FINAL

DRAFT POGONIP MASTER PLAN
ENVIRONMENTAL IMPACT REPORT

Volume Two

- Responses to Comments
- Revisions to Draft EIR
- Mitigation Monitoring Program

submitted to the:

CITY OF SANTA CRUZ
DEPARTMENT OF PARKS AND RECREATION

submitted by:

B R A D Y / L S A
PLANNERS AND LANDSCAPE ARCHITECTS

JUNE 1998

B R A D Y / L S A
PLANNERS AND LANDSCAPE ARCHITECTS

Volume Two
TABLE OF CONTENTS

■ ■ ■

VOLUME ONE

I. INTRODUCTION 1

II. COMMENT LETTERS AND PUBLIC HEARING MINUTES 5

	Comment Number
Federal Agencies	A1-A8
State Agencies	B1 - B6
Local Agencies and District Offices of State Agencies	C1- C37
Members of the Public and Citizens Groups	D1 - D405
Draft EIR Public Hearing Minutes	
Comment Letters regarding the Master Plan	

VOLUME TWO

III. RESPONSES TO COMMENTS 1

IV. REVISIONS TO THE DRAFT EIR 115

V. MITIGATION MONITORING PROGRAM 191

Chapter III[1]
RESPONSES TO COMMENTS

■ ■ ■

Federal Agencies

U.S. Department of the Army, Corps of Engineers

A1. Comment noted. Any proposed discharges of dredged or fill material (including that associated with excavation) into waters of the U.S. as part of the *Master Plan* and requiring a Section 404 permit would be the subject of an application to the Corps prior to such activity.

U.S. Department of the Interior, Fish and Wildlife Service

A2. This introductory comment is noted but requires no further response.

A3. Comment noted. Alternative A and B propose bicycle and equestrian trail use primarily along existing roads. One portion of the Brayshaw Trail (Alternative A) and the Rincon Trail (Alternatives A and B) come near sensitive plant species. The DEIR includes measures to prevent indirect impacts to these occurrences through the use of protective fencing and interpretive signs. Ranger patrols and successful implementation of a Bicycle Ordinance, as proposed in the *Master Plan,* would reduce impacts from unauthorized trail users. Mitigation Measure BIO-1 also includes management and monitoring of rare plant occurrences and occurrences of the Ohlone tiger beetle.

A4. Comment noted. Although sensitive plant species have not been documented for the areas proposed for the Pogonip garden, Outdoor Education Camp and Lower Meadow parking lot (e.g., 1986 and 1996 surveys), the seedbank may include such species. Approximately 14 acres of prairie would be affected by these three projects, as identified on page IV.B-39 of the DEIR.

[1] See Volume One for Sections I and II.

A5. We appreciate the update of the status regarding the current re-evaluation of the need to list the Ohlone tiger beetle. The public should be aware that if the U.S. Fish and Wildlife Service (USFWS) does list the Ohlone tiger beetle before development at Pogonip, a formal consultation with the USFWS and the application for a potential "take" in the form of an Habitat Conservation Plan (HCP) will be required.

A6. The need for focused California red-legged frog surveys have been called out on page IV.B-32 under Mitigation Measure BIO-1d in the DEIR. The USFWS protocol will most certainly be used if plans in or adjacent to the Sycamore Grove Natural Area are implemented. A formal consultation with the USFWS would be conducted before any final plans are made or activities begin.

A7. We are aware of the recent studies conducted by the U.S. Geological Research Division where radio-tracked California red-legged frogs have been observed moving overland through grasslands and agriculture fields, in non-wetland/non-riparian habitats (Scott, 1998). The following text change should be added to page IV.B-28, fourth paragraph of the DEIR:

> "This upland habitat area ~~is an unlikely movement corridor for frogs~~ may be used by some red-legged frogs during wet, mild weather."

The following addition is made to Chapter VII of the DEIR under "C. Contacts":

> "Scott, Norm, 1998, personal communication with Dawn Reis, Habitat Restoration Group, May."

A8. Table IV.B-1 (page IV.B-2, DEIR) is amended as follows to reflect the recent proposed rule to list the Santa Cruz tarplant as a threatened species:

> "Santa Cruz tarplant ~~C1~~ FPT
>
> FPT - Species proposed for threatened status by USFWS"

Robust spineflower has been recorded from scattered private properties in the Aptos region, as per conversations with the County of Santa Cruz Planning Department. These occurrences may not be recorded with the California Natural Diversity Data Base (CNDDB).

State Agencies

University of California, Santa Cruz

B1. As referenced in the comment, the *Master Plan* (page 3-4) and the DEIR (page IV.G-4) contain language indicating that the Coolidge Drive Overlook is not considered a staging area for Pogonip. At the request of UCSC, the section of Lookout Trail between Coolidge Drive and Spring Trail will be removed from the *Draft Pogonip Master Plan* map. However, the existing trail provides an established path between Coolidge Drive and Spring Trail for foot traffic. Therefore, the trail will be maintained to minimize the potential for creating new informal trails between Coolidge Drive and Spring Trail. The *Master Plan* indicates on page 7-4 that the UCSC campus parking areas should not be considered as a parking area for Pogonip users.

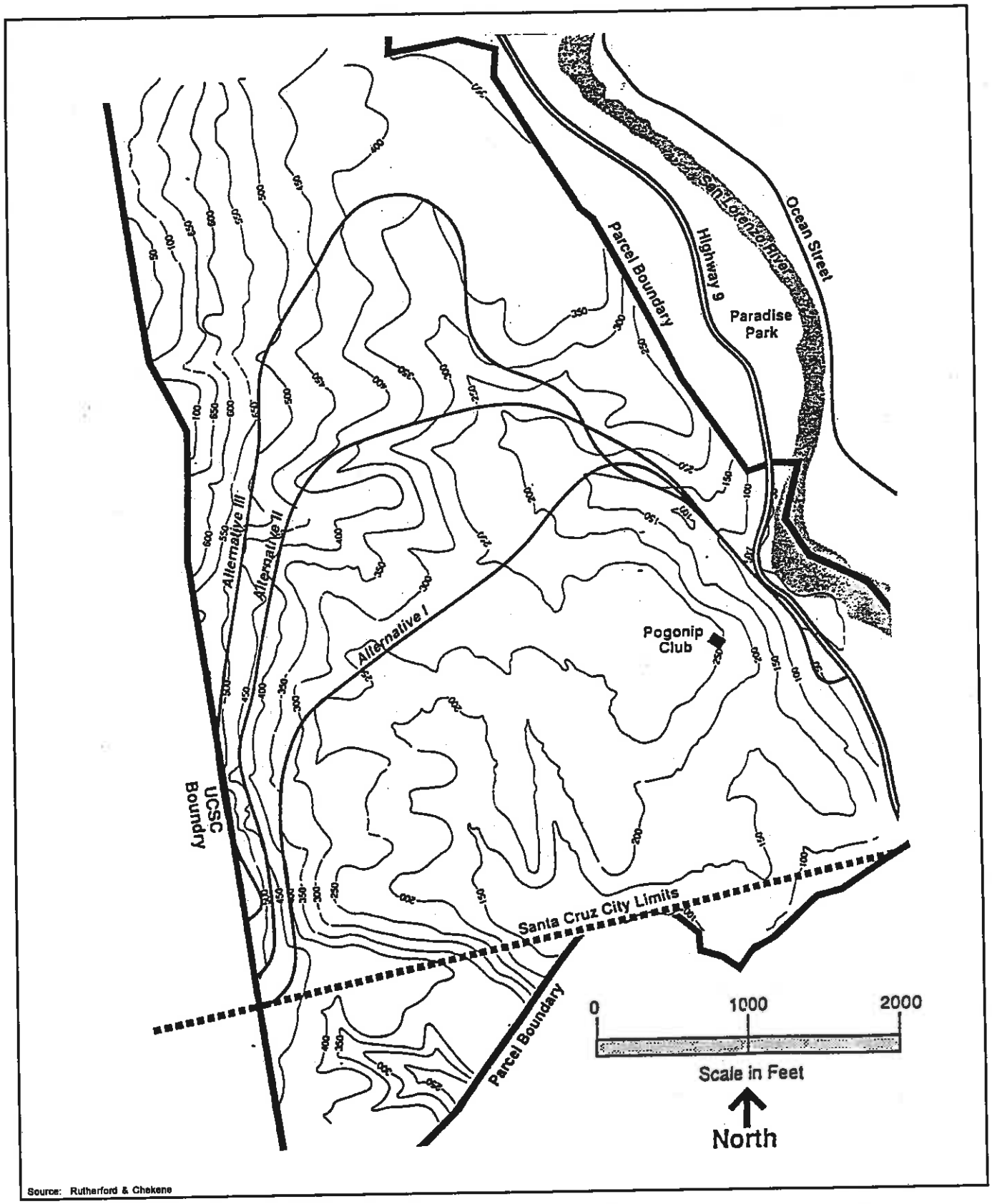
B2. The *Master Plan* indicates a kiosk will be provided at the Glen Coolidge Drive entrance to the Rincon Trail if the sight distance can be improved to allow for safe access. Mitigation Measures TRANS-5a, TRANS-5c, TRANS-5d and TRANS-5e address safety issues at the Glen Coolidge Drive entrance to the Rincon Trail. The following mitigation measure is added on page IV.G-19 of the DEIR:

> "Mitigation Measure TRANS-5f: Rincon Trail should be maintained as a service road only and a kiosk should not be provided at the Rincon Trail entrance at Glen Coolidge Drive until sight distances provided at the intersection of Glen Coolidge Drive with the Rincon Trail are improved to meet Caltrans and Santa Cruz County standards."

B3. The relocatable easement for an eastern access road through Pogonip is addressed with new text in the Land Use, Traffic and Circulation and Cumulative Impacts sections of the DEIR. A new figure, Figure VI-1(a) is also added to the DEIR and shown on the following page. The eastern access road has not been included in the DEIR planning history section because this section is intended to provide background information for the *Pogonip Master Plan*. The eastern access road is considered a separate project from the proposed rises in the Master Plan.

The following text is added to page IV.A-11 as a new section (6).

> "Prior to the City's purchase of the Pogonip property, the Cowell Foundation extended a joint option to the City of Santa Cruz and UCSC pursuant to which either or both of them might, prior to



Source: Rutherford & Chekene

DRAFT POGONIP MASTER PLAN

ENVIRONMENTAL IMPACT REPORT

Figure VI-1(a)
Eastern Access: Route Alternatives

January 1, 1999, locate an eastern access road to UCSC over the Pogonip property. The following two conditions must be satisfied prior to the exercise of the option: (1) the appropriate lead agency must have legally complied with the requirements of the California Environmental Quality Act; and (2) the City Council must have passed a resolution approving the exercise of the option for an eastern access road across Pogonip and specifying the course of any such access road over the Pogonip property. In order to extend the option, the City and UCSC would need to execute a new agreement or amend the original agreement.

The option agreement would allow for the construction of a two-lane roadway, with bicycle paths along a route which would originate at State Highway 9, pass through the Pogonip property, and connect to Glen Coolidge Drive near the eastern boundary of the campus. A specific alignment for the road has been defined; however, three preferred routes were identified in the UCSC LRDP EIR (March 1989) as shown in Figure VI-1(a). The final alignment of an eastern access road would probably resemble one of these alignments (or a combination of them). Environmental assessment of a final alignment and alignment alternatives in accordance with CEQA has not been prepared and would probably not be prepared until a decision is made to exercise the option.

The uses proposed in the Master Plan would not preclude development of an eastern access road across Pogonip."

The following text is added to page IV.G.10 as final paragraph under Section g.

"An option agreement presently allows for construction of a two-lane roadway, with bicycle paths, along a route which would originate at State Highway 9, pass through the Pogonip property, and connect to Glen Coolidge Drive near the eastern boundary of the UCSC campus. A specific alignment has not been identified, however, three preferred routes were identified in the *UCSC Long Range Development Plan EIR* (March 1989) and are shown in Figure VI-1(a) of the Final EIR. For any of these alignments, or for any possible combination of these alignments, there would be potential trail/service crossings and potential need for trail/service road realignments; however, the trail and service road network proposed in the *Master Plan* would not preclude development of an eastern access road."

The following text is added to page VI-5 of the DEIR.

> The uses as proposed in the *Draft Pogonip Master Plan* would not preclude development of an eastern access road across Pogonip. Because no resolution regarding the eastern access road has been passed, this potential development is not evaluated in the discussion of cumulative impacts."

B4. Page I-7, Section 2 of the DEIR is amended to read as follows:

> "The U.S. Fish and Wildlife Service (USFWS) will review the project for potential impacts on Ohlone Tiger Beetle habitat in the Upper Main Meadow are and federally-listed plant species. The University of California, Santa Cruz (UCSC) is a Responsible Agency with respect to subsequent approval of the short segment of trail or any other improvements related to Pogonip that occur on University of California property.

The following text is added to the list of concerns from NOP and scoping meeting comments, as stated on page I-8 of the DEIR:

- Nitrates from Pogonip garden and groundwater impacts.
- Need for a Pogonip-UCSC multi-use connector trail without such a trail impacting University lands or causing extensive construction and long-term maintenance enforcement costs to the University.
- Avoidance of identification of University parking lots in the Draft *Master Plan* as access to Pogonip facilities.
- Need for ADA accessible parking on Pogonip property.
- Avoidance of identification of Coolidge Drive overlook as a trailhead for Pogonip trails, or intersection of Rincon Road and Coolidge Drive as primary access point for Pogonip.
- Need to address relocatable University easement for an eastern access road through Pogonip, and how this road may be precluded by *Master Plan* elements.

The last sentence of the first full paragraph on page VI-5 of the DEIR is corrected as follows:

> "Specifically, drainage from these new developments would be directed into Jordan Gulch and as such, would not pose problems for the Pogonip area (Aldecoa, 1997)."

California Office of Planning and Research

B5. Comment noted.

California Department of Parks and Recreation

B6. Comment noted.

California Department of Transportation

B7. As stated on page IV.G-6 of the DEIR, the Sycamore Grove area is currently served by an unimproved parking area approximately 400 feet in length with a maximum depth of approximately 40 feet from SR 9. Improvement of the parking area is not included in the *Master Plan*. Potentially, implementation of the *Master Plan* through the development of a nature loop trail, interpretive displays and picnic tables, could increase the parking demand for the Sycamore Grove area. However, it is not the intention of the *Master Plan* that the Sycamore Grove area become a major staging area for Pogonip. The following text is added at the end of the first paragraph on page IV.G-15:

> "Improvements to the Sycamore Grove area could increase the parking demand at this location, although no improvements to the unimproved parking area at this location are included in the *Master Plan*."

Mitigation Measure TRANS-2 on page IV.G-15 of the DEIR is supplemented by a second measure, creating a two-part measure as shown below:

> "Mitigation Measure TRANS-2a: The *Draft Pogonip Master Plan* should identify potential off-site parking areas to be utilized for the shuttle system. The availability of parking at these locations during the periods when high-attendance special events would be conducted should be guaranteed through a contract between the City and the applicable landowner. Adequate parking for service and shuttle vehicles should be provided at the Clubhouse. (LTS)
>
> Mitigation Measure TRANS-2b: Improvement of the Sycamore Grove area should be coordinated with Caltrans to ensure that the planned improvements would not significantly increase the parking demand at this location. Parking demand would be reduced by limiting the improvements proposed for this area or controlling

access to the area by requiring that groups visiting the site be made subject to a permit and limited in size, and/or that group visits be scheduled."

B8. The design deficiency at the SR 9/Golf Club Drive intersection is an existing deficient condition. As described on pages IV.G-11 to IV.G-14 of the DEIR, the proposed project would not significantly impact traffic operations at the SR 9/Golf Club Drive intersection. However, the City and State should coordinate efforts to improve the geometric design of this intersection.

The DEIR text is amended under Impact TRANS-3 on page IV.G-16 and the mitigation measure on page IV.G-17 of the DEIR as shown below:

"**Impact TRANS-3: The proposed project would contribute additional traffic to the currently deficient sections of Golf Club Drive, creating or contributing to unsafe conditions. In addition, project-related traffic could exacerbate sight distance-related safety issues due to existing deficiencies of the SR 9/Golf Club Drive intersection.**

Mitigation Measure TRANS-3c: The City and State should work together to improve the geometric design of the SR9/Golf Club Drive intersection to improve the sight distance provided on the north leg of the intersection due to an existing deficient condition. This coordination should be initiated as soon as possible after adoption of the *Master Plan* and records of its accomplishment should be maintained by the City Parks and Recreation Department."

The following mitigation measure should be added in the Cumulative Section to the bottom of page VI-11 of the DEIR:

"In addition, the City and State should work together to improve the geometric design of the SR 9/Golf Club Drive intersection to improve the sight distance provided on the north leg of the intersection, due to an existing deficient condition. This coordination should be initiated as soon as possible after adoption of the *Master Plan* and records of its accomplishment should be maintained by the City Parks and Recreation Department."

B9. The following text is added on page IV.G-19 of the DEIR at the end of Mitigation Measure TRANS-5a:

"The placement of any sign within the State right-of-way would require an encroachment permit."

Existing sight distances at the intersection of the Rincon Connector Trail with SR 9, the Rincon Trail intersection with Glen Coolidge Drive and the Sycamore Grove trail crossing with SR 9 are described on page IV.G-4 and IV.G-5 of the DEIR. Minimum sight distance requirements were evaluated using a 45-mile-per-hour design speed at the Sycamore Grove location and a 40-mile-per-hour design speed at the Rincon Connector Trail location, although the posted speed limit is 35 miles per hour at both locations. The higher design speeds were utilized because, based on field observations of vehicles speeds, the actual or real-world or observed vehicle speed distributions at both locations appeared to exceed the 35-mile-per-hour speed limit.

Sight distances provided at the Sycamore Grove trail crossing of SR 9 currently meet Caltrans standards based on the 45-mile-per-hour design speed. Sight distances at the intersection of Rincon Connector Trail with SR 9 do not meet Caltrans standards for a 40-mile-per-hour speed limit. The existing horizontal and vertical alignments of SR 9 and the existing alignment of the Rincon Connector Trail limit the number of locations where SR 9 can be crossed. The location for the SR 9/Rincon Connector Trail crossing was chosen because it provides the best sight lines on SR 9 on this segment of SR 9.

Mitigation Measure TRANS-5a states that advance warning signs should be provided per Caltrans standards on SR 9 at the intersection with the Rincon Connector Trail and the Sycamore Trail crossing. Mitigation Measure TRANS-5b states that the Rincon Connector users should be directed to cross SR 9 at the location where the west leg of the Rincon Connector Trail intersects SR 9. At this location, trail users would cross SR 9 at a right angle to SR 9 and sight distances in each direction would be maximized. However, a minimum sight distance of 300 feet would not be achieved for the southerly intersection leg. The removal of large trees located immediately east of the roadway would improve the sight distance provided at this location. However, given the existing geometrics of SR 9, it may not be feasible to improve sight lines at the trail crossing without significant improvement of SR 9.

Local and Regional Agencies

Santa Cruz County Regional Transportation Commission

C1. General comments related to transportation are noted, but no further response is required.

C2. The proposed *Master Plan* provides a comprehensive framework for designing and managing the Pogonip trail system. The *Master Plan* establishes or will result in the development of trail design standards, user education programs, trail regulations, enforcement procedures and trail monitoring procedures designed to reduce potential trail user conflicts. The design and management guidelines described on pages 3-9 through 3-12 of the *Master Plan* and summarized on pages III-24 and III-25 of the DEIR include measures that are intended to minimize conflicts between different user groups.

C3. Golf Club Drive between the railroad trestle and the Pogonip property boundary is located within the City of Santa Cruz and any improvement of this roadway section should conform with American Association of State Highway and Transportation Officials (AASHTO) roadway design standards.

C4. The following text is added to Mitigation Measure TRANS-3b on page IV.G-17 of the DEIR:

> "The City should coordinate the implementation of additional traffic controls at the Golf Club Drive grade-separation, should they be necessary, with the Santa Cruz County Regional Transportation Commission (SCCRTC)."

C5. Comment supporting Mitigation Measure TRANS-6 is noted.

C6. See Response to Comment No. B8.

C7. The following text is added after the first sentence of the third paragraph on page IV.G-10 of the DEIR:

> "The CMP is updated every two years and the existing CMP was adopted in June 1996."

C8. The Pogonip trail system will be designed using trail design standards appropriate for multi-use trails located in a rural park setting. To preserve

the existing natural setting of the park, it will not be possible to achieve Caltrans design standards for Class I bikeways. The Caltrans Highway Design Manual provides recommended design standards for bike paths including widths, surface type, stopping sight distances, grades and horizontal and vertical curves. Caltrans requires a minimum paved width of eight feet for a bicycle-only path and recommends that a minimum paved width of 12 feet for a multi-use path. Identification of "slow zones" (blind curves, limited visibility, steep areas) is one element of the trail management actions (*Draft Master Plan*, page 3-12). To further clarify this aspect of the *Master Plan*, Mitigation Measure TRANS-6 on page IV.G-23 of the DEIR is renumbered to Mitigation Measure 6a and Mitigation Measure 6b is added as follows:

> "Mitigation Measure TRANS-6b: Trail segments that would require special speed or operational controls should be identified and marked with appropriate warning signs."

C9. The first sentence of the fourth full paragraph on page VI-5 is amended to read as follows:

> "The Santa Cruz County Regional Transportation Commission (SCCRTC) ~~completed the "Major Transportation investment Study" and transmitted a summary of this study to the City's Parks and Recreation Department in 1997.~~ is currently preparing a Major Transportation Investment Study (MTIS) of long-range transportation solutions for the Watsonville Junction-Santa Cruz-UCSC Corridor."

The last sentences of the fifth paragraph on page VI-5 should be amended to read:

> ~~"The Study completed by SCCRTC~~ A technical report describing the results of Task 11, the Environmental Screening, identifies preliminary environmental issues for the selected alternatives. In the vicinity of Pogonip, impacts to open space lands, noise, visual, the crossing of Spring Trail and biological resources resulting from Alternative 4 would have to be evaluated. Noise, traffic, and air quality impacts associated with construction were summarized as temporary for the area of the rail line that would pass through Pogonip."

C10. The following text is added to the end of the fifth full paragraph on page VI-11 of the DEIR (Section 7.a.):

"Santa Cruz County Regional Transportation Commission (SCCRTC) staff have indicated a desire to preserve trail access consistent with safety considerations should the rail alignment be constructed."

City of Santa Cruz Water Department

C11. The confluence of Redwood Creek and the San Lorenzo River is upstream of the City of Santa Cruz's Tait Street surface water intake. The description of Redwood Creek on page IV.D-4 of the DEIR is revised to include this fact at the end of the first paragraph:

"Existing uses and site conditions that have the potential to adversely impact surface water quality include: (1) siltation resulting from erosion of pedestrian trails and service roads, and (2) the occurrence of landslides and gully formation in the Santa Margarita formation on the slopes below Brayshaw and Fern Trails."

New proposed uses that have the potential to adversely impact water quality at the Tait Street diversion include: (1) construction and use of the multi-use UCSC connector trail; (2) intensification of pedestrian, mountain bike and equestrian trail use under all trail alternatives; and (3) fire management activities. With implementation of the recommended mitigation measures, none of the activities with potential adverse impacts to water quality are considered to be significant.

City of Santa Cruz Mayor, Celia Scott

C12. As stated on page IV.H-11 of the DEIR, no existing wastewater hookups exist west of the railroad trestle that crosses Golf Club Drive. Between Pogonip and the railroad trestle, there are five lots shown on the City's zoning map. With the allowable zoning of R-1-7 (7,000 square foot minimum lot size), further subdivision of these lots could occur because many of these lots far exceed the minimum allowable lot size. Thus, the language on page VI-1 of the DEIR under "Growth-Inducing Impacts" is revised as follows:

~~"While some homeowners who currently have their homes on septic systems could request sewer service due to the proximity of the extended line to their homes,~~ While the proposed extension is not expected to induce more intense development than allowed by existing zoning, many of the lots along Golf Club Drive are larger than allowed by current zoning and the existence of a new sewer line

could induce more intense growth than currently exists. In this way, an extended sewer line could remove a potential restriction to increased subdivisions in this area of the City and could be growth-inducing. In an area that currently has very large lots (about five lots exceeding three acres in size each), the current zoning could allow about 80 new lots (assuming that 33 percent of the land area would be devoted to roads to serve the new lots). To minimize the growth-inducing impacts of the proposed new sewer line extension, this new line should be sized to only serve the Clubhouse and other proposed facilities. At a later date, the line could be increased to serve more development, but such an expansion would require separate environmental review.

C13. Based upon a trail use survey conducted at Pogonip in April/May 1994, estimated trail use was 100 visitors on weekdays and 150 visitors on weekends. This is the only trail use data available for Pogonip. Peak use would be expected to occur during the months of July and August, based upon review of visitor attendance records for nearby State Park facilities. No surveys have been conducted during this period.

No trail use data are available for UCSC (Bertken, 1998). A trail use survey was conducted at Wilder Ranch State Park on the Labor Day weekend in 1997 (Buchanan, 1998). This time period is considered peak use. Trail users were counted at the tunnel entrance to the eastern portion of Wilder Ranch State Park between 9:00 am and 5:00 pm. On August 31, 1997, 495 bicyclists, 105 pedestrians, and 25 equestrians were counted (total 625 trail users). On September 1, 1997, 566 bicyclists, 99 pedestrians, and two horses were counted (total 667 users). The tunnel entrance is not the main entrance for equestrians; thus, equestrian use is likely higher than this estimate. Based upon this survey, it is estimated that weekend use during peak season would be about 80 to 85 percent bicycle use, 15 percent pedestrian use, and less than 5 percent equestrian use.

No trail surveys have been conducted at Henry Cowell Redwoods State Park (Jones, 1998). Estimates and analyses undertaken for other multi-use facilities indicate the percentage of user groups varies. A trail use study at Blue Sky Ecological Reserve in San Diego County estimated 20 percent bicycle use during a six-month trial period. Overall, the estimated percentage use for bicycles at a 17.5 mile trail (less than 5 percent grade and primarily paved) of the East Bay Regional Parks District is 54 percent. Hikers made up 25 percent, runners made up 7.3 percent, equestrians made up 1 percent, and the remaining 14 percent were "other/skaters" (Fiala, 1998).

Visitor attendance records are available for Henry Cowell Redwoods State Park and Wilder Ranch State Park. The attendance records estimate total visitor use, which includes picnicking, visitor center use, etc., in addition to trail users. No estimates are available for the percentage attributed to trail use for these visitor attendance records. The visitor attendance information is shown below in Table A.

Table A
STATE PARK FACILITIES VISITOR ATTENDANCE
ALL USERS (1997)

Facility	August	December	March
Wilder Ranch State Park	Low: 340 High: 740 Avg.: 476	Low: 125 High: 340 Avg.: 209	Low: 105 High: 433 Avg.: 207
Henry Cowell Redwoods State Park	Low: 287 High: 1,091 Avg.: 508	Low: 40 High: 710 Avg.: 212	Low: 134 High: 537 Avg.: 218

Note: These estimates are based upon visitor attendance data available from State Parks. The estimates do not include group use data. The counts included vehicles and non-vehicular based visitors. The number of vehicles was multiplied by two to estimate the number of visitors.

For Pogonip the increased number of users for the three trail use alternatives has been estimated based upon the Pogonip trail use information collected in 1994, State Park facilities visitor attendance estimates, and the assumptions listed below:

1. Trail use would increase over time for all three alternatives; however, Alternative A would yield the highest increase in bicyclists due to the greater number of trail entrances as compared to Alternative B.

2. Equestrian use would likely be similar for Alternative A or B because the Spring Street and Golf Club Drive entrances are not feasible equestrian staging areas.

3. Trail use for all types of uses would be highest during the summer months (July and August),considered to be peak season. Visitor attendance would be lower during the winter and early spring. This assumption is based upon attendance records for State Park facilities.

Based upon these assumptions and review of visitor attendance/trail use data from other facilities, estimates of future use are provided in Table B below. All of the estimates below assume an existing use level of an average of 100 visitors per day during low season and 200 visitors per day during peak season.

Table B
PROJECTED INCREASED TRAIL USE
(Daily Average)

Alternative	Pedestrian	Equestrian	Bicycle	Total
Existing Use (Pedestrian Use Only)				
Low Season	100	--	--	100
Peak Season	200	--	--	200
Alternative C (Pedestrian Use Only)				
Low Season	125	--	--	125
Peak Season	250	--	--	250
Alternative B				
Low Season	125	10	55	190
Peak Season	250	40	125	415
Alternative A				
Low Season	90	30	180	300
Peak Season	180	60	360	600

As shown in Table B, the total peak season use under Alternative A would be 30 percent higher than Alternative B and 116 percent higher than Alternative C in terms of total trail users. Under the most intense use (Alternative A), future peak use would increase by 415 daily users compared to existing peak use. Under Alternative B, the breakdown in use is estimated at 60 percent pedestrian, 30 percent bicycle, and 10 percent equestrian use. For Alternative A, it is estimated to be approximately 60 percent bicycle, 30 percent pedestrian, 10 percent equestrian use.

Even with increased usage, recreational impacts would not be significant because under the California Environmental Quality Act, significant impacts related to recreation would occur if a project would increase the demand for neighborhood or regional parks or other recreational facilities and affect existing recreational opportunities in an adverse way. The proposed project would provide (vs. increase the demand for) new and expanded recreational opportunities. By the various trail alternatives, each type of recreational opportunity would be protected from adverse impacts (e.g., including perceived safety hazards that may be experienced by hikers on trails used by

bicyclists) by the provision of trails for all types of users. For example, even under Alternatives A and B, hikers could enjoy a hiking experience separate from equestrians and bicyclists by using trails designated for pedestrian use only. For this reason, it was determined that significant adverse impacts related to recreation would not result from the proposed *Draft Pogonip Master Plan.*

C14. The DEIR, on page VI-9, fourth paragraph, does include recommended mitigation measures associated with increased regional use of trails due to a regional multi-use trail network, as such use may impact soils and lead to increased erosion. The proposed trail connections to UCSC and Henry Cowell Redwoods State Park would connect to existing fire road systems within the two respective areas. The City has coordinated with UCSC and State Park staff to determine the preferred connection and to ensure there would be no significant adverse impacts to sensitive biotic resources. A biologist and geologist/hydrologist conducted a site visit along the proposed new trail connection within UCSC and the existing Rincon Connector Trail within State Park property. Mitigation measures have been identified as needed for these segments. The proposed connection through Pogonip may decrease use on "Lock 'Em Up," a steep, eroded route connecting UCSC and State Park property. This would be a beneficial cumulative impact.

C15. For each of the two alternatives that propose on-site development (i.e., excluding the "No Project Alternative"), the changes from the *Draft Pogonip Master Plan* are identified. Where no changes are identified for specific elements of the *Master Plan*, such as for the trail alternatives, the elements would be the same as the proposed project. Thus, for both alternatives, the three trail alternatives are included and impacts would be similar to the proposed project.

On page IV.C-15, impacts related to erosion are clearly distinguished for each alternative trail proposal.

It should be emphasized that the distinction between the three trail alternatives relates to only to three existing service roads (Rincon Trail, Spring Trail, and Brayshaw Trail), one existing trail (Rincon Connector Trail) and one proposed trail (USCS Connector Trail). For <u>all</u> alternatives, nine existing trails would remain for pedestrian use only and one proposed trail (Harvey West Park Trail) would be for pedestrian use only. Multi-use proposals would affect 3.8 miles (40 percent of total trail length) of trails under Alternative A and 1.5 miles (16 percent) of trails under Alternative B. The one main distinction between Alternative A and B would be that <u>all</u> service roads would be proposed for multi-use under Alternative A while

only one service road would be for multi-use under Alternative B. Depending on the alternative trail system adopted, different levels of mitigation would be needed. For the Final EIR, the DEIR mitigation measures related to trails have been revised to show "All Trail Alternatives", "Alternative A", "Alternative B" or "Alternative C" at the end of individual mitigation measures.

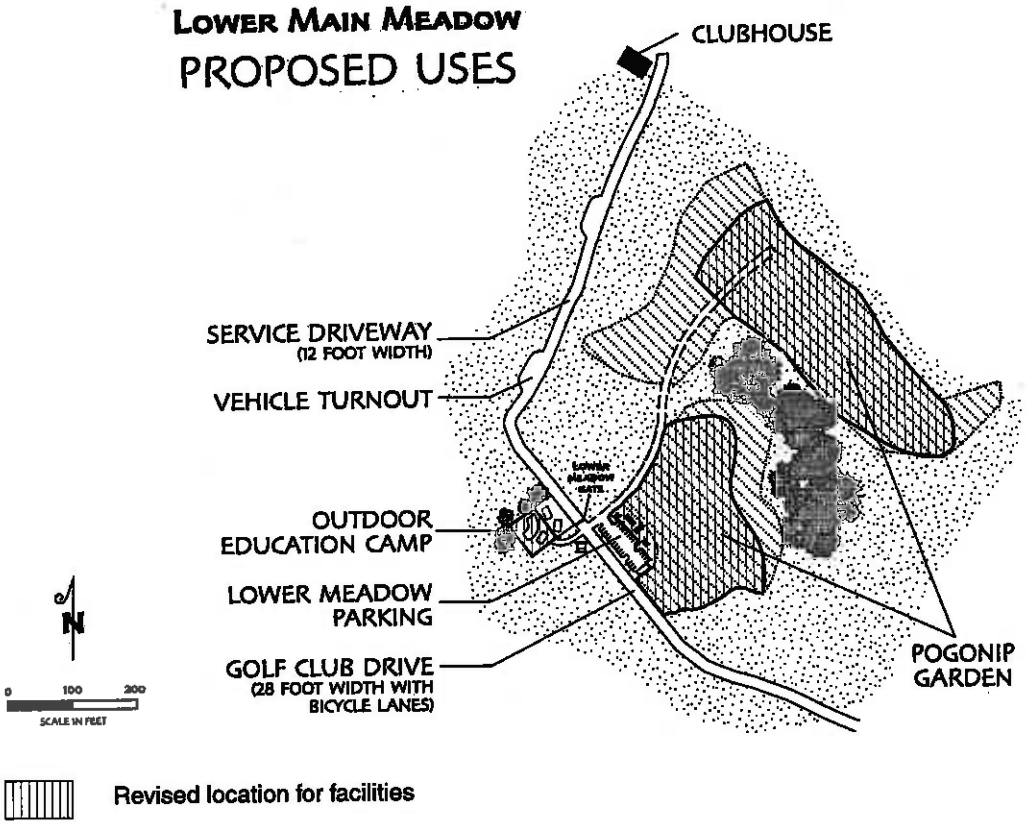
C16. The Reduced Lower Meadow Use Alternative is defined more specifically below in Chapter V of this Addendum. A new Figure V-1, Reduced Lower Meadow Use Schematic Layout depicts the reduced garden, parking and outdoor education camp sites. Mitigation measures for setbacks and avoidance of gullies, slopes in excess of 10 percent, and seep areas proposed in the EIR also are considered in the reduced garden site.

C17. With the Reduced Lower Meadow Use Alternative, the volume of trips generated by the garden is expected to decrease because a portion of the garden employees would work at the off-site garden support facility. In addition, a portion of the garden support related trips such as deliveries of material would be generated at the off-site location rather than at the Pogonip garden, further reducing the number of trips generated by the garden. These trip reductions would likely be offset by an increase in employee trips associated with employees traveling between the off-site facility and the Pogonip garden. On balance, it is not anticipated that the relocation of the garden support facilities would result in a significant change in the volume of trips generated by the garden.

C18. As stated on page V-5, last paragraph, the Lower Meadow Parking area would be reduced to 15 spaces from the project's 30 spaces and these would be located along Golf Club Drive. The Reduced Garden Alternative has also been revised to include a 15-car parking lot rather than the project's 30 spaces. Figure V-1 shows the proposed site for the reduced parking area under both alternatives.

The language in the DEIR at the bottom of page V-3 has been revised as follows:

> The Lower Meadow parking lot would be ~~unchanged~~ reduced and would provide a maximum of ~~30~~ 15 spaces for park visitors and Pogonip Garden Project staff (refer to Figure V-1). Shareholder pickups would occur off-site or would be carefully scheduled to ensure adequate parking spaces are available. The number of parking spaces for Garden employees would be reduced to five spaces."



Note: Actual boundaries will be determined after site specific slope, soil and seep analysis completed. Garden acreage may be further reduced.

Reduced Garden Acreage:	Approximately 9 acres total; greenhouses; support facilities located off-site.
Reduced Outdoor Education Camp:	Less than one-half acre total; no overnight use
Reduced Parking:	15 parking spaces; no covered garden vehicle/equipment parking on-site

Source: City of Santa Cruz Parks and Recreation Department, June 1998.

Figure V-1
Reduced Lower Meadow Use Site Plan

The following language is added to the DEIR at the end of the last paragraph (p. V-5) to provide more specificity:

> "...prairie habitat and the white tailed kite. These spaces would be located in the area along Golf Club Drive. shown on Figure V-1."

An off-site location for the garden has not yet been identified as mentioned on page V-5 of the DEIR. The purpose of this alternative is to evaluate a *Draft Pogonip Master Plan* that does not include the garden component

The language in the DEIR for this alternative is revised as follows:

> "~~Off-Site Garden and Relocated Parking~~ No Garden and Reduced Lower Meadow Use Alternative."

C19. The proposed Golf Club Drive roadway design of a 20-foot wide travel roadway with four-foot shoulders on each side for bicyclists and pedestrian traffic is consistent with roadway standards established by the American Association of State Highway Transportation Officials (AASHTO).

With the Reduced Lower Meadow Use alternative, the garden would be maintained on-site, although at a lower intensity of development. Given the volume of trips generated by the garden as well as the Clubhouse, Outdoor Education Camp and other Pogonip visitors, it is recommended that two travel lanes be provided on Golf Club Drive between the railroad trestle and the Lower Main Meadow with this alternative.

The following text is added after the last paragraph on page V-4 of the DEIR:

> "It is recommended that two travel lanes with shoulders for pedestrians and bicyclists be provided between the railroad trestle and the access driveway to the Lower Main Meadow."

With no garden project at Pogonip, traffic on Golf Club Drive between the park boundary and the Lower Main Meadow would be reduced to traffic generated by the Clubhouse, Outdoor Education Camp and other Pogonip visitors. With this alternative, Golf Club Drive between the park boundary and the Lower Main Meadow could be designed as a one-lane roadway, 14 feet in width with turnouts, based upon project traffic; however, the City's Fire Code and General Plan state that roadways in wildfire hazard areas shall not be less than 20 feet wide. It is recommended that Golf Club Drive

between the railroad trestle and the Lower Meadow gate be upgraded to AASHTO standards.

C20. The "No Project" Alternative would not be superior because of its failure to achieve beneficial effects of the *Draft Pogonip Master Plan* as listed on pages V-2 and V-3 of the DEIR. The trail alternatives would not affect the determination of the environmentally-superior alternative because there are no significant, unavoidable impacts associated with the trails, while such impacts do occur in relation to the garden. With or without multi-use, potential impacts can be mitigated for the trails. If the City wishes to reduce the types and numbers of mitigation measures associated with adoption of the *Master Plan*, the most restrictive trail alternative, Alternative C, (no multi-use) would require the fewest mitigation measures.

C21. The EIR states that there is potential red-legged frog habitat in the Sycamore Grove area and along the San Lorenzo River (page IV.B-19 and page IV.B-32 under Mitigation Measure BIO-1d). Bridges are proposed across Pogonip Creek and Redwood Creek to reduce trail use impacts on the creek environment. Bridge construction is expected to occur during the dry season. Please refer to Response to Comment Nos. A6 and A7.

C22. Wildlife movement corridors are discussed in regard to deer fencing in the proposed Pogonip Garden on page IV B-41. Please refer to Response to Comment No. D53 regarding deer fencing as well as Response to Comment Nos. D139 and D128. We have reviewed the wildlife monitoring study conducted at the Blue Sky Ecological Reserve. Please refer to comment D128. Areas with known or potential habitat for sensitive wildlife species (bobcat denning areas, Ohlone tiger beetle habitat, red-legged frog habitat) have been proposed for pedestrian use only (i.e., Pogonip Creek Trail, Prairie Trail, Harvey West Trail, Fern Trail).

C23. Refer to the Response to Comment No. D329 regarding fire management activities. An analysis of an alternative access road to the garden was not proposed as part of the *Master Plan*; however, if a route were proposed from higher along Golf Club Drive, as the commentor proposes, the road would likely affect coastal terrace prairie and could have erosion-related impacts.

C24. The summary of impacts presented the public hearing on March 31, 1998 is attached on the following pages. Table 1 does not address impacts, but addresses mitigation measures. Impacts related to specific trails and specific trail alternatives are identified in the text that follows the summarized impact text. For example, see pages IV.B-29 and IV.C-15 of the DEIR. To make the document more readable, impacts were identified as specifically

Table 1
SUMMARY OF MITIGATION MEASURES BY TOPIC[a]

	Land Use	Vegetation & Wildlife	Geology, Soils & Seismicity	Water Resources	Archaeological and Historic Resources	Visual Quality & Aesthetics	Transportation & Circulation	Service Systems & Utilities
CLUBHOUSE REHABILITATION	No Impact	BIO-3	GEO-1t GEO-1u	WATER-1n WATER-1p	ARCH-1	VIS-2 VIS-3	TRANS-1 TRANS-2	SER-1a SER-2a SER-2b SER-6 SER-7
POGONIP GARDEN	No Impact	***BIO-1a*** BIO-2c BIO-2d BIO-3	***GEO-1a*** GEO-1d GEO-1f GEO-1g GEO-1h GEO-1i GEO-1u	WATER-1a WATER-1o WATER-1p	ARCH-4	VIS-1a VIS-1b VIS-2 VIS-3 VIS-4	TRANS-1 TRANS-3a TRANS-3b TRANS-4	SER-3 SER-6
OUTDOOR EDUCATION CAMP	No Impact	BIO-1b BIO-2c	GEO-1b GEO-1c GEO-1u	WATER-1p WATER-1r	ARCH-4	VIS-2	TRANS-1 TRANS-2 TRANS-3a TRANS-3b TRANS-4	SER-1a SER-2a SER-2c SER-6
SYCAMORE GROVE NATURE AREA	No Impact	BIO-1c BIO-1d BIO-1e BIO-2a BIO-2c	GEO-1t GEO-1u	WATER-1q	ARCH-4	No Impact	TRANS-1	SER-6
TRAILS ALTERNATIVES A, B AND C	**All No Impact**	**All BIO-1f** **All BIO-1g** **All BIO-1h** **All BIO-1i** A,B BIO-1j **All BIO-2e** **All BIO-3**	**All GEO-1i** **All GEO-1j** **All GEO-1k** A,B GEO-1l A,B GEO-1m **All GEO-1n** **All GEO-1o** A,B GEO-1p **All GEO-1q** **All GEO-1r**	**All WATER-1b** A,B WATER-1c **All WATER-1d** A,B WATER-1e **All WATER-1f** **All WATER-1g** **All WATER-1h** All WATER-1i **All WATER-1j** **All WATER-1k** **All WATER-1l** A,B WATER-1m **All WATER-1s**	**All ARCH-3**	No Impact	**All TRANS-5a** A,B TRANS-5b A,B TRANS-5c A,B TRANS-5d A,B TRANS-5e A,B TRANS-6	A,B SER-1a A,B SER-1b A,B SER -1c A,B SER-1d A,B SER-1e

	Land Use	Vegetation & Wildlife	Geology, Soils & Seismicity	Water Resources	Archaeological and Historic Resources	Visual Quality & Aesthetics	Transportation & Circulation	Service Systems & Utilities
MAINTENANCE AND SUPPORT FACILITIES	No Impact	BIO-3	GEO-1u	WAT-1q	ARCH-4	No Impact	No Impact	SER-2b
TRANSPORTATION, CIRCULATION AND PARKING	No Impact	BIO-2b BIO-2c	GEO-1e GEO-1i GEO-1j GEO-1k GEO-1t GEO-1u	WAT-1n	ARCH-4	No Impact	TRANS-2 TRANS-3a TRANS-3b TRANS-4	SER-9
UTILITIES	No Impact	No Impact	GEO-1u	WAT-1q	ARCH-4	No Impact	No Impact	SER-3 SER-4 SER-5 SER-8
FIRE MGMT.; RESOURCE MGMT. AREAS; AND HISTORIC SITES[b]	No Impact	No Impact	GEO-1s	No Impact	ARCH-2a ARCH-2b ARCH-2c ARCH-3 ARCH-4	No Impact	No Impact	SER-2a SER-2b SER-2c

XXX = Significant and unavoidable after mitigation. **XXX** = Applies to all trail alternatives.

[a] SU: Significant and unavoidable; all other impacts would be less-than-significant after mitigation.
[b] Refer to Clubhouse Rehabilitation regarding impacts for that specific historic site, and to specific sites areas for biological impacts.

Note: Specific numbers of mitigation measures refer to those used in Draft EIR.

related to significance criteria, and the discussion that follows each summarized impact addresses individual components of the *Master Plan* that may relate to the specific impact (as on the pages mentioned above). The trail alternatives are only one component of many within the *Master Plan*. The issue of increased number of users is addressed above in the Response to Comment No. C13.

C25. Please refer to Response to Comment Nos. C22 and D128 on wildlife disturbances from bicycle use. Mitigation Measure BIO3 has been revised to address patrolling of trails and citing unauthorized users, such that impacts to wildlife can be minimize (see Mitigation Monitoring Program in Chapter V of this FEIR Addendum).

C26. On page IV.C-13, fourth paragraph of the DEIR, with regard to all trail users (pedestrian, bike, and equestrian), the DEIR makes the following statement: "Each of these users has the potential to increase erosion, reduce vegetative cover, compact soils, and modify runoff conditions under both existing conditions and under all proposed trail alternatives." No suggestion is given to an "equal probability" of impacts resulting from different uses. The DEIR, instead notes that "increasing traffic loads by horses and mountain bikes may increase the potential for erosion and sediment transport to local wetlands, if an active trail maintenance program is not rigorously pursued in perpetuity." The following text is added on page IV.C-15, fourth paragraph:

> "...perpetuity. Thus, Alternative A would have the most significant impacts due to this alternative including the most extensive multi-use options and likely allowing the most intense use of all the alternatives. Alternative B would be the next most intensive and Alternative C would be the least intensive based on likely usage."

The critical issue relative to reducing trail impacts associated with any increase of use, is the commitment of land managers and land users to maintenance of trails and service roads. This commitment is presented in the *Draft Pogonip Master Plan* page 3-9, Section 3.5, in the Trail Design Guidelines and Trail Management Actions and referred to in the DEIR on page III-24.

In the case of the Santa Cruz Mountains and the other central coast ranges, no quantitative analysis has been done to evaluate the physical impacts of multi-use on erosion rates.

The commitment to increasing access to the site to bikes and horses requires that the community pay for increases in park operation and trail maintenance

costs, increases in ranger patrols, and increased enforcement of rules limiting multi-use access to pedestrian-only single track trails. Should the monitoring of trail conditions, prior to and following plan implementation, indicate that trail degradation is notable, the City has the ability to restrict any and all use, depending on level of impact and the ability of the City to mitigate the impacts.

The EIR authors have made observations of trail, road and hydrologic conditions at Pogonip and at the nearby USCS campus, Wilder Ranch State Park, Henry Cowell Redwoods, Castle Rock, Big Basin and the Forest of Nisene Marks periodically since 1967, when the Environs study was conducted for the siting of the UCSC campus, and more recently throughout the past decade as part of geomorphic analyses of area wetlands and streams. Informal trail observation surveys have also been conducted in East Bay Regional Parks, East Bay Municipal Utility District, Mid Peninsula Regional Open Space District and Santa Clara County Parks Department properties. Reconnaissance-level observations throughout the region reveal a wide range in the extent of erosion and trail management problems caused by pedestrian and multi-use activities, depending on soils, slope, drainage conditions and levels of use. Appropriate initial trail construction and vigilant repair of drainage features are the most notable actions that appear to minimize and mitigate for intensification of user impacts, regardless of user type.

In situations such as the farm roads in Wilder Ranch, trail impacts resulting from multi-use access and increases in overall park use are both a result of increased traffic and the nature and construction of the roads themselves. Observations reveal that in low gradient sections, and those sections with exposed limestone, schist and granites (which are similar to the Spring Trail/Rincon Trail area of Pogonip), road surfaces appear to be relatively stable and not a significant source of sediment. In sections of road in the more fragile marine terrace deposits and in the exposures of Santa Margarita formation, gullies have developed and road closures have resulted. Throughout Wilder Ranch, single-track trails appeared to have increased in width and loss of vegetative cover under increases in mountain bike usage.

Without exception, management of drainage control features and enforcement of trail use regulations, such as wet season closures, help to mitigate the visible and persistent trail degradation conditions encountered by the EIR authors. The *Draft Pogonip Master Plan* Trail Design Guidelines and Trail Management Actions address these issues. If approved by the City, the *Pogonip Master Plan* and the proposed trails program should adequately mitigate adverse impacts likely to occur with varying levels of use. The City may also, at any time, close trails or limit use of trails and resource

management areas if it is determined by the proposed monitoring activities that adverse impacts have occurred, or are likely to occur, within their jurisdiction.

C27. Suggested limitations on multi-use in Mitigation Measure GEO-1l refer to limitations on multi-use traffic volumes through permit application and review. Cumulative impacts associated with potential increases in use by large groups would be addressed by the implementation of the proposed trail monitoring and appropriate responsive trail maintenance activities.

It is likely that greater levels of use by mountain bikes and horses will lead to greater levels of impacts. Refer to text changes identified in the Response to Comment No. C26. Trail management actions proposed in the *Draft Pogonip Master Plan,* combined with Mitigation Measures GEO-1i, GEO-1j, GEO-1k, GEO-1m, GEO-1n, GEO-1o, GEO-1p, and GEO-1q, should reduce impacts to less than significant levels. As discussed in previous responses, the City, through monitoring and responsive management, will be able to limit impacts by individual review of group permits concurrently with review of trail conditions and appropriate maintenance activities.

C28. The current degree or extent of specificity in the *Draft Pogonip Master Plan* requires that proposed trail alignments, design and construction plans be developed by qualified trails designers approved by responsible City staff and the Parks Commission/City Council, as appropriate. To specify the need for additional design and review of any future trail routes, the following sentence is added to Mitigation Measure GEO-1m on page IV.C-21 of the DEIR:

> "...Prior to the construction of new trails, trail design plans, construction details, and an erosion control plan should be submitted for review by City staff and the City Council prior to approval and construction."

It is true that environmental review would be required for future discretionary actions; however, an Addendum or Supplemental EIR may not be required. The findings of an Environmental Initial Study could determine that a Mitigated Negative Declaration may be more appropriate.

C29. Two surface water features are named in existing background documents. These named features are included in all base maps in the DEIR. Additional mapping of seeps and springs is included in Figure IV.C-1 of the DEIR. Numerous small seeps, weeps, and springs exist on the property, depending upon local rainfall and groundwater conditions.

C30. As stated at the top of page IV.D-16 of the DEIR, "The following combination (emphasis added) of mitigation measures should be implemented....". Monitoring is only one of 19 identified mitigation measures for this particular impact.

Mitigation monitoring, in this context, requires that an initial baseline survey of conditions be undertaken and that adverse changes in site conditions observed in subsequent monitoring observations be compared to the initial conditions. Changes in conditions noted in monitoring efforts serve as the catalyst for changes in trail management strategies, application of specific maintenance approaches, or in the extreme case, closure of trails to types or variable levels of use. Monitoring, therefore, can be seen as a central component of adaptive management, not as adequate mitigation in and of itself.

C31. Slope regulations pursuant to Section 24.14.030 (Slope Regulations, City of Santa Cruz Zoning Ordinance) do not directly address the issue of trail development on slopes in excess of 30 percent on a large parcel such as Pogonip. Section 24.14.030 (1)g states that no development except minor development on parcels of one-half acre or less, such as walkways, fences, retaining walls less than three feet high above existing grade, planter boxes and similar features, will be allowed to encroach on 30 percent slopes without any exception. As such, the development of the UCSC Connector Trail does not appear to conflict with the slope ordinance. In addition, because the UCSC Connector Trail does not propose motor vehicle access, the slope ordinance and associated driveway design standards do not appear to apply.

C32. The trip generation estimates provided in the DEIR were developed to indicate the general volume of vehicle trips currently generated by the park. The 1994 trail survey provided the best available data from which to make the trip generation estimates. A comprehensive and costly trail user survey and data collection program would be required to establish precise trail usage and vehicle trip volumes, and the results are not likely to change the impacts or mitigation measures recommended in the DEIR.

C33. Twenty-four hour traffic counts were performed between Thursday May 7, 1998 and Thursday May 14, 1998 on Golf Club Drive at the railroad trestle to confirm the existing volume of traffic on Golf Club Drive west of the railroad trestle. During the seven day survey period, 1,180 vehicles were counted on Golf Club Drive at the railroad trestle yielding an average daily usage of 169 vehicles. The seven day count of vehicles is consistent with the estimated traffic volume presented in the DEIR of 150 vehicles per day on weekdays

and 200 vehicles per day on weekends on the section of Golf Club Drive west of the railroad trestle.

C34. The first paragraph on page IV.G-12 of the DEIR indicates that allowing bicyclists and equestrians on the Pogonip trails is not expected to increase the volume of vehicle trips generated by the park. It is expected that equestrians would enter the site on horseback from nearby locations and bicyclists would primarily use Pogonip trails for through connections. The daily trip generation estimates presented in the DEIR do not include vehicle trips generated by equestrians and bicyclists as it is expected that these users would not generate more than a minimal volume of trips to the park.

However, the DEIR presents a conservative estimate of the volume of trips that would be generated by the park during a 24-hour (daily) period. This would occur when a full-attendance Clubhouse event occurs and the Outdoor Education Camp and the garden generate the anticipated maximum volume of 24-hour (daily) trips associated with these uses. As stated on page IV.G-11 of the DEIR, the estimated daily trip generation estimate for the project will vary on a daily basis in relation to the number and size of activities or events conducted on any one day. While 200-person Clubhouse events are not anticipated on a daily basis, the Clubhouse will be available for use on a daily basis.

C35. The following text should be added at the end of the fourth full paragraph on page IV.G-3 of the DEIR as follows:

> "...as a bikeway. Striped bike lanes are not provided on SR 9 in the vicinity of the project. Striped shoulders of varying width are provided on sections of SR 9 from SR 1 to north of Golf Club Drive."

The lack of bicycle facilities on SR 9 should not preclude including bike lanes on reconstructed Golf Club Drive. Bicyclists should be allowed to use Golf Club Drive to access the Clubhouse, garden and Outdoor Education Camp if the multi-use alternative is not implemented. Additional bicycle traffic would be added to Golf Club Drive should the multi-use trail alternative be implemented.

It is recommended that Golf Club Drive between the park boundary and the access driveway serving the Lower Main Meadow area be widened to provide two, 10-foot travel lanes with 4-foot paved shoulders on both sides of the roadway for bicyclists and pedestrians. The recommendation that Golf Club Drive within Pogonip be widened is based on geometric standards published by the American Association of State Highway Transportation Officials

(AASHTO). These standards recommend that Area Roads within recreational areas be designed for two-way travel with a traveled way of between 18 and 20 feet with shoulders of between 0 and 2 feet in width for a total roadway width of between 18 feet and 24 feet. The proposed widening also addresses emergency access needs.

The trip generation estimate for the project is presented on page IV.G-13 of the DEIR. During a full-attendance special event at the Clubhouse, it is estimated that the Clubhouse, garden and education camp components of the project would generate 206 daily trips. These trips would utilize Golf Club Drive for access. The trip generation estimate is based on an analysis of the trip generating characteristics, including parking limitations and auto occupancy factors associated with these uses. The volume of trips generated by the project will be less than the peak demand presented in the DEIR when a full-attendance special event is not conducted at the Clubhouse and the Outdoor Education Camp is not utilized.

C36. Studies of existing multi-use situations have established that an on-going trail monitoring program is an important element of a multi-use trail implementation program. The *Pogonip Master Plan* Trail Management Actions include a Ranger Enforcement Plan, a Volunteer Patrol program and a user response form to provide users with a forum for reporting problem areas. The Pogonip trail monitoring program will identify problem areas that require implementation of specific measures to reduce conflicts or improve safety. In some cases, physical changes to the trails may be necessary involving trail widening or trail restrictions may be necessary. If extensive physical changes are necessary, additional CEQA review may be necessary.

C37. Comment noted.

Public and Citizens Groups

Steve Moran

D1. Comment is noted, but requires no further response as it does not question the baseline information analysis in the DEIR.

D2. Comment noted. The text on page III-22 of the DEIR, under "Alternative A" does address the regional connection benefits of this alternative.

D3. Comment is consistent with the DEIR regarding the ease of protecting the existing wood rat nest by re-routing the UCSC Connector Trail.

D4. Opening up this section of the trail to bicycles and horses potentially increases the user rate and overall activity along the trail. The concern is due to the potential change in activity levels if this section is officially open to multiple-user activities. Although predictions in user levels (including hikers) are speculative, it was decided to close this section to multiple use to ensure a reduction in at least a certain amount of activity as compared to a multiple use plan.

D5. Group use permits for pedestrians and equestrian users are currently required by the City Parks and Recreation Department for special events. Mitigation Measure GEO-1l on page IV.C-21 of the DEIR assumes the continuance of this existing permit process. Proposed multi-use events would be reviewed within the context of all proposed special events that require group permits.

D6. Limits on wet season use proposed in Mitigation Measure GEO-1n on page IV.C-21 are intended to apply to all trail users, including pedestrians.

D7. Trail closures would be dictated by trail conditions encountered during mitigation monitoring and normal trail conditions observations by park staff and park users. Closures should be implemented for periods of time when trail conditions are poor and use of the trail system would result in adverse impacts to soil and water resources, threats to trail and slope stability, or increased trail maintenance requirements. The exact period of time can be determined by City Parks and Recreation Department staff, based on monitoring.

D8. Unauthorized use of trails is noted in the DEIR as a source of trampling and erosion. Mitigation Measure WAT-1i calls for the closure and obliteration of informal trails to reduce their impact on water resources through erosion. Group use requires a group use permit, as described in Response to Comment No. D5. Conditions of use detailed in group use permits are addressed on a case-by-case basis. Compliance with these conditions requires good faith efforts on the part of the users and enforcement by City Department of Parks and Recreation staff. The DEIR assumes that as part of implementing Mitigation Measure WAT-1i, Mitigation Measure WAT-1k, and Trail Management Actions proposed in the *Draft Pogonip Master Plan,* monitoring of unauthorized trail use will be done on a biophysical basis (i.e., focusing on plant trampling, erosion, and drainage conditions). All users using informal trails would be viewed equally as unauthorized users.

D9. Implementation of Mitigation Measure WAT-1e calls for additional site analysis to be completed as a component of the design of the UCSC Connector Trail. At that time, specific trail alignment, construction

specifications and trail gradients can be determined. Drainage structures mentioned in Mitigation Measure WAT-1d are relevant to all trails at Pogonip.

D10. Please refer to the Response to Comment No. D9.

D11. The last sentence of Mitigation Measure TRANS-5a on page IV.G-18 of the DEIR should be amended as follows:

> "These signs should include ~~"Pedestrian Crossing" and Equestrian Crossing"~~ Pedestrian Symbol (W54A), Equestrian Symbol (W45) and Bicycle Symbol (W79) signs where appropriate. The design and installation of the advance warning signs on SR 9 should be coordinated with Caltrans. Installation of signs in the State right-of-way will require on encroachment permit from Caltrans."

D12. Trail use Alternative A designates Spring Trail as a multi-use trail while Alternatives B and C designate Spring Trail for pedestrian use only. No text changes are necessary.

D13. Mitigation Measure TRANS-6 on page IV.G-23 of the DEIR recommends that multi-use trails be monitored for safety problems and the need for additional mitigation measures. As stated in Mitigation Measure TRANS-6, these trail improvements may include closing the trail to multi-use, providing a separate parallel trail, or widening the trail. A variety of options are provided.

D14. Mitigation Measure SER-1c does not imply that volunteer patrols be a strict condition of trails being open for multi-use, but that on-site rangers "work with user groups to provide volunteer patrols" as stated on page IV.H-5 of the DEIR. The nature of "volunteers", is such that this mitigation measure cannot be counted on in any legal sense to produce results, but must be seen as a supplement to other mitigation measures.

D15. It is not possible to "require" users to travel at a "safe speed" because the term "safe speed" cannot be enforced. While it is true that users may exceed a posted speed limit, this recommendation is not considered an "oppressive management technique" as suggested in the comment and posted speed limits are able to be enforced. The mitigation measure states that "speed limits for bicyclists should be posted as needed..." which means that such posting would only occur in appropriate locations. Posting speed limits is necessary to enable enforcement.

D16. Pedestrians using Pogonip trails are already subject to ticketing by Park Police for park violations including dog leash laws and use of unauthorized areas. This enforcement would continue with implementation of the *Master Plan* and would be extended to equestrians.

D17. Table IV.G-5 on page IV.G-22 of the DEIR has been amended as shown on the following page to show information regarding Wilder Ranch.

D18. Please refer to the Response to Comment No. D17.

D19. This comment expresses the opinion of the commentor. The DEIR presents an overall analysis of both multi-use and restricted use, and does not find that multi-use would result in any significant, unavoidable impacts. Mitigation measures are recommended in instances where multi-use would result in specific impacts, such as trail use conflicts related to public safety. Revisions to the DEIR to reduce the apparent "bias" seen by the commentor are not considered necessary.

Board of Directors, Homeless Garden Project

D20. The DEIR does acknowledge that the *Draft Pogonip Master Plan* is an implementation of Policy L 3.4 of the City's General Plan, as discussed on page IV.A-13 of the DEIR. In terms of Policy L 3.4.1 regarding the Land Use Options Assessment Report, DEIR text on page IV.A-14 states that the current *Master Plan* has "evolved" from the Land Use Options Assessment Report. The General Plan does not require that all uses identified in the Mixed Land Use option be implemented. The history of the planning process is provided on pages III-4 and III-5 of the DEIR. Because General Plan policies are addressed in Section IV.A of the DEIR, it is not necessary to revise Figure III-1 of the DEIR.

D21. The importance of uses is subject to interpretation. The order of the discussion in the *Master Plan* and the DEIR is not set up in any particular order based on importance or other criteria; however, the consistent order of *Master Plan* elements is maintained throughout the document to assist the reader.

D22. For specific topics where individual elements of the *Master Plan* do not need to be called out (i.e., Land Use, Transportation, and Service Systems and Utilities), plan components are not addressed individually. Plan components are addressed individually under "Vegetation and Wildlife", "Geology, Soils and Seismicity", and "Water Resources".

Table IV.G-5
MULTI-USE TRAIL WIDTH STANDARDS

Jurisdiction	Allow non-paved, multi-use trails in jurisdiction?	Which trails allowed for multi-use?	Standard trail width	Grade	Notes
EBRPD[a]	Yes	Fire service roads only	10-12 feet	Varies	Widths dependent on Fire Department requirements for adequate vehicular access.
MROSD[b]	Yes	Varies-see notes	Class A: 6-10 ft. Class B: 4-6 feet	Class A: Varies Class B: Less than 15%	Suitable trail uses for each trail class designation based on physical characteristics and trail use on adjacent parklands.
California State Parks: Santa Cruz District	Yes	Paved and unpaved park roads, including fire roads, dirt roads, and service roads; see notes for exceptions	Width over 5 feet	Varies	District Superintendent can close roads or open trails to bicycle use at his/her discretion; parks may implement *Draft Pogonip Master Plans* with policies that may act to supersede these restrictions (see parks listed below).
California State Parks: Henry Cowell Redwoods	Yes	Fire roads only	10- to 20-foot widths	Less than 15%	
California State Parks: Forest of Nisene Marks	Yes	Fire roads only	10- to 20- foot widths	Varies	Would recommend any multi-use trail to be 5 to 6-foot minimum width (Waggoner, 1997)
Soquel Demonstration State Forest[c]	Yes	All trails multi-use	Single-track trails: 5 foot width max.; Fire roads 10 to 15 feet	Varies	Trails are engineered to control erosion and bicycle speed and to ensure user safety.
MMWD[d]	Yes	Bicycle use allowed on fire roads only	12 to 15 feet	Varies	Restrictions on equestrian use on narrow trails.
Wilder Ranch	Yes	All trails multi-use	Single-track trails: 4 feet up to width of fire road[e]	Varies	

[a] East Bay Regional Park District
[b] Midpeninsula Regional Open Space District
[c] Statistics taken from Draft Education and Recreation Master Plan; Final Plan not yet adopted.
[d] Marin Municipal Water District.
[e] Of the 35 miles of trails, just over one-half are fire roads and the remainder are single-track.

Source: EBRPD, MROSD, State Parks, and MMWD, 1997.

D23. The impact analysis section begins by addressing potential impacts to rare, threatened or endangered species. These potential impacts relate to both plant or animal species. The second *Master Plan* feature discussed under this impact heading is the Pogonip garden, wherein potential impacts to sensitive wildlife species are considered. As there are no known occurrences of rare plants within the proposed garden site, this issue is not presented.

D24. All environmental documentation faces this format issue: should one discuss the impacts and mitigation measures for a given sub-topic together (which has certain advantages in continuity) or should one discuss all impacts prior to recommending mitigation measures. The consistent format used throughout the DEIR was a conscious decision on the part of the EIR authors who believe that it facilitates a clear understanding of the relationship between the *Master Plan's* potential effects and the ways that adverse effects could be ameliorated. The requested format change is not considered necessary and would not change the factual analysis or findings of the report.

D25. A definition of "normal significance criteria" is not provided by the commentor, nor is there reference as to which criteria "go considerably beyond the standards established by CEQA Guidelines". The CEQA Guidelines include relatively general significance criteria and therefore more specific criteria are used in the EIR, based on the professional judgement of the EIR authors. These refined criteria are consistent with previous environmental analyses conducted by the City and were approved by the City of Santa Cruz Parks and Recreation Department prior to completion of the Draft EIR.

D26. Table II-2, repeated on the following page (with edits shown by underling), addresses the level of impacts for topics analyzed in the DEIR before mitigation. This table was provided in the EIR Summary document but not in the main text of the Draft EIR and thus is attached herein for the reader's reference. While there may have been mitigation measures in mind when specific Pogonip features were sited, the EIR authors did identify additional impacts upon more detailed analysis and the need for new mitigation measures.

An error in Table II-2 has been corrected. The level of impact related to trails should be "Significant" under the topics of "Geology, Soils, and Seismicity" and "Water Resources". The garden would have significant impacts related to Transportation and Circulation due to traffic on deficient sections of Golf Club Drive as discussed under Impact TRANS-3 in the DEIR. The footnote regarding archaeological resources is amended as shown in Table II-2.

Table II-2
SUMMARY OF LEVEL OF IMPACTS FOR *MASTER PLAN* COMPONENTS[a]

Project Component	Land Use	Vegetation and Wildlife	Geology, Soils & Seismicity	Water Resources	Archaeological & Historic Resources	Visual Quality & Aesthetics	Transportation & Circulation	Service Systems & Utilities
Clubhouse Rehabilitation	○	○	◑	◑	◑	○	●	◑
Pogonip Garden	○	●	●	●	○[b]	●	●	●
Outdoor Education Camp	○	●	●	◑	○[b]	◑	●	◑
Sycamore Grove Nature Area	○	●	●	◑	○[b]	○	●	○
Trails	○	●	●	●	◑	○	●	●
Maintenance and Support Facilities	○	○	◑	◑	○[b]	○	○	○
Utilities	○	○	◑	◑	○[b]	○	○	◑
Roadway Improvements	○	○	●	◑	○[b]	○	○	○

○ No Impact ◑ Less-Than-Significant Impact ● Significant Impact

[a] Applies to the level of impact prior to mitigation.

[b] Assumes no archaeological resources are present at these sites. On-site monitoring during construction would be needed to verify that this is the case.

D27. A full description of the garden and the fact that operations would be in accordance with the California Certified Organic Farm (CCOF) standards can be found on pages III-10 through 14 of the Draft EIR. A comparison of garden operations at UCSC and the different soil types found at UCSC can be found in the discussion below.

The DEIR reviews the garden project as a proposed new use on the 150-foot terrace. The project plan and garden concept descriptions presented on page 2-9, Section 2.4 of the *Draft Pogonip Master Plan* served as the basis for the DEIR evaluation.

Impacts associated with development of the garden project include the disturbance of the Santa Margarita formation through removal of grassland cover and grading for site preparation of plots, greenhouses, and a service access road. An additional effort to remove the existing, non-functional golf course irrigation pipes and related infrastructure would be necessary to initially plow the main planting plots.

It is understood that a Garden Operations and Management Plan will be prepared prior to construction and operation of the garden. The DEIR evaluated the garden using information provided to date. Disturbance of the Santa Margarita formation, its seeps, and perched water table, combined with the existence of incipient gully formation at three points within the proposed garden area, had not been adequately addressed at the time of preparation of the *Master Plan* and DEIR.

As implied in this comment and several others, comparison between the UCSC Farm and Garden Site and the proposed Pogonip garden site is useful to understand the similar approaches and proposed environmental goals, while also distinguishing the fundamental differences between the two sites, particularly in terms of site drainage and geologic characteristics. As noted in the DEIR, the proposed Pogonip garden site is to be developed on the Santa Margarita formation, in an area with known occurrences of perched groundwater, a defined wetland swale, and numerous groundwater seeps.

The UCSC Farm and Garden project, on the other hand is underlain by cavernous limestone, "karst" deposits, with all drainage for the Farm and Garden site drained by an alluvial filled sinkhole, which results in the on-site percolation of stormwater runoff to the groundwater system (Johnson, 1988). Groundwater levels in the karst caverns below the UCSC Farm and Garden site were measured at 190 feet below ground surface, when UCSC Well #3 was constructed under the direction of Weber/Hayes Associates (Weber/Hayes, 1989).

Soils mapped at the UCSC Farm and Garden Project are mapped as the Elkhorn Series, which is typically a sandy clay loam (SCS Soil Survey of Santa Cruz County, 1980). In the upper soil profile used for production of crops, the Elkhorn soil units characteristically have permeabilities of 2 to 6 inches per hour, whereas the Watsonville loams at the Pogonip garden site have permeabilities of 0.6 to 2 inches per hour.

The runoff of rainwater, irrigation return flows, or naturally occurring seeps on the Pogonip garden site will be greater at the Pogonip site than at the UCSC Farm and Garden Site at any given rate or amount of rainfall. In addition, the erosion potential associated with higher amount and velocity of overland flow of stormwater is higher on the Pogonip site, due to the saturation of the Watsonville soil units by rain and/or irrigation, the perching clay and silt layers of the Santa Margarita formation, and the development of impervious surfaces associated with the greenhouses, and other features on the terrace surface.

In summary, a comparison of the geology, soils and drainage at both the UCSC Farm and Garden site and the proposed Pogonip garden site illustrate fundamental differences that support a more conservative approach to drainage planning, soil disturbance, and infrastructure development at the Pogonip site. It is these environmental characteristics and not the mission of the garden or its approach to sustainable agriculture that lead to the conclusions set forth in the DEIR.

D28. When changes are made to the text of the DEIR that would affect the summary table, these same changes also apply to the Summary table of the DEIR, Table II-1.

D29. Policy 3.4.1 is addressed on page IV.A-14 of the DEIR. No changes to the project were considered necessary due to the fact that the *Draft Pogonip Master Plan* evolved from the Land Use Option Assessment Report and no conflicts were identified.

D30. Refer to the "Errata" section at the end of these responses. The Greenbelt Overlay District was eliminated in 1991 and changes to the text of the DEIR have been made accordingly.

D31. Table IV.A-1 is retitled "Relationship of Project to Policies <u>of the City's General Plan</u> ~~in the Land Use Element~~". Land Use Policy 3.4.1 is addressed on page IV.A-13 of the DEIR. Reference is made to the garden due to the potential for garden uses to interfere with recreational use of Pogonip (i.e., in terms of potential visual conflicts). Comment regarding other policies related

to the garden is noted. Table IV.A-1 focuses upon policies related to all *Master Plan* components and does not necessarily include all relevant policies of the General Plan, especially where conflicts with policies were non-existent. However, in order to be comprehensive and in response to this comment, new policies have been added as shown below.

Policies are not addressed under the "Setting" section but the reader is referred to the end of the section (see third paragraph on page IV.A-3 of the DEIR). Because the emphasis of Table IV.A-1 is upon potential conflicts with policies which relate to "Impacts and Mitigation Measures", the table is located there.

Of the recommended text changes the following text is added to Table IV.A-1 of the DEIR:

Economic Development Policy 1.3. Support and prioritize the development of locally owned, small and cooperative businesses recognizing the special character and recirculation of capital they bring to the community.	The garden component of the *Master Plan* would meet the intent of this policy.	None necessary.
Land Use Policy 3.1.3.1. Encourage organic farming practices on agricultural lands and community gardens within the City.	The garden element of the *Master Plan* would expand organic gardening options within the City.	None necessary.
Economic Development Policy 1.6.5. Promote protection of significant agricultural lands and sustainable agricultural programs throughout the City and County.	By allowing relocation of the garden to the Pogonip site, the City would protect sustainable agricultural programs within the City.	None necessary.
Safety Element Policy 6.5.2. Emphasize the City's role as an organic agricultural center and work with appropriate agencies to develop demonstration projects on non-chemical pest control and soil management practices.	See above.	None necessary.

D32. The DEIR describes on pages IV.B-13 and 14 the general features of the prairie habitat on the site, including typical plant species and subtypes. The

text also notes the presence of rare plant species within portions of the prairie such as "Haunted Meadow". In conjunction with the mapped data on Figure IV.B-1 and IV.B-2, the DEIR adequately portrays the location and importance of the prairie habitats at Pogonip. The commentator is correct that the text does not place a relative value on the prairie, other than to state, under Sensitive Habitats (page IV.B-16) that prairie habitats are a high priority according to the California Department of Fish and Game (CDFG). As reiterated by the commentator, the DEIR states that some areas of the prairie are degraded by large amounts of invasive non-native plant species. Page IV.B-12 also describes the non-native grassland areas within Pogonip and describes previous land uses within these areas. The fact that portions of the Upper Main Meadow and Lower Main Meadow, which were most likely coastal terrace prairie historically, were managed as irrigated golf course, pasture and horse training, suggests that the native grasses were able to persist under this management regime. While these areas may not be as floristically diverse as other prairie areas within Pogonip, they have retained enough features to still be considered prairie.

D33. Figure IV.B-2 identifies the location of all wetland areas within Pogonip, including those located near the Clubhouse. The DEIR focuses on the wetland areas near Golf Club Drive and the garden, as well as along the Pogonip Creek Trail, since *Master Plan* activities are proposed to occur adjacent to these areas. The *Master Plan* does not propose to change the existing land use near the Upper Main Meadow wetlands (area to continue to be grazed by horses). The EIR commentator is correct in stating that the origin of the wetlands is not discussed. These wetlands are assumed to be under the jurisdiction of the U.S. Army Corps of Engineers and are considered sensitive habitat by the City of Santa Cruz. As stated in the DEIR, a wetland delineation, conducted per U.S. Army Corps of Engineers criteria, should be conducted prior to construction of the garden. The location of the wetland, as depicted in the DEIR, is based on field surveys and aerial photo interpretation. The exact boundary of the wetland would be determined by conducting the delineation and surveying the outside edges of the wetland. The DEIR concurs with the commentator that these wetlands can co-exist with the Pogonip garden and be managed successfully. Mitigation Measure BIO-2d recommends a 100-foot buffer between intensive garden activities (e.g., crop cultivation areas) and the edge of the wetland. Perennial crops such as herbs or other crops that do not involve annual or seasonal soil cultivation could be allowed in the area 50-100 feet from the outside edge of the wetland.

D34. "Range", as used in this case refers to the distribution of kites in California, and "home range" refers to a particular individual's movements and may vary greatly from bird to bird. Home ranges for white-tailed kites have been noted

to differ between individuals from 18 to 120 hectares[2] (Faanes and Howard, 1987). In addition, the foraging habitat is not necessarily adjacent to the nesting site. White-tailed kites have been observed to rely on a foraging area of 0.06 square kilometers (km) in an area located 1.9 km from the nest site (Faanes and Howard, 1987).

Ornithologist and raptor experts may argue on how much the proposed Pogonip garden project may or may not affect the two observed nesting pairs. However, what may happen is purely speculative. It is possible that the kites could leave and abandon the nest and it is possible that they could stay. The important point is that home ranges for kites may vary greatly and experts cannot predict what the birds will do. However, we can conclusively state that the two nesting pairs of kites have been utilizing both portions of the Lower Main Meadow.

As stated on page IV.B-27 of the DEIR, the known presence of two nesting pairs utilizing the proposed garden area during the nesting season leads to the conclusion that a change in the habitat or activity levels in either the foraging or nesting location would be considered potentially significant.

The following new text is to be added to the bottom of page IV.B-27 of the DEIR:

> "White-tailed kites are protected under the federal Migratory Bird Treaty Act (MBTA)(16 U.S.C., Sec. 703, Supp. I, 1989) which prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nest. In addition, raptors are protected in California under the State Fish and Game Code (Section 3503.5, 1992). Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." White-tailed kites (and American kestrels) are in the order Falconiformes. Disturbances that cause nest abandonment and /or loss or reproductive effort is considered "taking" by the CDFG. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Kites will abandon their nest and reproductive attempts if there is a loss of foraging habitat to support

[2] A hectare is equivalent to 2.47 acres.

the nest. Construction disturbances (and gardening activities) during the breeding season could result in the incidental loss of fertile eggs or chicks, or lead to nest abandonment. Foraging habitat during the nesting season is consider an extension the of kite's nest.

As it is known that two nesting pairs of kites have relied on the proposed garden area for foraging to support their reproductive activities, habitat displacement from associated buildings, increase in human activity levels during the nesting season (which varies slightly form year to year but is generally from February to August) or potential changes to foraging habitat which support the reproductive effort of kites in Pogonip, are considered a significant impacts. Under CEQA guidelines, significant impacts should first be avoided. If impacts cannot be avoided, then mitigation measures to aid in avoiding impacts and to compensate for habitat loss need to be developed."

The following text should be added to the end of Mitigation Measure BIO-1a on page IV.B-31:

If the garden project is retained as an element of the *Pogonip Master Plan*, the following steps need to be implemented: 1) conduct a pre-construction survey to confirm whether or not the kites are nesting again in Pogonip and to confirm if the kites are using the same locality; 2) conduct a small mammal population study in the proposed garden area and in other grasslands in order to evaluate the potential foraging habitat in other areas; 3) develop specific mitigation measure to avoid take on reproductive habitat (this includes the foraging area supporting the nest) and to compensate for habitat loss. This includes reviewing the proposed Pogonip Garden's Operations and Management Plans in order to develop specific mitigation measures for kites and other wildlife; 4) during the development of the mitigation measures surrounding the Garden's Operations and Management Plans, conduct formal consultations with both agencies responsible for overseeing protection of the nesting habitat of kites (CDFG and USFWS)."

The following text is added to the end of the first paragraph in the DEIR on page IV.B-22.

"The population of nesting kites in Santa Cruz County is unknown. The CDFG and local bird experts are compiling data on the numbers of kites in Santa Cruz County. However, the best guess of nesting kites in Santa Cruz County is around 25 (Suddjian, 1998)."

The following name is added under "C. Contacts" in Chapter VII of the DEIR:

> Suddjian, D., 1988. Personal communication with Dawn Reis, Habitat Restoration Group, May.

D35. Please refer to the first part of the to Response to Comment No. D34. The federal MBTA protects raptors during the breeding seasons because reproductive success is essential to the conservation of a species and because it is often difficult to evaluate or protect non-nesting habitat that is used only for short periods during migratory flights. Raptors may choose to nest or forage in localities near human activity. This does not change the protective status of their habitat. Raptors are more likely to be disturbed by changes in activity or habitat during the nesting season, especially the time until chicks have hatched. Construction and site preparation associated with the garden during the nesting season would not comply with the MBTA or the CDFG code as described under the Response to Comment No. D34.

The garden can potentially provide foraging habitat for the kites. However, there is no assurance that: 1) the kites will the use the garden site as foraging area due to the changes in habitat and activity levels; and 2) the garden can provide adequate prey. Therefore, there is the potential for prey loss, especially during the first year when the garden is being established. There are mitigation measures that can be adapted to aid in avoiding the take of nesting habitat and lessen disturbance. However, the potential for a significant impact to nesting kites and the necessary mitigation measure are already stated in the DEIR. Please see the Response to Comment No. D34 for further explanation of why this impact is considered significant.

The amount of prey potentially provided by the garden is dependent on types of crops used, pest management practices, weed control, water use, timing/seasonality of the garden and tilling activities. Year-round irrigation, in combination with the cultivation of grain crops or legume crops, can increase both insect and rodent use. However, comprehensive studies of kite use in agricultural areas where equal treatment is given to farm use and grasslands are lacking. In fact, the USFWS Habitat Suitability Index Models for kites (Faanes and Howard, 1987) found that row crops and farmlands were not used by kites. Tall grass habitats (in areas where there was no cultivation or grazing) equaled only about 2 percent of the total vegetation in the six habitats used by foraging kites but were occupied by kites 73 percent of the total foraging time. Short uncultivated or grazed grasses were used 13 percent of the time for foraging and consisted of only 2 percent of the total

habitat used. This data suggests that kites utilize tall grass habitats more often than short, grazed areas.

The DEIR addressed potential impacts resulting from all proposed Lower Main Meadow uses. The analysis of the Outdoor Education Camp includes potential impacts to white-tailed kite which are addressed on page IV.B-28 and IV.B-30 of the DEIR and Mitigation Measure BIO-1b.

D36. Comment noted. As stated in Mitigation Measure BIO-2d, the garden can co-exist with the wetland if adequate buffers are established.

D37. Each trail is discussed separately since each trail traverses specific habitat types, thereby potential affecting differing resources. The EIR authors do not concur that trails present the biggest impact to biological resources. The *Master Plan* proposes construction of two new trails (e.g., UCSC Connector Trail and Harvey West Park Trail); all other trails are existing, such that vegetation removal is limited to trail brushing and trail maintenance. As stated in the DEIR, specific measures are recommended to minimize impacts to adjacent habitats by users.

D38. Comment noted. The DEIR calculated the overall footprint of the garden in determining impact and the commentor is correct in stating that not all of the area is coastal terrace prairie. Of the 12.5 garden area, approximately 7.9 acres occur within coastal terrace prairie areas. Even though this acreage of coastal terrace prairie is lower than stated in the DEIR, the impact conclusion remains significant. The following correction is made at the beginning of the first full paragraph on page IV.B-36:

> "Development of the Pogonip garden facility (Pogonip garden areas and associated facilities) would impact approximately ~~12.5~~ 7.9 acres of coastal terrace prairie."

The following text is added to the second sentence of the second bullet under Mitigation Measure BIO-2c on page IV.B-39 of the DEIR:

> "For the Pogonip garden facility, approximately ~~14~~ 7.9 acres of existing non-native grassland or degraded coastal terrace prairie could be ~~re-created~~ rehabilitated and/or restored."

D39. As these Upper Main Meadow facilities are not proposed within sensitive resource areas, their operation is not expected to result in significant impacts to such resources. Horse grazing was not identified in the DEIR as a significant impact to the grassland resources of this area.

D40. Comment noted. Please refer to Response to Comment No. D25. No text changes are necessary.

D41. Please refer to Response to Comment No. D32.

D42. Please refer to the Response to Comment Nos. D34 and D35 regarding the kite's range, garden use and protection during the nesting season.

It was beyond the scope of work to conduct focused surveys to quantify the time kites spent foraging in different areas. The EIR authors focused on presence/absence surveys, identifying known nesting and foraging areas and potential foraging areas. Time spent foraging in one particular area may be of more importance than an occasional foraging attempt elsewhere. The proposed garden area is roughly 80 percent the total area where the kites where observed foraging. Most of the time, the kites where observed foraging in the proposed garden area.

D43. Please refer to Response to Comment No. D35.

D44. No changes to the DEIR are considered necessary. The garden plan, as submitted as part of the *Master Plan* would result in significant but mitigable impacts. If the mitigation measures described in the DEIR are successfully implemented (e.g., Mitigation BIO-2d), the impacts would be reduced to a less-than-significant level, as shown on pages IV.B-39 and IV.B-40.

D45. The EIR authors concur that if the environmental document were a "Master EIR" or "Program EIR" instead of a "Project EIR", planning guidelines for garden development would be appropriate. However, the document is considered a Project EIR, which requires that specific mitigation measures be developed wherever possible.

D46. The acreage of impact to coastal terrace prairie from the garden has been revised to 7.9 acres. Please refer to the Response to Comment No. 38.

D47. Comment noted. No changes to the text of the DEIR are considered necessary.

D48. The DEIR does address impacts to the kite from other uses, as stated for the Outdoor Education Camp on page IV.B-28 and the Lower Meadow Parking Area on page IV.B-30. Please refer to Response to Comment Nos. D34 and D35.

D49. The DEIR evaluated the garden plan as it was graphically presented in the *Master Plan.* Based upon a review of that plan, garden activities were shown to occur up to 20 feet from the wetland area. The mitigation measures identified in the DEIR were intended to provide the guidelines for the protection of the wetland features while the adjacent areas are used for garden activities. The commentor is correct in stating that the City's General Plan does not include agriculture in its definition of "development" and, as such, the last sentence of BIO-2 (2) on page IV.B-35 is revised as follows:

> "A ~~The proposed~~ 20-foot setback has been depicted on the garden plans. ~~is not consistent with the City's General Plan Policy EQ4.2.2, which specifies a setback of 100 feet from the edge of the wetlands to developed areas.~~ Agricultural activities are not considered development under the City's General Plan and, as such, are not subject to a setback from the edge of wetlands. General Plan Policy EQ3.1 requires agricultural site design and erosion control measures in areas adjacent to stream and wetland areas to minimize vegetation removal."

Refer to Response to Comment No. D38 regarding text changes.

D50. Comment noted. The EIR authors concur that the garden could participate in prairie restoration projects and such services could greatly benefit overall restoration and management of the prairie habitat at Pogonip. The DEIR recommends restoration and/or rehabilitation of other grasslands within Pogonip at a 1:1 ratio (i.e., 1 acre impacted to 1 acre restored/rehabilitated). Garden staff could implement this restoration under the guidance of the City Parks and Recreation Department and a qualified botanist. Refer to the Response to Comment No. D38 regarding text changes.

D51. Under CEQA Guidelines, mitigation measures should first identify suitable actions to *avoid* a significant impact (if such an action is feasible) and, secondly, identify measures to *mitigate* the impact if the avoidance measures are not selected. The approach allows the decision makers (i.e., City Council) to understand their choices in deciding to approve or disapprove a project. The DEIR identifies a measure that could be implemented to avoid significant impacts to coastal terrace prairie from the garden. The DEIR also identifies suitable mitigation measures to mitigate impacts to coastal terrace prairie, should the City Council decide to approve the garden design as proposed.

The EIR authors do not concur with the proposed re-wording of Mitigation Measure BIO-2d. The proposed language does not provide a clear direction for reviewers of EIR regarding the specific features of the buffer, who will

review and/or approve the design, or what guidelines will be used to delineate the wetland.

D52. The indirect impact discussion in the DEIR addresses the loss of grassland (approximately eight acres) which will occur from all garden activities, as well as the area proposed for greenhouses and buildings, as shown in the *Draft Pogonip Master Plan* schematic garden design. In conjunction with the deer exclosure fencing, these activities may affect overall wildlife movement and utilization of the area.

D53. We cannot comment on the effects of the revised deer fencing on wildlife movement corridors, as the DEIR evaluated what was shown in the *Master Plan*. However, we suggest that deer fence design allow for corridors for wildlife movement during the duration of the project. Such a fence, if built, should take into consideration movements of medium-sized mammals as well, and allow passage of the ravine across the proposed garden and across Clubhouse Drive to the Upper Main Meadow. Preferably, an additional corridor running perpendicular to the Lower Main Meadow ravine and across the ravine would also be included in the design. Refer to the end of Mitigation Measure BIO-3 on page IV.B-44 of the DEIR.

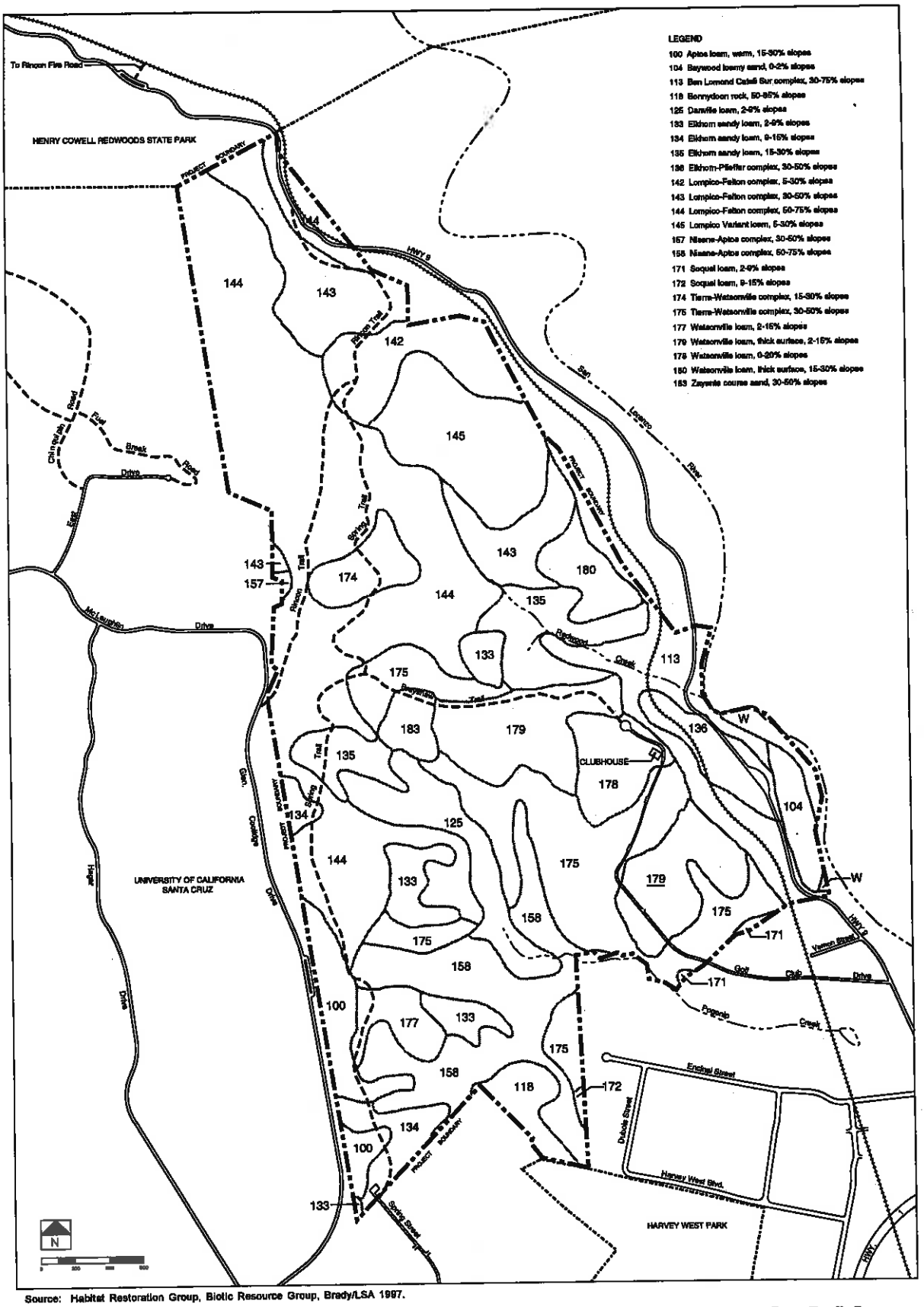
D54. Consistent with the comment, the last sentence on page IV.C-5 of the DEIR is eliminated as follows:

> ~~"The usefulness and potential productivity of the loam is of particular importance in the assessment of the proposed garden project."~~

Map features on Figure IV.C-2 have also been modified to reflect this change, as shown on the following page.

D55. Gully erosion is an alteration of landforms, which in this case may result in the incision of the terrace formation, adversely impact the proposed service access road by undercutting and/or perching drainage features, and result in mudflow or landslide conditions on the steeper sections of the site and on downslope areas.

Existing gully incision in the terrace has exposed old, formerly buried irrigation lines at two locations in the grassland habitat, upgradient of the oak woodland ravine in the area of the proposed garden. Soil piping and rodent burrows occur throughout the immediate vicinity of these existing erosion features. Elsewhere in Santa Cruz County, gully formation has been a noted source of slope instability and streambank failures such as at the Bean Creek and Mount Herman areas.



Source: Habitat Restoration Group, Biotic Resource Group, Brady/LSA 1997.

DRAFT POGONIP MASTER PLAN
ENVIRONMENTAL IMPACT REPORT

Figure VI.C-2
Soils

As early as 1958, the California Department of Water Resources (DWR) noted that Santa Margarita sands were adversely impacting Bean Creek, Zayante Creek, and the lower San Lorenzo River. The 1979 San Lorenzo Watershed Plan also recognized this formation as a major cause of slope and stream instability in the Zayante, Branciforte and Scotts Valley areas. Recent water supply and erosion studies conducted for the City of Santa Cruz Water Department, the San Lorenzo Water District and the Santa Cruz County Department of Environmental Health (Balance Hydrologics, 1996, 1997) have noted that the disturbance of the Santa Margarita formation remains the major source of sediment to the lower San Lorenzo River. These field studies include *the San Lorenzo Valley and North Coast Watersheds Sanitary Survey* (Balance Hydrologics, Camp Dresser and McKee, Archibald and Wallberg, 1996),and *Assessment of Streambed Conditions and Erosion Control Efforts in the San Lorenzo River Watershed, Santa Cruz County, California, Late 1970's to 1996* (Balance Hydrologics, 1997). Ongoing fisheries studies conducted for the City of Santa Cruz and San Lorenzo Valley Water District by local fisheries expert Don Alley also note the prevalence of the Santa Margarita formation as the primary sediment source.

Erosion is addressed in Sections IV.C and IV.D because it is related to both soil conditions and hydrologic influences.

D56. The trail network at Pogonip is primarily an existing feature (except for UCSC Connector Trail and Harvey West Trail); whereas, the garden project represents new development at the site with varying levels of use. Both the trail network and the garden project have proposed general design and management guidelines that attempt to minimize impacts to soil and geologic resources. The primary difference is that the trails design and management guidelines are based on interpretation of existing conditions experienced under known existing levels of use and higher potential levels of use. The garden project design and management guidelines, on the other hand, must anticipate new impacts associated with the site preparation, ongoing agricultural use, and development of features which may alter runoff amounts and velocities.

The comparison of existing features like the trails, which are not proposed to be increased in length, scale, or width, with new proposed features like the garden project may be misleading. With the exception of the UCSC Connector Trail and Harvey West Trail, trail lengths and widths proposed in the *Draft Pogonip Master Plan* approximate those which already exist. In addition, none of the trail use alternatives that are presented in the *Master Plan* exclude use of any recognized trails or call for retirement of existing

recognized trails and service roads. All trail-use alternatives call for reduction of areas disturbed by informal foot trail alignments.

Given that all but the approximately one mile of trails are existing and are proposed to be monitored and managed more intensively by the City Parks and Recreation Department for erosion control and trail maintenance, and that an unknown length of informal trails are proposed to be restored under all trail alternatives, the garden project's disturbance of the terrace surface must be viewed as additive to the site's overall erosion potential.

D57. Comment noted.

D58. The comment suggests that the DEIR be revised to reflect the significance of erosion impacts associated with the existing trail conditions and gully formation and soil piping (i.e., tunnel formation below the surface related to subsurface erosion) that are present under the City's management of the Pogonip site. The DEIR describes existing trail and site erosion conditions in the environmental setting sections of both the water resources and geology, soils and seismicity sections of the report (Sections IV.C and IV.D). It should be reiterated that most trails currently exist; whereas, the garden is an entirely new element at the project site.

Gully formation and soil piping are actively occurring within the influent areas of the ravine feature that bisect the two primary garden plots. Elsewhere on the Pogonip site, there is active slope instability in the Santa Margarita formation along Redwood Creek and along Fern Trail, both in natural areas of limited pedestrian access and restricted vehicle use. Gully repair to sections of Spring Trail is being addressed as part of a cooperative effort with UCSC and is described on page III-17 of the DEIR.

The comment that the DEIR must be changed to more accurately reflect the actual impacts of the garden, relative to trail impacts is noted. However, because the garden is a new, proposed use, the DEIR can only describe the potential impacts that the garden plans are likely to have. As depicted and described in the DEIR, the garden project would likely have significant impacts on the fragile Santa Margarita formation that underlies the active garden plots, roadway, greenhouses, and most importantly, the active gullies that have emerged from the oak woodland habitat in the bisecting ravine.

As presented in the DEIR, the garden's scale, location and type of drainage features, and plans for access by the existing road alignment do not adequately address the sensitivity of the site. Throughout the areas in the County where the Santa Margarita formation has been the subject of

continued disturbance by road use, vegetation removal, gully formation and soil piping, treatments to stabilize the formation have generally been unsuccessful.

The DEIR goes on to state that a reduced garden project, developed as a component of the Reduced Lower Meadow Use Alternative, could mitigate soil and erosion impacts to a less- than-significant level. As noted in the comment, additional information, including site specific soils analysis, drainage feature design, road construction specifications and remedial treatments for gully repair of existing site conditions are necessary prior to development of the garden site to fully mitigate potentially-significant impacts to less-than-significant levels.

D59. As noted in the Response to Comment No. D56, the proposed garden project is a new feature in an area underlain by a local geologic formation known to be subject to rapid erosion, gully formation, and slope instability. The fragility of the Santa Margarita formation when subjected to disturbance, whether natural or human-induced, should not be underestimated. Plowing annually (or more frequently as noted in the garden project's comment letter), and increased runoff from impervious features such as the greenhouses are likely to result in significant impacts to the underlying Santa Margarita formation.

The necessary improvements to the garden access road to make it capable of supporting small trucks and equipment requires that local soils, existing gullies, and areas of seep flow must be considered in impact assessment and design. No trails that currently exist (with the exception of the service roads) have proposed access requirements for vehicles of comparable size and weight to the garden access road.

Impact GEO-1 addresses all features discussed in the *Draft Pogonip Master Plan*. Readers are directed to pages IV.C-11 through IV.C-18 of the DEIR to review this discussion. The impacts analysis for the entire EIR focuses on new "development" (i.e., new trails, expanded trail use, Clubhouse rehabilitation, garden development, fire management activities) proposed as part of the *Master Plan*. The impact analysis considers existing conditions as related to potential impacts but does not consider existing conditions to be "impacts".

D60. The DEIR reviewed the proposed garden plan presented in the *Draft Pogonip Master Plan*. Acreages were estimated from the schematic plan and project description in the draft *Master Plan*. As depicted, the garden project appears to maximize cultivation of the 12.5-acre envelope. The

active garden plot area was not shown, or described, as a 6-acre portion of the overall site. The active garden plots are described and shown as row crops in the proposed garden project plan (see Figure III-5 of the DEIR).

The initial preparation of the primary garden plots may require the use of tractor-pulled plows. Site preparation must also include removal of existing irrigation lines, grading and surfacing of the garden access road, building pads, installation of irrigation lines, and greenhouse sites. Impacts associated with this site preparation, given the fragility of the Santa Margarita formation, may be significant, especially if early or late season rainstorms occur during initial site development.

Other garden plan details in the comment are noted. However, these details were not included in the *Draft Pogonip Master Plan* reviewed by the EIR team.

D61. The area between the garden access road and ravine is less than 15 percent slope, except at the three separate gully headcuts in the grassland habitat. These gully headcuts appear to be slowly moving uphill out of the oak woodland habitat that fills the ravine. This area below the garden access road and above the oak woodland exhibits soil piping conditions that are likely to be a result of both rodent burrow activity and subsurface erosion above and below hardpan layers in the soil profile and unconsolidated sands of the Santa Margarita formation. As depicted in the *Master Plan*, this area of soil piping and gully growth is proposed for orchard development, which will require excavation within the soil piping-affected slope.

Existing slope maps developed from aerial photos underestimate the steepness of several reaches and slopes within the ravine feature, and elsewhere in Pogonip as the ground surface is obscured by tree cover in stereo aerial photos. Field reconnaissance in this ravine reveals that slopes are greater than depicted in previous aerial surveys and subsequent aerial interpretation.

Slope gradients within drainage channels in the ravine include small areas with 30 percent slope to near vertical exposures of terrace deposits overlaying sandstone within 30 feet to 100 feet of the grassland edge. Existing slope maps of the site developed in previous constraints analyses, though generalized, indicate slopes in excess of 40 percent within the ravine area.

Because the garden project proposes cultivation of garden plots on slopes above and on both sides of the bisecting drainage, the ravine feature and its

steep slopes are considered within the garden project impact area. The existence of "drainage features" in the proposed plans speaks to this connection between the garden activities and the receiving waters of the intermittent stream and adjacent slopes.

The comment goes on to imply that the UCSC Farm and Garden Project should be viewed as an analog to the proposed Pogonip garden site. However, the geology and soils of the UCSC garden site differ notably from the Pogonip garden site. The UCSC garden site, like most of the lower half of the UCSC campus, is underlain almost entirely by marble and schist, which is locally resistant. Due to the fractured, cavernous limestone, this formation percolates rainfall and runoff directly into the groundwater system.[3] Johnson, 1988, mapped the small subwatershed, in which the UCSC Farm and Garden project is located, as a separate drainage unit within the larger Jordan Gulch watershed. The UCSC Farm and Garden site, like other areas underlain by limestone "karst' formations, is drained locally by a sinkhole or alluvium-filled swallow hole, through which rainfall and runoff are transmitted to groundwater within the limestone fractures and caverns. Surface runoff from the UCSC garden site does not leave the subwatershed.

As noted in the DEIR, the Pogonip garden site is proposed to be developed on an area mapped as Santa Margarita formation and terrace deposits. Unlike the UCSC garden site, the Santa Margarita formation in the proposed Pogonip garden site perches, rather than percolates, rainfall and storm runoff The Santa Margarita formation in the 150-foot and 250-foot terraces are known to contain silt and clay lenses which limit downward percolation of rainwater. Runoff from the Pogonip site is likely to be greater per acre at a similar quantity of rainfall. This difference is fundamental in addressing runoff management. The final design of the Pogonip garden site, therefore, requires that special attention be given to drainage features, which at present, are unvegetated gullies and areas of soil piping in a mapped seep zone. See Response to Comment No. D27 for additional discussion of this issue.

The comment continues by questioning the issue of wet season use of the Pogonip garden. The DEIR assumes that due to the perched water table and occurrence of numerous seeps within the proposed garden area, wet season use would be necessary during periods of average and above average rainfall. Slow drainage on the Pogonip terraces, combined with the occurrence of seeps, will extend the "wet season" conditions longer than that

[3] Johnson and Weber, 1989, An Evaluation of Groundwater Resources at the University of California, Santa Cruz, page 8.

of sites nearby, including the UCSC Farm and Garden Project. The occurrence of sedges on slopes, within the existing road alignment, and on the flat areas of both main garden plots indicate hydric soil conditions capable of supporting wetland plants. While occurrence of small areas of these water-loving plants does not necessarily reveal a jurisdictional wetland, it does speak to the occurrence of high or perched groundwater, and seeps.

D62. The DEIR reviewed the road alignment and proposed surfacing as presented in the *Draft Pogonip Master Plan*. As such, no alternative road alignments or surfacing treatments were considered. As noted in Response to Comment No. D61, wet season use of the road into the garden site for any winter season access is likely to be problematic, given the perched water conditions evident on the site and low soil strength characteristic of the Watsonville loam soil units. The existence of wetland plants on the road alignment speaks to this poor drainage and high groundwater condition.

Alternative locations for the road are not reviewed within the scope of this analysis. However, other possible alignments appear to have similar constraints such as seeps, a perched water table, and low soil strength.

D63. As noted in earlier responses, the trails network is an existing feature with recognizable impacts. Mitigation measures are proposed to reduce impacts associated with trail use under all alternatives to a less-than-significant level.

All trail alternatives propose the closure of informal foot trails which are not managed by City staff and for which management is not included in proposed trail design and management guidelines. The garden project is a new, proposed use which adds to the cumulative impacts to soils, geology, and hydrology associated with all existing Pogonip features and proposed plan alternatives.

As noted in previous responses, actions that present the potential for impact to soils and geology are the following: initial site preparation (which must include plowing of up to six acres of soils underlain by the Santa Margarita formation); removal of the existing underground irrigation lines related to the Pogonip Golf Club; site preparation for greenhouses, and construction of drainage features in areas of existing, active gully formation. Removal of the existing grassland and excavation of the old buried irrigation lines presents a potentially significant impact to soils and geologic resources. Exacerbation of the on-site gully formation, soil piping, and subsurface erosion may occur, particularly in the areas where these gullies have undercut and exposed sections of the formerly buried irrigation lines.

As noted in the Response to Comment No. D56, slopes within the proposed active garden plots areas are flat to approximately 15 percent slope. Within the ravine feature to which the garden project drains, higher slopes exist in the incised channel to which the garden project will contribute runoff in at least three locations.

D64. Refer to Response to Comment No. D54.

D65. The soil unit mapped on the 150-foot terrace is incorrectly mapped as 178. The correct soil unit is 179. Both are mapped as Watsonville Loam. Refer to Response to Comment No. D54.

D66. The significance criteria for soils, geology, and seismicity reflect the likelihood of rapid geologic change that can result from changes in surface runoff, subsurface flow and soil piping, expansion of the existing gullies on site, and the potential slope failures within the Santa Margarita formation and other geologic formations and conditions that exist on site. Examples of landslides and gully formation can be seen elsewhere in the Pogonip, particularly in the Santa Margarita formation down-gradient of Fern Trail. See also Response to Comment No. D25.

D67. Please refer to the above responses regarding the garden's impact on soils as compared to trail impacts. As noted above, the quantitative evaluation of garden impacts on geology and soils was not possible due to the general nature of the garden plans subject to review. Instead the DEIR relies on known, mapped characteristics of the project site geologic, hydrologic, and soil conditions. These existing conditions include active gully formation, soil piping above active gullies, freshwater seeps, and areas of a perched water table on fragile Santa Margarita formation.

Performance standards for either the proposed garden project or a reduced garden component of the Reduced Lower Meadow Use Alternative should include: (1) the development of a site specific geologic, soil depth and soil suitability study; (2) the development of a site-specific existing hydrologic assessment and drainage plan to address both surface and groundwater conditions, alterations of runoff and recharge, as well as changes in conditions likely to occur as the garden project is implemented; and (3) an erosion control plan that includes treatment of existing gully activity and soil piping in areas that will receive runoff from garden activities. Performance standards should require the following: that existing rates of gully formation and soil piping not be accelerated; that roadway use be limited to dry soil conditions, not just dry season conditions; and that farm practices and

erosion control methods be subject to an annual review by knowledgeable local erosion control experts.

D68. Text changes on page IV.C-9 are limited to correcting the size of the proposed garden from 10 acres to 12.5 acres. The following text is modified to read:

> "Due to the fragile nature of geology and soils of the middle terrace, the existing gully formation, and the likelihood of slope instability resulting from continued agricultural activity, it is not anticipated that the impacts of the ~~10~~ 12.5 acre Pogonip Garden, as proposed, can be mitigated to a less than significant level.

D69. Comment noted. Refer to the Response to Comment No. D60.

D70. The DEIR addresses issues associated with development of active agricultural practices on a fragile Santa Margarita formation terrace that currently exhibits incipient gully formation, soil piping, seeping groundwater and perched shallow groundwater. Evaluation of the garden project, as proposed in the *Draft Pogonip Master Plan,* has been completed based on the following: available technical, geology and soils studies; proposed garden plot design; garden implementation and garden management activities; and reconnaissance-level field evaluations. No new site specific soils analyses, slope evaluations, hydrogeologic investigations, or subsurface geologic studies were authorized as a part of this environmental review process.

Based on available site information, the proposed size and extent of the garden site, and the level of detail in the *Draft Pogonip Master Plan*, a finding of less-than-significant could not be made in the Draft EIR. Subsequent to completion of the DEIR, the EIR authors have reviewed a reduced garden area as presented by the City of Santa Cruz Parks and Recreation Department that would appear to be feasible for the Homeless Garden Project. Mitigation Measure GEO-1a has been revised to reduce the garden such that a finding of less-than-significant could be made. The garden site plan as presented in the *Draft Pogonip Master Plan* without the mitigation measure presented below, remains significant.

Mitigation Measure GEO-1a has been revised. The DEIR text on page II-15 and IV.C-18 has been revised as follows:

> "Mitigation Measure GEO-1a: To reduce the likelihood of excessive erosion, severe gully advancement, and slope instability, the

Pogonip garden should be ~~sited at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V~~reduced in acreage to avoid areas of slopes, gullies, soil pipes, seeps and perched shallow groundwater. In general, the garden site as proposed in the *Draft Pogonip Master Plan* would be reduced to exclude the following areas from cultivation of any kind: area of headcutting to the north of the ravine up to the existing access road; most of the area of the northwest of the existing access road; slope areas of 15 percent or greater, and 50-foot setbacks from slope areas. Prior to approval of the Garden Operations and Management Plan, a site specific soils analysis, slope evaluation and a hydrogeologic investigation should be conducted by a qualified hydrologist/geologist to determine the extent of these conditions and to ensure adequate buffers are provided. A site specific hydro-geologic analysis should also be undertaken to investigate the proposed site for the greenhouses. If the site proposed in the *Draft Pogonip Master Plan* is not deemed appropriate, the greenhouses should be relocated to the southern side of the existing access road, at the eastern side of the Lower Main Meadow. Use of the access road during wet conditions should be limited. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. ~~Because the garden is considered a key element of the project, the infeasibility of this mitigation would cause this impact to remain significant and unavoidable.~~ The following measures are recommended to further reduce or avoid impacts. ~~(SU)~~ (LTS)"

D71. Comment noted. No changes to DEIR are considered necessary.

D72. Comment noted. See above responses for a thorough discussion of this issue.

D73. Page IV.C-12 paragraphs one and two, are amended to read as follows:

"The Santa Margarita sandstone in the area proposed for terraced permaculture crops exhibits 16 to 30 percent slopes and is prone to severe erosion when subject to disturbance... Typical best management practices (BMPs) for fragile Santa Margarita slopes are not well developed, and have not been implemented successfully in comparable terrain to the proposed garden site. ~~Best Management Practices (BMPs) for active cultivation of soils associated with steep Santa Margarita sandstone slopes are not well developed at this time.~~ The extreme erosion hazards associated with this local

geologic formation have made it well studied. Nonetheless it remains poorly managed by landowners ~~and farmers throughout the sandy soil areas of Santa Cruz County and Northern Monterey County.~~ where it is subject to disturbance. Watershed studies conducted by the City Water Department, the County of Santa Cruz, and the California Department of Water Resources have identified this unconsolidated sandstone formation as having particular regional importance in terms of slope inability and extreme erosion hazard."

Other comments are noted, but do not require additional changes to DEIR text.

D74. Mitigation Measure GEO-1a calls for a reduction in the Pogonip garden acreage to avoid unstable eroding areas. The existence of active gully erosion in the Santa Margarita formation in the proposed permaculture crop area above the access road, combined with soil piping and gully formation in the steep arroyo that bisects the garden plots, necessitates a finding of significant impact to geology and soils resources at Pogonip. Rapid gully erosion is a significant alteration of landforms and source of sediment.

The a reduced garden site plan, subject to Mitigation Measure GEO-1d, would likely result in mitigation of significant impacts associated with Mitigation Measure GEO-1a to a less than significant level. The crucial element is the determination of slope gradients and breaks in slopes in active erosion features. The setback requirements proposed in Mitigation Measure GEO-1d should apply to all slopes, including those of the incised gullies above and below the garden site, as well as the more gradual vegetated slopes that surround the garden plots. Additional slope and soils analyses of the site would be completed in the proposed Garden Operations and Management Plan.

D75. In response, the following changes and additions to Mitigation Measure GEO-1d are proposed on page IV.C-19 of the DEIR:

"Mitigation Measure GEO-1d: ~~In the proposed Pogonip Garden site, BMPs such as contour bedding, winter covercropping, and increased widths for vegetated buffers along cultivated fields and adjacent slopes should be implemented to reduce impacts on the terrace formation.~~ The Pogonip Garden should develop a Garden Operations and Management Plan which identifies and relies upon Best Management Practices appropriate for seep-influenced slopes and perched groundwater conditions in the Santa Margarita

formation to mitigate potential impacts on soils and the underlying geologic formation. The Operations and Management Plan should describe management of runoff, sediment and existing erosion conditions on-site. The Operations and Management Plan should also describe maintenance of facilities and strategies for storm damage response and remedial gully repair techniques. BMP's for this site should be based on feasibility assessments and recommendations developed by qualified erosion control specialists, hydrologists, or geotechnical experts familiar with design and operation of agricultural activities in sandy soils.

The following language..."

D76. No change to the DEIR text is considered necessary.

D77. Comment noted. No changes to the DEIR text are considered necessary.

D78. As noted in the Response to Comment No. C3, the confluence of Redwood Creek and the San Lorenzo River is upstream of the City of Santa Cruz's Tait Street surface water intake. This error is noted. The description of Redwood Creek on page IV.D-4 is revised in the DEIR text as follows:

"At present, the primary trail crossing and several small informal crossings on Redwood Creek along Fern Trail are undergoing locally severe erosion and bank failures, contributing to sediment loads in the San Lorenzo River above the City of Santa Cruz Water Department's Tait Street Diversion."

D79. The occurrence of perched and seeping groundwater is noted in the DEIR because saturated conditions in the Santa Margarita sandstone are an issue of geotechnical significance.

D80. Comment noted. Refer to the Response to Comment No. D58.

D81. Existing conditions are discussed in the Water Resources Environmental Setting section. Existing trail, service road, and overall erosion conditions for the whole Pogonip site do not represent significant impacts to water resources, relative to impacts associated with other uses in the San Lorenzo Watershed. In addition, the impacts analysis focuses on changes proposed by the project upon existing conditions, but existing conditions do not equate with impacts. All components of the *Master Plan* are addressed.

The discussion of the Pogonip Garden on and Related Facilities is changed as follows on pages IV.D-8 and IV.D-9 of the DEIR.

> "Erosion of the Santa Margarita sandstone and the terrace soils is a potentially significant water quality impact associated with the organic garden. The Santa Margarita sandstone in the area proposed for terraced permaculture crops exhibits 16 to 30 10-15 percent slopes and is prone to severe erosion when subject to disturbance....
>
> ....Irrigation of the organic garden project at 2.0 acre-feet per acre (af/acre) from March through November, as proposed, would result in a net application of approximately 20 acre-feet of municipal water for 10 acres of agricultural production, as depicted in the *Draft Pogonip Master Plan*. This estimate is confirmed by agricultural water use estimates from local commercial agricultural operations that produce similar crops showing that typically at least 1.5-3.0 af/acre of applied water is required. Reduction in amount of irrigated acreage and/or use or water conservation measures would reduce total water use."

D82. Comment noted. Refer to Response to Comment Nos. D58, D59, and D81. Quantification of trail system impacts is not considered necessary.

D83. Comment noted. Refer to Response to Comment No. D79. No deletion of text is considered necessary.

D84. No text change would be necessary. All components of the *Master Plan* are addressed under Impact WAT-1, starting on page IV.D-7 of the DEIR.

D85. Please refer to Response to Comment No. D59.

D86. Please refer to Response to Comment No. D81. The DEIR analysis was based on the information provided in the *Master Plan*. This new information would require a revision to the entire analysis which is not appropriate at this time. These issues can be addressed at the time of the proposed Garden Operations and Management Plan which is addressed in the *Master Plan*.

D87. Comment noted. Mitigation Measure WAT-1a on page IV.D-16 of the DEIR is changed as follows:

> "Mitigation Measure WAT-1a: ~~To reduce the water quality impacts, the Pogonip garden should be sited elsewhere at an alternative off-~~

~~site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. Because the garden is considered a key element of the project, the following measure is recommended to further reduce this impact.~~ To mitigate potential water quality impacts, the Pogonip Garden shall prepare an Operations and Management Plan. The Management Plan should include mitigation measures and BMP's to reduce the water quality impacts. The following measures are suggested:

- The actively tilled fields should be reduced in scale such that a vegetated buffer of at least 30 feet separates plowed areas from slopes greater than 10 percent and active gully headcuts at the top of the drainage corridor that bisects proposed organic garden plots. Drainage structures, gully treatments, and organic garden plot layout should be developed in coordination with knowledgeable agricultural planners such as staff of the Natural Resource Conservation Service (NRCS), Santa Cruz County Agricultural Commission, and UC Agricultural Extension Service. The Farm Operations and Management Plan should be reviewed and accepted by knowledgeable erosion control and/or geotechnical specialists familiar with local conditions. This plan should also be approved by the City prior to development of the site."

D88. While the proposed garden Operations and Management Plan (to be approved prior to garden implementation), calls for implementation of BMP's, Mitigation Measures WAT-1o, WAT-1p, and WAT-1g are sufficiently important to merit open discussion in the mitigation section of the EIR, rather than referring to their proposed inclusion in a garden plan yet to be developed. The inclusion of these particular mitigation measures in the overall mitigation measure list does not in any way preclude their integration in the Garden Operations and Management Plan.

D89. The text under Figure IV.F-4(a) on page IV.F-6 should be changed to read as follows:

"a) View towards Upper Meadow and Clubhouse, looking north from Golf Club Drive adjacent to the Lower Meadow. ~~where proposed garden would be located.~~"

Visible natural features are addressed, regardless of the point from which they become visible. The recommendation for design guidelines is considered reasonable. Regarding Policy 2.1.2, this is the opinion of the commentor and does not acknowledge that grading will be required to create new garden plots.

Regarding Policy 2.1.5, other non-garden elements are addressed. The Clubhouse area has already been altered and is not appropriate for relocation. Design mitigation measures are also recommended for the Outdoor Education Camp (see Mitigation Measure VIS-1b). Screening of parking areas (which would also reduce glare) is recommended on page 7-4 of the *Draft Pogonip Master Plan*. Design guidelines related to the Clubhouse are addressed in Section 2.1 of the *Master Plan*. Siting of the water tank to minimize visual impacts is addressed on page 7-6 of the *Master Plan*.

Policies 6.1, 6.1.1, and 6.2.2 are addressed because they are considered applicable to the project, and not just to streetscapes within the City.

D90. While it is true that no mitigation measures are required for less-than-significant impacts, these are recommended for Impact VIS-1 to help guide the City in further reducing potential visual impacts. Such mitigation measures are especially needed for Impact VIS-2 which refers back to Impact VIS-1 regarding mitigation measures. If some of these mitigation measures are proposed as part of the garden, no undue burden should be experienced for the garden operations.

The following words are added to the first bulleted item on page IV.F-13:

> "...North, west, and east walls shall be composed of natural stained, board and batten design or comparable material in appearance. Rigid glazing..."

All project elements were considered in terms of the visual analysis. However, the focus was upon features which might have significant visual impacts. Trails was not one of these. New built features in unscreened areas, such as new greenhouses, could have visual impacts to users of Pogonip. The analysis also took into consideration the design guidelines already included in the *Draft Pogonip Master Plan*. As stated on page 2-12 of the *Master Plan*, "Design Guidelines and Management Actions for the Pogonip Garden will be addressed specifically in a Garden Operations and Management Plan."

D91. Many of the Clubhouse features are currently visible and would not be an introduction of new uses to an undeveloped area. For this reason, more emphasis is placed on the proposed greenhouses. The Clubhouse complex is not completely ignored. In addition, the *Draft Pogonip Master Plan* includes design guidelines related to the following: Clubhouse complex; parking; utilities and services; and, maintenance and support facilities. Additional mitigation measures were not found to be necessary. The following text is added to the top of page IV.F-12 of the DEIR (immediately following the bulleted items):

> The *Draft Pogonip Master Plan* includes design guidelines related to the following: Clubhouse complex; Outdoor Education Camp; parking; transportation and circulation; trails; utilities and services; and, maintenance and support facilities. These guidelines would eliminate any potentially-significant impacts related to these facilities. No such guidelines have yet been developed for the proposed garden.

It is very possible that garden buildings may fit equally well into the landscape, as compared to the Clubhouse complex. However, the use of design guidelines is recommended to ensure this. Design guidelines in the *Master Plan* related to Golf Club Drive address replanting with native plant species and no additional mitigation measures would be necessary.

D92. Refer to the Response to Comment No. D89.

D93. Impact VIS-3 on page IV.F-14 of the DEIR is deleted in light of the revised layout of greenhouses and their location relative to Golf Club Drive, as well as design guidelines in the *Draft Master Plan* that address lighting of outdoor parking areas. as follows:

> ~~**Impact VIS-3: Light could be created on the site in association with nighttime lighting of parking areas. Glare could be generated by the proposed on-site greenhouses. Lighting may be visible from distant residences, while glare from the greenhouses may be visible during daytime hours to hikers, bicyclists, and other users of Pogonip. (S)**~~

The discussion under Impact VIS-3 and Mitigation Measure VIS-3 are also eliminated from the DEIR. However, it should be noted that the latest greenhouse layout does not show a truly southfacing orientation (see Figure III-5 in the DEIR) which may need correction in the final site layout. Because of this change, the old Impact VIS-4 new becomes Impact VIS-3.

A new subsection "b" under "Impacts and Mitigation Measures" on page IV.F-11 has been added. This new subsection is called "b. Less-than-Significant Impacts" and is included as follows:

> b. Less-Than-Significant Impacts. The project would have less-than-significant impacts related to light and glare for a number of reasons. The *Draft Pogonip Master Plan* includes guidelines restricting any outdoor lighting at the Lower Meadow parking area. Lighting at the Clubhouse is addressed under Design Guidelines for the Clubhouse which state that any lighting should be shielded and directed downwards. Glare from the greenhouses would be limited due to the glazing on the southern exposure, and this glazing would not be highly visible from Golf Club Drive or other high uses areas within Pogonip. Existing trees would also screen this glazing from more distant locations within the City.

Subsection "b" entitled "Impacts and Mitigation Measures" would now become subsection "c" on page IV.F-11 of the DEIR. The grading-related impact has been left unchanged because this is an issue that warrants addressing in the DEIR.

D94. Recommended changes to Table IV.F-1 were not considered necessary and would run counter to the intent of CEQA to be a full disclosure document. Policy Number 6.1.1 is corrected to be Policy 6.1 in Table IV.F-1.

D95. No changes to the text of the DEIR are considered necessary to respond to these comments which represent the opinions of the commentor.

D96. The first paragraph on page IV.F-12 is revised as follows:

> "...All of these elements would contrast visually with the material and style of the existing Clubhouse and would be light in color and ~~highly~~ visible due to their location in an open meadow area. These greenhouses would be most visible from Golf Club Drive and the Outdoor Education Camp. However, their siting at the base of a slope and setback from Golf Club Drive would help to minimize their visibility."

D97. Mitigation Measure VIS-1a has been retained and is not considered arbitrary. In the final site plans, the greenhouse location may be changed and this mitigation measure would help to guide the future siting of the greenhouses.

D98. No changes to the text of the DEIR are considered necessary to respond to these comments which represent the opinions of the commentor.

D99. No changes to the text of the DEIR are considered necessary to respond to these comments which represent the opinions of the commentor.

D100. Impact VIS-3 has been eliminated as discussed above under the Response to Comment No. D93.

D101. Refer to the Response to Comment No. D93.

D102. No changes to the text of the DEIR are considered necessary to respond to these comments which represent the opinions of the commentor.

D103. The proposed project as presented in the *Draft Pogonip Master Plan* does not include use of an on-site water supply. The connection to the City of Santa Cruz water system is based upon a determination that there would be a mix of domestic and irrigation use and the need for treatment and more extensive infrastructure makes on-site sources less feasible.

Potential on-site supplies includes a well, springs and creeks. The existing well produces less than 10 gallons per minute (gpm). The springs are known to produce nearly 8 gpm most years, meaning they could produce 13 acre feet per year. The well water, or a combination of well water and spring-fed water supply, could potentially satisfy the needs for the Homeless Garden Project; however, a complete analysis of these sources has not been completed. If on-site supplies were considered for irrigation use at a future date, supplemental environmental review would be needed subsequent to this EIR. To satisfy the complete needs of the Pogonip project, potable and irrigation use, the municipal water system has been identified by the City as the preferred system.

D104. The significance criteria on page IV.H-9 could be changed to read:

> "The project would result in ~~encouragement of~~ the use of significant amounts of water, or...".

However, the impact analysis would not change based on this minor wording change. Development outside of a service boundary could have major growth-inducing impacts if water lines are extended through undeveloped lands.

Changing the water use factor by 30 percent would not change the overall conclusion. No changes to the impact analysis or mitigation measure on page IV.H-10 of the DEIR are considered necessary.

D105. Any increase in solid waste limits the useful life of a landfill and has indirect associated impacts related to water quality, land use, and other topics associated with landfill development. However, this impact can be easily mitigated by increased provisions for recycling.

Regarding Impact SER-9 and interference with utility box access, this impact relates to electrical service for existing customers and could indirectly relate to human health and safety if electrical service were cut off during extremely cold months and elderly or infirmed people were affected.

D106. It is not considered necessary to adjust the water demand calculations because the impact and mitigation measure would remain unchanged.

D107. The impact related to increased water demand should remain as significant, given the fact that the City demand exceeds the existing safe yield during drought years as stated at the top of page IV.H-8 of the DEIR.

D108. For the same reason stated in the Response to Comment No. D107, no changes to the associated mitigation measure have been made.

D109. Refer to Response to Comment No. D103.

D110. The *Draft Pogonip Master Plan* includes many components as described in Chapter III of the DEIR. If one or more of the components is removed, the *Master Plan* is still "feasible". However, certain opportunities may be lost. For example, if the garden is removed from the *Master Plan*, it would be forced to locate at another site, and as described in Chapter V of the DEIR, no alternate site has yet been found, possibly leaving the City without this facility. Similarly, if the trails component of the *Master Plan* were removed, the City would have significantly reduced recreational opportunities at Pogonip.

However, the *Master Plan* would still be viable if one or two components were removed. The garden is one of ten components of the *Master Plan*. Under the "No Project Alternative" discussion on page V-2 of the DEIR, one of the adverse factors discussed in the failure to provide a site for the garden (see Comment No. D20).

D111. The Reduced Lower Meadow Use Alternative would appear as shown in a new figure, entitled "Reduced Lower Meadow Use Site Plan" and numbered as Figure V-1 and shown after the Response to Comment No. C165. Visual impacts related to the garden are addressed in Response to Comment No. D96. The revised site plan addresses the need to protect coastal terrace prairie habitat and steeper slopes, as discussed in Sections IV.B and IV.C of the DEIR.

D112. VEG-2 addresses potential direct and indirect impacts to wetlands. Mitigation measures that are designed to avoid indirect impacts, such as the establishment of buffers, would apply to this alternative.

D113. While the garden may not include cultivation on slopes greater than 15 percent, stormwater runoff from garden features such as the greenhouses, plots and access road would flow from the garden to an incised arroyo, or ravine, with slopes in excess of 16 percent. The garden, as presented in the *Master Plan*, was evaluated for the DEIR.

D114. Design guidelines for parking facilities are included in the *Draft Pogonip Master Plan.* This particular impact does not address the issue of glare.

D115. Impact VIS-3 has been eliminated per the Response to Comment No. D93. Thus the following text is now deleted from page V-4 of the DEIR:

> ~~"Impact VIS-3 identifies visual impacts associated with glare created by greenhouse lighting. This alternative would avoid this impact by locating the greenhouse structure off site."~~

D116. The Final EIR has not evaluated alternative locations for the greenhouses, nor is this task considered necessary for the adequacy of the Final EIR.

D117. No change to the text is considered necessary to address this opinion of the commentor. The main benefits from the Reduced Lower Meadow Use Alternative would be reduced impacts related to white-tailed kite habitat and foraging areas, wetlands, and erosion. Other benefits would not be as significant.

D118. Please refer to Response to Comment Nos. D34 and D35 regarding white-tailed kites. Please refer to Response to Comment No. D53 regard deer fencing and wildlife corridors.

D119. Refer to Response to Comment No. D113.

D120. Refer to earlier responses to comments such as Comment No. 93 through D100:

D121. The following phrase is added to Impact SER-1 on page V-7 of the DEIR:

> "**Impact SER-1** identifies an impact resulting from increased water demand associated with the garden. This alternative would avoid this impact only if the garden were located outside of the City of Santa Cruz."

D122. The following sentence is added under "Adverse Factors" on page V-7 of the DEIR:

> "...as well as goals of the *Pogonip Mater Plan*. In addition, this alternative would not meet the intent of Policy L 3.4.1 of the City's General Plan regarding development and implementation of the Pogonip *Master Plan* as expressed in the mixed-use plan in the Pogonip Land Use Options Assessment Report, as it has evolved to provide a mix of uses - recreational, educational, and agricultural."

To date, no off-site garden location has been identified. Alternatively, the City may adopt the project as proposed (i.e., with the garden remaining on the site) and may need to make a statement of overriding considerations regarding significant and unavoidable impacts.

The garden was evaluated to the same degree as other components of the *Master Plan*. As stated in this comment, the trails and trail alternatives have also received a great deal of public scrutiny. Changes to the DEIR are being made in the main part of Chapter IV to more clearly identify impacts of trail alternatives. For example, when mitigation measures are recommended that relate to trails, these mitigation measures state to which trail alternative the measure applies. These changes are shown with underlining in the Mitigation Monitoring Checklist in Chapter 5 of this Addendum.

California Native Plant Society

D123. The DEIR identifies measures that could be implemented to *avoid* impacts to coastal terrace prairie by the garden, Lower Meadow Parking Lot and Outdoor Education Camp. Implementation of these measures would preclude the need for other mitigation measures. If however, avoidance of impacts is not possible, the DEIR recommends mitigation measures to *recreate* and/or *restore* grassland sites on Pogonip as mitigation for such impacts. As presented on page IV.B-40, potential areas for grassland

rehabilitation occur along the Spring Trail, near Fern Trail and the grassland area near the ranger office. The floristic composition of these areas could be enhanced through a program of grassland management and revegetation. As presented in the DEIR, a prairie management plan would be developed wherein specific locations, management and/or revegetation actions, goals and performance standards would be identified. The reference to performance standards, "i.e., increase diversity of density of native prairie species by 50 percent within five years", was only intended to be an example of the type of performance standards that would be established. The EIR authors concur that the actual standards should be developed based on the floristic composition of the chosen mitigation site and the mitigation goals.

D124. The EIR authors concur that the cessation of horse grazing over the last century has resulted in an overall degradation of the coastal terrace prairie. However, prior to the introduction of horses, it is expected that the grasslands were maintained by periodic fires and grazing by native grazers (e.g., tule elk). Through development of the grassland management program, areas suitable for grazing, fire and/or mowing management would be identified. As stated in the Fire Management Plan, selective burning of the grasslands would be compatible with wildfire management goals. Although the *Master Plan* identifies priorities for grassland management, the DEIR (Mitigation Measure BIO-2c) recommends implementation of a prairie management plan within one year of any Lower Main Meadow improvements.

The management goal of preserving extant populations of rare plants in Mitigation Measure BIO-1i, wherein population size and distribution should increase by an average of 20 percent, implies that over a five-year period, populations will increase by 20 percent. Depending upon seasonal weather conditions, in some years the populations may decrease; however in some years, population may significantly increase. Yet over a five-year period (assuming normal fluctuations in weather patterns), management actions would result in a net gain (+20 percent) for rare plant populations and their distribution. The mitigation program would establish performance standards for the grassland program, which would include weed abatement, reduction of thatch, and control of invasive non-native plant species. It is expected that a number of plant species, including those presented by the commentor, would be considered for control in the grassland areas. Currently, the natural resources plan of the *Master Plan* does not include measures to arrest forest succession and preservation of coast live oak communities. Measures to undertake such a program are beyond the scope of this EIR and would require additional design and environmental review. This comment addresses the *Master Plan* rather than the DEIR.

Implementation of the grassland management actions in the Haunted Meadow are intended to preserve and enhance the rare plant populations of the entire meadow area, as well as areas currently accessed by pedestrians and emergency vehicles. The existing pedestrian trail showed evidence of soil compaction during the 1997 and 1998 field assessments. During the rainy season, this trail can be muddy and can cause trail users to walk in the adjacent grassland, thus creating a second parallel trail. Prolonged use of a "second trail" can adversely impact grassland resources. The trail re-alignment is also consistent with Comment No. A3 from the U.S. Fish and Wildlife Service (USFWS), wherein they support the proposal to align trails to avoid impacts to coastal terrace prairie. The fencing (low-split rail-type fencing) is proposed to be placed along the upper edge of the meadow (along Rincon Trail) to deter equestrians and bicyclists from entering the meadow (Alternatives A and B). The fence would not encircle the meadow nor impede deer (or other wildlife) use of the meadow.

D125. Clubhouse improvements and creation of the Upper Meadow Parking area would not occur in coastal terrace prairie areas. Widening of Golf Club Drive would occur between the railroad trestle and the entrance gate. The non-native grassland areas were observed to be dominated by non-native grass species, although other native herbaceous species were also observed. The prevalence of non-native species, as compared to the other prairie areas of Pogonip, led the EIR authors to consider this area as non-native grassland.

The occurrence of locally unique plant species is stated in the DEIR and refers to detailed studies conducted on the site for the 1986 Draft Biotic Study and limited updated information in 1996 (HRG, 1997). As part of the Biotic Assessment, the local chapter of CNPS volunteered to the City to conduct rare plant surveys of Pogonip and update the earlier 1986 work. This information was not submitted to the City, and as such was not included in the Biotic Assessment or into the DEIR. The impacts to locally unique species, based on available information, are addressed under Impact BIO-1.

The cumulative impact analysis in the DEIR (page VI-7) states that management actions that promote native prairie species (i.e., management of Pogonip grasslands) would minimize cumulative indirect *(emphasis added)* impacts to this habitat. An example of an indirect impact is trampling of habitat by trail users. The analysis states that direct *(emphasis added)* removal of prairie habitat would result in significant cumulative impacts. An example of a direct impact is removal of prairie for the Outdoor Education Center. This impact remains significant due to other projects within the region that may impact prairie habitat, such as development in the Soquel

hills and City of Scotts Valley, as stated in the DEIR. The commentor's list of other projects in the areas (i.e., UCSC and other areas), underscores the DEIR's finding of a significant cumulative impact.

The potential impact to sensitive plant communities, such as coastal terrace prairie, from bicycle use is identified in the DEIR, Impact BIO-1 and BIO-2. Trail users may impact sensitive resources adjacent to the trail by trampling or off-trail use. Mitigation Measures BIO-1f, 1g, 1h, 1i, and 2e provide measures to avoid and/or minimize impacts. Measures are identified to install protective fencing along the trail edge in areas where the trail is near sensitive habitat (i.e., Brayshaw Trail [Alternative A], Rincon Trail [Alternative A and B], UCSC Connector [Alternatives A and B], Spring Trail [Alternative A]). Bicycle use is not proposed in areas of known and/or potential use by the Ohlone tiger beetle (Alternatives A, B or C).

Equestrian trail users were considered to have the same impacts to sensitive resources as bicyclists (see discussion above). As stated by the commentor, the EIR preparer concurs that horses have the potential to import weed seeds into an area. Given the limited trail access proposed for equestrians in Pogonip (three existing service roads and two trails in Alternative A or one road and two trails in Alternative B), coupled with their exclusion from sensitive resource areas (assuming mitigation measures are implemented as recommended in the DEIR), the impact is not deemed significant.

As presented in the DEIR, a prairie management plan would be developed wherein specific locations, management and/or revegetation actions, goals and performance standards would be identified. The potential for a seedbank of rare and/or locally unique species would also be part of management program development. Additionally, detailed botanical data from the 1986 Pogonip Biotic Study was reviewed for this EIR and utilized in the impact analysis. These data, although over ten years old, provided valuable information on the identification of prairie areas and sensitive plant occurrences (both "above" and "below" ground).

D126. Quantification of locally-unique species is not considered necessary. The need for Ohlone tiger beetle management and protection has been identified on page IV.B-33 of the DEIR under Mitigation Measure BIO-1f.

The following text should be deleted from the DEIR on page IV.B-24, top paragraph:

> ~~"Little is known about the life history of this species, as larva of Ohlone tiger beetles have never been found; therefore complete habitat requirements remain unknown."~~

Please refer to Response to Comment No. A5 regarding the Ohlone Tiger Beetle.

D127. The survey data are more applicable to address in the *Master Plan*. Other comments also apply to the *Master Plan*.

Richard Stover

D128. The EIR authors have reviewed the "Wildlife Monitoring During the Bicycle Trial Period at Blue Sky Ecological Reserve" (Patton, 1995), and agree with your interpretation of the study results. Changes and additions to the discussion under Impact BIO-3 on page IV.B-42 are as follows:

> "It is not known whether wildlife react differentially to bicycle use and equestrian use. Bicycle use is expected to have a greater impact on wildlife use compared to pedestrian use only (Patton, 1995). In addition, incidental occurrences of bicycle road-killed amphibians and reptiles have been observed in other parks on trails that are open to bikes. ~~However,~~Fast-moving..."

George Jammel, Sierra Club

D129. Refer to the Response to Comment No. C13 regarding increased use and D145 regarding soil impacts of trail alternatives.

D130. The recommended change from the word "improvement" to "project", "change", or "modification" is not considered necessary, nor would it change the overall EIR analysis. While the commentor may not agree with the use of the word "improvement", this term is commonly accepted as referring to new development and is not intended to imply that improvements necessarily "improve" the existing natural conditions.

D131. Refer to Response to Comment No. C13 regarding usage data. However, the analysis regarding potential impacts is not entirely dependent on usage data. Current usage would be reflected in current conditions which are addressed in the various topical "Setting" sections of the DEIR.

D132. The DEIR analysis evaluated the potential for impacts based on the proposed trail alignment and whether it traversed sensitive resources. The two

alternatives for the UCSC Connector Trail do not traverse sensitive resource areas, and therefore impacts to such resources from trail use are not anticipated.

D133. The *Master Plan* proposes signs to delineate or designate where bicycles and equestrians would be allowed. The *Master Plan* also recommends adoption of a Bicycle Ordinance to provide the legal foundation for ranger staff to cite violators. Successful implementation of trail user restrictions (through signs and citations, and through adequate ranger patrols) would minimize significant impacts to sensitive biotic resources, regardless of the number of users.

D134. See Response to Comment No. D133.

D135. The DEIR text states that data on the current distribution and population of yampah and robust spineflower in this area are lacking. Data were not collected for the DEIR because the schedule for the EIR data collection occurred during the fall and winter months (the non-blooming period for these species). Current data on the occurrence of these species near the Pogonip Creek trail would require focused species surveys during May, June and July; this work is not currently part of the EIR scope of services. The DEIR analysis presumed that previously recorded occurrences of these species are still valid, yet also states that these exact occurrences may have changed (i.e., potential change in location or extent; especially for annual species such as the spineflower) and new census data are necessary prior to trail use changes and/or improvements. To address the issue that the distribution of these species may be different than previously mapped, Mitigation Measure BIO-1i requires that the current distribution and population size of the rare plants within the prairie be identified and any changes with historical records be evaluated. Also in this mitigation measure, a prairie management plan would be developed that would identify measures to preserve and enhance rare plant resources in the vicinity of these trails, such that adverse impacts from trail users are avoided. These measures would be implemented prior to implementing any trail use changes or trail improvements.

D136. Mitigation Measure BIO-1i requires that the current distribution and population size of the rare plants within prairie habitat near trails (such as the meadows along the Fern Trail) be identified and any changes from historical records be evaluated. Also in this mitigation measure, a prairie management plan would be developed that would identify measures to preserve and enhance rare plant resources in the vicinity of this trail, such that adverse impacts from trail users are avoided. This could include re-

routing sections of trail, if necessary (such as is proposed in the Haunted Meadow area). These measures would be implemented prior to initiating any trail use changes or trail improvements along the Fern Trail.

D137. As stated in paragraph 6 on page IV.B-29, the Prairie Trail has been designated for pedestrian used only. Please refer to the Response to Comment No. A5.

D138. During the fall/winter field surveys for the EIR, it appeared to members of the EIR team that the fence was discouraging access by most park users to the vegetation around the spring area. A subsequent visit to the site in preparation of these responses, leads the EIR authors to agree that people continue to access the spring area, regardless of the fence. To protect the wetland resources at the spring area, the following text is added to Mitigation BIO-2 on page IV.B-41 of the DEIR:

> "Mitigation Measure BIO-2f: The City should redesign and re-construct protective fencing around the spring along the Spring Trail, as existing fencing is not adequate to protect the wetland resources. Fencing should surround the wetland area and include interpretive signs notifying park users to stay out of the spring area to protect this sensitive feature. (LTS)"

D139. Refer to the Response to Comment No. D128.

D140. Please refer to the Response to Comment Nos. D34, D35 and D42 regarding kites. Bobcats and mountain lions travel through and use a variety of different habitat types. There appears to be less activity in areas north of Pogonip's Redwood Creek. As mountain lions are particularly large, ranging, and skittish animals, cumulative impacts to this species from development outside of Pogonip park should be kept in mind. Potential population declines over time are addressed on page IV.B-42 of the DEIR.

D141. The data source comes from numerous encounters of homeless encampments while conducting site visitations and habitat assessments for wildlife. The high number of homeless encampments can be further verified by the City Park Rangers at Pogonip. However, quantification is not considered necessary for the DEIR analysis.

D142. The Trail Use Survey was undertaken in 1994. The survey was conducted at Pogonip over the course of a six-week period from April 16 to May 27. The survey was conducted at two locations within Pogonip, the Spring Street and Golf Club Drive entrance. Approximately 15 percent of the trail users had

dogs. Of these, nearly all pet owners carried a leash with them; however, approximately 46 percent of all dogs observed were off leash.

D143. This comment calls for additional discussion of soil impacts for specific trails. Specific areas of soil erosion are referred to in Section IV.D of the DEIR. The overlap between impacts to and mitigation measures for soil, erosion and water resources is acknowledged in the DEIR. Because erosion, sedimentation and adverse water quality impacts associated with persistent turbidity are issues of local regulatory concern and public health in the San Lorenzo River watershed, the DEIR addresses them more fully in the Water Resources section (Section IV.D) of the DEIR.

Supplemental study regarding site mapping, classification and analysis of local soil and trail conditions may be conducted during implementation of the *Master Plan.* However, the DEIR does note that there are some trails and service road sections that are much more susceptible to erosion than others (see Section IV.D of the DEIR). As part of the Final EIR, trail-related mitigation measures have been identified as applying to specific trail alternatives (A, B, or C). For this information, refer to mitigation measures in Chapter V of the FEIR Addendum.

D144. The survey of regional multi-use trail and road impacts included Cafferata and Poole, 1993; CDF, 1996; Camp, Dresser and McKee, 1995; Crockett, 1986; Iverson and King, 1993, Jones and Stokes, 1995; Mid-Peninsula Regional Open Space District 1993 and 1997; Santa Cruz Circle Trail (no date); and Seney and Wilson (no date). Full citations are included in Section VII of the DEIR.

Several studies reviewed in the development of the DEIR were not included in the list of references. These errata are noted and the following citations are added to Chapter VII of the DEIR:

> "Cessford, Gordon R. 1995. *Off-Road Impacts of Mountain Bike: A Review and Discussion, Science and Research Series No. 92.* New Zealand Department of Conservation.
>
> Bjorkman, Alan W. 1996. *Off-Road Bicycle and Hiking Trail User Interactions: A Report to the Wisconsin Natural Resources Board.* Wisconsin Department of Natural Resources Bureau of Research.
>
> National Recreation Trails Advisory Committee. 1995. *Conflicts on Multiple-Use Trails: Synthesis of the Literature and State of the Practice.*"

In response to other comments as well as this one, the following additional study was reviewed and considered, and is added to Chapter VII:

> "Beck, Lawrence and Lamke, Gene. 1995. *Blue Sky Ecological Reserve User Observation Study During Bicycle Trial Period.* San Diego State University."

Impacts to the Brayshaw Trail service road under existing use, proposed multi-use and increased levels of use are noted on pages IV.C-7 and IV.D-11 and Mitigation Measure WAT-1s. Mitigation measure WAT-1s calls for surfacing and development of a drainage management plan for Brayshaw Trail to reduce erosion and water quality impacts associated with erosion of the road surface and failure of the road shoulder in the section with slopes greater than 12 percent.

D145. The *Draft Pogonip Master Plan* proposed two types of trail use for analysis: multi-use and pedestrian-only use. Multi-use for both Alternatives A and B is defined by the *Master Plan* as service road use by horses and mountain bikes. The DEIR, therefore, assessed impacts to be expected by both uses for the "multi-use" trail alternatives. Discussion of the separate impacts related to horses or bikes was not a component of the *Draft Pogonip Master Plan* and therefore not analyzed in the DEIR.

Because the location of multi-use access (Alternative A and B) is focused on the historic service roads, analysis of impacts on local soils is not appropriate. The road fabric of gravel, sands, limestone baserock, and organic litter (impacted by multi-use and increases in levels of use) are not soil units comparable to those units mapped in the USDA/Soil Survey of Santa Cruz County and depicted Figure IV.C-2 of the DEIR and described in Appendix E-1. Impact ARCH-3 addresses the impacts of trail alternatives on the service roads. Mitigation Measure ARCH-3 proposes mitigation measures to avoid impacts to historic trail segments (page IV.E-13 of the DEIR).

Construction of the multi-use UCSC Connector Trail is proposed in Alternative A and Alternative B, and is to be located within an area mapped as the Lompico-Felton Complex soil unit. Differences within the Lompico-Felton Complex are based on slope. Other soil units may be present within the mapped Felton-Lompico Complex. Subsequent to this EIR, site assessment of soils would be necessary to identify other soil units and specific site conditions, as mentioned under Mitigation Measure GEO-1m on page IV.C-21 of the DEIR.

Mitigation Measure WAT-1e on page IV.D-17 of the DEIR calls for construction specifications to be developed by trail designers with practical experience in the region and "field fit" to actual site conditions. Mitigation WAT-1(f) on the same page calls for specifications to be developed and "field fit" for creek crossings and grading plans for steep slopes. Mitigation Measure WAT-1(m) on page IV.D-18 and Mitigation Measure GEO-1(m) on page IV.D-21 call for additional site inspection and trail design prior to construction.

Pedestrian use on existing trails and service roads is proposed primarily on existing trail alignments. No additional analysis of soils was deemed necessary. Where minor trail alignments are to be done, Mitigation Measure WAT-1f on page IV.D-17 addresses site-appropriate design approaches. Mitigation Measure WAT-1j on page IV.D-18 and Mitigation Measure WAT-1l on page IV.D-18 address specific approaches to avoid or minimize impacts resulting from soil erosion in the trail network.

Ongoing trail maintenance, as proposed in the *Draft Pogonip Master Plan* Trail Design Guidelines and Trail Management Actions and, as noted in Mitigation Measure WAT-1k on page IV.D-18, requires diligence and commitment on the part of the City and user groups. The EIR recommends that with the approval of the *Master Plan* and FEIR, the following occur: 1) enforcement of trail use limitations and regulations; 2) monitoring of trail erosion conditions; and 3) support of an on-going trail maintenance program. Approved mitigation measures would be monitored as part of the approved Mitigation Monitoring Plan (see Chapter V of this Addendum).

D146. The following new text is added after the first sentence in the first paragraph on page IV.G-20 of the DEIR:

> "...between trail users. The concept of user conflict on multi-use trails extends beyond the personal safety or inconvenience associated with physical conflicts on the trails. Differences in user goals and values are also important sources of conflict between user groups.
>
> One study of off-road hiking and biking trail interactions based on user surveys and observations of trail use in Wisconsin found the following (Bjorkman, 1996):
>
> 1. When bicyclists were added to the trail system, the trail experience changed for most hikers due to increased trail traffic in the following ways: a) hikers felt overwhelmed by

large numbers of bikers; b) hikers were displaced to hiker-only trails; and c) hikers developed an awareness of the environmental degradation resulting from bicycle use of the trails.

2. Hiker displacement to low-use trails and/or non-bicycle trails will occur when bicycles are introduced to the trail system. Less than 30 percent of the bikers gave hikers a warning when approaching requiring hikers to focus on impending encounters with cyclists. More than 80 percent of the repeat hikers reported that they avoided the bike trail on return visits.

3. The goals of hikers and bikers are different and incompatible. Hikers generally seek a quiet, undisturbed nature study while bikers generally seek an uninterrupted aerobic workout. Trail encounters interfere with each group achieving their desired goal.

4. Hikers are concerned with the environmental degradation they observe with bike use. In addition, both groups have differences in values regarding the use of green areas. A small core of hikers have deep convictions with regards to the intrusion of bicyclists into the natural environment and will oppose bikes even when separate trail corridors are designated for each user group.

5. Hikers and bikers agreed that trail corridor separation is the best way to provide for goals of each group and reduce conflicts between user groups.

A 1994 Federal Highway Administration (FHWA) study documenting a synthesis of the existing research regarding trail conflicts includes principles to improve cooperation on multiple-use trails (Moore, 1994). These principles are as follows:

1. Recognize conflict as goal interference
2. Provide adequate trail opportunities
3. Minimize the number of contacts in problem areas
4. Involve users as early as possible
5. Understand user needs
6. Identify the actual sources of conflict
7. Work with affected users

8. Promote trail etiquette
9. Encourage positive interaction among different users
10. Favor "light-handed management"
11. Plan and act locally
12. Monitor progress

The FHWA study lists physical and management actions that can be implemented to address trail conflicts. Physical measures include providing proper trail design (redesign), layout and maintenance. Management actions include information and education, user involvement, and regulations and enforcement.

The FHWA study recommends that multi-use trail conflicts be addressed with a strategy that employs a combination of physical and management actions with a long-term perspective. Several of the studies cited in the FHWA study indicate that education and information are the best strategy for preventing user conflicts. Informational strategies are generally preferred over implementation of physical measures and/or enforcement programs. Ranger patrols were the most effective measure for promoting trail etiquette followed by signs and brochures."

The following new references are added to Chapter VII of the DEIR:

"Bjorkman, Alan W. 1996. *Off-Road Bicycle and Hiking Trail User Interactions: A Report to the Wisconsin Natural Resources Board.* May.

Moore, R.L. 1994. *Conflicts on Multiple use Trails: Synthesis of the Literature and State of the Practice*."

D147. According to park planning staff, the UCSC Connector Trail was selected for multi-use because it provides a direct linkage between the Pogonip Trail system and the UCSC fire road trail. With the UCSC Connector Trail, a continuous trail system linking Cowell State Park, Pogonip, UCSC and Wider Ranch State Park would be established. While Rincon Trail connects to the UCSC road system, it does not connect to an off-road trail system at its intersection with Glen Coolidge Drive. Therefore, the UCSC Connector Trail was designated for equestrian and bicycle use. In addition, the Rincon Trail access at Glen Coolidge Drive cannot be promoted until safety issues including sight distances at this location are resolved.

D148. See Response to Comment No. C33 regarding vehicular traffic on Golf Club Drive. The volume of traffic on the existing section of Golf Club Drive located between the railroad trestle and the Pogonip boundary (gate) is not a factor in evaluating the geometrics of Golf Club Drive within Pogonip (between the Pogonip boundary and the new access road/driveway serving the Lower Main Meadow). The determination that Golf Club Drive within Pogonip should be widened is based on geometric standards published by the American Association of State Highway Transportation Officials (AASHTO). These standards recommend that Circulation Roads within recreational areas be designed with a traveled way width of between 20 and 22 feet with shoulder widths of between 2 and 4 feet, for a total roadway width ranging from 24 feet to 30 feet. AASHTO recommends that Area Roads within recreational areas be designed with a traveled way of between 18 and 20 feet with shoulders of up to 2 feet in width, for a total roadway width ranging from 18 feet to 24 feet. A traveled way width of 20 feet (two 10-foot travel lanes) with shoulders 4 feet in width on each side of the road is recommended for Golf Club Drive from the Pogonip boundary to the Lower Main Meadow. The 4-foot shoulders are recommended to provide for bicycle and pedestrian traffic on this section of roadway.

The term "daily trips" refers to trips made during a 24-hour period. Also, see Response to Comment No. C34 for additional discussion of the project trip generation. It is most probable that a full-attendance Clubhouse event would occur on a weekend day which would coincide with maximum utilization of the Overnight Education Camp. The Clubhouse would be available for use on a daily basis, although not every use would be a full-attendance event. The trip generation estimates provided in the DEIR provide a reasonable estimate of the trips that would be generated by activities within Pogonip. See Response to Comment No. C19 for a discussion of alternative design widths for Golf Club Drive.

D149. Please refer to the last paragraph of Response to Comment No. 144.

D150. Please refer to the Response to Comment Nos. D34, D35 and D42.

D151. Please refer to the Response to Comment Nos. D34, D35 and D42. A 250-foot boundary around the kite nest in the Lower Main Meadow, if used again by a nesting pair, does not apply in this situation as the foraging habitat (which includes the entire proposed Pogonip Garden area) is considered an extension of the nest site which is located in the middle of the proposed area. Increase in human activity levels at night can certainly affect the kites in the same way as in the day. However, the main concern regarding night time activities is in regard to any potential street or garden lighting. Night

lighting has the potential to disturb nesting activities and nesting site selection during the breeding season, as well as roosting activities during the non-breeding season. This impact would be considered significant under MBTA and CDFG code as stated in Response to Comment No. D34.

D152. Mitigation Measure BIO-2d states that a wetland delineation should be conducted for the garden area. This delineation would include all of the proposed garden development area, such that other potential wetland areas near the access road would be identified. If impacts to wetlands cannot be avoided, a permit from the U.S. Army Corps of Engineers would be required. Measures to avoid impacts to wetlands and mitigate for unavoidable impacts would be required by the Corps of Engineers.

D153. A reduced-size garden has been evaluated as part of Alternative B, as discussed starting on page V-3 of the DEIR. A new graphic, Figure V-1 has been added as shown in the Response to Comment No. C16 to illustrate the area where this reduced garden would occur. Environmental benefits would occur as mentioned by this comment.

D154. Mitigation measures for white-tailed kites have not be established as current project plans result in a significant impact. Under CEQA guidelines significant impacts should first be avoided. If it is decided that the garden project is still to be pursued on the site, specific mitigation measures could be developed with the formal consultation of the appropriate regulatory agencies. Please refer to responses to Comment Nos. D34 and D35.

D155. The Santa Cruz County Resource Conservation District (RCD) and the USDA Natural Resources Conservation Service (NRCS-formerly the Soil Conservation Service) are different entities, although they share office space and coordinate on soil conservation programs. NRCS staff serve as technical advisors to the RCD, which is a landowner-based organization.

NRCS Soil Conservationist Rich Casale conducted an Agricultural Viability Evaluation of the proposed garden site dated November 4, 1996. His main recommendation was as follows:

> "The City should use extreme caution if a decision is made to use this ten acre area on the Pogonip Property for the Homeless Garden Project or to convert it to some other type of agricultural use. The soils of this site, as noted above, have severe limitations and are best suited to open space, watershed, and to a lesser extent very limited grazing under careful management."

Additional technical support for drainage management and soil conservation as part of the garden management plan even for a smaller garden project would be advisable.

D156. The DEIR evaluated the garden access road as it was proposed in the *Draft Pogonip Master Plan.* Alternative access road alignments could be examined as part of the garden design and management plan to be developed prior to garden site development and program implementation. Site reconnaissance conducted by the EIR team during field visits to the proposed garden area revealed two active erosion gullies in the Santa Margarita formation on the slopes just up-gradient of the alternative road alignment discussed in the comment. Additional study of the geotechnical issues associated with road use in this active erosion area would be necessary as part of any future road design. Refer to Mitigation Measure GEO-1e on page IV.C-19 of the DEIR.

D157. The on-site water option for potable water use would not be feasible for financial, water quality and reliability reasons, as stated in the Response to Comment No. D239. Fire suppression is one of the many reasons that the City proposes to bring in City water supplies to the site.

Homeless Garden Project

D158. The DEIR evaluated all components of the *Draft Pogonip Master Plan.* The fact that the trails acreage is greater than the garden is not the controlling variable when it comes to the degree of impact. Habitat and soil types are of greater importance. Usage impacts of the garden are very different than the trails.

D159. The *Draft EIR* does not state that trail-related impacts are determined to be "acceptable" as suggested in the comment. Rather, they have been found capable of being mitigated to a less than significant level by the recommended mitigation measures. The garden impacts could only be mitigated to less than significant impacts by a reduction in acreage for geology/hydrology.

D160. Refer to the Response to Comment No. D91. The *Draft Pogonip Master Plan* includes a number of measures to minimize visual impacts related to the Clubhouse, and the DEIR recommends mitigation measures that can make potential visual impacts of the greenhouses less than significant.

D161. The commentor does not note where the garden is "faulted" for insufficient detail. All project components were evaluated at the *Master Plan* level of

detail, and mitigation measures were recommended accordingly. Changes to the text of the DEIR are clearly identified in these responses, and the Summary Table (Table II-1) has been reproduced to show all changes to the impacts and mitigation measures. A reprint of a revised DEIR is not considered necessary.

D162. The highlighted maps shown at the public hearing on March 31 were to clearly identify areas of impact as related to proposed facilities. In addition to sensitive areas in the vicinity of the garden, other highlighted features included the UCSC Connector Trail, Brayshaw Trail, and Spring Trail. Thus, the suggested "prejudicial attitude" toward the garden represents the commentor's opinion, one with which the EIR authors respectively disagree.

D163. The differences between the UCSC garden and the Pogonip garden are addressed in the Response to Comment No. D27.

Richard Schmale (2/20/98)

D164. The daily trip generation estimate for the Pogonip garden includes trips generated by employees and visitors to the garden. The trip generation rate for the garden, 8 trips per employee, includes an allowance for trips made by visitors to the site as well as trips made by employees of the garden.

Richard Schmale (2/24/98)

D165. This comment concurs with observations of the site conditions encountered by EIR team members during reconnaissance visits to the proposed Pogonip garden site. Due to these existing erosion and gully conditions, the DEIR found that, as proposed, the garden project would have significant impacts on geology and soil resources at Pogonip.

D166. This comment is consistent with field observations of the 150-foot terrace access road. As noted in Mitigation Measure GEO-1d, a Garden Operation and Management Plan shall be required and approved by the City prior to garden implementation.

As noted in the Response to Comment No. D155, NRCS Soil Conservation Rich Casale conducted an Agricultural Viability Evaluation of the proposed garden site dated November 4, 1996. His main recommendation was as follows:

> "The City should use extreme caution if a decision is made to use this 10-acre area on the Pogonip property for the Homeless Garden

Project or to convert it to some other type of agricultural use. The soils of this site, as noted above, have severe limitations and are best suited to open space, watershed, and to a lesser extent very limited grazing under careful management."

With regard to a reduced-acreage garden site, the DEIR noted on page IV.C-9 that a reduced garden on the terrace may be mitigated to a less-than-significant level. It was not, however, within the scope of the DEIR to develop a reduced garden site plan for the Homeless Garden Project.

Cathy Puccinelli

D167. Comment noted.

Richard Stover

D168. Comment noted. The Kettle Moraine State Park Off-Road Bicycle and Hiking Trail User Interaction Study conducted by the Wisconsin Natural Resources Board was reviewed by the EIR team and served as a primary source for the development of mitigation measures included in both the Geology, Soils and Seismicity section and the Water Resources section. Reader should note, however, that climatic conditions in southern Wisconsin vary markedly from coastal California in several fundamental ways. First, in Wisconsin, there is no "dry" season and for several months each year, multi-use trails are snow-covered or frozen. Second, the glacial moraine environment is more varied in slope throughout the park than the service roads proposed for use at Pogonip.

The road fabric of gravel, sands, limestone baserock, and organic litter impacted by multi-use and increases in level of use are not soil units comparable to variable soils that are arrayed throughout the kettle moraine and kettle hole terrain on which the study focuses. Impact ARCH-3 addresses the impacts of trail alternatives on the service roads. Mitigation Measure ARCH-3 proposes mitigation measures to avoid impacts to historic trail segments (page IV.E-13).

New multi-use trail construction is limited to the proposed UCSC Connector Trail. Mitigation Measure WAT-1e calls for construction specifications to be developed by trail designers with practical experience in the region and "field fit" to actual site conditions. Mitigation WAT-1f calls for specifications to be developed and "field fit" for creek crossings and grading plans for steep slopes. Mitigation Measure WAT-1m and Mitigation Measure GEO-1m call for additional site inspection and trail design prior to

construction. Mitigation Measure WAT-1j and Mitigation Measure WAT-1l address specific approaches to avoid or minimize impacts resulting from soil erosion in the trail network.

Ongoing trail maintenance, as proposed in the *Draft Pogonip Master Plan* Trail Design Guidelines and Trail Management Actions and as noted in Mitigation Measure WAT-1k, requires diligence and commitment on the part of the City and user groups. Mitigation Measure WAT-1s addresses the slopes on excess of 15 percent proposed for multi-use on Brayshaw Trail, which is the steepest section of trail proposed for multi-use. The EIR assumes that with the approval of the *Pogonip M aster Plan* and FEIR, enforcement of trail use limitations and regulations, monitoring of trail erosion conditions, and support of an on-going trail maintenance program will occur as conditions of approval. Approved mitigation measures will be monitored as part of the approved Mitigation Monitoring Plan (see Chapter V of this FEIR Addendum).

Richard Schmale (3/13/98)

D169. A reduced garden alternative is addressed in Chapter V of the DEIR, and a new Figure V-1 has been included herein to show the preferred location of the reduced-scale garden. Refer to the Response to Comment No. C16.

John Coha

D170. Excessive vehicle speed on Glen Coolidge Drive at the intersection with Rincon Trail is an existing problem as indicated on page IV.G-18 of the DEIR. Mitigation Measure TRANS-5e includes a recommendation that the City work with the County and UCSC to reduce traffic speeds on Glen Coolidge Drive. Reducing the speed limit will not necessarily reduce vehicle speeds on Glen Coolidge Drive. When drivers do not consider speed regulations to be reasonable, the limits will be disobeyed and will lose their value. Factors that should be considered when establishing speed limits include prevailing vehicle speeds, physical features, accident experience and traffic characteristics.

D171. The Notice of Preparation letter from Mr. Frank Zwart, UCSC Assistant Vice Chancellor states that "Staff has doubts about the planning feasibility of such a connector due to the absence of existing trails or sidewalks to which the connector could be linked." The internal UCSC road network would provide a continuous route for bicyclists using the Rincon Trail and the New UCSC Connector Trail. Facilities for pedestrians in the form of sidewalks or trails are not provided along Glen Coolidge Drive at the

intersection with Rincon Trail. To access Rincon Trail from the UCSC campus, pedestrians must walk in the bike lane or, where feasible, along the immediate edge of the roadway. It is not feasible for equestrians to utilize Glen Coolidge Drive.

Ann Stanislawsky

D172. Comment noted.

David Green Baskin

D173. Comment noted.

D174. This connection issue related to Trails Alternative A is addressed on page III-22 of the DEIR.

D175. Please refer to the Response to Comment No. D3.

D176. Please refer to the Response to Comment No. D4.

D177. See Response to Comment No. D5.

D178. See Response to Comment No. D6.

D179. See Response to Comment No. D7.

D180. See Response to Comment No. D8.

D181. See Response to Comment No. D9.

D182. See Response to Comment D10.

D183. See Response to Comment No. D11.

D184. See Response to Comment No. D12.

D185. See Response to Comment No. D13.

D186. Refer to the Responses to Comment Nos. D14 and D15.

D187. See Response to Comment Nos. D16 and D18.

D188. Refer to the Response to Comment No. D17.

Nan Tunison Ogawa

D189. Comment noted.

John Swift

D190. It is beyond the scope of work to assess the environmental buildout of the Golf Club Drive Specific Plan. This DEIR took the approach of addressing specific development proposals rather than the City's General Plan to address cumulative impacts, as described on page VI-4 and VI-5 of the DEIR.

D191. As stated on page VI-4 of the DEIR, for the cumulative analysis, CEQA allows the use of either a list of anticipated projects or a summary of projections documented in an adopted planning report. The cumulative impacts analysis for the *Master Plan* utilized a list of reasonably anticipated projects that are either under construction, approved or proposed. At this time, there are no formal applications for development along Golf Club Drive. Therefore, potential impacts of future development of this area were not considered in the cumulative analysis. The impacts associated with development of the Golf Club Drive area will be analyzed at the time development proposals for this area are presented to the City.

D192. Comment noted. This comment is consistent with the findings of the DEIR.

D193. This comment relates to the *Draft Pogonip Master Plan* rather than the DEIR.

D194. The recommended mitigation measures regarding enforcing speed limitations for bicycles are considered both feasible and practical and further evaluation is not considered necessary. This issue of bicycle access to Pogonip as part of the Golf Club Drive Specific Plan is not part of this project.

D195. This comment relates to the *Draft Pogonip Master Plan* rather than the DEIR.

D196. Please refer to Mitigation Measure SER-1a on page IV.H-5 of the DEIR.

Mildred Bourriague

D197. Comment noted. No additional impact analysis regarding the garden is considered necessary.

Patricia Doler

D198. Comment noted. A reduced-scale garden is evaluated in Chapter V of the DEIR.

D199. Comment noted. This comment addresses the *Draft Pogonip Master Plan.*

D200. Comment noted. This comment addresses the *Draft Pogonip Master Plan.*

D201. Change text of DEIR at page IV.E-3, second paragraph:

> ~~The house burned down, apparently prior to World War II, and was never rebuilt (Cartier et al., 1996, Hoover et al., 1990, Morstein, 1987, Strelow, 1992; Piwarzyk, 1994).~~ The original house burned down and was never rebuilt (Cartier et al., 1996; Hoover et al., 1990; Morstein, 1987; Strelow, 1992; Piwarzyk, 1994).

The date the house burned does not affect the environmental impact assessment.

Bruce Engelhardt

D202. Comment noted.

D203. Refer to text under Impact GEO-1, beginning on page IV.C-11 of the DEIR.

D204. Comment noted. Please refer to the Response to Comment Nos. D34, D35 and D42.

D205. Comment noted. Visual impacts related to the garden are addressed in Section IV. F of the DEIR.

D206. Comment noted.

D207. Comment noted. This comment addresses the *Draft Pogonip Master Plan.*

D208. Comment noted. This comment addresses the *Draft Pogonip Master Plan.*

James Felich

D209. Comment noted.

Stuart Howell

D210. Refer to Response to Comment No. 133.

D211. This comment addresses the *Draft Pogonip Master Plan.*

D212. Comment noted. To date, none of these locations has been found to be suitable for the proposed garden.

Tony Morel

D213. Comment noted.

D214. There has been no historical documentation of burrowing owls in the Lower Main Meadow. Burrowing owl surveys, as well as other raptor surveys, have been conducted in this area (see Response to Comment Nos. D34 and D35). No evidence of burrowing owls or potential burrowing owl burrows have been found.

Bruce A. McDougal

D215. Visual impacts are addressed in Section IV.F of the DEIR, including recommendations for mitigation measures to reduce potential visual impacts related to proposed facilities.

D216. Please refer to revised Mitigation Measure GEO-1d (see Response to Comment No. D75), which calls for a garden Operations and Management Plan to be submitted and approved prior to site disturbance. Additional environmental review may be necessary. The level of project-specific environmental analysis shall be determined by the City Parks and Recreation Department, when actual site plans and management programs are submitted to the City. Also refer to Response to Comment No. D155.

D217. Comment noted.

D218. The Transportation and Circulation section of the DEIR addressed the transportation-related impacts of the proposed project to Golf Club Drive west of the railroad trestle. See Response to Comment No. D191 with regards to the analysis of impacts associated with the development of the land adjacent to Golf Club Drive.

Karena Pushnik

D219. Comment noted.

D220. Comment noted.

D221. Comment noted.

D222. The *Master Plan* seeks to expand the use of the Pogonip to bicyclists and equestrians while maintaining the existing natural setting and minimizing impacts. Therefore, development of new trails has been kept to a minimum. Development of the Eastern Access to UCSC would improve the linkage between the UCSC campus and the SR 9 corridor for bicyclists. Development of the Major Transportation Investment Study Alternative 4 with a facility for bicyclists in the rail corridor would also improve east-west circulation opportunities for bicyclists. However, these proposals are not part of the proposed *Master Plan*.

Sandra G. Henn

D223. See Response to Comment No. D146 for a discussion of multi-use trail conflicts.

D224. Comment noted. The recommended monitoring of trails is intended to ensure that excessive erosion does not occur from bicycle activity. Financing issues apply to the *Draft Pogonip Master Plan* rather than the DEIR.

D225. The issue of liability related to bicycle accidents is not applicable to the DEIR. It should also be noted that many of the Pogonip trails would remain for pedestrian use only, even if Alternative A or B were adopted.

D226. Unauthorized use of single track, or pedestrian trails, by mountain bikes is an issue of enforcement. Limiting access and enforcement regulations are proposed in the *Draft Pogonip Master Plan* and in the DEIR.

Increased erosion and reduced water quality are likely to occur if the use of pedestrian-only trails by multi-use park users occurs. Trail Management Guidelines proposed in the *Pogonip Master Plan* include establishing a bicycle ordinance to reduce inappropriate trail use, a monitoring program with user observations as a critical component, and the closure of non-designated paths.

D227. See Response to Comment No. D144 for discussion of available regional multi-use studies. Soil and biological resource effects associated with bikes and horses are not, however, well quantified in the available literature. If the City approves the *Master Plan* and EIR, mitigation measures and trail management actions should be adequate to mitigate impacts to a less-than-significant level.

D228. See Response to Comment No. D145.

D229. See Response to Comment No. D145.

D230. Please refer to Response to Comment Nos. D128 and D139.

D231. Many of the Pogonip trails would remain for pedestrian use only, even if Alternative A or B were adopted. Refer to the Response to Comment No. C15.

Ted M. Coopman; Stephanie J. Coopman; Craig Meriweather; Rennie Saunders; Virginia Saunders; Kristina Wulbern

D232. This comment addresses the *Draft Pogonip Master Plan.*

D233. Modification of the non-historic Clubhouse access road would be necessary for engineering and safety reasons in order to facilitate public access to the Clubhouse.

D234. This comment addresses the *Draft Pogonip Master Plan.*

D235. This comment addresses the *Draft Pogonip Master Plan.*

D236. This comment addresses the *Draft Pogonip Master Plan.*

D237. Comment noted.

D238. Comment noted.

Douglas Deitch

D239. The *Draft Pogonip Master Plan* proposes to use municipal water supplies for both potable and non-potable use. Alternative sources of water supply were not considered in the EIR because the *Master Plan* did not propose such use, and the City supplies were selected as the preferred water system based on economics, water quality, and reliability.

Use of the springs, surface water in Pogonip Creek, or groundwater requires additional hydrogeologic and hydrologic investigations, exploration of existing riparian and appropriative water rights, and design and construction of a water supply delivery system. A "package" treatment plant at Pogonip could cost about $100,000, depending on demand. While the cost would likely be less in the short-term than the option of bringing City supplies to the site, other costs such as maintenance of the plant and monthly testing of effluent would make this far more expensive in the long run.

Should the City contemplate alternative sources of water supply, a feasibility study and alternatives analysis for proposed on-site water supply alternatives should be completed. The feasibility study should include reasonable assessments of costs to develop a delivery system from remote spring sources to facilities adjacent to Golf Club Drive; stream diversion design, operation and conveyance to use locations; and well site development and pumping costs. Impacts to local riparian habitat, emergent marsh seep habitat, and groundwater recharge should also be examined.

D240. The Greenbelt Overlay District expired in December 1991, as stated in the Response to Comment No. D30. The issue of the eastern access is addressed under the Response to Comment No. B3.

D241. See Response to Comment No. D222 for a discussion of a potential east-west trail connection.

Mark Primack

D242. Please refer to Response to Comment Nos. D34, D35 and D42.

D243. In response to the comment regarding previous land uses of the Lower Main Meadow area, please refer to Response to Comment No. D32. Despite previous land activities, native perennial grass species (as well as other native species) were able to tolerate these conditions and persist in the meadow. Mowing and grazing of the native grasses, as was done for the equestrian uses, apparently was conducive to their persistence in the area. Mapping and identification of the botanical resources of Pogonip, including the Lower Main Meadow area, was conducted in 1986 as part of the Pogonip Biotic Study and in 1996 for the Pogonip Biotic Assessment.

Impacts to the prairie from the garden, as shown in the *Draft Master Plan*, have been revised in terms of total size from 12.5 acres to 7.9 acres; please refer to Response to Comment Nos. D38 and D46.

D244. As stated in the DEIR, a wetland delineation, conducted as per U.S. Army Corps of Engineers criteria, should be conducted prior to implementation of the garden. The location of the wetland, as depicted in the DEIR, is based on field surveys and aerial photo interpretation. The exact boundary of the wetland would be determined by conducting the delineation and surveying the outside edges of the wetland. The garden plan depicted in the *Master Plan* shows that row crops encircle the garden. This plan is depicted in the DEIR as Figure III-5.

The wetland area within the proposed garden area was identified as part of a "marshy swale" that extended across Golf Course Drive during the 1986 Biotic Study. During the 1996 field surveys for the Pogonip Biotic Assessment (HRG, 1997), the area exhibited a dominance of wetland plant species. As stated by the commentor, this wetland could be caused by human activities, based on previous land management activities. This fact would be determined during a wetland delineation wherein a detailed analysis of soils, hydrology and vegetation is undertaken. The analysis would include an evaluation of historical features and whether they are affecting the presence of the wetland. Mitigation Measures BIO-2d recommends that a delineation be conducted to clarify the current status of this area.

Mitigation Measure BIO-2d states "Intensive garden activities, such as row crop cultivation ...", occur 100 feet from the wetland. It does not state "intensive row crop cultivation", as implied by the commentor. Row crop cultivation typically involves seasonal and/or periodic soil clearing and tilling (either by hand or by machine). Due to the potential for sediments moving from the row crop areas to the adjacent wetland, a 100 foot setback is recommended. The mitigation measure states, too, that perennial crops that typically do not require annual or seasonal soil cultivation could be located within 50 feet of the wetland.

D245. Without a specific garden plan which identifies crop type, irrigation methods, pest control, weed control, and seasonal planting schedules, we cannot address this question. Organic garden practices and crops are vastly diverse. Please refer to the Response to Comment No. D35.

D246. Comparison between the proposed Pogonip Garden site and the UCSC Farm and Garden Project is addressed under Responses to Comment Nos. D27 and D61. Chadwick Garden (UCSC) appears on area photos to be approximately 10 percent of the size of the proposed Pogonip garden site. The Chadwick Garden site is underlain at depth by schist or marble bedrock, and near the surface by deep, well drained Nisene-Aptos soils. The Chadwick Garden site drains to McLaughlin Road and the UCSC road system.

The likelihood of slope instability in the proposed garden site is high. The proposed garden site has at least five areas currently exhibiting gulley erosion. These areas are both above and below the proposed garden site. In the center of the site, an area of approximately one acre exhibits notable soil piping conditions, which is a precursor to rapid gully advancement.

Drainage patterns and seepage zones are proposed to be modified in the development of the proposed Pogonip garden, regardless of its "organic" status. As depicted, the drainage features proposed for the garden are located in active slope instability and soil piping areas. Exacerbating instability by increasing runoff through construction of the greenhouses and road compaction is likely to occur. Use of the road itself, may disturb the fragile underlying capping layer of the Santa Margarita formation.

The areas proposed for orchards and terrace permaculture exhibit soil piping characteristics. Soil piping may be a result of both rodent burrows and the variable rates of surface and subsurface erosion that occur in the unconsolidated sandstone and siltstone layers of the underlying Santa Margarita formation. Field reconnaissance indicated that active expansion of these two related types of slope instability are occurring directly on the proposed garden site and within the receiving waters and drainage ways to which the garden project will contribute runoff.

With regard to slopes in the garden area, refer to Response to Comment No. D27.

D247. Refer to the Response to Comment No. D96. The first paragraph on page IV.F-12 has been changed as follows:

> "Exterior materials would include ~~aluminum~~ or plastic or fiberglass..."

The recommended mitigation measures are appropriate as part of the Pogonip Garden Operations and Management Plan. The visual character of non-existent structures is not applicable to address in the DEIR. Revegetation of the widened road is addressed in the *Draft Pogonip Master Plan*.

Keith Kelsen

D248. Refer to the Response to Comment No. D174.

D249. Based on site reviews of the proposed trail route conducted during preparation of the DEIR, it appears that wood rat nests can be avoided while meeting the need to locate a trail that avoids erosion.

D250. Please refer to the Response to Comment No. D4.

D251. See Response to Comment No. D5. Please refer to Response to Comment No. D128 on wildlife disturbances from bicycle use. The end of Mitigation Measure BIO-3 on page IV.B-44 of the DEIR should be amended to add the following bullet text:

> " • Ranger staff should routinely patrol Pogonip trails and cite illegal bicycle and equestrian users on all applicable trails. Ranger staff should maintain a log of citations and monitor trails for evidence of unauthorized use. This measure would be in conjunction with measures identified in Mitigation Measure TRANS-6."

D252. See Response to Comment No. D6.

D253. See Response to Comment No. D7.

D254. See Response to Comment No. D8.

D255. See Response to Comment No. D9.

D256. See Response to Comment No. D10.

D257. See Response to Comment No. D11.

D258. See Response to Comment No. D12.

D259. See Response to Comment No. D13.

D260. Refer to the Response to Comment No. D14 and D15.

D261. Refer to the Response to Comment No. D14 and D15.

D262. See Response to Comment No. D16.

D263. See Response to Comment No. D17.

D264. Refer to the Response to Comment No. D188.

D265. No changes to the DEIR are considered necessary because no "bias" exists in the analysis.

Lawrence M. Cuprys

D266. Refer to Response to Comment No. C26 for discussion of multi-use impacts and available biophysical data available for use in the EIR. Additional information is included in Response to Comment Nos. D8, D129, D143, D144, D145, D226, D227, and D320.

Jane Walton

D267. Rebuilding the Clubhouse at another location is not considered in the DEIR and is not proposed as part of the *Draft Pogonip Master Plan*. Dismantling and relocating some or all of the elements of the Clubhouse would cause the Clubhouse to become not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

D268. Vehicle trip generation associated with the garden is evaluated under Impact TRANS-1 on page IV.G-11 of the DEIR.

D269. Mountain lions and bobcats are skittish animals and are rarely encountered by humans. Both species of cats have been coexisting with humans in the Santa Cruz Mountains for a long time without attacks or dangerous encounters with humans. No significant safety threat would be expected due to garden activities, deer, and bobcats.

D270. Comment noted.

Steve Miller

D271. Please refer to Response to Comment No. C13.

D272. Comment noted. Please refer to Response to Comment Nos. D128 and D139. The following text is added to the "Trails" subsection under Impact BIO-3 at the end of page IV.B-42 of the DEIR:

> "However, there is some evidence that areas open to bicyclists result in a decrease in both the average number of wildlife species sighted and number of wildlife sightings (activity levels) (from the "Wildlife Monitoring During the Bicycle Trial Period at Blue Sky Ecological Reserve," Patton, 1995). In addition, incidental occurrences of bicycle-killed amphibians and reptiles have been

observed in other parks on trails that are open to bikes. It can be assumed that fast-moving horses would have the same effect as bicyclists. It is assumed that slow moving (walking) horses are likely to impact wildlife in ways more similarly to pedestrians, except for wildlife interactions where trail compaction and erosion are an issue (i.e., Ohlone tiger beetle burrows)."

Chuck & Vivian Beebee

D273. Comment noted.

Fritzi Nelson

D274. Comments noted.

Kathy Puccinelli

D275. Kites forage on a number of prey items but rely heavily on meadow voles (*Microtus califronicus*) and other small "mouse" or "rat" type of rodents. Meadow voles can make up over 80 percent of the kite's diet (Faanes and Howard, 1987). It is possible that a kite would take a gopher as prey. However, in natural situations, gophers may not be as available as a food source for a kite, as gophers spend most of their time underground. It is more likely for a kite at Pogonip to eat primarily meadow voles and some deer mice (*Peromyscus* sp.) and house mice (*Mus musculus*).

D276. See Response to Comment No. D75 which includes revised text for Mitigation Measure GEO-1d.

D277. See Response to Comment Nos. D75 an D276.

D278. See Response to Comment No. D155, which refers to the preliminary agricultural viability report the NRCS District Conservationist conducted for the City Parks Department in 1996. Detailed soils analysis of the proposed garden site has not been undertaken by City staff, EIR consultants, or the Homeless Garden Project. Approaches to site development, planting plot design, orchard placement and drainage should be defined in the proposed Garden Operations and Management Plan to be approved by the City prior to site disturbance and garden implementation.

D279. Comment noted. As of this date, the EIR authors are not aware of another feasible site for the Homeless Garden Project, within or outside City limits.

D280. The payment for water for the garden would have to be arranged between the City and the Homeless Garden Project. Projected water use is addressed on page IV.H-9 of the DEIR. Cost issues do not need to be addressed as part of the DEIR.

D281. This question applies to the *Draft Pogonip Master Plan.*

D282. This question applies to the *Draft Pogonip Master Plan.*

D283. Planning for future development of the Golf Club Drive area outside of Pogonip boundaries is beyond the scope of the DEIR.

D284. This comment applies to the *Draft Pogonip Master Plan.*

D285. Comment noted. Increased ranger services are addressed in Section IV.H of the DEIR.

D286. The Draft EIR was prepared as an unbiased, environmental analysis of proposed uses for Pogonip. There are no personal biases in favor of or opposed to particular uses that occur at Pogonip. An additional review of the DEIR is not considered necessary.

Susan & Kenneth Coale

D287. Comment noted.

D288. Comment noted. Horses have been excluded from trails where soil compaction and erosion may damage Ohlone tiger beetle burrows or protected plant species (page B. IV-27) and /or where it was decided to reduce the number of users, via limiting user type, on a trail in order to limit human activity levels around bobcat denning sites. Please refer to Response to Comment No. D139.

D289. Equestrian use is not proposed for "steep, winding, single track trails" as suggested in this comment. Equestrian use under Alternatives A and B would occur primarily on service roads within Pogonip that are wide enough to accommodate multi-use. As stated on page III-19 of the DEIR..."If equestrian and bicycle use were allowed on the Rincon Trail Connector, the trail bed may be widened in some locations, as needed." The proposed UCSC Connector Trail, as discussed on page III-21 of the DEIR, would be constructed at a gradient no greater than approximately 12 percent at a width of four to six feet.

D290. Comment noted.

Deborah A. Malkin

D291. The table entitled "Summary of Mitigation Measures by Topics" is enclosed herein as provided in the Response to Comment No. C24. Potential impacts from the proposed paving of service driveways and parking areas are addressed on pages IV.C-17, IV.C-18, and IV.B-31. These new facilities would occur in areas previously disturbed by the clubhouse, tennis courts, and Ranger facility uses, as mentioned on page III-26 of the DEIR.

D292. These facilities are not within sensitive resource areas, such that impacts from development of these structures are not expected.

D293. Refer to the first bulleted item on page III-26 regarding the size of the storage area as part of the maintenance facility.

D294. As stated on in the second paragraph on page IV.G-15 of the DEIR, it is expected that the location of the shuttle parking area will vary depending on the type of event. Specific shuttle parking locations would be evaluated by the City. A potential shuttle parking location is on-street parking on Encinal Street. Mitigation Measure TRANS-3a recommends that Golf Club Drive be widened to provide two travel lanes in each direction between the railroad trestle and the Pogonip boundary.

D295. A significance criterion related to "sound and feel of a place" was not included in the Visual Quality section of the DEIR, and for this reason no impacts related to such a criterion were identified. Such a criterion would be highly subjective and is not commonly relied on in environmental documents as per CEQA Guidelines.

D296. Refer to Response to Comment No. C13.

D297. The California Department of Parks and Recreation has reviewed the uses proposed in the *Draft Pogonip Master Plan*. A letter dated September 7, 1997 from the Planning and Local Services Section of the California Department of Parks and Recreation to the City of Santa Cruz states "The proposed uses described in the Master Plan are consistent with the intent of the California Wildlife, Coastal, and Park Land Conservation Act of 1988."

D298. Comment noted.

D299. This comment relates to the *Master Plan* rather than the EIR. All components of the *Master Plan* were addressed in the DEIR analysis.

D300. The fourth paragraph on page IV.G-15 should be modified to read as follows:

> "The Outdoor Education Camp would be used by groups of up to 30 people for day use and overnight use. The use of carpools, buses or alternative access modes to transport users of this facility to the Pogonip site would minimize parking demand associated with this facility.
>
> The *Draft Pogonip Master Plan* parking design guidelines state that all parking areas will be paved in accordance with the City of Santa Cruz standard specifications. Because the parking lots would be located within a park setting, improving the parking lot surface with an appropriate all-weather surface would be adequate.
>
> The following combination of mitigation measures would reduce this impact to a less-than-significant level."

The following mitigation measure should be added to Mitigation Measure TRANS-2 on page IV.G-15 of the DEIR:

> "Mitigation Measure TRANS-2c: Parking lots located at the Clubhouse and Lower Main Meadow should be surfaced with an appropriate all-weather surface."

D301. The statement was not meant to imply that Alternative C would increase (emphasis added) the demand for parking. For further clarification, and because the garden elimination should balance the amount of reduced parking, the last sentence under "3" on page V-7 has been eliminated as follows:

> ~~"Impact TRANS-2 identifies impacts related to increased parking demand. Implementation of this alternative would exacerbate this impact by reducing the amount of parking provided on the site."~~

D302. No changes in use are proposed for Wilder Ranch. While the proposal of Alternative A or Alternative B may allow a regional connection to UCSC and ultimately to Wilder Ranch, this connection would connect with trails that are currently open to bicycle use. No significant increase in use is expected at Wilder Ranch due to the proposed connection.

Becky Johnson

D303. Provision of a camping area for the homeless is an issue germane to the *Master Plan* rather than the DEIR. Because such a use was not included in the *Master Plan*, the environmental impacts of such use have not been evaluated in the DEIR.

Ron Stillman

D304. Enforcement of bicycle regulations, ongoing monitoring, and signage to minimize conflicts between bicyclists and pedestrians are addressed under Mitigation Measures SER-1a through 1e on pages IV.H-5 and IV.H-6 of the DEIR. The commentor does not identify the type of "damage" being referred to in regard to bicyclists and equestrians. If this refers to soil damage and erosion, this impact is addressed under WAT-1 of the DEIR, starting on page IV.D-7.

Salem Margarian

D305. Comment noted. This comment pertains to the *Master Plan.*

D306. While this comment primarily pertains to the *Master Plan* rather than the DEIR, it should be noted that widening of Golf Club Drive is necessary for safety (i.e., emergency vehicles) as well as general access. No explanation is provided as to why the trip generation assumed for the garden is too high. A total of 8 trips per employee were assumed for the garden, or 64 daily trips as shown on page IV.G-13, Table IV.G-2. These trips include employees, associated persons such as delivery vehicles for supplies, and trips generated by persons picking up produce.

D307. Comment noted.

D308. Comment noted.

D309. This comment addresses the *Master Plan* rather than the DEIR. A designated trail is not proposed in this area.

Doug Landauer

D310. All user groups – hikers, bicyclists, and equestrians – were evaluated equally in the DEIR. Because of the identified impacts unique to specific users, mitigation measures did not always apply to all users. For example, speed

limit signage does not apply to hikers and equestrians as related to safety concerns.

David Silva, Green Party

D311. The type of operation of the garden does not relate to limitations imposed by soil type and drainage conditions as addressed in the Response to Comment No. D27.

D312. This comment applies to the *Master Plan* rather than the DEIR.

Robert Pollie

D313. Pedestrian safety regarding bicycle use is addressed on page IV.G-20 and IV.H-4 and 5. Erosion issues regarding bicycle use are addressed on pages IV.C-13 and IV.D-10. Wildlife impacts related to bicycle use are addressed on page IV.B-42 of the DEIR. Please refer to Response to Comment No. D128 regarding bicycle impacts on wildlife.

D314. Comment noted. Please refer to the Response to Comment No. D295.

Richard Schmale

D315. Please refer to page IV.F-12 of the DEIR regarding visual impacts of the garden as viewed from Golf Club Drive.

Jacquelyn Griffith

D316. Comment noted about the variety of users along Spring Trail. Even if Alternative A or B were selected regarding trails, a number of trails would be available for the variety of users mentioned without them being affected by horses or bicyclists. Given that wheelchair access is proposed for Spring Trail, it is true that wheelchair users could be affected by bicyclists or equestrians along Spring Trail under Alternative A. The City could decide to choose this option of the trail alternatives. The following sentence is added to the discussion under Impact SER-1 on page IV.H-5 of the DEIR, third paragraph:

> "As trail use increases, so does the potential for conflict. Conflicts on Spring Trail could occur for wheelchair users (given that wheelchair access is proposed at the Spring Street entrance) if Alternative A were selected which allows bicycle and equestrian use along this trail. Wheelchair users could feel intimidated by these

other users and are more restricted in their ability to move out of the way of bicyclists and equestrians as compared to non-wheelchair bound hikers."

The mitigation measures under Impact SER-1 would be adequate to mitigate the above potential impact.

In terms of trail materials, natural dirt trails are proposed throughout Pogonip. The impacts regarding horses that are discussed in this comment are not significant enough to warrant new or revised mitigation measures.

D317. Tree removal at the lime kilns is not proposed.

D318. These comments address the *Master Plan* rather than the DEIR.

D319. Mitigation Measure BIO-1b specifies measures to minimize impacts of the camp to kites; implementation of this measure will also minimize impacts to other wildlife species. Mitigation Measure BIO-1b specifies no overnight camping during March through August which is the breeding season for the kite. Refer to the first paragraph on page IV.B-28 regarding noise impacts on white-tailed kites, and page IV.B-42 of the DEIR regarding the impacts of use of the Outdoor Education Camp on foraging habitat.

Gillian Greensite

D320. Little quantitative analysis of the soil and biotic habitat effects of mountain bikes on area trails is available. The DEIR assessed impacts of mountain bikes on other local multi-use trail networks at a reconnaissance-level. Studies reviewed in the EIR process are summarized in Response to Comment No. D144. Refer to Response to Comment No. D8 regarding trail use and mitigation measures. With regard to enforcement of trail regulations, this responsibility would rest with Park Rangers. The DEIR recommends measures which may require an increased emphasis on enforcement than is presently the case in the Pogonip area. Safety is addressed under Impact TRANS-6 on page IV.G-19 of the DEIR.

Erik Schmidt

D321. Comment focuses primarily on the *Master Plan* and as such is noted.

D322. Comment focuses primarily on the *Master Plan* and as such is noted.

Terrence Willit & Jennifer Cross

D323. Comment focuses primarily on the *Master Plan* and as such is noted.

D324. Comment noted. The impact to 7.9 acres of prairie as well as additional acres for the Outdoor Education Camp (approximately one additional acre) would result in the modification of the site's soil resources, including arthropods and mycorrhizae, that are currently dependent on the prairie plant species. No additional mitigation measures would be necessary.

D325. This comment addresses the *Master Plan* rather than the DEIR.

D326. Comment noted.

D327. Please refer to the Response to Comment No. C12.

D328. Comment noted. Please see Response to Comment No. D125 regarding the cumulative impact analysis.

Celia Scott

D329. The following text is added to the DEIR as a new impact at the end of subsection IV.B on page IV.B-44.

> **"Impact BIO-4: The Fire Management Element of the *Draft Pogonip Master Plan* identifies fire management actions to reduce the fuel loads in the vicinity of structures (e.g. Clubhouse and other proposed facilities), along Pogonip property boundaries, and along service roads and specified trails (e.g. Fern Trail). Activities such as clearing and thinning understory, prescribed burns, mowing and grazing may affect biotic resources and wildlife habitat, depending upon the extent of the activity, timing, expected use by wildlife in the area, and presence of sensitive species. (S)**
>
> Within the Sycamore Grove Nature Area, the *Master Plan* recommends understory clearing to minimize illegal camping and reduce fire hazards. As most of the understory within this area is currently invasive, non-native species (e.g., periwinkle, English ivy), impacts to native botanical resources are not considered significant. Revegetation activities proposed for the Nature Area can be accomplished in a manner conducive to fire management such as

planting clumps of shrubs amid native perennial grasses and native riparian trees. A reduction in illegal activities in the Sycamore Grove area would benefit wildlife utilization of the areas, as the area is currently adversely affected by human debris and night-time human activities.

Management actions proposed along service roads and trails (e.g., Fern Trail understory clearing, replanting of low ignition grasses and mowing of the fuel break at the Lower Meadow Trail) may affect biotic resources if vegetation clearing is extensive. The replacement of non-native vegetation with native plant species such as perennial grasses would be a benefit to the areas botanical resources. The thinning of understory and tree pruning within woodlands may adversely affect wildlife utilization of these areas, depending upon the extent of vegetation removal and expected use of the area by wildlife.

Boundary management actions propose mowing grasses for a distance of 30 to 70 feet from the property line. Mowing of such areas is not expected to significantly impact botanical resources and may, over time, reduce the occurrence of non-native annual grasses, thus benefiting the area's botanical resources. The proposed thinning of understory vegetation within woodlands for a distance of 30 to 50 feet from the property line may adversely affect wildlife utilization of these areas, depending upon the extent of vegetation removal and expected use of the area by wildlife.

Prescribed burns in the coastal terrace prairie, when conducted in consultation with a biologist, can benefit the native species. As proposed in the *Pogonip Master Plan*, this work would be done in consultation with a biologist.

> Mitigation Measure BIO-4: Vegetation clearing for fuel management purposes should be done in a manner that maintains habitat features for wildlife and minimizes the introduction of invasive non-native plant species. Prior to vegetation clearing, a wildlife biologist should identify vegetation features to be retained within the clearance area, including snag trees that provide cavities for nesting birds, significant clumps of vegetation that provide cover for wildlife, and a proportion of downed woody debris that provides habitat for amphibians and other species. Vegetation clearing should be limited to the removal of

above-ground vegetation (tree limbs and shrub limbs). Ground scraping should be prohibited as this activity may encourage the growth of invasive, non-native plant species, such as French broom. Prescribed fire plans that involve burning near coastal terrace prairie containing sensitive plants or animals or grazing plans in these areas should be reviewed by CDFG and USFWS to ensure that impacts to listed plant and insect species are avoided and/or minimized. The City should consult with a biologist and entomologist regarding prescribed burns in these areas. (LTS)"

D330. The Draft EIR was not defined as either a Project EIR or a Program EIR. However, the California Environmental Quality Act (CEQA) requires the same contents for either EIR. The level of detail of analysis was based on the information contained in the *Draft Pogonip Master Plan*. As such, some elements such as the garden which is to include an Operations and Management Plan at a later date, include recommendations for mitigation measures to incorporate in that Plan. Many elements of the *Master Plan* include very specific mitigation measures that could be applied at the time of construction and operation. As either a Program or Project EIR, some components of the *Master Plan* may be subject to discretionary approval in the future and, as such, would require further environmental review at that time. If these components have been adequately evaluated as part of this DEIR, a Negative Declaration would be able to be issued for that component.

Peter Katzlberger

D331. Refer to the Response to Comment No. D30.

D332. See Response to Comment No. D46 regarding the revised acres of impact to the coastal terrace prairie from the garden. The use of the Lower Meadow as a foraging habitat for both pairs of kites come from direct observations in the field while conducting the wildlife surveys. In addition, the kites were observed foraging over the grasslands along the slope, adjacent to a small acacia grove where the Pogonip garden plans propose to put in an orchard and herb garden. The kites select this foraging area due to available prey. Please see additional Response to Comment No. D42.

D333. Refer to the Response to Comment No. D56.

D334. Please refer to the Response to Comment Nos. D34, D35 and D154 regarding the kite habitat and foraging. If mitigation measures were to be

developed to provide specific gardening plans and design suitable for the foraging kites, gardening activities would be limited to the non-reproductive season, August through the first part of February. Kites forage on a number of prey items but rely heavily on meadow voles (*Microtus califronicus*) and other small rodents. This would mean planting a cover grain or legume crop utilized by rodents and other prey items. It would also mean limitations on other activities such as weed control, harvesting, ground disturbance (tilling) and other human related activities during this period. The first year of a garden installation is the most difficult to predict, as nesting raptors, including kites, are likely to be disturbed by changes in the environment, especially during courting and while sitting on eggs.

D335. Regarding slopes at the proposed garden, refer to Response to Comment No. D61. Regarding comparison of potential erosion impacts from proposed garden operations and existing trail conditions, refer to Response to Comment No. D59.

D336. This comment represents the opinion of the commentor. The greenhouses have associated visual impacts due to existing visual conditions, the site visibility from public use areas, and the size and materials proposed for the greenhouses, as documented on page IV.F-12 of the DEIR.

D337. Refer to the Response to Comment No. 239 regarding municipal vs. on-site water sources. The elements evaluated in the DEIR were derived entirely from material provided in the *Draft Pogonip Master Plan.*

Mark Primack

D338. Grading of the golf course and installation of the irrigation system are acknowledged historical events that have shaped the Santa Margarita terraces at Pogonip. Since its installation, the irrigation system has been exposed in places by erosion and gully formation on the slopes below the Clubhouse above the proposed garden site, and at the locations of the garden site's proposed drainage features. In one location, above the proposed terrace permaculture and orchard sites, an active gully and soil pipe have developed in the area graded for the tee-off bench for Hole 3. The green for Hole 6 is now the location of a larger gully on the slope, approximately 100 yards to the east.

The wetland noted on the map for the proposed garden site may be a result of the green for Hole 3. A metallic number 3 is mounted on a wooden post on the wetland fringe. Perched rainfall runoff in the local shallow swale in which this wetland area sits is more likely to serve as the hydrologic source

for this wetland than the old irrigation system. Impermeable layers in the Santa Margarita formation and vestiges of the green's flat surface appear to locally perch seasonal rainwater. Simple water quality tests of mineral content and specific conductance at the old spring boxes in the limestone kiln area and at the wetland site could resolve this question.

Peter Scott

D339. The issue of bicycle use impacts on the physical and biological environments is addressed in subsections IV.B, IV.C, and IV.D of the DEIR and in response to comments herein. The sociological and psychological impacts of bicycle use are not required to be addressed by the California Environmental Quality Act.

D340. See Response to Comment No. D148.

Rick Gladstone

D341. Comment noted.

Ken Dickerson

D342. Comment noted. Please refer to Response to Comment No. D50 regarding design features of the garden.

Richard Schmale

D343. Views from Golf Club Drive are shown in Figures IV.F-4 and IV.F-5 of the DEIR. Visual impacts related to the garden and associated facilities are addressed on page IV.F-12 of the DEIR.

D344. Descriptions and locations of existing erosion problems are discussed in the "Setting" subsection of Sections IV.C and IV.D in the DEIR. Areas of potential future erosion are discussed on pages IV.C-11 through IV.C-18 of the DEIR. Active gullies are described in the descriptions of Spring Trail, Fern Trail, and in the vicinity of the proposed Pogonip garden site. Mapped landslides and seep areas are illustrated in Figure IV.C-1, "Existing Geology and Surface Hydrology Resources." Also refer to Response to Comment No. D338.

Steve Robins

D345. Comment noted.

Jacquey Griffith

D346. This comment addresses the *Draft Pogonip Master Plan.*

D347. Due to the limited equestrian use expected at Pogonip and the limited number of trails that would be open to equestrian use (under Alternative A or B), impacts associated with horse feces would be less than significant.

Steve Williams

D348. A Fire Management Plan is included as part of the *Draft Pogonip Master Plan.* In addition, the potential for fire hazards is evaluated under Impact SER-2 on page IV.H-6 of the DEIR.

Bruce Engehardt

D349. Impacts of multi-use Alternatives A and B are discussed on pages IV.C-13 through IV.C-16 of the DEIR and on pages IV.D-10 through IV.D-14.

D350. Comment noted. Please see Response to Comment No. D38 regarding the revised acres of impact to the coastal terrace prairie from the garden.

Robert Polly

D351. This comment addresses the *Draft Pogonip Master Plan.*

Jonathan Scheuer

D352. For discussion of the UCSC Farm and Garden Project, refer to Response to Comment No. D61.

A reduced garden site, which avoids areas of gully formation and soil piping, could be mitigated to a less-than-significant level. Refer to Response to Comment No. D70.

D353. Comment noted. There are many other raptors, besides the two pairs of nesting kites, which frequently utilize the Lower Main Meadow area for foraging, including a red-shouldered hawk, red-tailed hawk, American kestrel and barn owl.

D354. Comment noted.

Larry Moore

D355. This comment addresses the *Draft Pogonip Master Plan.*

Jim Moran

D356. Additional detail on slopes and soil depth should be addressed in the proposed Garden Operations and Management Plan called for in Mitigation GEO-1d.

Sally Ross

D357. Comment noted.

Chuck Beebe

D358. Refer to the Response to Comment No. D17 regarding Wilder Ranch information.

Jane Friedman

D359. This comment addresses the *Draft Pogonip Master Plan.*

Ali Edwards

D360. Comment noted.

Bob Culbertson

D361. Comment noted.

Celia Scott

D362. Please refer to the Response to Comment C26 regarding bicycle impacts on trail soils.

Robert Culbertson & Celia Scott

D363. Comment noted. Erosion resulting from recent heavy winters, including that of 1997-1998, is visible throughout the region on all kinds of trails, roads and slopes.

K. Beiers & Bob Culbertson

D364. Comment noted.

Liz Matoza, Amy Courtney, Shani O'Neill, Andrea Lopez

D365. These comments address the *Draft Pogonip Master Plan.*

Marlin Humble

D366. Comment noted. No proposals for poisoning rodents have been presented.

Gillian Greensite

D367. Comment noted. See Response to Comment No. C26 for a discussion of Wilder Ranch trail conditions and relevant management goals described in the *Draft Pogonip Master Plan* Trail Design Guidelines and trail management actions. Also refer to trail mitigation measures in Sections IV.C and IV.D of the DEIR.

Ed Davidson

D368. The eastern access road is addressed in the Response to Comment No. B3.

Chris Brewer

D369. Refer to the Response to Comment No. D34.

Karen Pushing

D370. Comment noted.

Barbara McCrary

D371. Comment noted.

Mark Michael

D372. The DEIR does not preclude the use of bicycles on proposed multi-use trails but recommends mitigation measures to ensure that environmental damage and conflicts with pedestrians do not result. Please refer to Sections IV.B, IV.C, IV.D, and IV.G of the DEIR.

Don Roth

D373. Comment noted.

Nadine Golden

D374. Any evaluation of soils and agricultural viability of the proposed Pogonip garden site should be based on soil and erosion conditions present on the site. Management of the site should be detailed in the Garden Operations and Management Plan. This Plan can note the potential increase in soil fertility.

Cathy Puccinelli

D375. Comment noted.

Stuart Howell, Woody Carroll, Sandy Henn

D376. These comments address the *Draft Pogonip Master Plan.* Sections IV.C and IV. D of the DEIR address potential erosion due to trail use.

David Carnaghe

D377. Additional archaeological and historical research is considered under Mitigation Measure ARCH-2a, page II-27 of the DEIR.

Patricia Dollar & D. Malkin

D378. Comment noted.

Michael Rotkin

D379. This comment addresses the *Draft Pogonip Master Plan.*

D380. Additional information on the existing conditions at the proposed garden site is discussed in Response to Comment No. D87. Development of greenhouses on sloping land will require grading of pads in the vicinity of active soil piping and seasonally saturated soils.

Issues of drainage management, remedial gully repair, road construction and greenhouse access are addressed in the DEIR in the Setting subsections of the Geology and Water Resource sections of the DEIR and more specifically on pages IV.C-11, IV.C-12, IV.D-8 and IV.D-9.

Response to Comment No. D27 discusses proposed garden activities on Pogonip and existing conditions on the UCSC farm and garden site. Mitigation Measure GEO-1d calls for a Garden Operations and Management Plan to be submitted and approved prior to site disturbance.

D381. Additional archaeological and historical research is considered under Mitigation Measure ARCH-2a, page II-27 of the DEIR.

D382. This comment addresses the *Draft Pogonip Master Plan.*

K. Beiers

D383. See Response to Comment No. D75 and Mitigation Measure GEO-1d. for Garden Operations and Management Plan components likely to be required by the City. No evaluation of pesticides on the Pogonip was completed as a part of the EIR. No reports of chemical spills, storage, or presence in aquatic habitat have been noted in previous studies. Pesticide use is not addressed in the *Draft Pogonip Master Plan.*

D384. Please refer to the Response to Comment D330.

D385. Additional archaeological and historical research is considered under Mitigation Measure ARCH-2a, page II-27 of the DEIR.

D386. This comment addresses the *Draft Pogonip Master Plan.*

D387. Comment noted.

D388. Seasonal limits on use are discussed in Mitigation Measures GEO-1b, GEO-1h, GEO-1n, and WAT-1b.

D389. Comment noted.

C. Mathews

D390. Comment noted.

D391. See Response to Comment No. D145.

D392. The issue of penalties for infractions of regulations is the responsibility of the City Parks and Recreation Department. Mitigation measures recommended in the DEIR are all considered reasonable and enforceable. Monitoring to ensure the implementation of mitigation measures is

addressed in the Mitigation Monitoring Program found in Chapter V of this FEIR Addendum.

Celia Scott

D393. Please refer to the Response to Comment C13 regarding estimated future use of Pogonip. Please refer to the Response to Comment No. D17 regarding Wilder Ranch.

D394. Please refer to the Response to Comment No. C15 regarding mitigation measures for specific trail alternatives.

D395. The proposed widening of Golf Club Drive extends between the railroad trestle and the access driveway serving the Lower Main Meadow area. Between the Clubhouse and the Lower Main Meadow, Golf Club Drive would be improved to a 12-foot wide driveway with turnouts every 400 feet. In addition, a gate would be located just north of the Lower Main Meadow access driveway which would restrict access to the upper section of Golf Club Drive to service vehicles. The gate would only be open for special events and to allow service vehicles and emergency vehicles access to the Clubhouse. Because use of the upper section of Golf Club Drive would be limited to special events and traffic flows during these periods would be predominately inbound prior to the event and predominately outbound after the event, widening the upper section of Golf Club Drive to provide two travel lanes is not required. See Response to Comment No. C33 for a discussion regarding existing vehicular volumes on Golf Club Drive and Response to Comment Nos. C35 and C19 regarding the proposed improvement to Golf Club Drive.

D396. See Response to Comment No. D146 for a discussion of multi-use trail conflicts and Response to Comment No. C36 for a discussion of mitigation monitoring.

D397. Any necessary widening of historic roads (i.e., Spring Trail, Rincon Trail) should occur in a manner that does not adversely affect their significant historic characteristics (see ARCH-3, page II-31 of the DEIR).

D398. See Response to Comment No. C31.

D399. See Response to Comment No. D329 regarding actions associated with the Fire Management Plan. Part of this comment addresses the *Draft Pogonip Master Plan.*

D400. As shown on page 2-7 of the Draft Pogonip Master Plan, the Outdoor Education Camp would be about 100 feet by 180 feet in dimension, or about 0.4 acres in size. Night lighting of the Outdoor Education Camp has not been proposed in the *Draft Pogonip Master Plan.* The issue of recycling receptacles is addressed on page IV.H-14 of the DEIR, under Mitigation Measure SER-6.

D401. Comment noted.

D402. Cost information regarding new facilities and mitigation measures address the *Draft Pogonip Master Plan* rather than the DEIR.

E. Schick

D403. See Response to Comment No. D239.

D404. This comment addresses the *Draft Pogonip Master Plan.*

M. Herrera

D405. Comment noted.

Chapter IV
REVISIONS TO THE DRAFT EIR

■ ■ ■

The following are text changes made to the DEIR, as addressed in Chapter III of this Addendum:

Page

I-7 Page I-7, Section 2 of the DEIR is amended to read as follows:

> "The U.S. Fish and Wildlife Service (USFWS) will review the project for potential impacts on Ohlone Tiger Beetle habitat in the Upper Main Meadow are and federally-listed plant species. The University of California, Santa Cruz (USSC) is a Responsible Agency with respect to subsequent approval of the short segment of trail or any other improvements related to Pogonip that occur on University of California property.

I-8 The following text is added to the list of concerns from NOP and scoping meeting comments, as stated on page I-8 of the DEIR:

- Nitrates from Pogonip garden and groundwater impacts.
- Need for a Pogonip-UCSC multi-use connector trail without such a trail impacting University lands or causing extensive construction and long-term maintenance enforcement costs to the University.
- Avoidance of identification of University parking lots in the Draft *Master Plan* as access to Pogonip facilities.
- Need for ADA accessible parking on Pogonip property.
- Avoidance of identification of Coolidge Drive overlook as a trailhead for Pogonip trails, or intersection of Rincon Road and Coolidge Drive as primary access point for Pogonip.

- Need to address relocatable University easement for an eastern access road through Pogonip, and how this road may be precluded by *Master Plan* elements.

II-4 Table II-1 is enclosed on the following page with edits to impacts and mitigations shown in underlining.

II-40 Table II-2 following (with edits shown by underling), addresses the level of impacts for topics analyzed in the DEIR before mitigation. This table was provided in the EIR Summary document but not in the main text of the Draft EIR and thus is attached herein for the reader's reference. While there may have been mitigation measures in mind when specific Pogonip features were sited, the EIR authors did identify additional impacts upon more detailed analysis and the need for new mitigation measures.

An error in Table II-2 has been corrected. The level of impact related to trails should be "Significant" under the topics of "Geology, Soils, and Seismicity" and "Water Resources". The garden would have significant impacts related to Transportation and Circulation due to traffic on deficient sections of Golf Club Drive as discussed under Impact TRANS-3 in the DEIR. The footnote regarding archaeological resources is amended as shown in Table II-2.

III-5 Figure III-1 on page III-5 of the DEIR should be corrected to show "Adopted" (vs. "Adoped" in the second box.

IV.A-5 The reference to the Greenbelt Overlay District on page IV.A-5, sixth paragraph should be deleted because this district expired in 1991, as follows:

~~The project site also falls within a Greenbelt Overlay District (GB-O). The purpose of this overlay district (where the underlying land is not already protected by General Plan, zoning, or other constraints on development) is to maintain essentially undeveloped lands until a time when urban expansion is necessary. Only land uses that are environmentally and visually compatible with the existing physical characteristics of the land, or which are permitted mitigated uses, are allowed.~~

Table II-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
A. LAND USE (Refer to pages IV.A-1 to IV.A-14)			
No impacts would occur related to land use.			
B. VEGETATION AND WILDLIFE (Refer to pages IV.B-1 to IV.B-43)			
BIO-1: Implementation of the *Draft Pogonip Master Plan* has the potential to impact populations of rare, threatened or endangered species. These species include those listed by either State or Federal agencies (e.g., CDFG and/or USFWS), species proposed for State or Federal listing, species recognized as State or Federal species of concern, or species considered locally rare or unique.	S	BIO-1a: To protect white-tailed kite habitat, the Pogonip garden site should be relocated to an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative. Adequate on-site alternative locations are not available without causing harm to equally or greater value habitat. The garden is considered by the City to be a key element of the *Pogonip Master Plan*. Without relocation of the garden, this impact remains significant and unavoidable. Other mitigation measures are recommended to avoid and/or minimize other biotic impacts. If the garden project is retained as an element of the *Pogonip Master Plan*, the following steps need to be implemented: 1) conduct a pre-construction survey to confirm whether or not the kites are nesting again in Pogonip and to confirm if the kites are using the same locality; 2) conduct a small mammal population study in the proposed garden area and in other grasslands in order to evaluate the potential foraging habitat in other areas; 3) develop specific mitigation measure to avoid take on reproductive habitat (this includes the foraging area supporting the nest) and to compensate for habitat loss. This includes reviewing the proposed Pogonip Garden's Operations and Management Plans in order to develop specific mitigation measures for kites and other wildlife; 4) during the development of the mitigation measures surrounding the Garden's Operations and Management Plans, conduct formal consultations with both agencies responsible for overseeing protection of the nesting habitat of kites (CDFG and USFWS).	SU

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-1 *continued*		BIO-1b: Activities associated with the Outdoor Education Camp should be limited to passive educational activities with low noise levels, particularly during the the months of March through August, the breeding season of the white-tailed kite. Night-lighting and overnight camping should not be allowed during the kite's breeding season. All group activities should be directed away from the kite nesting area and education groups should be informed of these use restrictions.	LTS
		BIO-1c: Development of the Sycamore Grove Nature Area should include all of the following combination of measures to avoid impacts to sensitive wildlife species: • Any site grading should be conducted in a manner that avoids impact to migrating western pond turtles (assuming turtles utilize the area). • Construction activities should be scheduled outside of the turtle's movement periods (between September and May), assuming turtles utilize the area. • If construction were to occur between June and September, focused surveys for turtles should be conducted by a qualified biologist to determine the presence or absence of this species. • If the surveys show that the species is present, construction activities should be modified to avoid impacts (i.e., change construction window). • Fire management activities that include removal of understory vegetation should be coordinated with CDFG and/or a qualified biologist such that impacts to biotic resources are avoided or minimized.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-1 *continued*	S	BIO-1d: Assuming that California red-legged frogs utilize the Sycamore Grove portion of Pogonip, park visitors should be informed of the sensitive status of the frog. Interpretive signs, describing the natural history, protective status and restrictions on collection of adult frogs and tadpoles, should be installed within the nature area. Focused species surveys should be conducted prior to any construction activity in the Sycamore Grove area to ascertain presence or absence of the species within Pogonip.	LTS
	S	BIO-1e: Development of the Sycamore Grove Nature Area should avoid removal of native riparian trees that may impact the yellow warbler. If large native trees, or any size willows, are to be removed, focused surveys for yellow warblers should be conducted. If yellow warblers are found, suitable revegetation of riparian habitat should be implemented. Revegetation should include a minimum 1:1 replacement ratio (i.e., acre for acre) to compensate for impacts to warbler habitat. The revegetation should occur within a suitable area of Sycamore Grove and the revegetation plan should be reviewed and approved by California Department of Fish and Game prior to removal of any native trees. The planting plan should be consistent with guidelines in the *Draft Fire Management Element* of the *Draft Pogonip Master Plan*.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-1 *continued*	S	BIO-1f: The Prairie Trail, in the vicinity of the known Ohlone tiger beetle colony, should be monitored to ensure that continued pedestrian use of the trail is not impacting the beetle. If the beetle becomes listed by the USFWS, the City should confer with the USFWS on grassland management techniques to preserve and enhance the area for the long-term protection of the species. Grassland management actions, such as prescribed fire and/or selective grazing, should be implemented, in consultation with USFWS. The City may be required to obtain a Section 10(a)(1)(b) permit, pursuant to the Endangered Species Act (ESA), for grassland management actions if the beetle becomes federally listed as threatened or endangered. Use of prescribed fires is consistent with the *Draft Fire Management Element*. (All alternatives)**	LTS
	S	BIO-1g: Focused presence or absence surveys for Ohlone tiger beetles should be conducted in the area proposed for the Harvey West Trail. This trail should be designed to avoid impacts to Ohlone tiger beetles, if they are found to be present. As discussed above, if the beetle becomes federally listed, a consultation with the U.S. Fish and Wildlife Service should be conducted, pursuant to the Endangered Species Act (ESA). Management actions within the Harvey West Trail area, such as grazing and/or prescribed fire, may require permitting from USFWS. (All alternatives)	LTS

**Text in parentheses ( ) at the end of mitigation measures related to trails identify if the measure applies to Alternative A, B, or C for trails or All alternatives.

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-1 *continued*	S	BIO-1h: The rare plant species within the prairie habitat near the Fern Trail (i.e., Haunted Meadow near junction of Rincon, Spring and Fern trails), near the Brayshaw Trail (junction of Brayshaw Trail and Spring Trail) and in prairie and woodland habitat along the Pogonip Creek Trail should be protected from potential direct and/or indirect trail user impacts by a combination of all the following measures: • A two-rail fence should be installed along the edge of the Spring Trail next to Haunted Meadow and at the junction with the Brayshaw Trail to preclude off-trail uses in these meadows. • Fencing should be installed prior to or concurrent with area trail improvements. • Interpretive signs should be provided describing the plants' status and need for protective measures. • The re-routing of the Fern Trail out of Haunted Meadow should be implemented concurrent with the fencing. • If the emergency vehicle access near Haunted Meadow is necessary, a gate would be needed at the north end of the fencing. Vehicle access and horse patrols through the prairies should be limited to the dry season when the potential for soil compaction is least. (All alternatives)	LTS
	S	BIO-1i: As presented in the *Draft Pogonip Master Plan*, habitats supporting rare species (i.e., coastal terrace prairie and scattered occurrences within other habitats) within Pogonip require active resource management. Since the prairie habitat near Fern Trail, the Pogonip Creek Nature Trail and Brayshaw Trail supports known occurrences of rare plant species, these are high priority areas for management. The following combination of steps should be implemented:	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-1 *continued*		• Prior to any trail improvements near these areas, prairie management plans should be developed for these prairie areas. The plan(s) should specify measures to preserve and promote the occurrence of the rare plant species, such as selective grazing, prescribed fire and/or seasonal mowing. This action is consistent with the *Draft Fire Management Element* of the *Draft Pogonip Master Plan.* • The plan(s) should identify the current distribution and population size of the rare plants within the prairie and evaluate potential changes in such distribution with historical records (as available). • The plan(s) should specify a goal of preserving the extant populations and, over the next five years of active management, population size and distribution should expand by a minimum average of 20 percent. • The plan(s) should specify monitoring and reporting methodologies such that the effectiveness of the management techniques can be evaluated. Contingency measures to be implemented if management techniques fail to meet the stated performance standards should also be specified; such measures may include changes in management actions, emergency seed collection or other measures as approved by CDFG and USFWS. • The City should obtain an agreement with CDFG on management actions affecting populations of San Francisco popcorn flower (a State-listed species) and conduct voluntary consultation with USFWS and CDFG on management actions affecting populations of robust spineflower, Santa Cruz clover and Gairdner's yampah. • The prairie management plan(s) should be reviewed and approved by USFWS and CDFG prior to implementation of management actions.	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-1 *continued*		• Selected grassland management techniques should be implemented within one year of trail changes or improvements. • A program to monitor the status of the rare plant species and the effects of the selected grassland management actions should be developed as part of the grassland management program. Results of the monitoring should be made available for regulatory agency review. (All alternatives)	
	S	BIO-1j: The UCSC Connector Trail should be aligned to avoid impacting existing wood rat nests. The proposed trail layout near the Pogonip - UCSC boundary should re-routed a short distance upslope to avoid the nests sites in this area. The final trail alignment should be field-checked by a qualified wildlife biologist prior to construction to document that trail construction will not impact the nests. (Alternatives A and B)	LTS
BIO-2. Implementation of the *Draft Pogonip Master Plan* has the potential to impact habitats (i.e., riparian woodland, wetland habitat and coastal terrace prairie) considered sensitive by either State or Federal agencies (e.g., CDFG and/or USFWS) and/or City of Santa Cruz.	S	BIO-2a: At the Sycamore Grove Nature Area, invasive, non-native vegetation (especially the non-native ivy and periwinkle which are low growing ground covers) should be removed and revegetation of native plants, such as willows and blackberry, should occur.	LTS
	S	BIO-2b: Drainage from the Lower Meadow parking lot and entrance road should be directed away from the nearby intermittent drainage way and into a grassy drainage swale. The grassy swale would aid in the entrapment and filtering of road/parking lot runoff (including oils and greases) and reduce the potential for such materials to enter the natural watercourse. Design of the grassy drainage swale (including its size and features) should be completed or undertaken by a qualified engineer.	LTS
	S	BIO-2c: The following combination of measures should be implemented for the Lower Main Meadow area. When alternatives are appropriate to specific measures such as relocation, these are specified.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-2 *continued*		• The Pogonip garden, Lower Meadow parking lot and Outdoor Education Camp should collectively be re-designed to avoid or reduce their combined impact to coastal terrace prairie habitat. Avoidance of impacts may be possible by placing all three facilities within the non-native grassland in the easternmost portion of the Lower Main Meadow, as presented in the Alternatives addressed in Chapter V of the EIR. • If avoidance of impacts is not deemed feasible for the Pogonip garden, Lower Meadow parking lot or Outdoor Education Camp, re-creation and/or restoration of other grassland on Pogonip would be a feasible mitigation strategy. For the Pogonip garden facility, approximately 14 acres of existing non-native grassland or degraded coastal terrace prairie within Pogonip could be re-created and/or restored. Approximately 2.0 acres would be necessary to mitigate impacts from the Lower Meadow parking lot and the Outdoor Education Camp. Grasslands that could be considered for this mitigation action are located near Spring Trail, near Fern Trail and the grassland near the ranger office. A more detailed analysis of these potential mitigation sites, in addition to the development and implementation of a detailed prairie mitigation plan, would be necessary to mitigate these impacts to a less-than-significant level if this alternative mitigation measure were selected.	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-2 *continued*		• Prior to implementation of the *Draft Pogonip Master Plan's* proposed improvements (i.e., parking lot, Outdoor Education Camp or Pogonip garden facility), the prairie management plan(s) should be developed for the preserved prairie areas within Pogonip. The plan(s) should specify measures to preserve and promote the occurrence of the native coastal prairie species, including revegetation actions (i.e., seeding, plantings) and management actions (i.e., selective grazing, prescribed fire and/or seasonal mowing). The plan(s) should identify the current diversity and density of native prairie species within the mitigation areas and specify a performance standard for suitable mitigation (i.e., increase diversity and density of native prairie species by 50 percent within five years). The plan(s) should specify monitoring and reporting methodologies such that the effectiveness of the prairie mitigation techniques can be evaluated. • Contingency measures to be implemented if techniques fail to meet the stated performance standards should also be specified. Such measures may include changes in management actions, additional seed collection, or other measures as approved by CDFG and USFWS. • The City should obtain approval of the mitigation plan(s) by USFWS and CDFG prior to implementation of the Lower Main Meadow improvements. • Selected grassland mitigation techniques should be implemented within one year of implementation of any Lower Main Meadow improvements. • A program to monitor the status of the prairie mitigation(s) and the effects of the selected prairie management actions should be developed as part of the mitigation plan(s) program. The results of the monitoring should be submitted to regulatory agency personnel for review.	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-2 *continued*	S	BIO-2d: The following combination of measures should be implemented as related to the Pogonip garden area if the Pogonip garden is not relocated: • The location of the wetland should be determined prior to finalization of the Pogonip garden plan and a wetland delineation conducted pursuant to U.S. Army Corps of Engineers criteria. • Assuming direct impacts to the wetland are avoided, the Pogonip garden facilities should be re-designed to avoid indirect impacts from adjacent Pogonip garden activities. • Intensive Pogonip garden activities, such as row crop cultivation, should be located 100 feet from the outside edge of the wetland. • Perennial crops such as herbs or other crops that do not involve annual or seasonal soil cultivation could be allowed in the area 50 to 100 feet from the outside edge of the wetland. • A buffer zone, comprised of native grasses and forbs should be maintained between one and 50 feet from the outside edge of the wetland.	LTS
	S	BIO-2e. The City should select trail alignments that avoid impacts to coastal terrace prairie. If avoidance is not feasible in some locations, impacts should be reduced by placing trails in areas with the least amount of native grasses and forbs. If impacts to prairie habitat still occur, the City should implement revegetation actions along the trail to compensate for the removal of habitat. Trail cuts should be revegetated with site-obtained grass and forb species. (All alternatives)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-2 *continued*		BIO-2f. The City should redesign and re-construct protective fencing around the spring along the Spring Trail, as existing fencing is not adequate to protect the wetland resources. Fencing should surround the wetland area and include interpretive signs notifying park users to stay out of the spring area to protect this sensitive feature.	LTS
BIO-3: Implementation of the *Draft Pogonip Master Plan* has the potential to impact wildlife utilization of Pogonip and wildlife movement corridors within and adjacent to Pogonip lands. However, there is some evidence that areas open to bicyclists result in a decrease in both the average number of wildlife species sighted and number of wildlife sightings (activity levels) from the "Wildlife Monitoring During the Bicycle Trial Period at Blue Sky Ecological Reserve" (Patton, 1995). In addition, incidental occurrences of bicycle, road-killed amphibians and reptiles have been observed in other parks on trails that are open to bikes. It can be assumed that fast-moving horses would have the same effect as bicyclists. It is assumed that slow moving (walking) horses are likely to interface with wildlife in ways more similarly to pedestrians, except for wildlife interactions (i.e. Ohlone tiger beetle burrows) where trail compaction and erosion are an issue.	S	BIO-3: The following combination of mitigation measures should be implemented to avoid, reduce or compensate for impacts to wildlife utilization and/or wildlife movement in and through the Pogonip. • Focused nesting surveys should be conducted for nesting barn owls near the Clubhouse. If nesting is observed, construction activities should be timed to avoid impacting nesting activity (i.e., schedule construction after young have fledged). • To avoid and/or reduce impacts to denning bobcats, the City should take steps to ensure that the Harvey West, Lookout and Pogonip Creek trails are used for pedestrian use only, as designated in the *Draft Pogonip Master Plan*. Any illegal bicycle or equestrian use of these trails should be monitored and mitigation measures developed and implemented, if necessary, to reduce impacts to bobcats. • Signs should be installed notifying park visitors that dogs are required on leash at all times. Due to the higher sensitivity of the Pogonip Creek, Lookout and Harvey West trail areas for wildlife, dogs should be prohibited from these trails. • More vigorous enforcement of the dog leash law by rangers should occur to avoid and reduce impacts to wildlife from unleashed dogs.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-3 *continued*		• Monitoring of dog usage should occur for the first two years after Master Plan adoption, and the policy regarding dogs should be amended if necessary. If the presence of unleashed dogs increases, other measures may be necessary such as an outright ban on dogs within Pogonip. • A buffer zone measuring at least 50 feet outward from the tree dripline should be established between the Pogonip garden facilities and the wooded drainage as shown in Figure IV.B-3. The buffer would allow for a wider corridor for wildlife movement through the site. Additionally, the gap between the deer fencing along the access road should be widened to a minimum of 100 feet in width. Any drainage structure should be located out of this wildlife movement corridor (see Figure IV.B-3). • Ranger staff should routinely patrol Pogonip trails and cite illegal bicycle and equestrian users on all applicable trails. Ranger staff should maintain a log of citations and monitor trails for evidence of unauthorized use. This measure would be in conjunction with measures identified in Mitigation Measure TRANS-6. (All alternatives)	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
BIO-4: The Fire Management Element of the *Draft Pogonip Master Plan* identifies fire management actions to reduce the fuel loads in the vicinity of structures (e.g. Clubhouse and other proposed facilities), along Pogonip property boundaries, and along service roads and specified trails (e.g. Fern Trail). Activities such as clearing and thinning understory, prescribed burns, mowing and grazing may affect biotic resources and wildlife habitat, depending upon the extent of the activity, timing, expected use by wildlife in the area, and presence of sensitive species.	S	BIO-4: Vegetation clearing for fuel management purposes should be done in a manner that maintains habitat features for wildlife and minimizes the introduction of invasive non-native plant species. Prior to vegetation clearing, a wildlife biologist should identify vegetation features to be retained within the clearance area, including snag trees that provide cavities for nesting birds, significant clumps of vegetation that provide cover for wildlife, and a proportion of downed woody debris that provides habitat for amphibians and other species. Vegetation clearing should be limited to the removal of above-ground vegetation (tree limbs and shrub limbs). Ground scraping should be prohibited as this activity may encourage the growth of invasive, non-native plant species, such as French broom. Prescribed fire plans that involve burning near coastal terrace prairie containing sensitive plants or animals or grazing plans in these areas should be reviewed by CDFG and USFWS to ensure that impacts to listed plant and insect species are avoided and/or minimized. The City should consult with a biologist and entomologist regarding prescribed burns in these areas.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
C. GEOLOGY, SOILS AND SEISMICITY (Refer to pages IV.E-1 to IV.E-21)			
GEO-1: New developed features that would be added to the Pogonip site have the potential to alter landforms and to create a substantial increase in erosion. Slope instability may also result from such features.	S	GEO-1a: To reduce the likelihood of excessive erosion, severe gully advancement, and slope instability, the Pogonip garden should be ~~sited at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V~~reduced in acreage to avoid areas of slopes, gullies, soil pipes, seeps and perched shallow groundwater. In general, the garden site as proposed in the *Draft Pogonip Master Plan* would be reduced to exclude the following areas from cultivation of any kind: area of headcutting to the north of the ravine up to the existing access road; most of the area of the northwest of the existing access road; slope areas of 15 percent or greater, and 50-foot setbacks from slope areas. Prior to approval of the Garden Operations and Management Plan, a site specific soils analysis, slope evaluation and a hydrogeologic investigation should be conducted by a qualified hydrologist/geologist to determine the extent of these conditions and to ensure adequate buffers are provided. A site specific hydro-geologic analysis should also be undertaken to investigate the proposed site for the greenhouses. If the site proposed in the *Draft Pogonip Master Plan* is not deemed appropriate, the greenhouses should be relocated to the southern side of the existing access road, at the eastern side of the Lower Main Meadow. Use of the access road during wet conditions should be limited. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. ~~Because the garden is considered a key element of the project, the infeasibility of this mitigation would cause this impact to remain significant and unavoidable.~~ The following measures are recommended to further reduce or avoid impacts.	~~SU~~LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	GEO-1b: Use of the Outdoor Education Camp should be conducted during the periods of low rainfall, particularly summer and fall (dry) season. Use should be curtailed during winter and spring, during periods of rain and as the site dries out in the spring to minimize soil impacts. It would be advisable to institute a rain dependent closure policy, akin to wet conditions restrictions on area playing fields, to limit erosion, soil compaction, and disturbance of local vegetation.	LTS
	S	GEO-1c: To reduce impacts from site use of the Outdoor Education Camp, erosion control features such as vegetated buffer strips, gravel walkways, and rock filled ditches should be sited in ways that reduce erosion. Tent platforms or other similar structures should be used for overnight camping to limit vegetation trampling and compaction of soils. The *Draft Pogonip Master Plan* should include guidelines to support runoff management through the use of pervious surfaces, vegetative buffers and other similar features that would reduce potential erosion impacts.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	GEO-1d: ~~In the proposed Pogonip Garden site, BMPs such as contour bedding, winter cover cropping, and increased widths for vegetated buffers along cultivated fields and adjacent slopes should be implemented to reduce impacts on the terrace formation.~~ The Pogonip Garden should develop a Garden Operations and Management Plan which identifies and relies upon Best Management Practices appropriate for seep-influenced slopes and perched groundwater conditions in the Santa Margarita formation to mitigate potential impacts on soils and the underlying geologic formation. The Operations and Management Plan should describe management of runoff, sediment and existing erosion conditions on-site. The Operations and Management Plan should also describe maintenance of facilities and strategies for storm damage response and remedial gully repair techniques. BMP's for this site should be based on feasibility assessments and recommendations developed by qualified erosion control specialists, hydrologists, or geotechnical experts familiar with design and operation of agricultural activities in sandy soils. The following language should be added to the Pogonip Garden Operations and Management Plan: • *Design of the Pogonip garden plots should include a minimum 30-foot vegetated buffer from the cultivated field edge to the break in the adjacent slope and the existing on-site wetlands. This buffer would serve to separate actively-tilled soils and the steeper soil units found on the 30-50 percent slopes downgradient from both primary Pogonip garden plots (north and south row crop areas). The buffer would also protect seasonal wetlands from inputs of agricultural runoff and sediments.*	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	• *Within orchard lands, efforts should be made to minimize the disturbance of soils and vegetation beneath orchard trees to reduce potential erosion and gully formation.* • *Terrace gardening, if necessary for permaculture and herb plots, should minimize surface disturbance and retain native vegetation cover to the maximum extent feasible to reduce erosion and potential instability on slopes. Constructed diversion berms should be minimized to reduce soil disturbance on slopes with 16-30 percent grades.* • *Disturbance to mapped seeps and springs on the slopes above the Pogonip garden access road and below the Pogonip Clubhouse should be avoided to minimize erosion of persistently wet soils.* • *Future plans for drainage features, gully repair and erosion control should be reviewed by qualified professionals. Drainage plans should also include regularly cleaned sediment basins, to minimize soil loss off the middle terrace and to reduce downstream sedimentation impacts.*	LTS
		GEO-1e: Mitigation for the unstable conditions in the existing dirt (and proposed Pogonip garden access) road off Golf Club Drive requires engineering of a more stable roadbed, with provisions for high soil moisture and drainage. Features for surface and subsurface runoff should include adequate culvert capacity or an "at grade" swale crossing at the intersection with the existing wetland swale on-site. Additional measures, such as a compacted gravel roadbed or a paved road surface, may be necessary following site specific investigations of wet season soil conditions.	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	GEO-1f: The location and design of the Pogonip garden's drainage features would determine their effectiveness in controlling runoff and sediment transport off the Pogonip garden site. As proposed, no details or specifications for critical drainage features have been provided. Sediment basins upstream of the proposed drainage features would be necessary to assure that sedimentation impacts to on-site drainage features and downstream wetlands are minimized. As proposed, generalized drainage features are located to release runoff to slopes ranging from 15 to 50 percent directly into or in the vicinity of active gullies.	LTS
	S	GEO-1g: Construction impacts of the garden structures, parking area and ancillary facilities would be mitigated by adherence to local erosion control and drainage standards and monitoring of erosion conditions by a qualified erosion control specialist.	LTS
	S	GEO-1h: Winter season/wet condition soil disturbance should be avoided in the Pogonip garden area. Active maintenance of erosion control features and sediment basins should occur year-round during periods of storms.	LTS
	S	GEO-1i: The most effective mitigation for the potential increase in erosion of the surface of the service roads is annual cleaning and rebuilding of waterbars, dip-swales, and other roadway and trail drainage features. By maintaining runoff control features each year, preferably in the fall, the community gains the assurance that impacts of trail use during the dry season will be addressed prior to the onset of erosion inducing rainfall. (All alternatives)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	GEO-1j: Waterbars should be constructed of materials other than locally available crushed rock, which has limited compaction strength and effectiveness under heavy traffic loads. For the historic service roads, native fine grained, compacted roadbed material would serve as a sufficient waterbar material. Shallow excavation of the roadbed on the uphill side of the waterbar to be built would supply material for the bar, direct much of the erosive flow off the trail, and lengthen the lifespan and effectiveness of the waterbar. The use of flexible rubber waterbars, placed in timber or concrete footings across high use or steep trail segments, would provide critical runoff management while withstanding consistent impacts of pedestrian, equestrian, and mountain bike users. (All alternatives)	LTS
	S	GEO-1k: Outsloping of existing service roadway surfaces to shed water in a dispersed manner would reduce high-energy runoff from potentially erosive and/or unstable steep slopes and existing gullies. Where this is not feasible, inside ditches should be rock-filled and maintained to move stormwater while minimizing erosion and minor slope failures in roadcuts. (All alternatives)	LTS
	S	GEO-1l: Limitations on multi-use traffic volumes would serve to minimize multi-use trail impacts. This may be realized by individually reviewing trail use permits for special events. (All alternatives)	LTS
	S	GEO-1m: Additional detail should be provided during the selection process for the new trail routes and prior to any new trail construction. This detail would include site-specific construction techniques and other mitigation measures to be utilized in particularly steep areas requiring slope cuts and at stream and wetland crossings. Prior to the construction of new trails, trail design plans, construction details, and an erosion control plan should be submitted for review by City staff and the City Council prior to approval and construction. (Alternatives A and B)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	GEO-1n: In all trail alignments, limits on wet season should be imposed to reduce impacts to local soil resources and slope stability. (All alternatives)	LTS
	S	GEO-1o: In the case of the proposed new trail alignments where moist soils, surface ponding, slow drainage, and other problematic trail maintenance conditions occur, additional construction standards may be necessary. Measures such as surfacing problem areas with locally-derived, crushed rock should be established to add structure to the new trail beds, while adding to the trail surface resistance to downslope, mountain bike, brake skidding and steep slope equestrian impacts. Trail surfacing should be evaluated based on post-construction conditions and re-evaluated periodically following actual use. (Alternatives A and B)	LTS
	S	GEO-1p: In all multi-use trail alternatives, increased signage and speed control features should be established to reduce the overall impact of trail use by reducing trail widening at points of user interface, and on turns where users may drift off designated trails. (Alternatives A and B)	LTS
	S	GEO-1q: Fencing should be constructed as needed to limit trail cutoffs and to limit potential adverse impacts associated with vegetation trampling and excessively steep, unmaintained informal trails. (All alternatives)	LTS
	S	GEO-1r: Impacts in the vicinity of the historic sites and features should be mitigated by trail design and site-appropriate erosion control treatments. For example, trails should not be routed where rockfall or other instability hazard during rainfall or earthquake events could harm trail users. (All alternatives)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*	S	GEO-1s: Reduction of the continuing potential geologic hazards associated with the steep quarry faces should be accomplished through a combination of exclusionary fencing, signage, and seasonal closures of the potentially hazardous areas.	LTS
	S	GEO-1t: Changes in runoff and potential erosion should be mitigated through the minimization of impervious surfaces and the use of vegetated buffers and swales adjacent to event grounds, roadways and parking areas. The City of Santa Cruz should review specific project plans and require BMPs to minimize increased runoff volumes and velocities, and to reduce the likelihood of erosion.	LTS
	S	GEO-1u: Construction impacts of ancillary Pogonip garden facilities, Upper and Lower Parking areas, caretaker facilities, the Clubhouse rehabilitation, and the Outdoor Education Camp should be mitigated by adherence to City of Santa Cruz erosion control standards and monitoring of construction and erosion control efforts by certified erosion control specialist or registered engineer and/or geologist.	LTS
D. WATER RESOURCES (Refer to pages IV.D-1 to IV.D-19)			
WAT-1: New developed features would be added to the Pogonip site that could result in substantial degradation of water quality (including siltation from erosion).	S	WAT-1a: ~~To reduce water quality impacts, the Pogonip garden should be sited at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. Because the garden is considered a key element of the project, the following measure is recommended to further reduce this impact.~~ To mitigate potential water quality impacts, the Pogonip Garden should prepare an Operations and Management Plan. The Management Plan should include mitigation measures and BMP's to reduce the water quality impacts. The following measures are suggested:	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
WAT-1 *continued*	S	• The actively tilled fields should be reduced in scale such that a vegetated buffer of at least 30 feet separates plowed areas from slopes greater than 10 percent and active gully headcuts at the top of the drainage corridor that bisects proposed Pogonip garden plots. Drainage structures, gully treatments, and Pogonip garden plot layout should be developed in coordination with knowledgeable agricultural planners such as staff of the Natural Resource Conservation Service (NRCS), Santa Cruz County Agricultural Commission, and UC Agricultural Extension Service. The farm operations and management plan should be reviewed and accepted by knowledgeable erosion control and/or geotechnical specialists familiar with local conditions. This plan should also be approved by the City prior to development of the site.	LTS
		WAT-1b: To reduce trail-related impacts, voluntary seasonal trail closures should be posted with on-site signage at the Parks and Recreation Department, and through public notices in local media. Wet season trail closures should be implemented to minimize adverse impacts to water quality and reduce trail maintenance requirements. Seasonal closures would likely be more effective than daily closures due to the different trail moisture conditions likely to be encountered in the variable terrain. In all trail alignments and trail use alternatives, existing and proposed, limits on wet season use would reduce impacts to local soil and water resources. (All alternatives)	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
WAT-1 *continued*	S	WAT-1c: In both multi-use trail alternatives, increased signage and speed control features should be implemented to reduce overall impacts of trail use, by reducing trail widening at points of user interface, and on turns where users may drift off designated trails. Unauthorized access by mountain bikes and horses on single track pedestrian routes should be monitored to reduce the potential for trail widening and erosion. (Alternatives A and B)	LTS
	S	WAT-1d: Drainage structures such as waterbars, ditches and culverts should be cleared and maintained prior to each rainy season. This measure applies to all trail alternatives, including existing use and proposed multi-use alignments. Leveling the low duff/soil berm that develops on the downslope side of pedestrian trails would also reduce erosion and sedimentation. Drainage features should be maintained to keep trails drier, limit standing water, and disperse erosive stormwater flow over wider areas, thereby reducing the volume and velocity of trail runoff at any given point in the trail network. (All alternatives)	LTS
	S	WAT-1e: In the case of the proposed new multi-use trail alignments, construction specifications should be developed by trail designers with practical experience in the region and field fit to site-specific conditions. Trail alignments should be developed to minimize gradients to 12 percent or less. Where feasible, multi-use trails should be designed to have less than 8 percent grade. Steeper gradient informal trails should be obliterated and user traffic should be directed to maintained trails through the use of brush piles, downed trees, and, if necessary, fences. (Alternatives A and B)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
WAT-1 *continued*	S	WAT-1f: Specifications for creek crossings and grading on steep slopes should be developed in the field by those familiar with the episodic nature of winter storms and slope instability in the Coast Range. Slope cuts should be minimized, to the extent feasible, and slope fills for maintaining trail widths should be avoided, due to the inevitable disturbance of the fill matrix under equestrian and mountain-bike use. Overall trail widths should be minimized on slopes in excess of 30 percent to reduce the potential for slope failure and erosion. (All alternatives)	LTS
	S	WAT-1g: On steeper slopes (i.e., those slopes greater than 30 percent), slope cuts should be located with regard to potential slope instability, existing landslides and slope failures, as well as user safety and sight lines. In general, narrower trails reduce slope disturbance and changes in runoff patterns that may substantially impact local surface water quality in the event of trail degradation or slope failures. (All alternatives)	LTS
	S	WAT-1h: Fencing should be installed at specific locations as needed, to limit trail cutoffs and redundant routes and to limit the potential adverse impacts associated with excessively steep, unmaintained informal trails. (All alternatives)	LTS
	S	WAT-1i: Existing informal and unauthorized trails should be obliterated, to the extent feasible, to focus user traffic on maintained trails. (All alternatives)	LTS
	S	WAT-1j: Overhanging limbs, trailside brush, and downed logs should be cleared from multi-use trails to minimize informal trail bypasses, pullouts and cutoffs that promote trail widening, vegetation trampling and soil disturbance. (Alternatives A and B)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
WAT-1 *continued*	S	WAT-1k: A sustained maintenance program should be established to include the commitment of regular budget allocations and provision for contingency funds to rehabilitate trails following episodes of flooding, landsliding, and other disturbances typically associated with the Santa Cruz Mountains. (All alternatives)	LTS
	S	WAT-1l: Re-routing of Fern Trail to minimize trail impacts to wet meadow and native grasslands should be conducted with due consideration to the active gulleying and slope failure occurring immediately downslope in the Santa Margarita formation. (All alternatives)	LTS
	S	WAT-1m: Prior to construction of the UCSC Connector Trail, either route requires additional site inspection and trail design. The proposed trail grade should not exceed 12 percent and proposed trail widths should be approximately four to six feet within Pogonip. Due to the steep terrain, trail construction would require excavation of a cut face on slopes in exceedance of 40 percent. Maintaining drainage and minimizing trail widening due to traffic passing in different directions would be critical for the long term viability of either connector route. Well-placed pullouts, or passing areas, should also be provided to minimize user conflicts and informal trail widening. (Alternatives A and B)	LTS
	S	WAT-1n: Periodic sweeping of paved surfaces (e.g., parking areas) should be conducted during the summer and fall to reduce contaminated soil particles and animal wastes, thus reducing the first flush of urban runoff pollution in the rainy season from impervious surfaces.	LTS
	S	WAT-1o: Storage of manure, compost and nitrate rich materials to be used in the Pogonip garden should be undertaken to minimize leaching to groundwater by placement on impervious surfaces and covering of stockpiles during the rainy season.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
WAT-1 *continued*	S	WAT-1p: Water conservation practices in the Pogonip garden and stormwater runoff BMP techniques should be implemented to mitigate potential adverse impacts associated with use of treated municipal water for irrigation on downstream wetland resources.	LTS
	S	WAT-1q: Local erosion control and design review standards should be met to minimize construction impacts from ancillary facilities associated with the Pogonip garden, Outdoor Education Camp, and maintenance and support facilities.	LTS
	S	WAT-1r: Erosion control features should be constructed to minimize pedestrian use impacts associated with the Outdoor Education Camp. Trails and walkways on steep slopes should be avoided in these same areas. At the Outdoor Education Camp, tent platforms or other stable, well drained designated campsites should be used. Runoff management through the use of pervious surfaces, vegetative buffers and other similar features should be implemented to reduce stormwater impacts.	LTS
	S	WAT-1s: In sections of Brayshaw Trail that exceed 12 percent grade, the road surface should be paved and drainage should be managed to reduce persistent turbidity and maintain the integrity of the saddleback ridge on which the route sits. Brayshaw Trail's use as a critical year-round emergency access route between the Golf Club Drive entrance and the upper Pogonip results in frequent wet season use. Engineering drainage features and a stable roadbed in the steep section of Brayshaw Trail should be constructed to reduce existing and anticipated persistent turbidity in surface runoff, while increasing the lifespan of the route for emergency and operational access. (All alternatives)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
E. ARCHAEOLOGICAL AND HISTORIC RESOURCES (Refer to pages IV.E-1 to IV.E-14)			
ARCH-1: Clubhouse rehabilitation, if not carried out sensitively, could alter the historic features of the structure that contribute to its significance.	S	ARCH-1: The rehabilitation plan for the Clubhouse should be developed in consultation with a qualified professional historical architect and be consistent with guidance developed in consultation with the State Historic Preservation Officer.	LTS
ARCH-2: Deterioration of the lime kilns, quarries and associated historic features could occur with adoption of the *Draft Pogonip Master Plan* and increased use of Pogonip.	S	ARCH-2a: Three approaches are available to mitigate the deterioration of the lime kilns, quarries and associated historic features and contribute to historic preservation. These involve: (1) benign neglect of the physical resources in combination with a program of documentation and archaeological data recovery; (2) maintenance of the lime kilns, quarries and associated historic features in a state of "arrested decay," placing the historic preservation emphasis on minimal maintenance (primarily for safety reasons) and conducting additional historical and archaeological studies to better understand the history of these resources; and (3) active preservation which would include reconstruction of some or all of the complex of kilns and associated features for public interpretation (informed by additional historical and archaeological studies).	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
ARCH-2 *continued*		Elements of these approaches could be combined to develop alternative preservation programs. Selection of a mitigation approach must be made realistically, taking into consideration the long-term fiscal commitment to a selected historic preservation program. Short-term preservation actions may have the effect of temporarily delaying or masking obvious deterioration of historic resources but only a comprehensive, long-term historic preservation program would actually result in the preservation of the historic resources. The following combination of measures should be implemented to reduce this impact to a less-than-significant level. If only one mitigation measure is selected by the City, any of the following (2a, 2b, or 2c) by itself would be adequate to reduce the impact to a less-than-significant level. Neglect of the complex of kilns and associated features would result in the deterioration and eventual disintegration of the structural elements. Deterioration would result due to natural processes of decay and collapse enhanced by impacts such as visitors climbing over the ruins. Reduction of the historic features could be regarded as a natural process in the formation of the archaeological record. Mitigation could include the recovery and documentation of important information pertaining to the historic resource. The City of Santa Cruz has sponsored a photographic and architectural documentation of the lime kilns. The City should undertake a thorough documentation of all of the features associated with lime production and the history of lime production in Pogonip to adequately mitigate neglect of the historic structures and features themselves.	

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
ARCH-2 *continued*	S	ARCH-2b: The loss of the structures associated with lime production could be arrested, but probably not entirely alleviated, through the design and execution of a plan to curtail the deterioration of the historic resources. Such a plan would necessarily address both the effects of natural processes and the effects of visitor use. A thorough survey of the lime kilns and associated features would have to be made to inventory and describe the resource as a prelude to developing a management plan. Each of the natural processes contributing to the deterioration of the resources would have to be discovered and a means to alleviate each of the adverse processes would have to be considered and implemented. Treatment of the effects of some natural processes (e.g., large magnitude earthquakes, soils wasting, tree fall) may not be possible or feasible. Historic preservation efforts may have to be compromised in consideration of other environmental factors, such as conservation of trees and other vegetation in the immediate vicinity of historic resources. Visitor use of some of the historic properties may have to be constrained by fencing or other means to reduce or eliminate the impact of visitors on the structures. Visitor education and enhanced ranger patrols could be effective in reducing visitor impacts. Implementation and enforcement of a long-term stabilization plan would require that the City of Santa Cruz commit the requisite fiscal resources to such a program for decades.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
ARCH-2 *continued*	S	ARCH-2c: A third approach to mitigating the adverse on-going impacts on the lime kilns and associated historic features involves a long-term historic resources management program including: (1) comprehensive archaeological and historical documentation of the historic resources; (2) reconstruction of some or all of the lime kilns and associated features; and (3) development and implementation of a long-term plan for the preservation, maintenance and interpretation of the historic resources. This program would entail a substantial cost to the City of Santa Cruz and would require extensive and intensive studies of the historic resources; consultation with historical architects, archaeologists and restoration specialists; reconstruction of some or all of the historical remains by construction teams skilled in historical reconstruction of masonry structures; preparation and implementation of a long-term maintenance program; development and implementation of public education and interpretive programs; and permanent assignment of City staff to the historic preservation effort. At its most comprehensive, such a program would include preservation considerations such as reinforcing appropriate historic structures against earthquake damage.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
ARCH-3: Construction, maintenance and use of trails as part of the project has the potential to result in adverse impacts to historic attributes of the Rincon Trail and Spring Trail.	S	ARCH-3: The following combination of mitigation measures should be implemented to reduce this to a less-than-significant impact: • Impacts to historic elements of the Spring and Rincon trails can be avoided, to the extent feasible, by developing and implementing procedures for construction, maintenance and use of the historic trail segments. These procedures should be included as an appendix to the *Final Pogonip Master Plan* as part of the appropriate City construction and maintenance manuals which direct the oversight of such projects in the City. Construction and maintenance supervisors and appropriate park personnel should be made familiar with the protocols for carrying out construction and maintenance activities along historic portions of the Spring and Rincon trails. Construction and maintenance operations within trail areas with historic fabric, should only be undertaken in accordance with established historic preservation procedures. For example, trail segments that serve as service roads, which are less than 10 feet in width and which include areas of historic fabric, should not be widened in a manner that adversely affects the historic characteristics of the trail/road. • When trail users create alternative pathways off established trails, a variety of adverse impacts could arise. Such impacts would include degradation of trail margins, erosion, and creation of pathways to or through sensitive historic resource areas. Every effort should be made to limit trail users to existing trails as defined in the *Trail Management Actions* section of the *Draft Pogonip Master Plan*.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
ARCH-4: Unanticipated discovery of archaeological remains could occur with implementation of the *Draft Pogonip Master Plan*.	S	ARCH-4: The following steps should be implemented to address unanticipated discovery of archaeological remains: • Important archaeological remains should be avoided and preserved in place. Potential impacts to potentially significant but undocumented archaeological resources could be avoided by conducting archaeological investigations to determine if archaeological remains actually exist in the three areas of concern; and/or • If archaeological remains are encountered, they should be evaluated by a professional archaeologist to determine their importance. • Alternatives to in-place preservation involve, for the most part, the recovery of that information which makes an archaeological site important. Some but not all of this information can be recovered by archaeological methods and techniques referred to as "data recovery." The conduct of an adequate data recovery effort at appropriate archaeological sites can render an adverse impact to less than significant. • The discovery of human remains at an archaeological site or any other location requires that procedures be followed as defined in California *Health and Safety Code* Section 7050.5 and *Public Resources Code* 5097.98 (requiring notification of the Coroner and Native American Heritage Commission, as appropriate), among others.	LTS
ARCH-5: Deterioration and loss of archaeological and historic resources evaluated as not important could occur.	LTS	ARCH-5. No mitigation measure would be necessary.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
F. VISUAL QUALITY AND AESTHETICS (Refer to pages IV.F-1 to IV.F-14)			
VIS-1: New developed features would be added to the Pogonip site that would be visible from public viewpoints and that would alter the natural features of the project site.	LTS	VIS-1a: Vegetative screening of greenhouses would only be possible on the north, east and west sides. Vegetative screening on the south side, which would be most visible from the entry portion of Golf Club Drive for those heading west and north into the site, would not be possible due to the conflict with the need for solar access. The following language should be added to the *Pogonip Garden Operations and Management Plan*: • *Proposed greenhouses shall be designed to be no greater than 11 feet in height, 20 feet in width, and 70 feet in length. North, west, and east walls shall be composed of natural stained, board and batten design. Rigid glazing materials shall be used for the south walls and roof, and shall be framed with wood to be compatible with the historic features of the site. Roof slope shall be 4:12. Vegetative screening shall be added to the north, east, and west walls of the greenhouses. This screening shall include native, drought-tolerant and fire resistant planting approved by the Department of Parks and Recreation. Greenhouse design shall be subject to Design Review approval.* • *Greenhouses shall be located at the northeast side of the proposed garden area, adjacent to Golf Club Drive but screened from the view of users of the outdoor area of the Clubhouse.*	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
VIS-1 *continued*	LTS	VIS-1b: The *Draft Pogonip Master Plan* should be revised to include the following new (see underlining) language regarding Design Guidelines for the Outdoor Education Camp: • *Provide a wooden shade structure over the picnic table area that is consistent with other visually prominent architectural features on the Pogonip site, to be determined during design review. The shade structure...* • *Provide a small shed for storage of educational program materials that is consistent with other visually prominent architectural features on the Pogonip site.*	LTS
VIS-2: The project would result in inconsistencies with policies of the Santa Cruz General Plan Community Design Element as addressed in Table IV.F-1.	S	VIS-2: To ensure consistency with policies of the City's General Plan Community Design Element, specific design changes recommended under Mitigation Measure VIS-1a should be implemented for the project.	LTS
~~VIS-3: Light could be created on the site in association with nighttime lighting of parking areas. Glare could be generated by the proposed on-site greenhouses. Lighting may be visible from distant residences, while glare from the greenhouses may be visible during daytime hours to hikers, bicyclists, and other users of Pogonip.~~	~~S~~	~~VIS-3: Mitigation Measure VIS-1a should be implemented to limit the overall size of the greenhouses and to include vegetative screening and appropriate materials to reduce glare.~~	~~LTS~~
VIS-34: The project has the potential to result in terrain modifications for construction of the proposed Pogonip garden. This issue is addressed in greater detail in Section C, the Geology, Soils, and Seismicity section of the EIR.	S	VIS-34: Refer to Mitigation Measures GEO-1c and GEO-1d, under Geology, Soils, and Seismicity.	LTS
G. TRANSPORTATION AND CIRCULATION (Refer to pages IV.G-1 to IV.G-23)			
TRANS-1: The proposed project would generate new vehicular trips that would contribute to existing road network volumes.	LTS	TRANS-1: No mitigation measures would be necessary.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
TRANS-2: The proposed project would generate new vehicular parking demand which would not be provided for on-site.	S	TRANS-2a: The *Draft Pogonip Master Plan* should identify potential off-site parking areas to be utilized for the shuttle system. The availability of parking at these locations during the periods when high-attendance special events would be conducted should be guaranteed through a contract between the City and the applicable landowner. Adequate parking for service and shuttle vehicles should be provided at the Clubhouse.	LTS
		TRANS-2b: Improvement of the Sycamore Grove area should be coordinated with Caltrans to ensure that the planned improvements would not significantly increase the parking demand at this location. Parking demand would be reduced by limiting the improvements proposed for this area or controlling access to the area by requiring that groups visiting the site be made subject to a permit and limited in size, and/or that group visits by scheduled.	LTS
		TRANS-2c: Parking lots located at the Clubhouse and Lower Main Meadow should be surfaced with an appropriate all-weather surface.	
TRANS-3: The proposed project would contribute additional traffic to the currently deficient sections of Golf Club Drive, creating or contributing to unsafe conditions. In addition, project-related traffic could exacerbate sight distance-related safety issues due to existing deficiencies of the SR 9/Golf Club Drive intersection.	S	TRANS-3a: The lower section of Golf Club Drive should be widened to provide two travel lanes. Shoulders should also be provided on both sides of the roadway.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
TRANS-3 *continued*	S	TRANS-3b: Given the relatively low volume of traffic currently utilizing Golf Club Drive west of the railroad trestle and the low volume of traffic anticipated with development of the project, it is recommended that Golf Club Drive at the railroad trestle be operated as a one-lane roadway. Allocation of right-of-way between traffic approaching in opposite directions can be self-regulated given the low volume of traffic on this road link. "One Lane Roadway" warning signs should be installed on Golf Club Drive on both approaches to the railroad trestle with appropriate pavement markings per the Caltrans Traffic Manual. This section of Golf Club Drive should be monitored for possible implementation of additional traffic control should operational problems occur. The City should coordinate the implementation of additional traffic controls at the Golf Club Drive grade-separation, should they be necessary, with the Santa Cruz County Regional Transportation Commission (SCCRTC).	LTS
		TRANS-3c: The City and State should work together to improve the geometric design of the SR 9/Golf Club Drive intersection to improve the sight distance provided on the north leg of the intersection due to an existing deficient condition. This coordination should be initiated as soon as possible after one-year of adoption of the *Master Plan* and records maintained by the City Parks and Recreation Department.	
TRANS-4: The proposed project would not provide adequate facilities for pedestrians and bicyclists on Golf Club Drive west of the railroad trestle.	S	TRANS-4: Facilities for pedestrians and bicyclists should be provided on Golf Club Drive between the railroad trestle and the Lower Main Meadow gate, which covers both the lower and middle sections of Golf Club Drive.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
TRANS-5: The proposed project may increase pedestrian, bicycle and equestrian traffic at the crossing of Pogonip trails with key arterials and roadways adjacent to the Park.	S	TRANS-5a: Advance warning signs should be provided per Caltrans standards on SR 9 and Coolidge Drive at the Rincon Trail, Rincon Connector Trail and Sycamore Trail crossings/intersections. These signs should include ~~"Pedestrian Crossing" and Equestrian Crossing"~~ Pedestrian Symbol (W54A), Equestrian Symbol (W45) and Bicycle Symbol (W79) signs where appropriate. The design and installation of the advance warning signs on SR 9 should be coordinated with Caltrans. Installation of signs in the State right-of-way will require on encroachment permit from Caltrans. (Alternatives A and B)	LTS
	S	TRANS-5b: Rincon Connector users should be directed to cross SR 9 at the location where the west leg of Rincon Connector intersects SR 9. Appropriate signs should be installed on the eastbound and westbound trail approaches to SR 9 to direct trail users to the proper location to cross SR 9. Installation of a crosswalk is not recommended at this location. (Alternatives A and B)	LTS
	S	TRANS-5c: Bicycle and equestrian trail users accessing the trail system from UCSC should be encouraged to gain access from the UCSC Connector located in the northerly area of Pogonip. (Alternatives A and B)	LTS
	S	TRANS-5d: Given the lack of facilities for equestrians on Coolidge Drive, equestrians should be prohibited between Rincon Trail and Coolidge Drive. Appropriate signs should be placed at the intersection of Rincon Trail and Spring Trail guiding equestrian traffic destined to or through the UCSC campus to the UCSC Connector Trail. (Alternatives A and B)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
TRANS-5 *continued*	S	TRANS-5e: The City should work with the County of Santa Cruz, which owns and maintains Coolidge Drive, to improve the sight distance at the existing Rincon Trail intersection through tree thinning and limbing along the road corridor. It may also be necessary to cut the toe of the slope on the west side of the road, just below the curve, to provide adequate sight distance for the existing speed limit. Any cut slope would likely require slope stabilization, such as a cribwall. In addition, the City should coordinate with the County of Santa Cruz and UCSC to reduce traffic speeds on Coolidge Drive, with 20-foot-wide speed humps or another appropriate measure. (Alternatives A and B)	LTS
		TRANS-5f: Rincon Trail should be maintained as a service road only and a kiosk should not be provided at the Rincon Trail entrance at Glen Coolidge Drive until sight distances provided at the intersection of Glen Coolidge Drive with the Rincon Trail are improved to meet Caltrans and Santa Cruz County standards. (Alternatives A and B)	
TRANS-6: The proposed project includes alternatives that may allow bicycle and equestrian use of the Pogonip trails which could result in potential conflicts between pedestrian, bicycle and equestrian users.	LTS	TRANS-6a: If one of the multi-use trail alternatives is selected, all multi-use trails should be monitored for safety problems and the need for implementing additional mitigation measures. Additional mitigation measures may include closing the trail to multi-use, providing a separate parallel trail for bicycle/equestrian use, or widening the trail. (Alternatives A and B)	LTS
		TRANS-6b: Trail segments that would require special speed or operational controls should be identified and marked with appropriate warning signs. (Alternatives A and B)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
H. SERVICE SYSTEMS AND UTILITIES (Refer to pages IV.H-1 to IV.H-16)			
SER-1: Anticipated increased levels of use in Pogonip and the types of use would increase the demand for ranger services beyond what is currently available.	S	SER-1a: To address additional ranger needs, conflicts requiring ranger assistance should be monitored. If necessary, additional ranger patrol services should be added. This dedicated time may be achieved initially by adding one additional staff member for maintenance duties to free up ranger's time for conflict resolution. (Alternatives A and B)	LTS
	S	SER-1b: Signage and informational handouts notifying park users of park regulations and educating trail users on appropriate and safe trail use should be available at Pogonip. Signs and handouts should be placed at all park entrances and at key locations throughout Pogonip. Signage locations within Pogonip should include parking and staging areas, the Outdoor Education Camp, the Clubhouse, Sycamore Grove, the garden, and major trail intersections. (All alternatives)	LTS
	S	SER-1c: On-site rangers should work with user groups to provide volunteer patrols to ensure that trail restrictions are followed and to convey trail etiquette and safety information. (Alternatives A and B)	LTS
	S	SER-1d: Speed limits for bicyclists should be posted along the trails to ensure safe conditions when multi-use is permitted. (Alternatives A and B)	LTS
	S	SER-1e: A volunteer trails committee should be established to include representatives of trail user groups (including hikers, equestrians, and bicyclists) in problem identification, prevention, and solutions. This committee should be coordinated by staff of the City's Parks and Recreation Department. (Alternatives A and B)	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
SER-2: The proposed project would increase demand for firefighting services but not beyond that level provided by existing staff and equipment.	LTS	SER-2a: Management actions to minimize fire hazards, as identified in the *Draft Pogonip Master Plan*, must be undertaken as the various improvements and new uses are implemented throughout Pogonip. These management actions include using appropriate building materials, vegetation management, and ensuring availability of fire suppression equipment.	LTS
	LTS	SER-2b: The Parks and Recreation Department should coordinate with the Fire Department to ensure that adequate fire safety prescriptions are included in the *Clubhouse Rehabilitation Plan*. The Parks and Recreation Department should also coordinate with the Fire Department regarding design of all other new facilities proposed for Pogonip, as well as to ensure that the water supply and delivery system and roadways are adequate for fire protection needs.	LTS
	LTS	SER-2c: The Parks and Recreation Department should establish an on-going vegetation management program to ensure that fire management actions are implemented. This program would include regular mowing, conducting prescribed burns when feasible, grazing, and other vegetation management strategies, as described in the Draft Pogonip Master Plan.	LTS
SER-3: The proposed project would result in a significantly increased demand for City water.	S	The following combination of mitigation measures should be implemented to reduce this impact to a less-than-significant level: • The Parks and Recreation Department should submit irrigation plans to the City Water Department for design review and review of compliance with water conservation ordinances prior to project approval. Implementation of water conservation techniques would reduce this impact to a less-than-significant level during non-drought periods.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
SER-3 *continued*		• The additional demand for water created by the Pogonip garden could impact city water supplies during drought conditions. The City should consider scaling back garden irrigation practices during times of drought.	
SER-4: The proposed project would require a six-inch water line extension from the municipal water line on Golf Club Drive and other water-related facilities.	LTS	SER-4: If cultural resources are uncovered during the excavation process for the water line, construction should stop and instructions prescribed in Chapter IV, Cultural Resources, should be followed.	LTS
SER-5: Wastewater generated as a result of increased use of the park would require a six-inch wastewater line extension along Golf Club Drive to serve the Clubhouse and nearby buildings.	LTS	SER-5: If cultural resources are uncovered during the excavation process for the wastewater line, construction should stop and instructions prescribed in Chapter IV.E, Cultural Resources, should be followed.	LTS
SER-6: With increased usage of Pogonip, the proposed project would result in the generation of additional solid waste that would reduce the useful life of the City's landfill facility.	S	SER-6: Recycling facilities should be provided in all areas where solid waste generating activities may occur. As shown in Table IV.H-1, no recycling bins are proposed in Sycamore Grove. Since this area is proposed for picnic tables, recycling bins should be provided to reduce the waste generated by these activities.	LTS
SER-7: Rehabilitation of the Clubhouse and expansion of maintenance and support facilities would result in the generation of solid waste during construction.	S	SER-7: The *Clubhouse Rehabilitation Plan* should include a construction-phase recycling plan, created in consultation with the Santa Cruz Public Works Department. The plan should address major materials generated by the construction project, including brush and other vegetative growth, dimensional lumber, metal scraps, cardboard packaging, and plastic wrap, and opportunities to recycle such materials or divert them away from the City landfill.	LTS
SER-8: Undergrounding of electrical and telecommunications lines would require excavation and could disturb biological and cultural resources.	S	SER-8: The undergrounded electrical and telecommunications transmission lines should follow the existing Golf Club Drive alignment to the maximum extent feasible to minimize biological and cultural impacts resulting from excavation. If cultural resources are uncovered during excavation, construction should stop and prescriptions given in Chapter IV, Cultural Resources, should be implemented.	LTS

Table II-1 *continued*

Impacts	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance With Mitigation
SER-9: Proposed parking facilities could interfere with PG&E access to the utility box located at the Spring Street cul-de-sac, or could require relocation of the box.	S	SER-9: The Parks and Recreation Department should obtain written verification from PG&E that the proposed parking facilities would not interfere with PG&E operations at this location. If the proposed parking would significantly interfere with PG&E access to this site, alternative handicapped accessible parking locations should be considered.	LTS
CUMULATIVE IMPACTS (Refer to pages VI-7 to VI-12)			
Cumulative impacts are addressed in Chapter VI(D) of the EIR. The only cumulative impacts for which mitigation measures were recommended related to Vegetation and Wildlife; Geology, Soils and Seismicity; Transportation and Circulation; and Utilities and Service System.	S	The following mitigation measures for cumulative impacts are recommended: • Biological protection measures for the proposed light rail system that may cross the southern portion of Pogonip; • Regional trail protection measures for potential erosion impacts; • Realignment of the light rail corridor to avoid the Harvey West Creek drainage; • Erosion control measures for any access roads that serve the light rail system; • Coordinated efforts to minimize rail line impacts on trail access and Pogonip circulation; • Reduced water demand for irrigation and implementation of the *Draft Fire Management Element*.	LTS

Table II-2
SUMMARY OF LEVEL OF IMPACTS FOR *MASTER PLAN* COMPONENTS[a]

Project Component	Land Use	Vegetation and Wildlife	Geology, Soils & Seismicity	Water Resources	Archaeological & Historic Resources	Visual Quality & Aesthetics	Transportation & Circulation	Service Systems & Utilities
Clubhouse Rehabilitation	○	○	◑	◑	◑	○	●	◑
Pogonip Garden	○	●	●	●	○[b]	●	●	●
Outdoor Education Camp	○	●	●	◑	○[b]	◑	●	◑
Sycamore Grove Nature Area	○	●	●	◑	○[b]	○	●	○
Trails	○	●	●	●	◑	○	●	●
Maintenance and Support Facilities	○	○	◑	◑	○[b]	○	○	○
Utilities	○	○	◑	◑	○[b]	○	○	◑
Roadway Improvements	○	○	●	◑	○[b]	○	○	○

○ No Impact ◑ Less-Than-Significant Impact ● Significant Impact

[a] Applies to the level of impact prior to mitigation.

[b] Assumes no archaeological resources are present at these sites. On-site monitoring during construction would be needed to verify that this is the case.

IV.A-11 The following text is added to page IV.A-11 as a new section (6).

"Prior to the City's purchase of the Pogonip property, the Cowell Foundation extended a joint option to the City of Santa Cruz and UCSC pursuant to which either or both of them might, prior to January 1, 1999, locate an eastern access road to UCSC over the Pogonip property. The following two conditions must be satisfied prior to the exercise of the option: (1) the appropriate lead agency must have legally complied with the requirements of the California Environmental Quality Act; and (2) the City Council must have passed a resolution approving the exercise of the option for an eastern access road across Pogonip and specifying the course of any such access road over the Pogonip property. In order to extend the option, the City and UCSC would need to execute a new agreement or amend the original agreement.

The option agreement would allow for the construction of a two-lane roadway, with bicycle paths along a route which would originate at State Highway 9, pass through the Pogonip property, and connect to Glen Coolidge Drive near the eastern boundary of the campus. A specific alignment for the road has been defined; however, three preferred routes were identified in the UCSC LRDP EIR (March 1989) as shown in Figure VI-1(a). The final alignment of an eastern access road would probably resemble one of these alignments (or a combination of them). Environmental assessment of a final alignment and alignment alternatives in accordance with CEQA has not been prepared and would probably not be prepared until a decision is made to exercise the option.

The uses proposed in the Master Plan would not preclude development of an eastern access road across Pogonip."

IV.A-11 The reference to the Greenbelt Overlay District on page IV.A-11, should be deleted because this district expired in 1991, as follows:

~~Some may perceive the Pogonip garden as incompatible with the Greenbelt Overlay designation applicable to the project site due to the introduction of developed features associated with the garden. However, prior City Councils have approved the garden, on a conceptual level, as an appropriate use for the Greenbelt.~~

IV.A-13 Table IV.A-1 is retitled "Relationship of Project to Policies of the City's General Plan ~~in the Land Use Element~~".

IV.A-13 Of the recommended text changes the following text is added to Table IV.A-1 of the DEIR:

Economic Development Policy 1.3. Support and prioritize the development of locally owned, small and cooperative businesses recognizing the special character and recirculation of capital they bring to the community.	The garden component of the *Master Plan* would meet the intent of this policy.	None necessary.
Land Use Policy 3.1.3.1. Encourage organic farming practices on agricultural lands and community gardens within the City.	The garden element of the *Master Plan* would expand organic gardening options within the City.	None necessary.
Economic Development Policy 1.6.5. Promote protection of significant agricultural lands and sustainable agricultural programs throughout the City and County.	By allowing relocation of the garden to the Pogonip site, the City would protect sustainable agricultural programs within the City.	None necessary.
Safety Element Policy 6.5.2. Emphasize the City's role as an organic agricultural center and work with appropriate agencies to develop demonstration projects on non-chemical pest control and soil management practices.	See above.	None necessary.

IV.B-2 Table IV.B-1 (page IV.B-2, DEIR) is amended as follows to reflect the recent proposed rule to list the Santa Cruz tarplant as a threatened species:

"Santa Cruz tarplant ~~C1~~ FPT

FPT - Species proposed for threatened status by USFWS"

IV.B-22 The following text is added to the end of the first paragraph in the DEIR on page IV.B-22.

"The population of nesting kites in Santa Cruz County is unknown. The CDFG and local bird experts are compiling data on the numbers of kites in Santa Cruz County. However, the best

guess of nesting kites in Santa Cruz County is around 25 (Suddjian, 1998)."

IV.B-24 The following text should be deleted from the DEIR on page IV.B-24, top paragraph:

~~"Little is known about the life history of this species, as larva of Ohlone tiger beetles have never been found; therefore complete habitat requirements remain unknown."~~

IV.B-27 The following new text is to be added to the bottom of page IV.B-27 of the DEIR:

"White-tailed kites are protected under the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C., Sec. 703, Supp. I, 1989) which prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nest. In addition, raptors are protected in California under the State Fish and Game Code (Section 3503.5, 1992). Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." White-tailed kites (and American kestrels) are in the order Falconiformes. Disturbances that cause nest abandonment and /or loss or reproductive effort is considered "taking" by the CDFG. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Kites will abandon their nest and reproductive attempts if there is a loss of foraging habitat to support the nest. Construction disturbances (and gardening activities) during the breeding season could result in the incidental loss of fertile eggs or chicks, or lead to nest abandonment. Foraging habitat during the nesting season is consider an extension the of kite's nest.

As it is known that two nesting pairs of kites have relied on the proposed garden area for foraging to support their reproductive activities, habitat displacement from associated buildings, increase in human activity levels during the nesting season (which varies slightly form year to year but is generally from February to August) or potential changes to foraging habitat which support the reproductive effort of kites in Pogonip, are considered a

significant impacts. Under CEQA guidelines, significant impacts should first be avoided. If impacts cannot be avoided, then mitigation measures to aid in avoiding impacts and to compensate for habitat loss need to be developed."

IV.B-28 The following text change should be added to page IV.B-28, fourth paragraph of the DEIR:

"This upland habitat area ~~is an unlikely movement corridor for frogs~~ may be used by some red-legged frogs during wet, mild weather."

IV.B-31 The following text should be added to the end of Mitigation Measure BIO-1a on page IV.B-31:

If the garden project is retained as an element of the *Pogonip Master Plan*, the following steps need to be implemented: 1) conduct a pre-construction survey to confirm whether or not the kites are nesting again in Pogonip and to confirm if the kites are using the same locality; 2) conduct a small mammal population study in the proposed garden area and in other grasslands in order to evaluate the potential foraging habitat in other areas; 3) develop specific mitigation measure to avoid take on reproductive habitat (this includes the foraging area supporting the nest) and to compensate for habitat loss. This includes reviewing the proposed Pogonip Garden's Operations and Management Plans in order to develop specific mitigation measures for kites and other wildlife; 4) during the development of the mitigation measures surrounding the Garden's Operations and Management Plans, conduct formal consultations with both agencies responsible for overseeing protection of the nesting habitat of kites (CDFG and USFWS)."

IV.B-35 The last sentence of BIO-2 (2) on page IV.B-35 is revised as follows:

"A ~~The proposed~~ 20-foot setback has been depicted on the garden plans. ~~is not consistent with the City's General Plan Policy EQ4.2.2, which specifies a setback of 100 feet from the edge of the wetlands to developed areas.~~ Agricultural activities are not considered development under the City's General Plan and, as such, are not subject to a setback from the edge of wetlands. General Plan Policy EQ3.1 requires agricultural site design and

erosion control measures in areas adjacent to stream and wetland areas to minimize vegetation removal."

IV.B-36 The following correction is made at the beginning of the first full paragraph on page IV.B-36:

"Development of the Pogonip garden facility (Pogonip garden areas and associated facilities) would impact approximately ~~12.5~~ 7.9 acres of coastal terrace prairie."

IV.B-39 The following text is added to the second sentence of the second bullet under Mitigation Measure BIO-2c:

"For the Pogonip garden facility, approximately ~~14~~ 7.9 acres of existing non-native grassland or degraded coastal terrace prairie could be ~~re-created~~ rehabilitated and/or restored."

IV.B-41 The following text is added to Mitigation BIO-2 on page IV.B-41 of the DEIR:

"Mitigation Measure BIO-2f: The City should redesign and re-construct protective fencing around the spring along the Spring Trail, as existing fencing is not adequate to protect the wetland resources. Fencing should surround the wetland area and include interpretive signs notifying park users to stay out of the spring area to protect this sensitive feature. (LTS)"

IV.B-42 The following text is added to the "Trails" subsection under Impact BIO-3 at the end of page IV.B-42 of the DEIR:

"However, there is some evidence that areas open to bicyclists result in a decrease in both the average number of wildlife species sighted and number of wildlife sightings (activity levels) (from the "Wildlife Monitoring During the Bicycle Trial Period at Blue Sky Ecological Reserve," Patton, 1995). In addition, incidental occurrences of bicycle-killed amphibians and reptiles have been observed in other parks on trails that are open to bikes. It can be assumed that fast-moving horses would have the same effect as bicyclists. It is assumed that slow moving (walking) horses are likely to impact wildlife in ways more similarly to pedestrians, except for wildlife interactions where trail compaction and erosion are an issue (i.e., Ohlone tiger beetle burrows)."

IV.B-42 Changes and additions to the discussion under Impact BIO-3 on page IV.B-42 are as follows:

"It is not known whether wildlife react differentially to bicycle use and equestrian use. Bicycle use is expected to have a greater impact on wildlife use compared to pedestrian use only (Patton, 1995). In addition, incidental occurrences of bicycle road-killed amphibians and reptiles have been observed in other parks on trails that are open to bikes. ~~However,~~Fast-moving..."

IV.B-44 The end of Mitigation Measure BIO-3 on page IV.B-44 of the DEIR should be amended to add the following bullet text:

" • Ranger staff should routinely patrol Pogonip trails and cite illegal bicycle and equestrian users on all applicable trails. Ranger staff should maintain a log of citations and monitor trails for evidence of unauthorized use. This measure would be in conjunction with measures identified in Mitigation Measure TRANS-6."

IV.B-44 The following text is added to the DEIR as a new impact at the end of subsection IV.B on page IV.B-44.

"**Impact BIO-4: The Fire Management Element of the *Draft Pogonip Master Plan* identifies fire management actions to reduce the fuel loads in the vicinity of structures (e.g. Clubhouse and other proposed facilities), along Pogonip property boundaries, and along service roads and specified trails (e.g. Fern Trail). Activities such as clearing and thinning understory, prescribed burns, mowing and grazing may affect biotic resources and wildlife habitat, depending upon the extent of the activity, timing, expected use by wildlife in the area, and presence of sensitive species. (S)**

Within the Sycamore Grove Nature Area, the *Master Plan* recommends understory clearing to minimize illegal camping and reduce fire hazards. As most of the understory within this area is currently invasive, non-native species (e.g., periwinkle, English ivy), impacts to native botanical resources are not considered significant. Revegetation activities proposed for the Nature Area can be accomplished in a manner conducive to fire management such as planting clumps of shrubs amid native perennial grasses

and native riparian trees. A reduction in illegal activities in the Sycamore Grove area would benefit wildlife utilization of the areas, as the area is currently adversely affected by human debris and night-time human activities.

Management actions proposed along service roads and trails (e.g., Fern Trail understory clearing, replanting of low ignition grasses and mowing of the fuel break at the Lower Meadow Trail) may affect biotic resources if vegetation clearing is extensive. The replacement of non-native vegetation with native plant species such as perennial grasses would be a benefit to the areas botanical resources. The thinning of understory and tree pruning within woodlands may adversely affect wildlife utilization of these areas, depending upon the extent of vegetation removal and expected use of the area by wildlife.

Boundary management actions propose mowing grasses for a distance of 30 to 70 feet from the property line. Mowing of such areas is not expected to significantly impact botanical resources and may, over time, reduce the occurrence of non-native annual grasses, thus benefiting the area's botanical resources. The proposed thinning of understory vegetation within woodlands for a distance of 30 to 50 feet from the property line may adversely affect wildlife utilization of these areas, depending upon the extent of vegetation removal and expected use of the area by wildlife.

Prescribed burns in the coastal terrace prairie, when conducted in consultation with a biologist, can benefit the native species. As proposed in the *Pogonip Master Plan*, this work would be done in consultation with a biologist.

> Mitigation Measure BIO-4: Vegetation clearing for fuel management purposes should be done in a manner that maintains habitat features for wildlife and minimizes the introduction of invasive non-native plant species. Prior to vegetation clearing, a wildlife biologist should identify vegetation features to be retained within the clearance area, including snag trees that provide cavities for nesting birds, significant clumps of vegetation that provide cover for wildlife, and a proportion of downed woody debris that provides habitat for amphibians and other species. Vegetation clearing should be limited to the removal of above-ground vegetation (tree limbs and shrub limbs).

Ground scraping should be prohibited as this activity may encourage the growth of invasive, non-native plant species, such as French broom. Prescribed fire plans that involve burning near coastal terrace prairie containing sensitive plants or animals or grazing plans in these areas should be reviewed by CDFG and USFWS to ensure that impacts to listed plant and insect species are avoided and/or minimized. The City should consult with a biologist and entomologist regarding prescribed burns in these areas. (LTS)"

IV.C-5 Consistent with the comment, the last sentence on page IV.C-5 of the DEIR is eliminated as follows:

~~"The usefulness and potential productivity of the loam is of particular importance in the assessment of the proposed garden project.~~"

IV.C-5 The last sentence is deleted on page IV.C-5 of the DEIR as follows:

" ~~The usefulness and potential productivity of the loams is of particular importance in the assessment of the proposed garden project."~~

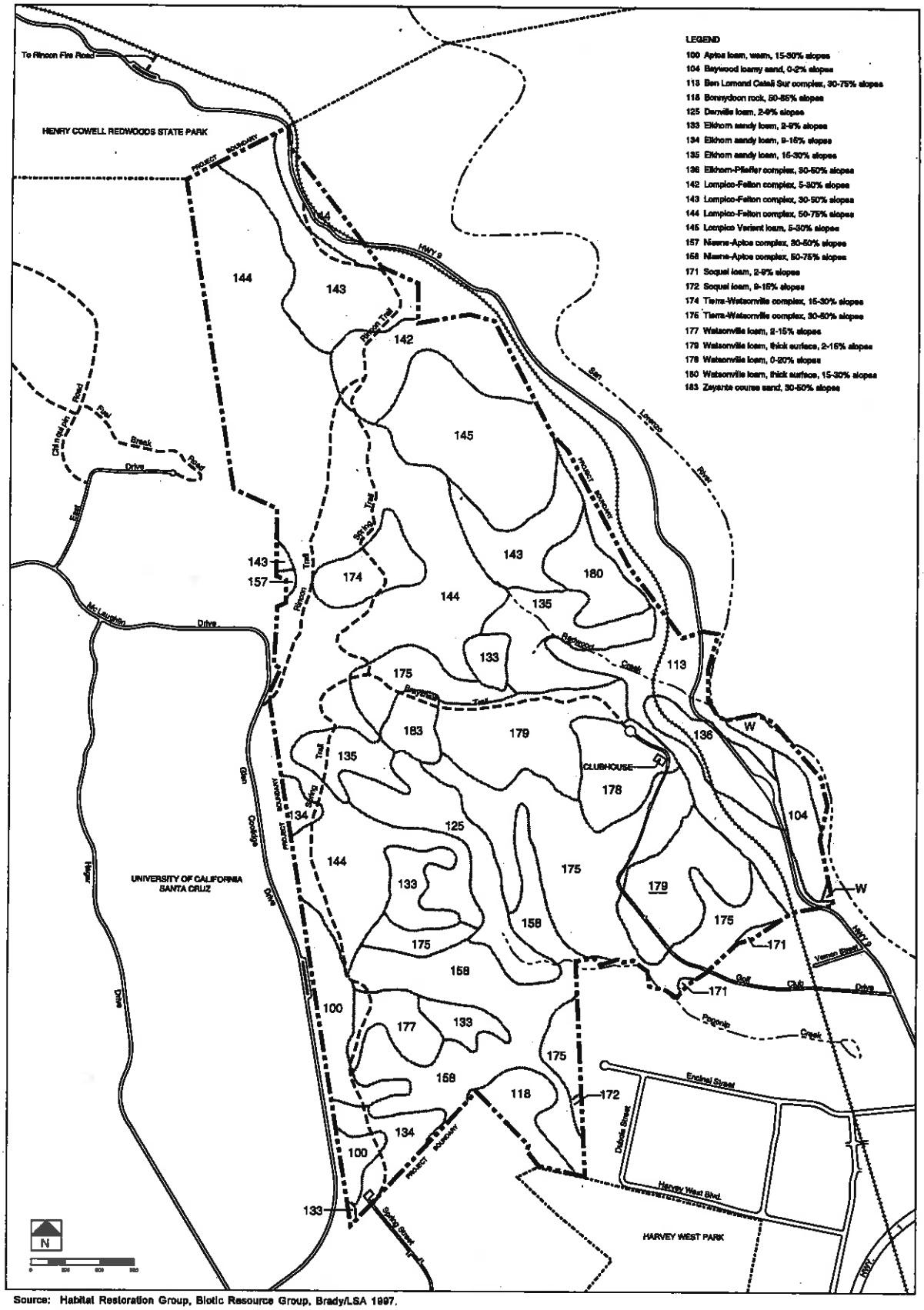
IV.C-6 Map features on Figure IV.C-2 have also been modified to reflect a change to, as shown on the following page.

IV.C-9 The following text is modified to read:

"Due to the fragile nature of geology and soils of the middle terrace, the existing gully formation, and the likelihood of slope instability resulting from continued agricultural activity, it is not anticipated that the impacts of the ~~10~~ 12.5 acre Pogonip Garden, as proposed, can be mitigated to a less than significant level.

IV.C-12 Page IV.C-12 paragraphs one and two, are amended to read as follows:

"The Santa Margarita sandstone in the area proposed for terraced permaculture crops exhibits 16 to 30 percent slopes and is prone to severe erosion when subject to disturbance... Typical best management practices (BMPs) for fragile Santa Margarita slopes are not well developed, and have not been implemented successfully in comparable terrain to the proposed garden site. ~~Best Management Practices (BMPs) for active cultivation of soils~~



Source: Habitat Restoration Group, Biotic Resource Group, Brady/LSA 1997.

DRAFT POGONIP MASTER PLAN

ENVIRONMENTAL IMPACT REPORT

Figure VI.C-2
Soils

~~associated with steep Santa Margarita sandstone slopes are not well developed at this time.~~ The extreme erosion hazards associated with this local geologic formation have made it well studied. Nonetheless it remains poorly managed by landowners ~~and farmers throughout the sandy soil areas of Santa Cruz County and Northern Monterey County.~~ where it is subject to disturbance. Watershed studies conducted by the City Water Department, the County of Santa Cruz, and the California Department of Water Resources have identified this unconsolidated sandstone formation as having particular regional importance in terms of slope inability and extreme erosion hazard."

IV.C-15 The following text is added on page IV.C-15, fourth paragraph:

"...perpetuity. Thus, Alternative A would have the most significant impacts due to this alternative including the most extensive multi-use options and likely allowing the most intense use of all the alternatives. Alternative B would be the next most intensive and Alternative C would be the least intensive based on likely usage."

IV.C-18 The DEIR text on page IV.C-18 and II-15 has been revised as follows:

"Mitigation Measure GEO-1a: To reduce the likelihood of excessive erosion, severe gully advancement, and slope instability, the Pogonip garden should be ~~sited at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V~~reduced in acreage to avoid areas of slopes, gullies, soil pipes, seeps and perched shallow groundwater. In general, the garden site as proposed in the *Draft Pogonip Master Plan* would be reduced to exclude the following areas from cultivation of any kind: area of headcutting to the north of the ravine up to the existing access road; most of the area of the northwest of the existing access road; slope areas of 15 percent or greater, and 50-foot setbacks from slope areas. Prior to approval of the Garden Operations and Management Plan, a site specific soils analysis, slope evaluation and a hydrogeologic investigation should be conducted by a qualified hydrologist/geologist to determine the extent of these conditions and to ensure adequate buffers are provided. A site specific hydro-geologic analysis should also be undertaken to investigate the proposed site for the greenhouses. If the site proposed in the *Draft Pogonip Master*

Plan is not deemed appropriate, the greenhouses should be relocated to the southern side of the existing access road, at the eastern side of the Lower Main Meadow. Use of the access road during wet conditions should be limited. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. ~~Because the garden is considered a key element of the project, the infeasibility of this mitigation would cause this impact to remain significant and unavoidable.~~ The following measures are recommended to further reduce or avoid impacts. ~~(SU)~~ (LTS)"

IV.C-19 The following changes and additions to Mitigation Measure GEO-1d are proposed:

"Mitigation Measure GEO-1d: ~~In the proposed Pogonip Garden site, BMPs such as contour bedding, winter cover cropping, and increased widths for vegetated buffers along cultivated fields and adjacent slopes should be implemented to reduce impacts on the terrace formation.~~ The Pogonip Garden should develop a Garden Operations and Management Plan which identifies and relies upon Best Management Practices appropriate for seep-influenced slopes and perched groundwater conditions in the Santa Margarita formation to mitigate potential impacts on soils and the underlying geologic formation. The Operations and Management Plan should describe management of runoff, sediment and existing erosion conditions on-site. The Operations and Management Plan should also describe maintenance of facilities and strategies for storm damage response and remedial gully repair techniques. BMP's for this site should be based on feasibility assessments and recommendations developed by qualified erosion control specialists, hydrologists, or geotechnical experts familiar with design and operation of agricultural activities in sandy soils.

The following language..."

IV.C-21 The following sentence is added to Mitigation Measure GEO-1m:

"...Prior to the construction of new trails, trail design plans, construction details, an erosion control plan should be submitted for review by City staff and the City Council prior to approval and construction."

IV.D-4 The description of Redwood Creek on page IV.D-4 of the DEIR is revised to include this fact at the end of the first paragraph:

> "Existing uses and site conditions that have the potential to adversely impact surface water quality include: (1) siltation resulting from erosion of pedestrian trails and service roads, and (2) the occurrence of landslides and gully formation in the Santa Margarita formation on the slopes below Brayshaw and Fern Trails."

IV.D-4 The description of Redwood Creek on page IV.D-4 is revised in the DEIR text as follows:

> "At present, the primary trail crossing and several small informal crossings on Redwood Creek along Fern Trail are undergoing locally severe erosion and bank failures, contributing to sediment loads in the San Lorenzo River above the City of Santa Cruz Water Department's Tait Street Diversion."

IV.D-8 The discussion of the Pogonip Garden on and Related Facilities is changed as follows on pages IV.D-8 and IV.D-9 of the DEIR.

> "Erosion of the Santa Margarita sandstone and the terrace soils is a potentially significant water quality impact associated with the organic garden. The Santa Margarita sandstone in the area proposed for terraced permaculture crops exhibits 16 to 30 10-15 percent slopes and is prone to severe erosion when subject to disturbance....
>
> ....Irrigation of the organic garden project at 2.0 acre-feet per acre (af/acre) from March through November, as proposed, would result in a net application of approximately 20 acre-feet of municipal water for 10 acres of agricultural production, as depicted in the *Draft Pogonip Master Plan*. This estimate is confirmed by agricultural water use estimates from local commercial agricultural operations that produce similar crops showing that typically at least 1.5-3.0 af/acre of applied water is required. Reduction in amount of irrigated acreage and/or use or water conservation measures would reduce total water use."

IV.D-16 Mitigation Measure WAT-1a on page IV.D-16 of the DEIR is changed as follows:

"Mitigation Measure WAT-1a: ~~To reduce the water quality impacts, the Pogonip garden should be sited elsewhere at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. Because the garden is considered a key element of the project, the following measure is recommended to further reduce this impact.~~ To mitigate potential water quality impacts, the Pogonip Garden shall prepare an Operations and Management Plan. The Management Plan should include mitigation measures and BMP's to reduce the water quality impacts. The following measures are suggested:

- The actively tilled fields should be reduced in scale such that a vegetated buffer of at least 30 feet separates plowed areas from slopes greater than 10 percent and active gully headcuts at the top of the drainage corridor that bisects proposed organic garden plots. Drainage structures, gully treatments, and organic garden plot layout should be developed in coordination with knowledgeable agricultural planners such as staff of the Natural Resource Conservation Service (NRCS), Santa Cruz County Agricultural Commission, and UC Agricultural Extension Service. The Farm Operations and Management Plan should be reviewed and accepted by knowledgeable erosion control and/or geotechnical specialists familiar with local conditions. This plan should also be approved by the City prior to development of the site."

IV.E-3 Change text of DEIR at page IV.E-3, second paragraph:

~~The house burned down, apparently prior to World War II, and was never rebuilt (Cartier et al., 1996, Hoover et al., 1990, Morstein, 1987, Strelow, 1992; Piwarzyk, 1994).~~ The original house burned down and was never rebuilt (Cartier et al., 1996; Hoover et al., 1990; Morstein, 1987; Strelow, 1992; Piwarzyk, 1994).

IV.F-6 The text under Figure IV.F-4(a) on page IV.F-6 should be changed to read as follows:

> "a) View towards Upper Meadow and Clubhouse, looking north from Golf Club Drive adjacent to the Lower Meadow. ~~where proposed garden would be located.~~"

IV.F-11 A new subsection "b" under "Impacts and Mitigation Measures" on page IV.F-11 has been added. This new subsection is called "b. Less-than-Significant Impacts" and is included as follows:

> b. Less-Than-Significant Impacts. The project would have less-than-significant impacts related to light and glare for a number of reasons. The *Draft Pogonip Master Plan* includes guidelines restricting any outdoor lighting at the Lower Meadow parking area. Lighting at the Clubhouse is addressed under Design Guidelines for the Clubhouse which state that any lighting should be shielded and directed downwards. Glare from the greenhouses would be limited due to the glazing on the southern exposure, and this glazing would not be highly visible from Golf Club Drive or other high uses areas within Pogonip. Existing trees would also screen this glazing from more distant locations within the City.

Subsection "b" entitled "Impacts and Mitigation Measures" would now become subsection "c" on page IV.F-11 of the DEIR.

IV.F-12 The first paragraph on page IV.F-12 has been changed as follows:

> "Exterior materials would include ~~aluminum~~ or plastic or fiberglass..."

IV.F-12 The following text is added to the top of page IV.F-12 of the DEIR (immediately following the bulleted items):

> The *Draft Pogonip Master Plan* includes design guidelines related to the following: Clubhouse complex; Outdoor Education Camp; parking; transportation and circulation; trails; utilities and services; and, maintenance and support facilities. These guidelines would eliminate any potentially-significant impacts related to these facilities. No such guidelines have yet been developed for the proposed garden.

IV.F-12 The first paragraph on page IV.F-12 is revised as follows:

> "...All of these elements would contrast visually with the material and style of the existing Clubhouse and would be light in color and ~~highly~~ visible due to their location in an open meadow area. These greenhouses would be most visible from Golf Club Drive and the Outdoor Education Camp. However, their siting at the base of a slope and setback from Golf Club Drive would help to minimize their visibility."

IV.F-13 The following words are added to the first bulleted item on page IV.F-13:

> "...North, west, and east walls shall be composed of natural stained, board and batten design or comparable material in appearance. Rigid glazing..."

IV.F-14 Impact VIS-3 is deleted in light of the revised layout of greenhouses and their location relative to Golf Club Drive, as well as design guidelines in the *Draft Master Plan* that address lighting of outdoor parking areas. as follows:

> ~~**Impact VIS-3: Light could be created on the site in association with nighttime lighting of parking areas. Glare could be generated by the proposed on-site greenhouses. Lighting may be visible from distant residences, while glare from the greenhouses may be visible during daytime hours to hikers, bicyclists, and other users of Pogonip. (S)**~~

IV.G-3 The following text should be added at the end of the fourth full paragraph on page IV.G-3 of the DEIR as follows:

> "...as a bikeway. Striped bike lanes are not provided on SR 9 in the vicinity of the project. Striped shoulders of varying width are provided on sections of SR 9 from SR 1 to north of Golf Club Drive."

IV.G-10 The following text is added after the first sentence of the third paragraph on page IV.G-10 of the DEIR:

> "The CMP is updated every two years and the existing CMP was adopted in June 1996."

The following text is added to page IV.G.10 as final paragraph under Section g.

> An option agreement presently allows for construction of a two-lane roadway, with bicycle paths, along a route which would originate at State Highway 9, pass through the Pogonip property, and connect to Glen Coolidge Drive near the eastern boundary of the UCSC campus. A specific alignment has not been identfied, however, three preferred routes were identfied in the *UCSC Long Range Development Plan EIR* (March 1989) and are shown in Figure VI-1(a) of the Final EIR. For any of these alignments, or for any possible combination of these alignments, there would be potential trail/service crossings and potential need for trail/service road realignments; however, the trail and service road network proposed in the *Master Plan* would not preclude development of an eastern access road.

IV.G-15 The following text is added at the end of the first paragraph on page IV.G-15:

> "Improvements to the Sycamore Grove area could increase the parking demand at this location, although no improvements to the unimproved parking area at this location are included in the *Master Plan*."

IV.G-15 The fourth paragraph on page IV.G-15 should be modified to read as follows:

> "The Outdoor Education Camp would be used by groups of up to 30 people for day use and overnight use. The use of carpools, buses or alternative access modes to transport users of this facility to the Pogonip site would minimize parking demand associated with this facility.
>
> The *Draft Pogonip Master Plan* parking design guidelines state that all parking areas will be paved in accordance with the City of Santa Cruz standard specifications. Because the parking lots would be located within a park setting, improving the parking lot surface with an appropriate all-weather surface would be adequate.
>
> The following combination of mitigation measures would reduce this impact to a less-than-significant level."

IV.G-15 Mitigation Measure TRANS-2 on page IV.G-15 of the DEIR is supplemented by a second measure, creating a two-part measure as shown below:

> "Mitigation Measure TRANS-2a: The *Draft Pogonip Master Plan* should identify potential off-site parking areas to be utilized for the shuttle system. The availability of parking at these locations during the periods when high-attendance special events would be conducted should be guaranteed through a contract between the City and the applicable landowner. Adequate parking for service and shuttle vehicles should be provided at the Clubhouse. (LTS)
>
> Mitigation Measure TRANS-2b: Improvement of the Sycamore Grove area should be coordinated with Caltrans to ensure that the planned improvements would not significantly increase the parking demand at this location. Reducing the improvements proposed for this area or controlling access to the area by requiring that groups visiting the site be made subject to a permit and limited in size and/or that group visits be scheduled would reduce parking demand."

IV.G-15 The following mitigation measure should be added to Mitigation Measure TRANS-2 on page IV.G-15 of the DEIR:

> "Mitigation Measure TRANS-2c: Parking lots located at the Clubhouse and Lower Main Meadow should be surfaced with an appropriate all-weather surface."

IV.G-16 The DEIR text is amended under Impact TRANS-3 on page IV.G-16 as shown below:

> **"Impact TRANS-3: The proposed project would contribute additional traffic to the currently deficient sections of Golf Club Drive, creating or contributing to unsafe conditions. In addition, project-related traffic could exacerbate sight distance-related safety issues due to existing deficiencies of the SR 9/Golf Club Drive intersection.**

IV.G-17 The mitigation measure on page IV.G-17 of the DEIR is amended as shown below:

> Mitigation Measure TRANS-3c: The City and State should work together to improve the geometric design of the SR9/Golf Club Drive intersection to improve the sight distance provided on the north leg of the intersection due to an existing deficient condition. This coordination should be initiated as soon as possible after adoption of the *Master Plan* and records of its accomplishment should be maintained by the City Parks and Recreation Department."

IV.G-17 The following text is added to Mitigation Measure TRANS-3b:

> "The City should coordinate the implementation of additional traffic controls at the Golf Club Drive grade-separation, should they be necessary, with the Santa Cruz County Regional Transportation Commission (SCCRTC)."

IV.G-18 The last sentence of Mitigation Measure TRANS-5a on page IV.G-18 of the DEIR should be amended as follows:

> "These signs should include ~~"Pedestrian Crossing" and Equestrian Crossing"~~ Pedestrian Symbol (W54A), Equestrian Symbol (W45) and Bicycle Symbol (W79) signs where appropriate. The design and installation of the advance warning signs on SR 9 should be coordinated with Caltrans. Installation of signs in the State right-of-way will require on encroachment permit from Caltrans."

IV.G-19 The following mitigation measure is added on page IV.G-19 of the DEIR:

> "Mitigation Measure TRANS-5f: Rincon Trail should be maintained as a service road and a kiosk should not be provided at the Rincon Trail entrance at Glen Coolidge Drive until sight distances provided at the intersection of Glen Coolidge Drive with the Rincon Trail are improved to meet Caltrans and Santa Cruz County standards."

IV.G-19 The following text is added on page IV.G-19 of the DEIR at the end of Mitigation Measure TRANS-5a:

> "The placement of any sign within the State right-of-way would require an encroachment permit."

IV.G-20 The following new text is added after the first sentence in the first paragraph on page IV.G-20 of the DEIR:

> "...between trail users. The concept of user conflict on multi-use trails extends beyond the personal safety or inconvenience associated with physical conflicts on the trails. Differences in user goals and values are also important sources of conflict between user groups.
>
> One study of off-road hiking and biking trail interactions based on user surveys and observations of trail use in Wisconsin found the following (Bjorkman, 1996):
>
> 1. When bicyclists were added to the trail system, the trail experience changed for most hikers due to increased trail traffic in the following ways: a) hikers felt overwhelmed by large numbers of bikers; b) hikers were displaced to hiker-only trails; and c) hikers developed an awareness of the environmental degradation resulting from bicycle use of the trails.
>
> 2. Hiker displacement to low-use trails and/or non-bicycle trails will occur when bicycles are introduced to the trail system. Less than 30 percent of the bikers gave hikers a warning when approaching requiring hikers to focus on impending encounters with cyclists. More than 80 percent of the repeat hikers reported that they avoided the bike trail on return visits.
>
> 3. The goals of hikers and bikers are different and incompatible. Hikers generally seek a quiet, undisturbed nature study while bikers generally seek an uninterrupted aerobic workout. Trail encounters interfere with each group achieving their desired goal.
>
> 4. Hikers are concerned with the environmental degradation they observe with bike use. In addition, both groups have

differences in values regarding the use of green areas. A small core of hikers have deep convictions with regards to the intrusion of bicyclists into the natural environment and will oppose bikes even when separate trail corridors are designated for each user group.

5. Hikers and bikers agreed that trail corridor separation is the best way to provide for goals of each group and reduce conflicts between user groups.

A 1994 Federal Highway Administration (FHWA) study documenting a synthesis of the existing research regarding trail conflicts includes principles to improve cooperation on multiple-use trails (Moore, 1994). These principles are as follows:

1. Recognize conflict as goal interference
2. Provide adequate trail opportunities
3. Minimize the number of contacts in problem areas
4. Involve users as early as possible
5. Understand user needs
6. Identify the actual sources of conflict
7. Work with affected users
8. Promote trail etiquette
9. Encourage positive interaction among different users
10. Favor "light-handed management"
11. Plan and act locally
12. Monitor progress

The FHWA study lists physical and management actions that can be implemented to address trail conflicts. Physical measures include providing proper trail design (redesign), layout and maintenance. Management actions include information and education, user involvement, and regulations and enforcement.

The FHWA study recommends that multi-use trail conflicts be addressed with a strategy that employs a combination of physical and management actions with a long-term perspective. Several of the studies cited in the FHWA study indicate that education and information are the best strategy for preventing user conflicts. Informational strategies are generally preferred over implementation of physical measures and/or enforcement programs. Ranger patrols were the most effective measure for promoting trail etiquette followed by signs and brochures."

IV.G-22 Table IV.G-5 on page IV.G-22 of the DEIR has been amended as shown on the following page to show information regarding Wilder Ranch.

IV.G-23 Mitigation Measure TRANS-6 on page IV.G-23 of the DEIR is renumbered to Mitigation Measure 6a and Mitigation Measure 6b is added as follows:

> "Mitigation Measure TRANS-6b: Trail segments that would require special speed or operational controls should be identified and marked with appropriate warning signs."

IV.H-5 The following sentence is added to the discussion under Impact SER-1 on page IV.H-5 of the DEIR, third paragraph:

> "As trail use increases, so does the potential for conflict. Conflicts on Spring Trail could occur for wheelchair users (given that wheelchair access is proposed at the Spring Street entrance) if Alternative A were selected which allows bicycle and equestrian use along this trail. Wheelchair users could feel intimidated by these other users and are more restricted in their ability to move out of the way of bicyclists and equestrians as compared to non-wheelchair bound hikers."

IV.H-9 The significance criteria on page IV.H-9 could be changed to read:

> "The project would result in ~~encouragement of~~ the use of significant amounts of water, or...".

V-3 The language in the DEIR at the bottom of page V-3 has been revised as follows:

> The Lower Meadow parking lot would be ~~unchanged~~ reduced and would provide a maximum of ~~30~~ 15 spaces for park visitors and Pogonip Garden Project staff (refer to Figure V-1). Shareholder pickups would occur off-site or would be carefully scheduled to ensure adequate parking spaces are available. The number of parking spaces for Garden employees would be reduced to five spaces."

Table IV.G-5
MULTI-USE TRAIL WIDTH STANDARDS

Jurisdiction	Allow non-paved, multi-use trails in jurisdiction?	Which trails allowed for multi-use?	Standard trail width	Grade	Notes
EBRPD[a]	Yes	Fire service roads only	10-12 feet	Varies	Widths dependent on Fire Department requirements for adequate vehicular access.
MROSD[b]	Yes	Varies-see notes	Class A: 6-10 ft. Class B: 4-6 feet	Class A: Varies Class B: Less than 15%	Suitable trail uses for each trail class designation based on physical characteristics and trail use on adjacent parklands.
California State Parks: Santa Cruz District	Yes	Paved and unpaved park roads, including fire roads, dirt roads, and service roads; see notes for exceptions	Width over 5 feet	Varies	District Superintendent can close roads or open trails to bicycle use at his/her discretion; parks may implement *Draft Pogonip Master Plans* with policies that may act to supersede these restrictions (see parks listed below).
California State Parks: Henry Cowell Redwoods	Yes	Fire roads only	10- to 20-foot widths	Less than 15%	
California State Parks: Forest of Nisene Marks	Yes	Fire roads only	10- to 20- foot widths	Varies	Would recommend any multi-use trail to be 5 to 6-foot minimum width (Waggoner, 1997)
Soquel Demonstration State Forest[c]	Yes	All trails multi-use	Single-track trails: 5 foot width max.; Fire roads 10 to 15 feet	Varies	Trails are engineered to control erosion and bicycle speed and to ensure user safety.
MMWD[d]	Yes	Bicycle use allowed on fire roads only	12 to 15 feet	Varies	Restrictions on equestrian use on narrow trails.
Wilder Ranch	Yes	All trails multi-use	Single-track trails: 4 feet up to width of fire road[e]	Varies	

[a] East Bay Regional Park District
[b] Midpeninsula Regional Open Space District
[c] Statistics taken from Draft Education and Recreation Master Plan; Final Plan not yet adopted.
[d] Marin Municipal Water District.
[e] Of the 35 miles of trails, just over one-half are fire roads and the remainder are single-track.

Source: EBRPD, MROSD, State Parks, and MMWD, 1997.

V-4 The following text is added after the last paragraph on page V-4 of the DEIR:

"It is recommended that two travel lanes with shoulders for pedestrians and bicyclists be provided between the railroad trestle and the access driveway to the Lower Main Meadow."

V-4 The following text is now deleted from page V-4 of the DEIR:

~~"Impact VIS-3 identifies visual impacts associated with glare created by greenhouse lighting. This alternative would avoid this impact by locating the greenhouse structure off site."~~

V-5 The following language is added to the DEIR at the end of the last paragraph (p. V-5) to provide more specificity:

"...prairie habitat and the white tailed kite. These spaces would be located in the area along Golf Club Drive, shown on Figure V-1."

The language in the DEIR for this alternative is revised as follows:

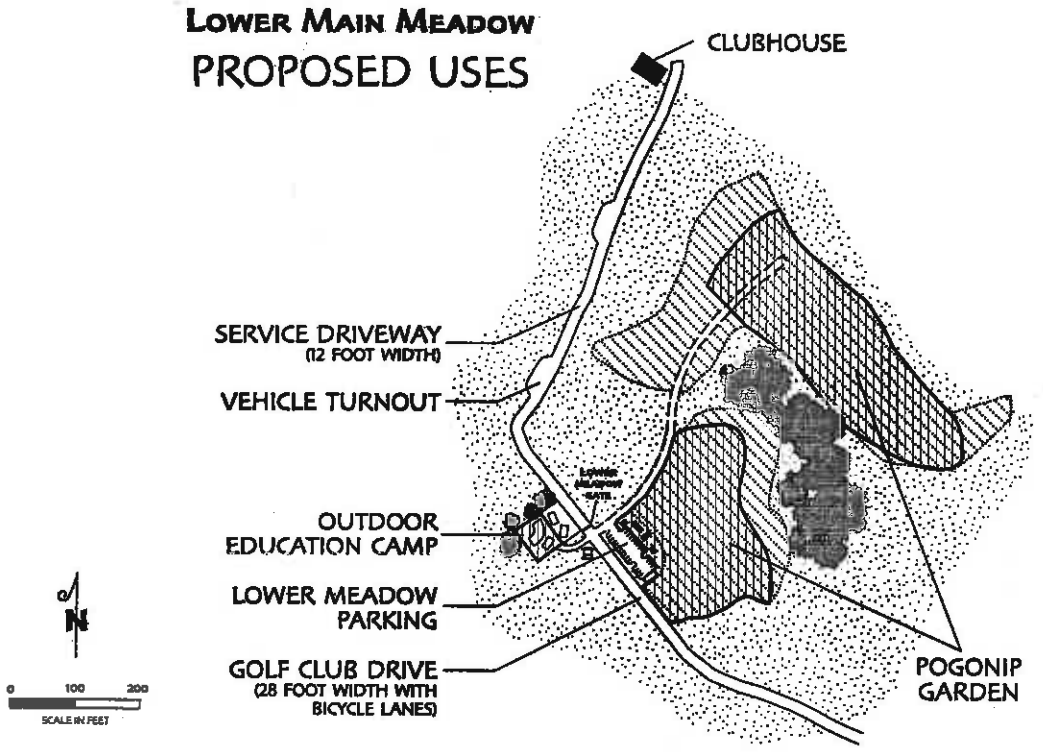
"~~Off-Site Garden and Relocated Parking~~ No Garden and Reduced Lower Meadow Use Alternative."

V-7 The following phrase is added to Impact SER-1:

"**Impact SER-1** identifies an impact resulting from increased water demand associated with the garden. This alternative would avoid this impact only if the garden were located outside of the City of Santa Cruz."

V-7 The following sentence is added under "Adverse Factors" on page V-7 of the DEIR:

"...as well as goals of the *Pogonip Mater Plan*. In addition, this alternative would not meet the intent of Policy L 3.4.1 of the City's General Plan regarding development and implementation of the Pogonip *Master Plan* as expressed in the mixed-use plan in the Pogonip Land Use Options Assessment Report, as it has evolved to provide a mix of uses - recreational, educational, and agricultural."



Note: Actual boundaries will be determined after site specific slope, soil and seep analysis completed. Garden acreage may be further reduced.

Reduced Garden Acreage:	Approximately 9 acres total; greenhouses; support facilities located off-site.
Reduced Outdoor Education Camp:	Less than one-half acre total; no overnight use
Reduced Parking:	15 parking spaces; no covered garden vehicle/equipment parking on-site

Source: City of Santa Cruz Parks and Recreation Department, June 1998.

Figure V-1
Reduced Lower Meadow Use Site Plan

V-7 The last sentence under "3" on page V-7 has been eliminated as follows:

~~"Impact TRANS-2 identifies impacts related to increased parking demand. Implementation of this alternative would exacerbate this impact by reducing the amount of parking provided on the site."~~

VI-1 Language on page VI-1 of the DEIR under "Growth-Inducing Impacts" is revised as follows:

~~"While some homeowners who currently have their homes on septic systems could request sewer service due to the proximity of the extended line to their homes,~~ While the proposed extension is not expected to induce more intense development than allowed by existing zoning, many of the lots along Golf Club Drive are larger than allowed by current zoning and the existence of a new sewer line could induce more intense growth than currently exists. In this way, an extended sewer line could remove a potential restriction to increased subdivisions in this area of the City and could be growth-inducing. In an area that currently has very large lots (about five lots exceeding three acres in size each), the current zoning could allow about 80 new lots (assuming that 33 percent of the land area would be devoted to roads to serve the new lots). To minimize the growth-inducing impacts of the proposed new sewer line extension, this new line should be sized to only serve the Clubhouse. At a later date, the line could be increased to serve more development, but such an expansion would require separate environmental review.

VI-5 The last sentence of the first full paragraph on page VI-5 of the DEIR is corrected as follows:

"Specifically, drainage from these new developments would be directed into Jordan Gulch and as such, would not pose problems for the Pogonip area (Aldecoa, 1997)."

VI-5 The first sentence of the fourth full paragraph on page VI-5 is amended to read as follows:

"The Santa Cruz County Regional Transportation Commission (SCCRTC) ~~completed the "Major Transportation investment Study" and transmitted a summary of this study to the City's Parks and Recreation Department in 1997.~~ is currently preparing a Major Transportation Investment Study (MTIS) of long-range

transportation solutions for the Watsonville Junction-Santa Cruz-UCSC Corridor."

The last sentences of the fifth paragraph on page VI-5 should be amended to read:

"~~The Study completed by SCCRTC~~ A technical report describing the results of Task 11, the Environmental Screening, identifies preliminary environmental issues for the selected alternatives. In the vicinity of Pogonip, impacts to open space lands, noise, visual, the crossing of Spring Trail and biological resources resulting from Alternative 4 would have to be evaluated. Noise, traffic, and air quality impacts associated with construction were summarized as temporary for the area of the rail line that would pass through Pogonip."

VI-5 Figure VI-1(a) is added to the DEIR and shown on the following page. The following text is added after the first full paragraph on page VI-5 of the DEIR:

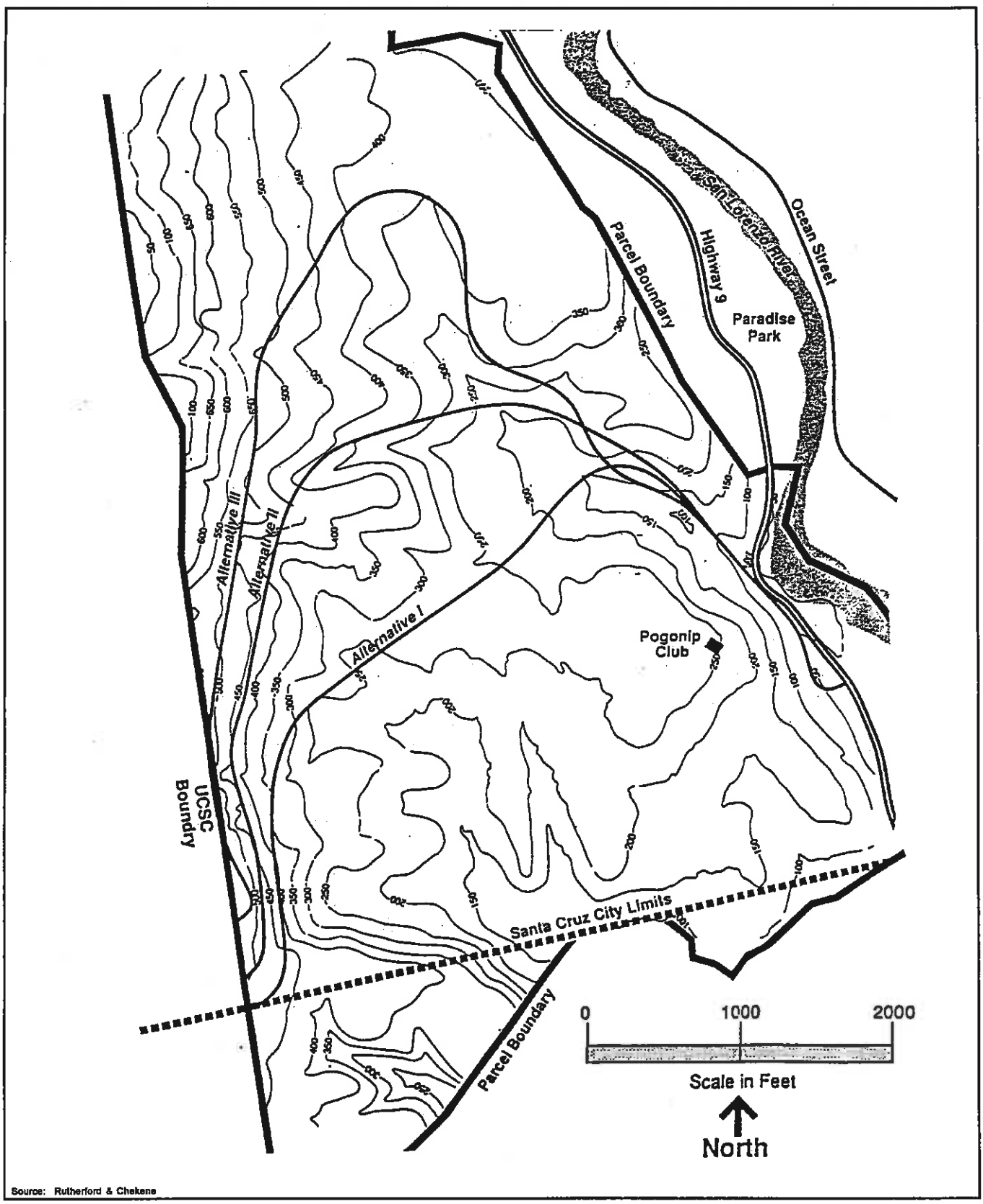
"The uses as proposed in the *Draft Pogonip Master Plan* would not preclude development of an eastern access road across Pogonip. Because no resolution regarding the eastern access road has been passed, this potential development is not evaluated in the discussion of cumulative impacts."

VI-11 The following text is added to the end of the fifth full paragraph on page VI-11 of the DEIR (Section 7.a.):

"Santa Cruz County Regional Transportation Commission (SCCRTC) staff have indicated a desire to preserve trail access consistent with safety considerations should the rail alignment be constructed."

VI-11 The following mitigation measure should be added in the Cumulative Section to the bottom of page VI-11 of the DEIR:

"In addition, the City and State should work together to improve the geometric design of the SR 9/Golf Club Drive intersection to improve the sight distance provided on the north leg of the intersection, due to an existing deficient condition. This



Source: Rutherford & Chekene

Figure VI-1(a)
Eastern Access: Route Alternatives

coordination should be initiated as soon as possible after adoption of the *Master Plan* and records of its accomplishment should be maintained by the City Parks and Recreation Department."

VII. These errata are noted and the following citations are added to Chapter VII of the DEIR:

Beck, Lawrence and Lamke, Gene. 1995. *Blue Sky Ecological Reserve User Observation Study During Bicycle Trial Period.* San Diego State University.

Bjorkman, Alan W. 1996. *Off-Road Bicycle and Hiking Trail User Interactions: A Report to the Wisconsin Natural Resources Board.* Wisconsin Department of Natural Resources Bureau of Research.

Cessford, Gordon R. 1995. *Off-Road Impacts of Mountain Bike: A Review and Discussion, Science and Research Series No. 92.* New Zealand Department of Conservation.

Moore, R.L. 1994. *Conflicts on Multiple use Trails: Synthesis of the Literature and State of the Practice*."

National Recreation Trails Advisory Committee. 1995. *Conflicts on Multiple-Use Trails: Synthesis of the Literature and State of the Practice.*

The following additions are made to Chapter VII of the DEIR under "C. Contacts":

Bertken, Ann. 1998. Personal communication with Susan Harris, City of Santa Cruz Parks and Recreation Department, May 12.

Buchanan, John. 1998. Personal communication with Susan Harris, City of Santa Cruz Parks and Recreation Department, May 13.

Fiala, Steve. 1998. Personal communication with Amy Skewes-Cox, Brady/LSA, May 18.

Jones, Jeff. 1998. Personal communication with Susan Harris, City of Santa Cruz Parks and Recreation Department, May 12.

Scott, Norm, 1998, personal communication with Dawn Reis, Habitat Restoration Group, May.

Suddjian, D., 1988. Personal communication with Dawn Reis, Habitat Restoration Group, May.

ERRATUM

Subsequent to publication of the *Pogonip Master Plan* DEIR, information was received that certain historic resources in Pogonip had been determined eligible for listing in the National Register of Historic Places by the State Historic Preservation Officer (SHPO). Such historic resources are automatically listed in the California Register of Historic Resources. Historic resources determined to be significant include Rincon Trail, and features associated with the Pogonip Lime Works (e.g., lime kilns, quarries, roads, etc.). Text of the DEIR has been edited to reflect the SHPO's determination. The SHPO's determination does not require revision of the impact analysis presented in the DEIR.

Page

IV.E-3 The third paragraph is changed as follows:

> "...Historic properties of concern under *CEQA* are those that are listed in, or eligible for nomination to, the *California Register of Historical Resources* or *National Register of Historic Places*."

IV.E-3 The last paragraph is edited as follows:

> ~~"Of the numerous improvements and features in the Pogonip, only~~ The Pogonip Clubhouse has previously been evaluated in terms of historic significance. It is listed in the City of Santa Cruz *Historic Building Survey*. It has been determined in consultation with the State Historic Preservation Officer (1991) to be eligible for listing in the *National Register of Historic Places* (NRHP) pursuant to appropriate eligibility criteria (36 CFR 60.4a, b and c). However, it is not yet listed in ~~either~~ the NRHP ~~or the~~. Having been formally determined NRHP eligible, it is automatically listed in the *California Register of Historical Resources* (CRHR)."

IV.E-4 The fourth paragraph is edited as follows:

"The historic lime production facilities have not been fully documented ~~and none has been formally evaluated as to eligibility for listing in the CRHR~~ but have been determined NRHP eligible as part of a potential historic district. This determination makes them automatically listed in the CRHR. The NRHP determination was made in consultation before the State Historic Preservation Officer and the Federal Emergency Management Agency in 1996."

IV.E-5 The first sentence is edited as follows:

"...recognized or documented. ~~None of the historic transportation features has been previously evaluated for listing in the CRHR.~~ The Rincon Trail has been determined eligible for listing in the NRHP. Spring Trail is NRHP-eligible as part of a potential NRHP district. Consequently, both trails are included in the CRHR. The eligibility determination was made by the SHPO in 1996."

IV.E-5 The second paragraph is edited as follows:

"....None of the artifacts and features have been previously evaluated to determine their eligibility for nomination to the CRHR. Any of these other artifacts and features that can be associated with the Pogonip lime industry could be considered significant as contributors to a potential NRHP district and would then be included in the CRHR."

IV.E-7 The eighth paragraph is edited as follows:

"(3) Lime Kilns, Limestone Quarries and Associated Features. ~~Remains of the three lime kilns, associated quarries, transportation features, tailings piles, possible workers' facilities and cut redwood stumps appear to meet several of the CRHR eligibility criteria and would also be considered *important* according to *CEQA Guidelines Appendix K*. These diverse features should be considered as comprising a district as opposed to being evaluated as individual sites, objects or artifacts.~~ The kilns, quarries, transportation...."

IV.E-8 The first paragraph is edited as follows:

"...archaeological information important in history, qualifying the historic resources for consideration under criterion "d". The lime kilns and associated features ~~appear to potentially meet each of the criteria under *CEQA Guidelines Appendix K* to be considered *important*.~~ have been determined eligible for listing in the NRHP by the State Historic Preservation Officer as a potential historic district. Such determination automatically places these resources on the CRHR."

IV.E-8 The third and fourth paragraphs are edited as follows:

"(5) Trails and Roads. ~~The significance of Spring Trail and Rincon Trail should be considered in the context of the lime kilns and other related features. In this context, these trails should be regarded as important contributing elements of a historic district as discussed above.~~ Rincon Trail has been determined to be individually eligible for NRHP and CRHR listing. Rincon Trail and Spring Trail are important as contributors to a potential NRHP district. Golf Course Drive does not appear to meet any of the eligibility criteria for CRHR listing.

(6) Other Artifacts and Features. None of the other known artifacts and features qualify for CRHR listing under any of the eligibility criteria, nor would they be considered *important* according to *CEQA Guidelines Appendix K* unless they are associated with the Pogonip lime industry."

IV.E-10 The last paragraph is edited as follows:

"Elements of these approaches could be combined to develop alternative preservation programs. Selection of a mitigation approach must be made realistically, taking into consideration the long-term fiscal commitment to a selected historic preservation program and in consultation with the State Historic Preservation Officer. Short-term preservation actions may..."

Chapter V
MITIGATION MONITORING PROGRAM

■ ■ ■

This Mitigation Monitoring Program has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of a mitigation monitoring program when mitigation measures are required to avoid significant impacts. The monitoring program is intended to ensure compliance during implementation of the project.

This Mitigation Monitoring Program has been formulated based upon the findings of the *Draft Pogonip Master Plan Environmental Impact Report (EIR)*. The program identifies mitigation measures recommended in the EIR to avoid or reduce identified impacts, and specifies the agencies responsible for implementation and monitoring.

The first column identifies the mitigation measure. The second column entitled "Party Responsible for Implementation" refers to the person/agency responsible for implementing the mitigation measure. The third column entitled "Mitigation Implementation" refers to the time that the mitigation measure should be implemented. The fourth column entitled "Agency Responsible for Monitoring" refers to the agency responsible for ensuring that the mitigation measure has been implemented. The fifth column entitled "Action by Monitor" refers to how monitoring is to occur. The last column entitled "Monitoring Timing" refers to when the monitoring action is to occur.

MITIGATION MONITORING CHECKLIST

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
A. LAND USE (Refer to pages IV.A-1 to IV.A-14)					
No impacts would occur related to land use.					
B. VEGETATION AND WILDLIFE (Refer to pages IV.B-1 to IV.B-43)					
BIO-1a: To protect white-tailed kite habitat, the Pogonip garden site should be relocated to an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative. Adequate on-site alternative locations are not available without causing harm to equally or greater value habitat. The garden is considered by the City to be a key element of the *Pogonip Master Plan*. Without relocation of the garden, this impact remains significant and unavoidable. Other mitigation measures are recommended to avoid and/or minimize other biotic impacts. If the garden project is retained as an element of the *Pogonip Master Plan*, the following steps need to be implemented: 1) conduct a pre-construction survey to confirm whether or not the kites are nesting again in Pogonip and to confirm if the kites are using the same locality; 2) conduct a small mammal population study in the proposed garden area and in other grasslands in order to evaluate the potential foraging habitat in other areas; 3) develop specific mitigation measure to avoid take on reproductive habitat (this includes the foraging area supporting the nest) and to compensate for habitat loss. This includes reviewing the proposed Pogonip Garden's Operations and Management Plans in order to develop specific mitigation measures for kites and other wildlife; 4) during the development of the mitigation measures surrounding the Garden's Operations and Management Plans, conduct formal consultations with both agencies responsible for overseeing protection of the nesting habitat of kites (CDFG and USFWS).	City Parks and Recreation Department	Prior to adoption of the *Final Pogonip Master Plan*[a]	City Parks and Recreation Department	Verify compliance	Prior to adoption of *Final Master Plan*

[a] *Final Pogonip Master Plan* also referred to as "*Final Master Plan*".

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-1b: Activities associated with the Outdoor Education Camp should be limited to passive educational activities with low noise levels, particularly during the the months of March through August, the breeding season of the white-tailed kite. Night-lighting and overnight camping should not be allowed during the kite's breeding season. All group activities should be directed away from the kite nesting area and education groups should be informed of these use restrictions.	City Parks and Recreation Department	Throughout period of facility use	City Parks and Recreation Department	Verify compliance	Throughout period of facility use
BIO-1c: Development of the Sycamore Grove Nature Area should include all of the following combination of measures to avoid impacts to sensitive wildlife species: • Any site grading should be conducted in a manner that avoids impact to migrating western pond turtles (assuming turtles utilize the area). • Construction activities should be scheduled outside of the turtle's movement periods (between September and May), assuming turtles utilize the area. • If construction were to occur between June and September, focused surveys for turtles should be conducted by a qualified biologist to determine the presence or absence of this species. • If the surveys show that the species is present, construction activities should be modified to avoid impacts (i.e., change construction window). • Fire management activities that include removal of understory vegetation should be coordinated with CDFG and/or a qualified biologist such that impacts to biotic resources are avoided or minimized.	City Parks and Recreation Department	Prior to development of Sycamore Grove Nature Area	City Parks and Recreation Department	Document presence/absence of turtles; schedule construction outside of movement period, if present	Concurrent with development

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-1d: Assuming that California red-legged frogs utilize the Sycamore Grove portion of Pogonip, park visitors should be informed of the sensitive status of the frog. Interpretive signs, describing the natural history, protective status and restrictions on collection of adult frogs and tadpoles, should be installed within the nature area. Focused species surveys should be conducted prior to any construction activity in the Sycamore Grove area to ascertain presence or absence of the species within Pogonip.	City Parks and Recreation Department	Surveys for frog presence May-November before development; install signs as part of improvements	City Parks and Recreation Department	Verify compliance Conduct survey	Concurrent with development
BIO-1e: Development of the Sycamore Grove Nature Area should avoid removal of native riparian trees that may impact the yellow warbler. If large native trees, or any size willows, are to be removed, focused surveys for yellow warblers should be conducted. If yellow warblers are found, suitable revegetation of riparian habitat should be implemented. Revegetation should include a minimum 1:1 replacement ratio (i.e., acre for acre) to compensate for impacts to warbler habitat. The revegetation should occur within a suitable area of Sycamore Grove and the revegetation plan should be reviewed and approved by California Department of Fish and Game prior to removal of any native trees. The planting plan should be consistent with guidelines in the *Draft Fire Management Element* of the *Draft Pogonip Master Plan.*	City Parks and Recreation Department	Survey for yellow warbler and document native vegetation removal prior to construction	City Parks and Recreation Department	Implement revegetation actions after CDFG approval	Concurrent with development

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-1f: The Prairie Trail, in the vicinity of the known Ohlone tiger beetle colony, should be monitored to ensure that continued pedestrian use of the trail is not impacting the beetle. If the beetle becomes listed by the USFWS, the City should confer with the USFWS on grassland management techniques to preserve and enhance the area for the long-term protection of the species. Grassland management actions, such as prescribed fire and/or selective grazing, should be implemented, in consultation with USFWS. The City may be required to obtain a Section 10(a)(1)(b) permit, pursuant to the Endangered Species Act (ESA), for grassland management actions if the beetle becomes federally listed as threatened or endangered. Use of prescribed fires is consistent with the *Draft Fire Management Element*. (All alternatives)**	City Parks and Recreation Department	Throughout period of trail use	City Parks and Recreation Department	Yearly assessment of beetle habitat. If species listed by USFWS, initiate consultation with USFWS as per Endangered Species Act.	Winter and Spring Annually
BIO-1g: Focused presence or absence surveys for Ohlone tiger beetles should be conducted in the area proposed for the Harvey West Trail. This trail should be designed to avoid impacts to Ohlone tiger beetles, if they are found to be present. As discussed above, if the beetle becomes federally listed, a consultation with the U.S. Fish and Wildlife Service should be conducted, pursuant to the Endangered Species Act (ESA). Management actions within the Harvey West Trail area, such as grazing and/or prescribed fire, may require permitting from USFWS. (All alternatives)	City Parks and Recreation Department	Prior to trail development Winter and Spring	City Parks and Recreation Department	Absence/presence survey. Initiate consultation with USFWS if present.	Prior to trail development

** Text in parentheses ( ) at the end of mitigation measures related to trails identify if the measure applies to Alternative A, B, or C for trails or All alternatives.

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-1h: The rare plant species within the prairie habitat near the Fern Trail (i.e., Haunted Meadow near junction of Rincon, Spring and Fern trails), near the Brayshaw Trail (junction of Brayshaw Trail and Spring Trail) and in prairie and woodland habitat along the Pogonip Creek Trail should be protected from potential direct and/or indirect trail user impacts by a combination of all the following measures: • A two-rail fence should be installed along the edge of the Spring Trail next to Haunted Meadow and at the junction with the Brayshaw Trail to preclude off-trail uses in these meadows. • Fencing should be installed prior to or concurrent with area trail improvements. • Interpretive signs should be provided describing the plants' status and need for protective measures. • The re-routing of the Fern Trail out of Haunted Meadow should be implemented concurrent with the fencing. • If the emergency vehicle access near Haunted Meadow is necessary, a gate would be needed at the north end of the fencing. Vehicle access and horse patrols through the prairies should be limited to the dry season when the potential for soil compaction is least. (All alternatives)	City Parks and Recreation Department	Prior to or concurrent with trail improvements	City Parks and Recreation Department	Document fence location and construction Monitor vehicle access in Haunted Meadow Document Fern Trail re-routing	During period of trail and fencing improvements; vehicle access monitoring ongoing
BIO-1i: As presented in the *Draft Pogonip Master Plan*, habitats supporting rare species (i.e., coastal terrace prairie and scattered occurrences within other habitats) within Pogonip require active resource management. Since the prairie habitat near Fern Trail, the Pogonip Creek Nature Trail and Brayshaw Trail supports known occurrences of rare plant species, these are high priority areas for management. The following combination of steps should be implemented:	City Parks and Recreation Department	Prior to trail improvements	City Parks and Recreation Department	Verify compliance	Ongoing throughout period of trail use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
• Prior to any trail improvements near these areas, prairie management plans should be developed for these prairie areas. The plan(s) should specify measures to preserve and promote the occurrence of the rare plant species, such as selective grazing, prescribed fire and/or seasonal mowing. This action is consistent with the *Draft Fire Management Element* of the *Draft Pogonip Master Plan.* • The plan(s) should identify the current distribution and population size of the rare plants within the prairie and evaluate potential changes in such distribution with historical records (as available). • The plan(s) should specify a goal of preserving the extant populations and, over the next five years of active management, population size and distribution should expand by a minimum average of 20 percent. • The plan(s) should specify monitoring and reporting methodologies such that the effectiveness of the management techniques can be evaluated. Contingency measures to be implemented if management techniques fail to meet the stated performance standards should also be specified; such measures may include changes in management actions, emergency seed collection or other measures as approved by CDFG and USFWS. • The City should obtain an agreement with CDFG on management actions affecting populations of San Francisco popcorn flower (a State-listed species) and conduct voluntary consultation with USFWS and CDFG on management actions affecting populations of robust spineflower, Santa Cruz clover and Gairdner's yampah. • The prairie management plan(s) should be reviewed and approved by USFWS and CDFG prior to implementation of management actions. • Selected grassland management techniques should be implemented within one year of trail changes or improvements.					

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
• A program to monitor the status of the rare plant species and the effects of the selected grassland management actions should be developed as part of the grassland management program. Results of the monitoring should be made available for regulatory agency review. (All alternatives)					
BIO-1j: The UCSC Connector Trail should be aligned to avoid impacting existing wood rat nests. The proposed trail layout near the Pogonip - UCSC boundary should re-routed a short distance upslope to avoid the nests sites in this area. The final trail alignment should be field-checked by a qualified wildlife biologist prior to construction to document that trail construction will not impact the nests. (Alternatives A and B)	City Parks and Recreation Department	Prior to trail improvement	City Parks and Recreation Department	Verify compliance	Once before trail improvement
BIO-2a: At the Sycamore Grove Nature Area, invasive, non-native vegetation (especially the non-native ivy and periwinkle which are low growing ground covers) should be removed and revegetation of native plants, such as willows and blackberry, should occur.	City Parks and Recreation Department	Concurrent with development of Nature Area	City Parks and Recreation Department	Verify compliance	Ongoing throughout facility use
BIO-2b: Drainage from the Lower Meadow parking lot and entrance road should be directed away from the nearby intermittent drainage way and into a grassy drainage swale. The grassy swale would aid in the entrapment and filtering of road/parking lot runoff (including oils and greases) and reduce the potential for such materials to enter the natural watercourse. Design of the grassy drainage swale (including its size and features) should be completed or undertaken by a qualified engineer.	City Parks and Recreation Department	At time of design of road, parking lot	City Parks and Recreation Department and Public Works Department	Verify compliance	Once at time of design

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-2c: The following combination of measures should be implemented for the Lower Main Meadow area. When alternatives are appropriate to specific measures such as relocation, these are specified. • The Pogonip garden, Lower Meadow parking lot and Outdoor Education Camp should collectively be re-designed to avoid or reduce their combined impact to coastal terrace prairie habitat. Avoidance of impacts may be possible by placing all three facilities within the non-native grassland in the easternmost portion of the Lower Main Meadow, as presented in the Alternatives addressed in Chapter V of the EIR. • If avoidance of impacts is not deemed feasible for the Pogonip garden, Lower Meadow parking lot or Outdoor Education Camp, re-creation and/or restoration of other grassland on Pogonip would be a feasible mitigation strategy. For the Pogonip garden facility, approximately 14 acres of existing non-native grassland or degraded coastal terrace prairie within Pogonip could be re-created and/or restored. Approximately 2.0 acres would be necessary to mitigate impacts from the Lower Meadow parking lot and the Outdoor Education Camp. Grasslands that could be considered for this mitigation action are located near Spring Trail, near Fern Trail and the grassland near the ranger office. A more detailed analysis of these potential mitigation sites, in addition to the development and implementation of a detailed prairie mitigation plan, would be necessary to mitigate these impacts to a less-than-significant level if this alternative mitigation measure were selected.	City Parks and Recreation Department and Homeless Garden Project	Prior to implementation of Lower Meadow improvements, and within one year of such improvements	City Parks and Recreation Department	Verify compliance, and obtain approval from USFWS and CDFG	Yearly during first five years; later on periodic basis as stated in mitigation plan

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
• Prior to implementation of the *Draft Pogonip Master Plan's* proposed improvements (i.e., parking lot, Outdoor Education Camp or Pogonip garden facility), the prairie management plan(s) should be developed for the preserved prairie areas within Pogonip. The plan(s) should specify measures to preserve and promote the occurrence of the native coastal prairie species, including revegetation actions (i.e., seeding, plantings) and management actions (i.e., selective grazing, prescribed fire and/or seasonal mowing). The plan(s) should identify the current diversity and density of native prairie species within the mitigation areas and specify a performance standard for suitable mitigation (i.e., increase diversity and density of native prairie species by 50 percent within five years). The plan(s) should specify monitoring and reporting methodologies such that the effectiveness of the prairie mitigation techniques can be evaluated. • Contingency measures to be implemented if techniques fail to meet the stated performance standards should also be specified. Such measures may include changes in management actions, additional seed collection, or other measures as approved by CDFG and USFWS. • The City should obtain approval of the mitigation plan(s) by USFWS and CDFG prior to implementation of the Lower Main Meadow improvements. • Selected grassland mitigation techniques should be implemented within one year of implementation of any Lower Main Meadow improvements. • A program to monitor the status of the prairie mitigation(s) and the effects of the selected prairie management actions should be developed as part of the mitigation plan(s) program. The results of the monitoring should be submitted to regulatory agency personnel for review.					

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-2d: The following combination of measures should be implemented as related to the Pogonip garden area if the Pogonip garden is not relocated: • The location of the wetland should be determined prior to finalization of the Pogonip garden plan and a wetland delineation conducted pursuant to U.S. Army Corps of Engineers criteria. • Assuming direct impacts to the wetland are avoided, the Pogonip garden facilities should be re-designed to avoid indirect impacts from adjacent Pogonip garden activities. • Intensive Pogonip garden activities, such as row crop cultivation, should be located 100 feet from the outside edge of the wetland. • Perennial crops such as herbs or other crops that do not involve annual or seasonal soil cultivation could be allowed in the area 50 to 100 feet from the outside edge of the wetland. • A buffer zone, comprised of native grasses and forbs should be maintained between one and 50 feet from the outside edge of the wetland.	City Parks and Recreation Department	Wetland delineation prior to approval of Garden operations and Management Plan. Designation of buffers on-site prior to garden improvements and ground disturbance	City Parks and Recreation Department	Submit delineation to U.S. Army Corps of Engineers for verification. Review and approve Garden Operations and Management Plan.	Monitoring of wetland protection and buffer throughout period of facility use
BIO-2e. The City should select trail alignments that avoid impacts to coastal terrace prairie. If avoidance is not feasible in some locations, impacts should be reduced by placing trails in areas with the least amount of native grasses and forbs. If impacts to prairie habitat still occur, the City should implement revegetation actions along the trail to compensate for the removal of habitat. Trail cuts should be revegetated with site-obtained grass and forb species. (All alternatives)	City Parks and Recreation Department	Prior to trail improvements	City Parks and Recreation Department	Verify compliance	Prior to trail improvements

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-3: The following combination of mitigation measures should be implemented to avoid, reduce or compensate for impacts to wildlife utilization and/or wildlife movement in and through the Pogonip. • Focused nesting surveys should be conducted for nesting barn owls near the Clubhouse. If nesting is observed, construction activities should be timed to avoid impacting nesting activity (i.e., schedule construction after young have fledged). • To avoid and/or reduce impacts to denning bobcats, the City should take steps to ensure that the Harvey West, Lookout and Pogonip Creek trails are used for pedestrian use only, as designated in the *Draft Pogonip Master Plan*. Any illegal bicycle or equestrian use of these trails should be monitored and mitigation measures developed and implemented, if necessary, to reduce impacts to bobcats. • Signs should be installed notifying park visitors that dogs are required on leash at all times. Due to the higher sensitivity of the Pogonip Creek, Lookout and Harvey West trail areas for wildlife, dogs should be prohibited from these trails. • More vigorous enforcement of the dog leash law by rangers should occur to avoid and reduce impacts to wildlife from unleashed dogs. • Monitoring of dog usage should occur for the first two years after Master Plan adoption, and the policy regarding dogs should be amended if necessary. If the presence of unleashed dogs increases, other measures may be necessary such as an outright ban on dogs within Pogonip.	City Parks and Recreation Department	Prior to Clubhouse improvements; prior to and concurrent with trail use; prior to and concurrent with vegetation clearing	City Parks and Recreation Department	Verify compliance. If barn owls present, schedule construction after young have fledged	Prior to Clubhouse improvements and continual, with records of compliance kept once per year for first ten years of operation

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
• A buffer zone measuring at least 50 feet outward from the tree dripline should be established between the Pogonip garden facilities and the wooded drainage as shown in Figure IV.B-3. The buffer would allow for a wider corridor for wildlife movement through the site. Additionally, the gap between the deer fencing along the access road should be widened to a minimum of 100 feet in width. Any drainage structure should be located out of this wildlife movement corridor (see Figure IV.B-3). • Ranger staff should routinely patrol Pogonip trails and cite illegal bicycle and equestrian users on all applicable trails. Ranger staff should maintain a log of citations and monitor trails for evidence of unauthorized use. This measure would be in conjunction with measures identified in Mitigation Measure TRANS-6. (All alternatives)					

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
BIO-4: Vegetation clearing for fuel management purposes should be done in a manner that maintains habitat features for wildlife and minimizes the introduction of invasive non-native plant species. Prior to vegetation clearing, a wildlife biologist should identify vegetation features to be retained within the clearance area, including snag trees that provide cavities for nesting birds, significant clumps of vegetation that provide cover for wildlife, and a proportion of downed woody debris that provides habitat for amphibians and other species. Vegetation clearing should be limited to the removal of above-ground vegetation (tree limbs and shrub limbs). Ground scraping should be prohibited as this activity may encourage the growth of invasive, non-native plant species, such as French broom. Prescribed fire plans that involve burning near coastal terrace prairie containing sensitive plants or animals or grazing plans in these areas should be reviewed by CDFG and USFWS to ensure that impacts to listed plant and insect species are avoided and/or minimized. The City should consult with a biologist and entomologist regarding prescribed burns in these areas.	City Parks and Recreation Department	Prior to vegetation clearing and prescribed burns	City Parks and Recreation Department	Verify compliance	At time of clearing and prescribed burns

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
C. GEOLOGY, SOILS AND SEISMICITY (Refer to pages IV.E-1 to IV.E-21)					
GEO-1a: To reduce the likelihood of excessive erosion, severe gully advancement, and slope instability, the Pogonip garden should be ~~sited at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V~~reduced in acreage to avoid areas of slopes, gullies, soil pipes, seeps and perched shallow groundwater. In general, the garden site as proposed in the *Draft Pogonip Master Plan* would be reduced to exclude the following areas from cultivation of any kind: area of headcutting to the north of the ravine up to the existing access road; most of the area of the northwest of the existing access road; slope areas of 15 percent or greater, and 50-foot setbacks from slope areas. Prior to approval of the Garden Operations and Management Plan, a site specific soils analysis, slope evaluation and a hydrogeologic investigation should be conducted by a qualified hydrologist/geologist to determine the extent of these conditions and to ensure adequate buffers are provided. A site specific hydro-geologic analysis should also be undertaken to investigate the proposed site for the greenhouses. If the site proposed in the *Draft Pogonip Master Plan* is not deemed appropriate, the greenhouses should be relocated to the southern side of the existing access road, at the eastern side of the Lower Main Meadow. Use of the access road during wet conditions should be limited. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. ~~Because the garden is considered a key element of the project, the infeasibility of this mitigation would cause this impact to remain significant and unavoidable.~~ The following measures are recommended to further reduce or avoid impacts.	City Parks and Recreation Department	Prior to approval of Garden Operations and Management Plan	City Parks and Recreation Department	Verify compliance	Monitoring of site restrictions throughout period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
GEO-1b: Use of the Outdoor Education Camp should be conducted during the periods of low rainfall, particularly summer and fall (dry) season. Use should be curtailed during winter and spring, during periods of rain and as the site dries out in the spring to minimize soil impacts. It would be advisable to institute a rain dependent closure policy, akin to wet conditions restrictions on area playing fields, to limit erosion, soil compaction, and disturbance of local vegetation.	City Parks and Recreation Department	Throughout period of facility use	City Parks and Recreation Department	Document site conditions for limiting wet season use	Throughout period of facility use
GEO-1c: To reduce impacts from site use of the Outdoor Education Camp, erosion control features such as vegetated buffer strips, gravel walkways, and rock filled ditches should be sited in ways that reduce erosion. Tent platforms or other similar structures should be used for overnight camping to limit vegetation trampling and compaction of soils. The *Draft Pogonip Master Plan* should include guidelines to support runoff management through the use of pervious surfaces, vegetative buffers and other similar features that would reduce potential erosion impacts.	City Parks and Recreation Department	Prior to development of Outdoor Education Camp	City Parks and Recreation Department	Document erosion control features, maintenance requirements, site conditions and adherence to approved site development conditions	Throughout period of facility use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
GEO-1d: ~~In the proposed Pogonip Garden site, BMPs such as contour bedding, winter cover cropping, and increased widths for vegetated buffers along cultivated fields and adjacent slopes should be implemented to reduce impacts on the terrace formation.~~ The Pogonip Garden should develop a Garden Operations and Management Plan which identifies and relies upon Best Management Practices appropriate for seep-influenced slopes and perched groundwater conditions in the Santa Margarita formation to mitigate potential impacts on soils and the underlying geologic formation. The Operations and Management Plan should describe management of runoff, sediment and existing erosion conditions on-site. The Operations and Management Plan shall also describe maintenance of facilities and strategies for storm damage response and remedial gully repair techniques. BMP's for this site should be based on feasibility assessments and recommendations developed by qualified erosion control specialists, hydrologists, or geotechnical experts familiar with design and operation of agricultural activities in sandy soils. The following language should be added to the Pogonip Garden Operations and Management Plan: • *Design of the Pogonip garden plots should include a minimum 30-foot vegetated buffer from the cultivated field edge to the break in the adjacent slope and the existing on-site wetlands. This buffer would serve to separate actively-tilled soils and the steeper soil units found on the 30-50 percent slopes downgradient from both primary Pogonip garden plots (north and south row crop areas). The buffer would also protect seasonal wetlands from inputs of agricultural runoff and sediments.* • *Within orchard lands, efforts should be made to minimize the disturbance of soils and vegetation beneath orchard trees to reduce potential erosion and gully formation.*	Homeless Garden Project and City Parks and Recreation Department	Prior to development of garden site and ground disturbance	City Parks and Recreation Department	Document site conditions for limiting wet season use; document erosion control features, function, maintenance requirements, erosion conditions, and adherence to approved Garden Operations and Management Plan	Throughout period of facility use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
• *Terrace gardening, if necessary for permaculture and herb plots, should minimize surface disturbance and retain native vegetation cover to the maximum extent feasible to reduce erosion and potential instability on slopes. Constructed diversion berms should be minimized to reduce soil disturbance on slopes with 16-30 percent grades.* • *Disturbance to mapped seeps and springs on the slopes above the Pogonip garden access road and below the Pogonip Clubhouse should be avoided to minimize erosion of persistently wet soils.* • *Future plans for drainage features, gully repair and erosion control should be reviewed by qualified professionals. Drainage plans should also include regularly cleaned sediment basins, to minimize soil loss off the middle terrace and to reduce downstream sedimentation impacts.*					
GEO-1e: Mitigation for the unstable conditions in the existing dirt (and proposed Pogonip garden access) road off Golf Club Drive requires engineering of a more stable roadbed, with provisions for high soil moisture and drainage. Features for surface and subsurface runoff should include adequate culvert capacity or an "at grade" swale crossing at the intersection with the existing wetland swale on-site. Additional measures, such as a compacted gravel roadbed or a paved road surface, may be necessary following site specific investigations of wet season soil conditions.	City Parks and Recreation Department and Homeless Garden Project	Prior to development of garden site	City Parks and Recreation Department and City Public Works Department	Document erosion control features, function, maintenance requirements, erosion conditions, and adherence to approved Garden Operations and Management Plan	Annually, throughout period of facility use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
GEO-1f: The location and design of the Pogonip garden's drainage features would determine their effectiveness in controlling runoff and sediment transport off the Pogonip garden site. As proposed, no details or specifications for critical drainage features have been provided. Sediment basins upstream of the proposed drainage features would be necessary to assure that sedimentation impacts to on-site drainage features and downstream wetlands are minimized. As proposed, generalized drainage features are located to release runoff to slopes ranging from 15 to 50 percent directly into or in the vicinity of active gullies.	Homeless Garden Project	Drainage features to be addressed in Garden Operation and Management Plan; construction prior to development of garden site	City Parks and Recreation Department and City Public Works Department	Document erosion control features, function, maintenance requirements, erosion conditions, and adherence to approved Garden Operations and Management Plan	Annually throughout period of facility use
GEO-1g: Construction impacts of the garden structures, parking area and ancillary facilities would be mitigated by adherence to local erosion control and drainage standards and monitoring of erosion conditions by a qualified erosion control specialist.	City Parks and Recreation Department	Prior to development of garden site	City Parks and Recreation Department and Public Works Department	Access compliance with conditions of approval for site plan	Annually
GEO-1h: Winter season/wet condition soil disturbance should be avoided in the Pogonip garden area. Active maintenance of erosion control features and sediment basins should occur year-round during periods of storms.	Homeless Garden Project	Throughout the period of use	City Parks and Recreation Department	Document erosion control features, maintenance requirements, erosion conditions, and adherence to approved Garden Operations and Management Plan	Year-round throughout the period of use
GEO-1i: The most effective mitigation for the potential increase in erosion of the surface of the service roads is annual cleaning and rebuilding of waterbars, dip-swales, and other roadway and trail drainage features. By maintaining runoff control features each year, preferably in the fall, the community gains the assurance that impacts of trail use during the dry season will be addressed prior to the onset of erosion inducing rainfall. (All alternatives)	City Parks and Recreation Department	Throughout the period of use	City Parks and Recreation Department	Document erosion control features, maintenance requirements, erosion conditions, adherence to approved Garden Operations and Management Plan, and management actions	Annually, or more frequently

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
GEO-1j: Waterbars should be constructed of materials other than locally available crushed rock, which has limited compaction strength and effectiveness under heavy traffic loads. For the historic service roads, native fine grained, compacted roadbed material would serve as a sufficient waterbar material. Shallow excavation of the roadbed on the uphill side of the waterbar to be built would supply material for the bar, direct much of the erosive flow off the trail, and lengthen the lifespan and effectiveness of the waterbar. The use of flexible rubber waterbars, placed in timber or concrete footings across high use or steep trail segments, would provide critical runoff management while withstanding consistent impacts of pedestrian, equestrian, and mountain bike users. (All alternatives)	City Parks and Recreation Department	Throughout the period of use	City Parks and Recreation Department	Document erosion control features, maintenance requirements, erosion conditions, adherence to approved trail design guidelines and trail management actions	Annually, or more frequently
GEO-1k: Outsloping of existing service roadway surfaces to shed water in a dispersed manner would reduce high-energy runoff from potentially erosive and/or unstable steep slopes and existing gullies. Where this is not feasible, inside ditches should be rock-filled and maintained to move stormwater while minimizing erosion and minor slope failures in roadcuts. (All alternatives)	City Parks and Recreation Department	Throughout the period of use	City Parks and Recreation Department	Document erosion control, archaeological impacts to road surfaces, maintenance requirements, erosion conditions, adherence to approved trail design guidelines and trail management actions	Annually
GEO-1l: Limitations on multi-use traffic volumes would serve to minimize multi-use trail impacts. This may be realized by individually reviewing trail use permits for special events. (Alternatives A and B)	City Parks and Recreation Department	Throughout the period of use	City Parks and Recreation Department	Document use and enforce conditions of group permits	Throughout the period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
GEO-1m: Additional detail should be provided during the selection process for the new trail routes and prior to any new trail construction. This detail would include site-specific construction techniques and other mitigation measures to be utilized in particularly steep areas requiring slope cuts and at stream and wetland crossings. Prior to the construction of new trails, trail design plans, construction details, and an erosion control plan should be submitted for review by City staff and the City Council prior to approval and construction. (Alternatives A and B)	City Parks and Recreation Department	Prior to trail construction	City Parks and Recreation Department and City Public Works Department	Document erosion control features, drainage crossings, maintenance requirements, erosion conditions, and adherence to approved trail design guidelines and trail management actions	Annually throughout period of facility use
GEO-1n: In all trail alignments, limits on wet season should be imposed to reduce impacts to local soil resources and slope stability. (All alternatives)	City Parks and Recreation Department	Throughout the period of use	City Parks and Recreation Department	Document site conditions for limiting wet season use	Throughout the period of use
GEO-1o: In the case of the proposed new trail alignments where moist soils, surface ponding, slow drainage, and other problematic trail maintenance conditions occur, additional construction standards may be necessary. Measures such as surfacing problem areas with locally-derived, crushed rock should be established to add structure to the new trail beds, while adding to the trail surface resistance to downslope, mountain bike, brake skidding and steep slope equestrian impacts. Trail surfacing should be evaluated based on post-construction conditions and re-evaluated periodically following actual use. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing equestrian/bicycle use	City Parks and Recreation Department	Document site conditions for limiting wet season use. Suggest remedial actions and maintenance requirements	Throughout the period of use
GEO-1p: In all multi-use trail alternatives, increased signage and speed control features should be established to reduce the overall impact of trail use by reducing trail widening at points of user interface, and on turns where users may drift off designated trails. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing bicycle use	City Parks and Recreation Department	Document signage placement, conditions of signage, and suggest replacement when signage sustains damage from vandalism or natural conditions	Throughout the period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
GEO-1q: Fencing should be constructed as needed to limit trail cutoffs and to limit potential adverse impacts associated with vegetation trampling and excessively steep, unmaintained informal trails. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document fence placement, condition of fences, and suggest maintenance, as needed	Throughout the period of use
GEO-1r: Impacts in the vicinity of the historic sites and features should be mitigated by trail design and site-appropriate erosion control treatments. For example, trails should not be routed where rockfall or other instability hazard during rainfall or earthquake events could harm trail users. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document site conditions. Suggest approaches to erosion control and visitor use limitations, as needed	Throughout the period of use
GEO-1s: Reduction of the continuing potential geologic hazards associated with the steep quarry faces should be accomplished through a combination of exclusionary fencing, signage, and seasonal closures of the potentially hazardous areas.	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document site conditions. Suggest approaches to erosion control and visitor use limitations, as needed	Throughout the period of use
GEO-1t: Changes in runoff and potential erosion should be mitigated through the minimization of impervious surfaces and the use of vegetated buffers and swales adjacent to event grounds, roadways and parking areas. The City of Santa Cruz should review specific project plans and require BMPs to minimize increased runoff volumes and velocities, and to reduce the likelihood of erosion.	City Parks and Recreation Department	Prior to construction of facilities	City Parks and Recreation Department and Public Works Department	Document erosion control features, function, maintenance requirements, erosion conditions, and adherence to conditions of approval of specific project plans and management actions	Annually
GEO-1u: Construction impacts of ancillary Pogonip garden facilities, Upper and Lower Parking areas, caretaker facilities, the Clubhouse rehabilitation, and the Outdoor Education Camp should be mitigated by adherence to City of Santa Cruz erosion control standards and monitoring of construction and erosion control efforts by certified erosion control specialist or registered engineer and/or geologist.	City Parks and Recreation Department	Prior to construction of facilities	City Parks and Recreation Department and Public Works Department	Document erosion control features, maintenance requirements, erosion conditions, and adherence to conditions of approval of specific project plans and management actions	Annually

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
D. WATER RESOURCES (Refer to pages IV.D-1 to IV.D-19)					
WAT-1a: ~~To reduce water quality impacts, the Pogonip garden should be sited at an alternative off-site location, as discussed under the Off-Site Garden and Relocated Parking Alternative in Chapter V. The acreage requirements for the garden and the lack of suitable habitat make an alternative on-site location infeasible. Because the garden is considered a key element of the project, the following measure is recommended to further reduce this impact.~~ To mitigate potential water quality impacts, the Pogonip Garden shall prepare an Operations and Management Plan. The Management Plan should include mitigation measures and BMP's to reduce the water quality impacts. The following measures are suggested: • The actively tilled fields should be reduced in scale such that a vegetated buffer of at least 30 feet separates plowed areas from slopes greater than 10 percent and active gully headcuts at the top of the drainage corridor that bisects proposed Pogonip garden plots. Drainage structures, gully treatments, and Pogonip garden plot layout should be developed in coordination with knowledgeable agricultural planners such as staff of the Natural Resource Conservation Service (NRCS), Santa Cruz County Agricultural Commission, and UC Agricultural Extension Service. The farm operations and management plan should be reviewed and accepted by knowledgeable erosion control and/or geotechnical specialists familiar with local conditions. This plan should also be approved by the City prior to development of the site.	Homeless Garden Project	Prior to development of garden site and ground disturbance	City Parks and Recreation Department	Document erosion control features, implementation of water quality BMPs, maintenance requirements, erosion conditions, and adherence to conditions of approval for specific project plans and garden operation and management actions	Twice annually

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
WAT-1b: To reduce trail-related impacts, voluntary seasonal trail closures should be posted with on-site signage at the Parks and Recreation Department, and through public notices in local media. Wet season trail closures should be implemented to minimize adverse impacts to water quality and reduce trail maintenance requirements. Seasonal closures would likely be more effective than daily closures due to the different trail moisture conditions likely to be encountered in the variable terrain. In all trail alignments and trail use alternatives, existing and proposed, limits on wet season use would reduce impacts to local soil and water resources. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document site conditions for limiting wet season use	Throughout the period of use
WAT-1c: In both multi-use trail alternatives, increased signage and speed control features should be implemented to reduce overall impacts of trail use, by reducing trail widening at points of user interface, and on turns where users may drift off designated trails. Unauthorized access by mountain bikes and horses on single track pedestrian routes should be monitored to reduce the potential for trail widening and erosion. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing bicycle/equestrian use	City Parks and Recreation Department	Document signage placement, conditions of signage, and suggest replacement when signage sustains damage from vandalism or natural conditions. Enforce proposed bicycle ordinance.	Throughout the period of use
WAT-1d: Drainage structures such as waterbars, ditches and culverts should be cleared and maintained prior to each rainy season. This measure applies to all trail alternatives, including existing use and proposed multi-use alignments. Leveling the low duff/soil berm that develops on the downslope side of pedestrian trails would also reduce erosion and sedimentation. Drainage features should be maintained to keep trails drier, limit standing water, and disperse erosive stormwater flow over wider areas, thereby reducing the volume and velocity of trail runoff at any given point in the trail network. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document erosion control features, drainage crossings, maintenance requirements, erosion conditions, and adherence to approved trail design guidelines and trail management actions	Twice annually or more frequently, as needed

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
WAT-1e: In the case of the proposed new multi-use trail alignment, construction specifications should be developed by trail designers with practical experience in the region and field fit to site-specific conditions. Trail alignments should be developed to minimize gradients to 12 percent or less. Where feasible, the multi-use trail should be designed to have less than 8 percent grade. Steeper gradient informal trails should be obliterated and user traffic should be directed to maintained trails through the use of brush piles, downed trees, and, if necessary, fences. (Alternatives A and B)	City Parks and Recreation Department	Prior to and concurrent with trail improvements	City Parks and Recreation Department	Document informal trail use and conditions, maintenance requirements, and suggest trail obliteration or closure management actions	Throughout the period of use
WAT-1f: Specifications for creek crossings and grading on steep slopes should be developed in the field by those familiar with the episodic nature of winter storms and slope instability in the Coast Range. Slope cuts should be minimized, to the extent feasible, and slope fills for maintaining trail widths should be avoided, due to the inevitable disturbance of the fill matrix under equestrian and mountain-bike use. Overall trail widths should be minimized on slopes in excess of 30 percent to reduce the potential for slope failure and erosion. (All alternatives)	City Parks and Recreation Department	Prior to trail construction	City Parks and Recreation Department	Document slope stability, erosion control features, drainage crossings, maintenance requirements, erosion conditions, and adherence to approved trail design guidelines and trail management actions	Throughout the period of use
WAT-1g: On steeper slopes (i.e., those slopes greater than 30 percent), slope cuts should be located with regard to potential slope instability, existing landslides and slope failures, as well as user safety and sight lines. In general, narrower trails reduce slope disturbance and changes in runoff patterns that may substantially impact local surface water quality in the event of trail degradation or slope failures. (All alternatives)	City Parks and Recreation Department	Prior to trail construction	City Parks and Recreation Department	Document slope stability, erosion control features, drainage crossings, maintenance requirements, erosion conditions, and adherence to approved trail design guidelines and trail management actions	Twice annually, or more frequently, as needed
WAT-1h: Fencing should be installed at specific locations as needed, to limit trail cutoffs and redundant routes and to limit the potential adverse impacts associated with excessively steep, unmaintained informal trails. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document fence placement, condition of fences, and suggest maintenance, as needed	Throughout the period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
WAT-1i: Existing informal and unauthorized trails should be obliterated, to the extent feasible, to focus user traffic on maintained trails. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document informal trail use and conditions, maintenance requirements, and suggest trail obliteration or closure management actions	Throughout the period of use
WAT-1j: Overhanging limbs, trailside brush, and downed logs should be cleared from multi-use trails to minimize informal trail bypasses, pullouts and cutoffs that promote trail widening, vegetation trampling and soil disturbance. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing bicycle/equestrian use	City Parks and Recreation Department	Document trail conditions, maintenance requirements, and suggest vegetation management actions	Throughout the period of use
WAT-1k: A sustained maintenance program should be established to include the commitment of regular budget allocations and provision for contingency funds to rehabilitate trails following episodes of flooding, landsliding, and other disturbances typically associated with the Santa Cruz Mountains. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document trail conditions and maintenance requirements. Suggest maintenance programs for annual funding.	Throughout the period of use
WAT-1l: Re-routing of Fern Trail to minimize trail impacts to wet meadow and native grasslands should be conducted with due consideration to the active gullying and slope failure occurring immediately downslope in the Santa Margarita formation. (All alternatives)	City Parks and Recreation Department	Following approval of the *Pogonip Master Plan*	City Parks and Recreation Department	Document slope stability, erosion control features, drainage crossing, maintenance requirements, erosion conditions, and adherence to approved trail design guidelines and trail management actions	Twice annually or more frequently, as needed

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
WAT-1m: Prior to construction of the UCSC Connector Trail, either route requires additional site inspection and trail design. The proposed trail grade should not exceed 12 percent and proposed trail widths should be approximately four to six feet within Pogonip. Due to the steep terrain, trail construction would require excavation of a cut face on slopes in exceedance of 40 percent. Maintaining drainage and minimizing trail widening due to traffic passing in different directions would be critical for the long term viability of either connector route. Well-placed pullouts, or passing areas, should also be provided to minimize user conflicts and informal trail widening. (Alternatives A and B)	City Parks and Recreation Department	Prior to construction of UCSC Connector Trail	City Parks and Recreation Department	Document slope stability, erosion control features, drainage crossings, maintenance requirements, erosion conditions, and adherence to approved trail design guidelines and trail management actions. Suggest remedial actions, as necessary.	Throughout the period of use
WAT-1n: Periodic sweeping of paved surfaces (e.g., parking areas) should be conducted during the summer and fall to reduce contaminated soil particles and animal wastes, thus reducing the first flush of urban runoff pollution in the rainy season from impervious surfaces.	City Parks and Recreation Department	Upon construction of facilities	City Parks and Recreation Department	Document sweeping activities	Twice annually, or more frequently
WAT-1o: Storage of manure, compost and nitrate rich materials to be used in the Pogonip garden should be undertaken to minimize leaching to groundwater by placement on impervious surfaces and covering of stockpiles during the rainy season.	Homeless Garden Project	Throughout period of use	City Parks and Recreation Department	Document implementation of water quality BMPs	Throughout period of use
WAT-1p: Water conservation practices in the Pogonip garden and stormwater runoff BMP techniques should be implemented to mitigate potential adverse impacts associated with use of treated municipal water for irrigation on downstream wetland resources.	Homeless Garden Project	Prior to development of garden site	City Parks and Recreation Department and Water Department	Document implementation of water conservation BMPs	Annually
WAT-1q: Local erosion control and design review standards should be met to minimize construction impacts from ancillary facilities associated with the Pogonip garden, Outdoor Education Camp, and maintenance and support facilities.	Homeless Garden Project	Prior to development of garden site	City Parks and Recreation Department and City Department of Public Works	Document erosion control features, function, maintenance requirements, erosion conditions, and adherence to conditions of approval for specific project plans and management actions	Twice annually, or more frequently

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
WAT-1r: Erosion control features should be constructed to minimize pedestrian use impacts associated with the Outdoor Education Camp. Trails and walkways on steep slopes should be avoided in these same areas. At the Outdoor Education Camp, tent platforms or other stable, well drained designated campsites should be used. Runoff management through the use of pervious surfaces, vegetative buffers and other similar features should be implemented to reduce stormwater impacts.	City Parks and Recreation Department	Prior to construction of facilities	City Parks and Recreation Department and City Department of Public Works	Document erosion control features, function, maintenance requirements, erosion conditions, and adherence to conditions of approval for specific project plans and management actions	Twice annually, or more frequently
WAT-1s: In sections of Brayshaw Trail that exceed 12 percent grade, the road surface should be paved and drainage should be managed to reduce persistent turbidity and maintain the integrity of the saddleback ridge on which the route sits. Brayshaw Trail's use as a critical year-round emergency access route between the Golf Club Drive entrance and the upper Pogonip results in frequent wet season use. Engineering drainage features and a stable roadbed in the steep section of Brayshaw Trail should be constructed to reduce existing and anticipated persistent turbidity in surface runoff, while increasing the lifespan of the route for emergency and operational access. (All alternatives)	City Parks and Recreation Department	Following approval of *Pogonip Master Plan*	City Parks and Recreation Department and City Department of Public Works	Document erosion control features, function, maintenance requirements, erosion conditions, and adherence to conditions of approval for specific project plans and management actions	Annually
E. ARCHAEOLOGICAL AND HISTORIC RESOURCES (Refer to pages IV.E-1 to IV.E-14)					
ARCH-1: The rehabilitation plan for the Clubhouse should be developed in consultation with a qualified professional historical architect and be consistent with guidance developed in consultation with the State Historic Preservation Officer.	City Parks & Recreation Department	Beginning of rehabilitation plan process	City Parks and Recreation Department	Ensure State Historic Preservation Office (SHPO) consultation and incorporate SHPO comments	Prior to any modification of Clubhouse
ARCH-2a: Three approaches are available to mitigate the deterioration of the lime kilns, quarries and associated historic features and contribute to historic preservation. These involve: (1) benign neglect of the physical resources in combination with a program of documentation and archaeological data recovery;	Parks and Recreation Department	Following approval of *Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Annually

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
(2) maintenance of the lime kilns, quarries and associated historic features in a state of "arrested decay," placing the historic preservation emphasis on minimal maintenance (primarily for safety reasons) and conducting additional historical and archaeological studies to better understand the history of these resources; and (3) active preservation which would include reconstruction of some or all of the complex of kilns and associated features for public interpretation (informed by additional historical and archaeological studies). Elements of these approaches could be combined to develop alternative preservation programs. Selection of a mitigation approach must be made realistically, taking into consideration the long-term fiscal commitment to a selected historic preservation program. Short-term preservation actions may have the effect of temporarily delaying or masking obvious deterioration of historic resources but only a comprehensive, long-term historic preservation program would actually result in the preservation of the historic resources. The following combination of measures should be implemented to reduce this impact to a less-than-significant level. If only one mitigation measure is selected by the City, any of the following (2a, 2b, or 2c) by itself would be adequate to reduce the impact to a less-than-significant level. Neglect of the complex of kilns and associated features would result in the deterioration and eventual disintegration of the structural elements. Deterioration would result due to natural processes of decay and collapse enhanced by impacts such as visitors climbing over the ruins. Reduction of the historic features could be regarded as a natural process in the formation of the archaeological record.	City Parks and Recreation Department	After approval of *Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Annually

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
ARCH-3: The following combination of mitigation measures should be implemented to reduce this to a less-than-significant impact: • Impacts to historic elements of the Spring and Rincon trails can be avoided, to the extent feasible, by developing and implementing procedures for construction, maintenance and use of the historic trail segments. These procedures should be included as an appendix to the *Final Pogonip Master Plan* as part of the appropriate City construction and maintenance manuals which direct the oversight of such projects in the City. Construction and maintenance supervisors and appropriate park personnel should be made familiar with the protocols for carrying out construction and maintenance activities along historic portions of the Spring and Rincon trails. Construction and maintenance operations within trail areas with historic fabric, should only be undertaken in accordance with established historic preservation procedures. For example, trail segments that serve as service roads, which are less than 10 feet in width and which include areas of historic fabric, should not be widened in a manner that adversely affects the historic characteristics of the trail/road. • When trail users create alternative pathways off established trails, a variety of adverse impacts could arise. Such impacts would include degradation of trail margins, erosion, and creation of pathways to or through sensitive historic resource areas. Every effort should be made to limit trail users to existing trails as defined in the *Trail Management Actions* section of the *Draft Pogonip Master Plan*.	City Parks and Recreation Department	Throughout period of use	City Parks and Recreation Department	Verify compliance	Throughout period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
ARCH-4: The following steps should be implemented to address unanticipated discovery of archaeological remains: • Important archaeological remains should be avoided and preserved in place. Potential impacts to potentially significant but undocumented archaeological resources could be avoided by conducting archaeological investigations to determine if archaeological remains actually exist in the three areas of concern; and/or • If archaeological remains are encountered, they should be evaluated by a professional archaeologist to determine their importance. • Alternatives to in-place preservation involve, for the most part, the recovery of that information which makes an archaeological site important. Some but not all of this information can be recovered by archaeological methods and techniques referred to as "data recovery." The conduct of an adequate data recovery effort at appropriate archaeological sites can render an adverse impact to less than significant.	City Parks and Recreation Department	Prior to beginning activity Within 24 hours of discovery Develop mitigation plan as soon as possible after inadvertent discovery. If known resource present and affected, develop and implement treatment plan prior to impacting resource.	City Parks and Recreation Department	Verify compliance	Periodically during activity with potential to discover and impact important archaeological remains
• The discovery of human remains at an archaeological site or any other location requires that procedures be followed as defined in California *Health and Safety Code* Section 7050.5 and *Public Resources Code* 5097.98 (requiring notification of the Coroner and Native American Heritage Commission, as appropriate), among others.	City Parks and Recreation Department	Within 24 hours of discovery of remains	City Parks and Recreation Department	Verify notification to coroner	Within 24 hours of discovery of remains
ARCH-5. No mitigation measure would be necessary.					

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
F. VISUAL QUALITY AND AESTHETICS (Refer to pages IV.F-1 to IV.F-14)					
VIS-1a: Vegetative screening of greenhouses would only be possible on the north, east and west sides. Vegetative screening on the south side, which would be most visible from the entry portion of Golf Club Drive for those heading west and north into the site, would not be possible due to the conflict with the need for solar access. The following language should be added to the *Pogonip Garden Operations and Management Plan*: • *Proposed greenhouses shall be designed to be no greater than 11 feet in height, 20 feet in width, and 70 feet in length. North, west, and east walls shall be composed of natural stained, board and batten design. Rigid glazing materials shall be used for the south walls and roof, and shall be framed with wood to be compatible with the historic features of the site. Roof slope shall be 4:12. Vegetative screening shall be added to the north, east, and west walls of the greenhouses. This screening shall include native, drought-tolerant and fire resistant planting approved by the Department of Parks and Recreation. Greenhouse design shall be.subject to Design Review approval.* • *Greenhouses shall be located at the northeast side of the proposed garden area, adjacent to Golf Club Drive but screened from the view of users of the outdoor area of the Clubhouse.*	City Parks and Recreation Department	At time of adopting *Pogonip Garden Operations and Management Plan*	City Parks and Recreation Department	Verify compliance	At time of adoption of *Pogonip Garden Operations and Management Plan*

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
VIS-1b: The *Draft Pogonip Master Plan* should be revised to include the following new (see underlining) language regarding Design Guidelines for the Outdoor Education Camp: • *Provide a wooden shade structure over the picnic table area that is consistent with other visually prominent architectural features on the Pogonip site, to be determined during design review. The shade structure...* • *Provide a small shed for storage of educational program materials that is consistent with other visually prominent architectural features on the Pogonip site.*	City Parks and Recreation Department	Prior to adoption of *Final Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Prior to adoption of *Final Pogonip Master Plan*
VIS-2: To ensure consistency with policies of the City's General Plan Community Design Element, specific design changes recommended under Mitigation Measure VIS-1a should be implemented for the project.	City Parks and Recreation Department	At time of adopting *Pogonip Garden Operations and Management Plan*	City Parks and Recreation Department	Verify compliance	At time of adoption of *Pogonip Garden Operations and Management Plan*
~~VIS-3: Mitigation Measure VIS-1a should be implemented to limit the overall size of the greenhouses and to include vegetative screening and appropriate materials to reduce glare.~~					
VIS-34: Refer to Mitigation Measures GEO-1c and GEO-1d, under Geology, Soils, and Seismicity.	City Parks and Recreation Department	At time of adopting *Pogonip Garden Operations and Management Plan*	City Parks and Recreation Department	Verify compliance	At time of adoption of *Pogonip Garden Operations and Management Plan*
G. TRANSPORTATION AND CIRCULATION (Refer to pages IV.G-1 to IV.G-23)					
TRANS-1: No mitigation measures would be necessary.					
TRANS-2a: The *Draft Pogonip Master Plan* should identify potential off-site parking areas to be utilized for the shuttle system. The availability of parking at these locations during the periods when high-attendance special events would be conducted should be guaranteed through a contract between the City and the applicable landowner. Adequate parking for service and shuttle vehicles should be provided at the Clubhouse.	City Parks and Recreation Department	Upon adoption of the *Master Plan*	City Parks and Recreation Department	Verify compliance	Upon reconstruction of the Clubhouse and prior to use of the Clubhouse for a special event with annual reporting through the period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
TRANS-2b: Improvement of the Sycamore Grove area should be coordinated with Caltrans to ensure that the planned improvements will not significantly increase the parking demand at this location. Reducing the improvements proposed for this area or controlling access to the area by requiring that groups visiting the site be made subject to a permit and limited in size and/or that group visits by scheduled.	City Parks and Recreation Department in coordination with Caltrans	Prior to improvements at Sycamore Grove	City Parks and Recreation Department	Verify compliance	Throughout period of use
TRANS-2c: Parking lots located at the Clubhouse and Lower Main Meadow should be surfaced with an appropriate all-weather surface.					
TRANS-3a: The lower section of Golf Club Drive should be widened to provide two travel lanes. Shoulders should also be provided on both sides of the roadway.	City Department of Public Works	Prior to allowing public vehicle access at Pogonip	City Parks and Recreation Department	Verify compliance	Once at time of rehabilitation of the Clubhouse and/or construction of the Lower Main Meadow uses and prior to use of these facilities
TRANS-3b: Given the relatively low volume of traffic currently utilizing Golf Club Drive west of the railroad trestle and the low volume of traffic anticipated with development of the project, it is recommended that Golf Club Drive at the railroad trestle be operated as a one-lane roadway. Allocation of right-of-way between traffic approaching in opposite directions can be self-regulated given the low volume of traffic on this road link. "One Lane Roadway" warning signs should be installed on Golf Club Drive on both approaches to the railroad trestle with appropriate pavement markings per the Caltrans Traffic Manual. This section of Golf Club Drive should be monitored for possible implementation of additional traffic control should operational problems occur. The City should coordinate the implementation of additional traffic controls at the Golf Club Drive grade-separation, should they be necessary, with the Santa Cruz County Regional Transportation Commission (SCCRTC).	City Department of Public Works	Prior to allowing public vehicle access at Pogonip	City Department of Public Works	Verify compliance	Annual monitoring of traffic operations as conditions warrant

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
TRANS-3c: The City and State should work together to improve the geometric design of the SR9/Golf Club Drive intersection to improve the sight distance provided on the north leg of the intersection due to an existing deficient condition. This coordination should be initiated as soon as possible after one-year of adoption of the *Master Plan* and records maintained by the City Parks and Recreation Department.	Caltrans and City Department of Public Works	After adoption of the *Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Once after improvement completed
TRANS-4: Facilities for pedestrians and bicyclists should be provided on Golf Club Drive between the railroad trestle and the Lower Main Meadow gate, which covers both the lower and middle sections of Golf Club Drive.	City Department of Public Works	During Golf Club Drive improvements	City Parks and Recreation Department	Verify compliance	Once at time of Golf Club Drive improvements
TRANS-5a: Advance warning signs should be provided per Caltrans standards on SR 9 and Coolidge Drive at the Rincon Trail, Rincon Connector Trail and Sycamore Trail crossings/intersections. These signs should include ~~"Pedestrian Crossing" and Equestrian Crossing"~~ Pedestrian Symbol (W54A), Equestrian Symbol (W45) and Bicycle Symbol (W79) signs where appropriate. The design and installation of the advance warning signs on SR 9 should be coordinated with Caltrans. Installation of signs in the State right-of-way will require on encroachment permit from Caltrans. (Alternatives A and B)	City Parks and Recreation Department in coordination with Caltrans	Prior to allowing bicycle/equestrian use	City Parks and Recreation Department	Verify compliance	Once at time of the installation of the warning signs
TRANS-5b: Rincon Connector users should be directed to cross SR 9 at the location where the west leg of Rincon Connector intersects SR 9. Appropriate signs should be installed on the eastbound and westbound trail approaches to SR 9 to direct trail users to the proper location to cross SR 9. Installation of a crosswalk is not recommended at this location. (Alternatives A and B)	City Parks and Recreation Department in coordination with Caltrans	Prior to allowing bicycle/equestrian use	City Parks and Recreation Department	Verify compliance	Upon completion of the installation of the guide and warning signs
TRANS-5c: Bicycle and equestrian trail users accessing the trail system from UCSC should be encouraged to gain access from the UCSC Connector located in the northerly area of Pogonip. (Alternatives A and B)	City Parks and Recreation Department in coordination with UCSC	Upon completion of the USCS Connector Trail	City Parks and Recreation Department	Verify compliance	Throughout period of use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
TRANS-5d: Given the lack of facilities for equestrians on Coolidge Drive, equestrians should be prohibited between Rincon Trail and Coolidge Drive. Appropriate signs should be placed at the intersection of Rincon Trail and Spring Trail guiding equestrian traffic destined to or through the UCSC campus to the UCSC Connector Trail. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing equestrian use	City Parks and Recreation Department	Verify compliance	Throughout period of equestrian use
TRANS-5e: The City should work with the County of Santa Cruz, which owns and maintains Coolidge Drive, to improve the sight distance at the existing Rincon Trail intersection through tree thinning and limbing along the road corridor. It may also be necessary to cut the toe of the slope on the west side of the road, just below the curve, to provide adequate sight distance for the existing speed limit. Any cut slope would likely require slope stabilization, such as a cribwall. In addition, the City should coordinate with the County of Santa Cruz and UCSC to reduce traffic speeds on Coolidge Drive, with 20-foot-wide speed humps or another appropriate measure. (Alternatives A and B)	City Parks and Recreation Department in coordination with UCSC and Santa Cruz County	Prior to opening Rincon Trail between Spring Trail and Glen Coolidge Drive to multi-use	City Parks and Recreation Department	Verify compliance	Throughout period of use
TRANS-5f: Rincon Trail should be maintained as a service road only and a kiosk should not be provided at the Rincon Trail entrance at Glen Coolidge Drive until sight distances provided at the intersection of Glen Coolidge Drive with the Rincon Trail are improved to meet Caltrans and Santa Cruz County standards. (Alternatives A and B)	City Parks and Recreation Department in coordination with UCSC	After adoption of *Final Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Throughout period of use prior to improving sight distance
TRANS-6a: If one of the multi-use trail alternatives is selected, all multi-use trails should be monitored for safety problems and the need for implementing additional mitigation measures. Additional mitigation measures may include closing the trail to multi-use, providing a separate parallel trail for bicycle/equestrian use, or widening the trail. (Alternatives A and B)	City Parks and Recreation Department	Throughout period of use	City Parks and Recreation Department	Verify compliance	Throughout period of use
TRANS-6b: Trail segments that would require special speed or operational controls should be identified and marked with appropriate warning signs. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing bicycle use	City Parks and Recreation Department	Verify compliance	Throughout period of bicycle use

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
H. SERVICE SYSTEMS AND UTILITIES (Refer to pages IV.H-1 to IV.H-16)					
SER-1a: To address additional ranger needs, conflicts requiring ranger assistance should be monitored. If necessary, additional ranger patrol services should be added. This dedicated time may be achieved initially by adding one additional staff member for maintenance duties to free up ranger's time for conflict resolution. (Alternatives A and B)	City Parks and Recreation Department	Throughout period of use	City Parks and Recreation Department	Verify if conflicts occur.	Throughout period of use
SER-1b: Signage and informational handouts notifying park users of park regulations and educating trail users on appropriate and safe trail use should be available at Pogonip. Signs and handouts should be placed at all park entrances and at key locations throughout Pogonip. Signage locations within Pogonip should include parking and staging areas, the Outdoor Education Camp, the Clubhouse, Sycamore Grove, the garden, and major trail intersections. (All alternatives)	City Parks and Recreation Department	After adoption of *Final Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Throughout period of use
SER-1c: On-site rangers should work with user groups to provide volunteer patrols to ensure that trail restrictions are followed and to convey trail etiquette and safety information. (Alternatives A and B)	City Parks and Recreation Department	Throughout period of bicycle/equestrian use	City Parks and Recreation Department	Verify if volunteer patrols available.	Ongoing
SER-1d: Speed limits for bicyclists should be posted along the trails to ensure safe conditions when multi-use is permitted. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing bicycle use and concurrent with use	City Parks and Recreation Department	Verify compliance	Ongoing
SER-1e: A volunteer trails committee should be established to include representatives of trail user groups (including hikers, equestrians, and bicyclists) in problem identification, prevention, and solutions. This committee should be coordinated by staff of the City's Parks and Recreation Department. (Alternatives A and B)	City Parks and Recreation Department	Prior to allowing bicycle/equestrian use	City Parks and Recreation Department	Verify compliance	Ongoing
SER-2a: Management actions to minimize fire hazards, as identified in the *Draft Pogonip Master Plan*, must be undertaken as the various improvements and new uses are implemented throughout Pogonip. These management actions include using appropriate building materials, vegetation management, and ensuring availability of fire suppression equipment.	City Parks and Recreation Department	Ongoing	City Parks and Recreation Department	Verify compliance	Ongoing with records once per year for first 5 years after *Final Pogonip Master Plan* adoption

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
SER-2b: The Parks and Recreation Department should coordinate with the Fire Department to ensure that adequate fire safety prescriptions are included in the *Clubhouse Rehabilitation Plan*. The Parks and Recreation Department should also coordinate with the Fire Department regarding design of all other new facilities proposed for Pogonip, as well as to ensure that the water supply and delivery system and roadways are adequate for fire protection needs.	City Parks and Recreation Department and City Fire Department	At time of Clubhouse Rehabilitation Plan and ongoing.	City Parks and Recreation Department	Verify compliance	At time of Clubhouse Rehabilitation Plan and ongoing.
SER-2c: The Parks and Recreation Department should establish an on-going vegetation management program to ensure that fire management actions are implemented. This program would include regular mowing, conducting prescribed burns when feasible, grazing, and other vegetation management strategies, as described in the *Draft Pogonip Master Plan.*	City Parks and Recreation Department and Fire Department	After adoption of the *Final Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Ongoing with records once per year
SER-3a: The following combination of mitigation measures should be implemented to reduce this impact to a less-than-significant level: • The Parks and Recreation Department should submit irrigation plans to the City Water Department for design review and review of compliance with water conservation ordinances prior to project approval. Implementation of water conservation techniques would reduce this impact to a less-than-significant level during non-drought periods. • The additional demand for water created by the Pogonip garden could impact city water supplies during drought conditions. The City should consider scaling back garden irrigation practices during times of drought.	City Water Department and Parks and Recreation Department	Prior to adoption of the *Final Pogonip Master Plan*	City Parks and Recreation Department	Verify compliance	Ongoing, depending on drought conditions
SER-4: If cultural resources are uncovered during the excavation process for the water line, construction should stop and instructions prescribed in Chapter IV, Cultural Resources, should be followed.	City Parks and Recreation Department	Within 24 hours of discovery.	City Parks and Recreation Department	Verify compliance	As needed.

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
SER-5: If cultural resources are uncovered during the excavation process for the wastewater line, construction should stop and instructions prescribed in Chapter IV.E, Cultural Resources, should be followed.	City Parks and Recreation Department	Within 24 hours of discovery.	City Parks and Recreation Department	Verify compliance	As needed.
SER-7: The *Clubhouse Rehabilitation Plan* should include a construction-phase recycling plan, created in consultation with the Santa Cruz Public Works Department. The plan should address major materials generated by the construction project, including brush and other vegetative growth, dimensional lumber, metal scraps, cardboard packaging, and plastic wrap, and opportunities to recycle such materials or divert them away from the City landfill.	City Parks and Recreation Department	At time of adoption of *Clubhouse Rehabilitation Plan*	City Parks and Recreation Department	Verify compliance	Ongoing during rehabilitation
SER-8: The undergrounded electrical and telecommunications transmission lines should follow the existing Golf Club Drive alignment to the maximum extent feasible to minimize biological and cultural impacts resulting from excavation. If cultural resources are uncovered during excavation, construction should stop and prescriptions given in Chapter IV, Cultural Resources, should be implemented.	City Parks and Recreation Department	At time of planning and constructing new lines; within 24 hours of cultural resource discovery	City Parks and Recreation Department	Verify compliance	Prior to line construction.
SER-9: The Parks and Recreation Department should obtain written verification from PG&E that the proposed parking facilities would not interfere with PG&E operations at this location. If the proposed parking would significantly interfere with PG&E access to this site, alternative handicapped accessible parking locations should be considered.	City Parks and Recreation Department	Prior to development of parking at Spring Street entrance.	City Parks and Recreation Department	Verify compliance	Once; prior to parking construction.

MITIGATION MONITORING CHECKLIST *continued*

Mitigation Measures	Party Responsible for Implementation	Mitigation Implementation	Agency Responsible for Monitoring	Action by Monitor	Monitoring Timing
CUMULATIVE IMPACTS (Refer to pages VI-7 to VI-12)					
The following mitigation measures for cumulative impacts are recommended: • Biological protection measures for the proposed light rail system that may cross the southern portion of Pogonip; • Regional trail protection measures for potential erosion impacts; • Realignment of the light rail corridor to avoid the Harvey West Creek drainage; • Erosion control measures for any access roads that serve the light rail system; • Coordinated efforts to minimize rail line impacts on trail access and Pogonip circulation; • Reduced water demand for irrigation and implementation of the *Draft Fire Management Element.*	City Parks and Recreation Department	As needed.	City Parks and Recreation Department	Verify compliance	At time of light rail design and construction; once regarding water demand