessary to avoid the likelihood of jeopardy to, or take of, the newly listed species or destruction or adverse modification of newly designated critical habitat. The County and City will continue to implement such modifications until such time as they have applied for and the Service has approved an amendment of the ITPs, in accordance with applicable statutory and regulatory requirements, to cover the newly listed species or until the Service notifies them in writing that the modifications to the HCP covered activities are no longer required to avoid the likelihood of jeopardy of the newly listed species or adverse modification of newly designated critical habitat.

7.1.2 Discovery of the Zayante Band-winged Grasshopper or Ben Lomond Wallflower in the Project Units

If the Zayante band-winged grasshopper or Ben Lomond wallflower are discovered within any of the Project Units, the Service will evaluate this new information and determine what, if any, IPHCP Covered Activities may affect the Zayante band-winged grasshopper or Ben Lomond wallflower. In addition, if the IPHCP Covered Activities would likely result in incidental take of the Zayante band-winged grasshopper, the City and County will coordinate with the Service and either request a permit amendment or implement activities that would avoid the take of the Zayante band-winged grasshopper.

7.2 Unforeseen Circumstances

The Habitat Conservation Plan Assurances (No Surprises) Rule [50 CFR 17.22 (b)(5) and 17.32(b)(5); 69 FR 71723] describes the obligations of the permittee (i.e., the City and County) and the Service. The purpose of the No Surprises Rule is to provide assurance to the non-Federal landowners participating in habitat conservation planning under the Act that no additional land restrictions or financial compensation will be required for species adequately covered by a properly implemented HCP, in light of unforeseen circumstances, without the consent of the permittee.

Unforeseen circumstances are defined as changes in circumstances that affect a species or geographic area covered by an HCP that could not reasonably be anticipated by plan developers and the Service at the time of the HCP's negotiation and development, and that result in a substantial and adverse change in the status of the covered species (50 CFR 17.3).

In case of a potential unforeseen event, the City or County will immediately notify the Service staff who have functioned as the principal contacts for implementing this IPHCP. In determining whether such an event constitutes an unforeseen circumstance, the Service must consider, but not be limited to, the following factors: size of the current range of the affected species; percentage of range adversely affected by the HCP; percentage of range conserved by the HCP; ecological significance of that portion of the range affected by the HCP; level of knowledge about the affected species and the degree of specificity of the species' conservation program under the

HCP; and whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

If the Service determines that additional conservation and mitigation measures are necessary to respond to the unforeseen circumstances where the HCP is being properly implemented, the additional measures required of the permittee must be as close as possible to the terms of the original HCP and must be limited to modifications within any conserved habitat area or to adjustments within lands or waters that already set-aside in the HCP's operating conservation program. Additional conservation and mitigation measures shall involve the commitment of additional land or financial compensation or restrictions on the use of land or other natural resources otherwise available for development or use under original terms of the HCP only with the consent of the permittee.

The City and County will receive regulatory assurances (No Surprises) for the Mount Hermon June beetle and Ben Lomond spineflower. In accordance with the No Surprises Rule, the City and County will be responsible for implementing remedial measures in response to any changed circumstances as described in this chapter, but they will not be responsible for addressing unforeseen circumstances.

If the Service, City, and County collectively agree that additional conservation and mitigation measures are necessary to respond to the unforeseen circumstances additional minimization or mitigation measures may be required for Covered Activities. However, once an application for a Covered Activity has been approved by the City or County, and all applicable parties have signed a Certificate of Inclusion for that activity, the mitigation requirements that apply to the Covered Activity that is the subject of the Certificate of Inclusion will not be changed by the City, the County, or the Service.

Chapter 8: Permit Amendment and Duration

The process for amending the ITPs and the IPHCP is set forth in the Implementing Agreement (Appendix H). However, in general, the following changes will require an amendment to the ITPs and/or the IPHCP.

8.1 Major Amendments

Major amendments may require a reinitiation of the intra-Service section 7 consultation, changes to the NEPA document, changes to the Findings and Recommendations document, and public comment. Amendment of the ITPs and/or the IPHCP would be required for any of the following:

- significant revision to the boundary of any of the Project Units;
- the new listing under the Act of a species not currently addressed in this IPHCP and which is likely to be taken by Covered Activities;
- modification of any project action, mitigation, or minimization measure in the IPHCP that may significantly affect authorized take levels, effects to the Mount Hermon June beetle, or the nature or scope of the Operating Conservation Program; or
- any other modification of a project likely to result in significant adverse effects to the Mount Hermon June beetle not addressed in the IPHCP and permit application.

8.2 Minor Amendments

Under certain circumstances, the ITPs, the IPHCP, or the Implementing Agreement may be amended without reinitiating the intra-Service section 7 consultation, modifying the NEPA document, or soliciting additional public comment. Such "minor amendments" may be undertaken to correct typographical errors or to effect other minor changes that bear little impact on the Operating Conservation Program. The effect of minor amendments on the Mount Hermon June beetle or the Ben Lomond spineflower would not exceed that described in this IPHCP, and the level of take authorized under the ITPs would not be exceeded. Examples of minor amendments include: (1) routine administrative revisions or changes to the Operating Conservation Program; (2) minor revisions to monitoring or reporting protocols; and (3) minor revisions to the IPHCP plan area or boundaries.

To effect a minor amendment, the City or County must submit the following documents in writing to the Service:

1. A description of the proposed amendment;
2. An explanation of why the amendment is necessary or desirable; and

3. An explanation of why the effects of the proposed amendment are not believed to be substantially different from those described in the original IPHCP.

If the Service concurs with the proposed amendment, the Service would authorize the amendment in writing, which becomes effective upon the date of the Service's written authorization.

8.3 Permit Duration

The ITPs will terminate automatically upon occurrence of any one of the following: 1) 5 years elapse from the date the ITPs are issued pursuant to this IPHCP; 2) the amount of Mount Hermon June beetle habitat that is impacted by Covered Activities reaches 139 acres; or 3) the regional HCP for the Sandhills is finalized.

The ITPs may be renewed, if necessary, without the issuance of a new permit. This can occur provided the permit is renewable, and that biological circumstances and other pertinent factors affecting the Mount Hermon June beetle and Ben Lomond spineflower within the Project Units are not substantially different than those described in this IPHCP. A minimum of 60 days prior to the expiration of the ITPs, the County and City must submit to the Service in writing the following documents:

1. A request to renew the ITPs, with reference to the original permit number;

2. Certification that all statements and information in the original IPHCP and permit application, together with any approved IPHCP amendments, are still true and correct, or inclusion of a list of changes;

3. A description of the take (i.e., the extent of habitat degradation or loss) that has occurred under the existing ITPs; and

4. A description of what portions of the project are still to be completed, if applicable, or what activities under the original ITPs the renewal is intended to cover.

8.4 Transfer of Certificates of Inclusion

In the event of a sale or transfer of ownership of a parcel within the boundaries of the IPHCP during the term of the signed Certificate of Inclusion, the new landowner may assume the rights and obligations under the Certificate of Inclusion. To do so, the landowner must submit a written request to the City or County, as appropriate, to reissue the Certificate of Inclusion for the new landowner's signature. The City or County may then reissue the Certificate of Inclusion, provided the Covered Activity that is the subject of the Certificate is in compliance with the Certificate, the IPHCP, and the ITP.

Chapter 9: Alternatives Considered

Section 10(a)(2)(A)(iii) of the Act requires that alternatives to the taking of listed species be considered and the reasons why such alternatives are not implemented be included in the IPHCP. The alternatives are summarized below:

9.1 No Action Alternative

Under this alternative, 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.

Mount Hermon June beetle and Ben Lomond spineflower habitat in the Sandhills has been degraded or lost due to sand mining, urban development, recreational activities, introduction of invasive plant species, and suppression of natural disturbance regimes (e.g., fire). Numerous private landowners continue to propose projects on sites that are likely to be occupied by Mount Hermon June beetles and Ben Lomond spineflower. These areas are being developed as the human population increases, demand for land intensifies, and unmanaged Sandhills habitat degrades. Because very little of the natural habitat remains, it is imperative to help preserve and properly manage any remaining high quality Sandhills habitat. Therefore, the No Action Alternative is of lesser conservation value to the Mount Hermon June beetle and Ben Lomond spineflower than is the proposed IPHCP. The No Action Alternative would also result in a considerable economic burden on landowners because they would need to prepare individual HCPs in lieu of participation in the IPHCP to comply with the Act. Additionally, because many of the proposed projects are ministerial in nature (i.e., the projects are not subjected to discretionary review by the City or County), some landowners have received building permits and have been informed to contact the Service, but instead conduct their building activities without doing so. For all of these reasons, the No Action Alternative was rejected.

9.2 Reduced Project Alternative (Reduced Take)

Under this 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. the In addition, 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. For these reasons, the Reduced Project Alternative was rejected.

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Appendix A. Definition of Terms

Authorized Activities: See Covered Activities.

Building and Paving: The construction or alteration of any structure or part thereof including access to and construction of parking areas.

Certificate of Inclusion: A document signed by each landowner and the applicable local jurisdiction (i.e., the City or County) to obtain incidental take coverage and commit to compliance and mitigation according to the IPHCP (see appendix C).

City: Where used in this IPHCP, refers to the City of Scotts Valley.

County: Where used in this IPHCP, refers to the County of Santa Cruz.

Covered Activities: The project types and/or activities described in chapter 2 of this IPHCP that are likely to result in take of the Mount Hermon June beetle, and for which take authorization is provided under the associated incidental take permits.

Covered Species: The plant and wildlife species addressed in a habitat conservation plan. In the case of this IPHCP, the covered species are the Mount Hermon June beetle and Ben Lomond spineflower.

Critical Habitat: Specific areas in and/or outside the geographical area occupied by a species at the time it is listed pursuant to section 4 of the Federal Endangered Species Act, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection.

Development Envelope: Any portion of a project site that will undergo the following activities: grading, land clearing, paving, construction or alteration of any structure or part thereof, including access to and construction of parking or staging areas, installation or repair of septic systems, installation of wells, tree and shrub removal, or the deposition of refuse or debris.

Eligible Development Projects: Projects that meet the eligibility criteria described in chapter 2.3 of this IPHCP.

Grading: Ground excavating, filling, leveling, smoothing, or any combination thereof.

Harm: In the definition of "take in the Federal Endangered Species Act, means an action which kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

Incidental Take: Any taking that is otherwise prohibited by the Federal Endangered Species Act, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Incidental Take Permit: A permit issued by the U.S. Fish and Wildlife Service pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act, which authorizes the incidental taking of federally listed endangered or threatened wildlife.

Land Clearing: The removal, by any method, of individual plants or vegetation down to duff or bare soil.

Mitigation: Actions that reduce or address potential adverse effects of a proposed activity on species covered by an HCP.

Native Sandhills Plant Species: Plant *SPECIES THAT'S OCCURRENCE IN THE SANDHILLS PREDATES COLONIZATION BY THE SPANISH IN THE 1700S AND IS THEREFORE PRESUMED TO BE NATURAL.*

No Surprises Rule: As described in Federal regulation (69 Federal Register 71723), assurances provided by the government to non-Federal landowners that if "unforeseen circumstances" arise, the Service would not require 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 to in an HCP without the consent of the landowner.

Project Unit: Any of the 10 geographic areas identified in this IPHCP (described in chapter 2 and shown in appendix B), within which Covered Activities may be conducted with the benefit of authorization under the Incidental Take Permits issued pursuant to this IPHCP.

Recovery: The use of all methods and procedures necessary to bring an endangered or threatened species to the point where measures provided by the Endangered Species Act are no longer necessary.

Sandhills Habitat: Unique communities of plant and animal species found on Zayante soils in Santa Cruz County.

Take: As defined in the Federal Endangered Species Act, to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

U.S. Fish and Wildlife Service: Bureau of the United States Department of the Interior with responsibility to administer the provisions of the Federal Endangered Species Act of 1973, as amended.

Zayante Soils: Soils derived from weathering of the Santa Margarita formation sandstone in Santa Cruz County, California. Zayante soils are coarse textured, sandy soils, which support the Sandhills ecosystem near the city of Scotts Valley and the communities of Ben Lomond, Mount Hermon, Felton, Olympia, Corralitos, and Bonny Doon.

Appendix B: Project Units for the IPHCP

Figure B-1. Rollingwoods Unit, IPHCP, Santa Cruz County, California

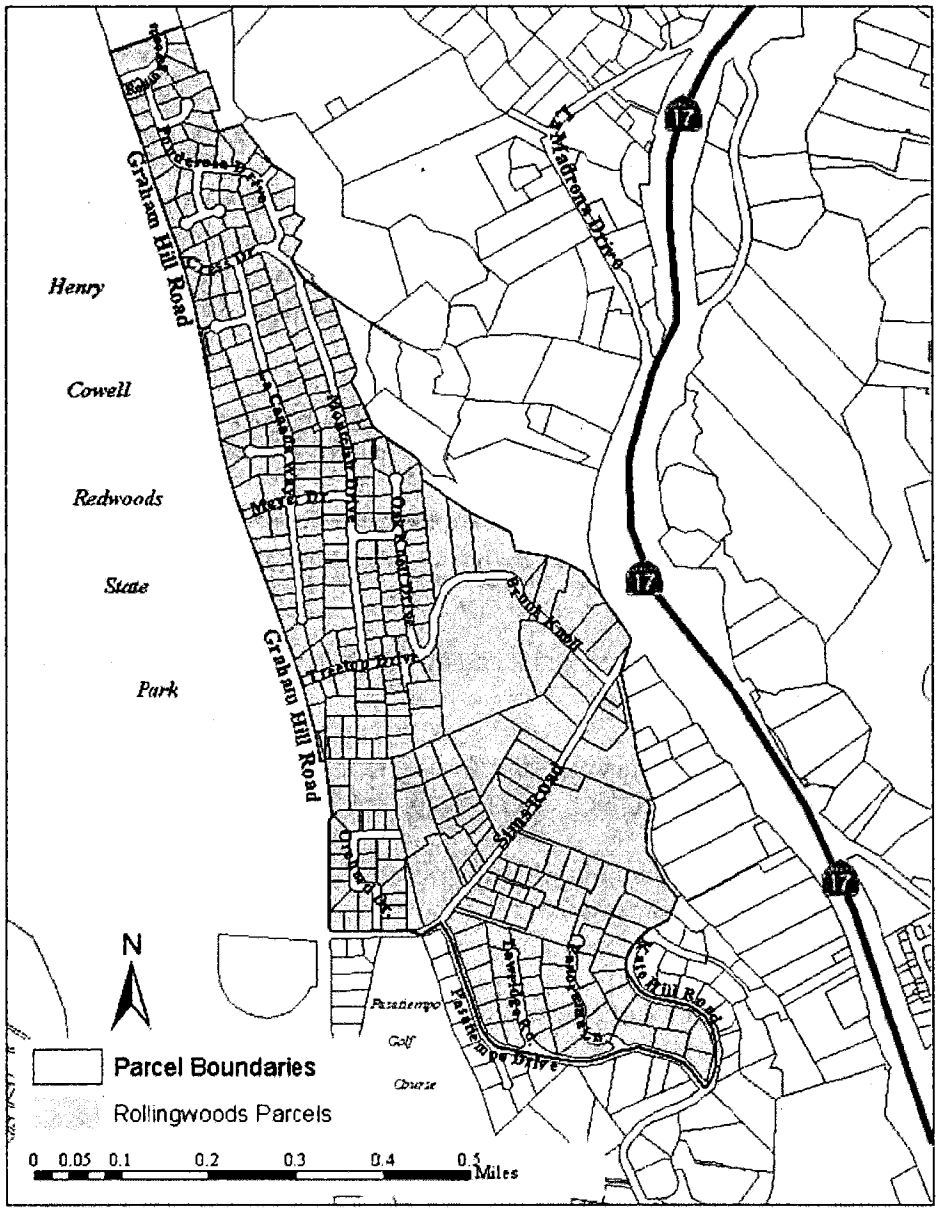

Figure B-2. Whispering Pines Unit, IPHCP, Santa Cruz County, California

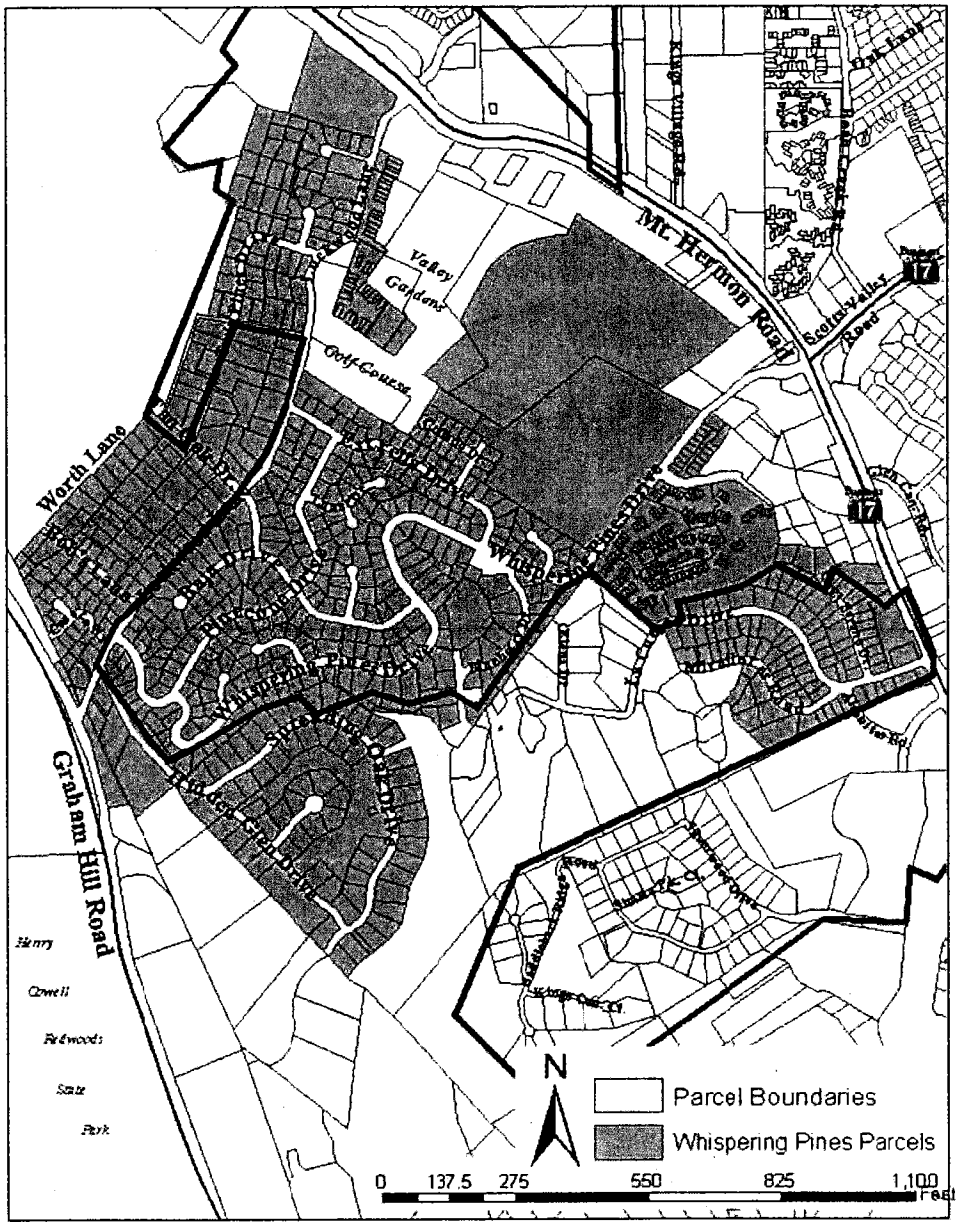

Figure B-3. Scotts Valley West Unit, IPHCP, Santa Cruz County, California

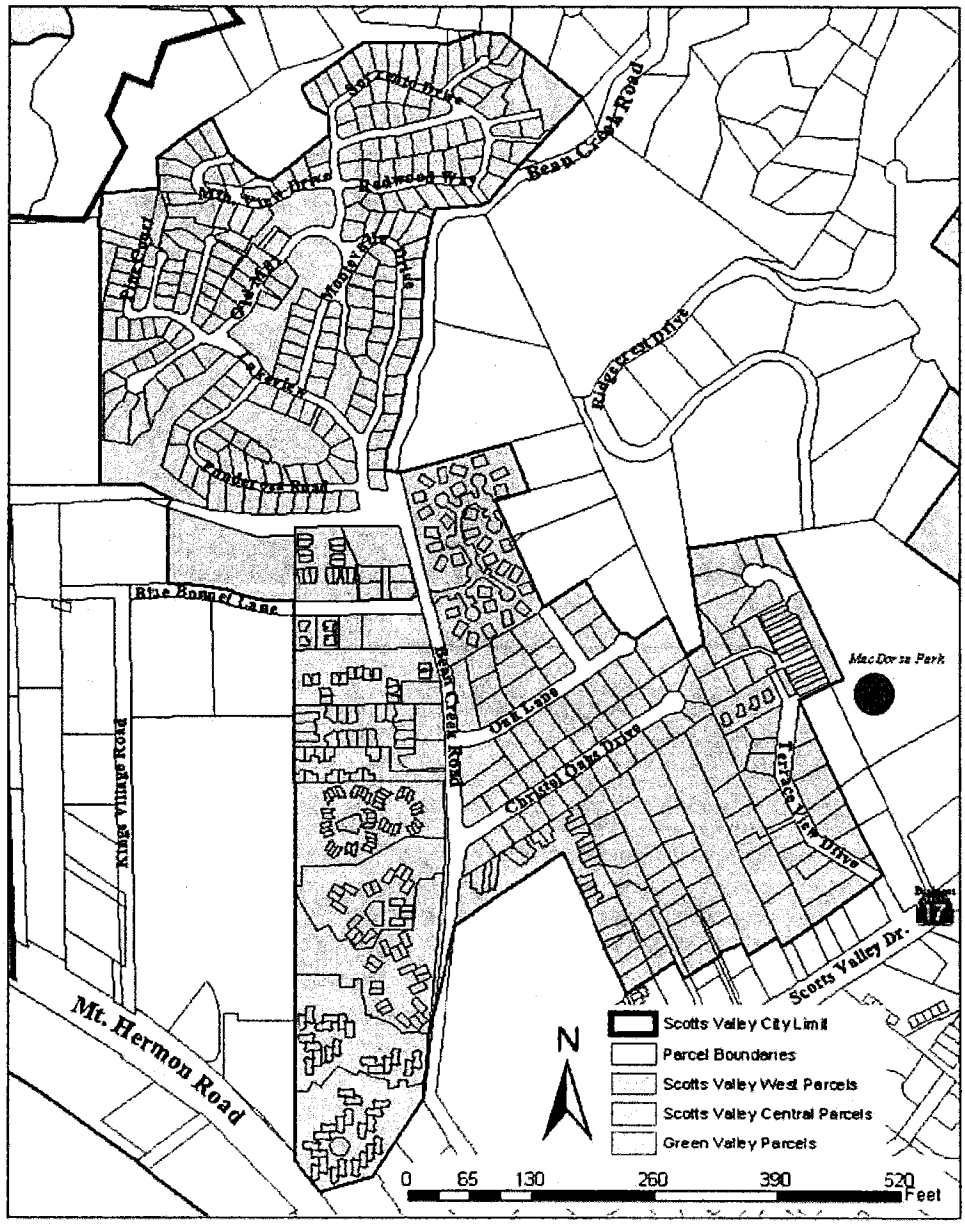

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Figure B-4. Scotts Valley East Unit, IPHCP, Santa Cruz County, California

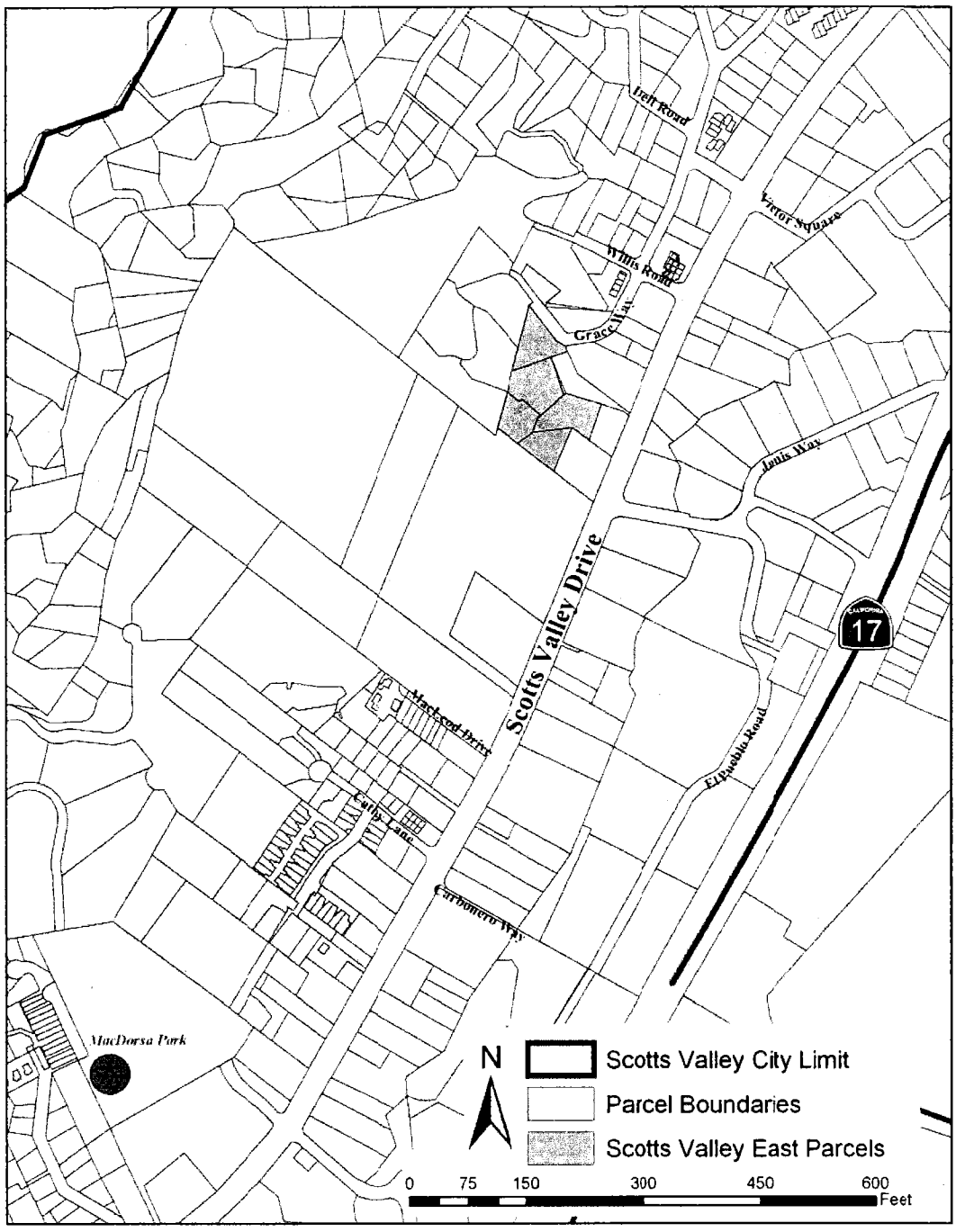


Figure B-5. Green Valley Unit, IPHCP, Santa Cruz County, California

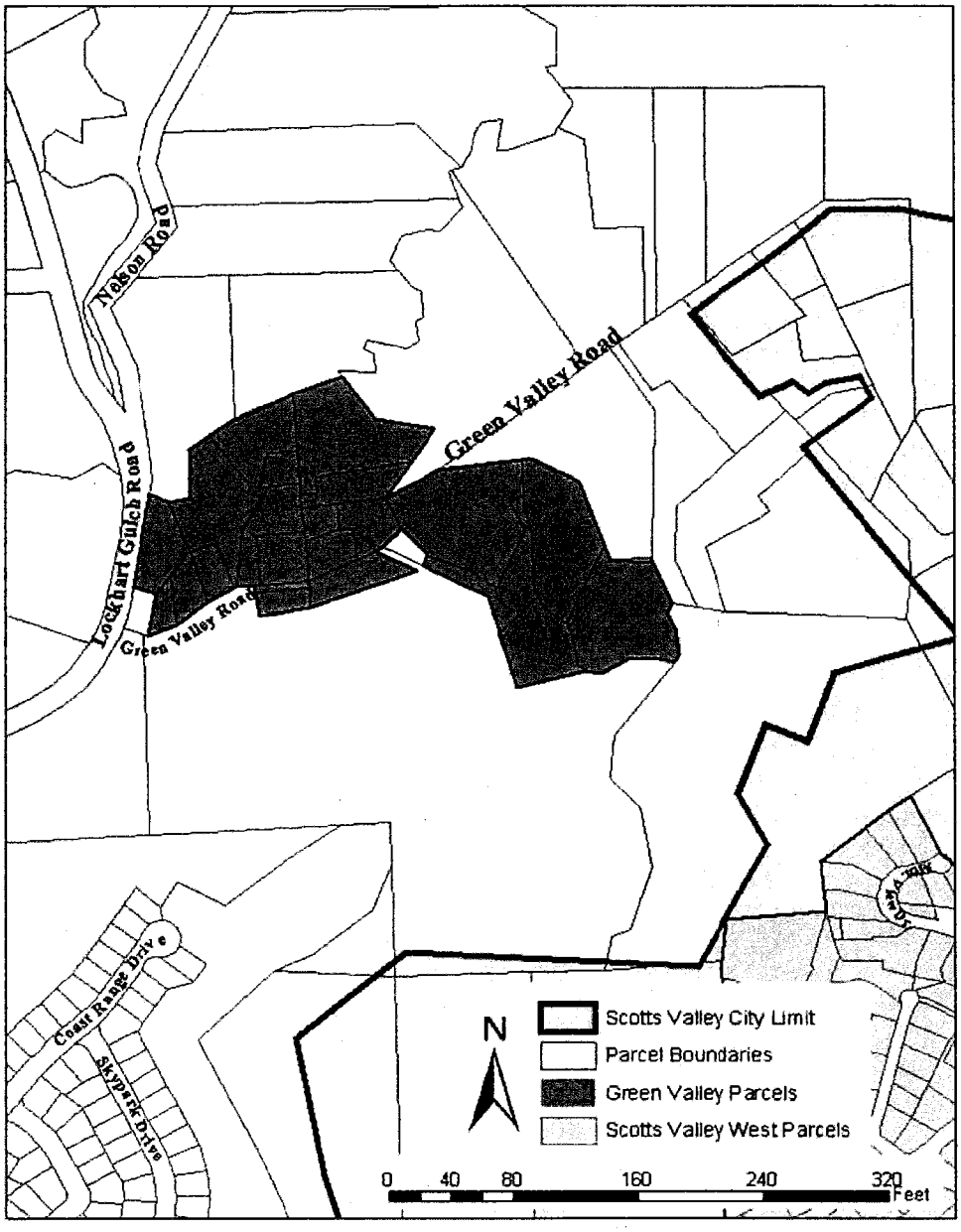


Figure B-6. Mount Hermon Unit, IPHCP, Santa Cruz County, California

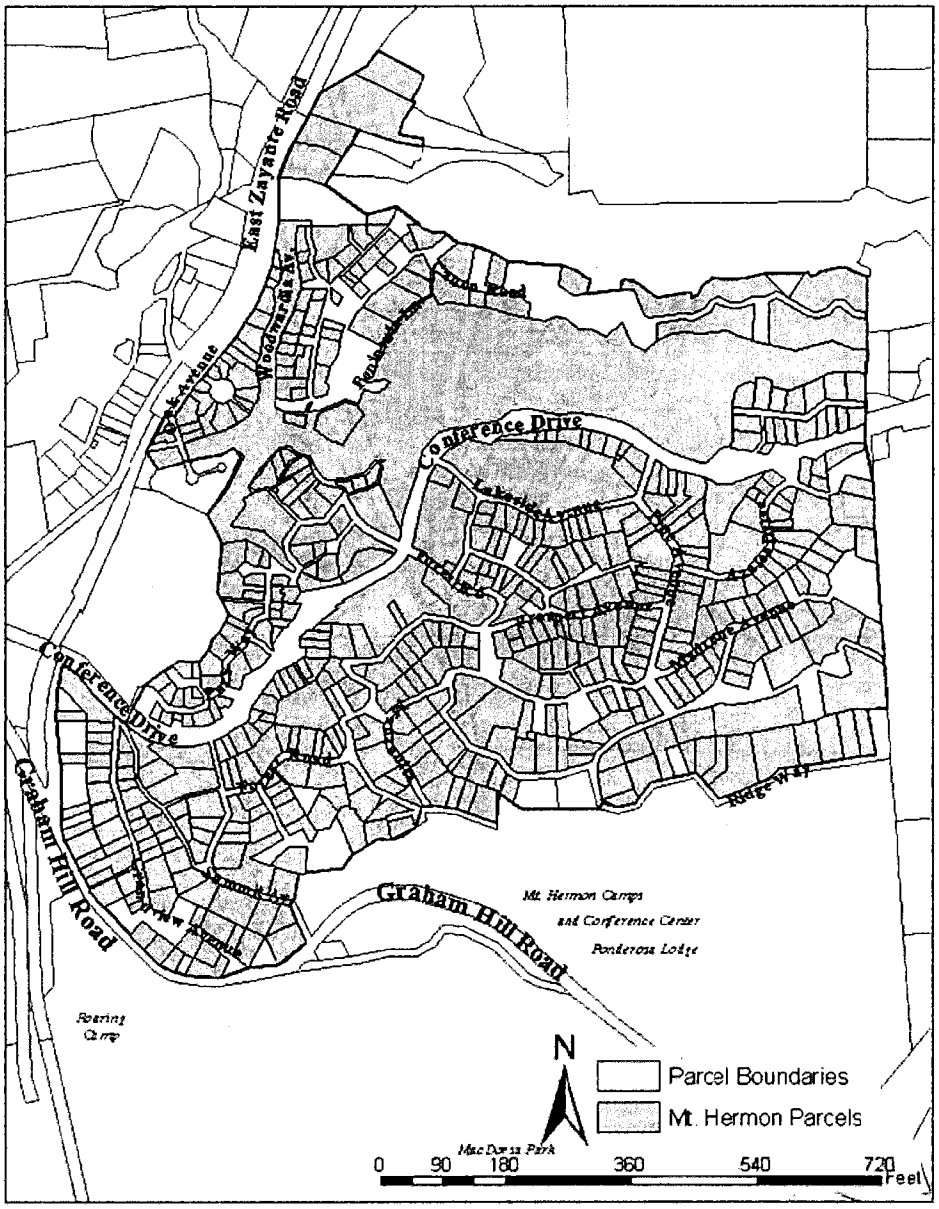


Figure B-7. Zayante Road North Unit, IPHCP, Santa Cruz County, California

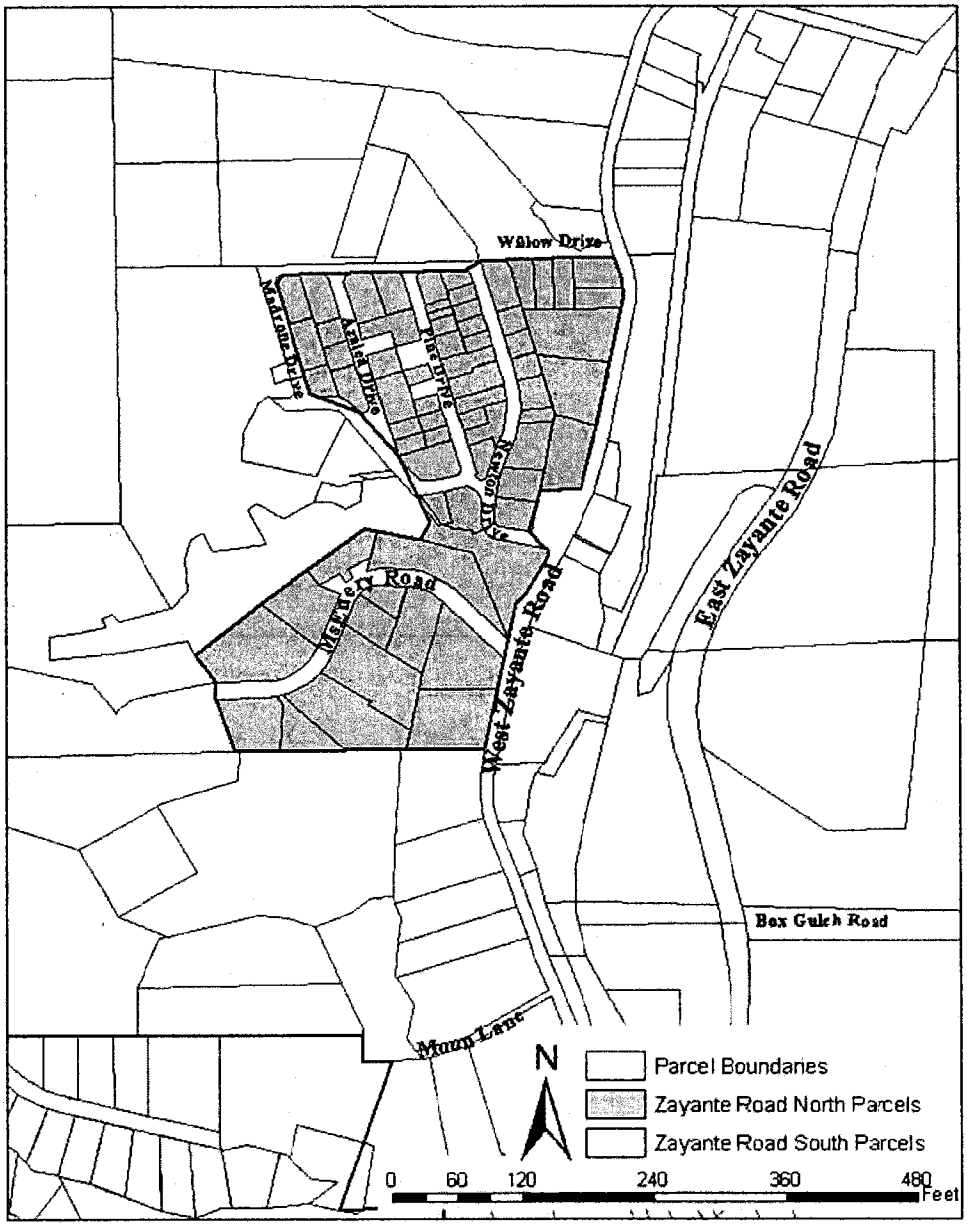


Figure B-8. Zayante Road South Unit, IPHCP, Santa Cruz County, California

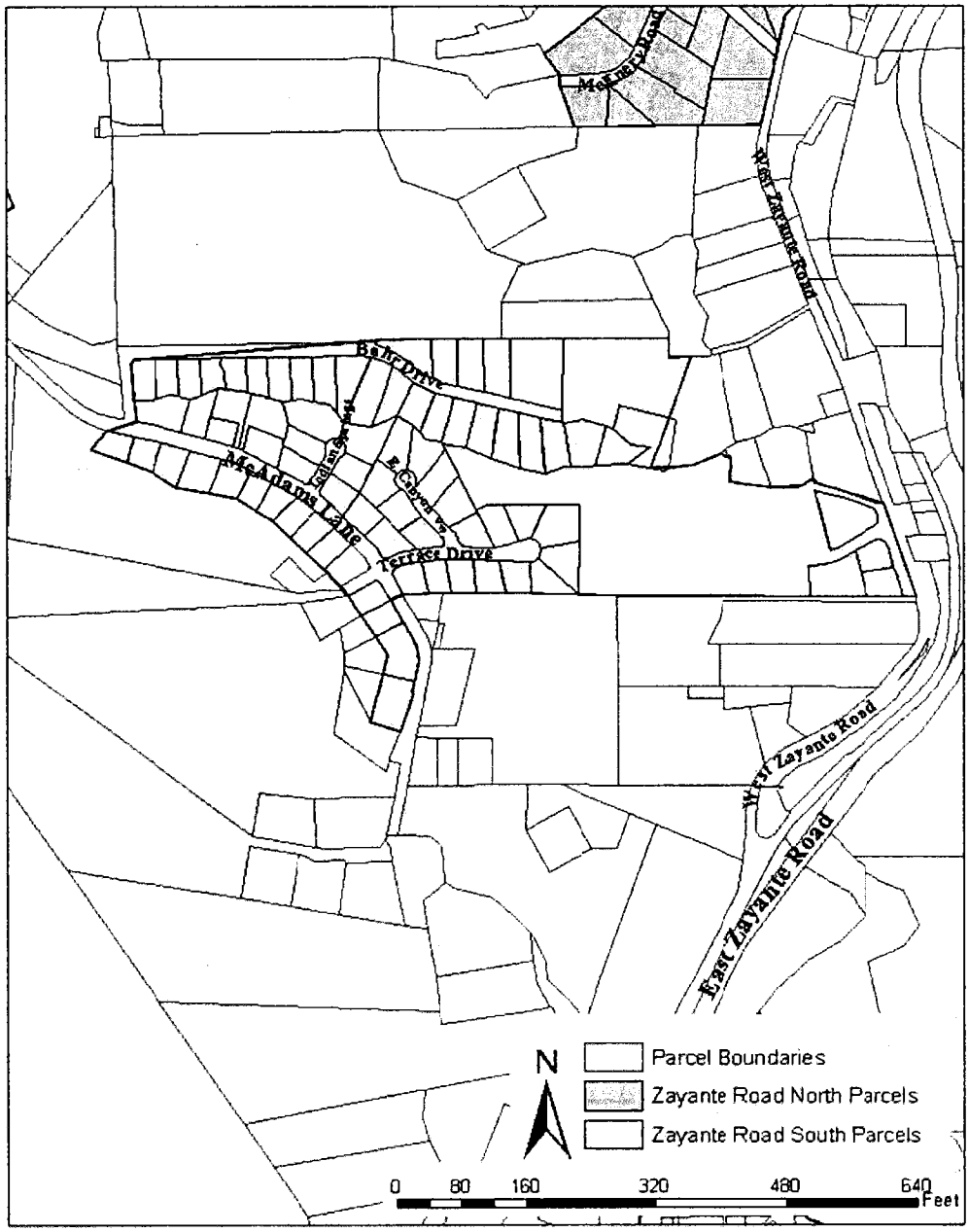


Figure B-9. Ben Lomond South Unit, IPHCP, Santa Cruz County, California

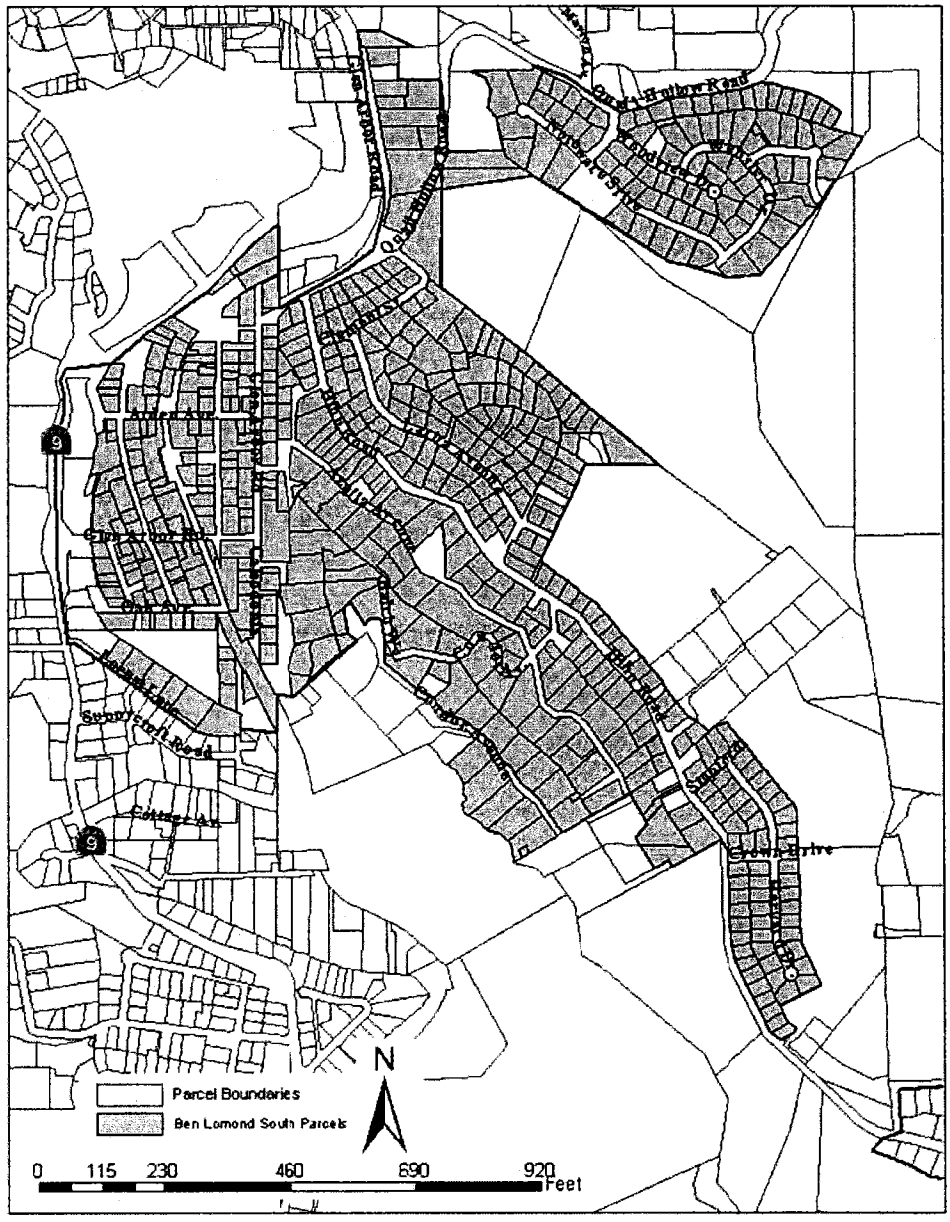
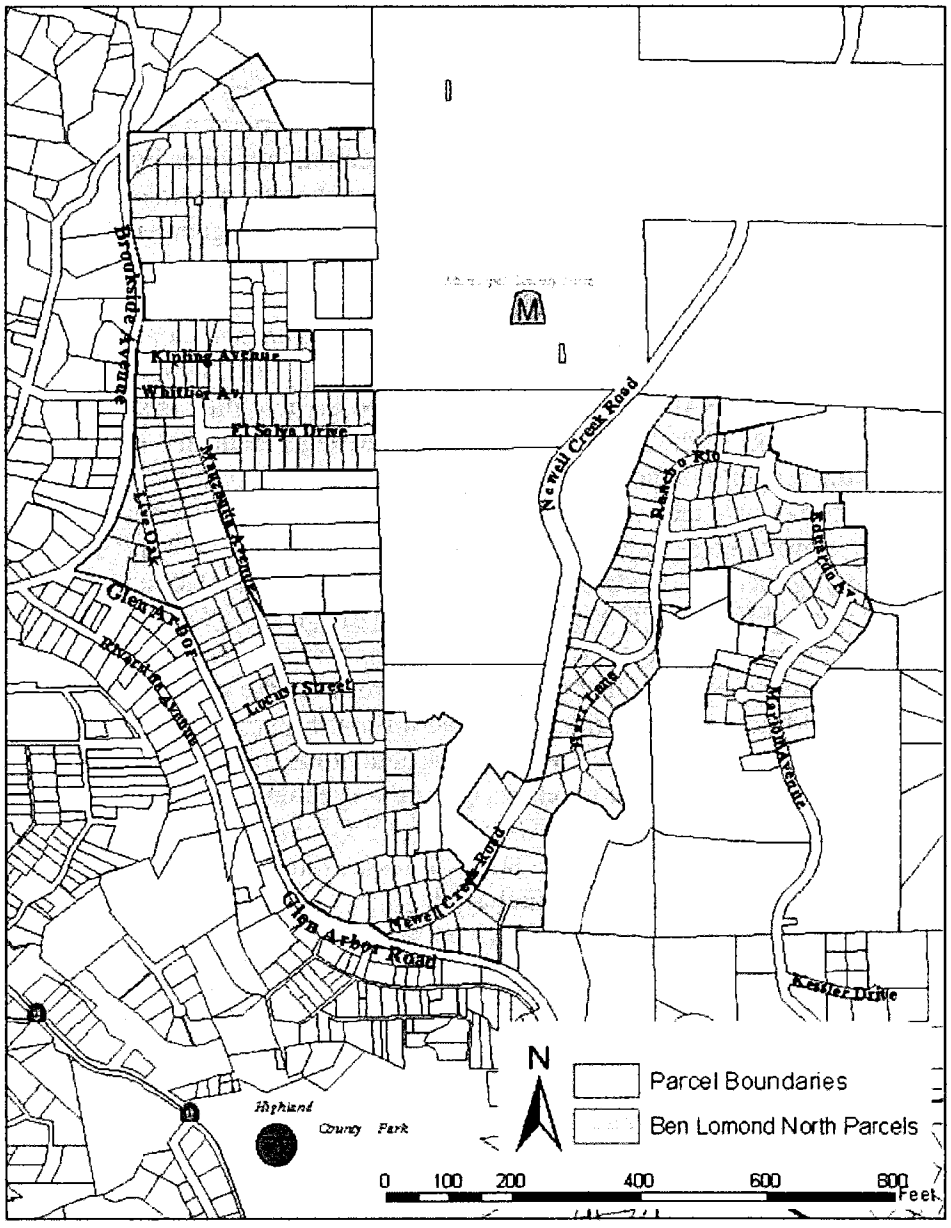


Figure B-10. Ben Lomond North Unit, IPHCP, Santa Cruz County, California



Appendix C. Certificate of Inclusion to Participate in the IPHCP

The United States Fish and Wildlife Service (Service) has issued incidental take permits (Permits) pursuant to the Federal Endangered Species Act authorizing take (50 Code of Federal Regulations 17.3) of the Mount Hermon June beetle in accordance with the terms and conditions of the Permits, the Sandhills Interim-Programmatic Habitat Conservation Plan (IPHCP), and the associated Implementing Agreement. Under the Permits, certain activities by [FILL IN PARTY OR ENTITY] are authorized to take the Mount Hermon June beetle, provided all applicable terms and conditions of the Permits, the IPHCP, and the associated Implementing Agreement are met.

As the owner/operator of the property depicted on Exhibit "1," attached hereto and incorporated herein by this reference, you are entitled to the protection of the [FILL IN CITY OF SCOTTS VALLEY OR COUNTY OF SANTA CRUZ] for the proposed activities as set forth in Exhibit "2," with respect to any take of the Mount Hermon June beetle as identified in the IPHCP. In the event that you use the property depicted on Exhibit "1" for other purposes without the express written consent of the Service, take authorization under the Permits will automatically cease. Such authorization is provided as described in the Permits, the IPHCP, and the Implementing Agreement. By signing this Certificate of Inclusion, you signify your election to receive Take Authorization under the [FILL IN CITY OF SCOTTS VALLEY OR COUNTY OF SANTA CRUZ] Permit in accordance with the terms and conditions thereof. This Certificate of Inclusion does not give Federal agencies additional regulatory control over the signatory nor require the signatory to provide additional information not called for in the Certificate of Inclusion, but instead ensures compliance with 50 Code of Federal Regulations, section 13.25(d). Coverage under the Permit will become effective upon receipt of the executed Certificate of Inclusion by the [FILL IN CITY OF SCOTTS VALLEY OR COUNTY OF SANTA CRUZ]. In the event that the subject property is sold or leased, the buyer or lessee must be informed of these provisions and execute a new Certificate of Inclusion.

_____ _____

Name Signature

_____

Address

_____

Phone

_____

City or County Representative

_____

Date

Appendix D. Sandhills IPHCP Eligibility Checklist

Directions: The following Sandhills IPHCP Eligibility Checklist is intended for use by each landowner/applicant to provide the U.S. Fish and Wildlife Service the information needed to ensure their proposed project is eligible to participate in the IPHCP. Please fill in all sections, attach photographs of the project area, and submit with the application package. Submit completed checklist to: (1) County of Santa Cruz Planning Department, 701 Ocean Street, 4th Floor, Santa Cruz, California 95060; or (2) City of Scotts Valley Building Department, 1 Civic Center Drive, Scotts Valley, California 95066

Applicant Name: _____ **Date:** _____
Address: _____ **APN:** _____
Name of IPHCP Project Unit the Parcel lies within: _____

Type of Project Proposed. Circle the type(s) of proposed development.

Single Family Dwelling / Guest Cottage / Room Addition / Detached Garage / Attached Garage / Remodel / Deck (ground-level or elevated) / Patio / Retaining Wall / Swimming Pool / Spa/Hot Tub / Fence / Sidewalk / Driveway / Other Impervious Surface / Utility Installation (gas, electric, cable, water, septic, sewage)
Other _____

IPHCP Eligibility Criteria. Check the appropriate box for each eligibility requirement. Provide an attachment with detailed explanations for any "no" answers.

YES NO Is the proposed project parcel zoned residential?
YES NO Would the proposed project result in ground disturbance? (grading, excavation, fill, land clearing, building, paving)
YES NO Is the proposed project located on a parcel that is 1.5 acres or less in size?
YES NO Will the total development envelope for the proposed project be less than 15,000 square feet (0.34 acre) on a single parcel?

Total amount of area expected to be disturbed as a result of the proposed project:____square feet

Note: This should include the construction area, as well as areas that will be disturbed as a result of the construction, including ground around the project, storage of building or paving materials, access areas for heavy equipment, and landscaping associated with development)

Appendix E. Sandhills IPHCP Compliance Monitoring Report

Directions: The following Sandhills Compliance Monitoring Report is intended for use by the County of Santa Cruz and City of Scotts Valley to comply with the annual monitoring report requirements of the IPHCP. The appropriate local jurisdiction is to fill in all sections and attach photographs of the project/habitat area.

Applicant Name: _____ **Date:** _____ **Address:** _____
APN: _____ **Incidental Take Permit Number:** _____

Background Information

Project description:

_____
_____
_____

Construction Activities

List the ground-disturbing activities that were conducted on the parcel during this year:

_____
_____

Total amount of area to be disturbed as a result of the proposed project: _____ square feet. Total amount of area disturbed this year: _____ square feet.

On-Site Habitat Conditions

Briefly describe the conditions on the parcel, including whether or not natural habitat conditions have been and will be maintained on the parcel.

_____
_____
_____
_____
_____

IPHCP Minimization Measures

Check the appropriate answer (yes or no) for each minimization measure that was or was not implemented this past year. Provide detailed explanations for all "yes" answers.

__YES __NO Were native plants destroyed, removed, crushed, or otherwise negatively impacted by project activities? If yes, please attach a description.

__YES __NO Were ground-disturbing activities (e.g., vegetation clearing, grading, digging, etc.) conducted between May 15 and August 15 on the project site? If yes, please attach a description.

__YES __NO Was turf grass, dense ground cover plants (e.g., ivy), weed matting, aggregate, or mulch installed on any portion of the project site? If yes, please attach a description.

IPHCP Mitigation

Please indicate how the property owner mitigated for project impacts:
Purchased credits in a conservation bank
Name of bank:_____
Number of conservation credits purchased_____

Recommendations

On an attachment, please outline any recommendations that may solve existing or anticipated problems with regard to project permitting or implementation in the Sandhills.

Note: Attach photographs documenting the conditions within and surrounding the project area.

_____
Printed Name of Individual Completing Report

_____
Signature

Appendix F. Native Sandhills Plant Species

Sources: Morgan 1983, Marangio and Morgan 1987, Lee 1994, McGraw 2004a and 2004b

Genus	Species	Family	Life Form	Jepson Page	Common Name
Achillea	millefolium	Asteraceae	H	189	Yarrow
Adenostoma	fasciculatum	Rosaceae	S	946	Chamise
Antirrhinum	multiflorum	Scrophulariaceae	H	1015	Multi flower snap dragon
Arctostaphylos	nummularia	Ericaceae	S	555	Gloss leaf manzanita
Arctostaphylos	silvicola	Ericaceae	S	556	Manzanita SC
Arctostaphylos	tomentosa ssp. crinita	Ericaceae	S	556	Wooly leaf manzanita
Armeria	maritima ssp. californica	Plumbaginaceae	H	822	Thrift
Artemesia	pycnocephala	Asteraceae	H/S	204	Sandhill sage
Baccharis	pilularis	Asteraceae	S	210	Coyote brush
Calochortus	venustus	Liliaceae	H	1188	Butterfly mariposa
Calyptridium	umbellatum	Portulacaceae	H	898	Pussy paws
Camissonia	contorta	Onagraceae	H	782	Contorted suncup
Camissonia	micrantha	Onagraceae	H	782	Miniature suncup
Campanula	angustiflora	Campanulaceae	H	460	Eastwoods bellflower
Cardionema	ramosissimum	Caryophyllaceae	H	480	Sand mat
Carex	globosa	Cyperaceae	H/S	1126	Globe sedge
Castilleja	affinis	Scrophulariaceae	H	1018	Indian paintbrush
Castilleja	exserta	Scrophulariaceae	H	1018	Purple owl's clover
Ceanothus	cuneatus var. cuneatus	Rhamnaceae	S	935	Buck brush
Ceanothus	papillosus	Rhamnaceae	S	937	Wart stem california lilac
Chlorogalum	pomeridianium	Liliaceae	H	1190	Soap plant
Chorizanthe	diffusa	Polygonaceae	H	858	Diffuse spineflower
Chorizanthe	pungens var. hartwegiana	Polygonaceae	H	859	Ben Lomond spineflower
Chrysolepis	chrysophylla	Fagaceae	T	658	Giant chiquapin
Clarkia	purpurea	Onagraceae	H	792	Purple clarkia
Clarkia	rubicunda	Onagraceae	H	792	Ruby chalice clarkia
Clarkia	unguiculata	Onagraceae	H	793	Mountain garland
Collinsia	bartsiifolia	Scrophulariaceae	H	1026	White collinsia
Crassula	connata	Crassulaceae	H	525	Sand pygmyweed
Cryptantha	clevelandii	Boraginaceae	H	373	Crytantha
Cryptantha	micromeres	Boraginaceae	H	376	Pygmyflower cryptantha
Cryptantha	muricata	Boraginaceae	H	376	Prickly popcorn flower
Cupressus	abramsiana	Cupressaceae	T	112	Santa Cruz cypress
Delphinium	parryi	Ranunculaceae	H	920	Parry's larkspur
Dendromecon	rigida	Papaveraceae	S	811	Bush poppy
Dichelostemma	capitatum	Liliaceae	H	1192	Blue dicks
Dudleya	palmeri	Crassulaceae	H	530	Palmers live forever
Epilobium	minutum	Onagraceae	H	797	Chapparal willow herb
Ericameria	ericoides	Asteraceae	S	252	Mock heather

Appendix F. Native Sandhills Plant Species

Eriodictyon	californicum	Hydrophyllaceae	S	684	Yerba santa
Eriogonum	nudum var. decurrens	Polygonaceae	H/S	876	Ben Lomond buckwheat
Eriogonum	vimineum	Polygonaceae	H	882	Broom buckwheat
Eriophyllum	confertifolium	Asteraceae	S	264	Golden yarrow
Erysimum	teretifolium	Brassicaceae	H	422	Ben Lomond wallflower
Eschscholzia	californica	Papaveraceae	H	814	California poppy
Filago	californica	Asteraceae	H	268	California poppy
Galium	spp.	Rubiaceae	H	978	Bedstraw
Gilia	tenuiflora	Polemoniaceae	H	834	Yellowthroat gilva
Gnaphalium	californicum	Asteraceae	H	271	California pearly everlasting
Gnaphalium	canescens ssp. beneolens	Asteraceae	H	271	Cudweed
Helianthemum	scoparium	Cistaceae	H	518	Peak rockrose
Heteromeles	arbutifolia	Rosaceae	S/T	953	Toyon
Heterotheca	grandiflora	Asteraceae	H	286	Telegraph weed
Heterotheca	sessiliflora ssp. echioides	Asteraceae	H/S	287	Bristly goldenaster
Horkelia	cuneata ssp. cuneata	Rosaceae	H	955	Coast horkelia
Horkelia	cuneata ssp. sericea	Rosaceae	H	955	Wedgeleaf horkelia
Koelaria	macrantha	Poaceae	G	1267	June Grass
Lasthenia	californica	Asteraceae	H	299	California goldfields
Layia	platyglossa	Asteraceae	H	303	Tidy tips
Lessingia	filaginifolia var. filaginifolia	Asteraceae	H	305	California aster
Linanthus	parviflorus	Polemoniaceae	H	843	Common linatus
Linaria	canadensis var. texana	Scrophulariaceae	H	1036	Toad flax
Lithocarpus	densiflora	Fagaceae	T	658	Tanbark oak
Loeflingia	squarrosa	Caryophyllaceae	H	482	Spreading loeflingia
Lotus	scoparius	Fabaceae	S	620	Deerweed
Lotus	strigosus	Fabaceae	H/S	622	Annual lotus
Lupinus	albifrons	Fabaceae	S	626	Silver bush lupine
Lupinus	arboreus	Fabaceae	S	626	Bush lupine
Lupinus	bicolor	Fabaceae	H	628	Pygmy leaved lupine
Luzula	comosa	Juncaceae	H	1166	Pacific woodrush
Madia	madioides	Asteraceae	H	313	Woodland madia
Malacothrix	clevelandii	Asteraceae	H	314	Cleavelands Dandelion
Malacothrix	floccifera	Asteraceae	H	315	Wooly dessert dandelion
Meconella	linearis	Papaveraceae	H	815	Narrow leafed meconella
Mimulus	androsaceus	Scrophulariaceae	H	1040	Rockjasmine monkey flower
Mimulus	aurantiacus	Scrophulariaceae	S	1040	Sticky monkey flower
Mimulus	rattanii car. decurtatus	Scrophulariaceae	H	1044	Monkey flower
Minuartia	californica	Caryophyllaceae	H	484	California sandwort
Minuartia	douglasii	Caryophyllaceae	H	484	Douglas sandwort
Monardella	undulata	Lamiaceae	H	722	Curly leaf mondardella
Monardella	villosa	Lamiaceae	H	722	Coyote mint
Montia	fontana	Portulacaceae	H	904	Blinks
Muilla	maritima	Liliaceae	H	1202	Sea Muilla
Navarettia	atractyloides	Polemoniaceae	H	47	Navarettia
Nemophila	pedunculata	Hydrophyllaceae	H	691	Baby blue eyes
Pectocarya	penicillata	Boraginaceae	H	384	Winged comb seed
Pellaea	mucronata	Pteridaceae	H (fern)	106	Bird foot fern

Pentagramma	triangularis	Pteridaceae	H (fern)	108	Western goldfern
Phacelia	distans	Hydrophyllaceae	H	698	Distant phacelia
Phacelia	douglasii	Hydrophyllaceae	H	698	Douglas phacelia
Phacelia	nemoralis	Hydrophyllaceae	H	702	Shade placelia
Phacelia	ramosissima	Hydrophyllaceae	H	705	Phacelia branching
Pinus	attenuata	Pinaceae	T	118	Knobcone pine
Pinus	ponderosa	Pinaceae	T	120	Ponderosa pine
Pinus	sabiniana	Pinaceae	T	120	Gray pine
Plagiobothrys	tenellus	Boraginaceae	H	390	Pacific popcorn flower
Plantago	erecta	Plantaginaceae	H	821	Plantain
Poa	secunda ssp. secunda	Poaceae	G	1289	Pine bluegrass
Polypodium	californicum	Polypodiaceae	H (fern)	108	California polypody
Psuedotsuga	menziesii	Pinaceae	T	118	Douglas fir
Pteridium	aquilinum var. pubescens	Dennstaedtiaceae	H	91	Brake
Quercus	agrifolia	Fagaceae	T	660	Coast live oak
Quercus	chrysolepis	Fagaceae	T	661	White live oak
Quercus	wislizenii	Fagaceae	T	662	Interior live oak
Rhamnus	californica	Rhamnaceae	S	942	Coffeeberry
Ribes	divaricatum	Grossulariaceae	S	678	no common name?
Salvia	columbariae	Lamiaceae	S	728	Chia
Salvia	mellifera	Lamiaceae	S	728	Black sage
Saxifraga	californica	Saxifragaceae	H	1009	California saxifrage
Scutellaria	tuberosa	Lamiaceae	H	730	Skullcap
Sequoia	sempervirens	Taxodiaceae	T	122	Coast redwood
Silene	verecunda ssp. platyota	Caryophyllaceae	H	493	San Francisco campion
Stephanomeria	virgata	Asteraceae	H	348	Tall stephanomeria
Stylocline	gnaphaloides	Asteraceae	H	349	Everlasting nest straw
Thysanocarpus	curvipes	Brassicaceae	H	447	Fringe pod
Toxicodendron	diversilobum	Anacardiaceae	S	136	Western poison oak
Vaccinum	ovatum	Ericaceae	S	567	Huckleberry
Vulpia	microstachys var. ciliata	Poaceae	G	1302	Eastwood fescue
Vulpia	microstachys var. confusa	Poaceae	G	1302	Tracy's fescue
Vulpia	microstachys var. pauciflora	Poaceae	G	1302	Pacific fescue
Vulpia	octoflora var. hirtell	Poaceae	G	1302	Fescue

Key

Life Form: G=Grass; H=Herb; S=Shrub; T=Tree

Jepson Page: Page number in The Jepson Manual (Hickman 1993) on which a detailed description of the subject plant species can be found.

APPENDIX G

IMPLEMENTING AGREEMENT

<<To be inserted when complete>>

IMPLEMENTING AGREEMENT

by and between the

UNITED STATES FISH AND WILDLIFE SERVICE

and the

COUNTY OF SANTA CRUZ

for the

"SANDHILLS INTERIM PROGRAMMATIC HABITAT CONSERVATION PLAN"

February 2011

CONTENTS

14.7 No Third-Party Beneficiaries

14.8 Relationship to the ESA and other Authorities

14.9 References to Regulations

14.10 Applicable Laws

14.11 Successors and Assigns

1.0 PARTIES

The Parties to this Implementing Agreement are the County of Santa Cruz (County) and the United States Fish and Wildlife Service (Service).

2.0 RECITALS AND PURPOSES

2.1 Recitals. The Parties have entered into this Agreement in consideration of the following facts:

(a) The ten project units identified in the Sandhills Interim Programmatic Habitat Conservation Plan (IPHCP) have been determined to provide, or potentially provide, habitat for the following Listed Species: Mount Hermon June beetle (*Polyphylla barbata*) and Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*);

(b) Permittee has developed a series of measures, described in the IPHCP, to minimize and mitigate to the maximum extent practicable the effects of Take of Covered Species incidental to Covered Activities; and

(c) Permittee will, for the benefit of private property owners within the IPHCP project units, extend Take Authorization received from the Service to eligible property owners through issuance of a Certificate of Inclusion as set forth in the IPHCP and this Agreement.

2.2 Purposes. The purposes of this Agreement are:

(a) To ensure implementation of each of the terms of the IPHCP;

(b) To describe remedies and recourse should any party fail to perform its obligations as set forth in this Agreement; and,

(c) To provide assurances to the Permittee that as long as the terms of the IPHCP, the Permit, and this Agreement are performed, no additional mitigation will be required of Permittee, with respect to Covered Species, except as provided for in this Agreement or required by law.

3.0 DEFINITIONS

The following terms as used in this Agreement will have the meanings set forth below:

3.1 Terms Defined in Endangered Species Act. Terms used in this Agreement and specifically defined in the Endangered Species Act (ESA) or in regulations adopted by the Service under the ESA have the same meaning as in the ESA and those implementing regulations.

3.2 Agreement means this Implementing Agreement.

3.3 Certificate of Inclusion means a document signed by each property owner and the County to obtain incidental take coverage and commit to compliance and mitigation according to the IPHCP.

3.4 Changed Circumstances means changes in circumstances affecting a Covered Species or the geographic area covered by the IPHCP that can reasonably be anticipated by the parties to the IPHCP and that can reasonably be planned for in the IPHCP (e.g. the listing of a new species.) Changed Circumstances and the planned responses to those circumstances are described in section 7.1 of the IPHCP. Changed Circumstances are not Unforeseen Circumstances.

3.5 Covered Activities means development projects that meet all of the following criteria, provided that these activities are otherwise lawful:

(a) The project is located within one of the ten IPHCP project units;

(b) The project is residential in nature;

(c) The project would result in ground disturbance to Zayante Soils; and

(d) The Development Envelope for the project, when combined with the Development Envelope for any project previously implemented on the same parcel using the IPHCP and associated Permit, does not exceed 15,000 square feet.

3.6 Covered Lands means the lands upon which the Permit authorizes Take of Covered Species and the lands to which the IPHCP's conservation and mitigation measures apply. These lands are described in Appendix B of the IPHCP.

3.7 Covered Species means the following species, each of which the IPHCP addresses in a manner sufficient to meet all of the criteria for issuing an incidental take permit under section 10(a)(1)(B) of the ESA: Mount Hermon June beetle (*Polyphylla barbata*) and Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*).

3.8 Development Envelope means any portion of a project site that will undergo any of the following activities: grading, land clearing, paving, construction or alteration of any structure or part thereof, including access to and construction of parking or staging areas, installation or repair of septic systems, installation of wells, tree and shrub removal, or the deposition of refuse or debris.

3.9 IPHCP means the interim programmatic habitat conservation plan prepared by the Service, County, and City of Scotts Valley for a portion of the Sandhills ecosystem within the County of Santa Cruz , California (as identified in Appendix B of the IPHCP).

3.10 Listed Species means a species (including a subspecies, or a distinct population segment of a vertebrate species) that is listed as endangered or threatened under the ESA.

3.11 Party and Parties mean the signatories to this Agreement, namely the United States Fish and Wildlife Service and County of Santa Cruz.

3.12 Permit means the incidental take permit issued by the Service to Permittee pursuant to Section 10(a)(1)(B) of the ESA for Take incidental to Covered Activities within the ten project units identified in the IPHCP, as it may be amended from time to time.

3.13 Permittee means the County of Santa Cruz.

3.14 Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any listed or unlisted Covered Species. Harm means an act that actually kills or injures a member of a Covered Species, including an act that causes significant habitat modification or degradation where it actually kills or injures a member of a Covered Species by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

3.15 Take Authorization means permission to Take Covered Animal Species pursuant to Section 10(a)(1)(B) of the ESA.

3.16 Third Party or Parties means a property owner(s) with Take Authorization extended by the County through a Certificate of Inclusion.

3.17 Unforeseen Circumstances means changes in circumstances affecting a species or geographic area covered by a conservation plan that could not reasonably have been anticipated by plan developers and the Service at the time of the conservation plan's negotiation and development, and that result in a substantial and adverse change in the status of the Covered Species.

3.18 Zayante Soils means soils derived from weathering of the Santa Margarita formation sandstone in Santa Cruz County, California. Zayante soils are coarse textured, sandy soils, which support the Sandhills ecosystem near the city of Scotts Valley and the communities of Ben Lomond, Mount Hermon, Felton, Olympia, and Bonny Doon.

4.0 OBLIGATIONS OF THE PARTIES

4.1 Obligations of Permittee. Permittee will fully and faithfully perform all obligations assigned to it under this Agreement, the Permit, and the IPHCP.

4.2 Obligations of the Service. Upon execution of this Agreement by all Parties, and satisfaction of all other applicable legal requirements, the Service will issue a Permit under Section 10(a)(1)(B) of the ESA, to the Permittee authorizing Take of the Mountain Hermon June beetle

resulting from Covered Activities on Covered Lands.

4.2.1 Permit Coverage. The Permit will identify all Covered Species [i.e., Mount Hermon June beetle (*Polyphylla barbata*) and Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*)]. The Permit will take effect for listed Covered Species at the time the Permit is issued

4.2.2 No Surprises Assurances. Pursuant to the Federal "No Surprises" provisions of 50 Code of Federal Regulations, sections 17.22(b)(5) and 17.32(b)(5), as long as the terms and conditions of this Agreement, the IPHCP, and the Permit are fully satisfied, the Service will not require additional measures to the extent restricted or proscribed in the No Surprises rule from the Permittee without its' consent unless required by law. However, notwithstanding anything to the contrary in this Agreement and the IPHCP, the Service retains statutory authority, under both sections 7 and 10 of the ESA, to revoke incidental take permits that are found likely to jeopardize the continued existence of a Listed Species.

4.3 Interim Obligations upon a Finding of Unforeseen Circumstances. If the Service makes a finding of Unforeseen Circumstances, during the period necessary to determine the nature and location of additional or modified mitigation, Permittee will avoid contributing to appreciably reducing the likelihood of the survival and recovery of the affected species.

5.0 INCORPORATION OF IPHCP

The IPHCP and each of its provisions are intended to be, and by this reference are, incorporated herein. In the event of any direct contradiction between the terms of this Agreement and the IPHCP, the terms of this Agreement will control. In all other cases, the terms of this Agreement and the terms of the IPHCP will be interpreted to be supplementary to each other.

6.0 THIRD PARTY TAKE AUTHORIZATION

6.1 Authorization. Upon execution of this Agreement by the Parties and issuance of the Permit by the Service, the Permittee may extend their Take Authorization to property owners undertaking Covered Activities. Such Covered Activities must be under the direct control of the Permittee in conformance with approvals granted by the Permittee and carried out in conformity with a Certificate of Inclusion and in compliance with this Agreement, the Permit and IPHCP. As part of discretionary and building permits that result in ground disturbance of Zayante Soils within the IPHCP project units, the Permittee shall include a Certificate of Inclusion requiring compliance with the Permit, the IPHCP and this Agreement. Such property owners shall receive Take Authorization provided they are in full compliance with all requirements of this Agreement, the IPHCP, the Permit, issued entitlements and all other applicable requirements.

6.2 Timing of Take Authorization. Authorization of Take for Third Parties shall occur

upon issuance of the Certificate of Inclusion by the Permittee. The Take Authorization conferred by the Permittee to Third Parties shall be for the length of time, and run concurrently with, the specific land development approval and the term of the Permit.

6.3 Effect of IPHCP Amendments on Third Parties. Amendments or other revisions to the IPHCP, subsequent to the granting of Take to a Third Party by the Permittee, shall not affect the Take conferred upon the Third Party or the level of compensation required unless the Third Party, the Service, and the Permittee all agree to such amendment or revision.

6.4 Effect of Revocation or Suspension of Permit on Third Parties. In the event that the Service revokes or suspends all or a portion of the Take Authorization allowed under the Permit, and provided the Permittee continues to carry out its obligations under the IPHCP, this Agreement and the Permit, the Take Authorization extended to property owners through a Certificate of Inclusion will remain in effect as to each individual Third Party granted Take Authorization prior to revocation or suspension unless the Service determines that continuation of the Permit with regard to Take by Third Parties granted Take Authorization would likely jeopardize a species listed under the Federal ESA. In this event, the Service, Permittee and Third Parties granted Take Authorization shall meet and make a good faith effort to reach a mutually satisfactory resolution. If these parties cannot reach a mutually satisfactory resolution, the Service may revoke or suspend all Take Authorization under the IPHCP for that listed species. In this event, Third Parties granted Take Authorization would not be eligible for any refund of any mitigation contribution.

6.5 Effect of No Surprises Assurances on Third Parties. Pursuant to the No Surprises Rule, the Service shall not require the commitment of additional compensation or other mitigation from the Permittee, and the Permittee will not require such commitments from a Third Party pursuant to the IPHCP and this Agreement beyond those measures imposed on the Third Party by the Permittee in accordance with the IPHCP and this Agreement, unless agreed to by the Third Party.

6.6 Retention of Enforcement Authority Over Third Parties. The Parties reserve the right to enforce all applicable federal, state, and local laws against persons that engage in unlawful land development activities without obtaining proper permits and approvals. The Parties further reserve the right to enforce all applicable federal, state, and local laws against Third Parties conducting land development activities within the IPHCP project units not in compliance with project approvals pursuant to the IPHCP.

7.0 TERM

7.1 Initial Term. This Agreement and the IPHCP will become effective on the date that the Service issues the Permit. This Agreement, the IPHCP, and the Permit will remain in effect for a period of five years from issuance of the original Permit, except as provided below.

7.2 Permit Suspension or Revocation. The Service may suspend or revoke the Permit for cause in accordance with the laws and regulations in force at the time of such suspension or

revocation (See 5 U.S.C. 558; 50 C.F.R. 13.27 - 13.29) except that the Service may revoke the Permit based on a determination that the continuation of the permitted activity would be likely to jeopardize the continued existence of the Covered Species only if the Service has not been successful in remedying the situation in a timely fashion through other means as provided in the No Surprises rule (50 CFR 17.22(b)(5) and 17.32(b)(5)). Such suspension or revocation would apply to the entire Permit. In the event of suspension or revocation, Permittee's obligations under this Agreement and the IPHCP will continue until the Service determines that all Take of Covered Species that occurred under the Permit has been fully mitigated in accordance with the IPHCP.

7.3 Extension of the Permit. Upon agreement of the Parties and compliance with all applicable laws, the Permit may be extended beyond its initial term under regulations of the Service in force on the date of such extension. If Permittee desires to extend the Permit, it will so notify the Service at least 180 days before the then-current term is scheduled to expire. Extension of the Permit constitutes extension of the IPHCP and this Agreement for the same amount of time, subject to any modifications that the Service may require at the time of extension. However, it does not constitute an increase in Take of the Covered Species or change in the scope of the IPHCP.

8.0 FUNDING

The Permittee warrants that it has, and will expend, such funds as may be necessary to fulfill its obligations under the IPHCP. The Permittee will promptly notify the Service of any material change in the Permittee's financial ability to fulfill its obligations. In addition to providing any such notice, the Permittee will provide the Service with a copy of its annual report each year of the Permit, or with such other reasonably available financial information that the Parties agree will provide adequate evidence of the Permittee's ability to fulfill its obligations.

9.0 MONITORING AND REPORTING

9.1 Planned Periodic Reports. As described in the IPHCP, the Permittee will submit periodic reports describing its' activities and results of the monitoring program provided for in the IPHCP.

9.2 Other Reports. The Permittee will provide, within 30 days of being requested by the Service, any additional information in its possession or control related to implementation of the IPHCP that is requested by the Service for the purpose of assessing whether the terms and conditions of the Permit and the IPHCP, including the IPHCP's adaptive management plan, are being fully implemented.

9.3 Certification of Reports. All reports will include the following certification from a responsible official who supervised or directed preparation of the report:

I certify that, to the best of my knowledge, after appropriate inquiries of all relevant

persons involved in the preparation of this report, the information submitted is true, accurate, and complete.

9.4 Monitoring by the Service. The Service may conduct inspections and monitoring in connection with the Permit in accordance with its' regulations. (See 50 C.F.R. 13.47)

10.0 CHANGED CIRCUMSTANCES

10.1 Permittee-initiated Response to Changed Circumstances. The Permittee will give notice to the Service within seven days after learning that any of the Changed Circumstances listed in Section 7.1 of the IPHCP has occurred. As soon as practicable thereafter, but no later than 30 days after learning of the Changed Circumstances, the Permittee will modify its activities in the manner described in Section 7.1 of the IPHCP, to the extent necessary to mitigate the effects of the Changed Circumstances on Covered Species, and will report to the Service on its actions. The Permittee will make such modifications without awaiting notice from the Service.

10.2 Service-initiated Response to Changed Circumstances. If the Service determines that Changed Circumstances have occurred and that the Permittee has not responded in accordance with Section 7.1 of the IPHCP, the Service will so notify the Permittee and will direct the Permittee to make the required changes. Within 30 days after receiving such notice, the Permittee will make the required changes and report to the Service on its actions. Such changes are provided for in the IPHCP, and hence do not constitute Unforeseen Circumstances or require amendment of the Permit or IPHCP.

10.3 Listing of Species that are not Covered Species. In the event that a non-covered species that may be affected by Covered Activities becomes listed under the ESA, the Permittee will implement the no-take/no-jeopardy measures identified by the Service until the Permit is amended to include such species, or until the Service notifies the Permittee that such measures are no longer needed to avoid jeopardy to, take of, or adverse modification of the critical habitat of, the non-covered species.

11.0 ADAPTIVE MANAGEMENT

Any adaptive management deemed necessary shall be in accordance with the April 24, 2006 Adaptive Management and Monitoring Plan for the Zayante Sandhills Conservation Bank, or most current Service approved version of this plan.

12.0 MODIFICATIONS AND AMENDMENTS

12.1 Minor modifications.

(a) Any Party may propose minor modifications to the IPHCP or this Agreement by providing notice to the other Party. Such notice shall include a statement of the reason for the proposed modification and an analysis of its environmental effects, including its effects on operations under the IPHCP and on Covered Species. The Parties will use best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties' written approval. If, for any reason, a receiving Party objects to a proposed modification, it must be processed as an amendment of the Permit in accordance with subsection 11.2 of this Agreement. The Service will not propose or approve minor modifications to the IPHCP or this Agreement if the Service determines that such modifications would result in operations under the IPHCP that are significantly different from those analyzed in connection with the original IPHCP, adverse effects on the environment that are new or significantly different from those analyzed in connection with the original IPHCP, or additional Take not analyzed in connection with the original IPHCP.

(b) Minor modifications to the IPHCP and this Agreement processed pursuant to this subsection may include but are not limited to the following:

(1) correction of typographic, grammatical, and similar editing errors that do not change the intended meaning;

(2) correction of any maps or exhibits to correct errors in mapping or to reflect previously approved changes in the Permit or IPHCP;

(3) minor changes to survey, monitoring or reporting protocols; and

(4) other types of modifications that are minor in relation to the IPHCP, that the Service has analyzed and agreed to.

(c) Any other modifications to the IPHCP or this Agreement will be processed as amendments of the Permit in accordance with subsection 12.2 of this Agreement.

12.2 Amendment of the Permit. The Permit may be amended in accordance with all applicable legal requirements, including but not limited to the ESA, the National Environmental Policy Act, and the Service's permit regulations. The Party proposing the amendment shall provide a detailed description of the amendment, a statement of the reasons for the amendment and an analysis of its environmental effects, including its effects on operations under the IPHCP and on Covered Species, and a certification that they are in compliance with the Permit.

13.0 REMEDIES, ENFORCEMENT, AND DISPUTE RESOLUTION

13.1 In General. Except as set forth below, each Party shall have all remedies otherwise available to enforce the terms of this Agreement, the Permit, and the IPHCP.

13.2 No Monetary Damages. No Party shall be liable in damages to any other Party or other person for any breach of this Agreement, any performance or failure to perform a mandatory or discretionary obligation imposed by this Agreement or any other cause of action arising from this Agreement.

12.3 Injunctive and Temporary Relief. The Parties acknowledge that the Covered Species are unique and that their loss as species would result in irreparable damage to the environment, and that therefore injunctive and temporary relief may be appropriate to ensure compliance with the terms of this Agreement.

13.4 Enforcement Authority of the United States. Nothing contained in this agreement is intended to limit the authority of the United States government to seek civil or criminal penalties or otherwise fulfill its enforcement responsibilities under the ESA or other applicable law.

13.5 Dispute Resolution. The Parties recognize that disputes concerning implementation of, compliance with, or termination of this Agreement, the IPHCP, and the Permit may arise from time to time. The Parties agree to work together in good faith to resolve such disputes, using the informal dispute resolution procedures set forth in this section, or such other procedures upon which the Parties may later agree. However, if at any time any party determines that circumstances so warrant, it may seek any available remedy without waiting to complete informal dispute resolution.

13.5.1 Informal Dispute Resolution Process. Unless the Parties agree upon another dispute resolution process, or unless an aggrieved party has initiated administrative proceedings or suit in federal court as provided in this section, the Parties may use the following process to attempt to resolve disputes:

(a) The aggrieved Party will notify the other Party of the provision that may have been violated, the basis for contending that a violation has occurred, and the remedies it proposes to correct the alleged violation.

(b) The Party alleged to be in violation will have 30 days, or such other time as may be agreed, to respond. During this time it may seek clarification of the information provided in the initial notice. The aggrieved Party will use its best efforts to provide any information then available to it that may be responsive to such inquiries.

(c) Within 30 days after such response was provided or was due, representatives of the Parties having authority to resolve the dispute will meet and negotiate in good faith toward a solution satisfactory to all Parties, or will establish a specific process and

timetable to seek such a solution.

(d) If any issues cannot be resolved through such negotiations, the Parties will consider non-binding mediation and other alternative dispute resolution processes and, if a dispute resolution process is agreed upon, will make good faith efforts to resolve all remaining issues through that process.

14.0 MISCELLANEOUS PROVISIONS

14.1 No Partnership. Neither this Agreement nor the IPHCP shall make or be deemed to make any Party to this Agreement the agent for or the partner of any other Party.

14.2 Notices. Any notice permitted or required by this Agreement shall be in writing, delivered personally to the persons listed below, or shall be deemed given five (5) days after deposit in the United States mail, certified and postage prepaid, return receipt requested and addressed as follows, or at such other address as any Party may from time to time specify to the other Parties in writing. Notices may be delivered by facsimile or other electronic means, provided that they are also delivered personally or by certified mail. Notices shall be transmitted so that they are received within the specified deadlines.

Deputy Regional Director
Pacific Southwest Region,
United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2606
Sacramento, CA 95825
Telephone: 916-414-6464

Planning Director
County of Santa Cruz
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060
Telephone: 831-454-3136

13.4 Entire Agreement. This Agreement, together with the IPHCP and the Permit, constitutes the entire Agreement among the Parties. It supersedes any and all other agreements, either oral or in writing, among the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters, and each party acknowledges that no representation, inducement, promise or agreement, oral or otherwise, has been made by any other Party or anyone acting on behalf of any other party that is not embodied herein.

14.4 Elected Officials not to Benefit. No member of or delegate to Congress shall be

entitled to any share or part of this Agreement, or to any benefit that may arise from it.

14.5 Availability of Funds. Implementation of this Agreement and the IPHCP by the Service is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this Agreement to expend any federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

14.6 Duplicate Originals. This Agreement may be executed in any number of duplicate originals. A complete original of this Agreement shall be maintained in the official records of each of the Parties hereto.

14.7 No Third-party Beneficiaries. Without limiting the applicability of rights granted to the public pursuant to the ESA or other federal law, this Agreement shall not create any right or interest in the public, or any member thereof, as a third-party beneficiary hereof, nor shall it authorize anyone not a party to this agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.

14.8 Relationship to the ESA and other Authorities. The terms of this Agreement shall be governed by and construed in accordance with the ESA and applicable federal law. In particular, nothing in this Agreement is intended to limit the authority of the Service to seek penalties or otherwise fulfill their responsibilities under the ESA. Moreover, nothing in this Agreement is intended to limit or diminish the legal obligations and responsibilities of the Service as an agency of the federal government. Nothing in this Agreement will limit the right or obligation of any federal agency to engage in consultation required under Section 7 of the ESA or other federal law; however, it is intended that the rights and obligations of Permittee under the IPHCP and this Agreement will be considered in any consultation affecting Permittee's use of the Covered Lands.

14.9 References to Regulations. Any reference in this Agreement, the IPHCP, or the Permit to any regulation or rule of the Service shall be deemed to be a reference to such regulation or rule in existence at the time an action is taken.

14.10 Applicable Laws. All activities undertaken pursuant to this Agreement, the IPHCP, or the Permit must be in compliance with all applicable state and federal laws and regulations.

14.11 Successors and Assigns. This Agreement and each of its covenants and conditions shall be binding on and shall inure to the benefit of the Parties and their respective successors and assigns. Assignment or other transfer of the Permit shall be governed by the Service's regulations in force at the time.

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Implementing Agreement to be in effect as of the date that the Service issues the Permit.

BY _____ Date _____

Deputy Regional Director
Pacific Southwest Region
United States Fish and Wildlife Service
Sacramento, California

BY _____ Date _____

Planning Director
County of Santa Cruz
Santa Cruz, California

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

3-201
(1/97)

FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

COUNTY OF SANTA CRUZ
701 OCEAN STREET
PLANNING DEPT., 4TH FLOOR
SANTA CRUZ, CA 95060
U.S.A.

2. AUTHORITY-STATUTES
16 USC 1539(a)

REGULATIONS
50 CFR 17.22

50 CFR 13

3. NUMBER
TE44928A-0

4. RENEWABLE	5. MAY COPY
☒ YES ☐ NO	☒ YES ☐ NO
6. EFFECTIVE	7. EXPIRES

8. NAME AND TITLE OF PRINCIPAL OFFICER *(If #1 is a business)*
MATTHEW G JONSTON
ENVIRONMENTAL COORDINATOR

9. TYPE OF PERMIT
NATIVE ENDANGERED SP. HABITAT CONSERVATION PLAN - E WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED
The permit area occurs within the Sandhill region of Santa Cruz County, CA, identified in the Interim-Programmatic HCP.

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. Further conditions of authorization are contained in the attached Special Terms and Conditions.

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ISSUED BY	TITLE	DATE
	DEPUTY REGIONAL DIRECTOR	

U.S. Fish and Wildlife Service, Ventura, California
Special Terms and Conditions for Permit TE44928A

E. All sections and provisions of Title 50 Code of Federal Regulations, parts 13 and 17.32, are conditions of this permit.

F. The authorization granted by this permit is subject to compliance with, and implementation of the Interim-Programmatic Habitat Conservation Plan for the Endangered Mount Hermon June Beetle and Ben Lomond Spineflower (IPHCP), hereby incorporated by reference. This permit and the IPHCP are binding upon the Permittee, and any authorized officer, employee, contractor, or agent conducting covered activities.

G. The Permittee, and its authorized officers, employees, contractors, and agents are authorized under the Endangered Species Act of 1973, as amended (Act), to incidentally take the endangered Mount Hermon June beetle (*Polyphylla barbata*), to the extent that take of this species would otherwise be prohibited under section 9 of the Act, and its implementing regulations, or pursuant to a rule promulgated under section 4(d) of the Act. Take may only occur incidental to otherwise lawful covered activities on 139 acres within the ten IPHCP Project Units as described in the IPHCP, and as conditioned herein. This permit authorizes the incidental take of Mount Hermon June beetles of all life stages in the form of harassment, harm, capture, injury, and mortality caused by implementation of IPHCP covered activities.

H. The Permittee must refer to the permit number above in all correspondence and reports concerning permit activities. Any questions you may have about this permit should be directed to the Field Supervisor of the Ventura Fish and Wildlife Office, 2493 Portola Road, Suite B, Ventura, California 93003, telephone (805) 644-1766.

I. A copy of this permit must be on the premises of each project site in which a covered activity has been authorized under the IPHCP or in the possession of the Permittee or its designated agents while conducting activities that may result in incidental take.

J. Annual reports must meet all requirements referenced in the IPHCP and be provided by the Permittee to the Service annually.

K. Upon finding dead, injured, or sick Mount Hermon June beetles, the Permittee or designated agents must notify the Ventura Fish and Wildlife Office (2493 Portola Road, Suite B, Ventura, California, 93003; (805) 644-1766). Notification must be within 3 working days and shall be in writing to both offices as well as by telephone to the Ventura Fish and Wildlife Office. The notification must include the date, time, and location of the specimen, a photograph, cause of death, if known, and any other pertinent information. Care must be taken in handling dead specimens to preserve biological material in the best possible state for later analysis. Should any injured Mount Hermon June beetles survive, the Permittee must contact the Service regarding their final disposition. Any remains of intact Mount Hermon June beetles should be placed with the California Academy of Sciences Entomology Department (Contact: David Kavanaugh, California Academy of Sciences Entomology Department, 875 Howard Street, San Francisco, California, 94103 (415) 321-8310). Arrangements regarding proper disposition of potential museum specimens must be made with the California Academy of Sciences by the Service prior to conducting any project-related activities.

L. The permittee will condition their discretionary permits to comply with the IPHCP, IA and these terms and conditions within the ten IPHCP Project Units as described in the IPHCP or require that landowners seek and obtain a separate incidental take permit from the Service for their activities.

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
TOM BURNS, PLANNING DIRECTOR

December 18, 2007

APPROVED AND FILED
BOARD OF SUPERVISORS
DATE: 1/15/08
COUNTY OF SANTA CRUZ
SUSAN A. MAURIELLO
EX-OFFICIO CLERK OF THE BOARD
BY DEPUTY

AGENDA: January 15, 2008

Board of Supervisors
County of Santa Cruz
701 Ocean Street
Santa Cruz CA 95060

SUBJECT: Proposed Operating Agreement Between County of Santa Cruz and Zayante Sandhills Conservation Bank

Members of the Board:

On December 12, 2006, your Board conceptually approved a strategy for mitigating the impacts of small residential development projects in sandhills habitat through use of mitigation banking. Since that time, the U.S. Fish and Wildlife Service (USFWS) approved the Zayante Sandhills Conservation Bank (Bank) as an entity that can serve as a mitigation bank to promote compliance with federal Endangered Species Act requirements. The purpose of this letter is to present your Board with an Operating Agreement between the Bank and the County of Santa Cruz that would allow use of the Bank to satisfy the mitigation requirements of the County's Sensitive Habitat Protection Ordinance as well.

BACKGROUND

The sandhills ecosystem occurs only in Santa Cruz County in association with the Zayante sand soil series. Zayante soils are limited geographically and, in general, are found in portions of the San Lorenzo Valley, Bonny Doon area, and the City of Scotts Valley. The sandhills ecosystem supports a number of federally listed endangered species, including the Mount Hermon June beetle, Zayante band-winged grasshopper, Santa Cruz wallflower, Ben Lomond spineflower, and Santa Cruz cypress. The sandhills also support the last known population of Santa Cruz kangaroo rat and other rare plants and animals. Accordingly, this ecosystem is also protected under the County Sensitive Habitat Protection Ordinance (County Code Chapter 16.32).

Development within the sandhills must be accomplished in a manner that adequately conserves this unique ecosystem. However, because sandhills habitat is limited geographically and has become highly fragmented, on-site mitigation of development activities has proven to be ineffective in many cases. This is particularly true in developed neighborhoods with relatively small parcels where on-site mitigation essentially results in a patchwork of small, discontiguous slivers of low quality habitat. The conservation/mitigation Bank is designed to provide a vehicle through which property owners can proceed with

reasonable development of their property and contribute towards protecting and managing larger blocks of higher quality habitat off-site.

CONSERVATION BANK OVERVIEW

The Zayante Sandhills Conservation Bank is a private venture run by a California limited liability company (PCO). The USFWS has initially authorized the Bank to sell a total of 56.77 conservation acre credits based on the habitat value of a 22.78-acre sandhills parcel (APN 072-262-74) located off of Hihn Road, Eleana Drive, and Ridgeview Drive in Ben Lomond (Attachment 1). This parcel is known as the Ben Lomond Sandhills Preserve, and must be managed in perpetuity according to a management plan prepared by sandhills experts and approved by USFWS. Moreover, the PCO and Center for Natural Lands Management have entered into and recorded a conservation easement on the parcel to ensure that it is preserved and managed according to the approved plan. The County of Santa Cruz is a third party beneficiary of the Conservation Easement and, as such, is entitled to enforce compliance with the easement in accordance with its terms and conditions.

The cost of acquiring and managing the preserve is being financed through an endowment, which is funded from the sale of conservation credits. The endowment is being established over time, with a full funding amount of $1,021,646.00. This amount will generate sufficient revenue annually to manage the preserve. In the mean time, the PCO has established an interim management account in the amount of $66,407.00 to ensure that one years' worth of management funds for the preserve are always available. This amount cannot be depleted without written concurrence from USFWS, in which case it would be immediately replenished. Once the endowment reaches full funding, the $66,407.00 in the interim account will be transferred to the endowment fund.

While USFWS issues conservation credits in terms of acre credits, they are sold in square-foot units. The current price of a conservation credit is $7.50 per square foot of sandhills habitat disturbed. Thus, a small residential addition resulting in 500 square feet of disturbance would pay $3,750 in mitigation fees. The fee for construction of a new single-family residence that disturbed a total of 5,000 square feet would be $37,500. The proposed operating agreement, which is discussed in more detail below, ties future increases in the cost of credits to the Bay Area Consumer Price Index.

OPERATING AGREEMENT

The proposed Operating Agreement (Attachment 1) includes the following key provisions.

Term of Agreement – The agreement has a term of up to 20 years. At the end of the third year, the Planning Department would perform a comprehensive review of the agreement to assure its effectiveness, financial stability, and the PCO's conformance with the agreement terms. The Department would report its finding and conclusions to your Board and, based on substantial evidence in the record, your Board would have the right to terminate or amend the agreement, if necessary.

Reporting Requirements – The PCO would provide the County with copies of all the reports it is required to submit to USFWS (e.g., Annual Management and Monitoring Report, Annual

Management and Monitoring Plan). In addition, the PCO would provide other reasonable information requested by the County including, but not limited to, audited financial statements.

Eligibility – The Planning Department would be authorized to approve use of conservation credits under the agreement provided the development is located within the boundaries of a specified area that corresponds to the proposed Interim Programmatic Habitat Conservation Plan (IPHCP) Area (Attachment 2), and covered by either the approved IPHCP or a USFWS approved individual project HCP. Eligible projects must also be residential in nature, on parcels no larger than 1.5 acres in size, involve no more than15,000 square feet of ground disturbance, and first incorporate appropriate minimization measures to avoid or reduce development-related impacts. Project proposals that do not meet these criteria, such as land divisions and commercial developments, could potentially use conservation credits as mitigation, but would require separate approval by your Board.

Cost of Credits –As previously mentioned, the cost of conservation credits during calendar year 2008 is $7.50 per square foot. Beginning in 2009, the PCO may adjust the price of credits based on the Consumer Price Index for the San Francisco-Oakland-San Jose Bay Area. Annual adjustments derived using a different method would require approval by your Board.

CONCLUSION

To date, landowners have faced two major difficulties obtaining approval for development projects in the sandhills. The first impediment has been lack of a reasonable mitigation option to compensate for project impacts. Establishment of the Conservation Bank, and formal agreements between the Bank and both USFWS and the County, will provide eligible landowners a relatively affordable mitigation option through the purchase of credits.

The second difficulty has been procedural in nature and involves obtaining the necessary authorizations from USFWS and the County. Implementing the proposed operating agreement between the Bank and County will eliminate the major procedural hurdle that is under the County's control, and position us to issue permits once federal requirements have been satisfied. However, it's important to note that property owners will still need to obtain a "Take Permit" or "Letter of No Effect" from USFWS prior to the County accepting conservation credits and issuing a discretionary or building permit. This is necessary to assure that the County is not tacitly facilitating development activities that may not be in compliance with federal law. In order to obtain a "Take Permit", land owners will either need to prepare and submit a Habitat Conservation Plan (HCP) to USFWS for approval, or wait until completion of the Interim Programmatic HCP and apply for coverage under the Take Permits issued to the County and City of Scotts Valley.

Finally, in addition to helping property owners in the sandhills, it's important to recognize that providing a mechanism for mitigation banking will also benefit the sandhills ecosystem. This approach will allow sandhills preservation and management to be done on a larger scale with the benefit of dedicated funding to implement a detailed adaptive management and monitoring plan.

It is therefore RECOMMENDED that your Board authorize the Planning Director to enter into the Operating Agreement with the Zayante Sandhills Conservation Bank (i.e., PCO) on behalf of your Board and take other related actions consistent with the Agreement.

Sincerely,

Tom Burns
Planning Director

RECOMMENDED:

SUSAN A. MAURIELLO
County Administrative Officer

Attachments:

1. Operating Agreement
2. Boundaries of proposed IPHCP Area

TB:CS:cs\G:\Board Letters\Pending

ZAYANTE SANDHILLS CONSERVATION BANK
OPERATING AGREEMENT WITH COUNTY OF SANTA CRUZ

This ZAYANTE SANDHILLS CONSERVATION BANK OPERATING AGREEMENT WITH THE COUNTY OF SANTA CRUZ (the "Agreement") is made and entered on January 15, 2008, by and between PCO, LLC, a California limited liability company ("PCO") and the County of Santa Cruz ("County"), a political subdivision of the State of California.

I. AGREEMENT RECITALS

WHEREAS, PCO is the owner of that certain 22.78 acres of real property, known as the "Ben Lomond Sandhills Preserve," which constitutes Phase One of the Zayante Sandhills Conservation Bank, located in the County of Santa Cruz, California, and more completely described on the site location maps attached hereto as **Exhibit "A"** and by the legal description attached hereto as **Exhibit "B"** (the "Property").

WHEREAS, PCO has previously entered into that certain Zayante Sandhills Conservation Bank Agreement, between PCO and the United States Fish and Wildlife Service ("USFWS"), for the Ben Lomond Sandhills Preserve ("BLSP"), dated May 12, 2006 (the **"Bank Agreement"**), which establishes the operation of a Conservation Bank on the Property known as the "Zayante Sandhills Conservation Bank" (the **"Conservation Bank"**) and subsequently on the property currently known as the Bias property, which shall constitute Phase Two of the Zayante Sandhills Conservation Bank. A copy of the Bank Agreement is attached hereto as **Exhibit "C."**

WHEREAS, PCO and the Center for Natural Lands Management, Inc., a California nonprofit corporation (**"CNLM"**) have previously entered into and recorded the Zayante Sandhills Conservation Bank Ben Lomond Sandhills Preserve Conservation Easement, dated March 22, 2007 (the **"Conservation Easement"**), which is designed to protect the existing wildlife and habitat values of the Property and is a requirement set forth in the Bank Agreement. The Conservation Easement is attached hereto as **Exhibit "D**."

WHEREAS, the Conservation Bank Agreement requires PCO to conduct certain management, monitoring and reporting activities on the Property according to the "Management Agreement for the BLSP Conservation Bank, "dated May 12, 2006 (the **"Management Agreement"**) as the operator of the Conservation Bank. The Management Agreement is attached hereto as **Exhibit "E**."

WHEREAS, the Conservation Bank is an approved Conservation Bank as determined by Guidelines established by the Department of Interior and USFWS has identified the Conservation Bank as an acceptable alternative to mitigate the impacts of eligible development projects within the boundaries of the Interim Programmatic Habitat Conservation Plan ("IPHCP") area attached hereto as **Exhibit F**.

WHEREAS, Chapter 16.32 of the County Code, its Sensitive Habitat Ordinance ("SHO"), does not prohibit the off-site mitigation of species- and habitat-related impacts, including the use of conservation bank(s) for this purpose; however, it does not define how such banking could be used for adequate mitigation of impacts.

WHEREAS, this Agreement provides a formal mechanism for authorizing the Conservation Bank to offer for sale Conservation Credits to satisfy, including but not limited to, the mitigation requirements of the County's SHO.

NOW, THERFORE, the Parties agree as follows:

II. AGREEMENT

Section 1. Purpose: The purpose of this Agreement is to ensure compliance with the County Sensitive Habitat Ordinance (Section 16.32 of the County Code) and federal and state law, and to allow landowners to utilize the Conservation Bank as one potential alternative to accomplish adequate off-site mitigation of impacts of development to the Covered Species and the Zayante Sandhills habitat.

Section 2. Term: This Agreement shall be effective on January 15, 2008 and shall be in effect for twenty (20) years or the full term of the Conservation Bank operation, whichever occurs first. At the end of the third year, the Parties agree that the Planning Department shall perform a comprehensive review of the Agreement to assure its effectiveness, financial stability, and the PCO's conformance with the terms of the Agreement, and provide a report and recommendation to the Board of Supervisors. This written report and recommendation shall be provided to PCO at least thirty (30) days in advance and PCO shall have the opportunity to rebut any information contained therein as part of the Board of Supervisor's review process. Based upon substantial evidence in the record, the Board of Supervisors shall have the right to terminate or amend the Agreement, as necessary, to ensure the Agreement's compliance with federal or state law.

Section 3. Reporting Requirements: PCO shall concurrently provide to the County all reports that PCO is legally obligated to provide to USFWS pursuant to USFWS approval and on-going over site of the Conservation Bank. This shall include, but shall not be limited to, reviews by the Conservation Bank Review Team (as defined in the Adaptive Management and Monitoring Plan for the Zayante Sandhills Conservation Bank (the "Management Plan") and the Annual Management and Monitoring Report (as defined in the Management Plan). In addition, PCO shall provide other information as reasonably requested by the County, including but not limited to, PCO's audited financial statements and related information.

Section 4. Access: The Property will be reasonably available for Santa Cruz County officials, approved scientific investigations, and supervised walking tours approved by USFWS, and in compliance with the Management and Monitoring Plan.

Section 5. Eligibility: No development application to the County shall be eligible to utilize Conservation Credits under this Agreement for mitigation unless the development is: (1) within the units identified in the Draft Interim Programmatic Habitat Conservation Plan (IPHCP), provided to the County by USFWS on May 18, 2007; and (2) covered by either the approved IPHCP or a USFWS approved individual Project HCP. The eligibility of a particular development application to utilize the Conservation Bank to accomplish off-site mitigation shall be as provided in the approved IPHCP, an approved individual Project HCP, and/or Section 16.32.090 of the County Code. The County shall only recognize the purchase of Conservation Credits as adequate mitigation for impacts created by residential

development projects on parcels no larger than 1.5 acres in size, that involve no more than 15,000 square feet of ground disturbance on a single parcel, and incorporate appropriate minimization measures to avoid or reduce impacts to sensitive habitat. Land divisions, residential parcels greater than 1.5 acres, and commercial and industrial developments are specifically excluded from this Agreement.

Separate approval by the Board of Supervisors for use of Conservation Credits for mitigation of project impacts shall be required for all development applications in Zayante Sandhills habitat that do not meet the eligibility requirements specified above.

Section 6. Minimization of Impact: Individual landowners shall be subject to the conditions of the County of Santa Cruz Sensitive Habitat Ordinance as determined by the Environmental Coordinator. The Environmental Coordinator shall first require reasonable measures to avoid and reduce development impacts. Conservation Credits from the Conservation Bank may wholly or partially satisfy any remaining Sensitive Habitat Ordinance requirements

Section 7. Baseline Credit Fee Amount: USFWS has initially authorized the Conservation Bank to sell a total of 56.77 Conservation Acre Credits as Phase One of the Conservation Bank, of which 44.8 Conservation Acre Credits are for the purpose of mitigating the impacts of eligible development projects on the Mount Hermon June beetle and apply to projects within the boundaries of the IPHCP area. Although Conservation Credits are issued by USFWS in terms of acre credits, Conservation Credits are sold in square foot units. Thus, 1 acre of Conservation Credit equals 43,560 square feet of potential Conservation Credit fees that can be sold by the Conservation Bank. PCO agrees that the initial Conservation Credit per square foot fee amount (the "Conservation Credit Fee") shall be $7.50/square foot of ground disturbance. As per projects subject to the IPHCP, the mitigation ratio for covered activities will be 1 to 1 in terms of the area of disturbance envelope to the number of Conservation Credits of mitigation responsibility (i.e., a landowner with a project that has a disturbance envelope of 0.1 acre will be required to mitigate by securing 0.1 conservation credit acres or preserving and managing in perpetuity 0.1 acres of comparable compensation habitat). The mitigation ratio for projects outside of the IPHCP designated areas will be determined at the time of impact assessment as per the USFWS and according to the County's Sensitive Habitat Ordinance.

Section 8: Credit Fee Adjustments for General Inflation. On or before January 1 of each year, PCO shall review and may adjust the dollar amount of the Conservation Credit Fee to take into account the effects of inflation/deflation generally. Annual adjustments will not exceed the amount calculated as follows: the current Conservation Credit Fee amount multiplied by the index for October of the year prior to January 1, divided by the index for October of the preceding year [e.g., 2008 Fee = 2007 Fee x (October, 2007 CPI Index/October, 2006 CPI Index)]. For purposes of making this adjustment, the index utilized shall be the Consumer Price Index for All Urban Consumers, All Items, San Francisco–Oakland–San Jose, as published by the U.S. Department of Labor, or its successor. Annual adjustments derived using a different method or that would exceed the amount calculated using this method shall require approval by the Board of Supervisors.

Section 9. Challenge to Agreement: The Parties hereto agree that in the event of a challenge to this Agreement, the PCO and County shall each be responsible for the cost of their own attorneys' fees in defending the Agreement. PCO shall be solely responsible for payment of any attorneys' fee award to a prevailing party in such a challenge.

Section 10. Entire Agreement: This Agreement and its related Exhibits contain the entire agreement of the Parties with respect to the matters covered by this Agreement, and no other agreement, statement, or promise made by any Party, or to any employee, officer, or agent of any Party, which is not contained in this Agreement, shall be binding or valid.

Section 11. Interpretation and Headings: The language in all parts of this Agreement shall in all cases be simply construed according to its fair meaning and not strictly for or against any Party. Headings of the paragraphs of this Agreement are for the purposes of convenience only and the words contained in such headings shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Agreement.

Section 12. Modification: This Agreement is not subject to modification except in writing signed by all Parties, and any attempted modification not in compliance with this requirement shall be void. The Parties shall use their good faith efforts to complete such modifications within ninety (90) days after the initial request is made for a modification by the requesting Party.

Section 13. Notices: All notices, demands, or requests from one Party to another may be personally delivered, sent by facsimile, sent by recognized overnight delivery service, or sent by mail, certified or registered, postage prepaid, to the persons set forth below or shall be deemed given five (5) days after deposit in the United States mail, certified and postage prepaid, return receipt requested and addressed as follows, or at such other address as any Party may from time to time specify to the other Parties in writing, and shall be effective at the time of personal delivery, facsimile transmission, or mailing.

PCO, LLC
Attn: Paul Burrowes
24650 Glenwood Drive
Los Gatos, CA 95033
Phone: 408- 497-3989

COUNTY OF SANTA CRUZ
Attn: Planning Director
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060
831-454-3137

Section 14. Successors and Assigns: This Agreement and each of its covenants and conditions shall be binding on and shall inure to the benefit of the Parties and their respective successors and assigns. PCO may assign its rights and obligations under this Agreement with the prior written approval of the County of Santa Cruz, which approval shall not be unreasonably withheld.

Section 15. Exhibits: All Exhibits referred to in this Agreement are attached to this Agreement and are incorporated herein by this reference.

Section 16. Attorneys' Fees: If any action at law or equity including any action for declaratory relief is brought to enforce or interpret the provisions of this Agreement, each Party to the litigation shall bear its own attorneys' fees and costs.

Section 17. No Partnerships: This Agreement shall not make or be deemed to make any Party to this Agreement an agent for or the partner of any other Party.

Section 18. Governing Law: This Agreement shall be governed by and construed in accordance with the internal laws of the State of California.

Section 19. Counterparts: This Agreement may be executed by the Parties in several counterparts, each of which shall be deemed to be an original executed document.

Section 20. Severability: If any provision of this Agreement, or the application thereof to any person or circumstances, is found to be invalid, the remainder of the provisions of this Agreement, or the application of such provision to person or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

Section 21. Breach of Agreement. Either Party shall have the right, upon sixty (60) days' prior written notice to the other Party, to terminate this Agreement for cause or other material breach of this Agreement, if the breaching Party has not cured the problem or, if the cure of the problem will reasonably last longer than sixty (60) days, has not reasonably commenced the cure of the problem within the sixty (60) day period after receipt from the non-breaching party of written notice of such breach described with particularity by the non-breaching Party.

IN WITNESS HEREOF, the Parties hereto have executed and delivered this Agreement as of the date first set forth above.

CSC:

County of Santa Cruz

By:_____ 1/15/08

Name: Tom Burns Date

Title: Planning Director

PCO:

PCO, LLC, a California limited liability company

By:_____ 12-05-07

Paul J. Burrowes, Managing Partner Date

PCO, LLC

[NEED TO ATTACH EXHIBITS A THROUGH E]

Materials on file with
Clerk of the Board
701 Ocean Street, Room 500
Santa Cruz, CA 95060
(831) 454-2323

Item No. 39 of 1/15/08

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHY MOLLOY PREVISICH, PLANNING DIRECTOR

NEGATIVE DECLARATION AND NOTICE OF DETERMINATION

Application No: N/A

APN(S): Multiple Parcels (3,606 parcels)

Interim Programmatic Habitat Conservation Plan (IPHCP)

The proposed project entails the U.S. Fish and Wildlife Service (Service) issuing Incidental Take Permits (ITPs) under the Endangered Species Act of 1973 (16 U.S.C 1531-1544, 87 Stat. 884), as amended (Act) to the County of Santa Cruz (the County) and the City of Scotts Valley (the City) for the incidental take of the Mount Herman June beetle from Covered Activities identified in the IPHCP. The proposed project also entails the county and the City accepting the implementation and enforcement responsibilities under the ITPs, via approval by the County Board of Supervisors and the City Council, respectively. The IPHCP covers certain eligible small development projects (e.g., single family dwelling, garage, remodel, deck, swimming pool, etc.) proposed in densely developed residential neighborhoods that support habitat for the Mount Herman June beetle and Ben Lomond spineflower, referred to as Covered Species (See Figure 2). Once the ITPs are issued by the Service and accepted by the County and City, the local jurisdictions could extend take authorization to individual landowners located within designated Project Units, who qualify, based on the eligibility criteria set forth in the IPHCP, and who sign a Certificate of Inclusion.

The proposed Interim Programmatic Habitat Conservation Plan (IPHCP) and Incidental Take Permits (ITPs) would apply to Covered Activities on 3,606 parcels located in the Sandhills region of unincorporated Santa Cruz County, California and the City of Scotts Valley. The ten Project Units are located between Highway 17 and Scotts Valley Drive on the east, and Graham Hill Road and Highway 9 on the west (See Figures 1 and 2).

ZONE DISTRICT: Multiple
APPLICANT: County of Santa Cruz and City of Scotts Valley
OWNER: Multiple Property Owners
PROJECT PLANNER: Matthew Johnston, 454-3201
EMAIL: pln458@co.santa-cruz.ca.us
ACTION: Negative Declaration
REVIEW PERIOD: APRIL 6, 2011 TO MAY 6, 2011
This project will be considered at a public hearing by the Board of Supervisors. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

Findings:
This project, if conditioned to comply with required mitigation measures or conditions shown below, will not have significant effect on the environment. The expected environmental impacts of the project are documented in the Initial Study on this project, attached to the original of this notice on file with the Planning Department, County of Santa Cruz, 701 Ocean Street, Santa Cruz, California.

Required Mitigation Measures or Conditions:
__XX__ None
_____ Are Attached

Review Period Ends: May 6, 2011

Date Approved By Environmental Coordinator: May 6, 2011

MATT JOHNSTON
Environmental Coordinator
(831) 454-3201

If this project is approved, complete and file this notice with the Clerk of the Board:
NOTICE OF DETERMINATION
The Final Approval of This Project was Granted by _____ on _____ (Date)
_____. No EIR was prepared under CEQA.
THE PROJECT WAS DETERMINED TO NOT HAVE SIGNIFICANT EFFECT ON THE ENVIRONMENT.
Date completed notice filed with Clerk of the Board: _____

County of Santa Cruz

0406

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR
www.sccoplanning.com

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ENVIRONMENTAL REVIEW INITIAL STUDY

Date: March 30, 2011

Application Number: Not Applicable

Staff Planner: Matthew Johnston

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: County of Santa Cruz and City of Scotts Valley

APN(s): Multiple Parcels (3,606 parcels)

OWNER: Multiple Property Owners

SUPERVISORAL DISTRICT: District 5 and small portion of District 1

PROJECT LOCATION:

The proposed Interim Programmatic Habitat Conservation Plan (IPHCP) and Incidental Take Permits (ITPs) would apply to Covered Activities on 3,606 parcels located in the Sandhills region of unincorporated Santa Cruz County, California and the City of Scotts Valley, California. The ten Project Units are located between Highway 17 and Scotts Valley Drive on the east, and Graham Hill Road and Highway 9 on the west (See Figures 1 and 2).

SUMMARY PROJECT DESCRIPTION:

The proposed project entails the U.S. Fish and Wildlife Service (Service) issuing ITPs under the Endangered Species Act of 1973 (16 U.S.C 1531-1544, 87 Stat. 884), as amended (Act) to the County of Santa Cruz (the County) and the City of Scotts Valley (the City) for the incidental take of the Mount Hermon June beetle from Covered Activities identified in the IPHCP. The proposed project also entails the County and the City accepting the implementation and enforcement responsibilities under the ITPs, via approval by the County Board of Supervisors and the City Council, respectively. The IPHCP covers certain eligible small development projects (*e.g.*, single family dwelling, garage, remodel, deck, swimming pool, etc.) proposed in densely developed residential neighborhoods that support habitat for the Mount Hermon June beetle and Ben Lomond spineflower, referred to as Covered Species (See Figure 2). Once the ITPs are issued by the Service and accepted by the County and City, the local jurisdictions could extend take authorization to individual landowners located within designated Project Units, who qualify, based on the eligibility criteria set forth in the IPHCP, and who sign a Certificate of Inclusion.

March 44

The ITPs issued pursuant to this IPHCP will expire when the Sandhills Regional HCP process is completed, 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. However, the IPHCP makes provisions for permit renewal. Projects conducted under the City and County's ITPs (i.e., Covered Activities) must be completed before the ITPs expire, if they are not renewed.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.

- ☐ Geology/Soils
- ☐ Hydrology/Water Supply/Water Quality
- ☒ Biological Resources
- ☐ Agriculture and Forestry Resources
- ☐ Mineral Resources
- ☐ Visual Resources & Aesthetics
- ☐ Cultural Resources
- ☐ Hazards & Hazardous Materials
- ☐ Transportation/Traffic
- ☐ Noise
- ☐ Air Quality
- ☐ Greenhouse Gas Emissions
- ☐ Public Services
- ☐ Recreation
- ☐ Utilities & Service Systems
- ☒ Land Use and Planning
- ☐ Population and Housing
- ☐ Mandatory Findings of Significance

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- ☐ General Plan Amendment
- ☐ Land Division
- ☐ Rezoning
- ☐ Development Permit
- ☐ Coastal Development Permit
- ☐ Grading Permit
- ☐ Riparian Exception
- ☒ Other: Acceptance of Terms and Responsibilities of Incidental Take Permits

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations:

The U.S. Fish and Wildlife Service (the Service) would issue the ITPs under section 10(a)(1)(B) of the Endangered Species Act, which would authorize take of the Mount Hermon June beetle resulting from certain eligible small residential development projects. To support this action, the Service is preparing an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) to address the environmental effects of issuance of the ITPs in association with the IPHCP for the Sandhills region.

DETERMINATION: (To be completed by the lead agency)
On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Matthew Johnston
Environmental Coordinator

March 30 2011
Date

II. BACKGROUND INFORMATION:

EXISTING SITE CONDITIONS

See Table 1.

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

See Table 1.

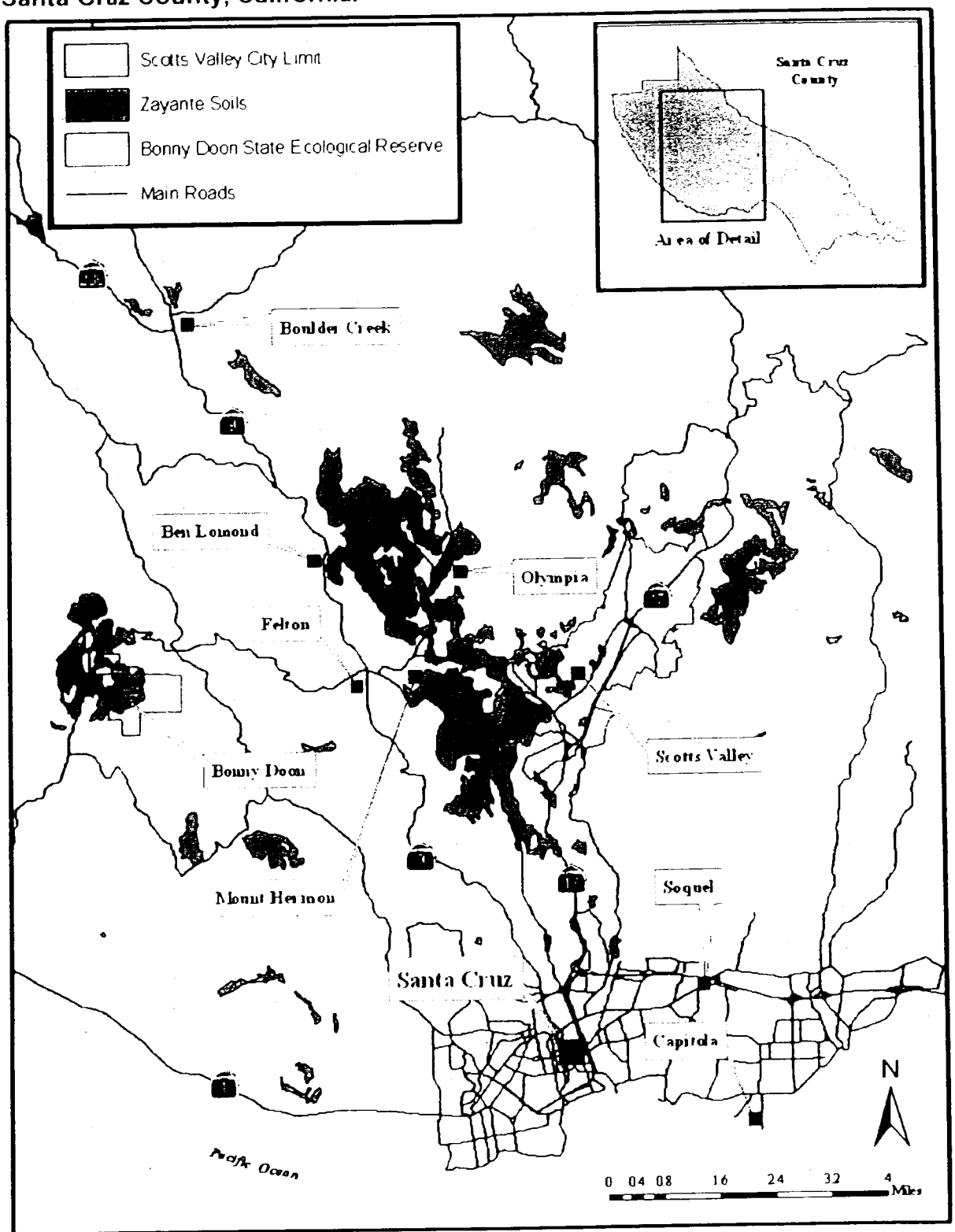
SERVICES

See Table 1.

PLANNING POLICIES

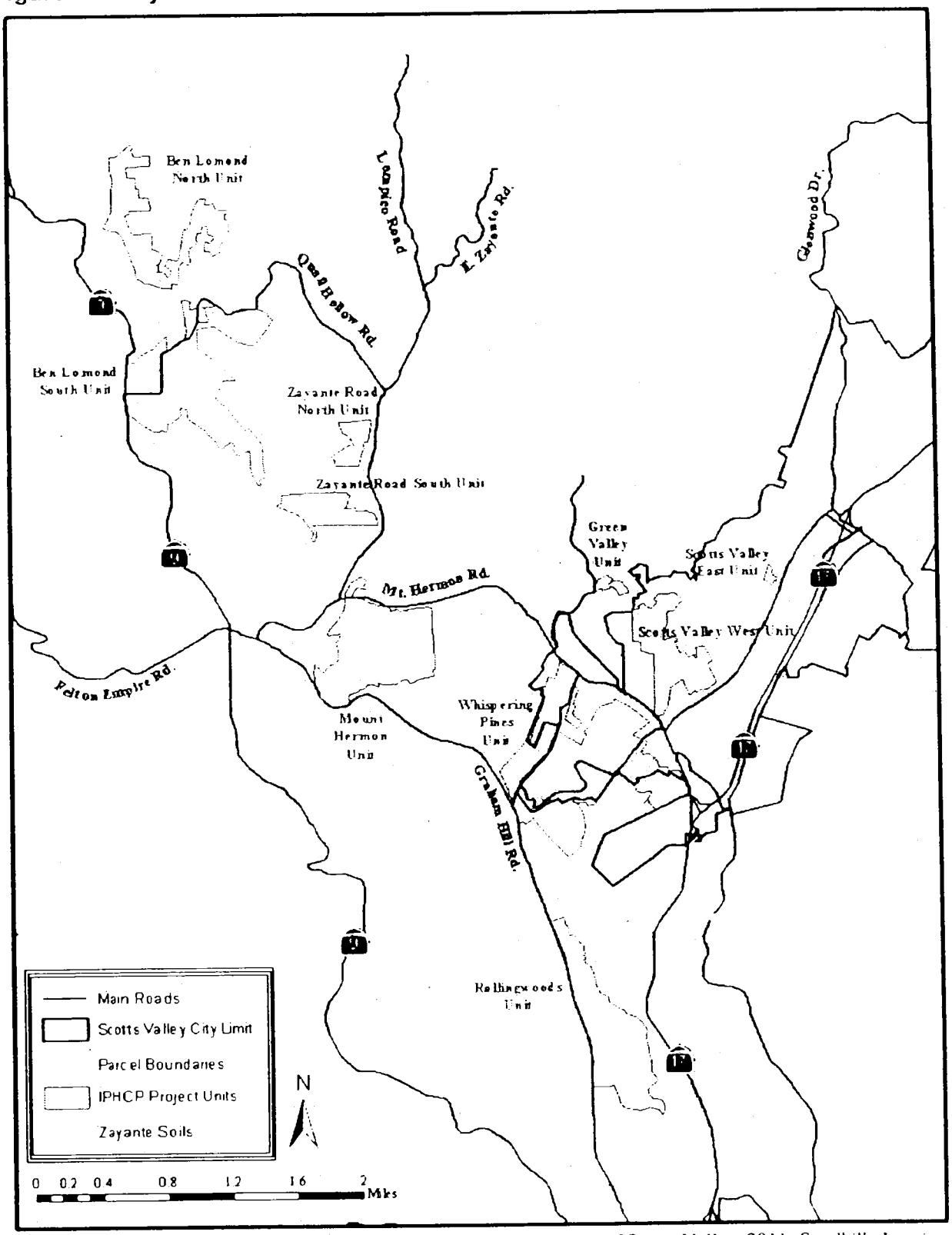
See Table 1.

Figure 1. Zayante soils series and the general locations of Sandhills habitat, Santa Cruz County, California.



Source: U.S. Fish and Wildlife Service, County of Santa Cruz, and City of Scotts Valley. 2011. *Sandhills Interim Programmatic Habitat Conservation Plan*. January.

Figure 2. Project Units Covered under the IPHCP, Santa Cruz County, California.



Source: U.S. Fish and Wildlife Service, County of Santa Cruz, and City of Scotts Valley. 2011. *Sandhills Interim Programmatic Habitat Conservation Plan*. January.

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

Table 1 provides information related to site conditions for the ten Project Units identified in the IPHCP.

Table 1: Existing Conditions within IPHCP Project Units

EXISTING CONDITIONS[1]	IPHCP PROJECT UNITS										
	Rollingwoods	**Whispering Pines (County)**	**Whispering Pines (City)**	**Scotts Valley East**	**Scotts Valley West**	**Green Valley**	**Mount Hermon**	**Zayante Road North**	**Zayante Road South**	**Ben Lomond North**	**Ben Lomond South**
Geology and Soils											
Fault Zone	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped
Landslide	Yes-small portion	Not mapped	Yes-portion	Not mapped	Yes-small portion	Not mapped	Yes-portion	Not mapped	Yes-small portion	Not mapped	Yes-small portion
Liquefaction	Yes-small portion with low potential	Yes-small portion with moderate potential	Yes-moderate to high potential	Not mapped	Yes-small portion with moderate potential	Yes-moderate potential	Not mapped	Not mapped	Not mapped	Not mapped	Yes-portion with moderate potential
Slope 0-30% 31-100%	0-30%	0-30%	0-30%	0-30%	0-30%	0-30%	0-30%	0-30%	0-30%	0-30%	0-30%
Erosion Potential[2]	Slight to Moderate	Slight to Moderate / Small portion of area High to Very High	Slight to Moderate / Small portion of area High	Slight to Moderate / Very High	Slight to Moderate / Small portion of area High	Slight to Moderate	Slight to Moderate / Very High	Slight to Moderate / High / Very High	Slight to Moderate / Small portion of area Very High	Slight to Moderate / Small portion of area High or Very High	Slight to Moderate / Small portion of area High or Very High
Shrink-Swell Potential[2]	Low to Moderate/Small portion of area High	Low to Moderate	Low to Moderate	Low to Moderate	Low to Moderate	Low/ Small portion of area Moderate to High	Low to Moderate	Low to Moderate	Low to Moderate	Low to Moderate	Low to Moderate
Septic Limitations[2]	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions	Severe under certain conditions
Hydrology, Water Supply, and Water Quality											
Floodplain	Yes-small portion	Not mapped	Yes-small portion	Not mapped	Yes-small portion	Not mapped	Yes-small portion	Yes-small portion	Yes-small portion	Yes-small portion	Yes-small portion
Nearby Watercourse	Powder Mill Creek	Carbonera Creek	Carbonera Creek	Carbonera Creek	Carbonera Creek	Bean Creek	Bean Creek and Zayante Creek	Zayante Creek	Zayante Creek	Newell Creek	San Lorenzo River

EXISTING CONDITIONS[1]	IPHCP PROJECT UNITS										
	Rollingwoods	**Whispering Pines (County)**	**Whispering Pines (City)**	**Scotts Valley East**	**Scotts Valley West**	**Green Valley**	**Mount Hermon**	**Zayante Road North**	**Zayante Road South**	**Ben Lomond North**	**Ben Lomond South**
Distance to Watercourse	460 feet (140 meters)	705 feet (215 meters)	705 feet (215 meters)	395 feet (120 meters)	970 feet (295 meters)	On-site	On-site	80 feet (25 meters)	80 feet (25 meters)	On-site	On-site
Groundwater Supply	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water Supply Watershed	Yes-portion	Yes-portion	Yes-portion	Not mapped	Yes-portion	Yes	Yes	Yes	Yes	Yes	Yes
Groundwater Recharge	Yes	Yes	Yes	Yes	Yes-portion	Yes-portion	Yes-portion	Yes	Yes-portion	Yes-portion	Yes-portion
Biological Resources											
Vegetation	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities	Remnant patches of Sandhills communities
Biologically Sensitive Habitat	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Energy and Natural Resources											
Timber and Agriculture	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Yes-small portion	Not mapped	Not mapped	Not mapped	Not mapped
Agricultural Resource	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped
Mineral Resources	Not mapped	Not mapped	MRZ-1, MRZ-2, and MRZ-3[3]	MRZ-3[3]	MRZ-1, MRZ-2, and MRZ-3[3]	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped
Electrical Power Lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Solar Access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Solar Orientation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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EXISTING CONDITIONS[1]	IPHCP PROJECT UNITS										
	Rollingwoods	**Whispering Pines (County)**	**Whispering Pines (City)**	**Scotts Valley East**	**Scotts Valley West**	**Green Valley**	**Mount Hermon**	**Zayante Road North**	**Zayante Road South**	**Ben Lomond North**	**Ben Lomond South**
Visual Resources and Aesthetics											
Scenic Corridor	Scenic Road – Route 17 from Route 1 to Santa Clara County[4]	Scenic Road - Lockwood Lane[3]	Scenic Road - Lockwood Lane. Important Vista[3]	Not mapped[3] or identified[4]	Scenic Road -Bean Creek Road. Adjacent to Prominent Ridge[3]	None identified[4]	Scenic Road – Mt. Hermon Road from Scotts Valley city limit to Graham Hill Road[4]	None identified[4]	None identified[4]	None identified[4]	Scenic Road – Route 9 from Route 1 to Santa Clara County[4]
Cultural Resources											
Historic Resources[5]	None identified	None identified	None identified	None identified	None identified	None identified	Mt. Hermon Conference Center Auditorium	None identified	None identified	Hammond Home, Shorey House	None identified
Archaeological Resources	Yes-potential throughout much of unit	Yes, potential throughout unit	Low, High and Moderate Sensitivity Zones[3]	Low, High and Moderate Sensitivity Zones[3]	Low, High and Moderate Sensitivity Zones[3]	Yes-potential throughout unit	Yes-potential throughout much of unit	Yes-potential throughout much of unit	Yes-potential within portion of unit	Yes-potential throughout much of unit	Yes-potential throughout portion of unit
Paleontogical Resources	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped	Not mapped
Hazards and Hazardous Materials											
Hazardous Matenals[6]	None identified	None identified	None identified	None identified	None identified	None identified	None identified	None identified	None identified	None identified	One parcel (APN 072-284-17)
Fire Hazard	Yes-portion	Yes-portion	Yes-portion	Not mapped	Yes-portion	Not mapped	Yes-portion	Yes-portion	Yes-portion	Yes-portion	Yes-portion
Noise											
Noise Constraint	N/A	Not mapped[3]	Not mapped[3]	Not mapped[3]	Not mapped[3]	N/A	N/A	N/A	N/A	N/A	N/A
Public Services and Utilities											
Fire Protection	Scotts Valley FPD	Scotts Valley FPD	Scotts Valley FPD	Scotts Valley FPD	Scotts Valley FPD	Scotts Valley FPD	Felton FPD	Zayante FPD	Zayante FPD	Ben Lomond FPD	Ben Lomond FPD
School District	Scotts Valley	Scotts Valley	Scotts Valley	Scotts Valley	Scotts Valley	Scotts Valley	San Lorenzo Valley	San Lorenzo Valley	San Lorenzo Valley	San Lorenzo Valley	San Lorenzo Valley
Sewage Disposal	CSA 10 & Private Septic	Scotts Valley Sewer &	Scotts Valley Sewer	Scotts Valley Sewer	Scotts Valley Sewer	Private Septic	Mt. Hermon Sewage	Private Septic	Private Septic	Private Septic	Private Septic

EXISTING CONDITIONS[1]	IPHCP PROJECT UNITS										
	Rollingwoods	**Whispering Pines (County)**	**Whispering Pines (City)**	**Scotts Valley East**	**Scotts Valley West**	**Green Valley**	**Mount Hermon**	**Zayante Road North**	**Zayante Road South**	**Ben Lomond North**	**Ben Lomond South**
		Private Septic					System & Private Septic				
Drainage District	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5	Santa Cruz County Flood Control and Conservation District 5
Project Access	Graham Hill Rd., Sims Rd., Hwy. 17	Graham Hill Rd.	Graham Hill Rd., Mt. Hermon Rd., Hwy. 17	Scotts Valley Dr., Hwy. 17	Mt. Hermon Rd., Scotts Valley Dr., Hwy. 17	Mt. Hermon Rd., Lockhart Gulch Rd., Hwy. 17	Graham Hill Rd., Mt. Hermon Rd., Hwy. 17	East Zayante Rd., Mt. Hermon Rd.	East Zayante Rd., Mt. Hermon Rd	Brookside Ave., Hwy. 9	Quail Hollow Rd., Hwy. 9
Water Supply District	City of Santa Cruz	San Lorenzo Valley	San Lorenzo Valley and Scotts Valley	Scotts Valley	Scotts Valley	Scotts Valley	None/Mt. Hermon Water System	San Lorenzo Valley	San Lorenzo Valley	San Lorenzo Valley	San Lorenzo Valley
Land Use, Population, and Housing											
Parcel Size	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre	≤1.5 acre
Existing Land Use	residential	residential	residential	residential	residential	residential	residential	residential	residential	residential	residential
Jurisdiction	County	County	City	City	City	County	County	County	County	County	County
Zone District	Residential SF	Residential SF / Park	Low, Medium, Medium High, and High Density Residential / Residential Estate[7]	Low Density Residential[7]	Medium, Medium High, and High Density Residential[7]	Residential SF	Residential SF / Park	Residential SF	Residential SF Special Use	Residential SF / Agriculture Residential	Residential SF / Agriculture Residential
General Plan	Residential-Urban Very Low Density	Residential-Urban Very Low Density and Parks and Recreation	Low, Medium, Medium High, and High Density Residential / Residential	Low Density Residential[8]	Medium, Medium High, and High Density Residential[8]	Residential - Rural	Residential-Suburban	Residential - Rural	Residential - Rural	Residential - Rural and Suburban	Residential - Rural and Suburban

EXISTING CONDITIONS[1]	IPHCP PROJECT UNITS										
	Rollingwoods	**Whispering Pines (County)**	**Whispering Pines (City)**	**Scotts Valley East**	**Scotts Valley West**	**Green Valley**	**Mount Hermon**	**Zayante Road North**	**Zayante Road South**	**Ben Lomond North**	**Ben Lomond South**
			Estate[8]								
Urban Service Line	Inside	Inside	Inside	Inside	Inside	Outside	Outside	Outside	Outside	Outside	Outside
Coastal Zone	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside

Notes:

1. Information presented in this table was developed from the County of Santa Cruz Geographical Information System (GIS) mapping, unless otherwise noted. The County GIS maps have not been ground truthed at a parcel level, and actual conditions on any given parcel may differ from the GIS information.
2. Information contained in Soil Survey of Santa Cruz County, California.
3. Information derived from constraint maps contained in City of Scotts Valley 1994 General Plan, updated December 1999.
4. Information contained in 1994 Santa Cruz County General Plan and Local Coastal Program.
5. Information contained in Adopted County Historic Inventory.
6. Information contained in Santa Cruz County Site Mitigation List, January 2009.
7. Information provided in City of Scotts Valley Zoning Map, March 2007.

8. **Information contained in City of Scotts Valley General Plan Map, 2001.**

PROJECT BACKGROUND:

The proposed IPHCP and ITPs would apply to certain eligible small development projects on parcels within ten designated Project Units located within a portion of the Sandhills region in the County and the City. The ten Project Units are located between Highway 17 and Scotts Valley Drive on the east and Graham Hill Road and Highway 9 on the west (See Figures 1 and 2). Attachment 1, to this Initial Study also provides parcel maps for each of the ten Project Units.

The Service designated the Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*) and Mount Hermon June beetle (*Polyphylla barbata*) as federally endangered in 1994 and 1997, respectively, under the Act. These species are associated with sandy soils in the Zayante series. The Zayante soil series supports habitat known as the Zayante or Santa Cruz Sandhills (Sandhills) found in and near the communities of Mount Hermon, Scotts Valley, Felton, Olympia, and Ben Lomond in Santa Cruz County, California (Figure 1). The Mount Hermon June beetle and the Ben Lomond spineflower occur on additional islands of Zayante sands in the vicinity of the community of Bonny Doon in Santa Cruz County. Both species are threatened by sand mining, urban development, invasion of nonnative plant species, intensive recreation, and fire suppression.

Numerous private landowners in the City and County are interested in applying under the Act for a section 10(a)(1)(B) permit to allow incidental take of the Mount Hermon June beetle. These landowners have proposed projects on sites that are likely occupied by Mount Hermon June beetles and Ben Lomond spineflower. The Service has recommended that the City and County work together to apply for incidental take permits (ITPs) and develop a regional programmatic habitat conservation plan (HCP) for the Sandhills. This would provide conservation benefits for these species and other rare species associated with this habitat. The regional HCP would streamline the local, state, and Federal permitting processes associated with these species and their habitat. However, the City and County will likely need at least several years to complete a regional HCP.

Due to the time required to prepare a regional HCP, the IPHCP for these species was developed for use on small development projects proposed in areas with existing, dense residential development. The IPCHP was developed in an attempt to provide an additional option for landowners that would be more efficient and effective than the traditional permitting process. Landowners will still have the option of developing their own HCP and seeking individual incidental take permits, or waiting until the County and City have developed and implemented a regional HCP.

DETAILED PROJECT DESCRIPTION:

Project Overview

The proposed project entails the Service issuing ITPs to the County and the City for the incidental take of the Mount Hermon June beetle from certain eligible small development projects identified in the proposed IPHCP, called Covered Activities. The proposed project also entails the County and the City accepting the following implementation and enforcement responsibilities under the ITPs, via approval by the County Board of Supervisors and the City Council, respectively:

- Overseeing implementation of avoidance and minimization measures required by the IPHCP and ITPs.
- Monitoring landowner compliance with the terms of each Certificate of Inclusion, the IPHCP, and ITPs.
- Creating and maintaining a database to track the areal extent of Zayante soils that is disturbed or modified by the Covered Activities, as authorized under the ITPs.
- Training planning department staff to review permit applications for compliance with the IPHCP.
- Enforcing the terms and conditions of the IPHCP and ITPs.
- Submitting annual reports to the Service.

Once the ITPs are issued by the Service and accepted by the County and City, take authorization could be extended to individual landowners located within designated Project Units, who qualify, based on the eligibility criteria set forth in the IPHCP, and who sign a Certificate of Inclusion.

The IPHCP is intended to be used for small development projects (*e.g.*, single family dwelling, garage, remodel, deck, swimming pool, etc.) proposed in areas with existing, dense residential development that are likely occupied by the Mount Hermon June beetle and Ben Lomond spineflower (See Figure 2). The eligibility criteria for coverage under the IPHCP include the following:

- 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 acres).[1]

[1] 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 or building permit.

- Proposed development is a project 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.

Projects that meet these eligibility requirements can be covered by the IPHCP and ITPs, and are thereby the proposed "Covered Activities" referred to in the IPHCP.

Ten Project Units within the IPHCP boundary were identified within the communities of Ben Lomond, Felton, Mount Hermon, and Scotts Valley. These Project Units range in size from 3.2 to 373 acres and encompass a total of 1,693.2 acres, including roads, common areas, and a substantial amount of existing development. Units include parcels in the vicinity of Rollingwoods, the Whispering Pines neighborhood, east and west Scotts Valley, Green Valley, Mount Hermon, Zayante Road, and Ben Lomond. Within these units, a maximum of 139 acres of Sandhills habitat could be developed or otherwise disturbed under the IPHCP. This acreage figure represents 5 percent of the estimated total amount (2,800 acres) of Sandhills habitat with documented occurrences of the Mount Hermon June beetle, as of 2004.

The IPHCP will be in effect for 5 years following the issuance of the requested ITPs, until the regional HCP is completed by the City and County, or the limit of habitat modification of 139 acres of Zayante soils is reached, whichever occurs first. However, the IPHCP makes provisions for permit renewal, if necessary, without the issuance of a new permit. This can occur if the biological circumstances and other pertinent factors affecting the Mount Hermon June beetle and Ben Lomond spineflower within the Project Units are not substantially different than those described in the IPHCP. This process could allow for the extension of the permit if the limit of habitat modification of 139 acres of Zayante soils is not reached within the 5-year time frame.

Operating Conservation Program

The IPHCP's Operating Conservation Program is intended to achieve its biological goals and objectives and to ensure that the impacts of Covered Activities on the Mount Hermon June beetle and Ben Lomond spineflower are minimized and mitigated to the maximum extent practicable. The biological goals and objectives of the IPHCP are presented in Table 2 and the minimization and mitigation measures are further described below. Monitoring and reporting components of the program are also covered.

Minimization Measures

The IPHCP will allow many landowners to proceed with development projects in areas where on-site avoidance of habitat for the Mount Hermon June beetle and Ben Lomond spineflower is not feasible. In such cases, landowners will first be required to minimize habitat loss and disturbance via the implementation of the following required minimization measures, which are detailed more specifically in the IPHCP and in Section III.C, Biological Resources, of this document:

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- Avoid impacts to native Sandhills plants to the greatest extent feasible, consistent with the purpose of the Covered Activity;
- Minimize construction-related ground disturbance during the growing season of the Ben Lomond spineflower and adult flight period of the Mount Hermon June beetle (May 15 through August 15);
- If scheduling ground disturbance to avoid the May 15 to August 15 time frame is not possible during construction, cover recently disturbed areas each evening during that period;
- Minimize landscaping elements that degrade habitat, as determined by the City or County and as consistent with the Covered Activity; and
- Minimize use of exterior night lighting that attracts insects during the flight period of the Mount Hermon June beetle (May 15 through August 15).

Table 2: IPHCP Biological Goals and Objectives

Goal	Goal/Objective Detail
1	**Minimize take of the Mount Hermon June beetle and adverse effects to the Ben Lomond spineflower within the Project Units.**
	Objective 1.1. Avoid disturbance of Sandhills habitat whenever feasible, and when avoidance is infeasible, minimize disturbance to Sandhills habitat.
	Objective 1.2. Minimize ground-disturbing activities during the growing season of the Ben Lomond spineflower and adult flight period of the Mount Hermon June beetle (May 15 – August 15).
	Objective 1.3. Minimize removal of native Sandhills plant species.
	Objective 1.4. Minimize landscaping with turf grass, weed matting, aggregate, and mulch.
	Objective 1.5. Minimize night lighting during the flight season of the Mount Hermon June beetle.
2	**Protect habitat for the Mount Hermon June beetle and Ben Lomond spineflower at an off-site location of high long-term conservation value to the species.**
	Objective 2.1. Provide funds to protect, manage, and monitor habitat for the Mount Hermon June beetle and Ben Lomond spineflower at a Service-approved conservation bank(s).

Mitigation Measures

In addition to implementing the above minimization measures, the impacts of Covered Activities must be mitigated and compensated for through the implementation of the following mitigation measures, which are detailed more specifically in the IPHCP and in Section III.C, Biological Resources, of this document:

- To the maximum extent feasible, require that any revegetation or landscaping activities associated with Covered Activities are conducted using locally-derived plant species native to the Sandhills;
- Prior to beginning any ground-disturbing activities, the impacts of Covered Activities must be mitigated in one of the following ways:

  1. Secure conservation credits for the Mount Hermon June beetle at the Zayante Sandhills Conservation Bank; or

2. Secure conservation credits for the Mount Hermon June beetle at another Service-approved conservation bank, which also has an Operating Agreement with the County if the parcel is within the County's jurisdiction.

The mitigation ratio for Covered Activities will be 1 to 1 in terms of the area of disturbance envelope to the number of conservation credits of mitigation responsibility (i.e., a landowner with a project that has a disturbance envelope of 5,000 square feet will be required to mitigate by securing 5,000 square feet of conservation credits for the Mount Hermon June beetle). Unless there is another Service-approved conservation bank, revenue from the sale of these conservation credits will go toward the purchase price and management of the Service-approved Ben Lomond Sandhills Preserve of the Zayante Sandhills Conservation Bank, which is comprised of 22.8 acres of high quality Sandhills habitat, including 22.4 acres of prime habitat for the Mount Hermon June beetle. More specifically, qualifying landowners who participate through a Certificate of Inclusion would pay a "mitigation fee" that the landowners (or the Applicants on behalf of the landowners) will use to purchase credits, commensurate with the amount of impact by the individual project. The Zayante Sandhills Conservation Bank will use the mitigation fees to provide long term management for the Covered Species in the preserve, which is owned and managed by the bank.

Monitoring and Reporting

Monitoring will be conducted to track compliance with the terms and conditions of the IPHCP, Implementing Agreement, and permits. There are three types of monitoring that will be performed: (1) compliance monitoring to track the permit holder's compliance with the requirements specified in the IPHCP, Implementing Agreement, and permits; (2) effects monitoring to track the impacts of the Covered Activities on the Covered Species; and (3) effectiveness monitoring to track the progress of the conservation strategy in meeting the biological goals and objectives of the IPHCP. Monitoring will provide information for making adaptive management decisions.

For each Covered Activity, the appropriate local jurisdiction (i.e., City or County) would fill out a compliance monitoring report. For projects implemented over the course of two or more years, the City or County will prepare and submit annual monitoring reports until the Covered Activities are completed. In order for the Service to accurately assess take levels and determine if the biological goals and objectives of the IPHCP are being met, each of the compliance monitoring reports 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 this IPHCP.

The City and County will provide feedback to each participating landowner as necessary to ensure compliance with the IPHCP and the ITPs. The City and County will compile the individual compliance monitoring reports prepared during each calendar year, summarize the information in the reports, and provide an annual summary report to the Service. The Service may prepare a brief report to the City and the County assessing the status of the conservation program including the effectiveness of minimization measures and the success of off-site mitigation.

County and City Responsibilities under the ITP

The City and County would receive the ITPs based on the IPHCP, and would therefore be responsible for complying with both the ITPs and the IPHCP. A detailed description of how the IPHCP would be implemented is provided in the Implementing Agreement (IPHCP Appendix H); the Implementing Agreement would govern implementation of the IPHCP. In general, however, the City and County would implement the IPHCP by integrating the requirements of the IPHCP into the City's and the County's discretionary and building permit programs.

The planning department of the City and the planning department of the County would assume the day-to-day responsibilities for implementation. As landowners submit applications for discretionary and building permits, each planning department would determine whether the proposed project is within a Project Unit and whether it is eligible for coverage under its' ITP. If the proposed project is within a Project Unit and would disturb ground by grading or other means, the planning department would notify the landowner that the proposed project may impact Zayante soils and may require an ITP from the Service. If the project is eligible for coverage under the IPHCP and the pursuant ITPs, the planning department would also explain the requirements for coverage and ensure that the landowner's application adheres to the IPHCP and the ITPs. If the landowner submits a complete application, including a signed Certificate of Inclusion, and has otherwise complied with all relevant terms of the IPHCP, as determined by the City or County, the City or County may extend coverage under its' ITP to the project. The project would then be a Covered Activity within the context of the IPHCP and incidental take resulting from the project would be authorized by either the City or County ITP.

According to the proposed IPHCP, the City and the County would establish application requirements and procedures for Covered Activities as described in Table 3 below.

Table 3: Application Requirements and Procedures

STEP	PROCEDURE
1	**Determine if the proposed project is within an IPHCP Project Unit.** The landowner should review the maps provided in Appendix B of the IPHCP. a. If the parcel lies within 1 of the 10 Project Units, proceed to step 2. b. If the parcel lies outside the boundaries of the 10 Project Units, the project site may still harbor Zayante soils and/or the Mount Hermon June beetle, Zayante band-winged grasshopper, Ben Lomond spineflower, or Ben Lomond wallflower. The City or County will notify the landowner that he or she should contact the Service to determine if the proposed project may take the Mount Hermon June beetle and if an individual ITP may be necessary. This step will help ensure the landowner is not in violation of section 9 of the Act for a project that is otherwise a lawful activity.
2	**Determine if the proposed project will disturb Zayante soils.** Most projects within the IPHCP Project Units will occur on Zayante soils, which support Mount Hermon June beetle habitat. However, due to the imprecision of soils maps and the buffer that was applied using a Geographic Information System (GIS), some parcels within the IPHCP Project Units may not contain Zayante soils. Landowners who are uncertain as to whether their project will indeed impact Zayante soils can have their project area evaluated by a qualified individual from, or recommended by, the County, City,

	or Service. A list of personnel qualified to conduct these evaluations will be available from the City, County, or Service. If a written evaluation from a qualified individual concludes that the project site does not contain Zayante soils, and the proposed project is not likely to result in take of Mount Hermon June beetles, the landowner does not need to obtain incidental take coverage under the IPHCP. If the proposed project will disturb Zayante soils, the landowner must proceed to step 3.
3	**Complete checklist of eligibility requirements.** The landowner must provide information to the City or County that demonstrates their eligibility to be covered by the IPHCP and ITP. The landowner should use the template "Sandhills IPHCP Eligibility Checklist" in Appendix E of the IPHCP. If all requirements are met, proceed to step 4. If all requirements are not met and the proposed project is not eligible for coverage under the IPHCP and ITP, the City or County will recommend that the landowner contact the Service for information about individual incidental take permits.
4	**Complete and Sign a Certificate of Inclusion.** The landowner must submit a signed Certificate of Inclusion with all necessary documentation in order to proceed. A template Certificate of Inclusion is provided in Appendix C of the IPHCP. To comply with the IPHCP, the landowner must submit the following documentation as part of their discretionary or building application submittal to the appropriate local jurisdiction (City or County): 1. Certificate of Inclusion; 2. Sandhills IPHCP Eligibility Checklist; 3. City or County Discretionary or Building Application; and 4. Project Plans (including development envelope).
5	**Submit Proof of Mitigation** Prior to issuance of a discretionary or building permit from the City or County, the landowner or conservation bank must submit a Conservation Credit Sales Receipt.

Service Responsibilities under the ITP

The Service will be responsible for providing timely advice and participation in consultations with the City and County under the IPHCP.

III. ENVIRONMENTAL REVIEW CHECKLIST

INTRODUCTION TO ANALYSIS

This section of the Initial Study contains the Environmental Review Checklist. The purpose of this checklist is to determine whether the proposed implementation of the ITPs and IPHCP could potentially result in a "significant effect on the environment" according to CEQA. CEQA defines a *significant effect on the environment* as a "substantial, or potentially substantial, adverse change in the environment" (PRC Div. 13 21068). State CEQA Guidelines Section 15382 describes *adverse change* as an "adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

The proposed project evaluated in this Initial Study is the issuance of the ITPs to the County and City for the incidental take of the federally listed Mount Hermon June beetle

and the implementation of the IPHCP's operating conservation program. This conservation program defines specific minimization and compensatory mitigation measures that would address the potential incidental take associated with Covered Activities in the Planning Units on both the Mount Hermon June beetle and the Ben Lomon spineflower (Covered Species). Currently, the Service advises all private landowners proposing activities that may result in injury or mortality of federally listed animals to prepare an individual HCP and apply for an incidental take permit. The IPHCP and associated ITPs are being developed in an attempt to provide an additional, interim option for landowners pursuing certain small projects in defined Project Units that may support the Covered Species.

IPHCP COVERED ACTIVITIES

As indicated above, the IPHCP and ITPs are intended to address the potential incidental take of Covered Species that may result from Covered Activities in the Project Units. However, the issuance of the ITPs would not result in the authorization or approval of any specific development projects or Covered Activities. All future eligible Covered Activities would proceed through the normal discretionary or building permit review and approval processes of the County or City. Individual landowners within the Project Units that pursue development permits for certain small projects during the ITP permit period would have to request coverage under either the County or City ITP and the County or City would have to extend such coverage.

Covered Activities constitute development and growth that is already allowed under the general plans of the County and City. The County and City general plan land use designations and zoning would not change with the ITPs and therefore the ITPs would not change (either reduce or increase) the amount of residential development already allowed pursuant to local land use controls. In other words, regardless of whether the ITPs are issued, the same amount of residential development could ultimately occur in the Project Units as is currently allowed under the County and City general plans. Additionally, the ITPs would not change the location of future residential development.

Given that the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this Initial Study provides a summary of existing County and City policies, programs, and regulations that are in place to address the potential environmental effects of all new growth and development in the Project Units, including that associated with the Covered Activities. It is assumed that Covered Activities within the Project Units would occur consistent with the relevant general plan and local regulations. It should also be noted that for Covered Activities that require discretionary approvals, subsequent compliance with CEQA for individual projects would continue to be required as part of the discretionary approval process.

IPHCP MINIMIZATION AND MITIGATION MEASURES

As indicated above, the approval of the IPHCP and issuance of the ITPs would not result in the authorization of specific Covered Activities. Rather, the IPHCP and the ITPs

are being prepared to more effectively and efficiently address the potential incidental take of Covered Species associated with Covered Activities, as compared to the traditional property-by-property permitting process. Therefore, while the IPHCP and ITPs will not result in the approval of any Covered Activities, they will dictate, in part, how that growth and development occurs via the implementation of various elements of the IPHCP, including the minimization and mitigation measures for addressing the biological effects on Covered Species. As a result, this section of the Initial Study analyzes:

(1) whether the issuance of the ITPs and implementation of the various elements of the IPHCP (e.g., the minimization and compensatory mitigation measures of the operating conservation program), would adequately address the adverse effects on the Covered Species that could occur with the Covered Activities and associated habitat removal allowed under the IPHCP and ITPs (see Response to C-1 below);

(2) whether the implementation of the IPHCP minimization and mitigation measures would result in any potentially significant environmental effects (see responses throughout the Environmental Review Checklist); and

(3) whether the IPHCP minimization and mitigation measures would conform with relevant County and City plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect (see Response to C-6 below).

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A. GEOLOGY AND SOILS Would the project:				
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
A. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
B. Strong seismic ground shaking?	☐	☐	☒	☐
C. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
D. Landslides?	☐	☐	☒	☐

The Project Units are not located within or adjacent to a county or State mapped fault zone (see Section II, Table 1), therefore the potential for ground surface rupture is low in these units. However, the Project Units are likely to be subject to strong seismic shaking. Additionally, liquefaction and landslide potential does exist is some limited locations within the Project Units, as identified in the County's liquefaction and landslide mapping (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to geologic hazards that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Future residential projects implemented as allowed under the County and City general

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

plans would be designed in accordance with the latest version of the California Building Code, as applicable, which should minimize the hazards of seismic shaking and liquefaction. Further, County General Plan policies 6.1.4 and 6.1.5 and County Code Chapter 16.10, Geologic Hazards, identify the need for geologic hazards assessments and/or reports for new development, if warranted, to assure that appropriate safeguards are incorporated into project plans. City General Plan policies SP-489 and SA-490 also identify the need for geotechnical and/or geologic investigations for projects in known or suspected geologic hazard areas. Per Policy SP-487, the City also uses the County's liquefaction and landslide maps to assess geotechnical hazards within their planning area.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in any potentially significant seismic-related impacts, as these measures would not change or otherwise affect seismic conditions on parcels in the Project Units. Therefore, the impact is *less than significant*.

2.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

See Response A-1 above, for a discussion of existing County and City policies, programs, and regulations pertaining to geologic hazards that are in place to address growth and development in the IPHCP Project Units.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in potentially significant impacts related to soil instability. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would reduce the overall amount of ground disturbance, as compared to existing conditions. To the extent that ground disturbance could exacerbate some soil instability conditions, such as landslide, the IPHCP should reduce such effects. Therefore, the impact is *less than significant*.

3.	Develop land with a slope exceeding 30%?	☐	☐	☒	☐

Based on the County GIS information, none of the subject parcels are known to be located in areas that exceed 30% slope (see Section II, Table 1). However, if projects

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

are proposed on parcels that have slopes greater than 30%, County and City policies and ordinances pertaining to development in such areas would apply.

IPHCP COVERED ACTIVITIES

See Response A-1 above, for a discussion of existing County and City policies, programs, and regulations pertaining to geologic hazards that are in place to address growth and development in the IPHCP Project Units.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in potentially significant impacts related to slope stability. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would reduce the overall amount of ground disturbance, as compared to existing conditions. To the extent that ground disturbance could exacerbate slope instability, the IPHCP should reduce such effects. Therefore, the impact is *less than significant*.

4.	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Zayante soils predominate within the Project Units, which have slight to moderate erosion potential. Small isolated areas do exist with high or very high erosion potential (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to soil erosion and sedimentation that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Some potential for erosion and associated siltation exists during the construction phase of future Covered Activities located in the Project Units. However, this potential would be minimized, as best management practices and standard erosion controls would be a required condition of future project approvals. In accordance with County General Plan Policy 6.3.4 and County Code Chapter 16.22, Erosion Control, a project must have an approved Erosion Control Plan prior to approval of a grading or building permit, which would specify detailed erosion and sedimentation control measures. The plan would include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion. City General Plan Policy OSA-353 and Chapter 15.06, Excavation, Grading, Erosion and Sediment Control Regulations of the

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Scotts Valley Municipal Code also specify requirements for erosion control. In particular, this Chapter sets forth rules, regulations and minimum standards to control excavation, grading, erosion, and sediment, and it requires control of all existing and potential conditions of accelerated erosion as part of the issuance of grading permits.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in potentially significant impacts related to soil erosion. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and one of the IPHCP minimization measures would further reduce the overall amount of ground disturbance, by requiring the avoidance of impacts to native Sandhills plants to the greatest extent feasible. Another minimization measure calls for ground-disturbing activities to be minimized between May 15 and August 15, which constitutes the majority of the dry season. If winter grading is allowed by the County or the City in the Project Units it would be for a limited area and time period. Additional erosion-control measures would also be required per County and City erosion control regulations (see discussion above). As a result, soil erosion and associated siltation should not be increased with the implementation of the IPHCP minimization and mitigation measures. Therefore, the impact is *less than significant.*

5.	Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☒	☐

Most of the soil types located in the Project Units have low to moderate shrink-swell potential. There are a few small, isolated areas that contain soils with high shrink-swell potential (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to geologic and soils hazards that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

It is unlikely that development in the Project Units subject to the ITPs would experience substantial risk caused by expansive soils. If expansive soils are present on a given parcel, County Code Chapter 16.10, Geologic Hazards, identifies the need for geotechnical or other engineering investigations and reports when a hazard or

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

foundation constraint requiring further investigation is identified. This requirement is intended to assure that appropriate safeguards are incorporated into project plans. City General Plan policies SP-489 and SA-490 also identify the need for geotechnical and/or geologic investigations for projects in known or suspected geologic hazard areas. In addition, the California Building Code (CBC) requires soils reports for structures to determine whether expansive soils exist and, if so, appropriate features are incorporated into the design of the structure (CBC 1802.3.2, 1805.8).

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in any potentially significant impacts related to expansive soils, as these measures would not change or otherwise affect expansive soil conditions on parcels in the Project Units. Therefore, the impact is *less than significant.*

6.	Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available?	☐	☐	☒	☐

Sewer service is provided to parcels located in some of the Project Units by County Service Area 10, Scotts Valley Sewer, or Mt. Hermon Sewage. However, private septic systems are relied on in many of the Project Units. All of the soils in the Project Units have soils with severe septic limitations under certain conditions, including moderate slopes, shallow soils, and/or soils with permeability issues (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to sewer and septic systems that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Given that private septic systems are relied on in many of the Project Units, it is expected that future projects covered under the ITPs would result in some new private septic systems. Where septic systems are proposed, County Code Chapter 7.38, Sewage Disposal, requires that a permit be obtained from the County Environmental Health Services. As part of this permitting process, lot size, lot location, soil conditions,

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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

and other factors are evaluated to ensure that site conditions are appropriate to support such a system. Additionally, Chapter 13.08, Sewage Disposal System Regulations of the Scotts Valley Municipal Code provide for similar permitting requirements.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in any potentially significant impacts related to septic systems, as these measures would not change or otherwise affect the installation or operation of such systems on parcels in the Project Units. Therefore, the impact is *less than significant*.

7.	Result in coastal cliff erosion?	☐	☐	☐	☒

None of the parcels are located in proximity to coastal bluffs (see Section II, Table 1). Therefore, the potential for coastal cliff erosion does not exist for the project.

B. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

1.	Place development within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated March 2, 2006, most of the parcels located within the Project Units are not within 100-year flood hazard areas. However, there are some small isolated areas within the Projects Units that are within or immediately adjacent to 100-year flood hazard areas (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to flood hazards that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

County General Plan policies 6.4.1 and 6.4.2 and County Code Chapter 16.10, Geologic Hazards, identify the need for hazards assessments for all development within flood hazard areas to ensure that development is protected from flood hazards

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

and does not contribute to flood-damage potential. Likewise, City General Plan policies SP-482, SA-483, SP-484, and SA-485 and Chapter 15.16, Flood Damage Prevention, of the Scotts Valley Municipal Code also specify similar requirements for development within flood hazard areas.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in any potentially significant impacts related to flooding, as these measures would not change or otherwise affect flood conditions on parcels in the Project Units. Therefore, the impact is *less than significant.*

2.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐

See Response to B-1.

3.	Be inundated by a seiche, tsunami, or mudflow?	☐	☐	☐	☒

None of the parcels are located in proximity to the ocean or an enclosed body of water (see Section II, Table 1). Therefore, the potential for inundation by seiches or tsunami does not exist for the project.

4.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

The Project Units are located in mapped groundwater recharge areas. Existing development in the Project Units obtain water from the City of Santa Cruz, the San Lorenzo Valley Water District, the Mt. Hermon Water System, the Scotts Valley Water District (see Section II, Table 1), or from private wells.

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to groundwater that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Future projects in the Project Units covered by the ITPs would obtain water from the City of Santa Cruz, the San Lorenzo Valley Water District, the Mt. Hermon Water System, the Scotts Valley Water District, or from private wells. Although future residential projects covered by the ITPs may incrementally increase water demand, this increase is not expected to be substantial given the nature and extent of the residential projects and the interim time frame of the ITPs. Additionally, given that any development covered by the ITPs would be already contemplated in the City and County general plans, it is expected that the various water agencies have accounted for this growth in their water supply planning. While that is the case, County General Plan policies 7.18.2 and 7.18.3 require written commitments from water service providers of adequate water availability and assessment of impacts on municipal water systems prior to project approval.

City General Plan policies PSP-559, PSA-560 through PSA-567, and PSP-568 seek to promote the provision of adequate water service for residents through cooperation with water districts that serve the area and by requiring new service connections for discretionary projects in order to minimize the effects of private well development on basin-wide groundwater resources. Further, City General Plan policies OS0-336 through OSP-346 require protection of watersheds and recharge areas through various programs, mitigation for loss of recharge associated with development, and minimizing new impervious surfaces associated with new development.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in potentially significant impacts related to groundwater supplies or groundwater recharge. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would reduce the overall amount of ground disturbance, as compared to existing conditions. As a result, building coverage and other impervious surfaces could potentially be limited by the implementation of the IPHCP, which would minimize interference with groundwater recharge. Therefore, the impact is *less than significant.*

5.	Substantially degrade a public or private water supply? (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion).	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

See Response A-4 above for a discussion of the potential for soil erosion and associated potential for siltation. Runoff from future residential projects covered by the ITPs may contain small amounts of chemicals and other household contaminants. No commercial or industrial activities that would contribute a significant amount of contaminants to a public or private water supply would be covered by the ITPs.

6.	Degrade septic system functioning?	☐	☐	☒	☐

See Response to A-6.

7.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding, on- or off-site?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

See Response A-4 above for a discussion of existing County and City policies, programs, and regulations pertaining to erosion/siltation that are in place to address growth and development in the IPHCP Project Units. Additionally, County General Plan policies 7.23.1 through 7.23.4 and County Code Chapter 16.22, Erosion Control, stipulate that developments requiring a building permit or discretionary approval maintain runoff at predevelopment rates to prevent erosion and siltation. This requirement would also minimize the potential that downstream flooding could increase or that runoff would exceed the capacity of existing or planned storm water drainage systems, as a result of project development covered by the ITPs. Likewise, Chapter 15.06, Excavation, Grading, Erosion and Sediment Control Regulations of the Scotts Valley Municipal Code identify design standards and other requirements for drainage facilities as part of the issuance of grading permits. Requirements include specifications for maintaining peak storm water runoff and sediment rates at predevelopment rates, requirements for mitigation if runoff exceeds predevelopment levels, and mechanisms for protecting natural drainage ways.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in potentially significant impacts related to alteration of existing drainage patterns. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would reduce the overall amount of ground disturbance, as compared to existing conditions. As a result, changes in existing drainage patterns on parcels in the Project Units should be minimized. Therefore, the impact is *less than*

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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

significant.

8. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff? ☐ ☐ ☒ ☐

See Responses A-4 and B-7 above.

9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? ☐ ☐ ☒ ☐

Refer to Responses B-1 and B-2 above.

10. Otherwise substantially degrade water quality? ☐ ☐ ☒ ☐

See Responses to A-4, B-5, and B-7 above.

C. BIOLOGICAL RESOURCES

Would the project:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service? ☐ ☐ ☒ ☐

COVERED SPECIES

The IPHCP is being prepared to address the potential incidental take of the federally endangered Mount Hermon June beetle associated with Covered Activities that are located on sites likely to be occupied by this species and the federally endangered Ben Lomond spineflower. These two federally endangered species are only known to occur in the Sandhills habitat of Santa Cruz County. The IPHCP would support the issuance of ITPs from the Service to the County and the City. The IPHCP provides a detailed description of these species in terms of their conservation status, life history, distribution, habitat requirements, threats, and recovery objectives. The IPHCP also provides an analysis of the potential loss of habitat and individuals of these species as a result of the Covered Activities. This information is based on various studies

conducted by Richard A. Arnold and Jody M. McGraw. The IPHCP is incorporated by reference and a brief summary of this information is provided herein to support, in part, the analysis of impacts under CEQA. Other references are cited.

Environmental Setting

Mount Hermon June Beetle

The Mount Hermon June beetle (*Polyphylla barbata*), a member of the family Scarabaeidae (Insecta: Coleoptera), has been listed as federally endangered since 1997, but critical habitat has not been designated for this species. The Mount Hermon June beetle has only one generation per year, but the majority of the life cycle occurs beneath the soil surface and presumably takes 2 to 3 years to complete. Adult females lay eggs beneath the soil surface on, or in close proximity, to host plants. Eggs hatch into larvae that feed on roots of host plants. As the larvae grow, they molt and eventually male and female adults emerge from pupae. Adult emergence and seasonal activity often begins in early June and continues through about mid-August (activity period). During the activity period, adult June beetles are active at night. Adult males emerge from the sandy soils and fly in search of pheromones released by flightless females which emerge from the soil. Mating occurs at the surface of the soil, and females retreat underground immediately where they presumably lay eggs. At the end of the flight period each evening, males burrow back into the soil, emerging repeatedly on subsequent evenings to search for mates.

The Mount Hermon June beetle has been found in association with Zayante sands and vegetation characteristic of the Sandhills (see Section C.2 below). Additionally, adult Mount Hermon June beetles have been found in disturbed areas where remnants of Sandhills habitat still occur. All documented observations of Mount Hermon June beetle reproduction are from sites that harbor Zayante soils. A limited number of observations of adult Mount Hermon June beetles have occurred on sandy soils in the immediate vicinity of, although not specifically on, Zayante soils.

The Mount Hermon June beetle has been observed in approximately 150 locations in Sandhills habitat (Zayante soils) in the vicinity of Mount Hermon, Felton, Ben Lomond, Zayante, and Scotts Valley. The species was also recently discovered in the Bonny Doon area. While the entire known range of the Mount Hermon June beetle encompasses a total area of nearly 10,000 acres, suitable habitat for the endangered insect is only known to occur within approximately 2,800 acres of that total, as of 2004. The precise amount of habitat which is currently occupied by the Mount Hermon June beetle is unknown. There is a close association between locations where the Mount Hermon June beetle occurs and various native Sandhills plant species, including ponderosa pines and Ben Lomond spineflower.

Ben Lomond Spineflower

The Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*), a small, short-lived annual herb of the buckwheat family (Polygonaceae), was listed as federally endangered in 1997, but critical habitat has not been designated. Seeds germinate in late fall after the first substantial rains. Plants form a basal rosette of leaves in the

winter, bolt in late February and early March, flower between March and May, and then set seed between June and July. In open habitat, the Ben Lomond spineflower can reach seedling densities in the hundreds per square foot. When in bloom, the Ben Lomond spineflower often appears as a spreading mat of small, showy, pink flowers.

The Ben Lomond spineflower is endemic to the Sandhills and restricted to sandy soils of the Zayante series. Specifically, the Ben Lomond spineflower requires sandy soils in open, sparsely vegetated areas. The core of current and historical populations of the species occurs in the vicinity of Mount Hermon, Felton, Ben Lomond, Zayante, Scotts Valley, and Bonny Doon. Population sizes vary widely from year to year due to interannual variability in climate, particularly rainfall.

Remaining Habitat In the Project Units

Sand mining, residential and commercial development, recreational uses, and invasive, non-native plant species have resulted in the loss, degradation, and fragmentation of habitat for the Mount Hermon June beetle and the Ben Lomond spineflower. Of the total number of parcels in the 10 Project Units approximately 90 percent are developed and the average parcel size ranges from 0.14 to 0.65 acre. Despite development, the Mount Hermon June beetle and Ben Lomond spineflower are found around existing roads, sidewalks, and buildings, and in small vacant lots surrounded by residential development. The IPHCP identifies numerous ongoing activities associated with the existing residential development that threaten these populations (see IPHCP Table 4), which are unnaturally small and may be susceptible to extirpation from random genetic, demographic, or environmental events. Given the ongoing threats, habitat fragmentation, and developed nature of the Project Units, the remaining habitat for these species in these areas is highly degraded and suboptimal.

However, habitat within the Project Units does provide some long-term conservation value for the Mount Hermon June beetle and Ben Lomond spineflower. Though degraded, fragmented, and reduced in size, habitat within the 10 Project Units may support persisting populations, as many of the Project Units were developed more than 40 years ago. The Mount Hermon June beetle lives the vast majority of its life below ground. Therefore, it is possible that development within the Project Units, at least at the current level, might not cause extirpations of Mount Hermon June beetle populations in these areas. The fact that Mount Hermon June beetles, which have a life cycle of 2 to 3 years, still inhabit these areas suggests that populations may be able to persist in the Project Units despite the current level of development.

It is likely that remaining habitat in the Project Units also provides connectivity between otherwise isolated populations of the Mount Hermon June beetle and Ben Lomond spineflower. Many of the Project Units are located adjacent to intact habitat that is being preserved and, in some cases, specifically managed for long-term persistence of these species. Maintaining habitat and populations within the Project Units could allow migration between populations in these protected areas. Connectivity and migration can help maintain genetic diversity and facilitate natural recolonization of habitat following extirpations that might result from fire, disease, or other events.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Impact Analysis

IPHCP Covered Activities

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. Rather, the IPHCP and ITPs are being prepared to address the potential incidental take of Covered Species that may result from future Covered Activities in the Planning Units. While a regional HCP is being developed, the IPHCP and ITPs would provide an additional interim option for landowners to address the potential incidental take of Covered Species that would be more efficient and effective than the traditional property-by-property permitting process. Therefore, this subsection of the Initial Study provides for an assessment of the overall effectiveness of the IPHCP and ITPs in addressing the anticipated adverse effects on Covered Species associated with the Covered Activities and habitat removal allowed under the ITPs.

As indicated in the IPHCP, grading, land clearing, and construction activities associated with allowed Covered Activities would likely injure or kill plants and seeds of the Ben Lomond spineflower, and adults, larvae, pupae and eggs of the Mount Hermon June beetle. Construction of new buildings and associated infrastructure including driveways and sidewalks would permanently remove habitat (i.e., Zayante soils) for both species. Mount Hermon June beetle and Ben Lomond spineflower individuals that persist on a project site after construction activities would be threatened by ongoing use of the property.

It is not possible to determine or accurately predict how many individuals of each species would be injured or killed as a result of the Covered Activities. Comprehensive data describing the distribution and abundance of the Mount Hermon June beetle and Ben Lomond spineflower within the Project Units is not available. In addition, population densities of these species fluctuate annually such that the number of individuals impacted would depend on the year in which a given project is conducted. For these reasons, the IPHCP indicates that it is more tangible and biologically defensible to evaluate the impacts of the Covered Activities under the IPHCP in terms of degradation or destruction of habitat.

Take of the Mount Hermon June beetle authorized by the ITPs issued pursuant to the IPHCP would be defined in terms of the areal extent of the species' habitat (Zayante soils), that is disturbed by the Covered Activities. Within the Sandhills communities that occur on Zayante soils, surveys have revealed that the Mount Hermon June beetle occurs within a broad array of microhabitats, including conditions associated with existing high density development. Ground disturbing activities covered by the ITPs would negatively impact populations of the Mount Hermon June beetle in a variety of direct and indirect mechanisms. Therefore, it is reasonable to assume that conducting

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

these activities within Zayante soils in the Project Units would degrade or eliminate Mount Hermon June beetle habitat and injure or kill Mount Hermon June beetles.

The ITPs issued pursuant to this IPHCP would authorize the take of Mount Hermon June beetles on no more than 139 acres of Sandhills habitat in the Project Units. This acreage figure would be the maximum area of habitat disturbance allowed by the IPHCP and ITPs. It represents 5 percent of the estimated total amount (2,800 acres) of Sandhills habitat with documented occurrences of the Mount Hermon June beetle, as of 2004.

Given that the IPHCP would cover projects that are yet to be proposed it is not possible to determine the exact locations of the habitat that would be lost. Based on locations of proposed projects to date, the City and County anticipate that some portion of habitat would be lost in each Project Unit. Habitat would be lost only on parcels that are equal to or less than 1.5 acres in size. A maximum of 15,000 square feet of additional habitat would be lost on any given parcel. However, the City and County anticipate that most projects covered under the IPHCP (e.g., swimming pools, garages, room additions, etc.) would be smaller and would each result in a loss of less than 15,000 square feet of habitat.

According to the IPHCP, the degradation or loss of up to 139 acres of Sandhills habitat within the Project Units should not have a significant effect on the persistence of the Mount Hermon June beetle and Ben Lomond spineflower throughout the species' ranges. Existing populations of these species persist on and in exposed Zayante soils around existing structures and other infrastructure and in vacant parcels. No more than 15,000 square feet of additional habitat would be lost on any given parcel under the IPHCP. Additionally, these habitat losses would likely be distributed throughout the Project Units in rough proportion to the size of each unit. Given the amount and expected distribution of the habitat that may be lost, Mount Hermon June beetles and Ben Lomond spineflowers should continue to persist on and in exposed soils in each of the Project Units. Therefore, following implementation of the Covered Activities, each Project Unit would likely provide less habitat, but essentially a similar quality of habitat, for the Mount Hermon June beetle and Ben Lomond spineflower.

While both species would likely continue to inhabit the Project Units in the short term, it is not possible to definitively predict whether these areas would support long term persistent populations of the Mount Hermon June beetle and/or Ben Lomond spineflower. There are no historical data on populations of the species within the Project Units, precluding assessment of the effects of development on population density and trends. However, the IPHCP ultimately concludes that it is unlikely that the additional habitat loss and other impacts from the projects covered under the IPHCP would be a substantial additional threat to the long-term persistence of the Mount Hermon June beetle and Ben Lomond spineflower, given that 90 percent of the parcels within the Project Units are already developed. Further, populations of these species occur within a variety of habitat areas that are protected from development, including Henry Cowell State Park, Quail Hollow Ranch County Park, the conservation areas of the Quail Hollow Quarry, the conservation areas of the Hanson Quarry, the preserves

of the Zayante Sandhills Conservation Bank, and the Bonny Doon Ecological Reserve (Ben Lomond spineflower only).

IPHCP Minimization And Mitigation Measures

As indicated above, to receive coverage under the County or City's ITP, applicants must limit their development envelopes to a maximum of 15,000 square feet. This requirement could potentially limit overall habitat disturbance and associated adverse effects on the Covered Species. Total habitat removal/disturbance would be limited to 139 acres or 5 percent of the estimated total amount (2,800 acres) of Sandhills habitat with documented occurrences of the Mount Hermon June beetle, as of 2004. Further, as part of the project, the IPHCP contains an Operating Conservation Program that would require minimization and mitigation measures for all Covered Activities, which would reduce and compensate for any adverse effects on the Covered Species. The effectiveness of the minimization and mitigation measures in addressing adverse effects on Covered Species is further discussed below. Section 10(a)(2)(B) of the Endangered Species Act requires that all applicants submit HCPs that "minimize and mitigate" the impacts of take authorized by an incidental take permit, and that issuance of the permit would not "appreciably reduce the likelihood of the survival and recovery of the species in the wild." In general, HCPs should include mitigation programs that are based on sound biological rationale, practicable, and commensurate with the impacts of the project on species for which take is requested. Additionally, the Service encourages applicants to develop HCPs that contribute to the recovery of a listed species. If the proposed project is expected to result in permanent habitat loss, then the mitigation strategy should include compensatory mitigation consisting of the permanent preservation of suitable habitat.

In accordance with these guidelines and requirements, the IPHCP's Operating Conservation Program is intended to achieve its biological goals and objectives and to ensure that the adverse effects of Covered Activities on the Mount Hermon June beetle and Ben Lomond spineflower are minimized and mitigated to the maximum extent practicable. The Operating Conservation Program includes the following minimization and mitigation measures, and monitoring and reporting requirements (see Section II for additional information about the Operating Conservation Program). Monitoring would also be conducted to track compliance with the terms and conditions of the IPHCP, Implementing Agreement, and ITPs. All of these measures are included as part of the project being evaluated under CEQA.

IPHCP Minimization Measures. The IPHCP minimization measures would reduce habitat removal and/or disturbance and associated effects on Covered Species on a parcel-by-parcel basis. Specifically, the minimization measures would require landowners to avoid habitat loss to the greatest extent feasible. For areas that would be disturbed, the minimization measures would reduce the adverse effects on the Covered Species by minimizing ground disturbance during the growing season of the Ben Lomond spineflower and the adult flight period of the Mount Hermon June beetle, minimizing landscape elements that degrade habitat, and minimizing use of exterior

night lighting that attracts insects. Overall, these minimization measures would reduce the potential for direct and indirect effects on the Covered Species from Covered Activities. The minimization measures are provided in detail below and in the IPHCP.

- **Impacts to plants that are native to the Sandhills must be avoided to the greatest extent feasible, consistent with the purpose of the Covered Activity.**

  Projects will be located to avoid the Ben Lomond spineflower, ponderosa pine, and silver-leaf manzanita whenever feasible, as determined by the City or County. Where avoidance is not feasible, minimizing impacts to native Sandhills plant species will be required.

  Implementation of these measures will minimize impacts to the Mount Hermon June beetle by maintaining host plants for the species. In addition, implementation of these measures will minimize impacts to the Ben Lomond spineflower by retaining individuals of the species whenever feasible.

- **Ground-disturbing activities associated with construction (e.g., vegetation clearance, grading, digging, etc.) must be minimized between May 15 and August 15 within the development envelope.**

  To the maximum extent feasible, the City and County will condition project approvals to avoid or minimize ground disturbance between May 15 and August 15.

  Adult Mount Hermon June beetles actively search for mates and breed during the evenings for approximately 12 to 14 weeks, generally between May 15 and August 15. During this period, males and females may burrow into duff and soils at relatively shallow depths for protection during the daytime hours. This measure will minimize impacts to the Mount Hermon June beetle by avoiding disturbance of adults during the critical breeding season.

  The Ben Lomond spineflower completes its annual life cycle between mid-October and early August. This measure reduces adverse impacts to the Ben Lomond spineflower by minimizing construction activities during the flowering and fruiting portions of its life cycle.

- **If construction-related ground disturbance associated with Covered Activities can not be scheduled to avoid the May 15 to August 15 time frame, participating landowners must ensure that areas that have been disturbed by construction activities are covered each evening during this time frame with tarps, landscape fabric, or other similar material. Only the immediate areas that have been recently disturbed must be covered in this manner between May 15 and August 15.**

  As described above, adult Mount Hermon June beetles actively seek mates during the evenings between approximately May 15 and August 15. Following activity each evening, males may burrow into duff and soils for protection during the daytime hours. Under such circumstances, disturbed, sandy soils in a project area may attract Mount Hermon June beetles seeking shelter for the evening. This measure will minimize impacts to the Mount Hermon June beetle by preventing adults that may have emerged from Zayante soils near the project site from burrowing into disturbed areas on the project site and being injured or killed when project activities resume the following day.

- **Landscaping elements that degrade habitat must be minimized to the greatest**

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

extent feasible, as determined by the City or County, and consistent with the purpose of the Covered 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. This measure minimizes impacts to the Mount Hermon June beetle by limiting these landscaping elements where adults may emerge from beneath the soil surface.

This measure will minimize impacts to the Ben Lomond spineflower by limiting the installation of landscape materials that inhibit establishment, growth, and reproduction of the plant.

- **Indirect impacts to the Mount Hermon June beetle from project lighting must be minimized to the greatest extent feasible.**

  Project activities between May 15 and August 15 will not utilize night lighting during construction. In addition, projects constructed under the IPHCP (Covered Activities) will minimize the installation of outdoor lighting. Permanent outdoor lighting shall be minimized and shall be shielded by fixture design or other means to minimize illumination of surrounding areas. If outdoor lighting is a necessary result of the Covered Activity (e.g., security lighting or lighting for handicap access structures), light sources (bulbs) that do not attract insects (e.g., yellow or sodium vapor bulbs) will be used to the maximum extent feasible.

  During the species' activity period (May 15 – August 15), male Mount Hermon June beetles fly to seek mates for a brief period beginning near dusk each evening. If these male Mount Hermon June beetles are attracted to artificial light sources, it may disrupt their reproductive behavior. This measure will minimize impacts to the Mount Hermon June beetle by avoiding potential interference with adult male Mount Hermon June beetle behavior during the breeding season.

IPHCP Mitigation Measures. Under the IPHCP, the take of individuals of the Covered Species resulting from Covered Activities must be mitigated for by permanently preserving and managing suitable habitat outside of the Project Units. Covered Activities would be limited to small "infill-type" projects in areas that contain previous development. Habitat for the Mount Hermon June beetle and/or Ben Lomond spineflower in the Project Units is fragmented and, in many cases, of reduced quality relative to larger contiguous, undisturbed parcels. Therefore, according to the IPHCP, protection in perpetuity of contiguous blocks of high quality habitat outside of the Project Units should compensate for the impacts of Covered Activities within the Project Units and should help ensure the long-term conservation of these species. The IPHCP mitigation measures include the following:

- **Planting of Native Sandhills Plant Species.**

  To the maximum extent feasible, the City and County will require that any revegetation or landscaping activities associated with Covered Activities are conducted using locally-derived source material (i.e., seeds or cuttings) of plant species native to the Sandhills, with particular emphasis on the plant species identified in Appendix F of the IPHCP.

- **Securing Off-site Mitigation.**

Prior to beginning any ground-disturbing activities, the impacts of Covered Activities must be mitigated in one of the following ways:

1. Secure conservation credits for the Mount Hermon June beetle at a ratio of 1:1 in terms of acres of disturbance to numbers 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 the Zayante Sandhills Conservation Bank; or

2. Secure conservation credits for the Mount Hermon June beetle at a ratio of 1:1 in terms of acres of disturbance to numbers 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 another Service-approved conservation bank, which also has an Operating Agreement with the County if the parcel is within the County's jurisdiction.

Because contiguous areas of high-quality habitat will be used to mitigate for impacts to fragmented, lower-quality habitat, the mitigation ratio for Covered Activities would be 1 to 1 in terms of the area of disturbance envelope to the number of conservation credits of mitigation responsibility.

According to the Service's *Guidance for the Establishment, Use, and Operation of Conservation Banks* (Service 2003), a conservation bank is "a site where habitat and/or other ecosystem resources are conserved and managed in perpetuity for listed species expressly for the purpose of offsetting impacts occurring elsewhere to the same resource values." According to this guidance, from the Service's perspective, conservation banking reduces the piecemeal approach to conservation efforts that can result from individual projects by establishing larger reserves and enhancing habitat connectivity. Larger reserves are more likely to ensure ecosystem functions, foster biodiversity, and provide opportunities for linking existing habitat. The above noted guidance is for use by Service personnel in evaluating and approving conservation banks. Implicit in the approval of a conservation bank, is the recognition that adverse effects to a species may be offset by the conservation improvements offered by the approved bank.

Further, the CEQA Guidelines acknowledge that mitigation for a significant impact can constitute any or all of the following types of actions: (1) avoiding the impact by not taking certain actions or parts of an action; (2) minimizing the impact by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (4) reducing/eliminating the impact over time by preservation and maintenance operations; and/or (5) compensating for the impact by replacing or providing substitute resources or environments (CEQA Guidelines Section 15370). The requirements of the IPHCP encompass all of these types of actions. Specifically, the later two actions are provided for via the purchase of conservation credits commensurate with the habitat loss, which fund the preservation, conservation, and maintenance of high-quality Sandhills habitat.

Currently, there are no other Service-approved Sandhills conservation banks, therefore, it is expected that credits would be obtained from the Service-approved Ben Lomond Sandhills Preserve of the Zayante Sandhills Conservation Bank unless or until

another Service-approved conservation bank is put in place. A summary of the Ben Lomond Sandhills Preserve is provided below based on the *Adaptive Management and Monitoring Plan for the Zayante Sandhills Conservation Bank* (McGraw 2006).

The Ben Lomond Sandhills Preserve, comprised of 22.8 acres of high quality Sandhills habitat and prime habitat for the Mount Hermon June beetle, is the first phase of the Zayante Sandhills Conservation Bank. Previously private property, this land will be preserved in perpetuity through conservation easements with the Center for Natural Lands Management, Inc. The biological goals and objectives for the Preserve focus on:

- Preserving and enhancing the six endangered or special-status species populations present in the Preserve (Mount Hermon June beetle, Zayante band-winged grasshopper, Ben Lomond spineflower, Santa Cruz wallflower, Ben Lomond buckwheat, and silverleaf manzanita).
- Increasing the understanding of the ecological factors influencing the distribution, abundance, and population persistence of these species.
- Maintaining or enhancing the structure and species composition of the native plant communities.
- Facilitating the ecological processes required to sustain the endemic sandhills populations and communities.

Approximately 90 percent of the Preserve, consisting of high quality habitat that supports a high diversity and abundance of native species, will be managed and maintained. Enhancement and restoration will occur on approximately 10 percent of the Preserve, which consists of habitat areas that have moderate or reduced diversity and abundance of native Sandhills species, as a result of habitat degradation. Key management strategies that are used throughout the Preserve include:

- Research to increase knowledge of the system's ecology to inform management.
- Exotic plant removal and management to facilitate endangered species and communities.
- Recreation management to enhance and maintain available habitat.
- Fire management to maintain a patch mosaic of communities and reduce the probability of wildfire.

The adaptive management program for the Preserve also involves monitoring to facilitate progress toward the stated biological goals and objectives. The monitoring provides feedback information for subsequent management changes and adaptations, including remedial actions, if necessary. The habitat management and monitoring of the Preserve is funded by an endowment established and managed by a private enterprise which contributes a portion of each credit sale from the Preserve to the endowment.

Based on the existing characteristics of the habitat and the approvals received to date from the Service, the conservation value of the Preserve has been quantified and

converted into a credit system that may be bought, sold, or traded for the purposes of offsetting the impacts of development on endangered species and their habitats within the service area of the conservation bank. The number of available conservation credits for the Preserve has been determined in the *Zayante Sandhills Conservation Bank: Evaluation of Conservation Credits for the Ben Lomond Sandhills Preserve* (Arnold 2006). According to this document, the Preserve plays an important role in local and regional conservation efforts in the Zayante Sandhills because it is contiguous with much of the habitat set aside at Quail Hollow Quarry, as well as several smaller properties surrounding the quarry and along Hihn Road.

Available conservation credits at the Preserve have been identified for Mount Hermon June beetle, Ben Lomond spineflower, and a number of other native Sandhills species, based on the existing habitats and native species that the Preserve supports. These credits can be purchased by landowners (or applicants on behalf of landowners) that have been extended coverage by the County or City under the IPHCP and their respective ITPs. While the conservation credits are for particular species, the mitigation fees obtained through the purchase of credits associated with Covered Activities would support the long-term preservation of Preserve lands and the various management and monitoring activities of the Preserve. Therefore, the purchase of conservation credits for Mount Hermon June beetle, as required by the IPHCP, would provide mitigation fees that could benefit other endangered species present in the Preserve, including the Ben Lomond spineflower.

Impact Conclusion

Under CEQA, a project would have a significant impact if it would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species.

As indicated above, the IPHCP acknowledges that there would be an overall allowed loss of habitat (up to 139 acres) for Covered Species in the Project Units with the implementation of the ITPs, which would adversely affect individuals of these species. The IPHCP concludes that it is unlikely that this additional habitat loss and other impacts from the Covered Activities would result in a substantial additional threat to the long-term persistence of the Mount Hermon June beetle and Ben Lomond spineflower throughout the species' ranges.

The IPHCP minimization measures would reduce habitat removal and/or disturbance and associated effects on Covered Species on a parcel-by-parcel basis. Specifically the minimization measures would require landowners pursuing Covered Activities to avoid habitat loss to the greatest extent feasible. Further, IPHCP compensatory mitigation measures would require that landowners pursuing Covered Activities: (1) landscape and revegetate using plant species native to the Sandhills and (2) secure conservation credits from a Service-approved conservation bank for the Mount Hermon June beetle at a 1:1 ratio in terms of acres of disturbance to numbers of credits. The purchase of such credits would compensate for or offset any adverse effects of Covered Activities on the Covered Species, as mitigation fees provided by the purchase of credits would support the on-going conservation and management

activities at the Preserve and would contribute to the conservation and recovery of both of the Covered Species. Given the above, the project would not have a substantial adverse effect on these species under CEQA. Therefore, the impact is *less than significant.*

NON-COVERED SPECIES

Environmental Setting

Zayante Sandhills support a number of other federal- and/or state-listed endangered species of animals and plants, as well as other special plant taxa that are recognized by the California Native Plant Society (CNPS) (see Table 4 below). These species are referred to as "Non-Covered Species" in this subsection of the Initial Study, as they are not addressed by or otherwise covered by the proposed IPHCP or ITPs.

Table 4: Non-Covered Special-Status Species Found in Zayante Sandhills

Common Name	Scientific Name	Conservation Status[1]
Zayante Band-winged Grasshopper	*Trimerotropis infantilis*	FE
Santa Cruz (Ben Lomond) Wallflower	*Erysimum teretifolium*	FE, CE, 1B
Santa Cruz Cypress	*Hesperocyparis abramsiana* (current name) *Cupressus abramsiana* (previous name)	FE, CE, 1B
Silverleaf Manzanita	*Arctostaphylos silvicola*	1B
Ben Lomond Buckwheat	*Eriogonum nudum* var. *decurrens*	1B
Santa Cruz Monkeyflower	*Mimulus rattanii* ssp. *decurtatus*	4
Curly-leaved Monardella	*Monardella undulata*	4

SOURCE: Zayante Sandhills Conservation Bank: Evaluation of Conservation Credits for the Ben Lomond Sandhills Preserve, Richard A. Arnold, Ph.D., April 15, 2006.

[1]**Conservation Status:**
FE = federally endangered
CE = California endangered
1B = CNPS List 1B: rare, threatened, or endangered in CA and elsewhere
4 = CNPS List 4: plants of limited distributions ("a watch list")

The federally listed Zayante band-winged grasshopper and Ben Lomond wallflower are known to occur in Sandhills habitat. However, based on the documentation provided in the IPHCP, these species are not likely to occur in the Project Units covered by the IPHCP. Further, Santa Cruz cypress occurs in the Santa Cruz Mountains, but is not currently known to occur in any of the IPHCP Project Units. Therefore, these species are not covered by the IPHCP and the ITPs.

A number of additional federal- and/or state-listed endangered and threatened species occur in the larger San Lorenzo River watershed, including but not limited to: California red-legged frog (*Rana aurora draytonii*), Ohlone tiger beetle (*Cicindela ohlone*), Santa Cruz tarplant (*Holocarpha macradenia*), etc. Although they are not currently known to occur in any of the IPHCP Project Units, these species could

potentially be discovered in the Project Units in the future, as indicated in the IPHCP.

Impact Analysis

IPHCP Covered Activities

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of the existing County and City policies, programs, and regulations pertaining to special-status species that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

According to the IPHCP, no take of, or adverse impacts to, any other federally listed or proposed species is anticipated to occur as a result of the Covered Activities. According to the IPHCP, if the Zayante band-winged grasshopper, Ben Lomond wallflower, or any other federally listed species are discovered within any of the Project Units, the Service would evaluate this new information and determine what, if any, IPHCP Covered Activities may affect these species. In addition, if the IPHCP Covered Activities would likely result in incidental take of any other federally listed animal species, the City and County would coordinate with the Service and either request a permit amendment or implement activities that would avoid the take of such species. Any permit amendment would be subject to the environmental review requirements of CEQA and NEPA and such review would take place, if and when a permit amendment is considered.

Additionally, the County and the City would refer individual applicants to the Service when proposed projects may result in the take of federally-listed species not covered by the IPHCP and ITPs. On lands under County jurisdiction, any proposed development in the Project Units would be evaluated by qualified staff, including a site visit to each parcel where development is proposed. In some cases, a biotic assessment may also be required and, if needed, a biotic report, per the County's Sensitive Habitat Protection Ordinance (County Code Chapter 16.32, Sensitive Habitat Protection). The presence or potential presence of other special-status species on the property being evaluated under the terms of the IPHCP and ITPs due to its Covered status could also be identified through this process.

IPHCP Minimization and Mitigation Measures

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in any potentially significant impacts related to special-status species not covered by the IPHCP and ITPs. The IPHCP minimization measures would reduce Sandhills habitat removal and/or disturbance and associated affects on other special-status species that may occur in this habitat. Specifically, the minimization measures would require landowners to avoid habitat loss and disturbance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

to the extent feasible. Overall, these minimization and mitigations measures would also reduce the potential that Covered Activities would result in direct or indirect effects on other special-status species that could be present. Therefore, the impact is *less than significant.*

2.	Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

See Response C-1 above. The Project Units consist of mostly developed residential areas with remnant patches of Sandhills habitat, which is identified as a sensitive biotic community by Santa Cruz County and is covered by the County's Sensitive Habitat Protection Ordinance (County Code Chapter 16.32, Sensitive Habitat Protection). The IPHCP provides a detailed description of this habitat based on various studies conducted by a number of local biologists, which is incorporated by reference.

The degradation or loss of up to 139 acres of Sandhills habitat within the Project Units would not have a substantial adverse effect on the environment under CEQA given that: implementation of the IPHCP would result in disturbance in remnant patches of habitat, implementation of the minimization measures would reduce habitat removal and disturbance to the extent possible, and compensatory mitigation measures would compensate for the acreage of habitat loss/disturbance at a 1 to 1 ratio. Therefore, the impact is *less than significant.* (See Response C-1 for further information.)

3.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife nursery sites?	☐	☐	☒	☐

Covered Activities within the Project Units would include small residential projects in areas with existing residential development. As a result, the proposed project does not involve any activities that would significantly interfere with the movements or migrations of fish or wildlife. Any impacts to early life stages of Mount Hermon June beetle would be fully mitigated through the purchase of conservation credits. Therefore, the impact is *less than significant.*

4.	Produce nighttime lighting that would	☐	☐	☒	☐

0449

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
substantially illuminate wildlife habitats?				

See Response to C-1 above. The IPHCP includes minimization measures to reduce direct and indirect effects of the Covered Activities on Covered Species and associated habitat. One of these measures addresses nighttime lighting and requires that it be minimized to the greatest extent feasible and designed to avoid attracting the Mount Hermon June beetle. See Response C-1 for the details of this measure.

5.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐

0450

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Impact Analysis

IPHCP Covered Activities

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not have a substantial adverse effect on federally protected wetlands. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to wetlands and development in the IPHCP Project Units, including that associated with the Covered Activities.

As reflected in Table 5 below, County General Plan policies 5.1.1 through 5.1.15, and County Code Chapters 16.30 and 16.32, are designed to promote conservation of sensitive habitats, including wetlands. Pursuant to these policies and ordinances, development within wetlands and other sensitive habitats must be avoided to the extent possible and, when avoidance is not feasible, impacts must be minimized and mitigated. City General Plan policies pertaining to sensitive habitats are presented in Table 6. OSP-325 calls for preservation of environmentally sensitive habitat areas. Other policies, such as OSA-320 and OSA-321, specify that the environmental review and permit processes be used to identify, maximize protection of, and mitigate impacts to valuable habitat areas. Consequently, development within the IPHCP Project Units, including that associated with Covered Activities, would not result in substantial adverse effects on federally protected wetlands.

IPHCP Minimization and Mitigation Measures

Implementation of the various elements of the IPHCP, including the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program, would not result in any potentially significant impacts to federally protected wetlands, as these measures would not change or otherwise affect wetlands on parcels in the Project Units. Therefore, the impact is *less than significant*.

6.	Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?	☐	☐	☒	☐

SANTA CRUZ COUNTY POLICIES AND REGULATIONS

The issuance of the ITPs based on the IPHCP would not result in conflicts with any County policies or regulations adopted for the purpose of protecting biological resources. The IPHCP has been developed to conform with existing County policies and regulations. The project would not result in a potentially significant impact related to conflicts with plans and policies. Therefore, the impact is *less than significant*. See further discussion below.

Santa Cruz County Policies

The Santa Cruz County General Plan Conservation and Open Space Element addresses sensitive habitats in policies 5.1.1 through 5.1.15. These policies, in conjunction with the County's Sensitive Habitat Protection Ordinance (see further discussion below), seek to minimize the disturbance of biotic communities which are rare or especially valuable because of their special nature or role in an ecosystem. As indicated in Table 5, below, the issuance of the ITPs and the implementation of the IPHCP would not conflict with any relevant policies of the County related to sensitive habitats.

Table 5. Relevant Santa Cruz County General Plan Policies

Policy #	Policy Summary	Project Consistency
5.1.1	**Sensitive Habitat Designation** applies to areas shown on General Plan Resources and Constraints Maps or any undesignated areas which meet the criteria in policy 5.1.2 and are identified through biotic review process or other means.	Project Units contain sensitive habitat, as identified on the County's Constraint Maps.
5.1.2	**Definition of Sensitive Habitat** includes: habitats with special biological significance, locally unique biotic communities (e.g., sand parkland), special-status species habitats, wetlands, riparian areas, etc.	Project Units contain sensitive habitat per this definition, as they contain remnant patches of Sandhills communities.
5.1.3	**Environmentally Sensitive Habitats** within the Coastal Zone should be designated as such per the California Coastal Act with related requirements	Not applicable, as the Project Units are not within the Coastal Zone.
5.1.4	**Sensitive Habitat Protection Ordinance** should be implemented to protect sensitive habitats. The ordinance identifies sensitive habitats, determines the uses which are allowed in and adjacent to such habitats, and specifies required performance standards.	See discussion under Santa Cruz County Regulations below.
5.1.5	**Land Division and Density Requirements in Sensitive Habitats** should be allowed only when the density and design of the subdivision are compatible with the protection of these resources.	As indicated in Responses C-1 and C-2 above, issuance of the ITPs based on the IPHCP would not result in any significant disruption of habitat values for the Covered Species. Subdivisions would not be allowed under the IPHCP/ITPs, and any Minor Land Divisions would have to comply with all of the eligibility requirements of a single parcel. Therefore, the project would conform with this policy.

Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact

Policy #	Policy Summary	Project Consistency
5.1.6	**Development Within Sensitive Habitats** - Sensitive habitats shall be protected against any significant disruption of habitat values; and any proposed development within or adjacent to these areas must maintain or enhance the functional capacity of the habitat. Reduce in scale, redesign, or, if no other alternative exists, deny any project which cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of a project is legally necessary to allow a reasonable use of the land	As indicated in Responses C-1 and C-2 above, the issuance of the ITPs based on the IPHCP would not result in any significant disruption of habitat values for the Covered Species. Therefore, the project would conform with this policy. See further discussion under Santa Cruz County Regulations, below.
5.1.7	**Site Design and Use** - To protect sensitive habitats, utilize site design and use regulations on parcels containing these resources: (a) structures shall be placed as far from the habitat as feasible, (b) delineate development envelopes to specify location of development; (c) require easements, deed restrictions, or equivalent measures to protect sensitive habitat on a project parcel which is undisturbed by a proposed development or to protect sensitive habitats on adjacent parcels; (d) prohibit domestic animals where they threaten sensitive habitats; (e) limit removal of native vegetation to the minimum amount necessary for improvements; and (f) prohibit landscaping with invasive or exotic species and encourage the use of characteristic native species.	The minimization measures contained in the IPHCP generally conform with this policy, but provide for additional elaboration as to how to specifically minimize direct and indirect effects on Covered Species.
5.1.8	**Chemicals Within Sensitive habitats** - Prohibit the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats.	The issuance of the ITP would not affect the implementation of this policy.
5.1.9	**Biotic Assessments** shall be required in areas of biotic concern and/or sensitive habitats as part of normal project review to determine whether a full biotic report should be prepared by a qualified biologist	The issuance of the ITP would not affect the implementation of this policy.
5.1.10	**Species Protection** - Recognize that habitat protection is only one aspect of maintaining biodiversity and that certain wildlife species, such as migratory birds, may not utilize specific habitats. Require protection of these individual rare, endangered and threatened species and continue to update policies as new information becomes available.	The issuance of the ITP would not affect the implementation of this policy.
5.1.11	**Wildlife Resources Beyond Sensitive Habitats** - For areas which may not meet the definition of sensitive habitat, yet contain valuable wildlife resources, protect these wildlife habitat values and species using the techniques outlined in policies 5.1.5 and 5.1.7 and use other mitigation measures identified through the environmental review process.	The issuance of the ITP would not affect the implementation of this policy.
5.1.12	**Habitat Restoration with Development Approval** - Require as a condition of development approval, restoration of any area of the subject property which is an identified degraded sensitive habitat, with the magnitude of restoration to be commensurate with the scope of the project.	The implementation of this policy related to Covered Activities would need to occur consistent with the IPHCP minimization measures to ensure restoration activities do not result in effects on Covered Species.
5.1.13	**Habitat Damaged by Code Violations** - Where a sensitive habitat has been damaged as a result of a code violation, require that restoration of damaged areas be undertaken in compliance with all necessary permits.	The implementation of this policy related to Covered Activities would need to occur consistent with the IPHCP minimization measures to

Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact

Policy #	Policy Summary	Project Consistency
		ensure restoration activities do not result in effects on Covered Species.
5.1.14	**Removal of Invasive Plant Species** - Encourage the removal of invasive species and their replacement with characteristic native plants.	The implementation of this policy related to Covered Activities would need to occur in conformance with the IPHCP minimization measures to ensure activities do not result in effects on Covered Species.
5.1.15	**Priorities for Restoration Funding** - Establish funding priorities among restoration projects by assessing the biological significance of the habitat and the degree of endangerment from development	The issuance of the ITP would not affect the implementation of this policy.

Santa Cruz County Regulations

County Code Chapter 16.32, Sensitive Habitat Protection, seeks to minimize the disturbance of biotic communities which are rare or especially valuable because of their special nature or role in an ecosystem. An area is defined as a sensitive habitat if it meets one or more of the following criteria:

a. Areas of special biological significance as identified by the State Water Resources Control Board.

b. Areas which provide habitat for locally unique biotic species/communities including but not limited to: oak woodlands, coastal scrub, maritime chaparral, native rhododendrons and associated Elkgrass, indigenous Ponderosa Pine, indigenous Monterey Pine, mapped grassland in the Coastal Zone and sand parkland; and Special Forests including San Andreas Oak Woodlands, indigenous Ponderosa Pine, indigenous Monterey Pine and ancient forests.

c. Areas adjacent to essential habitats of rare, endangered or threatened species as defined in (e) and (f) below.

d. Areas which provide habitat for species of special concern as listed by the California Department of Fish and Game in the Special Animals list, Natural Diversity Database.

e. Areas which provide habitat for rare or endangered species which meet the definition of Section 15380 of the California Environmental Quality Act guidelines.

f. Areas which provide habitat for rare, endangered or threatened species as designated by the State Fish and Game Commission, United States Fish and Wildlife Service or California Native Plant Society.

g. Nearshore reefs, rocky intertidal areas, seacaves, islets, offshore rocks, kelp beds, marine mammal hauling grounds, sandy beaches, shorebird roosting, resting and nesting areas, cliff nesting areas and marine, wildlife or educational/research reserves.

h. Dune plant habitats.

i. All lakes, wetlands, estuaries, lagoons, streams and rivers.

j. Riparian corridors.

Sites that are occupied by the Mount Hermon June beetle and Ben Lomond spineflower are protected under the County's Sensitive Habitat Protection Ordinance because these species are endangered species designated by the Service and they occur in the locally unique Sandhills habitat. The IPHCP's mitigation strategy is based on the preservation and long-term management of Sandhills habitat through the acquisition of mitigation credits and other means, and the County has determined that it is sufficient to fulfill the requirements of the Sensitive Habitat Protection Ordinance with respect to the Mount Hermon June beetle and Ben Lomond spineflower. Overall, the issuance of the ITP to the County should not conflict with or otherwise impede the implementation of the County's Sensitive Habitat Protection Ordinance related to these or other protected species or habitats.

CITY OF SCOTTS VALLEY POLICIES AND REGULATIONS

The issuance of the ITPs based on the IPHCP would not result in conflicts with any City policies or regulations adopted for the purpose of protecting biological resources. The IPHCP has been developed to conform with existing City plans, policies, and regulations. The project would not result in a potentially significant impact related to conflicts with plans and policies. Therefore, the impact is *less than significant*. See further discussion below.

City of Scotts Valley Policies

The City of Scotts Valley General Plan Open Space and Conservation Element addresses sensitive habitats in policies OSO-317 through OSA-322 and OSO-324 through OSA-328. These policies seek to minimize the disturbance of native plant and animal habitats. As indicated in Table 6, below, the issuance of the ITPs and the implementation of the IPHCP would not conflict with any relevant policies of the City related to sensitive habitats.

Table 6. Relevant City of Scotts Valley General Plan Policies

Policy #	Policy Summary	Project Consistency
OSO-317	Minimize the disturbance or removal of native vegetation.	The issuance of the ITP would support the implementation of this policy related to Covered Activities in the Project Units.
OSP-318	New development proposed in areas containing native plant communities shall be carefully planned and provide for the conservation and maintenance of these plants.	The issuance of the ITP would support the implementation of this policy related to Covered Activities in the Project Units.
OSA-319	Develop a comprehensive list of known rare and endangered plants and animals in the planning area.	The issuance of the ITP would not affect the implementation of this policy.
OSA-320	Use the environmental review process to identify and mitigate impacts of development on native plant communities and valuable habitat areas.	The issuance of the ITP would support the implementation of this policy related to Covered Activities in the

Policy #	Policy Summary	Project Consistency
		Project Units.
OSA-321	Through the permit process, the City shall require that proposed development located in or adjacent to native plant communities or valuable habitat areas be planned to maximize protection of the resource.	The issuance of the ITP would support the implementation of this policy related to Covered Activities in the Project Units.
OSA-322	Development of vacant land located within valuable habitats shall be limited to low densities, cluster developments, and/or passive recreational uses.	The issuance of the ITP would not affect the implementation of this policy.
OSO-324	Establish protective measures for habitat areas of particular environmental sensitivity and for rare or endangered animal species.	The issuance of the ITP would support the implementation of this policy related to Covered Activities in the Project Units.
OSP-325	Environmentally sensitive habitat areas and rare and endangered animal species shall be preserved.	The issuance of the ITP would support the implementation of this policy.
OSA-326	As part of the environmental review process, new development within areas of rare or endangered wildlife habitat shall prepare a site-specific survey which identifies the locations and type of species present.	The issuance of the ITP would not affect the implementation of this policy.
OSA-327	Through the permit process, ensure land uses in or adjacent to environmentally sensitive habitats shall attempt to avoid significant impairment of habitat value without adequate mitigation.	The issuance of the ITP would support the implementation of this policy related to Covered Activities in the Project Units.
OSA-328	The City shall identify those sites that are greater than one acre and contain or are located adjacent to significant habitats and encourage, where appropriate, acquisition by the Land Trust or similar organization.	The issuance of the ITP would not affect the implementation of this policy.

City of Scotts Valley Regulations

The City of Scotts Valley does not have an ordinance related to sensitive habitat protection, as does the County of Santa Cruz. However, the City does have a Tree Protection Ordinance (City of Scotts Valley Municipal Code Chapter 17.44.080) to protect significant trees which are a valued resource to the community of Scotts Valley. Determination of which trees receive protection is based on: 1) location; 2) size; 3) requirements of permits approved by the City's Planning Department or Planning Commission; and 4) status as a "heritage tree." The City's tree ordinance may protect some ponderosa pine (*Pinus ponderosa*) trees that are designated heritage trees, grow near roadways, grow on slopes, or are large in size. Ponderosa pines are a critical element of Sandhills habitat, and are the dominant species within Maritime Coast Range Ponderosa Pine Forest, a sensitive plant community endemic to the Sandhills.

According to the IPHCP, projects receiving take coverage under the IPHCP must be situated to avoid impacting native Sandhills plant species (including native trees) to the maximum extent possible (see Response C-1 above). Where complete avoidance is not feasible, projects covered by the IPHCP would be required to minimize impacts to native Sandhills plant species. Therefore, it is not anticipated that implementation of the IPHCP would result in the loss of any pines protected under the City's Tree Protection Ordinance and therefore would not conflict with this ordinance.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
7. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The USFWS has approved nine individual Low Effect HCPs for the Mount Hermon June beetle and one Low Effect HCP for the Mount Hermon June beetle and Ben Lomond spineflower Eight of these 10 individual HCPs are located within the proposed IPHCP area. Implementation of the IPHCP and issuance of the associated ITPs to the County and City would not conflict with any of the provisions of these individual HCPs. There are no other approved local, regional, or state habitat conservation plans in the IPHCP vicinity. Therefore, there is *no impact*.

D. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐

There are no mapped agricultural resources located in the Project Units, nor are these areas designated for agricultural use in the County and City general plans. However, there are some parcels adjacent to portions of the Project Units that are zoned Residential Agriculture (RA) in the County's General Plan, so there could be agricultural uses in the vicinity of the Project Units. On RA lands "small scale commercial agriculture, such as animal keeping, truck farming and specialty crops, can take place in conjunction with the primary use of the property as residential" per County Code Chapter 13.10, Zoning Regulations.

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to agriculture that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

While development on some parcels within the Project Units could potentially be in proximity to small-scale agricultural operations, if any, such operations are expected to be already occurring in conjunction with existing adjacent residential uses. Therefore, Covered Activities should not result in substantial additional adverse effects on adjacent lands used for agricultural purposes, such that those uses are hampered or otherwise affected. Likewise, existing adjacent agricultural operations, if any, should not substantially affect Covered Activities due to noise, dust, odor, and other effects which may be a result of normal commercial agricultural operations.

Future development of Covered Activities would have to be conducted in accordance with applicable County policies, such as Policy 5.13.27, which indicates that structures shall be sited to minimize possible conflicts with agriculture in the area. However, it should be noted that many of the County General Plan policies and the Agricultural Preservation and Protection Ordinance (Chapter 16.50 of the County Code) apply only to Commercial Agricultural Land designated in the County General Plan. Such land is not located in proximity to the Project Units and therefore these particular policies and regulations do not apply. The City of Scotts Valley does not have any relevant policies or regulations related to the potential for conflicts with adjacent agricultural uses.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in any potentially significant agricultural-related impacts, as these measures would not change or otherwise affect land designated for agricultural use by the County General Plan. Therefore, the impact is *less than significant*.

2.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

As indicated above in D-1, there are no mapped agricultural resources located in the Project Units, nor are these areas designated for agricultural use in the County and City general plans. Consequently, no Williamson Act contracts would be affected by the project.

3.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to timber that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

It is unlikely that Covered Activities within this Project Unit would affect timber resources in the future, as no mapped resources are located on parcels that could be developed under the IPHCP. It should also be noted that timber resources may only be harvested in accordance with California Department of Forestry timber harvest rules and regulations and with County Code Chapter 16.52, Timber Harvesting Regulations.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in any potentially significant timber-related impacts, as these measures would not change or otherwise affect land designated as Timber Resources by the County General Plan. Therefore, the impact is *less than significant.*

4.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐

As noted above in D-1, no mapped timber resources are located on parcels that could be developed under the IPHCP. Additionally, implementation of the IPHCP's conservation program would not change or otherwise affect land designated as Timber resources. Therefore, the impact is *less than significant.*

5.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

See Responses to D-1 and D-2 above.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
E. MINERAL RESOURCES				
Would the project:				
1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to mineral resources that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

As indicated above, mapped mineral resources are located in the Scotts Valley Project Units. Given that parcels that could be covered by the City's ITP are small (1.5 acres or less) and located in already densely developed areas, it is unlikely that development on these parcels that fall under the ITP would further limit the potential use or extraction of these resources over existing conditions. Additionally, the City General Plan and Municipal Code do not limit development or otherwise protect mineral resources in these areas.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in any potentially significant impacts related to mineral resources, as these measures would not change or otherwise affect mineral resources. Therefore, the impact is *less than significant*.

2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

See Response to E-1 above.

F. VISUAL RESOURCES AND AESTHETICS				
Would the project:				
1. Have an adverse effect on a scenic vista?	☐	☐	☒	☐

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

A number of County- or City-designated scenic roads are located within or adjacent to the IPHCP Project Units (see Section II, Table 1). There are no other visual or scenic resources in the Project Units that have been identified and/or mapped by the County or the City.

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to visual resources and aesthetics that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Given that covered residential projects that fall under the ITPs would be located on small parcels (1.5 acres or less) in already densely developed residential areas, it is unlikely that development on these parcels would have any additional adverse effect on designated scenic roads or would result in visual obstruction of these resources from public vantage points. However, Covered Activities would need to conform with County General Plan policies related to protection of vistas from designated scenic roads.

Similarly, it is unlikely that development on these parcels would degrade the existing visual character or quality of these sites and their surroundings. County General Plan policies 8.1.2 and 8.1.3 and County Code Chapter 13.10, Zoning Regulations, provide development standards for residential districts, which would ensure that standards for maximum building height, maximum number of stories, minimum setbacks, maximum ratios for floor area-to-parcel size, and other criteria are met for residential projects, as relevant. Likewise, Chapter 17, Zoning, of the Scotts Valley Municipal Code identifies similar development standards for residential projects. Compliance with these County and City standards, as part of the issuance of applicable building and other discretionary permits, would help to ensure that Covered Activities would not degrade the existing visual character or quality of these various sites and their surroundings.

Future development covered by the ITPs may create an incremental increase in night lighting in the Project Units, depending on the type of residential project. However, such an increase would be small and similar in character to the lighting associated with the surrounding existing residential uses in these already densely developed areas. Therefore, any increase in night lighting should not adversely affect the existing visual character or quality of these Project Units.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

any potentially significant visual or aesthetic impacts. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would further reduce the overall amount of ground disturbance. The IPHCP could potentially result in new development with reduced visual resource and aesthetic effects, to the extent that these measures serve to reduce overall building size in the Project Units. Further, minimization measures would also require that outdoor lighting be minimized and shielded by fixture design or other means to reduce illumination of surrounding areas. Therefore, the impact is *less than significant.*

2.	Substantially damage scenic resources, within a designated scenic corridor or public view shed area including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

See Response F-1 above.

3.	Substantially degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridgeline?	☐	☐	☐	☒

See response to F-1 above.

4.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

See Response to F-1 above.

G. CULTURAL RESOURCES

Would the project:

1.	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the

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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to historical resources that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Any proposed addition or modification of the two historical residences would have to be conducted in accordance with County Code Chapter 16.42, Historic Preservation, which requires a valid Historic Resource Preservation Plan approved by the Historic Resources Commission to make any such modifications. If a proposed project involved demolition of either of these structures, the following additional reports would be required: (1) a Special Inspections Report on the condition of the structure and (2) a Historical Documentation Report that documents the claim that preservation is not feasible and provides for the preservation of the historic values of the structure.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in any potentially significant historical resource impacts, as these measures would not change or otherwise affect these historical resources. Therefore, the impact is *less than significant*.

2.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐

The potential for archaeological resources to occur exists throughout the Project Units (see Section II, Table 1). Further, a cultural resources records search of all pertinent survey and site data was conducted for this project at the Northwest Information Center, Sonoma State University, on February 10, 2009. The records were accessed by utilizing the Felton USGS 7.5-minute quadrangle map and included the Sandhills project area along with a ¼ mile radius around the Project Units. In addition to Information Center maps and site record forms, other sources that were reviewed included: the Directory of Properties in the Historic Property Data File for Santa Cruz County, the National Register of Historic Places, the California Register of Historic Resources, the California Inventory of Historic Resources (1976), the California Historical Landmarks (1996), and the California Points of Historical Interest (1992).

The Native American Heritage Commission (NAHC) was contacted on March 20, 2009 and requested to provide information on locations of importance to Native Americans and a list of Native Americans that should be contacted. The NAHC sacred lands search failed to identify any traditional properties in the project area. The NAHC provides a list of Native American organizations that should be contacted concerning locations of importance to Native Americans in the project area. A letter to each organization on the NAHC list was sent on March 24, 2009, providing information

about the proposed project and requesting information on locations of importance to Native Americans. To date, two responses have been received by phone. A member of the Indian Canyon Mutsun Band of Costanoan, expressed interest in being notified of any excavation in the Project Units and would like to monitor those activities. A member of the Amah Mutsun Tribal Band, requested to be notified of any discoveries during excavation. Neither respondent had any specific information on known properties within the Project Units.

Approximately fifty studies have been conducted within the ¼-mile radius of the Project Units. The types of cultural resource sites recorded in the Sandhills project area include, but are not limited to, Native American village sites, temporary camp sites, lithic scatters, and historic settlement features. The landscape within the Sandhills area was radically different prior to development, and as a result, areas that appear disturbed may still harbor significant resources.

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to archaeological resources that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

County Code Chapter 16.40, Native American Cultural Sites, requires that archeological surveys be conducted for all discretionary projects located in areas with mapped archeological sensitivity and for which ground disturbance would occur. Such surveys are also required for any project, which would result in ground disturbance within 500 feet of a recorded Native American cultural site. Archaeological reports are required prior to the issuance of any project permits when a project site contains a culturally significant site and when development of the project would result in the disturbance of the site. Permit conditions for such a project would be based on the archeological report and consultation with local Native California Indian groups. Conditions shall include but not be limited to those stated in Chapter 16.40.035:

a. All appropriate preservation or mitigation measures. Preservation could occur through project design or restriction on use and/or grading to avoid the site. Preservation could also occur by having the site excavated by a professional archaeologist to preserve a sample of the remains, artifacts, etc., only as authorized by an Archaeological Excavation Permit.

b. A provision that if previously undiscovered human remains are encountered during the course of excavation or development, the responsible persons shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director per County Code Chapter 16.40.040.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

If the remains are not of recent origin, a full archeological report shall be prepared and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

c. A provision that the applicant pay the full costs of any preservation or mitigation measures.

Likewise, Chapter 17.44, Cultural Resource Preservation, of the Scotts Valley Municipal Code identifies similar requirements for cultural resource reports, permits when significant resources are present, and discovery of previously unidentified resources or human remains during construction. Compliance with these County and City code standards, as part of the issuance of building and discretionary permits, would help to ensure that all growth and development in the IPHCP Project Units, including that associated with the Covered Activities, would not cause an adverse change in the significance of an archaeological resource.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in any potentially significant archaeological resource impacts. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would further reduce the overall amount of ground disturbance. As a result, the potential for inadvertent discovery of archaeological resources could potentially be reduced with the implementation of the IPHCP minimization and mitigation measures. Therefore, the impact is *less than significant.*

3.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

See Response G-2 above.

4.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

There are no unique paleontological resources or unigue geological features mapped or otherwise known to be on or adjacent to the Project Units. Therefore, *no impact is anticipated.*

H. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1.	Create a significant hazard to the public or the environment as a result of the routine transport, use or disposal	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

of hazardous materials?

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations, if any, pertaining to hazardous materials use that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

The ITPs would cover qualified residential projects located within the Project Units. These types of residential uses would result in the use of small amounts of cleaning fluids and other chemicals that are common for household uses. These projects would not result in the transport, storage, use, or disposal of hazardous materials in any significant quantities. Additionally, both the County and the City have policies and programs to facilitate the safe disposal of household hazardous wastes. Therefore, no significant hazard to the public or environment would occur as result of growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant hazard to the public or environment as a result of the transport, storage, use, or disposal of hazardous materials, as these measures would not change or otherwise affect such use on parcels in the Project Units. Therefore, the impact is *less than significant*.

2.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

See Response H-1 above.

3.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

See Response H-1 above.

4.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐

One parcel, located within the Ben Lomond South Project Unit, is on the 2009 list of hazardous sites in Santa Cruz County compiled pursuant to the specified code. The other Project Units do not contain any parcels that are on this list (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations, if any, pertaining to existing or future contamination that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

As indicated above, one parcel is on the 2009 list of hazardous sites in Santa Cruz County. Regardless of whether or not Covered Activities take place on this parcel, cleanup of the contamination is required under County Code Chapter 7.1, Hazardous Materials-Hazardous Waste-Underground Storage Tanks. Similar cleanup under this chapter would be required if any future releases of hazardous materials occurs in the Project Units under County jurisdiction. Likewise, if any future releases of hazardous materials occurs in the Project Units under City jurisdiction, cleanup under City Municipal Code Chapter 13.12, Hazardous Materials Storage Permit, would be required.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant hazard to the public or environment as a result of exposure to existing contamination, as these measures would not change or otherwise affect exposure to such contamination on parcels in the Project Units. Therefore, the impact is *less than significant*.

5.	For a project located within an airport land use plan or, where such a plan	☐	☐	☐	☒

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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				

The Project Units are not located within two miles of a public or private airport. The closest private airports are located in Bonny Doon and Davenport. Therefore, there is *no impact.*

6.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

See Response to H-5 above.

7.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Implementation of the IPHCP and issuance of the associated ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Future development proposals would have to comply with all applicable emergency response requirements (e.g., adequate access for emergency response vehicles). Consequently, the project would not impair or interfere with implementation of any emergency response plans, and the impact is *less than significant.*

8.	Expose people to electro-magnetic fields associated with electrical transmission lines?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to electro-magnetic fields that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Given that the Project Units include residential areas in already densely developed areas, it is unlikely that proposed Covered Activities would be located in proximity to

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

electrical transmission lines. If a new residential structure were proposed in proximity to a transmission line and potentially hazardous electro-magnetic fields, County General Plan Policy 6.8.3 would require that the habitable development envelope be located away from any potentially hazardous fields. Alternatively, powerlines could be relocated or undergrounded to minimize exposure. City General Plan Policies PSP-586 through PSP-587 also make provisions for undergrounding of existing power lines.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant hazard to the public related to electro-magnetic fields associated with transmission lines, as these measures would not change or otherwise affect such conditions on parcels in the Project Units. Therefore, the impact is *less than significant.*

9.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Portions of some of the Project Units are located in fire hazard areas (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to fire hazards that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Future residential projects covered by the ITPs would incorporate all applicable fire safety code requirements and would include fire protection devices as required by the local fire agencies. Further, these projects would be built in existing densely developed residential areas within existing service areas and infrastructure. Therefore, growth and development in the IPHCP Project Units, including that associated with the Covered Activities, should not create or increase potential fire hazards.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

a significant hazard to the public related to fire, as these measures would not change or otherwise affect such conditions on parcels in the Project Units. Therefore, the impact is *less than significant.*

I. TRANSPORTATION/TRAFFIC

Would the project:

1.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to traffic that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

The ITPs would cover qualified residential projects located within the Project Units over an interim period. Covered residential projects that result in new bedrooms (e.g., a new single family residence) could create a small incremental increase in traffic on nearby roads and intersections. However, given the limited number of new trips likely to be associated with Covered Activities and the fact that any new trips would be distributed throughout the Project Units, it is expected that this increase would not cause the Level of Service at any nearby intersection to drop below Level of Service D. Level of Service D is the County's level of service standard under County General Plan Policy 3.12.1.

Additionally, the Circulation Element of the County General Plan and the Local Coastal Program Land Use Plan includes policies and programs to establish a transportation system which would: (1) accommodate the travel demands of cumulative development projected by the County General Plan (including projects covered by the ITP), (2) reduce traffic congestion, (3) promote mass transit and non-vehicular modes of transportation such as pedestrian and bicycle use, and (4) be within the County's

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

ability to finance and operate. In particular, County Code Chapter 15.12, Transportation and Roadside Improvement Fees, requires that new developments mitigate their impacts on transportation and roadside facilities through assessment of fees on new development, which fund identified system improvements. Any residential projects covered by the County's ITP that result in new bedrooms would be subject to this fee assessment. The fees have been established and are regularly updated such that they reflect the reasonable cost of mitigating the impacts of new development on transportation-related facilities.

The City of Scotts Valley General Plan also has policies and programs that seek to establish an integrated transportation system capable of accommodating existing and projected needs of the planning area. A similar impact fee program is in place in the Scotts Valley Municipal Code Chapter 16.58, Impact Mitigation Fees, to ensure that a given project that entails one or more new residential units pays its fair share of the cost of traffic improvements necessary to accommodate cumulative growth in the planning area.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant impact related to traffic, as these measures would not change or otherwise affect traffic conditions in the Project Units. Therefore, the impact is *less than significant.*

2.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

See Response H-5 above.

3.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐

Implementation of the IPHCP and issuance of the associated ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Future development proposals would have to comply with all applicable land use provisions, regulatory requirements, and roadway design criteria. Consequently, the project would not substantially increase hazards due to a design feature or incompatible land use, and the impact is *less than significant.*

4.	Result in inadequate emergency	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
access?				
See response to H-7 above.				
5. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to parking that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Under County and City codes, future residential projects covered by the ITPs would be required to comply with any parking requirements relevant to the applicable zoning districts and as applicable to the type of project being pursued. Therefore, any new parking demand generated by future residential projects covered by the ITPs would be accommodated on or in the immediate vicinity of the subject parcels. Covered Activities would not result in an increase in parking demand in existing parking facilities (e.g., parking lots, parking structures, etc.).

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant impact related to parking, as these measures would not change or otherwise affect parking conditions in the Project Units. Therefore, the impact is *less than significant*.

6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to roadway hazards that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Any future projects covered by the ITPs would be required to comply with current driveway, parking, and road requirements, as relevant, to prevent potential hazards to motorists, bicyclists, and/or pedestrians.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant impact related to hazards to motorists, bicyclists, or pedestrians, as these measures would not change or otherwise affect such conditions in the Project Units. Therefore, the impact is *less than significant*.

7.	Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the County General Plan for designated intersections, roads or highways?	☐	☐	☒	☐

See Response H-1 above.

J. NOISE

Would the project result in:

1.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to noise that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

The ITPs would cover qualified residential projects located within the Project Units. It is possible that projects covered by the ITPs could create a small incremental permanent increase in the existing noise environment. However, any increase would be small,

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

and would be similar in character to noise generated by the surrounding existing residential uses. Noise generated during construction of Covered Activities would temporarily increase the ambient noise levels in immediately adjoining areas.

It is also possible that future Covered Activities could be located on parcels that experience noise levels in excess of State, County and/or City noise standards due to adjacent traffic noise or other existing or future sources of noise. Per County policy, average hourly exterior noise levels shall not exceed the General Plan threshold of 50 Leq during the day and 45 Leq during the nighttime. Impulsive noise levels shall not exceed 65 db during the day or 60 db at night. Per County General Plan Policy 6.9.2, acoustical studies would be required for all new development with an existing or future Ldn noise exposure greater than 60 dB. The studies must comply with requirements of Title 24 of the California Code of Regulations, which stipulates that interior noise levels for residential uses would not exceed 45 dBA. An acoustic engineer would be required to measure actual noise levels at the project site and recommend construction techniques that would ensure compliance with noise standards.

The City of Scotts Valley General Plan policies NP-451 and NA-452 indicate that where the annual day-night noise level exceeds 60 dBA, the City shall require an acoustical engineering study for proposed new construction or renovation of structures. As for the County, these studies must recommend methods to reduce the interior day-night annual average noise levels to below 45 dBA for residences and other noise sensitive uses in order to meet state requirements.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and the specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not create a significant impact related to noise, as these measures would not change or otherwise affect such conditions in the Project Units. Therefore, the impact is *less than significant.*

2.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Implementation of the IPHCP and issuance of the associated ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Future development proposals would be residential in nature and, in all likelihood, would employ conventional construction techniques. Consequently, the project would not expose people to excessive groundborne vibration or noise levels, and the impact is *less than significant.*

3.	Exposure of persons to or generation of noise levels in excess of standards established in the General Plan or noise ordinance, or applicable	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
standards of other agencies?				
See Response J-1 above.				
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
See Response J-1 above.				
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
See Response H-5 above				
6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
See Response H-5 above				

K. AIR QUALITY

Where available, the significance criteria established by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) may be relied upon to make the following determinations. Would the project:

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

Santa Cruz County is located in the North Central Coast Air Basin (NCCAB), which also includes Monterey and San Benito counties. Within the NCCAB, the Monterey Bay Unified Air Pollution Control District (MBUAPCD) is responsible for ensuring that the state and Federal air pollutant emissions standards are not violated. The North Central Coast Air Basin does not meet State standards for ozone and particulate matter (PM_{10}) and therefore is a non-attainment area for these standards. Regional pollutants of concern that are emitted by various activities in the Basin include ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NOx]), and dust.

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to air quality that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Regional pollutants of concern that would be emitted by Covered Activities are ozone precursors and dust. Given the limited amount of new traffic that would be generated by future residential projects covered by the ITPs (see Response H-1 above), there is no indication that new emissions of VOCs or NOx would exceed Monterey Bay Unified Air Pollution Control District (MBUAPCD) thresholds for these pollutants. For example, the MBUAPCD CEQA Air Quality Guidelines provide a range of different land use types and sizes that could result in potentially significant ozone impacts (MBUAPCD 2008). These indicate that for new single-family development, 810 new dwelling units could potentially generate indirect sources of ozone precursors sufficient to result in significant impacts on ozone. Given that 90 percent of the qualifying parcels in the Project Units are already developed, only about 320 new single-family residences could result if all of the undeveloped parcels were developed under the ITPs (IPHCP Table 1).

Construction of future residential projects covered by the ITPs may result in short-term, localized decreases in air quality due to the generation of dust. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet or 0.3 acres per parcel. Therefore, grading and excavation on individual parcels would not exceed the MBUAPCD's PM_{10} threshold of 2.2 acres per day. However, dust from grading operations must be controlled per County Code Chapter 16.20, Grading Regulations and per City Municipal Code Chapter 15.06, Excavation, Grading, Erosion, and Sediment Control Regulations. Standard dust control best management practices would be implemented during construction to reduce dust emissions per these regulations.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in potentially significant impacts related to an exceedance of an air quality standard. The IPHCP would limit the development envelopes of Covered Activities to 15,000 square feet per parcel and the IPHCP minimization measures would further reduce the overall amount of ground disturbance and associated generation of PM_{10} emissions during construction. As a result, the implementation of the IPHCP minimization and mitigation measures would not contribute substantially to an existing exceedance of an air quality standard. Therefore, the impact is *less than significant.*

2.	Conflict with or obstruct	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
implementation of the applicable air quality plan?				
See Response K-1 above.				
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
See Response K-1 above..				
4. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
See Response K-1 above.				
5. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to odor control that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Future residential projects covered by the ITPs would not likely create objectionable odors affecting substantial numbers of people. Objectionable odors could potentially be generated by residential uses if animals are kept and not properly cared for or maintained. However, all uses would be required to comply with animal regulations, such that objectionable odors are not generated, per County Code Chapter 13.10, Zoning Regulations and per City Municipal Code Chapter 17.46, Exceptions and Modifications.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in potentially significant impacts related to odors, as these measures would not change or otherwise affect odorous conditions on parcels in the Project Units. Therefore, the

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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

impact is *less than significant.*

L. GREENHOUSE GAS EMISSIONS

Would the project:

1.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐

Implementation of the IPHCP and issuance of the associated ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Most of the parcels within the Project Units have already been developed, and future development projects would be residential in nature. These projects, like all development, would be responsible for an incremental increase in green house gas emissions by usage of fossil fuels during the site grading and construction. At this time, Santa Cruz County is in the process of developing a Climate Action Plan (CAP) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under AB 32 legislation. Until the CAP is completed, there are no specific standards or criteria to apply. All future development projects would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. Therefore, impacts associated with the temporary, construction-related increase in green house gas emissions is expected to be *less than significant.*

2.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

See Response L-1 above.

M. PUBLIC SERVICES

Would the project:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks or other recreational activities?	☐	☐	☒	☐
e. Other public facilities; including the maintenance of roads?	☐	☐	☒	☐

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to public services and utilities that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

While Covered Activities represent an incremental contribution to the need for services, the increase would be minimal given the nature, extent, and location of residential projects and the interim time frame of the ITPs. Additionally, the future residential projects would be constructed in existing densely developed residential areas within existing service areas that already receive services and have existing infrastructure. Moreover, Covered Activities would incorporate all applicable fire safety code requirements and would include fire protection devices as required by the local fire agencies or California Department of Forestry, as applicable. The local fire agencies or California Department of Forestry, as appropriate, would review and approve project plans for future residential projects covered by the ITPs, to assure conformity with fire protection standards, which include minimum requirements for water supply for fire protection, fire service access, etc.

Further, applicants seeking coverage under the ITPs would be required to pay school, park, and transportation fees in conformance with Santa Cruz County Code and the Scotts Valley Municipal Code. Fees collected from Covered Activities, in conjunction with other fees collected, would be used to offset the incremental increase in demand for school and recreational facilities and public roads. If new or expanded public service facilities are required as a result of planned growth in the service areas, including that related to the Covered Activities, the environmental effects of such

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

facilities would be evaluated under CEQA at the time that they are proposed.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in potentially significant impacts related to public services, as these measures would not change or otherwise affect public service requirements in the Project Units. Therefore, the impact is *less than significant*.

N. RECREATION

Would the project:

1.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐

See Response M-1 above.

2.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Implementation of the IPHCP and issuance of the associated ITPs would not include construction or expansion of recreational facilities. Therefore, there is *no impact*.

O. UTILITIES AND SERVICE SYSTEMS

Would the project:

1.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

See Responses A-4 and B-7 above.

2.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Future Covered Activities would obtain water from the City of Santa Cruz, the San

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Lorenzo Valley Water District, the Mt Hermon Water System, the Scotts Valley Water District (see Section II, Table 1), or from private wells. Future Covered Activities would obtain sewer services from County Service Area 10, Scotts Valley Sewer, Mt. Hermon Sewage System, or from private septic systems (see Section II, Table 1).

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to water or wastewater facilities that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Although Covered Activities may incrementally increase water demand, this increase is not expected to be substantial given the nature and extent of the residential projects and the interim time frame of the ITPs. Additionally, given that Covered Activities have already been contemplated in the City and County general plans, it is expected that the various water agencies have accounted for this growth in their water supply planning. While that is the case, County General Plan policies 7.18.2 and 7.18.3 require written commitments from water service providers of adequate water availability and assessment of impacts on municipal water systems prior to project approval.

Additionally, City General Plan policies PSP-559, PSA-560 through PSA-567, and PSP-568 seek to promote the provision of adequate water service for residents through cooperation with water districts that serve the area and by requiring new service connections for discretionary projects in order to minimize the effects of private well development on basin-wide groundwater resources. Further, City General Plan policies OS0-336 through OSP-346 require protection of watersheds and recharge areas through various programs, mitigation for loss of recharge associated with development, and minimizing new impervious surfaces associated with new development.

The wastewater flows from Covered Activities would not violate any wastewater treatment standards. Although Covered Activities may incrementally increase sewer system demand, this increase is not expected to be substantial given the nature and extent of the residential projects and the interim time frame of the ITPs. Additionally, given that Covered Activities have already been contemplated in the City and County general plans, it is expected that the various sewer agencies have accounted for this growth in their system planning. While that is the case, County General Plan Policy 7.19.1 requires written commitments from sewer service providers of adequate system capacity prior to project approval and County Policy 7.19.2 requires that new development pay its fair share of downstream sewer system improvements, if needed.

Provision of adequate sewer services in the City of Scotts Valley is provided for

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

through the City's Wastewater Plan, which is monitored and updated annually per City General Plan Policy PSA-571 to meet the demands of the service area. Improvements are planned and funding proposed to ensure that adequate levels of service are available to meet the demands of the service area per City General Plan Policy PSA-572.

If new or expanded water supply or sewer facilities are required as a result of planned growth in the service areas, including that related to the Covered Activities, the environmental effects of such facilities would be evaluated under CEQA at the time that they are proposed.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in potentially significant impacts related to the need for new water or wastewater treatment facilities, as these measures would not change or otherwise affect these facilities that serve parcels in the Project Units. Therefore, the impact is *less than significant.*

3.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

See Response O-2 above.

4.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

See Response O-2 above

5.	Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

See Response O-2 above.

6.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

needs?

IPHCP COVERED ACTIVITIES

As indicated in the Introduction to Section III above, the issuance of the ITPs would not result in the authorization of any specific Covered Activities or development above and beyond that already allowed under the existing approved general plans. Therefore, the project would not result in or otherwise cause direct, indirect or secondary effects associated with such Covered Activities. However, for information purposes, this subsection of the Initial Study provides a summary of existing County and City policies, programs, and regulations pertaining to landfill facilities that are in place to address all growth and development in the IPHCP Project Units, including that associated with the Covered Activities.

Future Covered Activities would make an incremental contribution to the reduced capacity of regional landfills. However, this contribution would be relatively small and would be of similar magnitude to that created by existing residential land uses in and around the Project Units. Further, given that any development covered by the ITPs has already been contemplated in the City and County general plans, it is expected that the County and City public works agencies have accounted for this growth in their municipal solid waste planning efforts.

IPHCP MINIMIZATION AND MITIGATION MEASURES

Implementation of the IPHCP and specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not result in potentially significant impacts related to landfill capacity or solid waste management regulations, as these measures would not change or otherwise affect the capacity of these facilities or related regulatory compliance. Therefore, the impact is *less than significant.*

7.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

See Response to 0-6 above.

P. LAND USE AND PLANNING

Would the project:

1.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

See Response to C-6 above.

2. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

See Response to C-7 above

3. Physically divide an established community?	☐	☐	☒	☐

Implementation of the IPHCP and specific minimization and compensatory mitigation measures of the IPHCP's operating conservation program would not physically divide an established community, as the IPHCP would not change or otherwise affect community structure within the Project Units. Therefore, the impact is *less than significant.*

Q. POPULATION AND HOUSING

Would the project:

1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐

The IPHCP and ITPs would not cause growth or otherwise be growth inducing, as they would not result in: (1) the authorization of growth or the approval of any specific development project, (2) growth above and beyond that allowed under existing approved general plans of the County and City, and/or (3) the removal of an existing obstacle to growth. Therefore, the impact is *less than significant.* These aspects of growth inducement are further discussed below.

As indicated above, the IPHCP and ITPs are intended to address the potential incidental take of Covered Species that may result from Covered Activities in the Project Units. However, the issuance of the ITPs would not result in the authorization or approval of any specific development projects or Covered Activities. All future eligible Covered Activities would proceed through the normal discretionary or building permit review and approval processes of the County or City. Individual landowners within the Project Units that pursue development permits for certain small projects during the ITP permit period would have to request coverage under either the County or City ITP and the County or City would have to extend such coverage.

Additionally, Covered Activities constitute development and growth that is already planned for under the general plans of the County and City. The County and City general plan land use designations and zoning would not change with the ITPs and therefore the ITPs would not change (either reduce or increase) the amount of

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

residential development already allowed pursuant to local land use controls. In other words, regardless of whether the ITPs are issued, the same number of dwelling units could ultimately be developed in the Project Units as is currently allowed under the County and City general plans. Additionally, the ITPs would not change the planned location of residential development.

Further, the issuance of the ITPs would not remove an existing obstacle to growth. Currently, the Service advises all private landowners proposing activities that may result in injury or mortality of federally listed animals to prepare an individual HCP and apply for an incidental take permit. A number of ITPs have been recently issued in the Sandhills by the Service and a number of ITP applications are pending (see Response N-3 below for additional information). The IPHCP and ITPs are being developed in an attempt to provide an additional option for landowners that would be more efficient and effective than the traditional permitting process. Landowners would still have the option of developing their own HCP and seeking individual ITPs, or waiting until the County and City have developed and implemented a regional HCP.

While the IPHCP and ITPs would not result in or otherwise cause indirect or secondary effects associated with such induced growth, this Initial Study provides a summary of existing County and City policies, programs, and regulations that are in place to address all new growth and development in the IPHCP Project Units, including that associated with the Covered Activities. It is assumed that Covered Activities within the Project Units would occur consistent with the relevant general plan and local regulations. It should also be noted that for Covered Activities that require discretionary approvals, subsequent compliance with CEQA for individual projects would continue to be required as part of this approval process.

2.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Development of Covered Activities in the identified Project Units would proceed in accordance with the existing County and City general plans. As such, the IPHCP would not increase or decrease the number of residential units or change the planned location of residential development. Therefore, issuance of the ITPs and implementation of the IPHCP would not result in displacement of people or housing, and there is *no impact*.

3.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

See Response Q-2 above.

R. MANDATORY FINDINGS OF SIGNIFICANCE

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	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐

See Section III (C), Biological Resources and Section III (F), Cultural Resources for explanation.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒

The proposed project, consisting of the issuance of the ITPs to the County and the City and the implementation of the IPHCP Operating Conservation Plan, would not have impacts that are individually limited, but cumulatively considerable. Issuance of the ITPs would provide permit coverage under the Act for the take of Covered Species and associated removal and/or disturbance of 139 acres of Sandhills habitat.

Under the ITPs and IPHCP, habitat removal or disturbance would be minimized to the extent possible on a project-by-project basis through a series of minimization measures.

Further, habitat removal or disturbance that does take place would be compensated for at a 1:1 ratio through the purchase of conservation credits at the Service-approved Zayante Sandhills Conservation Bank or another Service-approved conservation bank. The purchase of such credits would compensate for or offset any adverse effects of Covered Activities on the Covered Species, as mitigation fees provided by the purchase of credits would support the on-going conservation and management activities at the Preserve and would contribute to the conservation and recovery of both of the Covered Species. Given that the habitat loss and associated effects on individuals of the Covered

Species would be compensated for through commensurate mitigation, the proposed project would not have a cumulatively considerable contribution to a significant impact. (Section III (C), Biological Resources, provides additional information about the effectiveness of the IPHCPs minimization and mitigation measures.)

Other recent projects in the Sandhills region that have received ITPs are also required to compensate for any permanent loss of habitat for federally endangered species. Approximately 7.5 acres of Mount Hermon June beetle habitat have been approved for removal based on the issuance of ITPs from the Service and local approvals from the County or City. Compensatory mitigation for these projects has included securing conservation credits at the Zayante Sandhills Conservation Bank or providing for the permanent conservation of habitat preserves. Additionally, several mining operations in the Sandhills region that have ITPs are also required to compensate for any permanent loss of habitat through the establishment of on- and off-site conservation areas and on-going monitoring.

The County, City and Service are aware of a number of development projects that have been implemented in the action area by landowners who have not applied for or obtained an ITP. In these cases, it is uncertain as to the amount of Sandhills habitat that has been lost and the number of Mount Hermon June beetles and Ben Lomond spineflowers that have been killed or affected as a result of the development. However, the proposed project would not contribute to these losses, given that minimization measures and compensatory mitigation measures would be required for individual projects to receive coverage under the ITPs. Further, the IPHCP might decrease such losses in the future by providing a more streamlined method of receiving necessary approvals.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

See Section III (G), Hazards and Hazardous Materials for explanation.

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IV. TECHNICAL REVIEW CHECKLIST

	REQUIRED	DATE COMPLETED
Agricultural Policy Advisory Commission (APAC) Review	Yes ☐ No ☒	_____
Archaeological Review	Yes ☐ No ☒	_____
Biotic Report/Assessment	Yes ☐ No ☒	_____
Geologic Hazards Assessment (GHA)	Yes ☐ No ☒	_____
Geologic Report	Yes ☐ No ☒	_____
Geotechnical (Soils) Report	Yes ☐ No ☒	_____
Riparian Pre-Site	Yes ☐ No ☒	_____
Septic Lot Check	Yes ☐ No ☒	_____
Other:	Yes ☐ No ☒	_____

*Technical reviews would be conducted, as applicable, during the normal building permit or discretionary approval processes for future projects that may receive coverage under the ITPs.

V. REFERENCES USED IN THE COMPLETION OF THIS ENVIRONMENTAL REVIEW INITIAL STUDY

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VI. ATTACHMENTS

1. IPHCP Project Units

ATTACHMENT 1
IPHCP Project Units

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Figure B-1. Rollingwoods Unit, IPHCP, Santa Cruz County, California

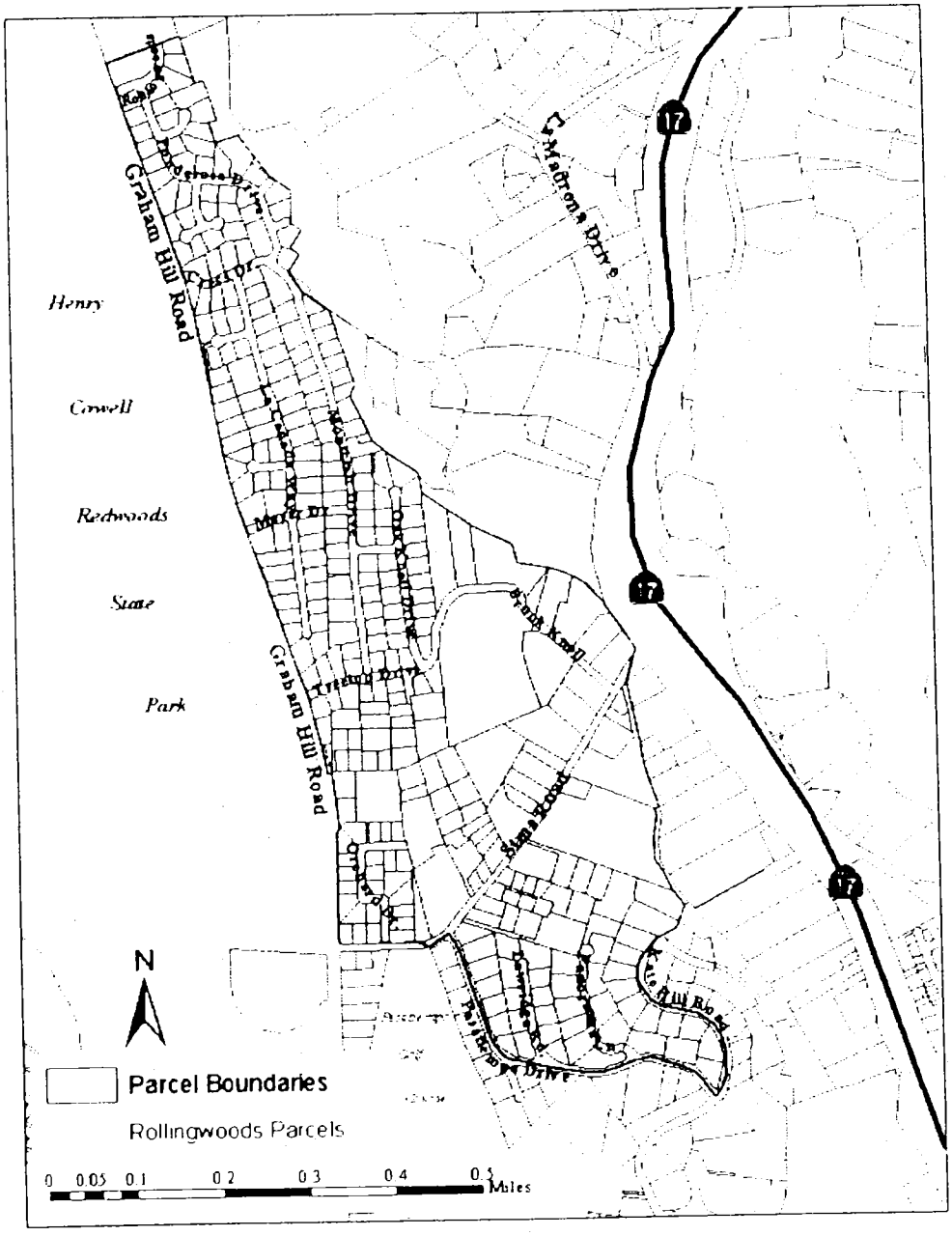

Figure B-2. Whispering Pines Unit, IPHCP, Santa Cruz County, California

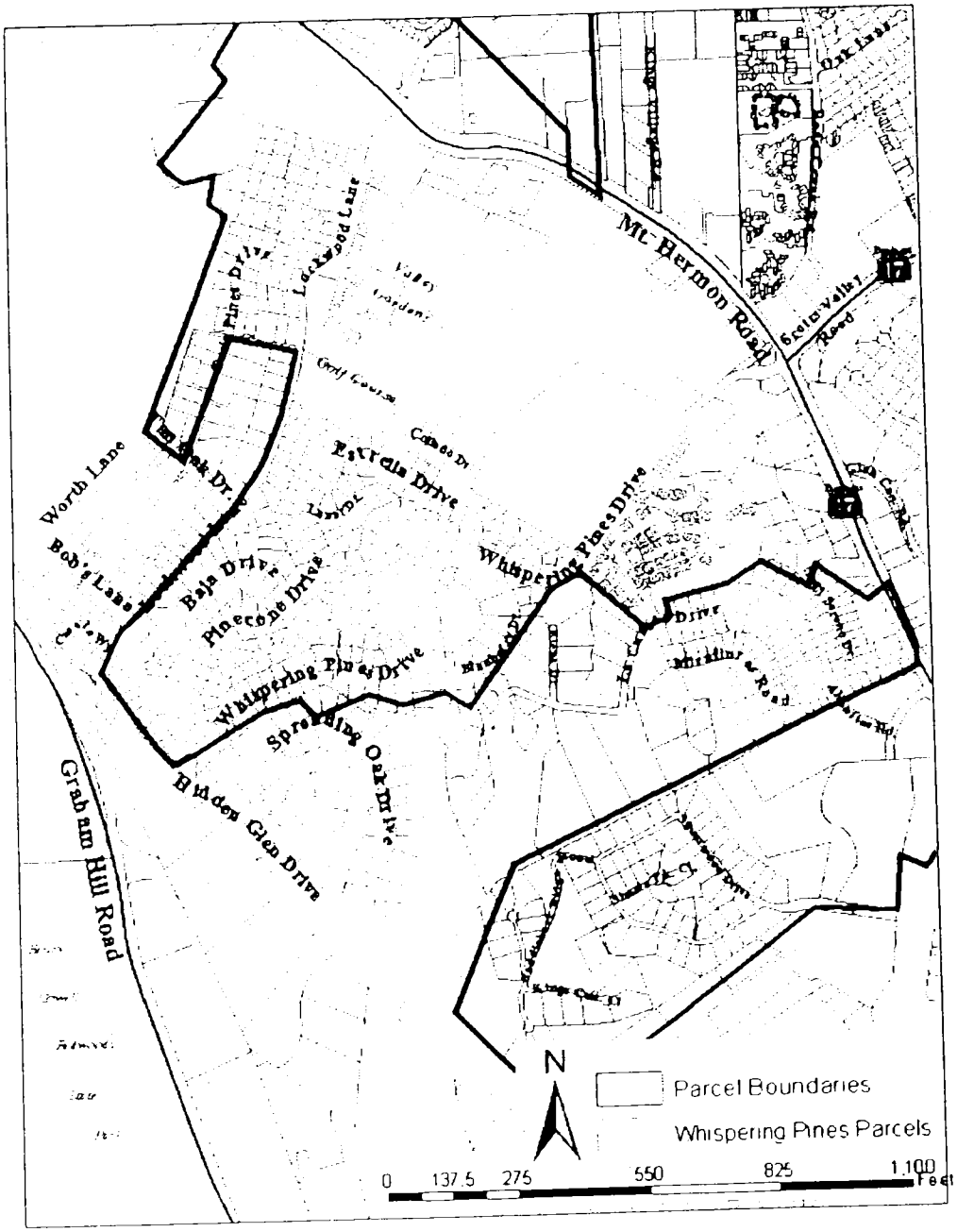

Figure B-3. Scotts Valley West Unit, IPHCP, Santa Cruz County, California

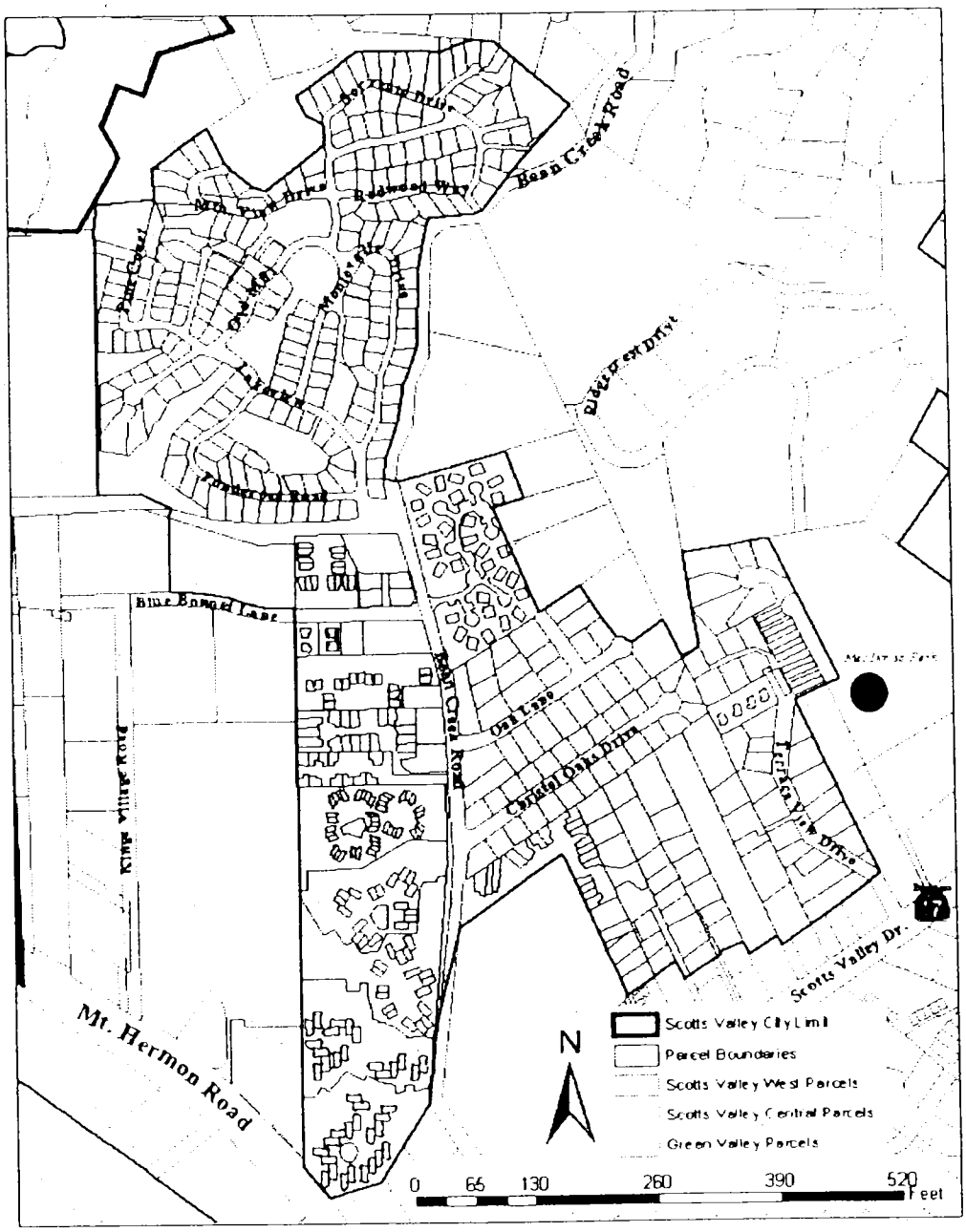

Figure B-4. Scotts Valley East Unit, IPHCP, Santa Cruz County, California

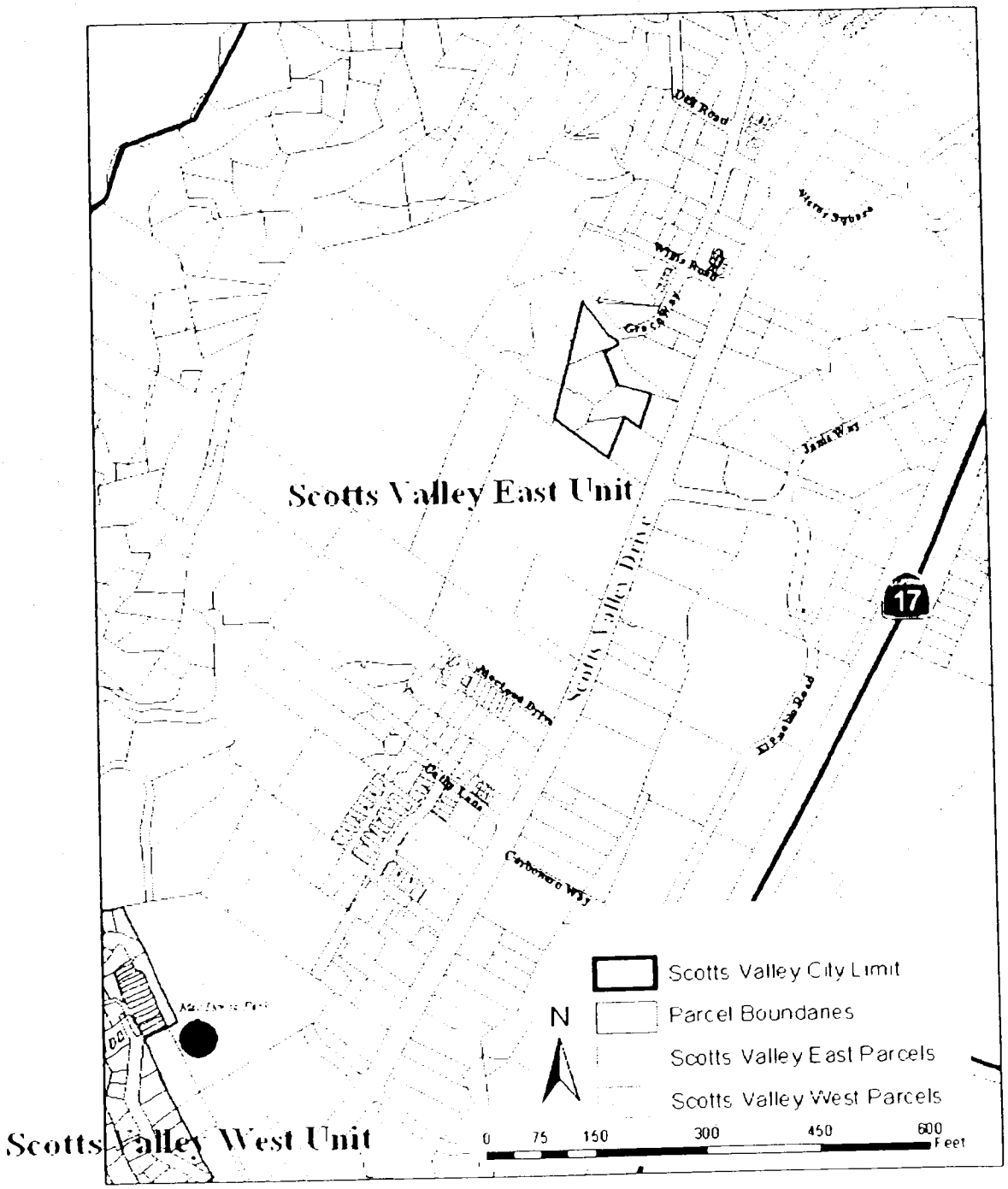

Figure B-5. Green Valley Unit, IPHCP, Santa Cruz County, California

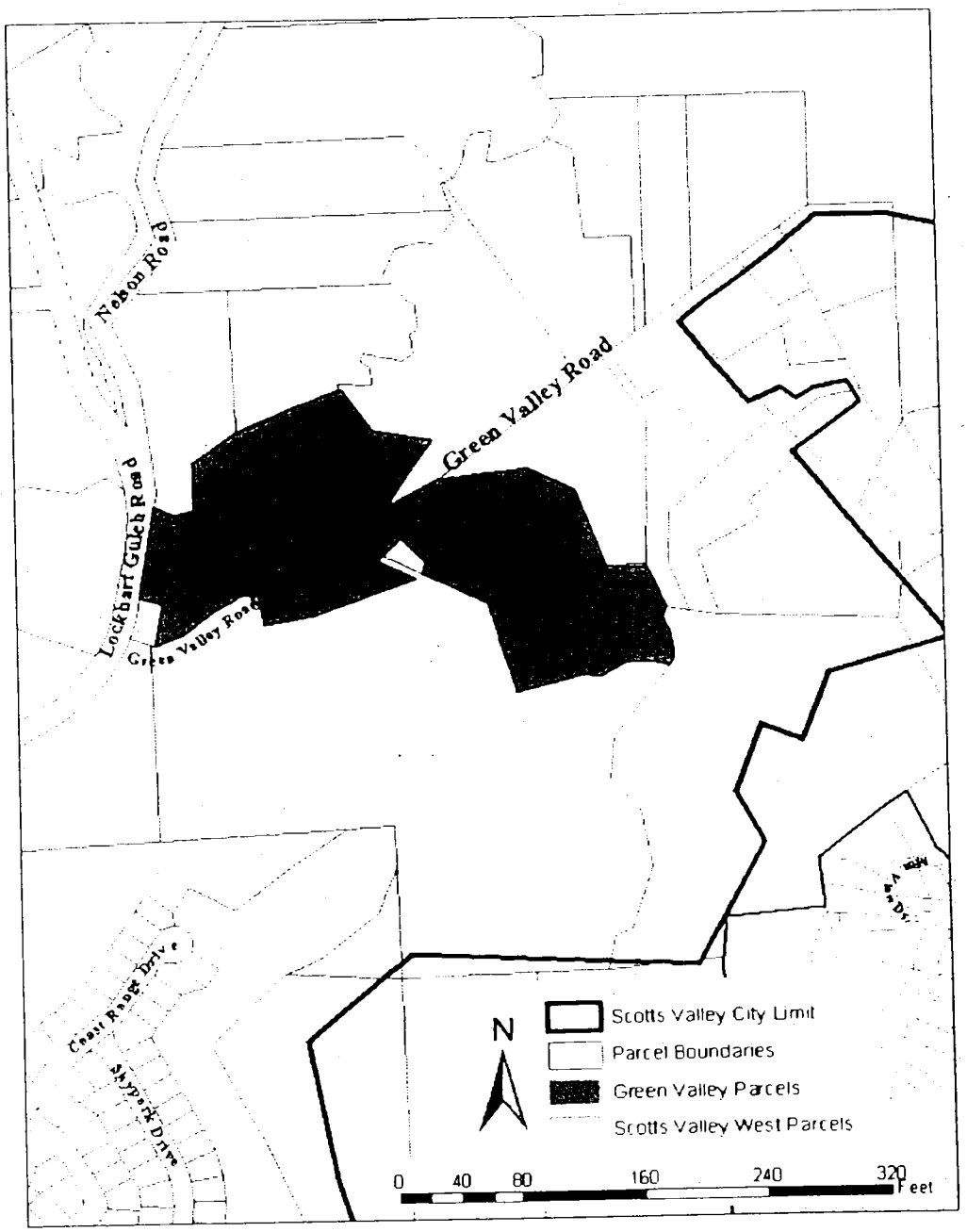

Figure B-6. Mount Hermon Unit, IPHCP, Santa Cruz County, California

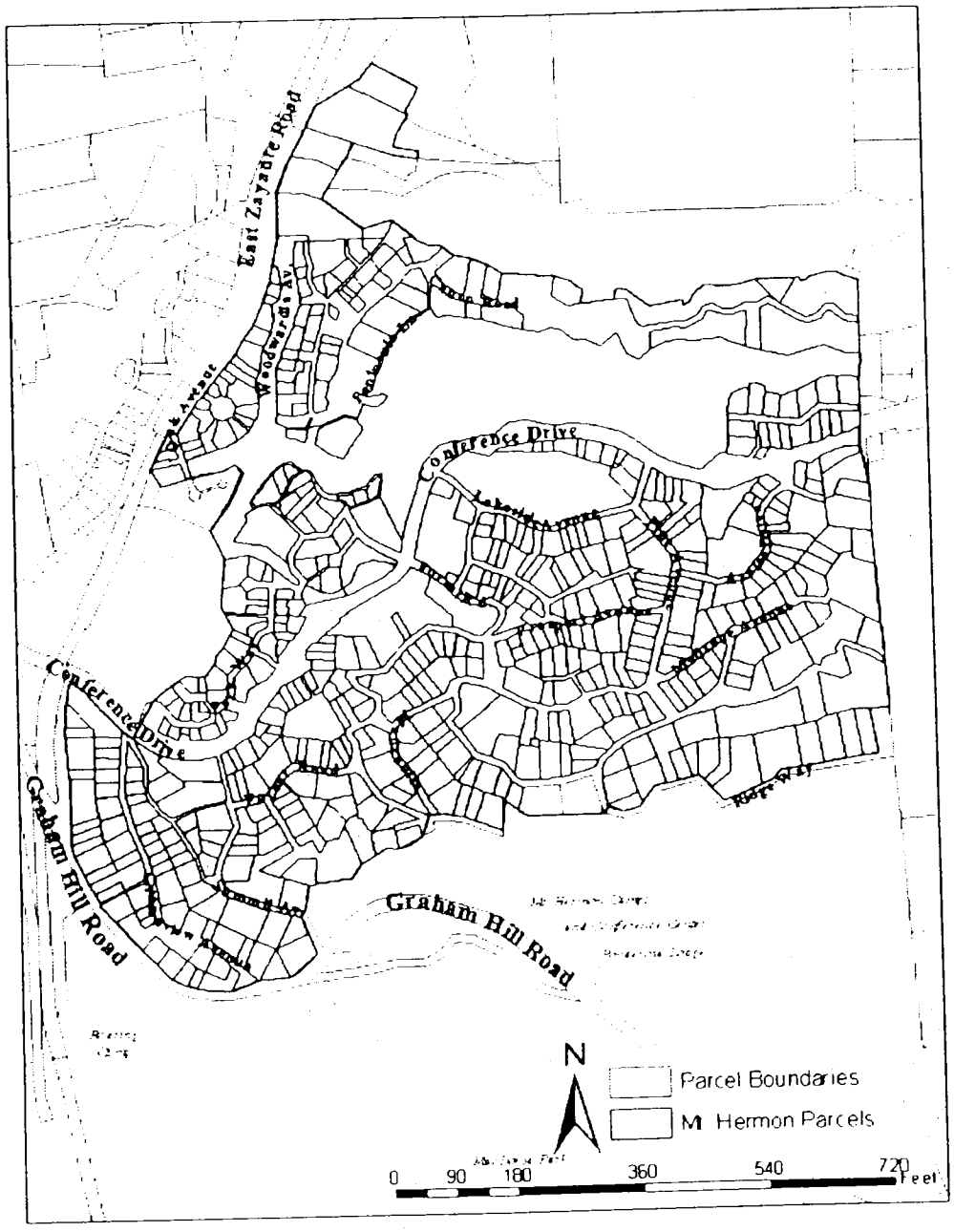

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Figure B-7. Zayante Road North Unit, IPHCP, Santa Cruz County, California

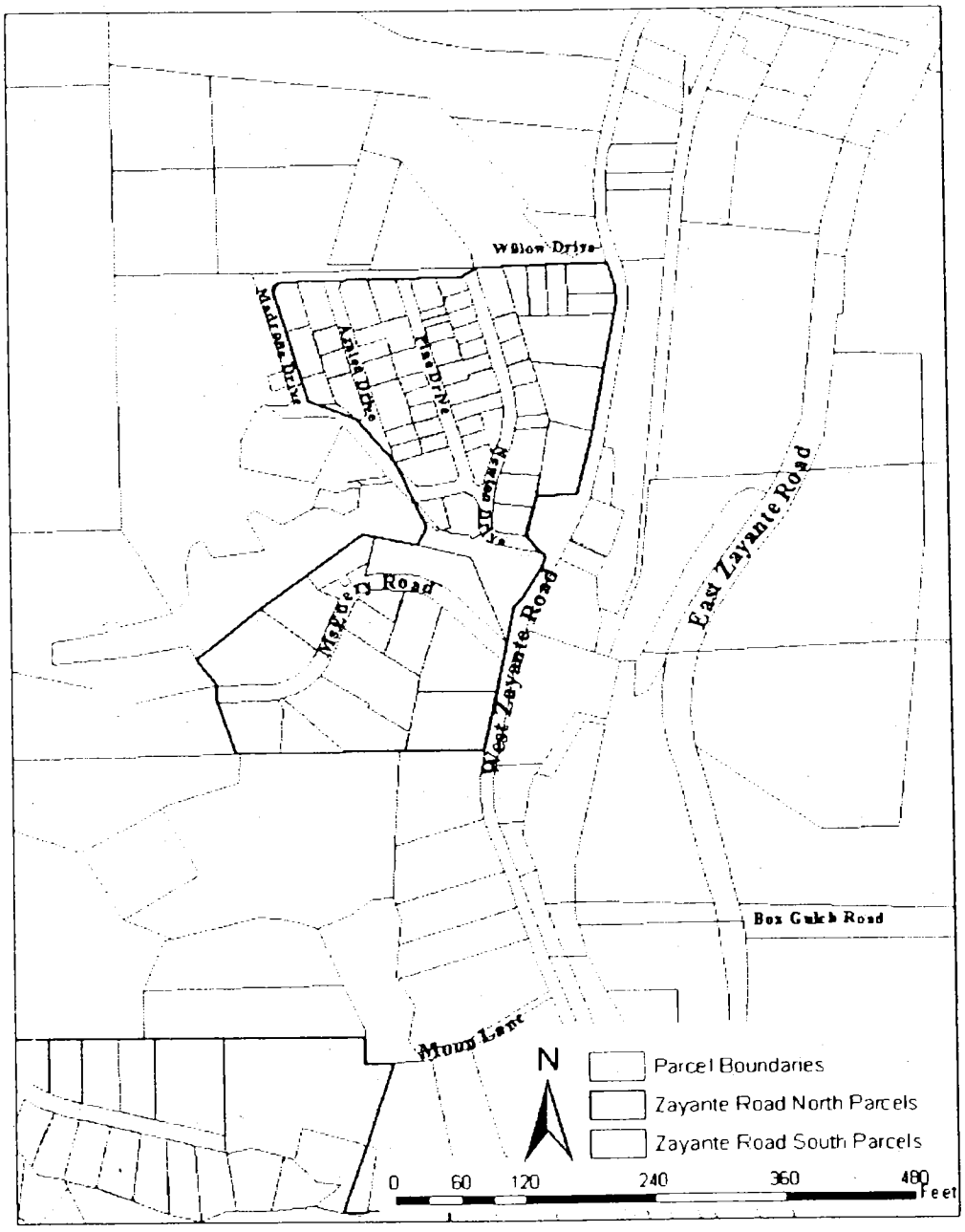

Figure B-8. Zayante Road South Unit, IPHCP, Santa Cruz County, California

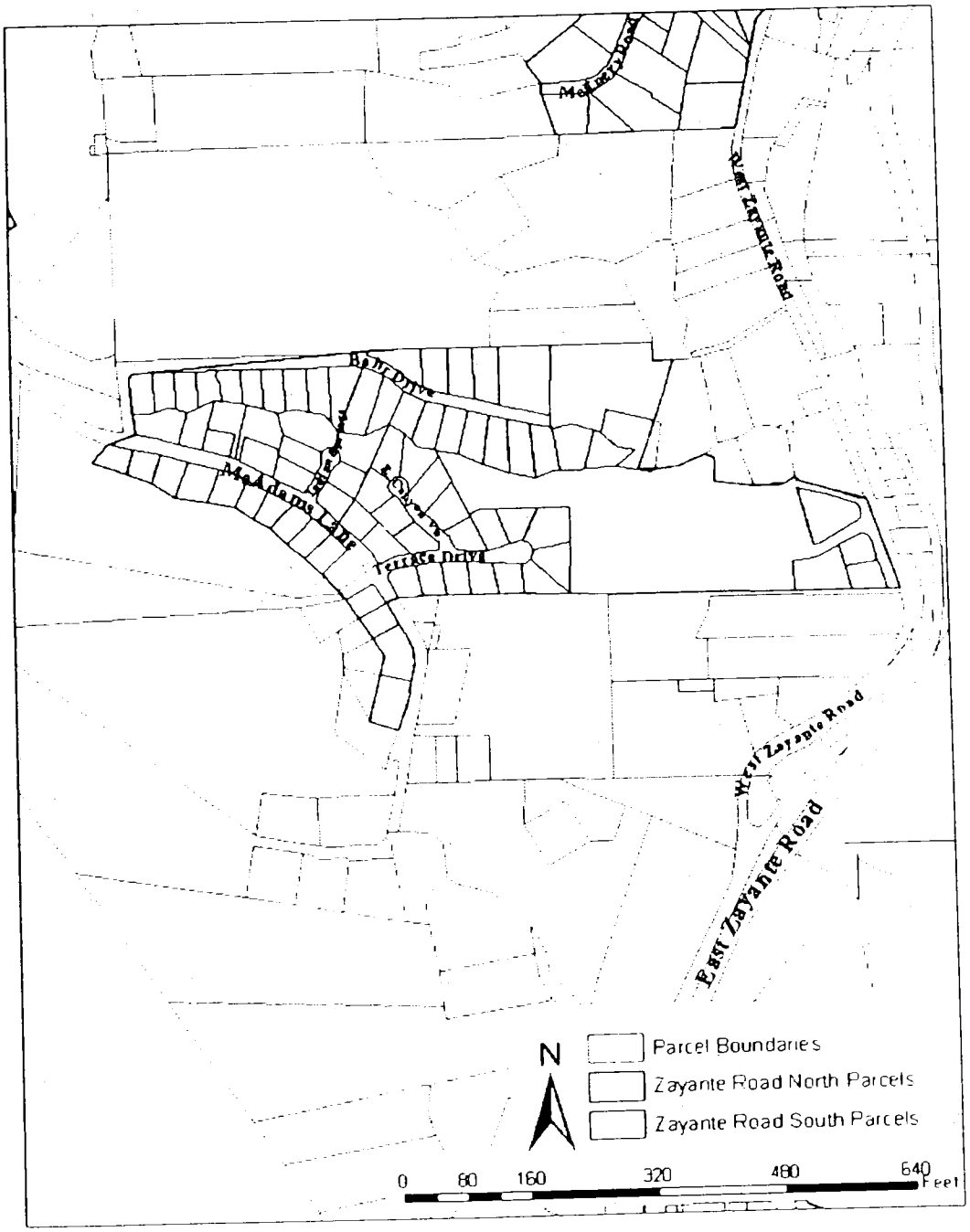

Figure B-9. Ben Lomond South Unit, IPHCP, Santa Cruz County, California

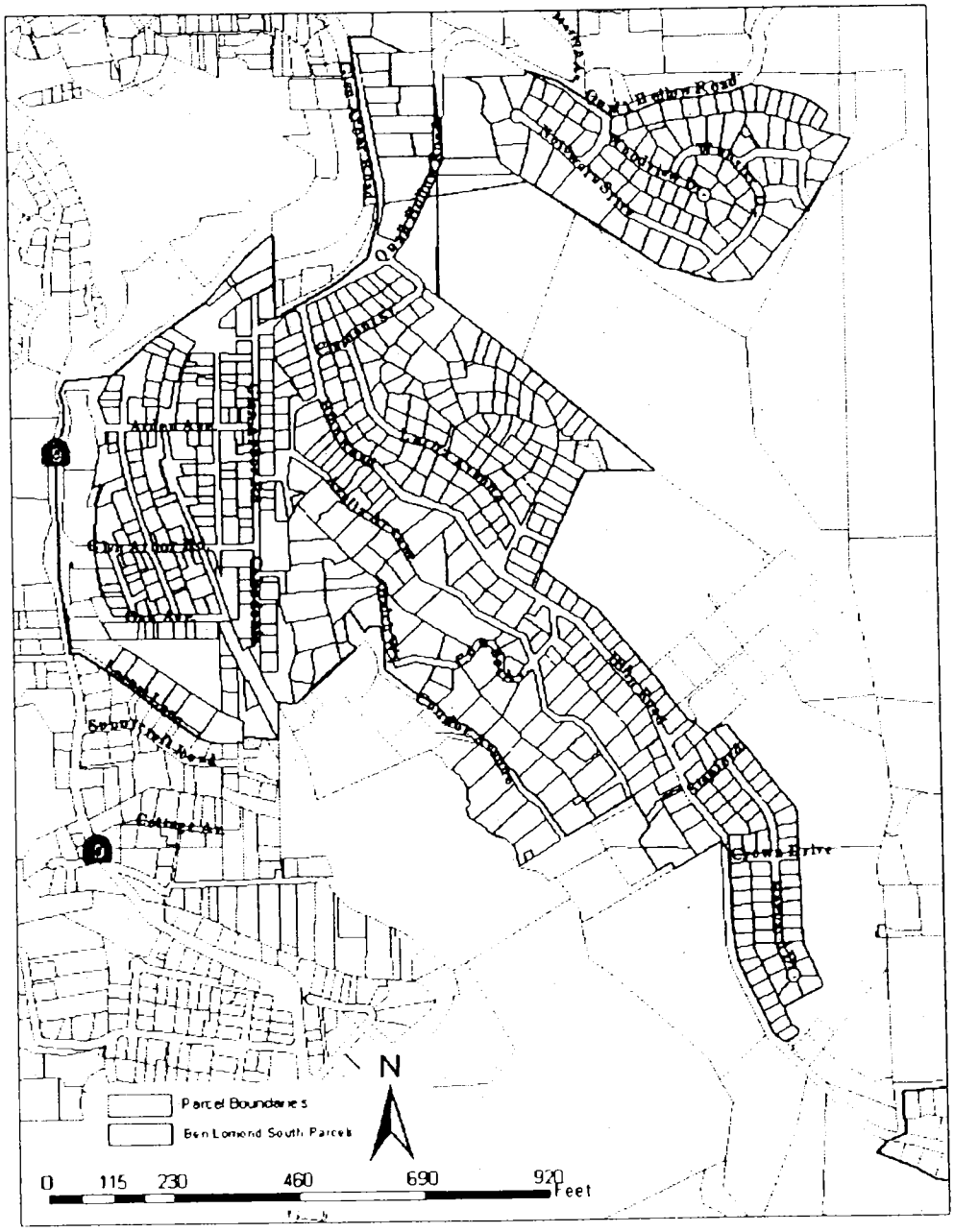

Figure B-10. Ben Lomond North Unit, IPHCP, Santa Cruz County, California