

SEASCAPE UPLANDS

SANTA CRUZ LONG-TOED SALAMANDER

HABITAT CONSERVATION PLAN

SANTA CRUZ COUNTY, CALIFORNIA

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**S. SUMMARY**

The Habitat Conservation Plan for the Santa Cruz Long-toed Salamander on the Seascapes Uplands is a comprehensive plan for creating a minimum 147 acre publicly owned and managed salamander preserve and allowing development of a maximum of 107 single family homes on 35.3 acres of the site and dedication of a 7.24 acre site for affordable housing. The key features of the plan are:

- oThe conveyance of a minimum of 147 acres of land (through dedication or easements) to the State of California or other agency as authorized by the USFWS and CDFG, for a Santa Cruz long-toed salamander preserve. The preserve will be managed by an Endangered Species Management Agency (such as the California Department of Fish and Game or the Center for Natural Lands Management), herein referred to as the ESMA.
- oThe landowner will pay \$300,000 into an endowment which will be used to fund the long-term management of the preserve. The endowment will be payable to the State Controller or the ESMA.
- oEach individual homeowner will pay an annual assessment of \$120.00 per year to augment the endowment fund. The assessments will be adjusted for inflation each year. The cumulative annual funding generated by the endowment and homeowners assessment will average about \$27,000 per year.
- oA maximum of 107 lots will be constructed as shown on the Tentative Map (Figure 5). If the Final Map contains fewer lots, all lots on the Final Map will be within the area where the 107 lots are shown on the Tentative Map.
- oLandowner will pay the direct costs of enhancing presently degraded habitat and existing migration corridors, for maintaining the existing breeding pond, and for monitoring of development activities.
- oLandowner will pay for the construction of two additional breeding ponds on the site and provide salamander undercrossings under roads to facilitate migration.

History

The Seascapes Uplands is located in the Seascapes section of Aptos in Santa Cruz County, California. It comprises approximately 190 acres of land situated on hilly terrain. In 1985 and 1986, a comprehensive Environmental Impact Report (EIR) was conducted on the Uplands Specific Plan (Chapter 1). During the EIR process the possibility of a habitat on the Uplands for the Federally listed endangered Santa Cruz long-toed

salamander (SCLTS) was identified. The SCLTS (*Ambystoma macrodactylum croceum*) is both a State and Federally listed endangered species. To clarify this issue, Seascope Land Company retained Herpetologist Stephen B. Ruth, Ph.D., to perform a thorough biological study of the salamander on the Uplands in 1986-87. A summary of Ruth's findings is included in Chapter 2.

Section 9 of the Federal Endangered Species Act prohibits take of federally listed endangered species. Section 10(a)(1)(B) allows the U.S. Department of Interior Fish and Wildlife Service to issue a permit for the incidental taking of endangered species in conjunction with implementing a conservation plan for the species. Seascope Land Company is seeking a Section 10(a)(1)(B) permit to allow the development of their residential project.

The California Endangered Species Act also prohibits the take of endangered species. In order to comply with state law, the landowner also seeking a 2081 permit from the California Department of Fish and Game.

The development plan for the Uplands has been revised to reflect constraints identified by Ruth and provides for the establishment of a publicly owned and managed salamander habitat. It also adjusts to constraints identified during the EIR process, including the following:

- oeliminate Road C -- the road and units accessed from Dolphin Drive,
- oeliminate the through road between Road A and Road B,
- ominimize the use of tunnels for salamander migration through the key migration corridor,
- opreserve native grasslands and a rare plant colony, and
- opreserve roosting trees for overwintering monarch butterflies.

In March 1992, the U.S. Fish and Wildlife Service conducted a formal Section 7 consultation on the issuance of the Section 10(a)(1)(B) permit. As part of that process a biological opinion was rendered. The opinion of the Service was:

"that the issuance of a 10(a)(1)(B) permit authorizing incidental take of the Santa Cruz long-toed salamander for the Seascope Uplands property development, in accordance with the measures required by the Habitat Conservation Plan and Management Agreement, is not likely to jeopardize the continued existence of the endangered SCLTS."

Additional measures listed as "Reasonable and Prudent Measures" in the biological opinion were incorporated into the HCP. Chapter 4 provides a detailed discussion of the development plan and habitat management program.

### Impacts

The primary impact of the Seascape Uplands Santa Cruz Long-toed Salamander Habitat Conservation Plan will be the loss of habitat of the salamander (refer to Environmental Assessment Document, May 1991). No more than 40 acres of the property will be disturbed by project construction. About 5 acres of this will be temporarily disturbed and reclaimed as habitat. Project grading will have no impact on essential SCLTS habitat. It may affect as much as 3% of adjacent primary habitat, 10% of adjacent secondary habitat, and 29% of adjacent marginal habitat.

Of the 86 acres of sensitive habitat found on the site (essential, adjacent primary and adjacent secondary habitats), as much as 6.3 acres (7%) may be disturbed by project grading.

Less than 1/10 of an acre of wetland habitat will be disturbed by construction of the two new salamander breeding ponds.

### Mitigations

The objectives of the Seascape Uplands Santa Cruz long-toed salamander Habitat Conservation Plan are to set aside enough habitat of the salamander at the Seascape Uplands to sustain a viable healthy breeding population there in perpetuity and allow the development of a residential development project which will provide for the creation, enhancement, protection, and maintenance of the Seascape Uplands salamander preserve (Chapter 3).

The Santa Cruz County Local Coastal Plan includes a provision for protecting environmentally sensitive habitats. The ordinance sets forth specific standards for conditions of approval of any proposed development in environmentally sensitive habitat areas and in areas adjacent to the essential habitat of rare and endangered species. The SCLTS is specifically identified as a sensitive species in the ordinance. The Seascape Uplands SCLTS HCP reflects provisions of the County Sensitive Habitat Ordinance.

The HCP specifies which areas of the site can be disturbed by development activities and which areas are to be set aside as a SCLTS preserve. It also includes a list of measures the developer must undertake to mitigate impacts on the salamander habitat. The measures include among other things: erecting a barrier (habitat fence) between areas to be disturbed by grading and areas which are to remain undisturbed, enhancing habitat in the preserve area, providing salamander road tunnels to facilitate salamander migration, creating two additional breeding ponds, and improving the existing pond.

During the project development phase, the Seascape Uplands SCLTS HCP will be funded directly by the developer. That is the developer will pay to carry out all activities described for the initial

development phase (see Chapter 4) as well as pay for the initial start-up costs.

Long-term funding to maintain and enhance the habitat contained in the preserve will be paid for through 1) interest on a \$300,000 endowment which will be paid by the landowner before project construction takes place, and 2) the collection of a \$120 annual assessment from each of the project residents. Approximately \$27,000 a year will be generated from the endowment interest and the homeowners assessment. The endowment fund will be paid to the State Controller or the ESMA. The annual assessments will be paid to the Endangered Species Management Agency and will be adjusted for inflation each year. The funds will be used to maintain and enhance the habitat in perpetuity.

Participants to the HCP will include the landowner, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game. Other participants may be the Center for Natural Lands Management, and the County. All parties to the HCP will be signatories to an implementation agreement. The agreement will legally assure that each party carries out the specific provisions of the plan assigned to them. Under certain conditions described in Chapter 5, the plan can be amended.

#### Alternatives

Three alternatives to the HCP were considered, the No Project Alternative, the 1985 Specific Plan Alternative, and the Public Purchase Alternative. The No Project and 1985 Specific Plan Alternatives were rejected in favor of the proposed HCP. The Public Purchase Alternative is considered the environmentally preferred alternative, however, funding uncertainties make its implementation remote and speculative. In light of this, the proposed HCP is considered the preferred alternative. Project alternatives are discussed in Chapter 6.

## **1. INTRODUCTION**

### **1.1 Project Location**

The Seascape Uplands is located in the Seascape community section of Aptos in Santa Cruz County, California (Figure 1). It comprises approximately 190 acres of land situated on hilly terrain. The site is adjacent to residential development on west, Bonita Drive to the northeast, San Andreas Road to the east, and a large brushy slope to the northwest. The site is accessed from San Andreas Road (Figure 1). At present, offices owned by the Seascape Land Company and a water tank for the offices are the only structures on the site.

### **1.2 Background**

The Seascape Uplands are part of a master planned community that includes a golf course, swim and tennis club, resort hotel (under development), community commercial shopping center and approximately one thousand homesites. In 1978, Seascape Land Company (known then as Aptos Seascape Corporation) submitted a Specific Plan for development of the Uplands with approximately 550 housing units, including an affordable housing site. That Plan was put on hold through the preparation and adoption of the Santa Cruz Local Coastal Plan (LCP).

In 1985 and 1986, after the Specific Plan was revised to be consistent with the LCP, a comprehensive Environmental Impact Report (EIR) was conducted on the Uplands Specific Plan (in conjunction with the Benchlands Specific Plan). During the EIR process the possibility of a habitat on the Uplands for the Federally listed endangered Santa Cruz long-toed salamander (SCLTS) was identified. The site does in fact contain an old stock pond which has become a breeding site for the salamander.

While the approval process for the Benchlands went forward, the review process for the Uplands was placed on hold until a complete study of the potential SCLTS habitat could be completed. Seascape Land Company retained Herpetologist Stephen B. Ruth, Ph.D., to perform a thorough biological study of the salamander on the Uplands in 1986-87. Ruth's findings are contained in "A Report on the Population Biology of the Santa Cruz Long-toed Salamander on the Seascape Uplands, Santa Cruz County, California with a General Review of its Life History, Current Status, and Suggestions for Protection and Management" (unpublished, prepared by Stephen B. Ruth, Ph.D., Science Research and Consulting Services, 1989).

A summary of Ruth's findings is included in Chapter II below. In 1989, the 1985 Specific Plan was converted to an application for a Tentative Map and was revised to reflect salamander constraints identified by Ruth as well as other constraints identified during the EIR process. The revised plan is the basis for this Habitat Conservation Plan. Changes to the plan resulted in reducing the total number of units proposed from approximately 550 units to approximately 107 single family homesites (plus a 7.24 acre site dedicated to the County for affordable housing units). Chapter IV provides a detailed discussion of the project plan.

### **1.3 Conservation Planning Process**

The Santa Cruz long-toed salamander conservation planning process for the Seascape Uplands began with a population study of the animal in 1986 and 87 by Steve Ruth. Biological constraints identified by Ruth were carefully digitized on a computer graphics system. The constraints were then overlain on site topography maps and submitted to the developer and project engineers. The plan was redesigned to minimize

impact on valuable salamander habitat in accordance with guidelines provided by Ruth. At the same time proposed locations of additional breeding ponds and migration tunnels were determined. The current project plan will provide for the long-term protection, enhancement and maintenance of SCLTS habitat at the Seascape Uplands.

#### **1.4 Objectives**

Objectives of the Seascape Uplands Santa Cruz long-toed salamander Habitat Conservation Plan are to set aside enough habitat of the salamander at the Seascape Uplands to sustain a viable healthy breeding population there in perpetuity and allow the development of a residential development project which will provide for the creation, enhancement, protection, and maintenance of the Seascape Uplands salamander preserve.

## **2. SANTA CRUZ LONG-TOED SALAMANDER -- BIOLOGICAL OVERVIEW**

### **2.1 Environmental Setting**

The Seascape Uplands site comprises several distinct vegetation communities. As part of the SCLTS study, Stephen B. Ruth, Ph.D. mapped the vegetation on the site using recent air photos. The air photo map was ground truthed to assure the plant communities were accurately mapped. The dominant plant communities on the site are grassland and evergreen forest. Less dominant communities are coastal scrub, woody riparian, eucalyptus forest, and herbaceous riparian (see Figure 2).

The earlier vegetation map was modified based on more detailed vegetation surveys conducted for the project EIR in 1993. During these surveys, a small population of a rare plant, Gairdner's yampah (*Perideridia gairdneri gairdneri*), was found on the site. The project was redesign to eliminate any disturbance to the Gardner's yampah. In addition, the EIR process led to the recognition of locally unique native grasslands on the site which are protected under the HCP.

### **2.2 Life History and Population Status Summary**

The following discussion is summarized from Ruth's report on the population biology of the Santa Cruz long-toed salamander on the Seascape Uplands.

Some of the Seascape Uplands property and adjacent land is habitat for an endangered amphibian, the Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*). The salamander is a "mole" salamander meaning it spends much of its life underground in small animal burrows. Mole salamanders are usually large and robust and have a broad flattened head. Many are brightly colored. Long-toed salamanders are a form of mole salamander which have unusually long toes

relative to the rest of their body parts.

The Santa Cruz long-toed salamander lives in dark, moist, cool places where there is little danger of drying out and little exposure to predators. They are most active at night and during rainy periods. Because the salamander larvae are aquatic the adults must breed in water. Breeding sites are often temporary ponds or other freshwater marsh or wetland habitat. Each wet season, adult salamanders migrate to a breeding site, often traveling great distances. Adults mate at the breeding site. Females typically lay between 200 to 300 eggs. The eggs hatch into larvae which grow in the pond until they transform into juveniles. At this stage they become terrestrial and can venture away from the pond. After the breeding season, adults often move out of the pond area although some may remain. Most juveniles leave the vicinity of the pond during fall rains.

Historically the SCLTS was widespread in temporary ponds and freshwater marsh habitats in the coastal summer fog belt south of Santa Cruz and north of Monterey. Urbanization and agriculture have caused a major decline in the number and water quality of ponds and freshwater marshes. With this decline has been a corresponding decline in the number and populations of the animal. At present 7 verified populations are known to exist. The largest population is found at Valencia Lagoon in Aptos, approximately two miles north of the Seascape site. The Seascape Uplands population is the second largest known population of the salamander. Smaller populations exist at: Ellicott Pond in Aptos, Bennett/Sturve Pond and McClusky Slough in northern Monterey County, and at Moro Cojo and the Calabasas area of Watsonville (see Figure 3).

Between February 1986 and March 1987 Stephen B. Ruth performed an intensive mark recapture study at the Seascape Uplands to determine the population status and habitat requirements of the salamander. A series of traplines were placed in strategic locations on the site. Salamanders caught in the traps were marked and released on the opposite side of the trapline. From this study population estimates, migration data, dispersal patterns, and other information was determined.

A total of 5016 Santa Cruz long-toed salamanders were trapped and marked during the study. From the mark recapture data, Ruth estimated that there were between 1408 and 1538 breeding SCLTS individuals on the site during the period of his study. This population level is considered good for an area the size of the Seascape Uplands.

The highest SCLTS activity took place at the breeding pond. Much of the movement occurred in and out of woody riparian, wet coastal scrub, and woodland vegetation communities. Ruth expects that substantial numbers of animals reside in the herbaceous riparian, wet annual grassland, and coastal scrub communities within the pond watershed.

### **2.3Habitat Requirements and Habitat Categories on the Site**

Upon completion of the Seascape Uplands SCLTS study, Ruth assessed habitat value and mapped habitat categories on site. The categories are shown in Figure 4 and described below. The purpose of defining the habitat categories was to provide site planning guidelines to minimize development impact on the salamander.

Essential Habitat. The habitat of greatest concern is considered essential to the survival of the SCLTS. There are 11.7 acres of essential habitat on the project site. It comprises the area of the breeding pond and the immediate adjacent riparian and coastal scrub vegetation. Dr. Ruth believes that there should be no loss of essential habitat at Seascape Uplands.

Adjacent Primary Habitat. This habitat comprises the hillside to the east of the pond containing woody riparian and evergreen forest vegetation. There are 17 acres of adjacent primary habitat on the site. According to Ruth, loss of significant amounts of primary habitat would likely affect the salamander's ability to sustain itself at the Seascape Uplands.

Adjacent Secondary Habitat. Secondary habitat areas include migration corridors and vegetation communities suitable for supporting salamanders but which are a greater distance from the pond making them less valuable than primary habitat. There are 57.4 acres of adjacent secondary habitat on the site. According to Ruth loss of some of the secondary habitat would not pose a significant threat to the salamander depending on the location of the habitat and extent of loss.

Adjacent Marginal Habitat. Marginal habitat areas identified on the site contribute little to the survival of the SCLTS there. Much of the marginal habitat has vegetation which does not support the animal (e.g. grassland and eucalyptus) or is too distant from the breeding source to be valuable. The site contains 107.1 acres of marginal habitat. Loss of greater amounts of this habitat would probably not pose a threat to the salamander.

## **3. CONSERVATION PLAN GOALS AND POLICIES**

### **3.1Existing Policies and Regulations Pertaining to Project**

#### **3.1.1 The Federal Endangered Species Act (16 USC 1531 et seq)**

**Relationship of Seascape Uplands to the Federal Endangered Species Act:** The Santa Cruz long-toed salamander is a Federally listed endangered species. It was originally listed in 1966 and was afforded additional protection through the Endangered Species Act of 1973.

The State Department of Fish and Game is involved with the Seascape Uplands project. That agency may ultimately be party to the HCP and HCP Implementing Agreement.

Habitat of the federally listed endangered Santa Cruz long-toed salamander is found on the site. Therefore, any activity which results in the disturbance of salamander habitat could result in a violation of Section 9 of the ESA.

The Seascape Land Company has submitted an application to the Secretary of the Interior for a Section 10(a)(1)(B) permit to allow the incidental taking of the SCLTS in conjunction with the implementation of a Habitat Conservation Plan for the Seascape Uplands.

### **3.1.2 The California Endangered Species Act (Fish and Game Code 2050 et seq)**

The California Endangered Species Act (CESA) is focused on the conservation of all state listed threatened or endangered species. The California Native Plant Protection Act specifically pertains to the protection of rare and endangered native plants (see below).

The Santa Cruz long-toed salamander is a State listed endangered species. There are no State listed threatened or endangered plants at the Seascape Uplands.

A goal of the Seascape Uplands HCP is to convey a minimum of 147 acres of land (through dedication and/or easements) to an ESMA, such as the Center for Natural Lands Management, for the permanent protection of the Santa Cruz long-toed salamander.

During the process of preparing the Seascape Uplands SCLTS HCP, several alternative concept plans for development and conservation of the site were examined. The current plan was selected as the preferred alternative based on biological and economic factors. The plan was further refined during the EIR process for the project.

All State Agencies involved in the Seascape Uplands SCLTS HCP, including the California Coastal Commission and the California Department of Fish and Game will consider the need to protect and conserve endangered species when reviewing the project.

It is the intention of the Applicant, Holcomb Corporation, to foster cooperation in choosing a plan which has a goal of conserving the habitat of the SCLTS.

Through permits or memorandums of understanding (MOU), the DFG may authorize individuals or public agencies to take or possess any

endangered, threatened, or candidate species for scientific, educational, or management purposes under Section 2018 of the CESA. A 2081 permit or MOU from CDFG may be required before the State would allow taking of the SCLTS.

Because the SCLTS is listed by both the federal and state government, the USFWS and CDFG are jointly involved with the project. In conjunction with the USFWS, the CDFG will provide biological consultation to the landowner, the County of Santa Cruz, and the California Coastal Commission.

### **3.1.3 California Environmental Policy Act (CEQA)**

#### **Policies related to Vegetation/Wildlife:**

##### **Section 15065**

Where a state or local governmental agency is the primary permitting or decision making body, it is designated the lead agency for the purposes of complying with CEQA. A Lead Agency will require an EIR to be prepared for any project which "has the potential to substantially 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 or eliminate important examples of the major periods of California history or prehistory."

##### **Section 21104.2**

The Lead Agency must consult with and obtain written findings from the California Department of Fish and Game in preparing an environmental impact report regarding project impacts upon endangered or threatened species.

##### **Section 15091-15092**

A public agency will not approve or carry out a project which is found to significantly affect the population size, range or habitat of rare or endangered species unless 1) the public agency makes written findings that changes have been required or incorporated into the project which avoid or substantially lessen the significant impact or 2) that economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the final EIR.

**Relevance to the Seascape Uplands:** The County has required an

Environmental Impact Report (EIR) for Seascape Uplands project. The EIR addressed the impacts on the rare and endangered species. In addition, an Environmental Assessment was prepared for the HCP. That document was made available to the public during the Federal Permitting process.

#### **3.1.4 California Coastal Act**

The California Coastal Act requires that local land use agencies set forth specific policies related to the protection and conservation of rare and endangered species in their Local Coastal Plan. The specific local policies should reflect the following general California Coastal Plan policies relating to environmentally sensitive areas. These policies provide for a more comprehensive approach to protection of habitat resources in the coastal zone than may be required by those of other agencies.

##### **Section 30240.**

(a) Environmentally sensitive habitat areas will be protected against any significant disruption of habitat values, and only uses dependent on such resources will be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas will be sited and designed to prevent impacts which would significantly degrade such areas, and will be compatible with the continuance of such habitat areas.

##### **Section 30107.5**

"Environmentally sensitive area" means 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.

#### **3.1.5 Santa Cruz County Sensitive Habitat Protection Ordinance**

The Santa Cruz County Local Coastal Plan (LCP) was certified by the California Coastal Commission in 1982. The LCP includes a provision for protecting environmentally sensitive habitats. The County adopted a Sensitive Habitat Protection Ordinance (Chapter 16.32 of the Santa Cruz County Code) to implement the LCP sensitive habitat policies.

The ordinance sets forth specific standards for conditions of approval of any proposed development in environmentally sensitive habitat areas and in areas adjacent to the essential habitat of rare and endangered species. The SCLTS is specifically identified as a sensitive species in the ordinance.

According to the ordinance, environmentally sensitive habitats

include "essential habitat of rare, endangered, and threatened species designated by the State Fish and Game Commission or the United States Department of Interior Fish and Wildlife Service". Essential habitat includes "the area required for food, water, predation, migration, or the nesting site or breeding grounds of a rare or endangered animal, as determined by a biotic assessment or biotic report approved by the Environmental Coordinator" (pages 16-94 and 95).

The following provides a summary of the standards for development in environmentally sensitive habitat areas:

- oSite disturbance shall not exceed 25%.
- oImpervious surfaces shall not exceed 10%.
- oDedicate conservation easement over undisturbed portion of site to the Department of Fish and Game.
- oNo project grading is allowed between October 15 and April 15.
- oSave all native trees to the maximum extent possible.
- o Avoid grading or filling within drip line of 24" or larger diameter trees.
- oMinimize disturbance of native vegetation.
- oRequire seepage pits where feasible.
- oRevegetate disturbed areas promptly with native or approved species. Site disturbance after revegetation shall not exceed 15%.
- oRequire step or pole foundations on slopes over 15%. Require pole foundations on slopes over 30%.
- oRequire that additions to existing development conform to LCP performance standards, except for new foundations which may not feasibly be constructed according to these standards. For the purposes of calculating site disturbance and impervious surface coverage, consider the existing development and the addition as a new development.
- oDevelop methods to eliminate development potential in the essential habitat area of the SCLTS.

**Relevance to the Seascape Uplands:** Steve Ruth, Ph.D. conducted a biotic assessment of the Santa Cruz long-toed salamander at the Seascape Uplands in 1986-87. For the study, Ruth identified areas of essential habitat, adjacent primary habitat, adjacent secondary habitat and marginal habitat on the parcel. Based on Ruth's assessment the essential, adjacent primary, and adjacent secondary habitat meet the definition of "environmentally sensitive habitat". Since the marginal habitat "contributes little to the survival of the population" (Ruth, 1989, page 147) it is not considered environmentally sensitive. This HCP was prepared based on the findings of Ruth's study and was designed to meet the requirements of Santa Cruz County's Sensitive Habitat Protection Ordinance.

The Seascape Uplands project area as a whole comprises approximately 190 acres. Of this roughly 86 acres (45%) comprises

sensitive SCLTS habitat. When the project is completed no more than 40 acres (23%) will be permanently disturbed and a minimum of 147 acres (77%) will be contained in a SCLTS habitat preserve. Project grading may disturb as much as 6.3 acres (7%) of the sensitive habitat. The majority of the development related grading will take place in the marginal habitat. No development or development related disturbance will take place in the essential habitat.

No project grading will occur between October 15 and April 15. A native plant revegetation plan will be prepared for temporarily disturbed areas. The plan will be implemented upon review and approval by the County, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and Center for Natural Lands Management. The 147 acres set aside for the SCLTS preserve will be conveyed to and managed by the Endangered Species Management Agency.

In addition to the above mitigation measures designed to mitigate impacts on the SCLTS in accordance with the provisions of the Sensitive Habitat Ordinance, the HCP for the Seascape Uplands will provide long term funding for the continued maintenance and protection of the salamander habitat at the Seascape Uplands in perpetuity.

### **3.2 Specific Seascape Uplands SCLTS HCP Goals**

The goals of the Seascape Uplands Santa Cruz long-toed salamander Habitat Conservation Plan are:

- oSet aside enough habitat of the SCLTS at the Seascape Uplands to sustain a good breeding population there in perpetuity.
- oProvide for the enhancement of presently degraded habitat and existing migration corridors and maintenance of the existing breeding pond.
- oCreate two additional breeding ponds on the site and provide salamander undercrossings under roads to facilitate migration.
- oConvey 147 acres of SCLTS habitat to The State of California which will provide for the stewardship of the land and management of the habitat for the benefit of the species.
- oAllow the development of a low intensity residential development which will provide funds for the short-term enhancement of the site and long term funds to pay for continued implementation of the Seascape Uplands SCLTS conservation program.

#### **4. THE HABITAT CONSERVATION PLAN**

##### **4.1 Residential Development Plan**

The residential development plan comprises the subdivision of approximately 35 acres of the site into approximately 107 lots ranging in size from 0.14 to 2.72 acres. Road right-of-ways will make up 9.4 acres of the site. A 7.24 acre parcel will be dedicated to the County for development of affordable housing units. Ultimately, physical development will only occur on as much as 40 acres of the site. Approximately 5 acres will be disturbed by project grading and reclaimed as habitat. The site will be graded to provide road access and building pads on each of the lots where a single family home will be built. The configuration of the lots and roadways is shown in Figure 5.

The development plan shown in Figure 5 is based on the Tentative Map. This would allow development of 107 lots. If the Final Map contains fewer lots, then any lots shown on the Tentative Map that are not shown on the Final Map, shall be part of the preserve. All lots on the Final Map will be within the area where the 107 lots are shown on the Tentative Map.

There will be two entrances to the project site: one on Bonita Drive and one on San Andreas Road. There will also be one emergency exit only on Seascap Boulevard. The internal circulation system allows for direct entrance to each single family lot off of two primary access roads, Road A and Road B. There will be emergency access only between Road A and Road B. The multi-family units will be accessible from the San Andreas Road entrance roadway. A total of 6 amphibian tunnels will be constructed under the roadways where they intersect migration corridors. The locations of the tunnels are shown in Figure 5. Details of tunnel construction are included below.

Project infrastructure, such as water, sewer, gas and electricity will be placed in the road right of way.

Project grading will have no impact on essential SCLTS habitat. It may affect as much as 3% of adjacent primary habitat, 10% of adjacent secondary habitat, and 29% of adjacent marginal habitat. Of the 86 acres of sensitive habitat found on the site (essential, adjacent primary and adjacent secondary habitats), as much as 6.3 acres (7%) may be disturbed by project grading.

##### **4.2 Development Responsibilities**

The following section describes mitigation activities the landowner will be responsible for performing before and during project

development. The timing for each of these is described in Section 5.1.

Creation of Permanent Salamander Preserve. Permanent development may occur on as much as 40 acres of the site (about 21%). The remaining 147 acres will not be developed and will be conveyed to the State of California or the ESMA for a permanent salamander preserve. The preserve will be managed by an Endangered Species Management Agency (such as the California Department of Fish and Game or the Center for Natural Lands Management). The conveyance will be done by transfer to fee title and through the formation of strict conservation easements in perpetuity. Figure 6 shows areas which will be transferred by fee title and areas of conservation easement.

Of the 147 acres of habitat conveyed to the state or ESMA, approximately 137 acres will be transferred in fee title and 10 acres will carry a conservation easement. The conveyance will occur before disturbance of any salamander habitat takes place. Because it is impractical to establish easements in small areas, an additional 5.9 acres of land lying between the permanent development area and the preserve will remain in private ownership.

Grading Restrictions. The grading restriction line is shown in Figure 5. The line demarcates the extent of where grading may occur and where it is prohibited. Actual grading within the line will be restricted to less than 23% of the site. Once the precise grading limit line is determined, a temporary fence will be constructed at the boundary between areas which will be graded and areas prohibited from grading to prevent any unauthorized grading in undisturbed habitat areas. Grading beyond the designated area may result in a violation of the Endangered Species Act and will be subject to a penalty (see Section 5.6.2). Signs stating that penalty will be posted every 100 feet along the fence. No grading will take place during the wet season (usually between October 15 and April 15) when salamander activity is at its highest level. As much as 5.2 acres of land will be temporarily disturbed by project grading and reclaimed as habitat.

Vegetation Removal. Vegetation removal will be minimized and restricted to areas needed for the construction of roadways, buildings, driveways and utilities. Santa Cruz long-toed salamanders will be salvaged from areas of dense vegetation, as described below, prior to vegetation removal.

Salvage. Long-toed salamanders take cover in dense vegetation. In order to minimize take of salamanders, prior to the commencement of grading in any areas where there is existing dense vegetation, particularly those areas identified as having high potential to support salamanders, the woody vegetation shall be removed by hand under the direction of a qualified biologist. The manual clearing shall occur at least three months in advance of grading, and must be done between

December 1st and March 1st (during the rainy season) when most salamander activity is concentrated at the breeding pond. This activity would allow SCLTS sufficient time to disperse to other protected sections of the project site. Salamanders in or returning toward cleared areas would seek out adjacent dense vegetation. Any salamanders uncovered during the removal of woody vegetation shall be released in the preserve. Salvage will reduce take resulting from future project grading activities.

Disposition of Dead, Sick, or Injured Specimens. Upon locating dead, injured, or sick SCLTS initial notification must be made to the Service's Law Enforcement Office in Sacramento or the Ventura Office at (805) 644-1766 within 3 working days of its finding. Written notification must be made within 5 calendar days and include the date, time, and location of the carcass, a photograph, and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. Injured animals should be transported to a qualified veterinarian. Should any treated salamanders survive, the Service should be contacted regarding the final disposition of the animals. The permittee shall endeavor to place the remains of intact SCLTS with educational or research institutions holding the appropriate State and Federal permits per their instructions. If such institutions are not available the information noted above shall be obtained and the carcass left in place.

Landscaping. The planting of any invasive non-native plant species shall be prohibited for use in interior project landscaping. The use of native plants indigenous to the area is encouraged. Final project landscaping plans shall be approved by the Endangered Species Management Agency (ESMA).

Permanent Fencing and Walls in Development Areas. Any fences or walls that are not part of a dwelling shall have 10-inch by 6-inch gaps at ground level at least every 10 feet along the length to allow the movement of SCLTS through the fence or wall.

Preserve Protection Fencing. The breeding pond and surrounding wetland areas shall be fenced to protect the habitat from disturbance and to assure public safety.

Guard Rails. Guard rails shall be constructed along stretches of road that cross through habitat areas to prevent motorists from trespassing into the preserve.

Rounded Curbs. Traditional curbs at the edges of roadways can act as barriers to salamander movement over roads. Rounded curbs allow the

salamanders to move up and over roads. All curbs shall be either be rounded or have 10-inch wide gaps every 10 feet to allow salamanders to cross.

Migration Tunnels. Amphibian tunnels shall be constructed under roads where they cross over migration corridors. Figure 5 shows the approximate placement of the tunnels. The tunnels shall be designed by an expert and made of materials suited to salamander movement. The USFWS and CDFG shall review and approve final tunnel designs. Preliminary research indicates that ACO Polymer Products makes a product that is suitable for use as amphibian tunnels. The product is a polymer concrete. It is less absorbent than regular concrete and doesn't flake off forming bits of material which can be abrasive to salamanders. The tunnels shall be designed so that rainwater can enter and provide a moist environment for the travelling salamanders.

Drift fencing shall be placed at the tunnel entrances to guide salamanders into the tunnels. Grating which extends for some distance over the drift fences shall be placed over each tunnel entrance. The specific design for the grating can be finalized before construction, however, it shall be constructed in such a way as to provide cover for the SCLTS as they move from the terrestrial habitat to the drift fences and tunnels. The mesh size of the grating shall be such that it allows SCLTS to easily pass through, but precludes mammalian predators from passing through. The grates should extend out to meet terrestrial plant cover to provide continuous protection.

Vegetation which would provide cover for the salamander shall be planted up to the grating edge or roadway. The vegetation cover should adjoin the grating mentioned above and also cover as much of the drift fences as practicable. This would protect salamanders from visual observation by predators while passing through the tunnels or over the roads.

Signs. No trespassing signs shall be posted in strategic locations along the boundary between permanent development and the preserve. If public access is allowed then signs shall be installed informing people of the sensitivity of the habitat, and prohibition against entering pond areas and straying from marked trails.

Drainage Controls. Runoff from developed portions of the site shall be prevented from entering drainages leading to breeding ponds. Petroleum products, pesticides, detergents, etc. could have a detrimental effect on breeding pond water quality.

Pesticides. Large scale use of pesticides will be prohibited unless it is essential for public health and then only under the supervision of the preserve manager.

Lighting. No street lights shall be located within 50 feet of a SCLTS migration corridor. SCLTS show a strong avoidance to light. The presence of light in the corridor areas would restrict salamander movement there, conversely absence of light in moist swales would encourage salamander movement.

Mosquito Abatement. If mosquitos become a public health problem at the breeding ponds, control measures shall be restricted to the use of mosquito specific bacteria toxins rather than the use of pesticides or introduction of mosquito fish (Gambusia). Mosquito fish have been known to eat amphibian larvae.

Improve Existing Pond. The existing breeding pond will require maintenance improvements to keep it useful as a breeding site for the SCLTS. Erosion now taking place along the sides of the pond is allowing water to escape. If erosion continues the pond may no longer hold water. The erosion problems can be corrected by erecting a spillway. The spillway can be used in the future to regulate pond water levels. A permanent fence shall be erected around the periphery of the pond about 25 feet from the high water mark to prevent public access. Pond improvements are shown in detail in Appendix A and maintenance activities are described in Appendix B, Restoration Plan.

Construct New Ponds. To provide additional breeding areas two additional ponds will be constructed. The new pond locations are shown in Figure 5. One pond site is in the southern portion of Uplands Valley, the other is just off of Bonita Drive near San Andreas Road. Details of pond design are included in Appendix A and maintenance activities are described in Appendix B, Restoration Plan.

During initial project grading, the ponds and surrounding berms shall be graded. The pond area shall be lined with a clay layer and sealed to prevent water from soaking into the ground. A concrete spillway will allow regulation of pond water level. Appropriate vegetation shall be planted at the pond. The periphery of the pond shall be fenced to prevent the public access. The fence shall be erected about 25 feet from the high water mark. The pond shall be constructed under the supervision of the ESMA.

Presence of Parasitic Flatworm at Breeding Ponds. There is some concern that pond improvement activities conducted under the HCP may enhance survivability of the parasitic flatworm. The flatworm could have an effect on the productivity of the SCLTS. Studies of the effects of pond maintenance activities on the populations of parasitic flatworm and its effect on the productivity of the SCLTS should be conducted. Maintenance activities at the pond should be modified based on the results of the studies.

Exotic Species Control. There are several species of invasive non-native plants found on the site including eucalyptus trees, pampas grass, etc. The exotic species shall be mapped and a priority system of eradication developed. Plants growing in the most sensitive habitat areas (e.g. pond drainage) shall be eradicated first. Techniques used for exotic species control shall reflect sensitivity of nearby habitat areas. For instance herbicide spraying may not be appropriate near pond drainages under certain conditions. Appendix B: Restoration Plan for the Seascape Uplands, provides guidance on exotic species management.

Vegetation Enhancement. Additional primary SCLTS habitat can be created within the Uplands Valley by planting additional appropriate native plant species. Willows can be planted along margins of herbaceous riparian vegetation. Additional plantings in drainage gullies can increase their value as salamander migration corridors. Areas where exotic species are eradicated, areas that are temporarily graded for project development, and existing off-road vehicle scars shall also be revegetated with native plants. Refer to Appendix B: Restoration Plan for the Seascape Uplands for specific information on the restoration and enhancement of salamander habitat.

Burrowing Animal Protection. Abandoned burrowing animal holes provide important refuges for long-toed salamanders. In order to protect burrowing animals from harm, each residence in the project area shall record a Covenant, Condition, and Restriction (CC&R), running with the land, which states that, unless otherwise stated by the Endangered Species Management Agency, any burrowing animal control activities performed on the property will use non-lethal methods. Areas identified as conservation easements shall be off-limits to any control measures for burrowing animals, unless specifically approved by the Service.

Rare or Unique Plant Protection. Management activities for the SCLTS conducted at the Seascape Uplands Santa Cruz long-toed salamander preserve shall consider the needs of Gairdner's yampah, a rare plant, and the locally unique native grasslands at the preserve as long as management of those species does not conflict with management of the site for the SCLTS.

#### **4.3Habitat Management Program**

The Habitat Management Program shall be either conducted by or overseen by the Endangered Species Management Agency (ESMA). The following elements must be included in the Habitat Management Program:

Habitat Maintenance. There shall be ongoing habitat maintenance activities performed on the preserve. Water levels of the ponds shall be checked periodically, exotic species control efforts shall continue on a regular basis, salamander tunnels and migration corridors shall be inspected for obstructions, particularly during breeding and migration

periods, trash shall be removed and unauthorized personnel prohibited from entering the preserve.

Parasite and Predator Control. The population of bullfrogs shall be controlled if they become a threat to the survival of the SCLTS. Research on the digenetic trematode parasite infesting SCLTS is necessary to determine impact on the species and possibility of control measures.

Species Monitoring. An ongoing low intensity SCLTS monitoring program shall be established to assess the vigor and health of the SCLTS population at the Seascape Uplands. The monitoring shall be conducted by SCLTS experts or persons trained by SCLTS experts. The Section 10(a)(1)(B) permit shall cover the handling of SCLTS by trained experts for purposes of monitoring the population of the animal and for relocating salamanders during the project construction phase. Any SCLTS handler(s) must be approved in writing by CDFG and USFWS upon a request presented with the appropriate credentials or training.

Monitoring shall consist of taking monthly salamander samples from March through September. More detailed breeding migration censuses may be desirable at less frequent intervals depending on the results of the annual population surveys.

Reporting. The incidental take permit issued under Section 10(a)(1)(B) requires an activities report submitted to the U.S. Fish and Wildlife Service by the end of January each year. The report shall be prepared and submitted to the USFWS and the California Department of Fish and Game by the ESMA.

Educational Uses. Under the direction of the ESMA the Seascape SCLTS preserve should be used for educational and scientific research purposes as appropriate.

## **5. PLAN IMPLEMENTATION, COSTS AND FUNDING**

### **5.1 Initial Program Implementation**

The following program elements, which are described above in Section 4.2 Development Responsibilities, will be the financial and legal responsibility of the developer either as part of project design (D), construction (C), and/or as an ongoing restriction (R):

- D Conveyance of salamander preserve to State of California.
- C Pay project start up costs as specified in Section 5.2 below.
- C Erect a temporary fence and warning signs at the boundary between areas to be graded and areas prohibited from grading to prevent illegal grading.

- C Erect guard rails along stretches of road that cross through habitat.
- C Provide for the use of a biological expert to assist with salvage of SCLTS during brush clearing of project site.
- D&R Restrict the use of invasive non-native plant species within the permanent development envelope,
- D&C Design and install salamander migration tunnels under the direction of a qualified biological expert.
- D&C Design and construct interior permanent fences and walls so that there are 10" by 6" gaps at ground level 10-15 feet intervals,
- D&C Post permanent no trespassing signs along the preserve boundary.
- D, C&R Design and install street lighting so that nighttime light does not hit migration corridors. Restrict the use of bright lighting in any areas near migration corridors.
- D, C&R Design, install, and maintain adequate drainage controls which prevent impervious surface runoff into the preserve area.
- R Restrict the large scale use of pesticides in any areas adjacent to the preserve.

All elements must be completed to the satisfaction of the Endangered Species Management Agency, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service.

The elements which are described in Section 4.3 Habitat Management Program, shall be funded by the developer. The actual implementation of the measures will be undertaken by an entity mutually agreed upon by the developer, the County, the California Department of Fish and Game and the U.S. Fish and Wildlife Service. The entity is referred to throughout the HCP as the Endangered Species Management Agency (ESMA).

Prior to the implementation of each program element a work plan shall be prepared and reviewed by the ESMA, U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the County of Santa Cruz. The work plans shall provide details of plan implementation. For each measure below, the type of information which shall be contained in the work plan is listed.

Exotics Species Control. The detailed exotic species control plan shall include a list of target species (e.g. eucalyptus, pampas grass), a map showing the distribution of the target species on the site, a priority list of species treated, treatment method (e.g. hand removal, herbicide spraying), herbicides used with application method and rates, schedule, and necessary follow-up work.

Vegetation Enhancement. The detailed vegetation enhancement plan shall provide a list of species proposed for planting and reasons for their use, availability of the seeds/plants and the supplier, planting methods (e.g. direct seeding, container planting), location of specific plantings with size of plants and densities, soil pre-treatments, any

soil amendments, and a watering and maintenance schedule.

Improve Existing Pond. The detailed pond improvement plan shall describe the existing condition of the pond, erosion control improvements, spillway design and construction, and materials for protective fence.

Create New Ponds. The detailed pond design construction plan shall include blue prints showing detailed grading plans for both ponds, construction materials and methods, water level control, and materials used for protective fence.

## **5.2 Project Start Up Costs**

During the initial implementation stages of the HCP there will have to be representatives of the ESMA available to do the following:

oassist the developer with initial HCP compliance,

ohold a pre-grading conference with development personnel,

osupervise grading and restoration activities, and

oprepare a report of the activities for the ESMA, local agencies, the California Department of Fish and Game and the U.S. Fish and Wildlife Service.

Completion of these tasks will require a part-time field assistant position. The person should be paid for by the ESMA rather than the developer. In order for the ESMA to create this position it will need to receive \$25,000 a year from the developer beginning at the time initial construction permits are issued and continuing until the permanent funding is established.

In addition to these construction monitoring costs, it will be the developer's responsibility to fund the short-term elements of the conservation plan listed in Section 4.2. The long-term elements will be carried out under the HCP once the project is completed. Dr. Stephen Ruth has prepared a suggested Santa Cruz long-toed salamander monitoring/research program and schedule for the project. Dr. Ruth's program/schedule is included in Apendix C of this report. The final scope of the monitoring/research program will be determined by the USFWS, CDFG, and biological experts.

## **5.3 Long-term Management Costs**

It is expected that once the initial habitat management measures

have been completed ongoing maintenance of the preserve will require a minimum of time and effort. The following is a breakdown of expected maintenance costs and a timeframe under which the activities shall be undertaken.

**Habitat Maintenance and Administration.** The entire preserve area shall be inspected two to three times a month for signs of damage, garbage dumping, etc, particularly the ponds, migration corridors, and road tunnels. Minor damage shall be repaired and garbage removed. Annual budget allocation: \$10,000

**Vegetation Management.** Continued exotic species management and enhancement planting shall take place on the preserve as necessary to maintain good quality habitat. Annual budget allocation: \$4,000

**SCLTS Population Monitoring.** A low intensity method of assessing the population status of the SCLTS shall be developed and carried out each year by a qualified biologist (see Appendix C). Results shall be provided in the Annual Report submitted to the USFWS and CDFG. Annual budget allocation: \$3,000

**Parasite and Predator Control and Research.** There needs to be ongoing research into methods of reducing the mortality of SCLTS at the Seascape Uplands. Funding shall be provided to academics interested in doing specific research on the SCLTS at Seascape Uplands. Annual budget allocation: \$2,000

**Reporting.** Conditions of the Section 10(a)(1)(B) permit require that the U.S. Fish and Wildlife Service receive an annual report of the activities conducted under the permit. The Endangered Species Management Agency shall prepare and submit a brief report to satisfy this requirement. Copies of the report shall be submitted concurrently to the California Department of Fish and Game and the Santa Cruz County Planning Department. Annual budget allocation: \$1,000.

#### Long-term Management Cost Summary

ITEM	ANNUAL BUDGET
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Habitat Maintenance	\$10,000
Vegetation Management	\$ 4,000
Population Monitoring	\$ 3,000
Research	\$ 2,000
Reporting	\$ 1,000

TOTAL ANNUAL BUDGET	----- \$20,000
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#### **5.4 Long-Term Project Implementation and Funding**

A long-term funding program will be established before development related disturbance takes place on the site. The long-term funding program will generate annual funds to be used for maintaining the salamander habitat. The Endangered Species Management Agency (ESMA) will provide staff to administer the ongoing habitat management program.

The funds will be used at the discretion of ESMA, but must meet the goals of the HCP.

The suggested method of providing long-term funding for this HCP is for the developer to deposit with the State of California the sum of \$300,000 as an endowment. The endowment would generate enough interest to meet the projected annual program costs itemized in Section 5.2 above. The endowment will be payable as follows:

One hundred thousand dollars (\$100,000) is due on or before the filing of the Final Subdivision Map for the project with the County Recorder's office. The balance of \$200,000 is due prior to the commencement of any work on the site.

To augment the annual funds generated by interest on the endowment each lot within the project, including all lots annexed to the project, will be assessed \$120.00 per year. The landowner will provide in the Declaration of Covenants, Conditions, and Restrictions provision for imposition of the regular assessments. The homeowners assessment fees will be adjusted for inflation each year using the Consumer Price Index, Employment Cost Index - West, or some other appropriate method. The fees will be paid to the State Controller. The ESMA must use the funds solely for the purposes of maintaining the Seascape Uplands SCLTS preserve in accordance with the provisions of the HCP.

If the income from the Endowment Fund and the homeowners regular assessment should not be sufficient to carry out the long term management duties described above, a special assessment can be authorized to raise additional money. The maximum amount of any special assessment that may be imposed upon any residential lot, however, shall not exceed \$250 in any consecutive five-year period.

Once the endowment funding is paid, the development project and initial habitat management program are completed, and the homeowners assessment is in place, the developer will be dismissed from further responsibility of the project.

#### **5.5 Amendment Procedures**

The Seascape Uplands Santa Cruz Long-toed Salamander HCP includes a range of material to limit and mitigate take of the endangered Santa Cruz long-toed salamander and to provide development consonant with the Santa Cruz County Local Coastal Program. If over the thirty year life of the permit, there are unforeseen circumstances which change development or other conditions, HCP amendments may be needed. This section describes amendments.

#### 5.5.1 Administrative Amendments

Changes which would not appreciably alter the extent of incidental take, the mitigation prescribed for take, or the funding of the Plan are primarily administrative and can be accomplished by amending the HCP text without modifying the underlying Section 10(a)(1)(B) permit. The determination of the administrative status of a change will be made by the ESMA with concurrence by the other parties, and must take into account the cumulative effect of the proposed change and all preceding or pending administrative changes.

An Administrative Amendment may be accomplished by the following procedure:

1. The ESMA initiates or receives a request for a change in the HCP and evaluates the change to determine if the change is administrative. An administrative change is one which is not likely to:
  - a. increase the cumulative extent of permanent disturbance on the site by more than 5%.
  - b. increase the cumulative extent of temporary disturbance of salamander habitat on the site by more than 5%.
  - c. affect the essential habitat of the salamander.
  - d. eliminate or impair any condition which was established to protect habitat from direct damage;
  - e. reduce the permanent funding level.
  - f. increase Plan operating costs by more than 5%;
  - g. act contrary to the general purposes of the HCP.

If none of the above conditions would result, the change may be processed administratively, in the following manner:

2. The ESMA prepares an amendment to the HCP text, which may be a changed page, a revised map, or an attachment, with each sheet bearing the date of the change. The amendment is sent to all

signatory parties along with the administrative determination made in Step 1, above.

- 3.If any party disputes the administrative determination, it has thirty days to notify the ESMA and the USFWS. The USFWS may approve the Administrative Amendment or require it to be processed as a Permit Amendment.
- 4.Except as specifically provided in the HCP or in law, an Administrative Amendment will not require a public hearing.

The purpose of the Administrative Amendment is to allow minor changes to be processed locally without burdening the federal permit process.

#### **5.5.2 Permit Amendments**

Changes which may appreciably alter the extent of incidental take, the mitigation prescribed for take, and the funding of the Plan will require an amendment to the Section 10(a)(1)(B) permit as well as to the HCP text. The ESMA or any party can request a permit amendment, and the request is processed by the USFWS.

- 1.The amendment request must be submitted in writing to all HCP parties and include:
  - a.a statement of the purpose of the amendment;
  - b.requested change in Permit and HCP text;
  - c.an analysis of the effect of the proposed change on:
    - i. extent of incidental take permitted by the Permit,
    - ii. mitigation for take prescribed by the Permit,
    - iii. funding to implement the Permit,
    - iv. long-term survival of the endangered species in the wild;
    - v. general purposes of the HCP;
    - vi.any other aspect of the environment, including any state environmental documents prepared in support of the change;
    - vii.landowner rights and obligations.
  - d.any additional mitigation to reduce impacts of amendment.
- 2.The Service will follow prevailing permit procedures, generally including compliance with the National Environmental Policy Act (NEPA), and Sections 7 and 10 of the Endangered Species Act.

3. The change will not become effective until the permit is formally amended.

#### **5.5.3 Changes Within the Developed Area**

The County of Santa Cruz can allow changes in the land use within the approved development envelope without a requirement for further public hearings for the HCP (hearings may be required under other law).

The County shall notify the ESMA, USFWS and CDFG of any changes in the development area.

#### **5.5.4 Minor Construction Boundary Adjustments**

In order to deal with conditions encountered during construction an explicit provision is made for minor Construction Boundary adjustments. Upon request by the landowner, the ESMA will allow the Construction Boundary fence to be moved up to fifty feet from the location shown in an approved detailed plan if there is a compelling reason for doing so. The ESMA will determine appropriateness of fence movement on a case by case basis. Minor boundary adjustments cannot increase the cumulative extent of temporary disturbance of habitat by more than 5%. Construction Boundary adjustments are not intended to allow a change in the permanent development footprint.

If the ESMA approves the request for minor adjustment, it becomes effective immediately. Within five working days, the ESMA must send a written notice that the adjustment was made to the USFWS.

#### **5.5.5 Permanent Funding Base**

The funding estimates in section 4.4 are based on an appraisal of the need to protect and enhance the habitat of the Santa Cruz long-toed salamander at the Seascape Uplands. In order to do this it is important for the funding to remain at an adequate level.

If there is a drop in the level of funding because of loss in lots, then the other lots must make up the difference so that the funding level is maintained.

If more lots are approved for the same development area, the per-lot fees will apply to the greater number of lots. The increased funding will offset the increased intensity, as long as there is no increase in direct take of habitat, and the adoption of the detailed plan can be an Administrative Amendment.

#### **5.6 Implementation Agreement and Plan Enforcement**

The provisions of the HCP are enforceable through the Section 10(a)(1)(B) and the Implementing Agreement. General procedures for

enforcement are addressed below, followed by a description of several practical enforcement scenarios which may be encountered.

#### **5.6.1 General**

The provisions of the HCP may be enforced by any signatory party through the HCP Agreement, a legally binding contract.

The USFWS may enforce the Federal Endangered Species Act apart from the Agreement. The USFWS may suspend the permit, or a portion of the permit, if the conditions of the permit are not observed.

#### **5.6.2 Boundary Violations**

A series of controls are meant to reduce the chances that construction will damage habitat outside of the area specified in the HCP and detailed plans approved by the County and USFWS. In general, the Construction Boundary will be demarcated by a fence. Any construction related damage that extends across the Construction Boundary is a violation of the terms of the HCP and Section 10(a)(1)(B) permit.

Construction related damage means direct damage, such as a bulldozer breaking through the fence and indirect damage, such as slope failure in the construction area extending across the Construction Boundary, erosion, or unauthorized vehicle activity.

Enforcement action is taken against the landowner regardless of the actual agent of the damage. This is done to accelerate the process of abatement and remediation, and because there is a direct link between the landowner and the Section 10(a)(1)(B) permit. The landowner is free to seek redress from any third parties actually responsible for the damage, but that is beyond the scope of the HCP.

If the Construction Boundary is violated, the following enforcement action is prescribed:

1. Upon notification by any party or member of the public of a possible Construction Boundary violation, the ESMA will promptly inspect the site to determine if construction related disturbance has crossed the boundary.
2. The ESMA is empowered to issue an immediate stop-work order. The stop-work order will apply to any construction activity within 200 feet of the Construction Boundary.
3. The ESMA will assess the extent of damage and report to the USFWS within five working days. An initial report may be made by telephone, but must be followed by written documentation.

4. Because it is difficult to precisely determine the habitat value of an area after it has been damaged, it is agreed that the landowner will pay liquidated damages of \$20,000 per acre damaged, or portion thereof on a prorata basis. The money will go into the trust fund and be used for accelerated enhancement elsewhere at the Seascape Uplands.
5. The landowner will be responsible for revegetation of the damaged area to the same standards as apply to other areas disturbed by construction.
6. The stop-work order will be lifted after:
  - a. the report to the USFWS has been made,
  - b. the liquidated damages have been paid, and
  - c. the ESMA has been assured by the landowner that the cause of the violation has been reasonably abated.

This established procedure is meant to protect habitat through its speed and preassignment of responsibility and damages. Note that any activity resulting in a take of the Santa Cruz long-toed salamander outside of the boundary specified in the HCP is not permitted under Section 10(a)(1)(B) permit. The USFWS may independently evaluate any such damage and seek separate enforcement action under Section 9 of the Endangered Species Act against any party responsible.

#### **5.6.3 Failure to Revegetate or Restore Specified Areas**

The Seascape Uplands HCP requires that the landowner perform a series of mitigation measures to enhance the habitat of the salamander. The principal means of enforcement for the restoration requirement is through establishment of a construction bond. Prior to authorization of construction, the County will require evidence of an adequate bond, a practical restoration plan, and a grant of a habitat easement to allow the ESMA access for monitoring and restoration. The bond should be at least 110% of the estimated cost of restoration of the areas which are required to be restored at any point in time (the landowner is not obligated to restore all restoration areas shown in the HCP at once). If the landowner does not meet the obligation in a timely fashion, the bonded amount will go to the ESMA to allow the restoration to be done independently.

#### **5.6.4 Failure to Pay Required Funding**

The HCP imposes a variety of interim and permanent funding obligations on the land. These will be recorded on the title of the parcel and will run with the land. Funding obligations may be changed

by amending the HCP and Permit.

Failure to pay funds as required creates a delinquency and ESMA may place a lien on the property for the amount owed and legal and administrative costs associated with collection.

In addition if any landowner fails to meet their funding obligations all rights of the Section 10(a)(1)(B) permit and HCP may be revoked. If the landowner wishes to resume payments then they will have to make up all payments which would have accrued during the time the payments were not made.

## **6. ALTERNATIVES CONSIDERED**

### **6.1 No Project Alternative**

Under the No Project alternative (denial of the Section 10(a)(1)(B) permit), take of the Santa Cruz long-toed salamander would not be legally authorized by the USFWS. This would leave the developer subject to violation of the Endangered Species Act should the site be developed.

In the short-term the salamander would be protected from take under Section 9 of the Endangered Species Act. The site would remain in private ownership with no salamander management or habitat enhancement programs in effect.

Denial of the permit may cause the landowner to abandon development of the site altogether. The landowner could decide to donate the site to a public agency or to a land trust agency, such as the Nature Conservancy or the Trust for Public Lands, for tax purposes.

Since the land use designation of the property allows development, the landowner could continue to seek approvals of an economically feasible project which avoids direct take of any SCLTS. Under this scenario, the landowner would have to prove that the development would avoid any destruction of salamanders and that it would not adversely affect the salamander's use of important habitat.

Under this alternative present day conflicts between private property rights and endangered species would not be resolved.

The site is easily accessible because it is within an urban area

and adjacent to urban residential development. The landowner may lose the incentive to protect and enhance the existing habitat of the salamander if development of the site is not approved. As part of a good faith effort to protect habitat while the HCP was being prepared, the landowner hired security guards to patrol the property for illegal trespassers. Before the security force was in place, the site was regularly used by off road motorcyclists. Past motorcycle use of the site caused damage to salamander habitat. If the project is denied, the landowner may decide to eliminate the security patrol. Other casual access use of the site would also continue to threaten the salamander.

According to the SCLTS expert, Steve Ruth, the berm surrounding the breeding pond is currently experiencing significant erosion on one side.

In addition, the pond has experienced moderate siltation over the past few years. The SCLTS HCP contains provisions to make improvements to the pond. Although the pond presently provides a valuable breeding site for the salamander, it may become less and less valuable as its condition deteriorates. Within a few years the pond may no longer hold enough water to allow for salamander breeding. Under the No Project alternative, the landowner may not make, or allow others to make, needed improvements to the breeding pond.

The invasive plant species found on the site, primarily pampas grass and eucalyptus trees, without management, would continue to spread and degrade native habitat. However, since the threat is not a severe one, this effect would probably not become critical for several years.

## **6.2 1985 Specific Plan Alternative**

In 1985 the Aptos Seascapes Corporation proposed a 551 unit development on the 193 acre Uplands site. This project, along with the Benchlands project, was the subject of a Draft Environmental Impact Report (EIR), prepared in August 1985 by LSA Associates, an Environmental Consulting firm hired by the County of Santa Cruz. That project would have resulted in the permanent loss of 104 acres of the site (53%) to development. Although the existing breeding pond was not to be disturbed by development, the plan was not sensitive to the habitat requirements of the salamander.

The 1985 plan did not adequately reflect biological constraints of the site. The 1994 plan is the result of a two year intensive study of the population of the SCLTS at the Seascapes Uplands which provided specific data on the nature and amount of sensitive habitat and migration corridors, as well as the EIR process which protects monarch winter roosting habitat, Gairder's yampah, and locally unique native grasslands. The 1994 plan minimizes loss of sensitive habitat, maintains the primary migration corridor over the main ridge through the use of an emergency access road only, uses salamander tunnels for road undercrossings at secondary migration corridors, calls for the

elimination of invasive non-native species and enhancement of migration corridors, and provides a long-term funding program to be use for protection and maintenance of the habitat by a conservation organization.

### **6.3 Public Purchase Alternative**

An alternative to development of the site is purchase of the site by a public agency which intends to maintain the site as a salamander preserve. The site could also be purchased by a private land trust agency, such as the Nature Conservancy or Trust for Public Lands, and maintained as a preserve. Under this alternative there would be no take of the Santa Cruz long-toed salamander at the Seascape Uplands.

Since the site currently has a land use designation under the Santa Cruz County Local Coastal Plan which allows for some residential development, the landowner would expect to receive fair market value of the property based on that land use. Fair market value of the site has been estimated at 7 million dollars (Seascape Land Company, March 1990).

According to the landowner, no public agency has sought to purchase the property, therefore an actual sale price has not been contemplated.

Due to the presence of the endangered species, the actual market value may be less than 7 million dollars. In fact, there may not be any private parties willing to purchase the site until the endangered species constraint is resolved. The landowner may thus be persuaded to sell the property to a public agency for less than the estimated fair market value.

Potential funding sources for purchase include the Federal Land and Water Conservation Act, the State Wildlife Conservation Board, and the State Wildlife Protection Act of 1990.

If mitigation funds were to become available solely for purchase of the site, additional moneys would be needed to protect and manage the site for the salamander. In the near term, the salamander could survive on the site with minimal management, however, after a few years, erosion and siltation problems at the breeding pond and the spread of invasive exotic plants would need to be addressed. The preserve managing entity would have to obtain a Section 10(a)(1)(B) permit or a scientific collecting permit in order to undertake certain management activities needed to enhance and protect the existing habitat.

Under this alternative, funds used to purchase the site would not be allowed for purchase of other valuable endangered species sites where there is no landowner participation. Public monies would be used to purchase the 190 acre site. Under the proposed plan, 147 acres of the site would be conveyed to the public (through dedication or easements) at no cost, and private money would be used to enhance and provide long term protection of the habitat.

#### 6.4 Preferred Alternative

The environmentally preferred alternative is public purchase of the site as a salamander preserve. This alternative would result in no take of the salamander, no loss of secondary and marginal habitat, and no disruption of existing migration routes resulting from the development of houses and roads.

Under this alternative all 190 acres of the site would be preserved. The loss of 40 acres of the site would be avoided. Uncertainties about whether the salamanders would use tunnels constructed under roads when traveling between the breeding pond and other habitat would become mute. The selection of this alternative as the environmentally preferred alternative is contingent upon assurances that public monies are not only available for purchase of the property, but also for providing for long-term management of the salamanders and its habitat in perpetuity.

Lack of a definitive funding source for public purchase and long-term management makes implementation of the Public Purchase alternative remote and speculative. The alternate Environmentally Preferred alternative is the proposed project. The proposed project guarantees that at least 147 acres of the site containing the most important habitat would be set aside as a salamander preserve and protected and managed in perpetuity. The existing breeding pond would be improved and two new breeding ponds created on site. Invasive exotic plant species would be controlled and additional plantings of native species would be used to upgrade marginal habitat areas. There would also be annual surveys of the salamander population to assist in determining future management strategies at the Seascape Uplands.

## 7. REFERENCES

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APPENDIX A  
CONCEPTUAL GRADING PLANS AND DETAILS OF NEW POND CONSTRUCTION  
AND IMPROVEMENT OF EXISTING POND

TYPICAL CONCRETE SPILLWAY DETAILS

POND #2 PROFILE

POND #3 PROFILE

APPENDIX B: RESTORATION PLAN FOR SEASCAPE

APPENDIX C: SUGGESTED SALAMANDER MONITORING/RESEARCH PROGRAM