

academic and research development, which would substantially reduce future options for program expansion and flexibility.

### 5.3 RESPONSES TO INDIVIDUAL COMMENTS

This section presents all written comments received on the Draft EIR and response to individual comments. Comments received at the two Draft EIR public hearings are contained in the two Public Hearing transcripts. Responses to the public hearing comments are presented on the pages that follow the two transcripts. It is recommended that reviewers use the index to comments on pages 5-1 through 5-6 to locate comments from specific agencies or persons and the responses to those comments.

From: "Angela Harris" <yoangie@msn.com>  
To: lrdp-eir@ucsc.edu  
Subject: LRDP EIR comments  
Date: Wed, 11 Jan 2006 17:36:05 -0700

To the consultants and the 2005-2020 LRDP Committee:

Per sections 4.4 Biology, 4.10 Noise and 4.8 Hydrology of the EIR for UCSC:

In section 4.4.1.11, addressing Wildlife Movement, I am concerned that the natural movement and migration needs of any species have not been specifically studied. To determine the width and best location for migration corridors would require observation of the territory needs of mammals, birds, reptiles, and insects. The migration corridors must then be designed to maximize benefit for the most species, with special concern given to sensitive species. What ecological study has been done to choose the location and dimensions of the habitat corridors?

1

I am concerned about soil erosion due to higher human traffic on foot paths around campus. What measures will be taken to encourage travelers to stay on paved paths? As far as I could tell, this EIR does not attempt to estimate the volume of soil that is currently lost from this campus due to erosion (as a result of soil compression by human activity). Thus, the implications of this soil loss for species on campus and for sedimentation of waterways towards the Santa Cruz community are not planned for. Also, how will increased foot traffic affect the roots of small and large plant species as well as the rhizospheres of those roots and soil organisms which depend on certain levels of soil aeration?

2

The placement of a playing field in east upper campus is absolutely ludicrous. To destroy such valuable and relatively pristine forest to place a 4 acre playing field there is not ecologically sound by any means. I do not advocate for the relocation of the playing field to any meadow/coastal prairie area, however I believe that recreational space can be incorporated between new housing plans and sprinkled in smaller areas around campus. Recreational space on this campus should be reclassified to encompass hiking and biking trails in the forest that surrounds it. If there are plans for a recreational field, what are the implications of the chemical inputs (i.e. fertilizers, herbicides) to manicure the grass? I realize that these details are to be decided pending implementation, however the effects of maintaining recreational space in upper campus are probably significant.

3

A list of songbirds (especially those that are rare, endemic to this area, have special sensitivities, or are migratory) that utilize this region should be studied for population predictions. If Santa Cruz provides

4



potential or actual habitat for these birds, the implications of habitat destruction and noise must be considered in relation to the population projections for their species and the other organisms which comprise their niche. It is important to keep in mind the peril of the wintering grounds for migratory birds, which has compromised their viability. If habitat is destroyed in Central and South America, then high quality habitat in North America becomes even more crucial to encourage the long-term survival of the species.

4

The potential extension of Meyer drive through the Eastside meadow does not adequately provide for the birds of prey found in this area, nor special species such as the burrowing owl. At least 5 predatory bird species (strigiformes and falconiformes) use this prairie to hunt and nest. The affects of increased traffic and fragmented habitat may compromise these birds which are just barely returning from the brink of extinction. It is unwise to compromise them again. Understandably, the impact of noise on birds of prey is not easy to quantify or qualify (especially without incurring damage to the test individuals). However, from observing the buffer zone needed around roads for wildlife to function in the same capacity as before the disturbance, some prediction should be possible.

5

Aethetically, I would like to see as little landscaping with exotic plants as possible, unless the plants provide some benefit to another native species. Landscaping with native plants is quite beautiful and acceptable.

It is important to ensure that appropriate funding will be guaranteed to monitor and mitigate the seep zone and other hydrological drainage areas around campus. Before a plan is implemented, sufficient funding should be set aside before construction starts to ensure that monitoring may be completed, and that a contingency plan can be developed and carried out fully if needed.

6

I would like to see a plan for greater accountability in the event of the failure of proposed mitigation measures. For example, if grassland mitigation near the Music Center is intended to compensate for some other construction, there must be monitoring and a contingency plan which have appropriate funding written into the initial proposal. If projects lack the funding to complete them in an ecologically responsible way, the project should be on hold.

7

The temporal scale of this EIR is One year, which may not not account for variable climate conditions. It is not long enough to establish patterns of behaviour, and at this point some assessment is probably at least 4 years old. To add legitimacy, studies must be carried out for extended time periods and knowledge continually updated. Building projects should recognize that they must adapt to new findings about the ecological

8

communities they will disrupt.

8

Finally, the frame of biological resources must be expanded to embrace a less anthropocentric view. To place value only on the parts of the ecosystem that are of some direct use or benefit to humans is narrow and unrealistic. I appreciate the language of the EIR that is more holistic, as we should recognize that ecosystems have inherent value. Humans are a part of the ecosystem, and we draw heavily on many of its resources, yet we are simultaneously dependent on its continuation. Our engineering must be respectful of the inherent value of each organism and maintain a focus on sustainability at all levels.

9

I encourage the consultants to work with local naturalists to obtain exhaustive lists of species (and their documented behaviors) on campus.

10

Thank you so much for your time and work, the document is very readable and I appreciate all of the long hours that are going into finding the best solutions for the expansion of this campus.

Sincerely,  
Angela Harris  
3rd year Environmental Studies/Biology major  
January 11, 2006

## Response to Comment Letter I-31

**Response to Comment I-31-1.** Please refer to Master Response BIO-5 (Wildlife Movement).

**Response to Comments I-31-2.** Some of the sensitive natural communities on the UC Santa Cruz campus (coastal prairie and northern maritime chaparral) are subject to potential impact from foot traffic. Increased foot traffic may have a potentially significant effect on coastal prairie in Crown Meadow, as discussed on page 4.4-44 of the Draft EIR. Removal and degradation of this habitat would be avoided and minimized through the implementation of LRDP Mitigation BIO-2A. Unavoidable loss of coastal prairie would be mitigated through the restoration of coastal prairie in the Campus Habitat Reserve, as stipulated in LRDP Mitigation BIO-2B. Coastal prairie in the Campus Habitat Reserve is unlikely to be impacted by increased foot traffic, because of the lack of adjacent new development. Special-status plant occurrences in Marshall Field or the southwestern portion of campus will not be significantly impacted because planned new development is unlikely to bring increased foot traffic to these areas. Significant increases in foot traffic are not anticipated in northern maritime chaparral or Santa Cruz manzanita areas, because the density of this vegetation discourages entry into these areas. A new mitigation (LRDP Mitigation HYD-3E) has been added requiring: (1) that design and planning for new pathways and bikeways include design features to control pedestrian and bicycles circulation, and (2) that bridges are provided where new pathways cross drainages (see Final EIR, Volume IV, Chapter 3, Revised Table 2-1).

**Response to Comments I-31-3.** The playing field would be constructed in a mixed evergreen forest. Please refer to Response to Comment LA-2-67 for the discussion of impacts related to mixed evergreen forest.

**Response to Comment I-31-4.** The Draft EIR currently addresses songbird species under LRDP Impact BIO-11. Mitigation for protecting nesting raptors (LRDP Mitigation BIO-11) specifically protects all bird species protected under the California Fish and Game Code and the Migratory Bird Treaty Act.

**Response to Comment I-31-5.** All grasslands on campus provide foraging habitat for resident raptor species. While raptors may show preference for ground squirrels, which are most abundant in the East Meadow, they also prey on a wide range of rodents available throughout campus grasslands. The proposed project involves the potential development and/or disturbance of approximately 98 acres of grassland area within which special-status birds have been observed foraging. However, the campus contains large undeveloped expanses of grassland habitat such as the Great Meadow (roughly 90 acres) and the East Meadow (roughly 80 acres), both of which would remain largely undisturbed. Therefore, the loss of foraging habitat potentially used by special-status birds is considered a less-than-significant impact. Mitigations associated with LRDP Impact BIO-11 will reduce any potential impacts to foraging raptors to a less-than-significant level. The 200-buffer is a standard approved for general construction activities and protection of nests by the California Department of Fish and Game and is well established as a nationwide standard.

Regarding the use of native plants in landscaping, the 2005 LRDP Physical Planning Principles and Guidelines state that as much as possible, landscaping will favor the use of native plants as well as non-invasive, drought-tolerant, and fire resistant species (2005 LRDP page 48).

**Response to Comment I-31-6.** Please refer to Response to Comment SA-4-2, which indicates that CEQA does not require funding sources be identified in an EIR.

**Response to Comment I-31-7.** Please see the Mitigation Monitoring Plan (Volume IV, Chapter 4) for information on how the Campus will track the implementation of mitigation measures. Please also see Response to Comment SA-4-6.

**Response to Comment I-31-8.** Temporal change is anticipated and understood as a given. To provide flexibility to adjust to such change, specific implementation of mitigations will be defined in project-level CEQA analyses and additional surveys and information will be incorporated into project-level CEQA analyses.

**Response to Comment I-31-9.** CEQA, requires the EIR analysis to provide an impartial analysis of the potential for the project to impact the natural environment. This was taken into account during the preparation of the Draft EIR.

**Response to Comment I-31-10.** Local experts and studies by UC Santa Cruz faculty, staff, and students were consulted in the preparation of the Draft EIR.

Date: Tue, 10 Jan 2006 22:26:11 -0800  
Subject: growth  
From: Robert Hatcher <hatcher@cruzio.com>  
To: lrdp-eir@ucsc.edu

I came to Santa Cruz partly because of the college and university. I like what they can bring to the community. I had no idea what they take.

To increase the size of the university without addressing the real, daily impact upon the citizens of the community is an arrogant act dividing the students and residents of our community.

1

Transportation, housing and resource allocation (some say usurping or resources) are real problems for those of us who live here.

Temporary, transitory, university administration acts like the selfish developer who comes into the community, takes away that which others hold dear, then leaves a wasted local.

Solve the problems you create, or don't create them.

Transportation, housing, water, roads, safety, tax base,....

You take, take, take, then retreat to your walled citadel, smugly surrounding yourself with multi-syllable justifications.

You leave me to pay your bills.

Robert.

Response to Comment Letter I-32

**Response to Comment I-32-1.** Comment noted. Please also refer to Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures.

Date: Tue, 29 Nov 2005 13:36:20 -0800 (PST)  
From: George Hays <geohays@yahoo.com>  
Subject: 2005 LRDP EIR Comment - George Hays  
To: lrdp-eir@ucsc.edu  
Cc: geohays@yahoo.com

UCSC Physical Planning And Construction  
1156 High Street, Barn G  
Santa Cruz, CA, 95064

RE: 2005 LRDP EIR Comment

All all whom it may concern,  
As a Santa Cruz County resident, and having lived next to UCSC for several years, I would like to strongly encourage the planners to tightly limit the amount of growth over the long-term at UCSC. Particularly, the upper campus and the fire road network must remain in their current low state of development. Why? UCSC is a unique location. It's relative ruralness is it's greatest strength. To increase the footprint of the university would be a gross mistake. Building up, including parking garages, would be the solution to take care of pressing needs. But I encourage the planners to oppose building out, at all costs.

Simply put, the population of the State of California will never stop growing. UCSC does NOT need to match this growth. There is no agreed-upon need to limit the population of the State, but we do need to agree here and now to limit the urbanization of UCSC and by doing so -- the cause of further urbanization of the forests above UCSC, and of the City and County of Santa Cruz themselves.

Why? Because UCSC is unique, and because there MUST BE PLACES IN THE STATE THAT DO NOT BECOME METROPOLISES. WE DO NOT NEED TO BOW TO THE PRESSURES OF POPULATION. There will be places that retain their character, and there will be places that do not. Let's not allow UCSC and Santa Cruz fall by means of an overly-growth-oriented LRDP.

We need to make this strong and hard decision to limit the growth at UCSC NOW. For, each step of urbanization cannot be turned back. Otherwise, soon,

the reason that we all care so much (about UCSC and Santa Cruz) could be lost. This tragedy can be avoided.

George Haye  
13766 Long Ridge Road #A  
Los Gatos (Santa Cruz County portion), CA, 95033  
geohaye@yahoo.com



### Response to Comment Letter I-33

**Response to Comment I-33-1.** Please refer to Master Responses ALT-6 (Increased Infill Development) and Master Response ALT-1 (Appropriate Enrollment Level for Reduced Enrollment Growth Alternative). Note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

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1-10-06

To Whom It May Concern:

The following is a list of my main concerns with the University's DEIR for its LRDP. Please note that I focus on biological resources because of my training and expertise. I am a biologist with a familiarity of the organisms of California's central coast. My specific research focus has been on the restoration and management of coastal prairie; the University has some of the most intact coastal prairie remaining in California. I have also studied the Ohlone tiger beetle, maritime chaparral, and wetlands. On all of these subjects, I would be happy to answer questions.

I would like to preface my comments by saying that it is my firm belief from many years of careful examination of UCSC that the current level of development has exceeded the campus' institutional, physical, and biological capacity. The signs are everywhere: unfunded mitigations, eroding hills, and disappearing species. It is unwise to further develop campus until such a time that we can manage our current obligations. To continue expanding development is to burden future generations with the damage we wrought now.

It is unethical that those in power choose to move forward with these plans: if all others were welcomed to act in such a way, our infrastructure, water resources, and natural lands would be in serious peril. Wishing independence of education for education's sake, Californians entrusted the University administration with much. Now, they are dooming landscapes never considered part of that bargain. The Administrators (and those that enable them) risk the people's trust with this and so much other recent gambling.

We lead by example.

Very Sincerely,

Grey Hayes

**General Comments**

If the past is any reflection of the future, there is much doubt to be cast on especially the mitigation measures proposed for the LRDP DEIR.

What percentage of mitigation measures (especially for biological resources) have succeeded thus far at UCSC?

Does the University consider it its legal obligation to complete the mitigation measures that are listed in its CEQA documents?

Does the University consider CEQA-defined 'feasibility' of mitigation measures to be financially as well as physically/biologically practical?

What state funding guidelines complicate the expenditure of funding for long-term mitigation requirements such that so many of the University's past mitigation measures have not been attempted due to lack of funding?

What is the process of approving funding at UCSC in order to fund mitigation measures?

To what extent have past mitigation measures received sufficient funding?

What new measures is the University suggesting to assure the public that the fraudulent process of requiring and then not funding mitigation measures will no longer take place?

1

The adequacy of the baseline throughout the DEIR is in question. Little can be used to independently verify the University's suppositions. Moreover, little can be used in the future to assess the level of impacts.

What are the elements that the University considers to be adequate in establishing CEQA-required baseline for: biological organisms and communities, hydrology, noise, and visual impacts?

2

**4.4.1.4 Regulatory Setting**

I do not find in this section any discussion of the California Coastal Act.

Does the University recognize the authority of the California Coastal Commission in regulating development by those portions of the University in the Coastal Zone?

Why does the University not consider the California Coastal Act as applicable the biological impacts of the proposed projects?

Which habitats at UCSC would be designated as Environmentally Sensitive Habitat Areas under the Coastal Act?

3

**4.4.1.5 Natural Communities**

There is no description of any recognized scientific methodology for delineation of natural communities either in the DEIR or the supporting biological assessments.

Why does the University not use sound science to determine the extent and composition of natural communities on the campus?

4

How can the public, including independent biologists, confirm the findings of the DEIR with regard to impacts to natural communities?

The definition for coastal prairie is not sufficient: the DEIR purports that '*coastal prairie, which refers to grasslands dominated by native perennial bunchgrasses and having a higher proportion of native herb species, is also present on the campus.*' This definition does not agree with the professional opinions of most biologists, the existing data, and the biological opinion of leading agency regulators. In fact, dominance of native perennial bunchgrasses is extremely rare, but areas with extremely low cover of native perennial bunchgrasses are sometimes highly valued by conservation biologists. In addition, the term 'dominated by native perennial bunchgrasses' does not specify relative or absolute dominance, a critical factor in interpreting data. Also, the phrase 'a higher proportion of native herb species' is meaningless and subjective, which does not help the public to understand or verify the designation of coastal prairie.

How do the coastal prairie areas on campus compare with other coastal prairie areas in the region and state?

5

Are the coastal prairie areas on campus in any way unique in composition?

Is coastal prairie considered ESHA in the Coastal Zone?

Because coastal prairie is often found in mesic sites, is it considered a sensitive biological community by the State Water Resources Board?

For determining coastal prairie, what is the critical percent cover and frequency of native perennial bunchgrasses, at what scale of analysis?

What is the critical patch size that the University has used for analysis of a coastal prairie plant community?

For the term 'a higher proportion of native herb species,' to what is the University comparing to determine what is 'higher?'

For the term 'a higher proportion of native herb species,' what is meant by 'proportion,' and how is this used to determine what is and what is not coastal prairie?

What methodology will future biological consultants working for the University use to analyze impacts to coastal prairie?

5

How will future consultants base their analysis of impacts to natural communities on the baseline and guidelines established by the LRDP DEIR?

The area that was supposed to be restored to coastal prairie in compliance with mitigation measures required by the development of the University's Performing Arts buildings – in Inclusion Area D – was attempted and failed. The University again failed to restore and enhance (as required by mitigation) coastal prairie at Colleges 9 and 10.

What evidence can the University produce that the mitigation measures it proposes for impacts to coastal prairie are feasible?

Where has coastal prairie restoration succeeded?

Where in California has what entity planted native perennial bunchgrasses which have subsequently survived and successfully reproduced themselves, proving that it is possible to create a self-perpetuating population of these species?

6

The University proposes to mitigate impacts to coastal prairie in Inclusion Area D. This area is already protected by an HCP and through mitigation required in response to impacts to coastal prairie from the construction of the Performing Arts complex.

Is it legal to mitigate in areas previously protected as: 1) mitigation for other projects or 2) HCP-oriented management units?

What precedent is there for lead agencies to designate previous mitigation sites or HCP protected lands as new mitigation sites for the same resources?

***Wetlands***

The DEIR proposes that the University will survey to determine the extent of wetlands prior to development of individual projects. There is not a similar level of analysis in the DEIR to other sensitive habitats, such as coastal prairie and maritime chaparral.

In what way do wetlands differ from the other sensitive habitats in the DEIR such that they receive a level of analysis that is significantly less?

7

How might the University's Corps of Engineers wetlands permitting vary if delineation of wetlands occurred for each individual project versus delineation and analysis of all wetlands and all impacts associated with all developments proposed by the LRDP?

What are the University's specific standards for high quality versus low quality wetlands?

What buffer distance does the University propose for protected wetlands in the LRDP study area?

Considering the extent of vegetation disturbance by the overpopulation of deer (see data collected by the Campus Natural Reserve's in its deer enclosure plots), how will the University consider vegetation analysis when delineating wetlands?

7

Considering the extent of soil disturbance because of erosion and grading, how will the University consider soils analysis when delineating wetlands?

Does the University consider Watsonville Loam to be a wetland indicator soil?

What does the University consider to be the length of the growing season when determining the duration of soil saturation for wetland delineation at UCSC?

**Riparian**

Campus has long considered restoring the western branch of Moore Creek, which has a large gully. And yet, the DEIR does not consider impacts to riparian areas that would occur as a result of that restoration.

Is campus considering the restoration of the campus' largest eroding gully, in the western branch of Moore Creek?

8

Why does the DEIR not address the impacts to riparian habitat associated with the restoration of the western branch of Moore Creek?

The DEIR lists impacts to various drainages that include riparian vegetation, but the document fails to quantify impacts to the riparian vegetation in those drainages.

How will riparian communities be affected by the developments proposed by the LRDP?

9

Where specifically are the riparian communities on campus?

Specifically, what does the University consider to be a riparian community?

**BIO-5**

Does the University deny the existence of a population of *Microseris paludosa* on upper campus, in meadows along Chinquapin fire road?

10

Does the University deny the existence of *Goodyera oblongifolia* along the 7 springs trail on upper campus?

11

***Other sensitive species***

Portions of campus are within the boundaries of Santa Cruz County, which maintains a list of locally significant plant species. Moreover, the University has had an ongoing and historic policy of CEQA consideration of and mitigation for impacts to a list of locally significant plant species developed by Buck. I refer the University to CEQA guidelines Appendix G [IV(e)].

12

What rationale does the University propose for not including in their CEQA analysis the local policies of Santa Cruz County with regard to their list of locally significant plant species?

What rationale does the University propose for not including in their CEQA analysis impacts to the species that they have traditionally considered locally significant as determined by past biological consultants to campus?

***4.4.1.6 Sensitive Natural Communities***

As with natural communities (see above), there is no description of any recognized scientific methodology for delineation of natural communities either in the DEIR or the supporting biological assessments.

13

Why does the University not use sound science to determine the extent and composition of sensitive natural communities on the campus?

How can the public, including independent biologists, confirm the findings of the DEIR with regard to impacts to sensitive natural communities?

***Wetlands***

Although requested in scoping comments, the DEIR did not include comprehensive wetland delineation for campus. Wet meadows exist in profusion on campus and are not mentioned as jurisdictional wetlands. Created wetlands, such as the College 8 retention pond, are also not analyzed as being jurisdictional wetlands. No maps are provided in the DEIR, though there is some mapping of these resources in supporting biological assessments by Jones and Stokes and Ecosystems West. The Ecosystems West report from October 2004 mentions two types of wetlands of specific interest: those within the matrix of maritime chaparral and those within coastal prairie areas.

14

How can the DEIR affectively analyze alternatives as required by CEQA without information on the extent of wetlands (and the buffers needed to protect them) that are noted by the University's own documents as being extensively throughout the proposed project area?

What specific process with the University use to delineate wetlands on campus areas both within and without the Coastal Zone?

Which current created detention and retention basins are classified as jurisdictional wetlands?

How will future and current created basins be managed with regard to wetlands permitting?

What agencies will the University consult in approval of their wetland delineation?

Is there a minimum area that the University will consider when seeking agency approval for impacts on a wetland?

Does the University recognize the potential for wetlands within maritime chaparral, as evidenced by biological opinion in the Ecosystems West (Oct. 2004) report?

How much of the coastal prairie on campus also qualifies as wetlands?

Where do wet meadows that qualify also as wetlands exist on campus?

How will all of the wetlands on campus be affected by alteration of surrounding hydrology including, but not limited to, increased impervious surface, changed drainage patterns, trenching and other hydrologic alteration, soil compaction, and changed plant communities associated with development?

14

***Shreve oak forest***

The University has been made aware of the presence of Shreve oak forest on campus, and yet this sensitive community is not listed or analyzed in the DEIR.

Does the University acknowledge the presence of sensitive Shreve oak forest on campus?

What is the geographical distribution of Shreve oak forest globally and in the region?

How will the LRDP proposals affect the extent and health of Shreve oak forest on campus?

15

***Caves***

The DEIR acknowledges that there are sensitive species inhabiting caves on campus. However, the DEIR fails to list the natural community associated with these caves as sensitive.

Does the University acknowledge that the karst system supports a unique and sensitive natural community, albeit underground?

16



What are the elements that define the sensitive natural community of the campus cave system?

What is the geographical extent of the sensitive cave community?

What impacts will the LRDP proposals have on the sensitive natural community associated with the caves?

16

***Purple needlegrass stands***

The California Department of Fish and Game considers purple needlegrass stands to be a sensitive natural community. However, it is not analyzed in the DEIR even though it occurs extensively on campus.

Does the University acknowledge the existence of stands of purple needlegrass on campus that are considered as sensitive by CDFG?

How does the University define purple needlegrass stands in terms of abundance and plant frequency?

How does the University define minimum patch size when determining impacts to purple needlegrass stands?

Is the University aware of any projects that successfully mitigated impacts to purple needlegrass by creating a self-perpetuating stand of purple needlegrass?

17

***Maritime chaparral***

As with all other natural communities, the University does not include a methodology for analyzing the extent and composition of maritime chaparral. Therefore, no present or future scientist can verify the findings of the DEIR. Moreover, the mitigation measures and standards of significance are not verifiable by outside parties. This type of analysis is arbitrary and capricious.

What are the critical minimum percent cover of which species for determining the presence of maritime chaparral?

What precise methodology does the University propose for mapping the distribution of maritime chaparral?

What is the minimum patch size for analyzing impacts to maritime chaparral?

18

Also, the University suggests that fire suppression negatively impacts maritime chaparral. However, there is no subsequent analysis of the repercussions of increased development in proximity of maritime chaparral with respect to the potential to manage the habitat with fire, which is critical for the long-term sustainability of the system.

19

How will increased proximity to development affect the potential to use fire to maintain the maritime chaparral and associated species?

Other than fire, what techniques have been proven to maintain the suite of maritime chaparral species?

In areas of maritime chaparral, or where there is evidence of maritime chaparral having existed historically, what sensitive species are likely to be extant in the soil seed bank that are not also present as adults above ground?

19

**4.4.1.9 Special Status species**

In the supporting biological assessments (Jones and Stokes and Ecosystems West documents), there is inclusion of the level of effort (hours, dates) or location of transects for the botanical surveys. It is clearly evident that several sensitive species were overlooked, and so the effort may was not sufficient.

How many actual hours of effort were used to determine the baseline used by the LRDP DEIR?

20

Where specifically did the surveys take place?

What were the actual dates of the surveys?

Did the surveys take place on dates where sensitive species were (verified by visiting other, known locations) possible to identify?

***Arctostaphylos andersonii***

The section on this species has a misleading statement about CEQA: ‘CNPS includes it on List 1B, indicating that it is sufficiently rare to be considered a special-status species under CEQA.’ This section should read that species listed as ‘1B’ meet the requirements for listing as rare and endangered and need to be treated such under CEQA.

Does the University consider the CNPS List 1B species as being functionally the same for the purposes of CEQA as species that are listed as rare and endangered?

21

Many of the assumptions regarding the status of the species are not based on good science and should be deleted. Note that the species is endangered by lack of wildfire. No analysis is given about potential for wildfire in most of its range and maintaining the species.

How do the number of known populations (15) of *Arctostaphylos andersonii* compare with species listed as endangered?

What proportion of the known populations of *Arctostaphylos andersonii* has similar potential as those occurring on UCSC for being managed using prescribed fire?

21

What proportion of the maritime chaparral on campus has significant numbers of *Arctostaphylos andersonii*?

***Horkelia marinensis***

The *Horkelia marinensis* account in the DEIR does not list or map numbers of the species, status, reasons for decline, etc.

What proportion of the local and global populations of *Horkelia marinensis* exist in the DEIR study area?

22

What are the reasons for decline of *Horkelia marinensis*?

Where do individual *Horkelia marinensis* exist in relation to proposed LRDP activities?

***San Francisco Popcornflower***

On what dates was this species surveyed for?

23

***Undescribed taxon of Carex***

The University's own biological assessment, which it uses to base the analysis in the DEIR states that this species requires more analysis to determine the extent of analysis by CEQA. Therefore, it is incorrect to avoid analysis of an undescribed taxon.

Why has the University ignored the consultation provided in the baseline biological assessment of this species?

24

Why has the University disregarded the precautionary principle by not determining the status of this undescribed *Carex* taxon?

At what time will the University finalize analysis of the potential impacts to the undescribed *Carex* taxon?

**4.4.1.10 Special-status wildlife species**

The DEIR overlooks potential impacts to marbled murrelet and mountain lion corridors: language suggests maintaining corridors (4.4.1.12) but does not provide maps for the locations of those corridors. Marbled murrelet may use upper campus as a flight corridor to access old growth at Henry Cowell Redwoods State Park. Night lighting associated with development further into upper campus could negatively impact the use of this potential corridor.

25

Using GIS analysis, how does upper campus compare (in terms of breadth and habitat quality) with all other potential corridors from the San Lorenzo Valley to the conservation lands along the north coast of Santa Cruz County?

25

How might the projects associated with the LRDP affect the potential marbled murrelet corridor of upper campus?

Where are the most important corridors for mountain lion use on campus?

How might the projects associated with the LRDP affect mountain lion use of corridors on campus?

26

How might increased development of campus affect the potential for human-mountain lion interaction and even injury of humans by mountain lions?

How can campus mitigate for the loss of corridors for mountain lion and the impacts of negative human-mountain lion interactions?

If mountain lions are significantly discouraged from using corridors on campus, what impacts might occur to surrounding conservation lands?

***Other species***

The DEIR fails to analyze impacts to ringtail, grasshopper sparrow, and steelhead trout. Steelhead are known from Wilder Creek, and may have a portion of that population's distribution in portions of Cave Gulch on or directly adjacent to campus.

What data exist for the presence of ringtail on campus?

27

What data exist on the extent of nesting grasshopper sparrows on campus?

How might the development associated with the LRDP affect grasshopper sparrows?

28

Are there unique attributes to campus grasslands that make them particularly attractive to grasshopper sparrows?

What proportion of the region's grasshopper sparrows nest on the UCSC campus?

Is campus aware of populations of rainbow or steelhead trout on or very near campus?

29

What impacts will LRDP proposals have on steelhead trout in Wilder Creek?

Is the dismissal of the need for analysis of the cave population of the Pacific giant salamander an example of the University's application of the precautionary principle?

30

How does the University define the precautionary principle with regard to proceeding with the projects proposed by the LRDP?

31

***Unsilvered fritillary (Speyeria adiastrum adiastrum)***

Baseline biological assessments upon which the DEIR is based include mention of this species of rare butterfly. However, further analysis is avoided because Dr. Arnold failed to discover the host plant, *Viola pedunculata*, in the study area. In fact, large areas of the host plant exist on campus, including thousands of individuals covering significant areas of Inclusion Area A.

32

Can the University confirm large populations of the host plant for this rare butterfly on campus?

Will the University complete analysis for the potential for this species now that it has been informed by a qualified botanist on the existence of the host plant for this species?

What is the correct methodology to survey for this species?

***Callippe silverspot butterfly (Speyeria callippe callippe)***

The species has been suggested to potentially inhabit campus, but is not addressed by the DEIR.

33

On what evidence does the University disregard the potential for the Callippe silverspot butterfly to exist on campus in areas affected by the LRDP?

What insect collections have been surveyed for and what experts consulted on the voucher specimens of this species that may have been collected from the UCSC campus in recent years?

**Proposed Mitigations**

**4.4.2.4 Sensitive Natural Communities**

Overall, proposed mitigations ignored caves, wet meadows, and Shreve oak forests (see above).

34

How will UCSC mitigate for impacts to the sensitive natural communities in the caves, wet meadows, and Shreve oak forests?

***Maritime chaparral***

The DEIR fails to include the useful maps and population numbers that are included in separate biological assessments; these maps are crucial for the public to analyze the DEIR. In particular, there is a need for a map of the proposed maritime chaparral 'conservation area,' and discussion of efficacy of mitigation measures. 'Removal of

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patch' language is not sufficiently detailed: it is not clear if this pertains to the removal of part of a patch. And, there are no 'patches' mapped in the LRDP. 'High' and 'medium' density of Santa Cruz manzanita is not defined. Nor is there sufficient data to show if the patch size of 2 acres is even possible: those are rare, if extant at all. Despite thousands of hours of survey time looking at maritime chaparral, I cannot say that I have ever witnessed a 2-acre patch of Santa Cruz manzanita.

Where specifically do Santa Cruz manzanitas grow in relation to the proposed LRDP developments?

Where is maritime chaparral located in relation to the proposed developments of the LRDP?

How many 2-acre patches of maritime chaparral exist on campus?

How many 2-acre patches of Santa Cruz manzanita exist on campus?

What is a 'patch' of maritime chaparral?

Where specifically have any of the practices suggested for mitigation proven the feasibility of the measures proposed?

In the absence of substantive proof of the feasibility of mitigation measures, how can the University justify a 1:1 mitigation ratio?

How much of a 'patch' would need to be removed before triggering a mitigation measure?

35

***Coastal Prairie***

Past mitigations to 'restore' the habitat have failed at UCSC and elsewhere. Landscaping should avoid shading the habitat. Provide map of potential impact areas and analyze the availability of mitigation areas.

Could the campus provide a comprehensive list of projects that have demonstrated the feasibility of restoring coastal prairie?

Has the campus ever succeeded in restoring coastal prairie?

How might shading from surrounding buildings or plantings be ameliorated to not affect coastal prairie mitigation areas?

Where, specifically, are the coastal prairie areas that might be impacted by LRDP activities?

36

How might coastal prairie mitigation areas overlap with prior mitigation areas or areas set aside in other conservation agreements?

36

**Wetlands**

Without a map, the public cannot determine if there is sufficient area for mitigation/restoration.

Where specifically does UCSC propose to mitigate for impacts to wetlands?

37

How many acres of wetland mitigation area are available on campus?

How many different wetland types may need to be mitigated?

**Sensitive Plant Species**

**BIO-5**

With many of the species, UCSC claims ‘no impact.’ And yet, increased campus population will create more recreational use of campus and increased indirect impacts. Also, increased irrigated landscape and loss of mountain lion use will lead to an increased deer population, which negatively affects sensitive plant species. There is a burgeoning homeless population on campus, which creates disturbance that negatively affects sensitive plant species.

How will the University mitigate the impacts to sensitive plant species of the increasing recreational use of campus?

38

What percentage of campus police enforcement time is used to offset impacts to sensitive species, currently? How will this change with the new LRDP?

Will the campus deer population increase or decrease with the increased development of campus?

How will a changed deer population affect sensitive plant species?

39

How will UCSC mitigate for the impacts of deer on sensitive plant species?

How will UCSC determine the extent of indirect impacts on sensitive plant species and respond to any declines in those species as caused by projects associated with the LRDP?

40

Does the increased development of campus affect the number of homeless encampments on undeveloped campus lands?

How will UCSC mitigate the impacts of homeless encampments and activities on campus lands?

41

**Weed Species**

**BIO-6**

Increased roads, trails, and traffic increase the possibility for increased noxious weeds, mitigation measures must include ongoing control. There is a need for a baseline map of the extent of weed species.

Will the development associated with the LRDP increase the potential for noxious weed invasion?

How will the University mitigate the effects of weed introductions on an ongoing basis?

Where do current noxious weeds exist in order to establish a baseline of natural resources?

42

***Ohlone Tiger Beetle***

**BIO-7**

The specific inclusion of 'no bikes' is unreasonable 'not allowed' without enforcement and monitoring is not sufficient. There is virtually no history of police enforcement and little efficacy of doing so. Foot traffic could also impact the species, as could other recreational activities. Increased development increases the potential for cow-people conflict; but, cows may be important to maintain habitat. Potential impacts suggest need for campus-wide HCP.

How will campus maintain the trails necessary for the Ohlone tiger beetle in the absence of mountain bike and foot traffic?

How has UCSC proven that enforcement by police is feasible to protect the Ohlone tiger beetle? How much effort has thus far been expended and how has this effort performed?

How might foot traffic in Ohlone tiger beetle areas affect the species?

How will increased campus development affect the potential for negative cow-people interactions?

What are proven management techniques for maintaining the Ohlone tiger beetle?

Why has UCSC not proposed a campus-wide HCP for addressing impacts to the Ohlone tiger beetle?

43

***Caves***

**BIO-8**

No mitigation measure for changed hydrology is listed. Campus has no history of successfully limiting use of the caves. No baseline population numbers or distribution maps for the organisms are given – these would be required for an adequate analysis.

44



Why has campus not included mitigation measures for the changed hydrology associated with the LRDP developments?

What can we learn about mitigation measures from other karst systems, in Texas or elsewhere, that have been negatively impacted by changes in hydrology similar to that being proposed or under way at UCSC?

How successful has UCSC been in limiting use of the caves?

What is the level of certainty of the feasibility of limiting use of the caves in the future?

What is the current baseline condition of the caves and cave organisms?

What level of impact would be necessary to trigger increased mitigation actions by UCSC?

44

***Red Legged Frog***

**BIO-9**

Also, drainage improvements (eg., in their 'Infrastructure Improvement Project') repeatedly suggested by hydrology experts include in-stream structures in red legged frog habitat. These impacts are not addressed by the suggested mitigation, (e.g., avoiding areas where the species might be). The species are in the stream channels under consideration year-round.

The DEIR suggests that there is potential for 'take' of the red legged frog on-campus as a result of the activities of the LRDP. However, there is no mention of the potential for a campus-wide HCP.

Which mitigation measures for avoiding impacts to the red legged frog will be used when completing the infrastructure improvement projects proposals to use in-stream structures in the east fork of Moore Creek?

Why is the campus avoiding completing a campus-wide HCP to cover impacts of all proposed projects on the red legged frog?

Is a campus-wide HCP more or less cost effective and more or less effective at conservation than a project-by-project consultation with USFWS on impacts to red legged frog?

What corridors are necessary to maintain a healthy metapopulation of red legged frogs?

45

***Water Quality***

UCSC proposes measures to continue dumping water into the karst system, using this unique geologic feature as a storm drain system. Current water quality impacts to the

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karst are not analyzed in the DEIR. The feasibility of the mitigation measures to improve the quality of water entering the karst is not discussed. Currently, there are at least 4 culverts that dump parking lot and road runoff directly into sinkholes, without filtration.

What are the current (baseline) levels of pollutants entering the groundwater by campus' practice of disposing of stormwater into sinkholes?

Where has the feasibility been established of the practices suggested by UCSC in improving water quality of the water entering the karst?

How many acres (baseline) of road and parking lot runoff is directed into sinkholes?

Over the past decade, what percentage of construction projects at UCSC has proceeded through the rainy season? Why?

How feasible have water quality mitigation measures proven for construction sites at UCSC?

How many culverts (baseline) direct road and parking lot runoff directly (within 20') into sinkholes?

46

***Water Quantity***

UCSC proposes a series of measures to mitigate for increased impervious surfaces resulting from increased development. However, the current drainage situation on campus is severely impacted, with resultant catastrophic erosion, habitat degradation, and dangerous conditions for humans. There is no track record of the University substantially improving this situation.

How will the proposed drainage mitigation measures be funded in order to guarantee their maintenance? Please provide examples where this has been successful at UCSC.

Where has the feasibility of the drainage mitigation measures been established?

Using historic data on subsequent storms in given seasons, how often will the proposed mitigation measures fail because rainfall exceeds capacity of infrastructure? What are the impacts of this failure?

What percentage of a given drainage basin is acceptable to shift into a different drainage basin under the current LRDP guidelines?

What are the presumed infiltration rates of the various drainage improvement structures proposed as mitigation measures by the DEIR?

47

What is the baseline versus complete build-out 25, 50 and 100-year event hydrograph for the major drainages leaving campus?

In the absence of an analysis of extreme storm events post build out, how can the University analyze impacts to the hydrology on campus?

### **Response to Comment Letter I-34**

**Response to Comment I-34-1.** The University has experience in implementing a wide variety of biological resources mitigation measures, including pre-construction surveys for special-status wildlife species, biological monitoring during construction, training of construction personnel in avoidance measures, fencing and annual monitoring of stands of special-interest plants, measures to maintain a ground squirrel population to serve as a prey base for golden eagles foraging in campus meadows, and restoration of coastal prairie. The biological resource mitigation measures in the 2005 LRDP EIR are based on this experience and consist of standard protocols acceptable to the regulatory agencies. Those measures that require habitat restoration include adaptive management provisions in the event that initial efforts at restoration are not successful (e.g., replanting or selection of a new more suitable site).

Regarding the status of implementation of the 1988 LRDP EIR mitigation measures, please see Response to Comment SA-4-2, which indicates that the University has implemented the great majority of these measures under its jurisdiction. Project-specific environmental documents tiered to the 1988 LRDP EIR have also resulted in the identification of additional project-level mitigation measures, some of which address biological resource issues. The Campus's project managers for construction projects, the personnel responsible for implementing these measures under the University's EIR Mitigation Monitoring Programs, have indicated in their annual monitoring reports that these measures have been appropriately implemented. Since 1990, these reports have been included in the Campus's mitigation monitoring reports. The most recent monitoring report, dated September 2004, is posted on the UC Santa Cruz website (<http://planning.ucsc.edu/lrdp/Monitoring/>). Regarding the feasibility and funding of mitigations and assurance that mitigations will be implemented, please see Response to Comments SA-4-2 and SA-5-1.

**Response to Comment I-34-2.** An EIR must include sufficient baseline data in order to determine whether or not a potential impact is significant, but should be concise and no longer than is necessary to make a determination of significance. This is clearly laid out in parts (a) and (c) of Section 15125 of Article 9 (Contents of Environmental Impact Reports) of the Guidelines for the California Environmental Quality Act (California Code of Regulations Title 14, Chapter 3), as amended December 1, 2005. Those overriding principles guided the production of the baseline characterization of all biological resources in the Draft EIR (pages 4.4-1 through 4.4-35) and in Sections 4.1, 4.8, and 4.10 related to aesthetics, hydrology, and noise baseline conditions.

**Response to Comment I-34-3.** The University recognizes the authority of the Coastal Commission in regulating development in portions of the campus that are within the Coastal Zone. As indicated in Section 4.9, *Land Use and Planning* (Draft EIR page 4.9-10), only campus lands west of Empire Grade Road are located in the Coastal Zone and are subject to the requirements of the California Coastal Act.

The Draft EIR acknowledges that some natural communities within the coastal zone on the UC Santa Cruz campus may qualify as Environmentally Sensitive Habitat Areas (ESHA) under the California Coastal Act. However, main campus lands west of Empire Grade Road are designated in the 2005 LRDP as Campus Resource Land, Campus Habitat Reserve, Protected Landscape, or Campus Natural Reserve, and no development in the coastal zone is planned within the planning horizon of the 2005 LRDP. The University is not required to seek approval of the 2005 LRDP from the Coastal Commission, as no

development is proposed in the portion of the main campus that is within the coastal zone. Therefore, an evaluation of project consistency with the Coastal Act, including policies related to biological resources and environmentally sensitive habitat areas, is not required for the main campus. The 2300 Delaware Avenue site is also located in the Coastal Zone. However, the site is already developed with buildings, parking and landscaping and no new development is planned for that site except replacement of mechanical equipment in existing enclosed paved yards. Thus, no ESHA could be potentially be impacted at that site.

Please refer to Response to Comment LA-2-89 for additional information about the University's obligations under the Coastal Act.

**Response to Comment I-34-4.** Mapping of natural communities, including sensitive natural communities, in the north campus area (Ecosystems West 2004) and other areas of the campus (Jones & Stokes 2004) is based on detailed surveys of the entire campus. Surveys of the north campus area were conducted by Randall Morgan between February 7 and June 10, 2000. Botanists Robert Preston and Margaret Widdowson surveyed the remainder of the campus on May 29 through 31 and October 8 and 9, 2002. During these surveys, existing maps of the campus natural communities (Buck 1986; Dashe 1982) were updated by mapping natural community types on 1-inch-equals-400-feet-scale base maps provided by UC Santa Cruz. Field maps are on file with UC Santa Cruz. Descriptions of the common plant species in these communities are provided in Jones & Stokes (2004) and Ecosystems West (2004). These community descriptions are summarized in the Draft EIR. The resulting natural community maps and maps of the 2005 LRDP development areas are part of the Draft EIR, which is publicly available. The University welcomes additional data collection or mapping efforts to refine the maps used in the Draft EIR. Future project-level EIRs will utilize the most detailed and current natural community maps available at the time each specific project is proposed.

**Response to Comment I-34-5.** For questions and comments regarding coastal prairie, please refer to Master Response BIO-4.

Future consultants will base their impact analyses on the most current, accurate, and detailed natural community mapping available for the project area at the time of the analysis. For example, rapid vegetation assessment data currently being collected may provide detailed vegetation maps that will refine impact analyses in future CEQA documents. Project-specific surveys will need to be conducted to update current mapping and to delineate wetlands.

**Response to Comment I-34-6.** Please refer to Master Response BIO-4 for discussion of coastal prairie mitigation and restoration. While the University does propose to potentially use portions of Inclusion Area D for coastal prairie restoration, this use is not inconsistent with the terms and conditions of the HCP implementing agreement. The implementing agreement notes under "Obligation of the Parties" term 4.3 that:

"No development or other actions inconsistent with these preserve designations shall be allowed within these preserves."

As described in the Draft EIR, no restoration will be allowed in the Ohlone Tiger Beetle Management Area of Inclusion Area D. This means that all potential coastal prairie restoration would occur in the remaining 6.8 acres of grasslands in Inclusion Area D. Restoration of coastal prairie within this area, managed as California red-legged frog upland habitat, is not inconsistent with the preserve designation

nor does it represent development of the preserve. Thus, restoration of coastal prairie in the Inclusion Area D preserve is not inconsistent with the HCP implementing agreement.

**Response to Comment I-34-7.** Wetlands were given the same consideration as other sensitive natural communities at UC Santa Cruz. Please refer to Master Response BIO-2, which provides information about wetland mapping.

In order to issue permits to fill or otherwise impact jurisdictional wetlands, the US Army Corps of Engineers (ACOE) typically requires detailed information about the location and nature of the impacts to be permitted. That level of detail is not currently available for all development envisioned under the 2005 LRDP. Project-level detail regarding potential impacts to wetlands from proposed development will be available as individual projects are proposed and designed. Therefore, wetland impacts from all development under the 2005 LRDP are only roughly quantified in the Final EIR based on from previous analyses of areas that may be subject for development. If the ACOE determines that independent permitting of individual projects constitutes inappropriate segmentation of a single larger project, the University will work with the ACOE to ensure that the appropriate permitting process is followed.

The relative quality of wetlands is not discussed in the Draft EIR, although it is noted on page 4.4-44 that the quality of wetlands may change over time. The University has not established a specific definition of high-quality or low-quality wetlands. However, wetlands that have been directly or indirectly disturbed by human activity, such that their functioning for habitat for native species, water quality enhancement, and flood control provision have been reduced, would generally be considered lower quality than wetlands that are less disturbed and better able to provide these functions.

Buffer areas would be individually designed as specific projects are proposed, based on the hydrology and habitat functions of individual wetlands and the nature of adjacent development. However, as a general rule of thumb, a 100-foot buffer between development and wetlands would serve to reduce water quality degradation and human disturbance for many wetland areas (Castelle et al. 1992).

Overbrowsing by deer may change the species composition of wetland plant communities or, in some cases, may eliminate most vegetation from a wetland area. Assuming that overbrowsing by deer has not significantly altered wetlands hydrology, wetlands should still show evidence of wetlands hydrology and hydric soil. Wetlands that are unvegetated, apparently due to overgrazing, would be considered as potential problem areas for wetland delineation. Delineators would seek to determine whether the area would support wetland vegetation in the absence of overgrazing, based on hydrology, soils, and whatever vegetation is present.

Determining whether hydric soils are present in areas located on fill or where substantial sediment deposition has occurred recently can be problematic. This is due to the fact that hydric soil characteristics require some period of time to develop, so that soil that has been recently disturbed may not yet show these characteristics. Areas where substantial soil disturbance has occurred in the past five years could be considered problem areas for delineation if hydric soil characteristics are not evident where expected. These areas would be delineated as potential wetlands based on hydrology and vegetation, and possible reasons for the absence of hydric soil characteristics would be noted.

Watsonville loam is designated as a hydric soil on the Hydric Soils List for Santa Cruz County (Natural Resources Conservation Service 1992). Its designation is due to the fact that it is either:

1. Somewhat poorly drained and has a frequently occurring water table at less than 0.5 feet from the surface for a significant period during the growing season, or
2. Poorly drained or very poorly drained and has a frequently occurring water table at less than 1.5 feet from the surface for a significant period during the growing season and has permeability of less than 6.0 inches an hour in any layer within 20 inches of the surface.
3. Based on this designation, the University considers Watsonville loam to be a hydric soil.

Based on the campus's location at the base of Ben Lomond Mountain and the description of the growing season in the Soil Survey of Santa Cruz County (Bowman and Estrada 1976), the University considers the growing season on campus to be approximately 245 days long.

**Response to Comment I-34-8.** If riparian habitat were to be restored or created as mitigation, future project-level EIRs would consider potential impacts to this habitat in the same manner as other riparian habitat. The Infrastructure Improvements Project Phase 1 and 2 includes several erosion control projects in the western branch (called the West Entrance Fork) of Moore Creek, above the Arboretum Dam. These improvements, which would address the large eroding gully mentioned in the comment, are identified and described in Tables 2-2a and 2-2b in Volume 3 of the Draft EIR on pages 2-89 through 2-109, and illustrated in Figure 2-2. IIP-SW-Impact BIO-2 addresses the temporary degradation and permanent loss of riparian vegetation that would result with construction of these erosion control projects (see Draft EIR page 2-49). Implementation of LRDP Mitigations BIO-4A through BIO-4C would reduce this impact to a less-than-significant level.

**Response to Comment I-34-9.** Riparian communities on campus consist of areas along streams, creeks, or other water bodies dominated by plant species that are typically associated with riparian areas, and not typically found in upland areas. As discussed on pages 4.4-12 and -13, approximately 4 acres of riparian forest dominated by an overstory of mixed willows and black cottonwood is found along Moore Creek between Oakes College and the Arboretum and in the West Entrance Fork.

In addition to this mapped riparian forest, numerous patches of riparian vegetation are found on campus that were below the minimum mapping unit used in mapping natural communities on campus (i.e., too small to be shown on maps but identified in the EIR). These patches of riparian vegetation are found in Jordan Gulch and are reported in Cave Gulch, and are dominated by California hazelnut, California blackberry (*Rubus ursinus*), and snowberry (*Symphoricarpos alba*), which are species typical of riparian forest shrub layers. Fern species that occur in these riparian areas include giant chain fern (*Woodwardia fimbriata*), coastal wood-fern (*Dryopteris arguta*), and western swordfern (*Polystichum munitum*).

Reach-specific descriptions of riparian vegetation in some portions of campus within the scope of infrastructure improvements are found in Volume III of the Draft EIR on pages 2-39 through 2-43.

Potential impacts to riparian communities are discussed and quantified on pages 4.4-45 and -46. Specifically, the Draft EIR states that bridge shading and Infrastructure Improvements Project may permanently impact a maximum of 0.70 acre of riparian vegetation, while 0.6 acre could be temporarily affected by these activities. As discussed in Volume III of the Draft EIR on page 2-50, the Infrastructure Improvements Project is expected to benefit riparian communities by reducing peak flows, channel incision, and erosion. These changes are expected to promote the development of additional riparian vegetation over the long term.

**Response to Comment I-34-10.** The University was not aware of the existence of a population of marsh microseris in this location. This population was not detected in 2002 surveys conducted by Margaret Widdowson and Rob Preston in this area (Jones & Stokes 2004). The University is aware that the CNDDDB includes a record for marsh microseris in Marshall Field, although the exact location of this occurrence is given as unknown (CNDDDB 2005). The University would welcome additional information about this occurrence, but the species was not been identified during recent surveys (Jones & Stokes 2004). Text on pages 4.4-12, 4.4-18, 4.4-47 and 4.4-83 of the Draft EIR has been revised to note this potential occurrence. Please see Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*.

**Response to Comment I-34-11.** The University was not aware of the presence of rattlesnake plantain along the Seven Springs trail in the upper campus. The species was not detected in surveys conducted in 1986 or in 2002. Although, rattlesnake plantain does not meet the criteria for a special-status plant species, it is considered a plant species of special interest by the University. Because it is not a special-status species, it is not analyzed in the Draft EIR; however, it is discussed in Appendix C of the Draft EIR.

**Response to Comment I-34-12.** As local standards do not directly regulate UC Santa Cruz activities, City and County standards were applied only in situations where State and Federal requirements or policies were not available. Under this analysis, no local policies and/or regulations were identified that covered resources not already protected by State and Federal law.

Special interest plants on the University's list were so designated because they are rare in the Santa Cruz Mountains, are at the edge of their range, are in an area far from their typical range, or are unusually close to the coast for the species range. Special-interest plants generally do not meet the definition of special-status plants under CEQA but have been frequently considered in impact analyses of campus projects because of their scientific interest and avoided during construction.

The University did not include these species in LRDP analysis because they do not meet the definition of special-status plants under CEQA. A discussion of these species and their context under CEQA can be found in Appendix C of the Draft EIR.

**Response to Comment I-34-13.** Please refer to Response to Comment I-34-4 above.

**Response to Comment I-34-14.** Please refer to Master Response BIO-2 regarding wetland impacts.

The University acknowledges that mesic grassland areas on campus, which may be referred to as wet meadows, may in some cases be jurisdictional wetlands. The University also acknowledges that detention basins may be jurisdictional waters of the U.S. Text on pages 4.4-13 and 4.4-14 has been revised to incorporate this information.

Waters of the United States will be delineated according to the method described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) at the time that a specific project is proposed that could affect potential jurisdictional waters. Waters of the State outside of the Coastal Zone would be delineated according to the same method, but wetlands considered isolated under the SWANCC decision (See *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (2001) 531 U.S. 159, 121 S.Ct. 675, 148 L.Ed. 2nd 576.), which may be outside of federal jurisdiction, will be mapped as potential Waters of the State. Within the Coastal Zone, Waters of the State would be delineated using a more inclusive approach that requires evidence of wetland hydrology, and the



presence of either hydric soils or hydrophytic vegetation, unless the University is directed by the California Coastal Commission to delineate wetlands using a different procedure. However, no development is planned for the Coastal Zone on the main campus. It is therefore not anticipated that there would be a need for wetland delineation in this area. No wetlands are present at 2300 Delaware Avenue, which is also in the Coastal Zone. Please also refer to Master Response BIO-2 (Wetland Impacts).

A formal delineation of waters of the U.S. would be required to determine whether any areas qualify as jurisdictional. Some retention and detention basins are not considered wetlands because they are routinely cleared of vegetation as part of the maintenance of their retention or detention functions and do not support hydrophytic vegetation. If it were determined that a retention or detention basin is a jurisdictional wetland, impacts to these areas would be mitigated. Specific mitigation would be determined on a case-by-case basis, but could involve the creation of additional basins or the restoration or creation of wetland areas that provide greater habitat function than retention and detention basins.

The University would seek approval for wetland delineations from the ACOE, CDFG, and the Regional Water Quality Control Board (RWQCB) as relevant to specific proposed projects. Typically, the ACOE verifies delineation in the field, and other agencies field verify portions of delineations that present them with special concerns. The University does not envision activities under the 2005 LRDP that would affect wetlands in the Coastal Zone. Therefore, the Coastal Commission's approval of wetland delineations for development areas is not expected to be necessary. The University will seek relevant agency approval for all impacts to jurisdictional wetlands that require permitting under the pertinent regulations.

The University does recognize the potential for wetlands within maritime chaparral. Such wetlands may occur in the north campus, in the vicinity of Chinquapin Road. If identified, wetlands would be subject to the requirements of LRDP Mitigation BIO-2 and impacts to chaparral would be addressed under LRDP Mitigations BIO-1A, -1B, and -1C.

The precise location and extent of jurisdictional wetlands on campus, whether in coastal prairie, grasslands, or other natural communities, cannot be determined until a formal delineation of Waters of the U.S. and of the State has been conducted. Concerning wetland mapping within proposed development areas at the programmatic level, please refer to Master Response BIO-2.

Potential impacts to wetlands and waters from changes in hydrology are discussed in the Draft EIR on pages 4.4-44, 4.8-29 through 4.8-34 of Volume I, and in Volume III on pages 2-68 through 2-70. The discussion of potential impacts to hydrology and water quality focuses on the potential for increased erosion and flooding because of elevated peak flows due to increased impervious surfaces. Implementation of LRDP Mitigations HYD-3A through HYD-3D will reduce erosion problems associated with increased impervious surface through project and road design, as well as public education and outreach to reduce erosion associated with off-road recreation. In addition, as discussed in Volume III of the Draft EIR on page 2-10, the Infrastructure Improvements Project will increase infiltration and reduce erosion in the campus's creeks. Mitigation IIP-SW-HYD-3A requires the University to monitor dispersion manifolds associated with storm water and drainage improvements for evidence of erosion and to prevent erosion through retrofitting of manifolds should erosion occur.

Redirecting surface runoff from its current path and altering groundwater flow could result in the loss of wetlands. It is not possible to provide specific information on how individual wetlands would be affected without specific project design information. However, the potential for impacts of this kind is discussed

on page 4.4-44. Projects that may lead to the loss or degradation of wetlands due to hydrological alteration requires permitting by the appropriate agencies, which may include the ACOE, RWQCB, and CDFG. Implementation of LRDP Mitigation BIO-3D will ensure that appropriate mitigation for such impacts is implemented in consultation with the agencies.

**Response to Comment I-34-15.** Please refer to Master Response BIO-3.

**Response to Comment I-34-16.** Please refer to Master Response to BIO-6.

**Response to Comment I-34-17.** Please refer to Response to Comment LA-6-22 regarding purple needlegrass stands.

As noted in Dyer (2003), purple needlegrass is often the focal species for grassland restorations. Because grasslands are adapted to natural disturbance, and because natural disturbance regimes have been altered by human influence, it is expected that some level of ongoing management will be necessary to maintain native grasslands such as purple needlegrass grassland. Ongoing grazing is among the management techniques that have been implemented on campus and could be utilized to maintain restored stands of purple needlegrass. Restored coastal prairie on campus in Inclusion Area D includes a significant component of purple needlegrass, and the relative cover of this species was documented to have increased significantly after five years of management (J. Fodor and M. Jones, personal communication).

**Response to Comment I-34-18.** Please refer to Master Response BIO-1.

**Response to Comment I-34-19.** Please refer to Master Response BIO-1. The potential presence of special-status species in the seed bank in the soil in areas of northern maritime chaparral is unknown and would be difficult to determine, but if any other special status species were identified within northern maritime chaparral, they would be protected as such.

**Response to Comment I-34-20.** As discussed on page 4.4-1 of the Draft EIR, the discussion of baseline conditions presented in the EIR is based on the previous biological survey work of Jones & Stokes and Ecosystems West. Additional surveys were completed for the proposed specific projects discussed in Volume III of the Draft EIR. In some cases, these informed the programmatic discussion, but no new campus-wide surveys were completed, as these were not necessary, given the wealth of recent plant and wildlife surveys at UC Santa Cruz. All previous surveys were timed to best observe the target species, including consideration of flowering periods. Ecosystems West (2004) conducted the North Campus surveys in February, March, April, and June of 2000, which would have allowed for identification of all special-status plants potentially present in the survey area. Jones & Stokes conducted botanical surveys in May and October of 2002 to identify all special-status plants potentially present in the survey areas of the Lower, Central, and Upper Campus.

**Response to Comment I-34-21.** Text on Draft EIR page 4.4-16 has been revised to clarify the meaning of CNPS List 1B status. Additionally, please refer to Master Response BIO-1 for discussion of the status and extent of Santa Cruz Manzanita populations on Campus and within the region. Comparison of one endangered species with another based purely on numbers is not prudent and does not take into account the ecological complexity of a population and the population's stability in the context of the species local, regional, or complete range.

**Response to Comment I-34-22.** As discussed on page 4.4-18 of the Draft EIR, Point Reyes horkelia was identified in scattered patches throughout the areas of coastal prairie in Marshall Field during surveys in

2002. This species is threatened by non-native species and residential development (CNPS 2006). No activities are proposed for this area of campus under the LRDP, and, therefore, no impacts to the species from LRDP activities are anticipated. Additional analysis related to this species was therefore deemed unnecessary.

**Response to Comment I-34-23.** Surveys of upper, central, and lower campus for this species were conducted on May 29 and 30, 2002. Surveys of north campus for this species were conducted between March 1 and June 10, 2000, approximately once each week during this period. The flowering period for this species is March to June, so, if present, the species should have been readily identifiable when these surveys were conducted.

**Response to Comment I-34-24.** The undescribed *Carex* taxon is discussed on page 4.4-19 of the Draft EIR. The regulatory status of this taxon cannot be determined until its taxonomic status has been clarified. This process is ongoing, but is unlikely to be completed before the LRDP EIR is finalized (Morgan 2006). If and when this taxon is determined to meet the criteria for a special-status plant species, the University will analyze potential impacts to it in future project-level EIRs, and make every effort to avoid, minimize, and mitigate those impacts.

**Response to Comment I-34-25.** The only documented occurrence of marbled murrelet in the region was in Big Basin Redwoods State Park in 1974. Due to the lack of information on this species in the area, mapping potential habitat use and movement corridors is difficult. Given the range and currently known distribution of the species (Larsen 1994), it is highly unlikely that murrelets would be found in campus areas proposed for development under the 2005 LRDP; thus the species was not considered in the Draft EIR.

Please refer to Master Response BIO-5 for a discussion of figures showing wildlife movement patterns at UC Santa Cruz. For Comments regarding mountain lions, see response to Comment I-34-26, below.

**Response to Comment I-34-26.** Mountain lion occurrence on and movement through UC Santa Cruz are referenced on page 4.4-63 of the Draft EIR. As mountain lions are a reclusive species, it is likely that the species would avoid human contact and that instances of interaction with humans would not increase appreciably.

**Response to Comment I-34-27.** The CNDDDB does not track ringtails, as they are not designated special status species by either the State of California or the Federal government. No data exists regarding the presence of ringtails on campus. No known surveys for the species at UC Santa Cruz exist.

**Response to Comment I-34-28.** Please refer to Response to Comment LA-6-24 regarding grasshopper sparrows.

**Response to Comment I-34-29.** UC Santa Cruz is aware of the listed steelhead population in Wilder Creek, downstream of the campus. As discussed under LRDP Impact HYD-2 and HYD-3, the project would not result in hydrologic or water quality impacts downstream of UC Santa Cruz. Also refer to Responses to Comments LA-6-26 and LA-6-51.

**Response to Comment I-34-30.** The Pacific giant salamander was not recognized in the Draft EIR (page 4.4-23) as a special-status species despite the neotenic forms. As discussed in the Draft EIR, neoteny is common within every species of the giant salamander family (*Dicamptadon*). The neoteny seen in *Dicamptadon* is seen in all populations without speciation occurring in any of those populations. Thus, it

seems unlikely that the neotenic forms observed in Empire Cave are a distinct new species that might deserve protected status. For this reason, impacts to the neotenic form of Pacific giant salamander found in Empire Cave were not analyzed.

**Response to Comment I-34-31.** Simply, the precautionary principle is that where there are threats of serious or irreversible damage (i.e. potential for significant impacts), lack of scientific certainty (i.e., a strong inference) shall not be used as sufficient reason for postponing measures to prevent the degradation of natural systems (environment) or human health. However, as the 2005 LRDP is a programmatic planning document, it is prudent to defer analysis in some cases where reasonable evidence suggests that scientific certainty may be achieved by the time project-specific implementation occurs. The mitigation measures included in the Draft EIR are designed to be sufficiently precautionary to ensure that impacts do not occur. The only species for which this is done in the LRDP EIR is the unidentified *Carex* species, whose taxonomic status is yet undetermined. In the case of the neotenic *Dicamptadon* found in Empire Cave, genetic analysis of neotenic forms throughout the species range did not show speciation and thus it appears that this population follows the rule and is not a distinct species. If at the time of project-specific analysis of projects, the neotenic Pacific salamanders are found to be the rare exception and do show speciation, mitigation will be developed to protect the species and its habitat.

**Response to Comment I-34-32.** Please refer to Response to Comment I-29-1.

**Response to Comment I-34-33.** There have been five occurrences of *Callippe silverspot* butterfly in the region since 1994 (CDFG 2005). All five were documented in San Mateo County. Although insect collections were not examined, the CNDDDB was searched and no known occurrence of the species on the campus was found.

**Response to Comment I-34-34.** Potential impacts to caves and special status species occupying them are discussed on pages 4.4-50 through 4.4-54 of the Draft EIR. The analysis provided there supports a conclusion that impacts to the caves will be less than significant (also see Master Response BIO-6 concerning special-status cave species). While no mitigation is required, the University will work to develop a physical barrier and a program of education to discourage recreational visits to the caves, as described in LRDP Mitigations BIO-8A and 8B.

Wet meadows are not identified as sensitive communities by the CNDDDB (2005) or the CDFG (2003). Implementation of LRDP Mitigations BIO-3A through BIO-3D will mitigate for impacts to wet meadows that are potentially jurisdictional waters of the U.S. or waters of the State (see pages 4.4-43 through 4.4-45 of the Draft EIR). Please refer to Master Response BIO-3 for a discussion of Shreve oak.

**Response to Comment I-34-35.** Please refer to Master Response BIO-1 for more detail on patch size and potential impacts to chaparral species. LRDP mitigations to address LRDP Impact BIO-1 have been revised to increase their clarity and efficacy. Please see Final EIR, Volume IV, Chapter 3, Revised Table 2-1 for the full text of the revised mitigation measures.

**Response to Comment I-34-36.** Please refer to Master Response BIO-4 (Coastal Prairie) and Response to Comment I-34-6 above.

**Response to Comment I-34-37.** Please refer to Master Response BIO-2 (Wetland Impacts).

**Response to Comment I-34-38.** Existing recreational trails are already well defined on campus and do not currently impact any special-status plant species. Increased usage of these trails thus is not anticipated

to result in additional impacts to special status plant species. Additionally, no new trails are proposed under the 2005 LRDP that would potentially result in additional impacts to special-status plant species. Thus, no impacts to any special-status plant species are anticipated as the result of increased trail usage. Also note that a new mitigation measure (LRDP Mitigation HYD-3E) has been added which requires the Campus to include fencing, signage and/or other design features in the design and planning for new pathways and bikeways to control pedestrian/bicycle circulation and minimize the potential for shortcuts and ad hoc trails.

Currently campus police enforce rules regarding use of trails. Campus land management staff ensures that fences and signs prohibiting trail use to protect the Ohlone tiger beetle are maintained. No increase in enforcement is anticipated under the 2005 LRDP.

**Response to Comment I-34-39.** Please refer to the discussion of the campus deer population on pages 4.4-34 and 4.4-63. It is unknown how resident deer populations will respond to the development outlined under the LRDP. There is only one special-status plant found on the campus, Santa Cruz manzanita, which is not a preferred food for deer. Therefore, even if the deer population on campus increased this would not result in a significant impact to special-status plant species.

**Response to Comment I-34-40.** The Campus conducts a botanical survey for each project that would disturb ground in an area with the potential for special-status plant species or sensitive natural communities. If the project requires mitigation to protect a plant species, implementation of this mitigation would be monitored as part of the project-specific Mitigation Monitoring Program.

The University does not anticipate any declines in special-status plant species populations due to LRDP projects, with the exception of impacts to Santa Cruz manzanita which are discussed under 2005 LRDP Impact BIO-1. If information becomes available indicating that future LRDP projects are likely to have significant impacts the University will analyze these impacts during project-level CEQA review and avoid, minimize, or mitigate them.

**Response to Comment I-34-41.** Homeless encampments on the north and upper campus are not only unauthorized uses of campus lands but are also a potential fire hazard. Therefore, the Campus will continue to discourage camping on the north and upper campus and to remove such encampments when they are discovered. Development on the north campus may make it less likely that homeless people would camp on the north campus.

**Response to Comment I-34-42.** The University acknowledges that potential impacts from increases in the relative cover and extent of noxious weeds are potentially significant and require mitigation (see pages 4.4-47 and 4.4-48 of the Draft EIR). The Draft EIR includes a mitigation measure to reduce this impact to a less-than-significant level. While the University agrees that mapping noxious weed populations would be helpful in planning control measures, this mapping exercise is not necessary to reduce potential impacts from LRDP projects to a less-than-significant level.

LRDP Mitigation BIO-6 states that the University will use weed-free erosion control materials and will use appropriate best management practices to reduce the spread of noxious weeds during construction. These practices will be applied in all construction areas. In addition, LRDP Mitigation BIO-6 states that, in uninfested areas, topsoil from trenches will be stockpiled and replaced when it is suitable for backfill, to avoid introduction of noxious weeds. These measures do not depend on the mapping of noxious weeds.

As stated in the Draft EIR, noxious weeds could degrade sensitive natural communities, notably coastal prairie (see pages 4.4-42 and 43) and northern maritime chaparral (see pages 4.4-39 and 4.4-41) and threaten special-status plant occurrences, especially Santa Cruz manzanita. Implementation of LRDP Mitigation BIO-1B would mitigate this impact by including the reduction of non-native species populations in the management plan for protected northern maritime chaparral and Santa Cruz manzanita areas. Implementation of LRDP Mitigation BIO-2B would mitigate potential noxious weed impacts to coastal prairie by requiring that the relative cover of native plant species in restored prairie be equal to or greater than the cover of native species in coastal prairie removed for LRDP projects.

**Response to Comment I-34-43.** Please refer to Response to Comment I-2-4 for a discussion of signage and campus police effort.

Increased foot traffic is not anticipated to result in direct “take” by beetles being stepped on or by beetle larvae killed by being encased in their burrows. An increase in campus development and therefore an increase in campus population will increase the probability of beetle-human interaction, but is not anticipated to result in negative effects on the tiger beetle population.

**Response to Comment I-34-44.** No significant hydrological impacts to karst communities were identified, thus no mitigation is required. The Draft EIR includes mitigation measures (LRDP Mitigation HYD-3) that would minimize changes in surface water hydrology and thereby minimize changes in the hydrology of the caves. The Draft EIR also includes mitigation measures to control the release of sediments and urban pollutants into storm water runoff that may eventually enter occupied karst habitat. The potential impacts of the 2005 LRDP on special-status cave species are not dependent on species population or densities. Instead, significance is measured by increased mortality and/or significant reduction of habitat for the species. Thus, the determination of impacts does not require specific data on population and distribution.

Please refer to Response to Master Response BIO-6 regarding human use of the caves, including new LRDP Mitigation BIO-8B, which commits the Campus to developing a barrier to limit access to Empire Cave.

**Response to Comment I-34-45.** Please refer to Response to Comments OPA-4-4 and I-5-9 regarding California red-legged frog.

**Response to Comment I-34-46.** Appendix D1 of the Draft EIR provides a summary of water quality data collected by the University since 1989. The summary includes data on runoff from three campus parking lots and from a well in the karst aquifer on the lower campus. These data provide baseline information for the water that is eventually discharged into the karst aquifer and water in the aquifer itself. As mentioned in Section 4.8.1.8 of the Draft EIR on page 4.8-21 and discussed further in Response to Comment LA-2-82, monitoring from 1989 through 2005 has not shown an increase in the concentrations of pollutants commonly found in urban runoff. For a discussion of the quality of karst water relative to biological resources, please see Master Response BIO-6.

The practices proposed by the University in the Draft Storm Water Management Program (SWMP) and in LRDP Mitigations HYD-3A through -3D to avoid pollution of runoff and to treat polluted runoff before it enters the karst aquifer are standard “Best Management Practices” (BMPs) that are recommended by federal and state agencies such as U.S. Environmental Protection Agency (USEPA) and the California

State Water Resources Control Board (SWRCB) to protect all waters. Numerous studies have been conducted on the pollutant removal efficiencies of structural BMPs. According to these studies, filtering practices and water quality swales on an average remove 85 percent of total suspended solids (TSS) and 70 percent of heavy metals in runoff. Infiltration practices (such as dispersion manifolds and infiltration trenches) remove 90 percent of TSS and about 90 percent of metals (New York State Storm Water Management Design Manual 2003). Another recent study that evaluated the performance of storm water treatment systems found that biofilters are effective in removing metals in urban runoff, and biofilters, detention basins, and retention basins are effective in removing total suspended solids in urban runoff (Geosyntec et al 2006). Because urban runoff cannot be effectively managed by employing structural BMPs alone, the Campus will also implement non-structural BMPs such as erosion control standards, enhanced maintenance and enforcement, and educational programs to reduce urban runoff pollution.

Table D2-1 presents the properties of campus watersheds that were used in the hydrologic modeling study, including the acreage of all impervious surfaces within each watershed. Most of the runoff from these areas reaches the karst aquifer, either directly or indirectly.

The number of construction projects at UC Santa Cruz that have proceeded through the rainy season is not tracked by the Campus and would not alter the analysis of impacts of future development on the campus under the 2005 LRDP. However, large construction projects extend over several years, and continue through the rainy season as site conditions permit. The Campus Standards Handbook specifies erosion and sediment control measures that must be in place for construction sites during the rainy season.

Management of construction storm water runoff has been subject to increasing regulatory attention throughout the U.S. over the past 15 years. The Campus continues to work with contractors and the Regional Water Quality Control Board (RWQCB) to improve the quality of construction storm water management on the campus. The construction site storm water controls included in the Campus's SWMP reflect current accepted practices. The SWMP is subject to approval by the RWQCB and will undergo a public review process. In addition to the regulations, which require storm water pollution prevention plans for projects that disturb 1 acre or more, with implementation of LRDP Mitigation HYD-2A, the Campus would continue to require construction site controls and best management practices for construction sites smaller than 1 acre.

The Campus's 2004 Storm water and Drainage Master Plan identified a number of locations where existing parking lot or road runoff could potentially affect the quality of water quality entering drainages or sinkholes. The proposed Infrastructure Improvements Project Phase 1 and 2 includes improvements to correct these conditions (see Draft EIR Table 2-2a, Volume III, pages 2-91 ff).

**Response to Comment I-34-47.** LRDP Mitigations HYD-3C and HYD-3D, the mitigation measures proposed to avoid erosion impacts from new development (as revised in the Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*, Revised Table 2-1) will be implemented as part of project design on a project-by-project basis as projects are proposed. Under the 1988 LRDP, the Campus incorporated design measures in all new development projects to ensure that post-development runoff rates did not exceed pre-development runoff rates. Controlling peak flows was a standard practice when those development projects occurred. This practice was found not to be completely successful in reducing or eliminating erosion of campus drainages. This is because, once flow rates are high enough to induce erosion, increasing the volume of runoff prolongs the duration of flow at that rate, thereby increasing the

amount of erosion. Furthermore, runoff from much pre-1989 development on campus has not been detained. LRDP Mitigation HYD-3D requires design measures to minimize the additional volume of runoff (in addition to controlling the rate of runoff, as required by LRDP Mitigation HYD-3C). Preventing an increase in runoff volume due to development will be more effective than past practices that focused solely on preventing increases in peak flow rates, because both these factors can influence erosion.

To address existing erosion conditions, the University is proposing to implement the Infrastructure Improvements Project Phase 1 and Phase 2 (analyzed in Volume III of the Draft EIR). Construction of the Phase 1 improvements is included in the Campus's State-funded Capital Improvement Program for 2006-07 but is subject to statewide voter approval of a bond measure in November 2006. Construction of the Phase 2 improvements is currently planned to begin in summer 2008 and continue through Summer 2009, subject to approval of bond measures in 2006 and 2008.

Please refer to Master Response HYDRO-1, which explains why the Draft EIR concluded that LRDP Impact HYD-3 would be significant and unavoidable. According to LRDP Mitigation HYD-3C, the projects developed under the 2005 LRDP would include design measures to control peak flows in order to maintain post-development peak flows for the 2-, 5-, and 10-year events at pre-development levels, and reduce the peak flow from a 25-year event to the pre-development 10-year flow. The control measures would prevent post-development peak flows from exceeding pre-project peak flows for storms larger than the 25-year event, although the flow would no longer be limited to the pre-project 10-year flow. Therefore, flooding or erosion would not increase significantly compared to pre-project conditions.

Also, as storm events get larger, the increase in runoff due to increased development is reduced as a proportion of total runoff and therefore a project's impact during larger events is actually smaller than under small storm conditions. In large events, undeveloped ground surfaces get saturated and behave like impervious surface. Therefore, in large events most of the precipitation is converted to runoff, regardless of whether the surfaces are developed or undeveloped. Development also affects areas with flatter topography, which produce little runoff naturally, more than it affects areas with steeper slopes, which naturally produce significant runoff. The campus is on the southeastern flank of Ben Lomond Mountain, a site that, due to its change in elevation, naturally would produce runoff for relatively small events. Therefore, in extreme events, the impact of additional impervious surfaces would be less than for more frequent smaller rainfall events. The hydrology analyses for existing conditions and post-development conditions for the 2-year and 25-year events are included in the Draft EIR as Appendix D2. The 2-year event was selected to represent "average" or frequent events. The 25-year event was selected to represent "extreme" events. As this data in Appendix D2 shows, the percent increase in runoff for post-development conditions compared to existing conditions during events larger than the 25-year is smaller than under the 2-year event. It is true that the potential for erosion is greater during large events, but for a hillside location such as the campus, the erosion potential during large events does not increase much with new development because for reasons explained above, in large events, the new impervious surfaces do not generate substantially more runoff.

The LRDP does not discuss or provide guidelines for with the diversion of storm water from one watershed to another. However, such diversions may be implemented within the planning horizon of this LRDP in order to manage campus runoff. Please also refer to Response to Comment LA-6-53.



Because the LRDP EIR is programmatic, it does not describe the specific mitigation measures that will be implemented for specific development projects under the 2005 LRDP. The locations of the infiltration-based drainage improvement structures have not yet been determined. They will be designed and located as part of specific development projects. Infiltration-based improvements that are included in the proposed Infrastructure Improvements Project are described in Volume III of the Draft EIR.

From: "greg hoffmann" <gr\_hoff@hotmail.com>  
To: lrdp-eir@ucsc.edu  
Subject: UCSC expansion  
Date: Tue, 03 Jan 2006 16:55:50 -0800

To Whom It May Concern,

I am writing to express my strong opposition to the UCSC long range expansion. As a UCSC alumni, I am afraid that much of what appealed to me during my four years attending the school (1993-1997) will be lost.

The campus' natural environment, especially the redwood forests will suffer dramatic reductions under this plan. Furthermore, I shudder to imagine the traffic and parking problems on campus if the population is to increase another 50%.

Yet now as a resident of the city of Santa Cruz, I am also greatly concerned with the impact the added student body will have on the small city. Santa Cruz is unique in so many ways, and I encourage those who wish to visit, reside, or study here. However, I am reminded of the concept of "the tragedy of the commons". The UCSC expansion will put too much pressure on the city to the detriment of all.

Thank you for your time and consideration in this matter.

Sincerely,

Gregory Hoffmann

630 14th Ave

Santa Cruz, CA 95062

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### Response to Comment Letter I-35

**Response to Comment I-35-1.** Development of the proposed project could result in the removal or disturbance of approximately 60 acres of redwood forest, although the acreage could be smaller because, if the north campus areas are developed in a manner similar to the existing central campus, significant numbers of trees would remain even within areas otherwise disturbed by development. However, in the context of the 457 acres of redwood forest on campus this impact only represents 13 percent of the total and is considered less than significant.

**Response to Comment I-35-2.** Comment noted.

**Response to Comment I-35-3.** Comment noted.

Date: Fri, 2 Dec 2005 10:46:25 -0800  
To: lrdp-eir@ucsc.edu  
From: Sandy Holeman <sholeman@ucsc.edu>  
Subject: comments on LRDP EIR

I think that the EIR is full of non-solutions to very real problems. Santa Cruz does not have the water resources or housing resources or road resources to accommodate 10,000 more residents. You are not fooling anyone with this EIR. You have not done the homework, or if you did, you are hiding the real answers that you discovered. Anyone who takes the time to read it (and I think UCOP is counting on the fact that most people do NOT have time to read the whole thing,) will find that you have not adequately addressed these issues.

1

I honestly believe that if you proceed with this LRDP you will destroy the city that has worked all of these years to be a good neighbor to UC.

I love working for this institution, and I believe in its mission. I also believe that the Regents are not looking at the real picture in Santa Cruz, are glossing over the problems, and are NOT being good neighbors to this city and its residents. This LRDP EIR is a disgrace.

--

Sandy Holeman  
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### Response to Comment Letter I-36

**Response to Comment I-36-1.** Please refer to Section 5.3.15.3 in Master Response UTIL-1, which summarizes the project's impact on water supply. For a complete discussion of the proposed project's impact on housing resources, please see LRDP Impact POP-3 on pages 4.11-21 through -26 of the Draft EIR. Traffic impacts are discussed in Section 4.14. The Draft EIR concludes that project impacts on housing, water supply and traffic would be significant and unavoidable. Note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the Final Draft 2005 LRDP (September 2006), please see Final EIR, Volume IV, Chapter 2, *Project Refinements*. With the lower enrollment growth target of 19,500 students included in the Final Draft 2005 LRDP, impacts on housing, water supply, and traffic would be reduced but would still be significant and unavoidable.

**Comments on LRDP 2020 – Environmental Impact Report**

**To:** UCSC Planning Department

**From:** Karen Holl, Professor of Environmental Studies, Restoration Ecologist

**Date:** November 26, 2005

Volumes 1 and 2

p. 3-20 – In discussing the Campus Natural Reserve (CNR) the EIR says that “Construction in this area is prohibited, except as required in conjunction with teaching and research in the area, or the limited construction of roads, utilities, and paths.” What is “limited construction”? This seems like it leaves the door open for a fair amount of damage to the CNR, which could compromise the teaching and research mission of the CNR.

1

In section 4.4.1.6 the caves are not mentioned as a sensitive habitat, although it is noted later that a number of the cave organisms are of conservation concern. The EIR also says that potential drainage effects on the caves will be addressed in the section on Hydrology and Water Resources. Later, on p. 4.8-32 it says that with the development in upper campus, even with mitigation the impact on the Cave Gulch watershed will be significant. This could potentially affect the quantity and quality of water in the caves which could negatively affect the cave organisms. Later on 4.8-41-42 it says that water quantity change in the cave will be controlled by detention structures and that the campus will not significantly affect water quality. I agree with these conclusions. But there is no discussion of sediments that will likely be transferred into the caves through runoff; these are likely to negatively affect the cave habitats. In summary, the EIR presents contradictory evidence about the effect of increased development on the water quality draining into the caves and inadequately addresses potential impacts on and mitigation measures to compensate effects on cave organisms.

2

p. 4.4-42 – I support the proposed method of mitigating for coastal prairie loss. In particular, I appreciate the recognition that if prairie mitigation is unsuccessful after 5 years that it will need to be redone. I would like to see this approach taken more often in mitigation efforts, since many habitat mitigation efforts are not successful.

3

In section 4.4.1.7 the EIR notes that degradation of areas surrounding seeps can affect the hydrology on which seep habitats depend. But, in the subsequent discussion of impacts for wetland destruction (4.4-43) only direct impacts on seeps are discussed. The extensive construction proposed at various edges of the seep zone in upper campus are nearly certain to affect the hydrology of the wetlands in the seep zone. The EIR says that these impacts are discussed in the “Hydrology and Water Resources” section, but they are not addressed there. I think that with the proposed development the campus would be in violation of the Clean Water Act by destroying jurisdictional wetlands through altering the hydrology. How these impacts will be mitigated needs to be detailed.

4

On p. 4.4-48, mitigation for increased bicycle usage on the Ohlone Tiger Beetle (OTB) is discussed. I am skeptical that additional signage will have an impact as, thus far, signage has had almost no impact on bicycle usage in upper campus since signs are often removed within 24 hr. Because the campus police are stretched thin, patrolling tends to be infrequent. Therefore, additional funding should be provided to the Campus Natural Reserve personnel to effectively manage their land under increased usage.

5

I was also surprised to see that there was no discussion of bicycle impacts in the southwestern portion of the campus, where OTB populations are also found and there is extensive bicycle traffic.

6

p. 4.4-53 – The EIR says that there are unlikely to be water quality impacts on caves, as the runoff from this area is not likely to be contaminated. But, it has been repeatedly demonstrated that runoff from roads and parking lots almost inevitably is contaminated with oil and other chemicals in gasoline. I think water quality monitoring in major routes draining into caves is critical to maintain the rare organisms found there.

7

p. 4.8-32 – The EIR says that the campus will mitigate unauthorized trail use by educational efforts, such as signs, which is an extremely naïve and ineffectual approach. Such efforts have been notoriously unsuccessful in the past. As discussed above, in upper campus, signage is removed by mountain bikers often within 24 hr. In the developed part of campus unauthorized trail use is beyond the point where simple signage will have any impact. Minimizing these impacts will require better planning of pedestrian paths from the beginning. It is typical to construct sinuous rather than direct paths, yet pedestrians nearly always take more direct routes. Also, there has to be additional funding for path maintenance, as well as bridges in places where such trails become inundated during the rainy season. As one of many existing examples, there is a highly eroded trail between College 9 and Crown College that crosses Jordan Gulch. The campus has not built a bridge there, so my Restoration Ecology students end up doing volunteer work on that trail because of inadequate maintenance for this problem. As the campus grows, such issues will increase greatly and adequate funding for maintenance is necessary.

8

I am particularly concerned about appropriate trail maintenance throughout Campus Natural Reserve lands, particularly near the seep zone, and have mentioned this at many points during the LRDP process. There is no discussion of how increased bicycle and foot traffic through the CNR will be mitigated. Such impacts are inevitable with the increased population on campus and the proposed development on all sides of the seep zone. To maintain the quality of the habitat for the teaching and research mission of the CNR it will be critical to mitigate for these trails impacts by increased funds for managing these lands, as well as fencing in the seep zone area.

On p. 4.8-11 there is a quote from the recent stormwater drainage plan commissioned by the University it says that “The East Fork of Moore Creek watershed including the Baskin, Science Hill, and Kresge subwatersheds, is so heavily impacted by excessive stormwater runoff that serious consideration should be given to curtailing all new

9

development in these areas to produce a zero net increase in surface runoff.” Yet, the LRDP proposes extensive development in these watersheds which raises a number of questions that are not addressed. First, the University proposes to do extensive development in upper campus and simply note that there will be substantial and unavoidable impacts, which is in complete contradiction with the stated principles of the LRDP to promote sustainability and environmental stewardship. I am unclear what the point of stating planning principles is, if these principles are adhered to so loosely as to be meaningless.

9

Second, additional impacts on these drainages, Moore Creek in particular, will affect habitat for Red Legged Frog, a species protected under the Federal Endangered Species Act. Since the EIR states that such an impact is “significant and unavoidable” under the current project plan, then the University would be in violation of the ESA by continuing extensive development in upper campus, yet this is not addressed. Up until now the University has elected to determine whether to write Habitat Conservation Plans on a project by project basis, but the LRDP is the only planning document that simultaneously considers all future development and, therefore, this potential violation of the ESA should be addressed here.

10

My third concern on this issue is that the EIR says that it is expected that the campus will comply with the mitigation recommendations in the *Stormwater and Drainage Master Plan* before proceeding with additional development, but there the funding source for these mitigations is not outlined. Based on my past experience with campus development and environmental impacts, I consider there to be no guarantee that the deferred maintenance from past development will precede additional future development. I think that the EIR should say that additional development “will not proceed until” the stormwater drainage improvement actions have been taken. I have watched the Jordan Gulch drainage undergo massive erosion over the past 10 years, while campus planners have known that actions have needed to be taken but funding is unavailable.

11

p. 4.8-47 At the end of the full paragraph on this page it says “The Campus would not draw water from the Purisima formation and would.” It seems that some words were deleted that need to be added back to understand the intent of this sentence.

12

p. 4.9-11 In this chapter on the compatibility of different land-uses it says that “Campus Natural Reserve lands are designated for the protection of resources of interest for teaching and research...These parcels would be kept in a natural state except as required in conjunction with teaching and research in this area and limited construction of utilities, roads, and paths. All new buildings adjacent to existing natural lands would be required to use the best management practices for construction and follow LRDP guidelines for sustainability and maintenance of the UC Santa Cruz character..” I consider much of the development that is proposed to be incompatible with the teaching and research mandate of the Campus Natural Reserve lands. Specifically, I am concerned about the extensive campus development proposed around the seep zone area, and have repeatedly voiced this concern during the LRDP process. With the extensive proposed development, the drainage patterns into the seep zone will be altered which will affect the ecosystems.

13



Moreover, this development will certainly increase traffic and human impacts on the reserve, which will compromise their value for teaching and research.

13

I am also concerned about the “significant and unavoidable” impacts on the Moore Creek drainage which will likely further degrade campus reserve lands in this area. To be compliant with CEQA these impacts need to be specifically addressed and mitigation measures outlined. For the Campus Natural Reserves to be able to manage these lands for their stated purpose with increased human impacts, substantial increases in the management budget of the CNR are necessary. The CNR is currently understaffed to manage the reserve lands in response to degradation caused by past development on campus. Because of this severe underbudgeting by the University my students are asked regularly to volunteer their time for land management; even with student help there is still a severe lack of labor for this task. This student labor force cannot be counted on to continue to compensate for underbudgeting for increased development. In addition to labor, costs of things such as erosion control and fencing out pedestrians in the seep zone must be considered.

14

Section 4.11 – What is not addressed in this already grim discussion of housing projections is the fact that construction on campus is so expensive that the above market rent prices are already driving students to live off-campus. As more housing is constructed these prices will continue to increase, with the likely result that less than the projected number of students that are predicted to live on campus will be able to afford housing prices on campus, thereby exacerbating the off-campus housing shortage.

15

Section 4.15- This section of the EIR addresses, amongst other things, the effect of campus expansion on increased demand for water from an already overdrawn system. The city of Santa Cruz is currently in the process of developing an HCP for the San Lorenzo River because of the effects of water withdrawal on a number of listed fish species. There is no discussion in the EIR of how additional water withdrawals would be reconciled with constraints against further withdrawal from the cities’ primary water source.

16

P. 4.15-31 – The EIR says that to mitigate the increased water usage “when the campus water consumption reaches 250 million gallons per year, the Campus shall initiate a program to retrofit existing campus facilities with the current efficient campus standards for toilets, showers and sinks, and with waterless urinals.” It also says that “Before the campus annual water consumption reaches 300 million gallons, the Campus shall conduct a study on the feasible measures for utilization of reclaimed water (including rainwater, grey water and/or recycled water in development...)” Water supplies are already limited in drought years. Therefore, it is unclear to me why these previous actions will not be undertaken before any additional development, instead of waiting until the situation is even more problematic. Particularly with respect to beginning to use grey water or recycled water, the sooner this is planned for and incorporated in new development the more feasible it will be. Following the stated principles of sustainability and environmental stewardship means designing systems correctly from the outset. Clearly, the campus will need to retrofit what was done in the past, but this is inevitably more

17

1704.02/1

costly. The most rationale approach from here on out is to begin immediately to design more sustainably. I strongly recommend these measures be taken immediately rather than later when they will be much less "feasible."

17

Volume 3

Chapter 2 - The proposed extensive proposed improvements to the stormwater drainage are long overdue and will certainly improve the drainage and erosion problems substantially. The EIR says that they will be completed over the next three years, but it is unclear where the funding will come from and, as far as I can tell, further development is not contingent upon completing them. As stated above, it is critical to clean up from erosion problems that have already been caused by construction before any further construction is done.

18

Concluding comments

I served as one of the faculty representatives in the Long Range Development planning process and spent endless hours in meetings and reading documents. I and others repeatedly questioned whether the 21,000 student enrollment target, was feasible on this campus, while respecting the natural environment and housing, traffic, and resource constraints. We were told that it was not the appropriate time to pose these questions and that these questions would be addressed in the EIR. Yet, now that the EIR has been written and there is considerable momentum in the planning process, the University does acknowledge that there will be significant and unavoidable impacts on housing, traffic, water supply, and erosion. Despite this fact, the University does not appear to be considering seriously a reduction in the proposed growth to a number that would be supportable with the existing resources. I realize and appreciate the fact that the University proposes to make many efforts to mitigate impacts of growth. But, the University has to acknowledge that growth on the UCSC campus cannot continue indefinitely and that to meet the stated needs of increased enrollments the University of California systemwide will need to look elsewhere. Personally, I think the time to do that is now, as the UCSC campus is growing well beyond resource constraints.

19

**Response to Comment Letter I-37**

**Response to Comment I-37-1.** The Campus Natural Reserve land use designation is intended to protect certain of the campus's natural features and processes for teaching and research (Draft LRDP page 66; Draft EIR page 3.9-20). Limited construction, as allowed in this designation, is defined as construction required for the maintenance of the area as a teaching and research reserve and the limited construction of roads, paths, bridges, or below-grade utility access. All other construction is prohibited in Campus Natural Reserve lands.

**Response to Comment I-37-2.** Please refer to Master Response BIO-6 regarding special-status cave species, including information on the drainage and water quality effects of the proposed project on the cave species.

**Response to Comment I-37-3.** The commenter's support for the proposed method of mitigating impacts to coastal prairie is noted.

**Response to Comment I-37-4.** The possibility of indirect impacts to seeps and other wetlands is acknowledged in the Draft EIR on page 4.4-44, as follows: "Indirect impacts to forest springs and seeps may occur through hydrologic modifications from development." The potential for indirect impacts on the north campus seeps through hydrological modification is discussed under LRDP Impact HYD-5 on page 4.8-38. The Draft EIR acknowledges that increased impervious surfaces on the north campus could reduce infiltration and recharge of the shallow aquifer that supplies water to springs and seeps located throughout the north campus (page 4.8-38). Implementation of LRDP Mitigation HYD-5A would reduce the impact to a less-than-significant level.

Furthermore, mitigation for impacts to jurisdictional wetlands would be formulated in negotiation with the responsible agencies with jurisdiction over these wetlands, such as the U.S. Army Corps of Engineers or the Central Coast Regional Water Quality Control Board. In keeping with the policies of these agencies to prevent any net loss of wetland acreage or values, the mitigation measures required by these agencies would also reduce the impacts to seeps to a less-than-significant level.

**Response to Comment I-37-5.** Please refer to Response to Comment I-2-4.

**Response to Comment I-37-6.** The population of Ohlone tiger beetles in the southwestern corner of campus is included in provisions outlined in the UC Santa Cruz Ranch View Terrace Habitat Conservation Plan that was approved by the USFWS in 2005. These provisions, which prevent significant impacts to the species, will govern future development in this part of campus.

**Response to Comment I-37-7.** Please refer to Master Response BIO-6.

**Response to Comment I-37-8.** A new mitigation measure (LRDP Mitigation HYD-3E), to address LRDP Impact HYD-3 has been added requiring that design and planning for new pathways and bikeways include fencing, signage and/or other design features to direct pedestrian/bicycle circulation and minimize the potential for shortcuts that could contribute to erosion. The mitigation also requires that bridges be provided where new pathways cross drainages that become inundated during the rainy season as another means of avoiding erosion and sedimentation. Please refer to Final EIR Volume IV, Chapter 3, *Changes to Draft EIR Text*, Revised Table 2-1.

**Response to Comment I-37-9.** Please refer to Master Response HYDRO-1 (LRDP Impact HYD-3). Additional development is proposed in the Moore Creek East Fork watershed, mostly as infill development. The Draft EIR acknowledges that increased runoff from the addition of impervious surfaces within this watershed could add to existing erosion problems that are present in this watershed (Draft EIR page 4.8-33). The EIR includes a suite of mitigation measures (revised LRDP Mitigations HYD-3A through 3E), which would reduce the impact to a less-than-significant level if it were feasible to implement them for all future development projects under all conditions. However, it is not known whether it will be feasible to implement LRDP Mitigation HYD-3D at all project sites to the extent necessary to prevent exacerbation of existing erosion conditions in Moore Creek. Therefore, LRDP Impact HYD-3 would be significant and unavoidable. In addition, if required, based on project-specific review, the Campus may divert some or all of the runoff from a project site in the Moore Creek East Fork watershed to the Jordan Gulch watershed.

**Response to Comment I-37-10.** Please refer to Response to Comments OPA-4-4A and I-5-9.

**Response to Comment I-37-11.** The EIR analysis does not assume that the storm water improvements included in the Infrastructure Improvements Project Phase 1 and Phase 2 would be implemented before any additional development on campus. Construction of the Phase 1 improvements is included in the Campus's State-funded Capital Improvement Program for 2006-07 but is subject to statewide voter approval of a general obligation bond measure in November 2006. Construction of the Phase 2 improvements is currently planned to begin in summer 2008 and continue through Summer 2009, subject to approval of bond measures in 2006 and 2008. The Campus anticipates that for many development projects, implementation of revised LRDP Mitigations HYD-3C and HYD-3D would reduce impacts to a less-than-significant level. Even in watersheds with existing erosion conditions, such as Moore Creek, development would not exacerbate these conditions if the design measures required by these mitigations are incorporated into the project such that there is no increase in runoff flowing into the drainage.

**Response to Comment I-37-12.** The sentence on page 4.8-47 of the Draft EIR has been corrected to read: "The Campus would not draw water from the Purisima formation." Please refer to Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*.

**Response to Comment I-37-13.** Both the 2005 LRDP and the mitigation measures identified in the Draft and Final EIR provide substantial protection for natural areas, including the Campus Natural Reserve and seep zones on the north campus. In addition to LRDP policies regarding sustainable development, the Final EIR includes LRDP Mitigations HYD-2A and -2B to ensure that construction projects incorporate best management practices to control erosion and pollution of storm water runoff. LRDP Mitigation HYD-3A emphasizes signage and public information to discourage inappropriate incursions off trails that might increase erosion; LRDP Mitigations HYD-3B through -3D provide measures to minimize the increase in impervious surfaces and ensure that runoff does not result in increased erosion; LRDP Mitigation HYD-3E includes additional planning to improve conditions on bicycle and pedestrian paths that might result in environmental damage; and LRDP Mitigation HYD-5B addresses karst construction and spring issues. The 2005 LRDP EIR also includes a wide range of measures to address biological resources of various kinds and to preserve wildlife corridors. All these measures are designed to minimize the effects of increased development and human presence on natural resources. With the inclusion of these measures, the proposed land uses on the north campus are compatible with the adjacent Campus Natural Reserve land uses.

**Response to Comment I-37-14.** Please refer to Master Response HYDRO-1, which explains why the Draft EIR concludes that erosion impacts to campus drainages would be significant and unavoidable. Regarding funding for mitigation measures; please see Response to Comment SA-4-2.

**Response to Comment I-37-15.** New construction costs are shared among all residents so as to keep room and board rates affordable across the spectrum of housing accommodation options. Please also see Master Responses POP-1 (Impact on Regional Housing Supply) and ALT-5 (Increased On-Campus Housing).

**Response to Comment I-37-16.** Please refer to Section 5.2.15.1 in Master Response UTIL-1, which discusses the various factors (including Endangered Species Act, Section 10 consultation with respect to the rivers from which the City diverts water) that could potentially reduce the supply of water at the source, and Section 5.2.15.3, which summarizes the impacts of the proposed project.

**Response to Comment I-37-17.** Please refer to Master Response UTIL-2, which provides additional information about the mitigation measures identified in the Draft EIR to address the contribution of the 2005 LRDP to the cumulative impact of future growth on water supply.

**Response to Comment I-37-18.** Phases 1 and 2 of the storm drainage improvements (which are the 94 improvements that are evaluated in the Draft EIR) are part of the UC Santa Cruz State-Funded Capital Improvement Program and are in the State budget. As noted above, construction of the Phase 1 improvements is included in the Campus's State-funded Capital Improvement Program for 2006-07 but is subject to statewide voter approval of a general obligation bond measure in November 2006. As noted above, construction of the Phase 2 improvements is currently planned to begin in summer 2008 and continue through Summer 2009, subject to approval of bond measures in 2006 and 2008. The Draft EIR (page 4.8-32) acknowledges that, based on this schedule, all the storm drainage improvements would most likely not be in place when some of the new buildings under the 2005 LRDP would be constructed on the campus. However, all new building projects will be required to control both peak flows and any increases in the volume of runoff from the project site in order to avoid or reduce the potential for increased erosion in the campus creeks (see revised LRDP Mitigations HYD-3C and -3D).

**Response to Comment I-37-19.** Note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. The Final Draft 2005 LRDP (September 2006) reflects the reduced enrollment growth target of 19,500 (three-quarter average) FTE students. For more information regarding the Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

UC Santa Cruz 2005 Long Range Development Plan  
Draft Environmental Impact Report

NAME: Doug Huskey DATE: 11.16.05

ADDRESS: 701 Highland Ave  
SANTA CRUZ, CA 95060

PHONE: 831-429-9574 EMAIL: dhuskey@seagate.com

AFFILIATION: property owner

COMMENT:

I have concerns about water usage, traffic,  
housing shortages and drainage from the LRDP.  
Housing shortages and drainage in particular are  
not adequately addressed by the DEIR. For  
instance not enough evaluation of the impact on local  
aquifers of building on the karst structure. Mitigation  
for finding karst in a building site should be  
to try to relocate the site - not to stabilize it.  
~~Stabilize~~ Stabilization using concrete causes  
disastrous contamination of local streams as  
concrete runoff goes thru the karst to the  
local aquifer.

1

Place your comment in the box provided at the back of the room, or  
mail written comments regarding the Draft EIR addressed to:

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, California, 95064

Response to Comment Letter I-38

**Response to Comment I-38-1.** Please see Response to Comment I-61-1 for a discussion of the impacts of grouting on downstream water quality.

From: "Louise Mary Edith Huttinger" <lhutting@ucsc.edu>  
Subject: 2005 LRDP EIR COMMENT  
To: lrdp-eir@ucsc.edu  
Date: Wed, 11 Jan 2006 13:06:43 -0800

2005 LRDP EIR COMMENT:

The 2005 LRDP Environmental Impact Report is a thorough document covering every impact that the development of upper-campus will bring to our community. There are many issues that I am concerned with being a student here at UCSC, most of which have to do with the disruption of the naturally beautiful aesthetics of our campus. The report states that the development will "substantially damage scenic resources, including, but not limited to trees, rock outcroppings or historic buildings" and it will also "create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area" (section 4.1.2.1). One of the many reasons I love this campus is for its beautiful views and its amazing stars at night. If light structures, similar to the one on the front of the Media Center, are implemented into the new development plan, it will ruin the natural beauty of the area by creating a fog of light pollution. The EIR does state that lighting "shall be designed to include directional lighting methods to minimize light spillage", but I ask them to take into deep consideration the effects of light on our nighttime sky and the wasteful impacts unneeded lighting has on the greater community.

1

Sincerely,  
Louise Huttinger  
Member of the Student Environmental Center



### Response to Comment Letter I-39

**Response to Comment I-39-1.** Draft EIR page 4.1-15 concludes that impacts on scenic resources would be reduced to a less-than-significant level with implementation of LRDP Mitigations AES-3A through -3C. Please refer to Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures.

Draft EIR page 4.1-21 concludes that impacts related to new sources of light and glare would be reduced to a less-than-significant level with implementation of LRDP Mitigations AES-6A through -6E.

Date: Mon, 26 Dec 2005 14:57:43 -0500  
To: lrdp-eir@ucsc.edu  
From: Kimberly Jannarone <kmj@ucsc.edu>  
Subject: Comments on LRDP

I'm writing in regard to the LRDP.

1. After reviewing the biological resources section, I am writing to express concern over the management plans for the Burrowing owl. I support the detailed plans to mitigate the negative affects of building on east meadows (specifically the lands below the East Remote Parking lot), but I believe that these are risky measures that we would be better off not undertaking.

The burrowing owl is a rare bird in Santa Cruz county and a very popular one. The loss of its habitat on our meadowlands is indeed significant.

As a birder, I also know that the Golden Eagles mentioned in the report forage on our eastern meadows far more frequently than the report suggests; as a matter of fact, we can reliably tell out of town visitors that they will see a Golden Eagle if they come to campus. This is obviously an important area for them (specifically the meadows near Hagar Drive), with more than abundant food source (the ground squirrels) and ideal hunting conditions.

These meadows are a unique feature of our campus that support two incredible and rare birds. We would be foolish to eliminate their hunting and, for the burrowing owl, breeding grounds.

I oppose new development on these eastern meadows.

2. I believe that as a campus community that ostensibly cares about environmental impacts, the health of native species, the preservation of natural resources, and the efficient use of energy, we should develop plans that reflect these values. Our LRDP seems to me to confirm to the minimum needs mandated by law in each of these areas. We should strive to do more.

In particular, I would like to see more:

-Strategic infill. The more we expand, the more we rely on harmful transportation and destroy irreplaceable habitats. We will need fewer roads, fewer vehicles, and will requires less habitat destruction if we build inside our limits to the best of our ability rather than spreading out. I would like to see more multi-story buildings and more underground parking. The aesthetic objection to high buildings is insignificant next to the environmental benefits of using less acreage.

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In addition, our campus is already so spread out that the campus community is one of the least close-knit I have ever seen. We should focus on bringing departments together, not carving out more space for them. We should focus on bringing students in colleges closer to their staff and faculty. We should work on making connecting spaces instead of requiring more travel time between units.

2

-Green buildings. I do not see a significant amount of thinking on environmentally intelligent buildings. Many cities strive to meet green building codes (such as LEED codes); this campus should be at the forefront of such buildings. I would like to see plans to use solar energy; to work with natural features of the land rather than against them; to design buildings that are friendly to nesting birds such as swallows; to design buildings that minimize the impact of bird collisions with windows. I believe we should strive to build only LEED-certified buildings. I would like to see a mandate on environmentally friendly materials.

3

We should publicly announce our commitment to such standards. We might hold a competition for the best green-design building award. Such an event would publicize our commitment to innovative environmental architecture; it would draw attention to our campus and its natural resources; and it would generate an unforeseen multitude of environmentally responsible and forward-thinking building plans.

-Emphasis on going beyond what is mandated by law and committing to innovation in environmental thinking. This might mean asking faculty to make sacrifices in terms of buildings (more sharing buildings and less spreading out in one-story buildings). It might mean standing up to the community that clamors for more parking and making it clear that accommodating car traffic is incredibly damaging to the campus environment; or, it might mean spending a significant amount of money to develop underground parking lots in places where it is environmentally feasible. It might mean facing the neighbors and workers who demand an Eastern access road through Pogonip by describing the impact of such a road on the environment and pointing out the long-term benefits of preserving open space, which outweigh the minimal traffic headaches encountered getting to campus.

4

5

In sum: I oppose developing the east meadows any more and disturbing the Burrowing Owl and Goden Eagle range. I believe the LRDP should publicly commit to developing the greenest buildings possible. And I think our LRDP should reflect the spirit of environmental preservation and innovation that this campus believes in.

Thank you.

Kimberly Jannarone

--

Kimberly Jannarone, D.F.A.  
Assistant Professor, Theater Arts  
University of California, Santa Cruz  
831-459-3490

## Response to Comment Letter I-40

**Response to Comment I-40-1.** Please refer to discussion on burrowing owl in Response to Comments I-5-11 and I-7-4. Refer to discussion in Response to Comments I-7-3 and I-7-4 for impacts of grassland removal on raptors and their prey.

**Response to Comment I-40-2.** Please refer to Master Response ALT-6 (Increased Infill Development).

**Response to Comment I-40-3.** In compliance with the University of California Policy on Green Building Design, Clean Energy Standards, all new buildings under the 2005 LRDP would be designed and constructed to outperform the required provisions of the California Energy Code (Title 24) energy efficiency standards by at least 20 percent, to meet a minimum standard equivalent to a LEED 2.1™ “Certified” rating. New laboratory buildings will also be designed and built to meet the Laboratories for the 21st Century (Labs 21) Environmental Performance Criteria.

**Response to Comment I-40-4.** It was suggested that UC Santa Cruz faculty should make sacrifices by sharing more buildings. It should be noted, that under the 1988 LRDP, population grew at a much faster pace than development, such that there currently is significant crowding in academic and administrative space on the campus. The 2005 LRDP would provide new building space not only to support the projected growth in campus population, but also to address existing shortfalls in building space to serve the current population on campus.

**Response to Comment I-40-5.** Comment noted. Please also refer to Master Response ALT-6 (Increased Infill Development) and Master Response TRAFFIC-3 (Eastern Access).

From: "Amber Lisa Janson" <ajanson@ucsc.edu>  
Subject: LRDP  
To: lrdp-eir@ucsc.edu  
Date: Tue, 10 Jan 2006 16:34:06 -0800

In response to the long range development plan, I believe that the educational benefits of UC Santa Cruz will down grade due to the increased population and decreased one on one attention that students have the option of recieving. Developpment of this campus will not only take away several acres of unique and uninhabited land reserves, but will also create an atmosphere completly opposite of what UC Santa Cruz initially stood for; which is a personal learning environment in the forested redwoods creating a bond between nature and learning. This would also destroy the only low income housing in Santa Cruz, the trailor park. The trailor park has stood a symbol of UC Santa Cruz since the sixties, to destroy this would be an obivious 180 degree change in what UC Santa Cruz will become in the future due losing the option of low income housing as well as riding the campus of the greatly loved land reserves and hiking trails that this campus is so well known for.

1

Development is ineviatable for the UC system, but I feel that expansion of this campus alone is not benefiting upcoming students but rather damaing their potential for connecting this unique bond between learing and nature. Expansion can be done and may best be done on other sites in California as opposed to having a few extreamly large UC campuses in California. This would create more options for upcoming students as well as lessen the large unpersonal lecture halls that the UC is currently offering. UC Santa Cruz can only achieve the unique blend of an alternate style of living (that which takes place in the forest), learning and nature if the campus is not expanded upon.

### Response to Comment Letter I-41

**Response to Comment I-41-1.** Please refer to Response to Comment LA-2-92 regarding the Campus Trailer Park. Please see Master Response ALT-5 regarding the cost of on-campus housing. Please refer to Response to Comment LA-2-124 for additional information about the north campus trail system. Please also refer to Response to Comment LA-2-42, which indicates that the vast majority of north campus lands would be retained in open space land use categories.

Date: Wed, 9 Nov 2005 16:42:23 -0800 (PST)  
From: al\_qaida hq <ecostar774@yahoo.com>  
Subject: Comments to UCSC Long Range EIR...  
To: lrdp-eir@ucsc.edu, blueplanet47@yahoo.com

Greetings-

My Comments on UCSC's long range EIR:

The campus is ALREADY overcrowded. Your parking and transportation situation is ALREADY out of control. UCSC does NOT need new growth per se', it needs a QUALITATIVE shift away from Science and Engineering and towards Environmental, Social and Intelligent/Informational eco-development policy.

1

I do NOT oppose developing the back of the campus ( i have seen the maps and have hiked the area repeatedly over the years). But you need to do it right. Axe and/or drastically reduce the residential housing and people/ transportation pressure, build an Earth Center comparable to Columbia University's Earth Institute. Build your roads and bridge to empire grade- that is good and needed. But be bike and walker friendly. If you're going to run shuttle buses, run them on Biodeisel.

2

Get rid of the newly installed stop lights and redundant stop signs that you've ALREADY put in place these past months and years all around campus- they're clogging up traffic and mucking things up EVERYWHERE.

3

Use INTELLIGENT/Advanced eco-development planning that treads lightly upon the land and learn to simplify your transportation hubs and people pressure links. Think ECOTOPIA.

4

Consider a BART style train loop from the base of campus to transport students up and down the hill and back every 10 minutes, for example.

In a word, EVOLVE into the 21st century people. The world needs Eco-solutions, NOT more urban sprawl. Become the exception to the rulers. Join us, WE are the future.

Steve Jones  
Santa Cruz LOCAL  
UCSC Graduate  
B.A. Environmental Studies  
<<http://www.geocities.com/earthbase4/planet.html>><http://www.geocities.com/earthbase4/planet.html>

( i built your RIDE BOARD at the Baytree Bookstore many years ago- that is



STILL there!!!)

## Response to Comment Letter I-42

**Response to Comment I-42-1.** Comment noted.

**Response to Comment I-42-2.** The proposed 2005 LRDP includes expansion of development north of the campus core. It is inferred that it is this area to which the commenter refers as “the back of campus.” Substituting an “Earth Center” for housing on the north campus would not be compatible with providing on-campus housing for 50 percent of the undergraduate population, 25 percent of graduate students and faculty and 3 percent of staff. On reduction of housing, transportation and population as development alternatives, please see Master Response PD-1 (on enrollment growth), Master Response ALT-5 (on campus housing issues) and Response to Comment I-45-30 (on transportation).

**Response to Comment I-42-3.** At times, a stoplight or stop sign slows one turning movement at an intersection while facilitating another movement. Overall, the intersection stoplights and signs have improved traffic levels of service at on-campus intersections.

**Response to Comment I-42-4.** LRDP Mitigation TRA-2B provides an open-ended menu of traffic mitigation options to ensure that the Campus has the flexibility to adopt new options, such as future advances in TDM in response to changing conditions.

From: "Rachel Kliger" <rkliger@ucsc.edu>  
To: <lrdp-eir@ucsc.edu>  
Subject: LRDP - Additional access to university  
Date: Tue, 18 Oct 2005 19:37:49 -0700

The traffic study of the EIR seems incomplete without bringing up an additional access to the University as a mitigating measure. I believe that the EIR should look at what are called the Encinal Routes to alleviate congestion in the Upper Westside.

Last year I spent a week at UCSC going through UCSC documents and maps pertaining to alternative access routes to the University.

I found 3 routes that had been studied by the University in 1992. These routes are entitled North Encinal Route, Middle Encinal Route and South Encinal Route. They start just above the faculty housing on Coolidge Drive, travel through vacant city land just below Pogonip, and end at Encinal Street in Harvey West Industrial Park.

These routes are different from the old Eastern Access Routes in that do not bisect Pogonip and they start from a much lower elevation.

Discussion of these routes, which would mitigate traffic problems discussed in the EIR, should be included in any complete LRDP plan.

(Please do not use my email address in the comment section.)

Rachel Kliger

546 Arroyo Seco

Santa Cruz, CA 95060

831-426-7059

Response to Comment Letter I-43

**Response to Comment I-43-1.** The Encinal Routes mentioned by the commenter are variations of the Eastern Access routes. Changing the alignment of an eastern access would not change the conclusions of the Draft EIR regarding traffic impacts. Please refer to Master Response TRAFFIC-3 (Eastern Access).

Date: Wed, 11 Jan 2006 08:11:16 -0800 (PST)  
From: Natasha Kowalski <tashakowalski@yahoo.com>  
Subject: EIR comments  
To: lrdp-eir@ucsc.edu

Dear UCSC:

I felt the EIR did not address how the UCSC expansion would effect the residents of the City of Santa Cruz. Here are areas where the EIR is lacking:

1. Vague or no mitigation for traffic, water, impact on neighboring parklands.
2. Impact on city housing and parking.

1

UCSC still needs to meet its obligations for its last round of growth. UCSC promised a list of mitigations that they have not met. Now UCSC wants to expand before addressing the problems created by the last round of growth such as traffic, housing and water issues. These issues need to be addressed before considering more growth.

2

If UCSC continues to pursue its latest plan for growth, I will work with fellow residents to stop this plan.

Sincerely,  
Natasha Kowalski

316 Alta Vista Dr! .  
Santa Cruz, CA 95060

Response to Comment Letter I-44

**Response to Comment I-44-1.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3, Revised Table 2-1, of the Final EIR for the full text of revised measures.

**Response to Comment I-44-2.** Please see Response to Comment SA-4-2 for the implementation status of the 1988 LRDP EIR mitigation measures.

Hal Levin  
2548 Empire Grade  
Santa Cruz, CA 95060

January 11, 2006

John Barnes  
Director of Campus Planning  
University of California, Santa Cruz  
Physical Planning and Construction  
1156 High Street  
Santa Cruz, CA 95064

RE: COMMENTS ON THE UCSC Draft EIR for the 2005 LRDP

Thank you for the opportunity to comment on the Draft Environmental Impact Report.

**General issues to be addressed regarding the Draft EIR released for Public Comment**

1. There are many inconsistencies spread throughout the Draft EIR and also between the Draft EIR and the Draft LRDP. The publication of the document with its numerous inconsistencies amounts to a form of CEQA fraud in that a reader of one part who has not read and compared all parts of the Draft EIR and the LRDP may be misled by the portion read. Such fraud in the preparation of an EIR is a clear violation of CEQA and must be corrected prior to approval of a Final EIR based on comments received on the Draft EIR and LRDP. There is even a serious question as to whether the Draft EIR must be revised and re-circulated before preparation of the Final EIR.
2. For example, there is an inconsistency in the estimated increase in staff and faculty described on Page 57 of the draft LRDP (net increase of 1,620 employees), and the LRDP DEIR which identifies a net increase of 1,520 employees.
3. There's a potential inconsistency in the projection of the increase in employees under the proposed LRDP. On page 1-1, the DEIR states that employees would increase by 1,520 over 2003-2004 levels under the plan. Yet on page 1-5, Table 1-1 states that faculty and staff would increase by only 983 between the 1988 LRDP, which was to reach its maximum numbers in 2005, and the 2005 LRDP.
4. Another example is in the traffic analysis where there are many inconsistencies among the various baseline estimates used and the various projections of new vehicle trips resulting from the proposed development. Comparison of these estimates in the 1988 LRDP, the 2005 LRDP and their respective EIR and Draft EIR is confusing and leaves the reader uncertain as to what the actual and projected number of vehicle trips will be.
5. These inconsistencies make responsible comments on the Draft EIR difficult and cumbersome at best and impossible at worst. These internal inconsistencies within and between the University's documents suggest strongly the need for a revision

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and re-issuance of the Final Draft LRDP and the Draft EIR for additional public comment.

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6. Members of the public cannot responsibly comment on the document given its sheer volume and the resulting difficulty of addressing it in its entirety. The inconsistencies can mislead readers of the DEIR and result in comments that are not sufficiently informed by the entire document or by a consistent and professionally competent document.
7. Plan is too general and vague for preparation of an adequate EIR. Some aspects are at project level while others are at program level. While the University officials at the public meetings have claimed But lack of sufficient data on baseline conditions makes identification and evaluation of environmental impacts and their necessary and appropriate mitigations difficult or impossible.
8. An example of the excessive generality of the document is that one rainfall level is given for the entire campus based on "average" monthly values. Rainfall rates are essential to proper planning of projects and mitigation of their impacts. On a cumulative level and on a program level, overall campus rainfall must be considered for determining the stormwater runoff that must be addressed by the campus and the City as well as adjacent unincorporated areas. Adequate planning for good engineering of these systems and evaluations of the systems impacts requires detailed estimates of worst case conditions, or, at least, 95%ile or 97.5%ile conditions.
9. Severe storms and severe droughts are not reflected in average annual rainfall data.
10. Natural fluctuations are very large – perhaps a factor of three or four between drought years and high rainfall years.
11. Variations across the campus lands are not reflected in "average" data for the "vicinity." Detailed numbers are essential.
  - a. The campus spans an elevation change of over 700 feet from the main entrance at the bottom (~300 ft above sea level) to the Natural Reserve (~1,000 feet above sea level). This difference in elevation alone can be expected to produce differential rainfall amounts since there will tend to be about a 2 degree Fahrenheit drop in temperature as the air moves up across the campus from the lower to the upper elevations.
  - b. Rainfall patterns in this region tend to be greatest at the north end of south facing valleys due, in part, to the fact that storms tend to bring rainfall from the south to the north even though most winter storms actually arrive from the north or northwest.
  - c. The campus spans a distance of approximately 2 miles from north to south. This distance along with the elevation changes together with the relevant surrounding topography result in enormous differences (greater than a factor of 2) in the annual rainfall and in individual storm or daily or monthly rainfall totals.
  - d. Accurate rainfall data are extremely important for planning a variety of types of physical development projects (e.g., roads, walkways, buildings, playing fields, site drainage, retaining walls, bridges, storm sewers, etc.) and for

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assessing their environmental impacts. Included are air quality, run-off, foundation stability, hillside stability, road drainage, among many others.

- e. Since developments are planned for the southern and northern extreme ends of the campus lands, more accurate rainfall data are necessary.
  - f. My property is located at the northeastern corner of the Cave Gulch neighborhood at ~1,000 feet elevation and shares two boundaries (north and east) with the University lands – specifically the Natural Reserve. I have carefully monitored rainfall here for the 19 years that I have lived here. In the mid-90s we had three consecutive years of more than 100 inches of rain here. The daily and seasonal totals reported by the Santa Cruz Sentinel for those years were just under half what I have measured here.
  - g. The actual difference in storm event or monthly or annual rainfall totals is more than a factor of two (2) between the lower end of the campus and the upper or northern campus. This is based on my 9 years of residence across Empire Grade from the Arboretum and an elevation of 330 feet above sea level and 19 years at my current location adjacent to the Natural Reserve near the northern end of Cave Gulch.
  - h. Average monthly rainfall does not provide worst case scenario data for planning for and assessing the various impacts of rainfall and those processes linked to it. It is necessary to obtain data for worst case storms and for sequential storms, as was evidence in the last half of December 2005 and the first few days of January, 2006. During the 36 hours beginning on the afternoon of December 17 there were more than 6 inches of rainfall at my property. During the five-day period beginning December 17, I collected more than 14 inches of rain. Table 4.3-1 shows only 5.42 inches for the entire month of December according to historical monthly average precipitation data.
  - i. If New Orleans relied only on historical average wind velocities or high tides or rainfall, it would not be able to assess the defenses necessary against severe storms. Similarly, UCSC must assess the greatest plausible hazards such as the 100-year storm (1955, 1982, when next?), the 100-year freeze, the 100-year wind, etc. to do a reasonable job of assessing potential environmental impacts.
  - j. Table 4.3-1 includes "Historical monthly average precipitation in the Santa Cruz Vicinity. So, the DEIR is not only based on vague and general plans, it is also based on "general" data. In fact, far better data are available and should be used in the preparation of the report. If the campus does not have better rainfall data, it should collect such data. Surely many of the science programs and environmental studies programs on campus have better data.
12. The LRDP describes the built-out campus as a sustainable one. There is no evaluation of the sustainability of the plan in the DEIR. Comments submitted during the scoping provided substantial information that could have been used to develop sustainable environmental targets and evaluate the sustainability plan.
13. Housing: It is apparent to any casual observer that the impact of the campus on housing alone is not sustainable in this community. It appears to be the University's position that a significant but unavoidable impact involves 30 up to 40% of the

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- single family residences in Santa Cruz being student-renter- occupied while present residents are displaced due to the unaffordable rental and purchase market.
- 14. Some designated land uses are very generally and ambiguously described. This avoids and prevents adequate evaluation of the environmental impacts.
- 15. DEIR is far too large (~900 pages, 37 pdf files) and cumbersome to review in a 83-day review period. The size and inconsistencies in the extension of 23 days beyond the originally announced 60 days was a recognition of this fact by the campus officials.
- 16. The 37 files that comprise the Draft EIR that are posted on the UCSC web site have been given protection that prevents the public from combining the files into a single file in order to perform searches on the whole document. As there are many inconsistencies in the Draft EIR, the campus and its consultants would benefit from creating a single file in order to determine where and what inconsistencies exist. The files should be saved without the protections that prevent such combining so that members of the public can use the files to prepare fully informed comments. The present form of the availability of the files is inappropriate for this age when electronic communication has advanced so far. It gives the appearance that the University is attempting to prevent comprehensive analysis of the entire Draft EIR. This is a form of obfuscation and closed process that is part of an overall pattern of behavior by the University to avoid fully disclosing its plans or fully evaluating them itself. This is tantamount to CEQA fraud.
- 17. Files have been formatted so that portions cannot be copied electronically for purposes of analysis. This is unnecessary and is an indication of an unwillingness of the planning staff to allow careful review and scrutiny of the document.
- 18. The potential impacts on the community are so large as to warrant 1) a more adequate Draft EIR with the inconsistencies resolved; 2) a longer review period and 3) a far more detailed and specific plan so that an adequate and complete Draft EIR can be prepared and reviewed by the public so that an adequate Final EIR can be prepared..
- 19. Document is full of findings of significant environmental impacts that are claimed to be unavoidable. Many if not most of these determinations of "unavoidable" are questionable at best. Some are simply wrong and reflect a lack of diligence on the part of the DEIR preparers or direction to them to avoid identification of adequate mitigations. A more serious investigation and consideration of alternative methods of mitigation would likely reveal that numerous impacts can be avoided. The DEIR represents a violation of CEQA and an effort to prepare a fraudulent document.
- 20. Significant impacts must be aggressively mitigated. As a public institution, the University is obliged to be a good citizen and to demonstrate its expertise by developing mitigation measures for far more if not all of the significant impacts..
- 21. Many impacts classified as insignificant would more properly be classified as low significance or significant. Again, the bias of the planners is to minimize the impact of the project on the environment and on the community. This is not effective in that the community is well aware of the impacts of prior growth since the changes that have occurred since 1988 are so evident to everyone who lives here.
- 22. The University keeps changing Chancellors so that no single Chancellor witnesses the impacts of growth. It is incumbent on staff who have worked at the University to

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join the faculty who have spoken up on the matter of the significant impacts of growth on the community as well as on the quality of education provided by the University. Only in this way can the new Chancellor begin to appreciate the significance of the changes that have occurred during the past 15 years and to gain a sense of the impacts that is shared by all who have lived here over that time and before.

23. Population growth will not be limited to the students, faculty and staff. There will be new construction work as well in order to construct the enormous expansion of campus facilities. Perhaps even more important, there will be families of faculty and staff as well as secondary or indirect growth to accommodate the likely 18 to 20% increase directly attributable to the University. This secondary or induced growth should also be considered in the DEIR, especially in matters concerned with housing, traffic, air quality, water supply, etc.
24. Population estimates for Santa Cruz in the Monterey Bay Unified Air Pollution Control District's (MBUAPCD) 2004 Air Quality Management Plan show Santa Cruz growing from a population of 56,953 in 2005 to 59,924 in 2020. The growth proposed in the Draft LRDP would add at least 10,000 including the students, faculty, staff, and families. There would be additional growth in construction workers and in the firms that supply their material needs as well as community services. Thus, a revision to the AQMP would be necessary that would shift the burden for meeting District air quality goals to the off-campus community including business and residential location throughout the community.
25. The DEIR simply says the Campus will work with MBUAPCD to have the population growth figures modified and the AQMP modified to reflect the campus growth.
26. Page 4-3.3 states that CARB is part of the Environmental Protection Agency.
27. Table 4.3-1 states average rainfall for the area. Rainfall on the northern portion of the campus is considerably higher than on campus and in the City in general. Rainfall figures at the northeastern edge of the Cave Gulch neighborhood immediately adjacent to the Natural Reserve are more than double those reported in the Santa Cruz Sentinel for Santa Cruz and are generally the same as those reported for Ben Lommond and Boulder Creek. Thus, all estimates based on rainfall figures in the table should be adjusted for addressing the relationship of rainfall to impact for the northern campus expansion.
28. The LRDP describes the built-out campus as a sustainable one. There is no evaluation of the sustainability of the plan in the DEIR. Comments submitted during the scoping provided substantial information that could have been used to develop sustainable environmental targets and evaluate the sustainability plan.
29. Housing: It is apparent to any casual observer that the impact of the campus on housing alone is not sustainable in this community. It appears to be the University's position that a significant but unavoidable impact involves 30 up to 40% of the single family residences in Santa Cruz being student-renter- occupied while present residents are displaced due to the unaffordable rental and purchase market.
30. Plan is too general and vague for preparation of an adequate EIR. Some aspects are at project level while others are at program level.
31. Some designated land uses are very generally and ambiguously described.

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- 32. DEIR is far too large (I am told ~900 pages, 37 pdf files) and cumbersome to review in a 60-day review period.
- 33. Files have been formatted so that portions cannot be copied electronically for purposes of analysis. This is unnecessary and is an indication of an unwillingness of the planning staff to allow careful review and scrutiny of the document.
- 34. The magnitude of the project (50% increase in student population and nearly doubling of building area) is far too large for only a 60-day review period.
- 35. The potential impacts on the community are so large as to warrant 1) a longer review period and 2) a far more detailed and specific plan.
- 36. Document is full of findings of significant environmental impacts that are claimed to be unavoidable. Many if not most of these determinations of unavoidable are questionable at best. A more serious investigation and consideration of alternative methods of mitigation would likely reveal that numerous impacts can be avoided.
- 37. Significant impacts must be aggressively mitigated. As a public institution, the University is obliged to be a good citizen and to demonstrate its expertise by developing mitigation measures for far more if not all of the significant impacts.
- 38. Many impacts classified as insignificant would more properly be classified as low significance or significant. Again, the bias of the planners is to minimize the impact of the project on the environment and on the community. This is not effective in that the community is well aware of the impacts of prior growth since the changes that have occurred since 1988 are so evident to those of us who live here.
- 39. Population estimates for Santa Cruz in the Monterey Bay Unified Air Pollution Control District's (MBUAPCD) 2004 Air Quality Management Plan show Santa Cruz growing from a population of 56,953 in 2005 to 59,924 in 2020. The growth proposed in the Draft LRDP would add at least 10,000 including the students, faculty, staff, and families. Thus, a revision to the AQMP would be necessary that would shift the burden for meeting District air quality goals to the off-campus community including business and residential location throughout the community.
- 40. The DEIR simply says the Campus will work with MBUAPCD to have the population growth figures modified and the AQMP modified to reflect the campus growth.
- 41. Page 4-3.3 states that CARB is part of the Environmental Protection Agency.
- 42. Table 4.3-1 states average rainfall for the area. Rainfall on the northern portion of the campus is considerably higher than on campus and in the City in general. Rainfall figures at the northeastern edge of the Cave Gulch neighborhood immediately adjacent to the Natural Reserve are more than double those reported in the Santa Cruz Sentinel for Santa Cruz and are generally the same as those reported for Ben Lommond and Boulder Creek. Thus, all estimates based on rainfall figures in the table should be adjusted for addressing the relationship of rainfall to impact for the northern campus expansion.

**Review baseline assumptions for all data:**

- 43. Since many mitigations in the Final EIR for the 1988 LRDP have not been implemented ("due to budget limitations" – 2004 Mitigation Monitoring Report), the baseline for determination of the environmental impacts of the 2005-2020 LRDP should be the conditions prior to the growth in enrollment and construction under the 1988 LRDP.

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44. The enrollment is currently less than 15,000 although the plan is being presented as though the growth and its impacts were already known. Any impact assessment must be based on the actual enrollment at the time the data are collected and projected appropriately (e.g., not necessarily linearly) to future enrollment, staff, and faculty numbers.

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45. Since growth will not likely follow a smooth, continuous curve, but, rather, be phased, the EIR should address the impacts of growth under various scenarios in order to determine peak surges in enrollment, staff, faculty, and construction.

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46. At the time of the 1988 LRDP adoption, the Campus had already expanded considerably beyond the 1978 LRDP. The moving forward without an adopted plan and EIR and implementation of the mitigations in the EIR appears to be a chronic campus behavior and undermines credibility. The EIR must discuss the relationship between the plan and actual development practices as well as the actual means for implementation of mitigations.

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47. The costs of all mitigations should be assessed and incorporated into the plan submitted for approval by the Regents. There should be no approval of any proposed enrollment growth or construction or discussion of necessary mitigations without cost estimates in order to avoid a repetition of the sham EIR for the 1988 LRDP due to "budget limitations" for mitigations while growth and its impacts occur.

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**Cumulative impacts**

48. The plan is quite general in many places and is not susceptible to detailed analysis of impacts to determine the cumulative impacts of the project. Sufficient detail must be added to the Draft LRDP and its description in the DEIR in order to ascertain the impacts that will ensue. Where details are not available, worst case assumptions should be considered in order to calculate total cumulative impacts.

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49. The lack of details in the LRDP and its DEIR results in failure to consider many impacts at a relevant level. For example, total vehicle trips and linear extrapolation of impacts for traffic, drainage, and air quality are clearly inaccurate and misleading. The result is that determination of impacts understates actual impacts and produces inadequate mitigation measures. Traffic impacts must be assessed at a more detailed level, looking at variations at peak flow periods in no more than 15 minute intervals, not hourly or weekly averages.

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50. The plan should be as specific as possible regarding every land use designation and project description. Much of the description lacks the detail necessary for preparation of an adequate and legally compliant EIR.

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**Section 5.0 Project Alternatives**

51. Serious consideration of alternatives is not reflected in the Draft EIR. Neither the depth of the comments and analysis nor the range and scope of the viable alternatives proposals are satisfactory.

52. There is insufficient analysis of the project alternatives.

53. There are poorly conceived alternatives that do not truly offer opportunities for the EIR preparers to give serious consideration to there relative impacts

54. The alternatives included are not sufficiently adequate to support the adoption of a final EIR without major revisions and expansion of the scope and of the analysis of alternatives considered.

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55. Among the alternatives to growth of the campus to 21,000 students and an additional 2,000 faculty and staff that might or should be considered are the following:
- A. Consider locating increased UC enrollment on other campuses where the campus-to-community population ratios are lower than in Santa Cruz.
  - B. Consider building new campuses in larger communities that can more easily absorb the impacts. The southern end of the San Joaquin Valley and the northern half of the Sacramento Valley are obvious locations.
  - C. Consider acquiring a small California State University campus in a large community and expanding it to reduce infrastructure costs.
  - D. Consider completing mitigations of existing impacts prior to further growth in enrollment or construction of additional facilities.
  - E. Consider delaying enrollment increases until housing needs of students, faculty and staff can be met according to prior LRDP stated assumptions of housing 70% of students on campus.
  - F. Consider providing alternative transportation to reduce or eliminate increased impacts on traffic. This could include eastern access, gondola, mandatory ride sharing and van pools, and enhanced access for bikes.
  - G. Consider the costs of mitigating impacts as part of the evaluation of alternative plans and comparing the alternatives to the proposed growth and development in the draft LRDP.
  - H. A population target far less than 19,500 must be evaluated as an alternative to the 21,000 figure. 19,500 is not a really significant alternative in terms of the impacts on the Santa Cruz community and the campus itself.
  - I. The growth to 21,000 on the Santa Cruz campus has no academic justification. The argument that UCSC must accommodate its "share" of the total UC population is not supportable. There is room at other campuses where the impacts on the local community will be far less and will be far easier and less costly to mitigate.
  - J. The overall justification for growth at UCSC must be evaluated and the real alternatives for the UC system need to be addressed if the claim is to be made that overall UC systemwide growth necessitates UC Santa Cruz growth to 21,000 students. This is an arbitrary figure and has no basis in a thorough analysis of the alternatives from an environmental impact perspective, as required by CEQA.
  - K. Consider remaining at 14,000 students and shifting the emphasis to programs that reflect both the intellectual and physical resources available already on the Santa Cruz campus. Strengthen these programs and consider re-locating non-priority or excellent programs to other existing UC campuses or to a new UC campus.
  - L. Consider growth to only 17,750, half way between the stated target of 21,000 students and the current enrollment of less than 15,000 students.
  - M. Give more thorough attention to the alternative of a new campus in the former Moffet Field location or elsewhere in the Santa Clara Valley.
  - N. Provide a more detailed analysis of the Moffet Field alternatives with more careful consideration to the variety of programs that might most beneficially

be centered there.. More complete rationale must be given for dismissing these alternatives. Certainly "high tech" oriented programs could logically be located in the Mountain View area, close to the center of much of the leading edge high tech industry in the Greater San Francisco Bay Area.

- O. Provide a more detailed analysis of the Fort Ord alternative with more careful consideration to the variety of programs that might most beneficially be centered there. More complete rationale must be given for dismissing these alternatives. Certainly "marine science" and terrestrial agriculture oriented programs could logically be located in the Fort Ord area or at Moss Landing, close to the center of much of the leading edge marine biology and agriculture industries in the Greater San Francisco Bay Area.
- P. Consider not building on the northern (upper) campus. There are many reasons to remove plans to build on the upper campus. These include additional cost of construction on the northern (upper) campus as well as the sensitive habitats and the distance, environmental impacts, and difficulty of travel from the present campus core to the northern portion. Foot travel will be mostly non-existent, and only a small amount of bicycle travel can be relied on to avoid 100% motor vehicle transport from the existing core to new facilities on the proposed northern campus development areas.
- Q. Eliminate many avoidable environmental impacts by concentrating growth in the developed area of the campus. This area already covers more land area than either the UC Berkeley or the UCLA campuses, both of which have student populations twice that of the present UCSC student population.

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56. Since a major impact is on traffic, serious alternatives to present automobile and bus-dominated transportation must be explored. These should include a menu of existing and innovative technologies that would be competitive with auto transport in terms of gaining mass appeal and ridership. Furthermore, financial incentives for alternative transportation can be adopted as policy instruments to reduce the reliance on single occupancy vehicles. Both discounts for reduced impact behaviors and higher costs for current and higher impact behaviors can be considered. These can include charges for parking on a single use basis rather than a monthly or annual permit, parking fee discounts for van pools or ridesharing vehicles based on ridership, and improving the convenience of parking for HOVs on campus while relegating SOVs to remote lots with minimal shuttle service. These options should be part of a major alternative to the proposed project. They should be applied to staff and students alike. Registration fee discounts can be offered to bicycle riders with demonstrated use of bicycles during the previous quarter. This can be considered a pay-as-you-go approach based on the increased or decreased costs to the university resulting from less or more mitigation requirements that actually result in the university's costs for mitigation.

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**Section 4.14 Traffic and Appendix e, Traffic**

57. Motor vehicle per trip impacts are not directly proportional to the number of trips and should be calculated by type of vehicle, travel speed, and stops. This should be done fully considering size, acceleration during level, downhill, and uphill grades, timing, weather (more students ride the buses during rainy weather), and specific

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- roads. Direction of travel on grades, width of road at stopping points, and other factors significantly affect traffic impacts.
58. All traffic impacts correspond to air pollution impacts and should be assessed in terms of the types of vehicles and projected emissions since emissions are highly variable. Diesel-powered bus service to the campus is a major contributor of fine particulate matter that is carcinogenic. Review the traffic and air quality impacts in the context of the Monterey Bay Unified Air Pollution Control District's latest plan.
  59. The significant increase in UCSC Perimeter Loop vehicles on High Street-Empire Grade between the Main Entrance and West Entrance to Campus have clearly demonstrated this.
  60. Additional Metro buses will be necessary to accommodate peak loads, and it will be important to perform quarter hour or at least 30 minute interval analyses of the impacts of additional students, staff and faculty traveling to Campus by bus and traveling around the campus on campus shuttle vans.
  61. Traffic eastbound-southbound on High Street in the afternoon has long been a motivation for drivers to seek alternative routes, specifically, Bay Street and some of the other Westside streets such as Escalona and King. The lengthy delay in reaching the Mission and King intersection on both the High Street route and along Mission will further encourage travel on Laurel and Walnut through the downtown area and onto Broadway and Soquel for eastbound traffic. Detailed computer modeling will be necessary to analyze and accurately characterize these impacts.
  62. Traffic northbound on Empire Grade to the proposed new Cave Gulch Bridge entrance is to include construction vehicles and construction and maintenance materials deliveries. Heavy vehicles carrying capacity loads traveling up the steep grade to the proposed Cave Gulch Bridge entrance will sometimes have velocities as low as 5 or at most 10 mph. This will make the entrance less attractive to all users since this mile from the West Entrance to the proposed new Cave Gulch Bridge Entrance will then take between 8 and 12 minutes to travel as compared with the 40 mph speed limit travel time of approximately 1.5 minutes. This slow traffic should be analyzed in terms of the actual projected usage of this new entrance.
  63. The safety of the road between the West Entrance and the Cave Gulch Neighborhood is already unacceptable. Numerous vehicles leave the roadway on both sides and directions of travel each year. Personal injury accidents are common. There are a number of reasons for this including the curves and incline as well as the very limited surface area adjacent to the road over most of this 1+ mile distance. Numerous heavily-laden vehicles will significantly increase the hazardous travel conditions resulting in a dramatic increase in accidents, injuries, and, perhaps, fatalities. It is unreasonable to expect the present road to support the proposed increased traffic without considerable increased safety hazards as well as vehicle damage to the canyon as vehicles leave the roadway and impact the hillside on the west side of the road or tumble into the canyon on the east side. Safety issues should be very carefully examined and all possible mitigations reviewed. Increasing roadway width would have enormous environmental impacts and should be evaluated carefully if it is to be considered as mitigation. It would also be extremely costly to expand the roadway width and the cost of such expansion

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should be identified and become part of the LRDP presented to the Regents for approval.

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- 64. Consider providing alternative transportation to reduce or eliminate increased impacts on traffic. This could include eastern access, gondola, ride sharing, and enhanced access for bikes.

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**Infrastructure**

- 65. Northbound Traffic of heavy vehicles carrying full capacity loads from West Entrance to the proposed corporate yard and Cave Gulch Bridge Entrance to campus will impose significant weight on the roadway. The downhill lane (east side of road) adjacent to the Cave Gulch Canyon washed out in the early 1980s during a period when the ground was heavily saturated. The stability of the road should be evaluated and necessary improvements should be identified as well as alternatives to the proposed increased uses. There is evidence of increasing slip-out risk as cracks in the roadway parallel to the road edge on the road have increased in size this winter. The costs of improvements and other mitigations should be identified and be part of the plan itself. Approval of the plan should include approval of the funds for implementation of the mitigations of negative impacts.

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- 66. There are already more than a dozen locations where there is very little distance between the roadway and the edge of the canyon where there are clearly visible cracks in the pavement indicating that the downhill side of the road has sunken or that the earth below has been compacted. These cracks are an ominous foreboding of landslides to come. The addition of numerous heavily burdened construction materials transport vehicles as well as other construction vehicles on the road suggests that the campus planners have simply not examined this road and its capacity to carry more vehicles. There are also frequent treefalls on this road, both closing the road and taking out of service the power and communications lines that run alongside and over it.

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- 67. The geologic underpinnings, the history of slides, the narrowness of the road, the steepness of the grade, and steepness of the slopes above and below the road, and other factors should be thoroughly investigated to determine the suitability of this road for the increased volume and weight of traffic proposed in the plan.

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- 68. Emergency egress for the private school and the neighborhood immediately above the proposed new entrance and road on Empire Grade in the Cave Gulch Neighborhood will be threatened by the planned new uses of the road.

**Section 4.3 Air Quality**

- 69. The three county Monterey Bay Unified Air Pollution Control District (MBUAPCD) is out of compliance with state and federal regulations. Furthermore, the relatively new state ozone standard will result in more Expected Peak Day Concentrations (EPDC) above the standard of 70 ppb. The maximum measured 8-hour ozone concentration shown in Table 4.3-4 is 0.077 ppm or 77 ppb, above the State standard of 70 ppb. The measurement was made at the "Nearby Monitoring" station on Soquel Avenue. The increased density of traffic commuting to the University can be expected to contribute a substantial potential for ozone formation and monitoring closer to the University would likely reveal a level as high or higher than that reported in the Draft EIR.

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- 70. The reported 77 ppb is close to the Federal 8-hour ozone standard of 80 ppb, and a small increase in precursor gas sources could easily result in EPDC above the Federal NAAQS standard.
- 71. The DEIR report cites data through 2004 but refers to the past five years. This should be corrected to either include 2005 data or to correctly characterize the period covered.
- 72. Section 4.3 on Air Quality includes use of the term ROG (e.g., Section 4.3.1.1 Study Area, and bottom of page 4.3-5, first paragraph under the heading "Ozone"), an antiquated term no longer used by EPA and CARB. This suggests that at least portions of the Air Quality section of the DEIR were prepared from "boiler plate" and do not reflect the current laws, regulations, standards, and implementation of federal (EPA), state (CARB), and local (MBUAPCD) air pollution control agencies. The current term is VOC and it has a specific definition within federal, state, and district regulation. The discussion at the bottom of page 4.3-1 continues to reinforce the appearance of boiler plate language since much of it could be used anywhere in California or in the MBUAPCD area.
- 73. Any proposal for private development of the magnitude of the proposed campus growth would be required to address the impacts and to offset any additions to the emissions inventory. The number of vehicle trips being proposed to be added to the campus would, for any private developer, require very major mitigations. The proposed growth on campus will add a very large number of vehicle trips that will severely affect any other development proposals in the area in terms of their approvals by the MBUAPCD. The University has a responsibility to identify these impacts, to consider alternatives to the portions of the project that create the need for these trips, and to discuss and select appropriate mitigations. This responsibility has not been fulfilled by the Air Quality section nor the Alternatives section of the DEIR.
- 74. Alternatives important to reduce the air pollution inducing aspects of the proposed growth would include severe restrictions on vehicles arriving on campus. Included in these restrictions could be car pooling requirements where staff and faculty must identify ride share opportunities and vehicles with less than two passengers are not permitted on campus.
- 75. Remote parking lots for long-distance commuters and vans or buses or carpooling options from these lots can be used to reduce not only air quality impacts but also traffic impacts on the several intersections that will be at service level F as a result of the project.
- 76. All traffic impacts correspond to air pollution impacts. The traffic numbers used in the report are inconsistent and are subject to significant revision when all comments are considered and when construction related traffic is factored into the totals.
- 77. Construction related traffic will be dominated by trucks, pick-up trucks and construction materials and equipment trucks as well as heavy earth-moving equipment. Such traffic will be significantly more polluting than passenger cars and should be correctly assessed in the EIR.
- 78. Construction will require additional energy and result in significant increases in atmospheric releases that have been treated as insignificant. This treatment is inappropriate and should be revised to significant with appropriate mitigations..

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- 79. There are inconsistencies between the number and entries in tables in this section. See, for example, the state and federal ozone standards.
- 80. The proposed growth on campus alone will more than double the projected population increases on which the 2004 MBUAPCD Air Quality Plan is based. It is not satisfactory to simply work with the District to revise the estimates. The plan itself will need to be revised to accommodate the increased vehicle related emissions.
- 81. Population growth will not be limited to the students, faculty and staff. There will be new construction work as well in order to construct the enormous expansion of campus facilities. Perhaps even more important, there will be families of faculty and staff as well as secondary or indirect growth to accommodate the likely 18 to 20% increase directly attributable to the University. This secondary or induced growth should also be considered in the DEIR, especially in matters concerned with housing, traffic, air quality, water supply, etc.
- 82. Population estimates for Santa Cruz in the Monterey Bay Unified Air Pollution Control District's (MBUAPCD) 2004 Air Quality Management Plan show Santa Cruz growing from a population of 56,953 in 2005 to 59,924 in 2020. The growth proposed in the Draft LRDP would add at least 10,000 including the students, faculty, staff, and families. There would be additional growth in construction workers and in the firms that supply their material needs as well as community services. Thus, a revision to the AQMP would be necessary that would shift the burden for meeting District air quality goals to the off-campus community including business and residential location throughout the community.
- 83. The DEIR simply says the Campus will work with MBUAPCD to have the population growth figures modified and the AQMP modified to reflect the campus growth.
- 84. The DEIR states that there is no State of California 8-hour ozone standard in the table immediately after one in which the newly adopted 8-hour state standard is listed. The second table also shows that in 2004 the new state standard was exceeded at the nearest monitoring station. The standard is 70 ppb O<sub>3</sub> and the reported concentration was 77 ppb for 2004. This is an extremely important fact that deserves more attention in the DEIR since the University along with all other developers will be under stricter requirements to mitigate their contribution to Ozone air pollution in the District.
- 85. Violation of the ozone standard will require stricter mitigations than are currently required. Since the campus growth will be the major single contributor to air pollution increases in the District, it is incumbent on the campus to more aggressively address its pollution releases. These will likely be in the form of motor vehicle trips and the accompanying pollution. Buses and trucks, especially diesel-powered vehicles traveling uphill to reach the campus, will be major sources and their emissions must be addressed directly.
- 86. Traffic traveling and additional 300 to 500 feet in elevation to reach the proposed corporation yard off Empire Grade in the Cave Gulch neighborhood will also contribute significant avoidable pollution.
- 87. The mitigations required by the Air Pollution Control District of any developer of a project of even 1/50<sup>th</sup> the size of the proposed campus growth would include a net zero increase in emissions of ozone precursors. The mitigations would include the

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emissions attributable to travel to and from the project. The DEIR does not address the need to reduce overall emissions to current levels.

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88. Mitigations can include alternative means of transportation, car pooling, bicycle lanes, van pools, ride sharing, and telecommuting, among others. Students who do not live on campus can reduce trips with distance learning. Telecommuting should be adopted for on campus employees to the greatest extent feasible. Additional student and faculty/staff housing on campus will also result in a net reduction in the additional pollution from vehicle trips.

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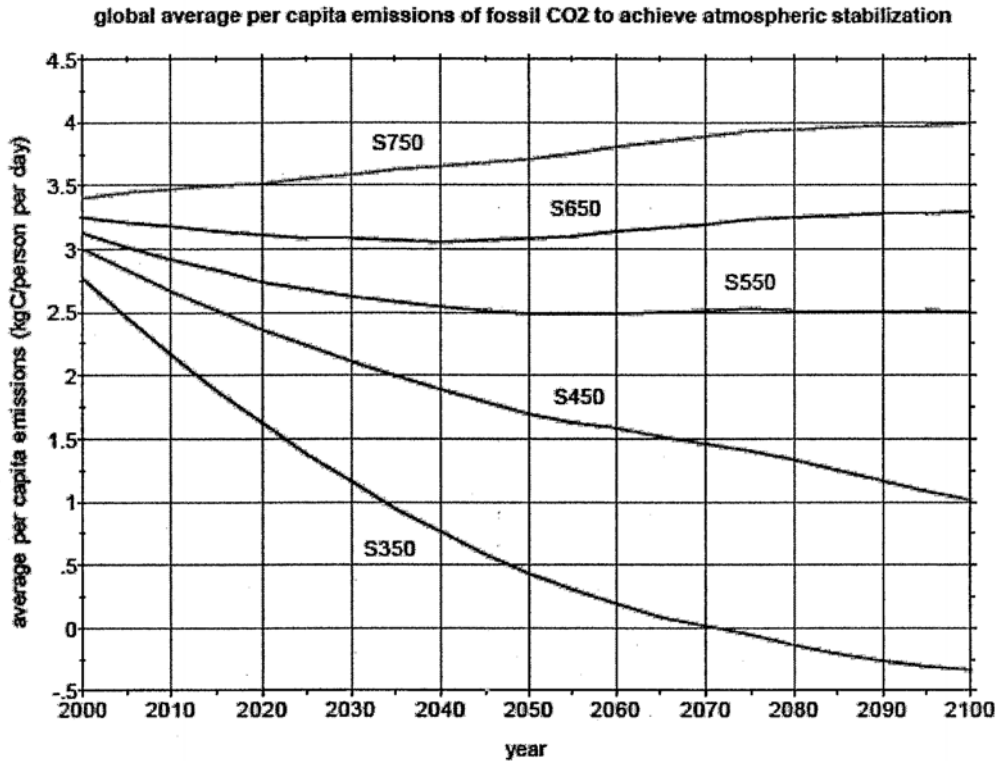
89. Carbon dioxide emissions attributable to the project have not been calculated and reported. In fact, the campus contribution to global climate change has not been addressed. Climate change is arguable at the heart of sustainability.

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90. Global climate change is an important potential impact that must be fully evaluated for any project of this magnitude. All alternatives to reduce or eliminate any increase in carbon emissions should be considered fully and the comparisons weighed. Among the other impacts that must be considered are sea level rises, increased temperatures, northward migration of disease bearing pests, more violent storms, droughts, tsunamis, and many other factors. Please refer to the recent reports of the IPCC, especially the report on impacts, *Impacts, Adaptation and Vulnerability*, available at [http://www.grida.no/climate/ipcc\\_tar/](http://www.grida.no/climate/ipcc_tar/).

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91. The sustainability of the plan is dependent on moving toward a sixfold reduction in current per capita carbon emissions in the United States and in California in order to achieve a globally equitable distribution of carbon emissions over the duration of this century that will result in stable atmospheric CO<sub>2</sub> levels from 450 to 550 ppm by the year 2100. This will result in warming, but, for the time being, is considered a reasonable international target. The campus must demonstrate its commitment to sustainability by developing a plan consistent with stabilizing carbon emissions contributing to global climate change. (Reference: Wigley et al, Nature, Vol. 379, 240-243). The scenarios are depicted in the graph below. They show various levels of atmospheric CO<sub>2</sub> and the corresponding global per capita daily carbon emissions in kilograms. Even at the 450 to 550 ppm level of average global carbon dioxide concentration, there will be considerable climate change including warming in the temperate zone of North America. Sustainability requires substantial reductions, on the order of a factor of six, in California for attaining the S450 to S550 scenarios according to the most widely accepted climate change models. UCSC must make significant changes in the per capita carbon emissions attributable to its activities if it is to make any claims of sustainability.



Notes: (1) Line labeled with stabilized atmospheric CO<sub>2</sub> level (ppm); (2) Traces represent the median of eight IPCC emission stabilization profiles (<http://cdiac.ornl.gov/ftp/db1009/>; F Joos and U Siegenthaler, file fossilJ.dat); (3) population projections represent the median from Lutz, W., W.C. Sanderson, and S. Scherbov, Eds. 2004. *The End of World Population Growth in the 21st Century: New Challenges for Human Capital Formation and Sustainable Development*. London: Earthscan. (accessed at <http://www.iiasa.ac.at>).

- 92. There is no evidence of any efforts to reduce Carbon emissions to any significant degree at all let alone to the degree necessary for a stable atmospheric CO<sub>2</sub> concentration at twice the pre-industrial level of <275 ppm.
- 93. Campus growth has been a major factor in the determination of the City to proceed with a desalination plant. Such a plant will contribute more air pollution and carbon dioxide to the atmosphere than conventional water treatment. Thus, the campus growth has induced the additional air pollution associated with desalination for potable water supplies.
- 94. In Section 4.3.2.2 the authors state "For the 2005 LRDP construction activities are expected to consist mostly of minimal grading activities." This statement is inconsistent with the very large land area shown for development under the plan, the construction of significant extensions of roads, and the normal excavation associated with building 2,000,000 square feet of occupiable space. Such a statement is patently false and comprises CEQA fraud.
- 95. In Section 4.3.2.2 the authors state: "Because detailed information regarding maximum areas of disturbance .... is not available at this time...." This is followed by a calculation that is not representative of the type and extent of construction that

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will be conducted on the northern campus under the plan. The plan should be revised to consider that northern campus construction is likely to occur in a concentrated period of time and to form a worst case scenario for purposes of these calculations of emissions.

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96. In Section 4.3.2.2 the authors state in the final paragraph under criteria pollutant emissions from construction activities: "According to MBUAPCD CEQA guidelines, temporary exhaust emissions... "These statements are not based on any project as large as the University's planned growth. Additional analysis is warranted here. Also, additional vehicle trips should be added for construction workers, construction equipment delivery to campus, and deliveries of materials and equipment for construction as well as furnishings for the buildings. Figuring an typical construction cycle of about 18 months from groundbreaking to occupancy, than a minimum of approximately 200,000 square feet or more would be under construction at any time. A reasonable estimate would double this number to estimate peak construction-related vehicle trips.

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97. Local carbon monoxide and all other vehicle related emissions should be recalculated once the various conflicting estimates of traffic volumes are reconciled along with adjustments in response to these and other comments on the draft EIR.

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98. Section 4.3.2.3 states that construction activities under the 2005 LRDP would result in emissions of PM<sub>10</sub> on a short-term basis. In fact, emissions for construction will be more or less steady for 15 years or the life of the LRDP. This is not short-term by any interpretation of the term and the impact cannot be deemed insignificant.

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99. PM<sub>2.5</sub> has been the federal and state standard for particle emissions since 1997. However, the report dismisses the concerns related to PM<sub>2.5</sub> without adequately treating the problem. This should be corrected by factoring in emissions from all vehicles involved in construction as well as transportation to and from and around the campus. Such an analysis has not been done in the report and must be done in the final EIR.

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100. Table 4.3-2 and Table 4.3.4 are inconsistent with respect to the State 8-hour Standard for ozone which is correctly identified in Table 4.3-2 as 70 ppb.

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101. Section 4.3, page 4.3-34, Table 4.3-21. The cancer risk is based on students. However, it is faculty and staff that have the longest residence time on campus at the buildings where the cancer risk exceeded  $1 \times 10^{-6}$ . These were laboratory buildings. The risk assessment should be revised to show the longer time spent on a daily basis and on a lifetime basis by faculty and staff working at or near the College Nine, Sinhseimer East Labs, Baskin Engineering, and the Santa Cruz Waldorf School.

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102. Section 4.3, page 4.3-34, Table 4.3-21. The cancer risk identified at the Santa Cruz Waldorf School suggests the need for further study of the risk for children and residents of the neighborhood, especially in homes that are actually located closer to campus or to the hazardous emissions than the Waldorf School itself.

103. LRDP Impact AIR-1. The impact will be significant when transportation of construction materials, workers, and equipment are included in the impact inventory and assessment. Mitigations should include reductions of all associated impacts with a focus on the strongest emission sources.

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- 104. LRDP Impact AIR-2. Mitigation AIR-2A. While the mitigations identified are valuable and important, they are not exhaustive nor sufficient. Furthermore, it is not clear that the University will, in fact, implement those measures identified. Finally, the measures identified are vague and require better quantification of building energy performance goals including expected loads and mitigation measures.
- 105. LRDP Impact AIR-2. Residual Significance. While it is true that the residual significance will be "significant," it is not true that it is unavoidable. Innovations in design are producing buildings with zero net energy targets. This can be accomplished through design, construction, operation, and use phases of the project. Important mitigations are available at each stage and should be identified and adopted. For example, use of photovoltaic electricity generation can offset much energy consumption. Hooking in to the electric grid, such electricity generation can reduce peak loads which coincide with the highest risk of air pollution episodes involving the formation of ozone which is a function of UV availability from sunlight as well as the source emissions of ozone precursors. It also allows electricity generation at the remote power plant sites where emissions controls are far more effective than at the point of electric use, notwithstanding the substantial transmission losses.
- 106. LRDP Impact AIR-3. The finding of "less than significant" is inappropriate and not justified by the DEIR. Mitigations are available in the form of alternative transportation options at the critical intersections. These have not been discussed in the DEIR and are an essential part of the incompleteness of the document. The assertion that this "less than significant" is an example of the fraud being perpetrated by the University. Such CO concentrations can impair driver performance (See published research by Antonio H. Miguel of UCLA on this subject). Such impaired performance can lead to increased traffic accident rates. A collision is an environmental impact because the "environmental damage" involved in repair and replacement of vehicles and the increased activity associated with dealing with the injured parties contribute further to other environmental stressors.
- 107. LRDP Impact AIR-4. The DEIR states that the impact is significant and unavoidable. The significance is likely but avoidable. Project Alternatives not explored in the DEIR can avoid these impacts. These include avoiding further growth on the Santa Cruz campus and exploring other options with the UC system to accommodate future demands on the UC system to accommodate qualified graduating high school students. Furthermore, eliminating admission of out-of-state students can further reduce the burden on the UC system.
- 108. LRDP Impact AIR-7. It is unacceptable for the campus to expose citizens off campus to toxic air contaminants in excess of the acceptable risk level of  $10^{-6}$ . This cannot be considered "less than significant." The Waldorf School (along with several others) is identified in the DEIR as a location with a risk of  $1.48 \times 10^{-6}$ . This cannot be considered "Less than significant." Effective mitigations are required. The location of the corporation yard at the proposed site alone could be reviewed and alternatives examined that involved less exposure of an affected population. The plan should be revised to eliminate the ridiculous idea of bringing a substantially increased number of diesel powered vehicles up Empire Grade and across a long bridge so that the materials can be off-loaded, stored, then re-loaded and distributed back down the

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hill, either via Empire Grade or on campus roads. The entire notion of the new Empire Grade north entrance should be re-examined in terms of its true potential to reduce impacts elsewhere in light of the significant impacts and costs it will bring.

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**Water Supply and Quality**

- 109. Impacts on Cave Gulch Neighborhood groundwater and wells have not been evaluated. The proposed development of the northern campus area is a serious threat to the quality of the water available to Cave Gulch residents who all depend on wells for water supply.
- 110. Impacts on Cave Gulch Creek have not been adequately evaluated. The proposed development of the northern campus area is a serious threat to the quality of the water in Cave Gulch creek.
- 111. Impacts on Moore Creek must be fully evaluated including the addition of more than a doubling of impervious surfaces under the proposed development.
- 112. Impacts on Wilder Canyon and Wilder Creek must be fully evaluated including the addition of more than a doubling of impervious surfaces under the proposed development.
- 113. Impacts on streams and creeks on and below the east side of campus must be fully evaluated including the addition of more than a doubling of impervious surfaces under the proposed development..

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**Wastewater**

- 114. Additional population will contribute to additional wastewater burdens at the municipal treatment plant. The capital plus the operating costs of the additional burden must be determined and the University must determine its ability to pay for and facilitate these improvements.
- 115. Any necessary increase in carrying capacity of the wastewater piping must be determined and the environmental impacts of any construction as well as the impacts on water leaving the outfall must considered and addressed.

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**Drainage and flood control**

- 116. The Campus is out of compliance with Federal and State regulations for wastewater management. No construction or additional enrollment or staff or faculty hiring should be considered until the impacts of current wastewater and runoff are assessed and mitigated.
- 117. Budget limitations for mitigations should be regarded as impacts that cannot be mitigated and the project should be deemed infeasible.
- 118. Increase in impermeable surfaces (roofs, walkways, roadways) results in increased runoff and potentially increases erosions.
- 119. Alternatives must be found for the proposed roughly doubling in square footage with a presumed rough doubling in concomitant roof area and paved areas. Means for controlling and cleaning as well as disposing of this water must be found to avoid soil erosion on the campus itself and downstream from the campus waterways.
- 120. Soil erosion**
- 121. Construction creates soil erosion
- 122. Increase in impermeable surfaces (roofs, walkways, roadways) results in increased runoff and potentially increases erosions.
- 123. Alternatives must be found for the proposed roughly doubling in square footage with a presumed rough doubling in concomitant roof area and paved areas. Means for

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controlling and cleaning as well as disposing of this water must be found to avoid soil erosion on the campus itself and downstream from the campus waterways.

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**Section 4.10 Noise**

- 124. /construction on the north campus will commence an unprecedented intrusion of noise into a residential neighborhood, i.e., the Cave Gulch Neighborhood. The noise is likely to continue for several years.
- 125. Location of the corporate yard adjacent to the Waldorf School is inappropriate from a noise perspective and will have negative impacts on learning as demonstrated in studies done at schools.
- 126. Location of recreational facilities, housing and academic buildings will bring many times the current number of hikers, walkers, bikers, etc. to the upper (north) campus area. This will likely increase the amount of activity and noise generated by these individuals.

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**Economic impacts**

- 127. The costs of improvements and all mitigations should be identified and be part of the plan itself. Approval of the plan should include approval of the funds for implementation of the mitigations of negative impacts as well as approval of the plan itself.
- 128. The University's failure to fulfill its 1988 LRDP goal of 70% of students housed on campus has contributed significantly to the unaffordability of housing in the community. This has resulted in University plans to develop more faculty and staff housing in the environmentally sensitive Ranch View Terrace development recommended against in the university's 1992 Implementation Report for the 1988 LRDP.
- 129. Housing demands in the City of Santa Cruz has grown steadily and made housing unaffordable for an increasingly large fraction of the non-University population. The result has been crowding in houses, changes in the character of neighborhoods, and deterioration of the quality of life for families. Mitigation of these impacts must be identified as well as alternatives including providing housing for all new students and faculty through University-funded programs, subsidies, land contributions, and other measures.

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**Mitigation feasibility**

- 130. The mitigation monitoring report for the 1988 LRDP (the summary table appears on the following page) shows that measures are not being implemented and budget limitations are being used to claim that the University is in compliance. This is blatant hypocrisy and should not be repeated. All mitigation measures should be studied as to feasibility and budget should be provided for them all. The EIR should investigate funding as a matter of feasibility analysis so that mitigations are not identified and included but not implemented.
- 131. Timing of mitigations should correspond to the impacts. In many cases, prevention is far more effective than mitigation after damage occurs, specifically with releases of pollutants to the environment (air, water, soil), or growth without adequate housing, transportation, etc.

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**Sustainability**

- 132. Lofty goals should be translated into criteria and methods for assessing their accomplishment. These can be done following a number of methods including but

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not limited to those described and reviewed in the attached article as well as life cycle assessment methods and tools (University of Leiden, various years), and socio-ecological indicator methods (Azar and Holmberg, 1996).

133. There is abundant information, both scientific and technical, to enable serious consideration of the implications of development on sustainability. For example, the following abstract from a just published article discusses four approaches to assessing impacts of development.  
[http://pubs3.acs.org/acs/journals/doi/lookup?in\\_doi=10.1021/es040394k](http://pubs3.acs.org/acs/journals/doi/lookup?in_doi=10.1021/es040394k). There are many more, and the plan should either drop the goals and principles statements or adopt specific targets based on criteria that relate to sustainability.

"Framing the Elusive Concept of Sustainability: A Sustainability Hierarchy", *Environmental Science & Technology*, 39(3): 673 - 682. 2005.

ABSTRACT]

Usage of the word "sustainability" is widespread and incorporates a plethora of meanings. After reviewing four extant sustainability frameworks, we propose a Sustainability Hierarchy to structure a broad array of issues that have been associated with sustainability. These issues vary widely in their urgency, severity and uncertainty of consequences, and temporal and spatial dimensions. It categorizes actions some view as unsustainable based on their direct or indirect potential to (i) endanger the survival of humans; (ii) impair human health, (iii) cause species extinction or violate human rights; or (iv) reduce quality of life or have consequences that are inconsistent with other values, beliefs, or aesthetic preferences. Effects considered include impediments to the ecosystem functions that support human life, human health, and species viability. This paper argues that for sustainability to become a more meaningful concept, the many worthy issues in the fourth category (values, beliefs, and aesthetic preferences) should not be considered sustainability concerns. Implications for companies, policy makers, and scientists are discussed.

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134. Additional frameworks are available from Weterings and Opschoor, 1992, "The Ecocapacity as a Challenge to Technological Development," Rijswijk, Netherlands: Advisory Council for Research on Nature and Environment; and from Dobson, Bryan Norton, and scores or even hundreds of others.
135. Andrew Dobson, *Ecological Politics*, 1996.
136. Dobson, A., 1998. *Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice*. Oxford: Oxford University Press, p. 39.
137. The plan claims to be one for sustainable growth and development. However, there is no evaluation of this aspect of the plan in the Draft EIR. Without details, no such claims can be made nor should they be part of the LRDP.
138. Sustainability can and should be evaluated in the EIR.
139. The following approach should be used to calculate carbon emission targets on a global, national, and local scale and for translating these targets to the overall growth projected in the program LRDP and later used for EIRs for specific buildings projects.

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Using the basic environmental carrying capacity ("ecocapacity") approach described by Weterings and Opschoor (1992) and by Friends of the Earth/Netherlands (1994), environmental space per capita ("ecospace") targets for sustainability have been developed. The target values address the amount of

resource consumption or pollution emission per person that the environment can support sustainably (meaning "indefinitely"). The approach proposed originally by Weterings and Opschoor was adapted by Graedel and Klee (2002) into four steps:

- Determine the virgin material supply
- Allocate the virgin material
- Identify the regional recapture of the resource base
- Compare current consumption rates to sustainable living rates

The first three steps and the first part of the fourth step can be based on available data. However, the establishment of sustainable targets, as in establishing "Ecocapacity" in Weterings and Opschoor, requires numerous assumptions, among them 1) planning time frame, 2) distribution of environmental goods and services among nations, and 3) assumptions and knowledge of the environment's capacity to replenish natural stocks and absorb pollution emissions. Most of these require value-based assumptions and the use of highly uncertain data. An important but missing piece is an on-going, open dialogue to establish the values framework for making these assumptions. As time passes, better data will be available and revisions may be made both to the value-basis as well as to the estimated carrying capacity. Ehrlich and Kennedy (2005) have called for such a dialogue pointing out that values and assumptions vary greatly among cultures and nations.

#### **Time Frame:**

Weterings and Opschoor adopted a 50-year time frame based on the availability of reasonably credible and accepted projections of population, resources, and environmental impacts. Graedel and Klee adopted a 50-year time frame based on a projection of two generations. Holdren *et al* assumed a 1,000 year time frame for fossil fuel supply allocation stating that this was longer than normal planning frames and shorter than the geological time scale relevant to the formation of fossil fuels. The 50-year and certainly the 1,000 year time frames allow periodic re-assessment of targets utilizing newly-available data.

#### **Distribution**

Weterings and Opschoor assumed a shift in the current, inequitable 30-to-1 distribution ratio of per capita use of environmental capacity between individuals in OECD and in developing countries. They adopted a more equitable 10-to-1 ratio over the 50-year time frame, although they did not propose the means by which to achieve this shift. Graedel and Klee adopted a target of equal distribution of ecospace to all projected inhabitants of the earth. Both groups used population assumptions from the then most recent United Nations population projections available at the time of their research. Between 1992 and 2002, the 50-year projections of global population were reduced from around 12 billion to around 10 billion.

**Replenishment:**

Each of the environmental resources is estimated on an individual basis and the pollution loads that will not exceed the ability of ecosystems to survive are estimated based on the best available science.

**Calculating Maximum Carbon equivalent ( $C_{eq}$ ) Emissions Targets**

Graedel and Klee calculated carbon emissions in terms of a virgin materials supply limit as follows: Assuming that a stable atmosphere could have a  $CO_2$  concentration no greater than 550 ppmv by the year 2100 related to calculated maximum global anthropogenic emissions of  $\sim 7.8 \times 10^{15}$  g (7-8 Pg) of carbon per year. For a projected  $7.5 \times 10^9$  people on earth in 50 years, they would allocate about 1 Mg carbon equivalents per person-year ( $C_{eq}/p-y$ ). Carbon re-capture was not considered established at this time, so zero recapture was included in their calculations. Inhabitants of the USA produce an average of 6.6 Mg  $C_{eq}/p-y$ , "...clearly well beyond the estimated global sustainable rate of 1 Mg  $C_{eq}/p-y$ ."

In Switzerland, emissions are approximately 2.0 Mg  $C_{eq}/p-y$ , still approximately twice the calculated sustainable limit. This calculation provides a target for "sustainable" societies and helps identify the scale of reductions required for a sustainable rate of carbon emissions. The  $CO_2$  emission limits calculations by Graedel and Klee are somewhat higher than the estimate by Wetterings and Opschoor made ten years earlier to allow a sustainable global average per capita carbon emission of 0.4 Mg  $C_{eq}/p-y$ . Scaling the Dutch estimate based on the more recent population projection used by Graedel and Klee results in a target value of  $\sim 0.5$  Mg  $C_{eq}/p-y$ .

Using these two figures as the upper and lower boundary, an estimate weighted toward the more recent and environmentally just calculation of Graedel and Klee produces a global average target value of  $\sim 0.8$  Mg  $C_{eq}/p-y$ . This requires an approximate 8-fold reduction in the annual average per capita carbon emissions in the USA and about half that in most of Europe and in Japan. As the Dutch authors suggested, with a transparent target-setting process, the targets can be revised when new data become available and when different values are used to inform the target-setting process.

**Allocation of resources within societies/nations:**

The next critical question is the allocation of carbon emissions among various sources. An initial estimate can be made using the current proportion of emissions among major activities and sectors. Buildings' share is assumed to be  $\sim 40\%$  of total  $C_{eq}/p-y$  (Levin 1995, Roodman and Lenssen 1996). The relative opportunities for improvements through conservation, more efficient technologies, and behavioral changes among the major sectors – industry, buildings, transportation, and agriculture – could be used to adjust the allocations among and even within these sectors.

An initial annual target of  $\sim 0.35$  Mg  $C_{eq}/p-y$  is assumed for all building-related purposes including construction, operational energy, and the energy required to

manufacture, install, maintain, and replace materials over a building's life cycle. Depending on the service life of a building and its components, a reasonable estimate of the life cycle energy and related carbon emissions will be in the range of 50 to 90% during the use phase. The longer the use phase, the lower the annualized energy and carbon emissions costs of embodied energy. In buildings with long service lives, presumably the most sustainable buildings, then the 90% reduction value would result in an allocation of 0.35 Mg C<sub>eq</sub>/p-y.

Further research can establish the potential efficiency improvements in each sector and provide incentives and sanctions for utilization of this "virgin material supply limit" allotment. For example, the transportation and building sectors have enormous room for improvements due to the large inefficiencies in the current vehicle fleet and building stock respectively. Over time, the limits can be reviewed and revised as more complete, accurate, and current data become available.

### **Building use type targets**

Allocation of the per-person target among various building types could be accomplished in several different ways. A simple, readily-available way is using the current distribution of energy use among building types as a basis. Using the data in the U.S. Department of Energy's *Buildings Energy Databook* (2004), the residential-to-commercial ratio is currently about 1.17. Within residential, there is as much as a 2 to 1 ratio between the energy used per m<sup>2</sup> per household member in single family detached dwellings and in multi-family dwellings in buildings with 5 or more units per building. This kind of disparity should be considered in allocations made according to existing distributions, according to equal energy use per capita, or according to some weighted distribution that encouraged more efficient energy use. Within commercial building types, energy use per m<sup>2</sup> varies by a factor of 6 with food sales being the highest at around 5.7\*10<sup>6</sup> btu/m<sup>2</sup>-y and warehouse and storage the lowest at around 1\*10<sup>6</sup> btu/m<sup>2</sup>-y. Offices are at about 2.3\*10<sup>6</sup> btu/m<sup>2</sup>-y and educational facilities at 1.5\*10<sup>6</sup> btu/m<sup>2</sup>-y.

Again, the per capita share of each use should also be considered in making calculations, but this could be further adjusted by consideration of the time spent in and the nature of each environment. For example, health care facilities are quite different from public assembly spaces in terms of the impact of the indoor environment on occupants and the occupancy patterns. It can also be argued that economic outcomes such as "productivity" (or more accurately, "task performance") should be considered.

Allocations can be based on the distribution of person-hours spent in each building type. But some buildings are inherently more energy intensive than others, e.g., laboratories and health care facilities compared to houses or offices. Thus, an adjustment would have to be made. Again, weighted allocations could be used as a policy tool to encourage more efficient energy use patterns.

### **Building-specific performance targets**

Building-specific environmental performance targets can be established for individual projects or building-types or for political or bioregional divisions or for whole nations. A convenient convention would be to calculate a building's ecospace allocations based on multiplying its use of ecospace by the total of all buildings of the same use type and comparing it to global targets. This can be done with the reciprocal of its area or its units of person-hours of use. For example a school of 1,000 m<sup>2</sup> and 500 students could be allocated its share of the total ecospace for schools based either on total educational facility area or total students in the municipality, region, nation or world. Allocation between various types of facilities and individuals should also be determined by the relative intensity of activity requiring the resource use or pollution emission as modified by local conditions of climate and the relevance of the particular resource or emission to the geographical and political contextual basis for the allocations. Here the strong connection between indoor environmental control and sustainability becomes clear. Air pollution problems differ between large urban areas and small towns or rural areas, and climate and other factors can affect the ability of a region to absorb pollutants without exceeding established limits.

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#### **Applying the C<sub>eq</sub> Emission Approach to Other Environmental Concerns**

The approach used for C<sub>eq</sub> emissions targets per building can be applied to other pollutant emissions and resource consumption. Once the allocation of permissible resource consumption and pollutant emissions is established, alternative designs can then be evaluated against comprehensive environmental performance goals. Specific environmental goals are articulated and project-specific targets are established for use with some of the LCA and other tools already available during design.

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**Mitigations**

- 140. All mitigations should be included in any budget requests or project plans submitted to the Regents for approval. It is unacceptable to identify mitigations in an EIR and fail to implement them when the project is constructed. This amounts to CEQA fraud.
- 141. Many mitigations identified as unavoidable are avoidable by choosing from among many viable project alternatives or by developing and implementing effective mitigations.

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Sincerely yours,

Hal Levin



**Response to Comment Letter I-45**

**Response to Comment I-45-1.** Please refer to Responses to Comments I-45-2 through I-45-4 for responses to specific concerns about consistency.

**Response to Comment I-45-2.** See Response to Comment LA-2-1.

**Response to Comment I-45-3.** The comment appears to suggest that there were inconsistencies in the baseline estimates used and the projections of new vehicle trips resulting from proposed development in the 1988 LRDP, the 2005 LRDP and their respective EIRs. The baseline information and the projection of new vehicle trips in the 1988 LRDP EIR are not relevant to the current planning and environmental review efforts because they do not provide current baseline information or projections of new vehicle trips resulting from proposed development under the 2005 LRDP. The 2005 LRDP Draft EIR, Section 4.14, *Traffic, Circulation, and Parking*, provides existing intersection levels of service at on- and off-campus intersections, based on actual traffic counts (see Tables 4.14-8 and 4.14-9). The estimated project trip generation with development under the 2005 LRDP is provided in the Draft EIR, Table 4.14-10. This information is used consistently throughout this section, as appropriate.

**Response to Comment I-45-4.** After the close of the public and agency comment period on the Draft EIR (January 11, 2006), the University prepared written responses to all written and oral comments received at the public hearings that raise environmental issues regarding the project, as stated in Volume IV Chapter 1, Introduction. Some of these responses have resulted in changes to the text of the Draft EIR to clarify or modify analyses and revise mitigation measures. Some of the responses have resulted in changes to the text of the 2005 LRDP. Additionally, a Recirculated Draft EIR – Additional Traffic Analysis, was prepared in response to comments to address the significant effects of the 2005 LRDP on project's impacts on freeway operations. The responses to public comments and the Recirculated Draft EIR have been published in this Final EIR. Please refer to Volume IV, Chapter 3 of the Final EIR, for a summary of all of the text changes made in response to public comments received on the Draft EIR. Please also refer to Responses to Comments I-45-2 and I-45-3 for responses to specific concerns about consistency.

**Response to Comment I-45-5.** Please refer to Response to Comment LA-2-25 for a discussion of the program-level and project-level analyses contained in the Draft EIR. The Draft EIR and Recirculated Draft EIR fully evaluate the project and cumulative impacts of the 2005 LRDP, as required by CEQA and the CEQA Guidelines. All feasible mitigation measures for significant impacts have been included in the Draft EIR and Recirculated Draft EIR. Please see Response to Comment SA-4-2 for a definition of “feasible” under CEQA. Please also see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3, Revised Table 2-1, of the Final EIR for the full text of revised mitigation measures.

**Response to Comment I-45-6.** The average annual rainfall as well as the annual extremes are presented in the Draft EIR Section 4.8.1.3 on page 4.8-3; these data illustrate the variability between drought years and wet years. Page 4.8-3 also discusses the difference in average annual rainfall between the upper and lower campus.

See Master Response HYDRO-1 regarding the program-level analysis of impacts. The analysis of storm water runoff for each major campus watershed is provided in Appendix D2 of the Draft EIR. Runoff was

calculated for a 2-year event (with an annual exceedance probability of 50 percent) and a 25-year event (with an annual exceedance probability of four percent).

Project impacts do not necessarily increase as the severity of the hydrological or meteorological events increases. For example, small storm events may not produce any runoff for undeveloped areas but may produce some runoff from developed areas. In larger storm events, the effect of increasing impervious surface area becomes smaller because as the ground gets saturated, even natural areas act as if they were impervious. Environmental impacts such as erosion or flooding from extreme storm events can be significant, but they would occur even without any of the development proposed under the 2005 LRDP and the impacts would probably be similar. Also refer to Response to Comment I-34-37.

Detailed rainfall records will be used in the project-level analyses performed for the design of project features and mitigation measures. See Master Response HYDRO-1 (LRDP Impact HYD-3).

**Response to Comment I-45-7.** CEQA does not require that an EIR include an assessment of a project's sustainability. The 2005 LRDP planning principles related to sustainability generally focus on meeting the needs of present users without compromising the ability of future users to meet their needs, particularly with regard to the use of natural resources. The text of the sustainability planning principles is provided on page 46 of the Draft 2005 LRDP.

**Response to Comment I-45-8.** Comment noted.

**Response to Comment I-45-9.** Please refer to Response to Comment LA-2-25 regarding the appropriate level of environmental analysis for a program such as the 2005 LRDP.

**Response to Comment I-45-10.** Comment noted.

**Response to Comment I-45-11.** Please see Responses to Comments I-45-2 through I-45-4 for responses to concerns about inconsistencies. Please also see Response to Comment I-75-2 for information related to the extension of the comment period.

**Response to Comment I-45-12.** This EIR considers the potential environmental impacts of development under the 2005 LRDP. It is a program-level document that evaluates impacts associated with the full development of the campus under the 2005 LRDP. The "project" that is evaluated is a program and not a specific development proposal. Therefore, the mitigation measures in the EIR are also programmatic in nature. In some instances, the Campus has concluded that even if all feasible mitigations are implemented, the impact will remain significant. In other instances, the Campus has determined that the impact would be significant and unavoidable after mitigation because enough project-specific information is not available to conclude that the impact would be reduced to a less-than-significant level for all future projects under the 2005 LRDP. For example, LRDP Impact HYD-3 is in this latter category, and Master Response HYDRO-1 explains why even with several mitigations, Impact HYD-3 would be significant and unavoidable. Similarly, see Response to Comment RA-1-1 as to why the Draft EIR concludes that two air quality impacts would be significant and unavoidable even after mitigation. That response also provides more information on the mitigation measures available to address air quality impacts of the proposed project and why further reduction in impacts is not possible. LRDP Mitigation UTIL-9 includes a suite of measures to minimize the increase in campus water usage under the 2005 LRDP, however, because the entire increase in water usage cannot be avoided, the Draft EIR finds the impact on water

supply to be significant and avoidable. Traffic impacts are found to be significant and unavoidable because the improvements that would mitigate these impacts are outside the control of the campus.

**Response to Comment I-45-13.** The Draft EIR provides an estimate of all dependents associated with the additional campus employees and students with families. Please see Section 4.11, pages 4.11-15 and -16 and Tables 4.11-6 and 4.11-8. As explained in Chapter 2 of the Final EIR (Volume IV), under the Final Draft 2005 LRDP (the Reduced Enrollment Growth Alternative analyzed in the Draft EIR), enrollment growth on campus would be smaller than that analyzed in the Draft EIR, which would lessen the Campus's contribution to population growth in the area. Estimates of employment and population that could be induced by the project are provided in Section 6.3, *Growth Inducing Impacts of the Proposed Project*. That section also addresses the impacts of secondary growth on traffic, housing, water supply, and other resources. Potential impacts from on-campus construction are analyzed in several sections of the Draft EIR, including Section 4.3, *Air Quality*, Section 4.4, *Biological Resources*, Section 4.8, *Hydrology and Water Quality*, and Section 4.10, *Noise*.

**Response to Comment I-45-14.** The Draft EIR presents an analysis of the consistency of the proposed LRDP with the Air Quality Management Plan (LRDP Impact AIR-4 on pages 4.3-30 and -31). Please also refer to Response to Comment LA-10-20.

**Response to Comment I-45-15.** The statement that CARB is part of the California EPA is correct.

**Response to Comment I-45-16.** Although the Draft EIR reports average monthly rainfall for the Santa Cruz area in Table 4.3-1 based on data from the weather station in Santa Cruz, the EIR notes on page 4.3-2 that the annual average rainfall ranges between about 30 to 45 inches in the Santa Cruz area, with the higher rainfall levels at upper elevations inland. Also see Section 4.8.1.3 on page 4.8-3, and Response to Comment I-45-6. Section 4.8.1.3 states that the Ben Lomond gauge is more representative of rainfall on the upper campus, and that the Santa Cruz gauge is more representative of rainfall on the lower campus.

**Response to Comment I-45-17.** Please see Response to Comment I-45-7 for information about evaluating sustainability in an EIR. Please see Response to Comment LA-9-46 for information about the housing impacts of the project. Please refer to Response to Comment LA-2-25 regarding the appropriate level of environmental analysis for a program such as the 2005 LRDP. Please also see Response to Comment I-75-2 for information related to the extension of the comment period.

**Response to Comment I-45-18.** Please see Response to Comment I-75-2 for information related to the extension of the comment period.

**Response to Comment I-45-19.** Please see Response to Comment I-75-2 for information related to the extension of the comment period. Please see Response to Comment I-45-5 for information about the Draft EIR evaluation of environmental impacts and identification of feasible mitigations. Please see Response to Comments RA-1-6 and I-45-15 for information about revising the Air Quality Management Plan and the relationship of the CARB to the EPA. Please also see Response to Comment I-45-6 for information about average rainfall for the area.

**Response to Comment I-45-20.** Please see Response to Comment I-1-6.

**Response to Comment I-45-21.** As explained on pages 4-1 to 4-2 of the Draft EIR, under CEQA, baseline conditions are generally the physical conditions that exist when the Notice of Preparation (NOP) is published. The NOP for the 2005 LRDP EIR was published in January 2005. However, for population-

related analyses, the academic year 2003-04, the most recent academic year for which complete population and housing data were available, is considered to be the baseline. The impacts of 2005 LRDP-related growth are compared to this baseline. Appropriate methods were used for projecting each impact; these methods are described in each impact section of the EIR.

**Response to Comment I-45-22.** The Draft EIR assesses the maximum impacts of full development under the 2005 LRDP through 2020. Specific projects that are developed under the 2005 LRDP, and are required to accommodate new growth, will be evaluated when the project details are available for review.

**Response to Comment I-45-23.** Please see Response to Comment SA-4-2 for a discussion of the implementation status of the 1988 LRDP EIR mitigation measures. Please also see Response to Comment LA-6-7, which describes the status of the 1988 LRDP EIR mitigation measures once the 2005 LRDP EIR is certified.

**Response to Comment I-45-24.** Please see Response to Comment SA-4-2 regarding identifying funding sources for mitigation measures.

**Response to Comment I-45-25.** Please refer to Response to Comment LA-9-12 regarding the cumulative analysis provided in the Draft EIR and Recirculated Draft EIR.

**Response to Comment I-45-26.** Because the comment lacks specificity regarding inconsistencies and inaccuracies, a response cannot be provided. Regarding analysis of variations in peak flow periods, the Draft EIR evaluates the two periods of a typical weekday where University and citywide traffic collectively are at their highest levels — the AM and PM peak hour. Within these peak hours, the traffic analysis focuses on the peak 15-minute period to determine delay and level of service. The analysis is not based on hourly or weekly averages.

**Response to Comment I-45-27.** The 2005 LRDP is a land use plan for campus growth over the next 15 years. It is similar to a city or county general plan, and is analyzed only at a programmatic level of detail, as provided for under CEQA (Section 15146 of the CEQA Guidelines). Also, please see Response to Comment I-45-22.

**Response to Comment I-45-28.** Please refer to Master Response ALT-3 (Range of Feasible Alternatives).

**Response to Comment I-45-29.** Please see Master Responses PD-1 and ALT-1 regarding enrollment growth alternatives; Master Response ALT-2 regarding accommodating growth at other campuses or sites; Master Response ALT-3 regarding the range of alternatives analyzed; Master Response ALT-4 regarding growth at the Moffett Field Satellite Campus/Silicon Valley Center; Master Response ALT-6 regarding infill development; and Responses to Comments I-26-2, -3, -4, -7, -8 and LA-9-136 through -139 regarding the Fort Ord Satellite campus. Issues related to the 70 percent on-campus housing goal projected in the 1988 LRDP and "triggers" for the production of additional housing are discussed in Master Response ALT-5. As discussed in Chapter 2 of the Final EIR (Volume IV), the Campus will recommend to The Regents that the Reduced Enrollment Growth Alternative analyzed in the Draft EIR. The 2005 LRDP has been revised to reflect the lower enrollment growth target under that alternative.

The commenter states that the Campus should consider completing mitigations for past impacts prior to further growth or development, and that the cost of mitigating impacts should be considered as part of alternative evaluation and comparison with the proposed project. Although it is true that implementation

of a few identified mitigation measures, particularly infrastructure improvements not related to specific projects, has been slowed by funding limitations, UC Santa Cruz has a strong overall record of carrying out identified mitigation measures, as documented in bi-annual mitigation monitoring reports (UC Santa Cruz 2004). The Infrastructure Improvements Project Phase 1 and 2 analyzed in this EIR is expected to remediate a number of water quality issues related in part to past development. As discussed under 2005 LRDP Mitigations TRA-2A in Draft EIR Section 4.14 (page 4.14-46) and in Draft EIR Section 4.14 (page 4.15-37), the University is prepared to pay its fair share of off-campus traffic and infrastructure improvements when other agencies identify and build those projects. Please see Master Response MIT-1 regarding the University's fair share fee obligations under Government Code 54999 and the University's fair share contributions. With regard to alternative transportation planning for the campus, please see Response to Comment I-45-30, below.

**Response to Comment I-45-30.** As discussed in the Draft EIR, Section 4.14, the Campus recognizes that effective TDM is essential to the reduction of traffic impacts in relation to current and projected campus growth. The commenter suggests a range of measures for reducing motor vehicle traffic. Many of these are already in place at UC Santa Cruz. The Campus has a very effective TDM program in place, which includes subsidized transit, transit links, van pools, incentives for ride sharing, parking controls and pricing designed to discourage regular driving to the campus, and bicycle-transit programs, among a wide range of TDM measures. The success of this program is demonstrated by the fact that around 55 percent of existing campus trips are by modes other than single occupancy vehicle. LRDP Mitigations TRA-2B, and TRA-4A through TRA-4F included in this EIR are directed toward continuing improvement and expansion of this program. Consistent with these measures, the Campus will continue to work with the City on additional transportation initiatives such as Bus Rapid Transit. Also consistent with these measures, the Campus will continue to work on both bicycle and pedestrian plans to continue to improve the viability of these non-motor vehicle modes.

**Response to Comment I-45-31.** The traffic analysis uses nationally accepted methodologies to evaluate levels of service conforming to the thresholds of significance established by the City of Santa Cruz. Nationally accepted methods include evaluation of a typical day with predominant factors for weather. Type of vehicle (passenger car versus truck), direction of travel, grades, speed, and roadway width are accounted for in the analysis of the level of service.

**Response to Comment I-45-32.** Regional emissions from mobile sources that are reported in the Draft EIR (LRDP Impact AIR-2) were calculated using EMFAC2002, a model that is recommended for this use by the MBUAPCD. The details of the model and modeling assumptions are presented on pages 4.3-19 and -20 of the draft EIR. As stated there, the fleet average vehicle mix contained in EMFAC2002 for Santa Cruz County was assumed for the analysis. This mix includes buses and trucks.

Emissions from diesel-powered buses and trucks were also included in the human health risk assessment (HRA) that was conducted to evaluate the human health risks from campus operations under the 2005 LRDP. Please see LRDP Impact AIR-5, which presents the results of the HRA.

**Response to Comment I-45-33.** See Response to Comment I-45-32 above.

**Response to Comment I-45-34.** Please refer to Response to Comment I-18-1.

**Response to Comment I-45-35.** The Draft EIR and the RDEIR evaluate the key access routes between the campus and downtown as well as other destinations in Santa Cruz, including State Routes 1 and 17.

For purposes of the analysis, University traffic was assigned to Laurel and Walnut, as well as Soquel Avenue and other east side streets. Potential impacts to these routes were compared to the standards of significance. No significant impacts were identified on these routes. Please refer to Draft EIR, Volume II, Table 4.14-16.

**Response to Comment I-45-36.** Please refer to Master Response TRAFFIC-2 (Impacts to Empire Grade Road).

**Response to Comment I-45-37.** Please refer to Master Response TRAFFIC-2 for a discussion of the issues raised regarding Empire Grade Road. The amount of traffic added to Empire Grade Road by the project and the proposed new Cave Gulch entrance, combined with existing and forecast non-project traffic, is well within the capacity of this road. Project traffic will not have any detrimental effect on emergency access to the Cave Gulch neighborhood.

**Response to Comment I-45-38.** The provision and enhancement of alternative transportation modes is the emphasis of LRDP Mitigations TRA-2B, and TRA-4A through -4F. Regarding an Eastern Access, see Master Response TRAFFIC-3.

**Response to Comment I-45-39.** Please refer to Master Response TRAFFIC-2 (Impacts to Empire Grade Road).

**Response to Comment I-45-40.** Please refer to Master Response TRAFFIC-2.

**Response to Comment I-45-41.** Please see Response to Comment ORG-5-3.

**Response to Comment I-45-42.** The Draft EIR discusses the attainment status of the air basin with respect to both federal and state air quality standards on pages 4.3-10 and 4.3-11. The air basin is nonattainment for the state PM10 standard and for the state ozone standard. The new 0.070 ppm state standard for 8-hour ozone standard went into effect in May 2006, but was not in effect when the Draft EIR was prepared. It should also be noted that while nearby monitoring data shows that the air quality in 2004 would have exceeded the new 0.070 ppm standard for 8-hour ozone, the data for 2005 and 2006 (through May) show a maximum of 0.055 and 0.051 ppm, respectively, at this monitoring station concentrations below the standard.

The Expected Peak Day Concentrations (EPDC), referred to in the comment, is a “hot spot” indicator that is calculated based on three consecutive years of data from each monitoring site in the air basin, according to the 2004 *Air Quality Management Plan for the Monterey Bay Region*. Three years of data are used to provide a more stable indicator than would be produced by just one year of data, since air quality trends can be highly affected by year-to-year variations caused by the weather. The EPDC “hot spot” indicator is the most important single indicator because it is used by ARB to designate areas in relation to the ambient air quality standard. EPDCs are updated annually, with the most recent EPDC indicators available for the year 2002, based on data from 2000 to 2002. These EPDCs are compared to the state 1-hour ozone standard, and do not exceed this standard at the nearby Soquel Avenue station. Only data from official monitoring stations meeting strict quality assurance criteria adopted by the ARB, such as the Soquel Avenue Station, are used in making these determinations.

It is expected that EPDCs will be calculated and compared to the new state 8-hour ozone standard in May 2006. Given the 8-hour ozone measurements provided in the first paragraph above, it is unlikely that the EPDC for the Soquel Station will exceed the new state 8-hour ozone standard. Moreover, according to the

2004 *Air Quality Management Plan for the Monterey Bay Region*, the overall emissions have declined since 1990 and are forecast to continue to decline through 2020. This decrease corresponds to the general improvement in ambient ozone levels in the air basin over time, which is expected to continue.

It is unlikely that monitoring near the University would reveal measured concentrations of ozone that violate the state 1-hour ozone standard, as only the Hollister and Pinnacles monitoring stations have had exceedences of this standard in the last three years. These stations are much further inland than the Soquel station and other monitoring stations in the air basin. It is unknown whether monitoring near the University would show measured concentrations of ozone that would violate the new state 8-hour ozone standard. However, the Soquel Avenue station is in close proximity to higher levels of traffic along Soquel Avenue (near 7th Avenue), and along Highway 1, than currently occur near the University. Regardless of what monitoring near the University would show, the Draft EIR fully evaluates the impacts of growth under the 2005 LRDP related to violations of air quality standards, based on application of the thresholds of significance recommended by the MBUAPCD (see LRDP Impact AIR-2, page 4.3-25). If the MBUAPCD modifies these thresholds in the future in response to the new state 8-hour standard, or for any other reason, this would have to be accounted for in the environmental review of future projects. Such a possibility cannot currently be anticipated and therefore cannot be incorporated into the impact analysis provided in the 2005 LRDP EIR. Please also see Response to Comment I-45-43 regarding the thresholds of significance and methodology recommended by the MBUAPCD.

**Response to Comment I-45-43.** The Draft EIR uses standards of significance and methodology recommended by the MBUAPCD to evaluate air quality impacts. The MBUAPCD CEQA guidelines do not suggest that impacts related to VOC or NO<sub>x</sub> emissions be evaluated in terms of concentrations. Instead, the guidelines consider that projects that emit VOC or NO<sub>x</sub> (ozone precursors) in quantities greater than 137 pounds per day will result in a significant impact on air quality. As is discussed under LRDP Impact AIR-2, VOC and NO<sub>x</sub> emissions from campus growth under the 2005 LRDP would exceed 137 pounds per day and, therefore, would result in a significant impact on regional air quality. Even with mitigation measures, NO<sub>x</sub> emissions are expected to exceed 137 pounds per day and the impact would remain significant.

Note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. As discussed in the Final EIR, Volume IV, Chapter 2 (*Project Refinements*, Air Quality Section) under the Final Draft 2005 LRDP, VOC emissions would be reduced below the threshold even without mitigation. NO<sub>x</sub> emissions would also be reduced, but the remaining emissions would still exceed the significance threshold and would still result in a significant impact to air quality.

**Response to Comment I-45-44.** When the Draft EIR was published, complete data were only available for 2004 and prior years.

**Response to Comment I-45-45.** Please see Response to Comment LA-2-49.

**Response to Comment I-45-46.** The 2005 LRDP is not a “development project” but a plan to guide the development of the campus over the next 15 years. The Draft EIR acknowledges that campus growth will result in additional vehicular emissions which, when combined with emissions from new stationary

sources on the campus, would result in a significant impact on air quality (LRDP Impact AIR-2). The Draft EIR includes a number of mitigation measures to reduce the total new emissions that would result under the 2005 LRDP. Many of these measures would be implemented in connection with specific projects under the 2005 LRDP, which would be the subject of further environmental review. The Final Draft 2005 LRDP (September 2006), because it plans for a lower population and less building space than the Draft 2005 LRDP (January 2005), would result in lower incremental emissions than the Draft 2005 LRDP analyzed in the Draft EIR.

**Response to Comment I-45-47.** The Campus currently has in place an aggressive transportation demand management (TDM) program to minimize the number of vehicle trips to the campus. Additional TDM measures for continuing improvements to this program aimed at reducing peak hour and daily vehicle trips to the campus are identified in LRDP Mitigation TRA-2B, which is presented in detail on page 4.14-48 of the Draft EIR. Table 4.14-19 presents examples of the TDM measures that the Campus would pursue under LRDP Mitigation TRA-2B; these include 10 TDM measures that are either existing TDM programs that would be expanded or would be pursued in the near term, and 10 TDM measures that have longer horizons and would be pursued as development under the 2005 LRDP progresses.

**Response to Comment I-45-48.** LRDP Mitigation TRA-2B includes a TDM measure committing the Campus to working with appropriate regional agencies to identify and develop Westside and Eastside Santa Cruz remote park-and-ride facilities with transit service (See Draft EIR page 4.14-48).

**Response to Comment I-45-49.** The Draft EIR uses the correct number and mix of daily vehicle trips to estimate the regional emissions from mobile sources. The methodology used to develop regional emissions from mobile sources is discussed on Draft EIR page 4.3-20. As explained there, the average fleet mix contained in EMFAC2002 for Santa Cruz County was used in the analysis. This fleet mix includes passenger cars as well as other types of vehicles such as delivery and construction trucks.

**Response to Comment I-45-50.** LRDP Impact AIR-1 addresses emissions from construction equipment and worker commuter vehicles. The analysis takes into account the different emissions factors that apply to off-road and on-road vehicles. As shown in Draft EIR, Table 4.3-10, construction equipment emissions are much greater than worker vehicle emissions.

**Response to Comment I-45-51.** LRDP Impact AIR-1 addresses emissions from construction activity based on currently accepted and MBUACPD-recommended methods and models (e.g., URBEMIS2002).

**Response to Comment I-45-52.** Please see Response to Comments LA-2-46 and I-45-42.

**Response to Comment I-45-53.** Please see Response to Comment RA-1-6.

**Response to Comment I-45-54.** The discussions of traffic (and thereby air quality) and infrastructure (housing, water supply) in the EIR also address the contribution of trips by families of students, faculty and staff to the potential impacts.

**Response to Comment I-45-55.** See Response to Comment RA-1-6 regarding the Air Quality Management Plan. Also as discussed in Response to Comment LA-2-46 the 8-hour state standard for ozone was approved by CARB on April 2005 and went into effect in May 2006, but was not in effect when the Draft EIR was prepared. Please see this response for further information about the tables that refer to this standard. Please also see Response to Comment I-45-42 regarding the implications of the new state 8-hour ozone standard.



**Response to Comment I-45-56.** Please see Response to Comment I-45-42 regarding the implications of the new state 8-hour ozone standard. Additionally, LRDP Impact AIR-2 is identified as significant and unavoidable even with the implementation of LRDP Mitigations AIR-2A through -2C (see Draft EIR page 4.3-25). LRDP Mitigations AIR-2A and AIR-2B would reduce VOC and NO<sub>x</sub> emissions from buildings and vehicle emissions, and LRDP Mitigation AIR-2C would reduce VOC and NO<sub>x</sub> emissions from the proposed gas turbines. In addition, when the guidelines for sustainable transportation initiatives are developed by the University of California, the Campus will implement programs with goals to reduce greenhouse gas emissions, especially through conversion of campus fleets to low or zero emission vehicles and through the use of alternate fuels. The three mitigation measures listed above are expected to reduce VOC emissions to less-than-significant levels. While the three measures would also reduce NO<sub>x</sub> emissions, they would not likely reduce such emissions to less-than-significant levels. No other feasible mitigation measures are available to reduce this impact to a less-than-significant level. Please see Response to Comment SA-4-2 regarding the definition of “feasible” under CEQA.

As noted above, the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. As discussed in the Final EIR, Volume IV, Chapter 2 (*Project Refinements*, Air Quality Section) under the Final Draft 2005 LRDP, VOC emissions would be reduced below the threshold even without mitigation. NO<sub>x</sub> emissions would be reduced, but would still exceed the significance threshold, and would still result in a significant impact to air quality.

**Response to Comment I-45-57.** Please see Master Response TRAFFIC-2 regarding LRDP-related traffic that would be added to Empire Grade Road as a result of the campus support facility. Due to the small number of vehicle trips (12 round trips a week of campus trucks moving materials from the facility to other parts of the campus until the Cave Gulch connector road is built and 1 truck round trip a month for delivery of mulch), the emissions from these vehicles would not be substantial and would not contribute to significant air pollution.

**Response to Comment I-45-58.** The mitigation measures identified in the Draft EIR include those recommended in the MBUAPCD’s CEQA guidelines. There are no recommended mitigation measures in the guidance that refer to offsetting emissions to current levels.

**Response to Comment I-45-59.** Please see LRDP Mitigation TRA-2B, which includes a suite of potential transportation demand management measures to reduce peak hour and daily vehicle trips to the campus, including measures related to car- and vanpooling, ridesharing, bicycle facilities, and telecommuting, among others. The Campus has pursued some distance learning programs and will continue to do so in the future. If these are successful, they may ultimately reduce the number of trips to campus. However, the Campus will pursue distance learning as part of the academic development process only to the extent that it enhances academic opportunities. As it is unclear at this point whether these programs will be successful, they are not included in the EIR as part of LRDP Mitigation TRA-2B.

Additional student housing on campus would be expected to reduce vehicle trips. Faculty and staff housing on campus probably would not substantially reduce peak hour trips, because additional trips by family members to work, school, off-campus and shopping also would be generated. Increased on-campus housing is addressed in Master Response ALT-5.

**Response to Comments I-45-60 through I-45-63.** As noted in the comments, global climatic change is attributed to increases in the emissions of carbon dioxide and other greenhouse gases that result from human activities as well as natural processes. The federal and state ambient air quality standards do not address carbon dioxide or other greenhouse gases. In addition, the MBUAPCD CEQA guidelines do not identify carbon dioxide as a pollutant that needs to be considered in this environmental document. However, many of the mitigation measures identified in the Draft EIR will also help to reduce carbon dioxide emissions. Also, in January 2006 the University of California issued guidelines for sustainable transportation initiatives. Following these guidelines, the Campus will implement programs with goals to reduce greenhouse gas emissions, especially through conversion of campus fleets to low or zero emission vehicles and through the use of alternate fuels.

**Response to Comments I-45-64.** Please refer to LRDP Impact UTIL-9 (Draft EIR pages 4.15-30 through –37) and Section 1.3 in Master Response UTIL-1 for information about the Campus’s contribution to the need for a new supply source under both normal and drought conditions. The City of Santa Cruz has identified a desalination plant as the new source and selected a preferred site for the plant. Please also see Section 5.2.15.4 of Master Response UTIL-1 regarding the environmental impacts of the desalination plant.

**Response to Comment I-45-65.** Section 4.3.2.2, Analytical Method, is intended to provide the reader with an understanding of the quantitative air quality analysis contained in Section 4.3, *Air Quality*. The comment refers to the statement in this section that “construction activities are expected to consist mostly of minimal grading.” This statement relates specifically to the calculation of construction PM<sub>10</sub> emissions, which addresses the maximum amount of both “minimal grading” and “major earthmoving” activities that could occur on a single day. It does not refer to the total amount of grading for a given project or the total amount of grading for all development under the 2005 LRDP. The MBUAPCD provides different PM<sub>10</sub> emission rates for minimal grading and major earthmoving activities. Over the course of construction for a particular project, typical daily ground disturbing activities fall under the minimal grading category above. In contrast, major earthmoving activities, such as building foundation excavations, occur on a limited land area over a short period of time. The statement referred to in the comment is therefore accurate. However, as indicated on Draft EIR page 4.3-15, in order to ensure that the overall PM<sub>10</sub> emissions are not underestimated, PM<sub>10</sub> emissions for both minimal grading and major excavations were calculated. This information is provided in the analysis of LRDP Impact AIR-1, Draft EIR, Table 4.3-10.

**Response to Comment I-45-66.** Please see Response to Comment LA-2-48 regarding the construction scenario evaluated in the Draft EIR. As indicated in this response, that scenario is a reasonable worst-case scenario based on a review of campus construction projects in the past six years. Construction of development proposed in the north campus will not take place all at once. Just as is the case for the rest of the campus, construction will take place on a project-by-project basis. Moreover, PM<sub>10</sub> emissions from construction are estimated for a worst-case day, based on MBUAPCD guidelines, not for total emissions from all construction activities for a given project. Based on the historic pattern of construction on the campus, it is considered unlikely that new development on the north campus will be greater than the worst-case construction scenario evaluated in the Draft EIR. However, as noted in the analysis (see Draft EIR page 4.3-25), a future project involving more than 6.75 acres cannot be ruled out. Please see Response to Comment LA-2-48 for further information. At the time that a specific development project is proposed for the north campus, a project-level environmental review in compliance with CEQA will be

conducted that will provide a detailed analysis of likely emissions during the construction of the project. If significantly higher emissions are indicated, the campus will implement not only the mitigation measures listed in the LRDP EIR but also project-specific mitigation measures.

**Response to Comment I-45-67.** Construction activities will occur intermittently and in stages. The Draft EIR analysis assumed that 270,000 square feet of building space could be under construction at one time (Draft EIR at page 4.3-23). Please see Response to Comment LA-2-48 regarding the reasonable worst-case construction scenario identified in the Draft EIR. Construction emissions take into account worker trips and supply trucks (See Table 4.3-9 under “Other Equipment”). In fact, the emissions for supply trucks are conservatively calculated (that is, the emissions used in the analysis are higher than would be likely to occur), because they were based on the assumption that the trucks would be off-road vehicles, whereas, most of these trucks will likely be on-road vehicles that would have to meet stricter emission standards.

**Response to Comment I-45-68.** As discussed on pages 4.3-28 through -30 of the Draft EIR, the three intersections with the highest delay and three intersections with the highest traffic volume were evaluated for CO concentrations using CALINE4. As indicated in Response to Comment OPA-1-5, peak hour traffic volumes and conditions at all intersections were reevaluated and/or confirmed during the preparation of the Final EIR. As a result of this process, discrepancies between adjacent intersections with respect to the peak hour traffic volumes were identified and corrected and the intersections were reevaluated for traffic impacts. The only intersection included in the carbon dioxide (CO) analysis (LRDP Impact AIR-3) where these traffic discrepancies were identified was the Highway 1/River Street intersection. While the level of service at this intersection did not change as a result of the corrections, the delay increased. Therefore, the CO analysis for this intersection was conducted again using CALINE4. The results of the original and the new analysis are presented in the table below.

**Results of Revised CO Analysis**

	Background	2010-Project		2020-No Project		2020-Project	
		Without Background	With Background	Without Background	With Background	Without Background	With Background
<b>Predicted 1-Hour Concentration (ppm)</b>							
Draft EIR	2.1	9.9	12	4.5	6.6	4.7	6.8
Final EIR	2.1	9.9	12	4.8	6.9	5.1	7.2
State Standard			20		20		20
Federal Standard			35		35		35
<b>Predicted 8-Hour Concentration (ppm)</b>							
Draft EIR	1	5.9	6.9	2.7	3.7	2.8	3.8
Final EIR	1	5.9	6.9	2.9	3.9	3.1	4.1

State Standard			9.0		9.0		9.0
Federal Standard			9		9		9

The new results indicate that the CO concentrations at this intersection would be slightly higher than previously reported in the Draft EIR. However, this intersection would still not exceed the State and Federal CO standards under the 2020 With Project Plus Background Scenario. The conclusion of LRDP Impact AIR-3 of a less-than-significant impact remains unchanged.

**Response to Comment I-45-69.** Construction activities will occur intermittently and not continuously at any one location over the 15-year planning period. Because some amount of construction on the campus would be underway at all times, there would be construction emissions on the campus nearly continuously. Any given location will only be subject to short-term emissions, however.

**Response to Comment I-45-70.** PM<sub>2.5</sub> is a subset of PM<sub>10</sub>, and so the PM<sub>10</sub> impacts encompass potential impacts from PM<sub>2.5</sub>. As stated in the Draft EIR, final designations for the new federal PM<sub>2.5</sub> standards were completed in December 2004. As shown in Table 4.3-4, monitored PM<sub>2.5</sub> concentrations are below the newer PM<sub>2.5</sub> standards. The MBUAPCD does not have specific emission thresholds for PM<sub>2.5</sub>.

**Response to Comment I-45-71.** See Response to Comment LA-2-46.

**Response to Comment I-45-72.** In accordance with Office of Environmental Health Hazard Assessment (OEHHA) guidelines, 70-year adult exposures were calculated for each receptor in the health risk assessment prepared in support of the LRDP EIR (Draft EIR page 4.3-32). Adjustments were made for each receptor type based on an exposure assumption for a child, resident adult, and worker. The estimated risks are presented in the Draft EIR (Table 4.3-21, page 4.3-34). When adjustments are made for staff and faculty at the on-campus receptors, the on-campus sensitive receptor cancer risk is found to be a maximum of 2.48 in one million, well below the cancer risk significance threshold of 10 in one million.

The maximum cancer risk for a worker at the Waldorf School is estimated to be 1.48 in a million. The risk for children would be lower than this number because the children are present at the site for a shorter time. Because this risk is well below 10 in one million, additional analysis of risk at the school or other homes in the Cave Gulch neighborhood is not necessary. Additionally, as indicated in Response to Comment LA-2-53 and Draft EIR page 4.3-33, exposure of the off-campus maximally exposed individual (MEI) would also not exceed the cancer risk significance threshold.

**Response to Comment I-45-73.** Please see Response to Comment I-45-67.

**Response to Comment I-45-74.** LRDP Mitigation AIR-2A is one of three mitigation measures identified to address all sources of emissions that would result in a significant air quality impact from daily operations. As shown in Table 4.3-16 of the Draft EIR, the pollutants of concern are NO<sub>x</sub> and VOC, as these emissions would exceed MBUAPCD emissions thresholds. The main sources of emissions of these pollutants are nonresidential space and water heating, and motor vehicles (Draft EIR page 4.3-28). LRDP Mitigation AIR-2A includes measures to address space and water heating sources. Please see Response to Comment LA-3-9, which discusses changes that the University has made to the mitigation measure to eliminate language that was identified as vague, including LRDP Mitigation AIR-2A. Please see Volume IV, Chapter 3, Revised Table 2-1, of the Final EIR for the revised mitigation measure.

LRDP Mitigation AIR-2B addresses mobile sources of emissions through the implementation of an expanded TDM program. In addition, although the new turbines that would replace the cogeneration system on the campus would reduce emissions compared to what they are at the present time, LRDP Mitigation AIR-2C requires the Campus to install emissions controls on the new turbines to further minimize VOC and NO<sub>x</sub> emissions. Please see Response to Comment I-45-56, which indicates that no other feasible mitigation measures are available to reduce this impact to a less-than-significant level. Please also see Response to Comment SA-4-2 regarding the University's monitoring of mitigation measures.

The Campus proposes to recommend to The Regents the adoption of the Reduced Enrollment Growth Alternative previously analyzed in the Draft EIR. The Final Draft 2005 LRDP (September 2006) revises the Draft 2005 LRDP (January 2005) to reflect this change. As discussed in the Final EIR, Volume IV, Chapter 2 (Air Quality Section) under the Final Draft 2005 LRDP, VOC emissions would be reduced below the threshold even without mitigation. NO<sub>x</sub> emissions would also be reduced, but the remaining emissions would still result in a significant impact to air quality.

**Response to Comment I-45-75.** LRDP Mitigation AIR-2A may include some of the measures identified in this comment. However, at this time, sufficient information for individual development projects under the 2005 LRDP is not available to identify specific and detailed design and construction features that would be feasible. Partly because of this and partly due to uncertainty with respect to any further emission reductions that would be achieved from the implementation of TDM measures, the impact is considered significant and unavoidable. Please also see Response to Comment I-45-56 for additional information about LRDP Impact AIR-2.

**Response to Comment I-45-76.** The analysis in the EIR of carbon monoxide (CO) concentrations at study area intersections is consistent with MBUAPCD CEQA guidelines. According to these guidelines, CO concentrations on roadways are considered significant if the predicted concentrations exceed the state or federal CO ambient air quality standards. As stated in the Draft EIR, these standards were "established at levels necessary, with an adequate margin of safety, to protect the public health, including the health of sensitive populations such as asthmatics, children and the elderly." As can be seen in Tables 4.3-17 and 4.3-18, the predicted CO concentrations are below the state and federal CO standards.

**Response to Comment I-45-77.** Please see Response to Comment LA-2-51, which explains why LRDP Impact AIR-4 was determined to be significant and unavoidable. The Draft EIR (Chapter 5) evaluates a range of alternatives that involve smaller increases in campus population and a No Project alternative. Please refer to Master Responses PD-1 (Magnitude of Enrollment Growth) and ALT-1 (Appropriate Enrollment Level for Reduced Enrollment Growth Alternative). Note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the environmental impacts of Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*. Adoption of the Final Draft 2005 LRDP (September 2006) would reduce LRDP Impact AIR-4 but not to a less-than-significant level.

Eliminating out-of-state undergraduate admissions would not have a large effect on the demand for expansion of the UC system or the UC Santa Cruz campus. In 2005, Out-of-State students accounted for six percent of undergraduates system-wide and four percent of UC Santa Cruz undergraduates. For

graduate students the percentage of out-of-state students is higher (26 percent system-wide and 18 percent for UC Santa Cruz). Graduate programs are more specialized so they must draw from a wider area, and the quality of the programs benefits from attracting top students from throughout the US and internationally. Therefore, eliminating out-of-state graduate students would have a detrimental effect on graduate education.

**Response to Comment I-45-78.** LRDP Impact AIR-7 does not state that the proposed project will result in a significant human health risk, defined as a cancer risk greater than 10 in a million. Human health risk from routine emissions from the campus is estimated and reported under LRDP Impact AIR-5 and the maximum cancer risk is estimated to be 5.41 in a million. The risk at Santa Cruz Waldorf School is estimated to be 1.48 in a million for a worker and a lower value than this for a child, as explained in the Response to Comment I-45-72. Also see Response to Comment LA-2-52.

The health risk analysis included the impact of diesel-powered mobile sources, such as delivery trucks traveling to and from the new Campus Support area off of Empire Grade. The new Campus Support area would generate approximately 12 truck trips per week associated with the distribution of materials from this facility to other parts of the campus. The vast majority of these trips would be made via the new north loop road, not Empire Grade (see Master Response TRAFFIC-2). Additionally, the Campus Support area and the new access road into the North Campus would be located south of the Cave Gulch neighborhood and Santa Cruz Waldorf School. Campus construction traffic and any new campus-generated traffic, therefore, generally would not travel through the Cave Gulch neighborhood or past the school, as the vast majority of campus-related traffic comes from the south.

**Response to Comment I-45-79.** Potential impacts to Cave Gulch wells are analyzed in the “Upper/North Campus” subsection of LRDP Impact HYD-5 on pages 4.8-37 to 4.8-38 of the Draft EIR. As explained in that analysis, the development on the north campus would not be upgradient of the Cave Gulch wells. Therefore, even if this development were to affect the quality of groundwater beneath the campus, that groundwater would not flow toward the Cave Gulch wells. Furthermore, implementation of LRDP Mitigation HYD-3D would minimize the effect on groundwater recharge by requiring construction of infiltration facilities with each development project. The soil will also filter most pollutants found in urban runoff. The Campus’s Storm Water Management Program includes a variety of additional design requirements to avoid polluting runoff and to treat polluted runoff before it reaches groundwater or surface water bodies.

**Response to Comment I-45-80.** Impacts to water quality in Cave Gulch Creek, Moore Creek, Wilder Creek, and streams in the Pogonip watershed east of the campus, including effects of the increased impervious surface, are analyzed on pages 4.8-31 through 4.8-34 of the Draft EIR. Details of the hydrologic analysis are included in Draft EIR Appendix D2. Impacts to Cave Gulch Creek are discussed in more detail on pages 4.8-41 to 4.8-43. Also refer to Responses to Comments LA-6-51 and LA-9-25.

**Response to Comment I-45-81.** LRDP Impact UTIL-2 addresses the impact of the proposed LRDP on off-campus wastewater conveyance and treatment facilities (Draft EIR page 4.15-22). The Draft EIR notes that improvements to the wastewater treatment plant would not be necessary because there is adequate existing capacity to handle additional flows from the campus and other projected growth in the service area. Some improvements to the conveyance system would be necessary. The University will pay a fair share fee to the public utility for utility improvements needed to serve the campus, in compliance

with Government Code 54999. Please refer to Master Response MIT-1 for information on the University's Government Code 54999 obligations.

**Response to Comment I-45-82.** The Campus is not out of compliance with federal and state regulations for wastewater, as the Campus does not have, and is not required to have, a federal or state wastewater discharge permit because its wastewater is discharged to the City's sewer system. The University has developed the Infrastructure Improvements Project to address erosion and sedimentation issues from runoff from existing development (described in Volume III of the Draft EIR). The Draft EIR includes a number of mitigation measures to avoid and reduce the impacts of increased runoff that would result from new development on the campus.

**Response to Comment I-45-83.** The mitigation measures proposed in the EIR have been determined by the University to be feasible, as required by CEQA Guidelines Section 15126.4. Please refer to Response to Comment SA-4-2 for the definition of "feasible" under CEQA and additional related information about the development of feasible mitigation by the University. If, in the future, the measures are determined to be infeasible as applied to a specific development project due to future funding limitations, the University will consider substitute measures and make the appropriate findings at the time of project approval.

**Response to Comment I-45-84.** The Draft EIR acknowledges that increased impervious surfaces would result in increased runoff, and evaluates the impact from the increased runoff that would result from campus growth under the 2005 LRDP (LRDP Impact HYD-3). Revised LRDP Mitigation HYD-3D requires implementation of design measures to minimize the increase in the volume of runoff.

**Response to Comment I-45-85.** Please refer to LRDP Impact HYD-3 and Master Response HYDRO-1. The Draft EIR includes mitigation measures to minimize the proposed increase in impervious surfaces, increase infiltration of runoff, and control erosion in campus drainages.

**Response to Comment I-45-86.** The potential for construction under the 2005 LRDP to cause erosion is analyzed on pages 4.8-28 to -29 of the Draft EIR, and the impacts of increased impervious surfaces are analyzed on pages 4.8-31 to -34. LRDP Mitigations HYD-2A and HYD-2B would be implemented to avoid erosion during construction. LRDP Mitigations HYD-3B, HYD-3C, and HYD-3D will minimize the potential of increased impervious surfaces to result in erosion off-campus by limiting peak flows and runoff volumes.

**Response to Comment I-45-87.** Most of the north campus development areas where construction activities would occur would be distant from the Cave Gulch residential community and the Santa Cruz Waldorf School. The Campus Support area on Empire Grade Road is adjacent to the Santa Cruz Waldorf School. The development area where the westerly employee housing on the north loop road would be built (with an estimated 125 residential units) extends to within about 300 feet of the campus boundary adjacent to the Cave Gulch neighborhood. In addition, the westerly portion of the north loop road and the connector to Empire Grade Road also would be relatively close to the Cave Gulch community. Construction of these roadways, the Campus Support facilities, and the employee housing development would occur at different points in time as the campus grows. Furthermore, the closest construction activity would be more than 100 feet from the Santa Cruz Waldorf School, and most of the construction activity would be at least several hundred feet distant from the nearest residential receptor. Much of the activity also would be separated from these receptors by Cave Gulch drainage, which would buffer much of the noise. As discussed in the Draft EIR (page 4.10-16), at distances of 100 feet or more from the

construction activity, construction noise would be below the significance threshold of 80 dBA  $L_{eq}$  daytime and evening, and 70 dBA  $L_{eq}$  nighttime for temporary increases in ambient noise due to construction activity. Therefore, construction activities on the north campus are not expected to significantly affect receptors in the Cave Gulch area. Furthermore, additional environmental review will be conducted at the time that any of these north campus improvements are proposed. The project-level analysis will determine whether project construction activity could cause noise impacts at the nearest receptor(s) and if so, LRDP Mitigation NOIS-1 would be implemented or additional project-specific mitigations would be implemented.

The Draft EIR noise analysis (page 4.10-18) found that the ambient noise levels associated with future project traffic near Santa Cruz Waldorf School would increase by about 1 decibel to about 52 dBA CNEL under the project scenario. The modeled “With Project” noise levels would be well below the threshold of significance, and the increase in noise would not be substantial, as described in the Draft EIR.

The Draft EIR did not attempt to model the noise increase in the vicinity of the campus support area from daily operations at that facility, because its design has not been developed. However, as explained under LRDP Impact LU-2 on page 4.9-12 of the Draft EIR, development of campus support facilities at this site would not result in a land use conflict with the nearby school or rural residences in Cave Gulch for a number of reasons. In compliance with LRDP Mitigation AES-5E, vegetated buffers would be maintained along Empire Grade Road, and buildings would be arranged on the site to further screen views of the campus support development from Empire Grade Road, and the adjacent Santa Cruz Waldorf School if necessary. This arrangement of the buildings and the vegetative buffers would also help reduce noise that could be perceived at the site’s boundary. The entrance to the campus support area on Empire Grade Road would be south of the school and the Cave Gulch neighborhood, and most of the campus-related traffic accessing the facility would not travel past the homes and the school. When specific projects are proposed, additional environmental review will be completed which will evaluate the potential for noise impacts from facility operations.

**Response to Comment I-45-88.** The Draft EIR acknowledges that recreational trail use in the north campus will likely increase under the 2005 LRDP. However, hiking and bicycling are passive recreational activities that do not generate high noise levels. For instance, the sound of footfalls is very low and would not be audible more than 10 feet away, and a cyclist would be audible within about 25 feet depending on terrain, etc. Therefore, the increase in noise from increased hikers and bikers is unlikely to be substantial and is unlikely to significantly affect any receptors in that area. Please refer to Response to Comment I-45-87 with respect to potential noise effects to sensitive receptors adjacent to north campus development areas.

**Response to Comment I-45-89.** Please see Response to Comment SA-4-2 regarding identifying funding sources for mitigation measures.

**Response to Comment I-45-90.** Please see Response to Comment LA-6-64 regarding the housing goals in the 1988 LRDP. The purpose of the Campus’s Ranch View Terrace housing project is to house more campus employees on the campus, consistent with 1988 LRDP housing goals. The development of the Ranch View Terrace project is unrelated to the University’s student housing targets under the 1988 LRDP. The comment about affordability of housing is noted. The California housing market is the most expensive in the country. A number of factors have contributed to the rise in housing prices in all parts of California, especially the coastal areas, both historically and in recent years. These include inadequate



housing supply, growing state population and, in recent years, low interest rates and alternate forms of mortgage financing. In addition, with the decline in the stock market, investors have diverted investment funds into the housing market. In the case of Santa Cruz, an additional factor has been its proximity to the Silicon Valley and its attractiveness to commuters from the Silicon Valley. With respect to rental properties, although it is true that UC Santa Cruz students are a contributing factor in the price of rentals, note that rents decreased during the recent economic downturn even though the number of students increased.

**Response to Comment I-45-91.** Please see Response to Comment I-45-90, above, regarding the cost of housing in Santa Cruz. Under the 2005 LRDP, the Campus plans to develop additional housing for students and employees. The Campus will continue to explore ways in which additional housing can be developed on the campus for students and for faculty and staff. The University requires that housing be self-supporting, and thus must be supported by housing demand. Additional housing will be built in response to demand for on-campus housing. Also refer to Master Response POP-1 (Impact on Regional Housing Supply).

**Response to Comment I-45-92.** Please see Response to Comment SA-4-2 regarding identifying funding sources for mitigation measures.

**Response to Comment I-45-93.** Please see Response to Comment I-45-7 regarding sustainability.

**Response to Comment I-45-94.** Please see Response to Comment I-45-7 for information about including a sustainability analysis in the Draft EIR.

**Response to Comment I-45-95.** Regarding the funding of mitigations, please see Response to Comment SA-4-2. Also see Response to Comment I-45-12 as to why some impacts are determined to be significant and unavoidable even with mitigation, and Master Response ALT-3 regarding the full range of alternatives to the proposed project evaluated in the EIR.

From: "Seth Levy" <sethlevy@pacbell.net>  
To: <lrdp-eir@ucsc.edu>  
Cc: "Tasha Kowalski" <tashakowalski@yahoo.com>,  
"Ryan Augustin" <ryan@cruzio.com>, <fat chance@cruzio.com>  
Subject: EIR comment due by Jan 11  
Date: Tue, 10 Jan 2006 08:31:40 -1000

Dear UCSC:

I felt the draft EIR did a very poor job in addressing the environmental impacts to the city and residents. Specifically:

1. Vague or no mitigation for traffic, water, impact on neighboring parklands.
2. Impact on city housing and parking.

In the final analysis the reason for this is probably that there is no good mitigation for these issues.

I feel strongly that since the UCSC has done such an inadequate job of mitigating their last round of growth (failing to house students as promised among many other failed promises) that it is foolish to proceed with this growth plan.

The only reasonable action is to first address the current traffic, housing, and water issues before even considering growing the university further. If the university proceeds with this ill conceived plan for growth I will join with my fellow city residents in protesting and litigating this issue as necessary to stop or delay this plan.

Sincerely,

Seth A. Levy  
316 Alta Vista Drive  
Santa Cruz, CA

## Response to Comment Letter I-46

**Response to Comment I-46-1.** Please see Responses to Comments SA-4-2, LA-3-9, and LA-6-7 for information regarding the implementation of previously approved and currently proposed mitigation measures. Please also see Table 2-1 in Volume IV, Chapter 3 of the Final EIR for the full text of revised 2005 LRDP EIR mitigation measures. In assessing the impact of a proposed project on the environment, CEQA requires that the analysis be limited to changes in the existing physical conditions that would occur as a result of the project (see Section 15126.2(a) of the CEQA Guidelines). Therefore, mitigation measures to address existing environmental issues are not required.

Date: Wed, 11 Jan 2006 16:50:31 -0800  
To: lrdp-eir@ucsc.edu  
From: Janet Linthicum <janetl@ucsc.edu>  
Subject: EIR comments

I would like to provide a few comments on the Draft EIR. I have been a raptor biologist for over 20 years, employed at the UCSC Predatory Bird Research Group. My comments pertain to further development of the East Meadow and possible measures to mitigate its effect on two species in particular; burrowing owls and golden eagles. I have studied both species there for several years out of personal interest. The East Meadow is attractive to and supports these two species primarily because of the abundance of ground squirrels there, which provide winter homes to the owls and food for the eagles. It may have understandably been unknown to the preparers of the document that for some reason, other grasslands in Santa Cruz County and even campus are largely devoid of squirrels, including those meadows abutting the campus where it is suggested the owls could move. In fact, the East Meadow is the only place in Santa Cruz County known to regularly support wintering burrowing owls (David Suddjian, Santa Cruz County Bird Records Keeper, pers. comm.), a species no longer known to breed in the County. The same is true of the eagles, it is the only place they are regularly seen foraging. I watch them do this most weekends. If these individuals, now in adult plumage, nest in the near future, it is likely they will depend upon this abundance of food to support their young.

1

Burrowing owls have been present in the East Meadow every winter of the last 11 years I have participated in the Santa Cruz County Christmas Bird Count by counting the owls there. It is suggested in the report that if evicted they may move to other nearby areas. However these areas in large part have no squirrels, and hence are not suitable burrowing owl habitat. I offer the suggestion for mitigation that if owls are passively evicted during construction activities, or even if numbers of squirrel burrows are destroyed by construction, that rather than install artificial burrows "nearby", (biologically unnecessary given the number of existing squirrel burrows) that artificial burrows be installed elsewhere in the campus meadows that are now largely without squirrels and their burrows. This can be done inexpensively and simply. Further, encouragement of squirrels in other parts of the meadows (away from the bike path) by mowing or other means of providing the short-grass habitat preferred by squirrels and owls alike would help mitigate the loss of habitat. The squirrels, which were extremely abundant in the Great Meadow in the late 1970s, are likely mostly gone due to the cessation of grazing there. The East Meadow of course is still grazed, benefiting the squirrels, owls, and eagles. If the current beneficial grazing regime could feasibly be expanded to other areas of the meadows, all species involved would likely benefit.

2

Burrowing owls are declining continent-wide, leading to the recent production of the Western Burrowing Owl North American Conservation Action Plan. I trust that UCSC would prefer to accommodate this species as best it can.

Thank you for your time.

Sincerely,

Janet Linthicum  
Santa Cruz Predatory Bird Research Group

Response to Comment Letter I-47

**Response to Comment I-47-1.** Please refer to discussion in Response to Comments I-7-3 and I-7-4.

**Response to Comment I-47-2.** Please refer to discussion on burrowing owl in Response to Comments I-5-11 and I-7-4.

REC'D JAN 11 2006

January 11, 2006

2005 LRDP EIR Comment  
UCSC Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, CA 95064

RE: Comments to the 2005 LRDP EIR

To Whom It May Concern:

I have four general areas of questions and comments. These are individually outlined below with several questions associated within each area and include Hydrology and Water Quality; Population and Housing; Traffic, Circulation, and Parking; and, Utilities. I close with two general statements.

**1) Hydrology and Water Quality**

LRDP Impact HYD-5 states the following.

“Campus development under the 2005 LRDP would not deplete groundwater supplies through pumping of groundwater for beneficial use, interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, or affect groundwater quality.”

However, LRDP Mitigation Measure HYD-5C states the following.

“If the existing or a new groundwater well is used the Campus shall perform monitoring of water levels within that well and any adjacent wells, and monitoring of those springs in the Campus vicinity shown to be connected to the well with a dye tracing study or other applicable testing method for the duration of groundwater pumping to ascertain whether there is any long-term decline in water levels or spring discharge.”

“If monitoring of water levels and springs indicates that Campus use of groundwater is contributing to a net deficit in aquifer volume, as indicated by a substantial decrease in average water levels in any monitored wells or a substantial reduction of flows in monitored springs, the Campus will terminate or reduce its use of groundwater from the aquifer.”

Questions/Comments

- a) What is the basis for the analysis that indicated the statement made in HYD-5, that there would be no impact? What studies have been done to identify the current condition of the aquifer as well as the condition following increased use by the Campus?
- b) Substantiate the contradiction between HYD-5 and HYD-5C. I.e., first it is stated that there will be no impact. This is followed by statements regarding what should be done if there is an impact.

- c) "Substantial," as it relates to the decrease in average water levels and spring flows, needs to be defined. It is very likely that what may not be substantial to the Campus would have significant impacts to neighboring well owners.
- d) Define "monitored wells." Does this include individual/private wells?

1

**2) Population and Housing**

LRDP Impact POP-3 states the following.

"Growth of the campus under the 2005 LRDP, in conjunction with other regional growth, would create a demand for housing that combined with demand created by other growth in the county, would exceed the supply."

LRDP Mitigation Measure POP-3 states that the "Campus shall work with the City of Santa Cruz to identify means of providing additional housing in the city, including affordable housing, particularly areas with good access to public transit."

2

Questions/Comments

The UCSC campus was conceived to be a large campus, similar if not larger than UCLA and UCB. However, over the last 40-years, the Westside of Santa Cruz, the City of Santa Cruz in general, and the greater Santa Cruz area and neighboring communities have developed to the point where additional housing is becoming impossible to accommodate. "Working with the City of Santa Cruz" will likely not be satisfactory to accommodate the ultimate population increase of more than 10,000 bodies (which includes the increase in student, faculty and staff proposed by the 2005 LRDP plus family members). Propose additional ways of effectively and realistically accommodating/housing this increase.

**3) Traffic, Circulation and Parking**

Questions/Comments

- a) Have traffic studies been done to indicate the level of service required along Empire Grade to the new entrance at Cave Gulch? I.e., is the existing road substantial enough, in terms of width and cross-section, to accommodate the increase in traffic numbers and loads? Was current Bonny Doon traffic taken into consideration during said study? I.e., a new entrance will cause substantial delays to current Bonny Doon residents.
- b) What mitigations will be put into place for the increase in traffic on Empire Grade to the new entrance at Cave Gulch to protect wildlife and pedestrians that use this road?
- c) Recognizing that it is a State requirement to put an additional ingress/egress to the Campus with the additional growth proposed by the 2005 LRDP, has a fire road been considered? I.e., a road not intended for everyday use, but for emergency use only. On Campus traffic associated with new construction could be accommodated through internal (to the campus) infrastructure improvements.

3

4

5



Page 3  
January 11, 2006

4) Water Supply

LRDP Mitigation Measure UTIL-9I states the following.

“Utilize water from the existing supply well in Jordan Gulch for non-potable uses. The Campus shall implement a program of monitoring flow at downgradient springs during the time when the well is being used.”

Questions/Comments

- a) To what extent has the EIR taken into consideration the numerous residential wells upstream of the Campus?
- b) Consider including, as mitigation, monitoring of wells upstream of the Campus to ensure private well users are not impacted by increased Campus use.

6

Final comments.

1. Consider maintaining one of the founding premises upon which the Campus was founded, its commitment to “the pursuit of knowledge in the company of friends.” UCSC is fast losing the friendship of its surrounding neighbors by not taking them into consideration as it aspires to grow.
2. On a similar note, as stated in the Executive Summary of the LRDP, UCSC, through implementation of the 2005 LRDP, aspires to “expand academic, research, and professional programs.” However, development authorized through the LRDP conflicts significantly with another key premise upon which the UCSC Campus was established. As once stated by Clark Kerr, “Let it seem smaller even as it grows bigger.” As recognized in the 2005 LRDP EIR, there will be “significant and unavoidable” impacts on the City of Santa Cruz and neighboring communities. Consider following Kerr’s recommendation by reducing these impacts to less than significant.

7

8

Heidi R. Luckenbach  
Resident, Santa Cruz County

## Response to Comment Letter I-48

**Response to Comment I-48-1.** As explained in the discussion of LRDP Impact HYD-5 on pages 4.8-40 to -41 of the Draft EIR, existing data indicate that extraction of groundwater from the existing well in the amount proposed under the 2005 LRDP would have little to no effect on the karst aquifer. This conclusion is based on the results of a seven-day pump test conducted in 1989, which was a year of severe drought, and on estimates of groundwater storage and recharge (see pages 4.8-16 to -17 and 4.8-40 to -41 of the Draft EIR for details and references). The University has included LRDP Mitigation HYD-5C in the Draft EIR in response to concerns expressed in the past by members of the public that extended pumping from this well would affect flow in down-gradient springs and streams. The criteria for terminating or reducing groundwater withdrawal would be determined through a more detailed analysis of the potential impacts as part of the project-level environmental review if and when the Campus proposes to initiate use of groundwater. “Monitored wells” refers to the three wells on campus in Jordan Gulch east of the CASFS.

**Response to Comment I-48-2.** Please refer to Response to Comment LA-3-25. Regarding revised mitigation for LRDP Impact POP-3, please see Master Response POP-1.

**Response to Comment I-48-3.** Please refer to Master Response TRAFFIC-2 (Impacts on Empire Grade Road).

**Response to Comment I-48-4.** Please refer to Master Response TRAFFIC-2.

**Response to Comment I-48-5.** The University has the option of closing the north entrance road connection to public traffic, in which case it would be used only for emergency, utility, and service vehicles or in the event of an evacuation of the campus. This decision has not been made at this time. As discussed in Master Response TRAFFIC-2, the proposed Empire Grade Road entrance is not projected to increase traffic to an extent that it would cause any significant impacts, and it provides other benefits including reducing traffic on pedestrian-oriented campus core roads, limiting heavy vehicle traffic through the campus core, and providing an additional route for emergency vehicles and emergency evacuation.

**Response to Comment I-48-6.** The Draft EIR evaluates the effects of campus development on groundwater supplies both due to the extraction of groundwater under drought conditions and as a result of a reduction in recharge due to increased impervious surfaces (see pages 4.8-36 through 4.8-41). Development on the north campus would not be upgradient of the Cave Gulch wells, and therefore, the wells would not be affected by any potential changes in water quality or quantity due to campus development under the 2005 LRDP.

**Response to Comment I-48-7.** Comment noted. Please also see Responses to Comments SA-4-2 and LA-6-7.

**Response to Comment I-48-8.** Comment noted. Please also see Response to Comment I-51-3 for information regarding the significant unavoidable off-campus impacts of the project.

Date: Wed, 19 Oct 2005 09:28:10 -0700  
Subject: LDRP  
From: Marissa Maciel <mrmaciel@ucsc.edu>  
To: <lrdp-eir@ucsc.edu>

The University needs to realize that equitable pay for all employees is necessary before any growth can be considered. It is not acceptable for the upper echelons of the campus administration to be paid market rates while the support staff and faculty members are left scrounging for any increase in pay made available to them. UCSC will lose any progress made by its members due to turnover rates, and any campus growth will be stunted because of this.

1

-----●  
Marissa Maciel  
Academic Support Coordinator  
Environmental Studies Department UCSC

Response to Comment Letter I-49

**Response to Comment I-49-1.** Comment noted. This issue is not within the purview of a CEQA analysis.

UC Santa Cruz 2005 Long Range Development Plan  
Draft Environmental Impact Report

NAME: NIALL MACKEN DATE: 11.16

ADDRESS: 207 Younglove Ave SC

PHONE: 420 1093 EMAIL: NMACKEN@IDEINC.COM

AFFILIATION: RESIDENT IN WESTSIDE

COMMENT:

- CONSIDERING THE POPULATION / SERVICES / WATER /  
TRAFFIC / ENVIRO ETC. IMPACT ON MY  
COMMUNITY, I COMPLETELY OBJECT  
TO THE CURRENT GROWTH OF USC LET  
ALONE THE PLANNED GROWTH.

1

Place your comment in the box provided at the back of the room, or  
mail written comments regarding the Draft EIR addressed to:

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, California, 95064

## Response to Comment Letter I-50

**Response to Comment I-50-1.** The Draft EIR includes mitigation measures to reduce impacts of campus growth insofar as this can feasibly be accomplished. In addition, note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which reflects the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

Date: Wed, 11 Jan 2006 14:22:18 -0800  
From: Bill Malone <billmalone@pacbell.net>  
To: lrdp-eir@ucsc.edu  
Subject: UCSC LRDP EIR Comments

I applaud the University's goal of wanting to educate more people. Most residents of Santa Cruz like the University—we just don't think the University is a good neighbor.

The EIR process makes it too easy for the University to not mitigate some problems. However, in the real world, these problems do not go away but have to be dealt with and somehow dealt with, or mitigated. Since the University won't take responsibility for dealing with the growth-problems, it falls to the City to solve them—any way they can.

My concern is where the additional 6000 students and 2000 staff will live.

From the City's prospective, most of the problems caused by the University—housing, traffic, parking—would be solved if all current and additional students were required to live on campus.

1

I understand that currently about 60% of students (and almost all staff) live off campus. Most of them live in the City of Santa Cruz. Including proposed growth, that will be about 16,000 of the city's 61,000 population. This is already an undue burden on the City, it's residents and support services. The University should reimburse the City for these services.

Traffic and parking around the University are already congested and the University does nothing to mitigate existing problems. And now the University is proposing to expand which will make a bad situation worse—much worse. Frustratingly, in the EIR the University makes no realistic attempt to mitigate the off-campus problems related to traffic, parking and additional housing requirements.

2

Most who have reviewed the UCSC LRDP EIR have reached the conclusion that the University LRDP EIR makes a half-hearted attempt at mitigating the effects of their proposed growth. Most of the major problems are dismissed as "significant but unavoidable". Close to 60% of the growth will be housed off-campus and the University makes no realistic attempt at mitigating the problems with this off-campus population.

3

The EIR must be redone to make real effort at describing in detail how the University will mitigate the problems of housing, traffic and parking—both on-campus and off-campus.

The problems must be mitigated. Some party—the University or the City—will

have to "mitigate" these problems. The problems don't disappear because the EIR won't attempt to solve them.

The Regents must not shirk their responsibility for solving the problems the University creates.

Bill Malone  
519 Walnut Ave  
Santa Cruz CA 95060



**Response to Comment Letter I-51**

**Response to Comment I-51-1.** As explained in Master Response ALT-5, although the University will continue to explore ways to house more of the new population on the main campus, the University has found that it will be difficult to achieve on-campus occupancy levels for students higher than the LRDP targets of 50 percent undergraduate and 25 percent graduate students housed on campus. Students choose their place of residence on the basis of many factors, as discussed in Master Response ALT-5. The University is not aware of any instances in which a public university has required all students to live on campus. The Campus does not believe that such a requirement could be established, nor would it be enforceable. However, although neither UC Santa Cruz nor any of the other UC campuses have requirements for freshmen to live on campus, 97 percent of incoming UC Santa Cruz freshmen choose to do so.

With respect to the impacts of the off-campus population on the City of Santa Cruz, the Draft EIR estimates and reports the number of persons under the 2005 LRDP who would live off-campus within the City of Santa Cruz. It also evaluates the effect of this population, in conjunction with non-campus related population growth, on resources within the city, including public services, recreational resources, and utilities. Note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which reflects the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

**Response to Comment I-51-2.** The Draft EIR clearly identifies standards of significance used to determine the significance of traffic and parking impacts, on and off campus, due to the 2005 LRDP. These standards have been used historically by the City of Santa Cruz in environmental impact reports. Off-campus traffic impacts are identified and LRDP Mitigations TRA-2A (as revised in the Final EIR; see Volume IV, Chapter 3) and -2B have been proposed. Please also refer to Response to Comment I-21-14 regarding mitigation of off-campus traffic impacts. The Draft EIR concludes that the 2005 LRDP provides for an adequate supply of on-campus parking and that the Campus has a mechanism to monitor and build new parking as growth occurs on the campus. Providing adequate off-campus parking is the only feasible mitigation for off-campus parking impacts.

Please refer to Master Response POP-1 with respect to housing impacts, and mitigation measures added in the Final EIR to address these impacts.

**Response to Comment I-51-3.** The Draft EIR and Recirculated Draft EIR analyze the impacts of the LRDP-related off-campus population on traffic, population and housing, recreation, public services, and utilities. All feasible mitigation measures have been included in the EIR in an attempt to reduce off-campus impacts to less-than-significant levels (Please see Response to Comment SA-4-2 regarding the definition of “feasible” under CEQA). As the University does not have jurisdiction over off-campus lands, some mitigation measures for off-campus impacts would be the responsibility of the City or the County (Please see Response to Comment LA-6-7 regarding off-campus improvements that are the responsibility of other agencies). However, where relevant, the University has developed mitigation measures and/or LRDP program elements that it can implement on campus to reduce or otherwise minimize off-campus impacts (e.g., LRDP Mitigation TRA-2B, expansion of Transportation Demand

Management Program to reduce peak hour traffic volumes; LRDP Mitigations UTIL-9A through 9I, programs to reduce demand on regional water supplies).

For significant impacts that are considered unavoidable in the Draft EIR and Recirculated Draft EIR there are no other feasible mitigation measures available that would lessen or avoid the impact. The EIR does not “dismiss” these impacts. As the EIR is an informational document, it does not indicate whether or how the project should be approved. Under CEQA, The Regents can approve the 2005 LRDP only if it finds that the 2005 LRDP’s benefits outweigh the significant unavoidable impacts identified in the EIR (Public Resources Code Sections 21002, 21002.1(c)).

REC'D JAN 11 2006

2005 LRDP EIR Comment January 11, 2006  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, Ca. 95064

To Whom It May Concern,

The following letter contains comments on the proposed LRDP and DEIR.

From a neighborhood prospective the DEIR has failed to mitigate the impact of traffic generated from growth. The use of Empire Grade to Bay as a main traffic corridor is flawed in many ways. It is a dangerous road that cannot handle transportation of large numbers of people. New ideas, thinking outside the box is the only way to effectively solve this transportation problem. I think a loop system inside the University that would transportate everyone from buses, bikes maybe a monorail to the University Bay entrance that would connect to other systems could be one possibility.

1

Next I would like to comment on the location of buildings.

Plans to build on the north campus wetlands, in an extremely sensitive environmental area will be certainly a tough way to proceed. There are neighbors and other groups that will fight plans of this sort every inch of the way. The LRDP and EIR will end up in the courts.

2

Lastly, why not focus growth on the Monterey Bay Campus to the south?

3

Sincerely,  
William L.May  
1401 High St.  
Santa Cruz, Ca. 95060

### Response to Comment Letter I-52

**Response to Comment I-52-1.** With respect to traffic safety along Empire Grade Road north of Heller Drive, please see Master Response TRAFFIC-2. The lower portion of Empire Grade Road, between Bay Street and Heller Drive, is used by the campus population to travel to and from the campus. However this portion of Empire Grade Road is not steep or winding. Master Response TRAFFIC-2 reports the number of additional peak hour trips that would be added to this portion of Empire Grade Road.

**Response to Comment I-52-2.** Comment noted.

**Response to Comment I-52-3.** Please refer to Response to Comments LA-9-136 and -137 and I-26-2.

UC Santa Cruz 2005 Long Range Development Plan  
Draft Environmental Impact Report

NAME: George McConbie DATE: 11/16/05

ADDRESS: 125 Palmetta SC CA 95060

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

AFFILIATION: \_\_\_\_\_

COMMENT: the infill idea should be used for  
expansion of UCSC.  
Please don't develop the upper campus.  
the wildlife will be harmed

1

Place your comment in the box provided at the back of the room, or  
mail written comments regarding the Draft EIR addressed to:

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, California, 95064

### Response to Comment Letter I-53

**Response to Comment I-53-1.** Sixty five percent of building space under the 2005 LRDP would be built as infill development in other parts of the campus (Draft EIR page 3-15). The comment expressing opposition to north campus expansion is noted for the record. Impacts to wildlife from the northern expansion are evaluated in Section 4.4 of the Draft EIR. Also see Master Response ALT-6 regarding increased infill development on the campus.

Date: Thu, 17 Nov 2005 09:14:29 -0800  
Subject: eir lrdp  
From: John <scrudz@scvolunteercenter.org>  
To: <lrdp-eir@ucsc.edu>

November 17, 2005

To: UCSC

Subject: Long Range Development Plan

Reference: Environmental Impact Report

From: John McGuire  
415 National Street  
Santa Cruz, CA 95060  
831-425-4744  
JohnAndCarol@att.net

Gentlemen:

During the process of developing the EIR for the planned population increase for the University several potentially significant impacts will be identified. Among them will probably be water supply, sewer capacity, traffic, housing, voting power, loss of forest lands, to name a few.

My concern is that a realistic evaluation be completed on each of the identified impacts and that a method be developed to insure that the mitigation measures are undertaken and completed.

During previous EIR's, mitigation measures were identified but for any number of reasons they were not all completed and the general population of the City was significantly impacted with no means of relief.

To insure that the general City population is not stuck again, I propose that mitigation measures identified during this EIR process be installed as a predecessor to the action that would cause the impact.

For example:        Develop a new water source before the increase in student population.

                  Increase the sewer capacity before the need arises for the capacity.

                  Solve the expected traffic problems before they are problems.

Develop on-campus housing and make it attractive before the arrival of the students and faculty.

Eliminate the present at-large voting practice for Council Seats in favor of district elections in order to reduce the impact of block voting by the University from students who are only temporary residents.

1

In Short:

Solve the problems the University has already created, solve the future problems before they become problems and start being a desirable, rather than an undesirable, asset for the City.



### Response to Comment Letter I-54

**Response to Comment I-54-1.** Please refer to Response to Comment SA-4-2 regarding the status of implementation of 1988 LRDP EIR mitigation measures. Please refer to Response to Comment LA-6-7 regarding the timing of implementation of off-campus improvements that are identified in the Draft EIR and Recirculated Draft EIR. Please also see Response to Comment LA-3-22, Master Response POP-1, and Master Response ALT-5 regarding the timing of construction of University on-campus housing.

From: "Sigrid McLaughlin" <sigrid@coincidence.net>  
To: <lrdp-eir@ucsc.edu>  
Subject: LRDP AND EIR  
Date: Wed, 11 Jan 2006 16:09:28 -0800  
Thread-Index: AcYXDHPEpnKTocf4S56+xDzsqJKSLg==

To: the Decision Makers on the LRDP and EIR  
From: Sigrid McLaughlin, PhD; retired UCSC faculty  
Re: LRDP EIR

Honorable Planners,

With great concern I have followed and participated in the discussions of the LRDP and EIR and have come to agree with the most recent points of critique the city council has presented. The plan and report remain vague at best or are silent about the impact on the community in which the project is to happen.

In general I find it hard to understand, why it is that the UCSC campus is chosen (as well as overcrowded Berkeley) to expand beyond what is unreasonable from the point of view of someone affected by the immediate consequences of the "cancerous" growth. UCSC is at this point no longer a campus hospitable to incoming freshmen and undergraduates. Lower division courses are mostly taught by TAs, faculty concentrates on seniors, grad students and research/writing/fund raising. Why not expand in CA population centers that lack educational opportunities--Merced, Fresno, etc.? Why not expand the most recent Merced campus rapidly? If funding is an issue, why here at UCSC when the areas on which the enormous square feet of buildings (DOUBLING the existing amount!) has no infrastructure and is in dense forests full of ravines and treacherous sink holes? Why build in an area that is habitat to much wild life and some threatened species? Elsewhere the ground is flat and building less expensive, and wild life much less present.

1

How is it possible that the community was not considered in the planning, nor consulted? It bears the brunt of the negative consequences--increased cost of living and deteriorating quality of life! How is it to procure the needs of the projected population in crease beginning from water (there is not enough now even; where from??)and waste disposal, increased traffic in already gridlocked intersections (the existing system cannot be expanded and entirely new ideas "outside" of the box would be needed--yet even that may not suffice), street maintenance, housing, and all the support personnel and space (doctors,nurses,dentists/hospitals; teachers/schools; sales personnel, shops, recreational

2

facilities  
etc etc.)

2

How is it possible that in a democracy (?) such decisions are made behind desks by people who don't know what they are deciding about and who cannot be reached?

The Santa Cruz population is most likely to resist the LRDP as it stands by all available means.

Sincerely,

Sigrid McLaughlin

Response to Comment Letter I-55

**Response to Comment I-55-1.** Please see Master Response ALT-2 with regard to accommodating enrollment growth at other sites.

**Response to Comment I-55-2.** Please see Response to Comment PH-14-1 regarding the public meetings that have been held throughout the 2005 LRDP planning process and EIR preparation period.

Date: Wed, 11 Jan 2006 09:28:39 -0800  
Subject: Long-range development plan  
From: Philip McManus <pmcmanus@baymoon.com>  
To: <lrdp-eir@ucsc.edu>  
Thread-Topic: Long-range development plan  
Thread-Index: AcYW1HWwtIbZxILHEdq5+gAUUSU+iA==

Dear University Planners,

I strongly support the mission of the University of California and agree that it has to grow in order to ensure equitable educational opportunities in the future. As such, I am predisposed to accept UC development plans.

However, the plan put forward for the enormous growth of the UCSC campus does not appear to make sense or be justifiable in relation to the costs to the local community. This impression is strongly reinforced by the shocking inadequacy of the draft EIR in addressing and proposing mitigations for anticipated impacts.

It now appears to me that the projected growth at UCSC exceeds local capacities and should to some degree be channeled to other UC campuses.

This issue requires a full public debate. A first step in that process is an adequate EIR. I request that you step back and do a major revision of the EIR. To do less is an abdication of your responsibility which will only breed distrust in the community.

Sincerely,  
Philip McManus

--

Philip McManus  
2500 Smith Grade  
Santa Cruz, CA 95060  
pmcmanus@baymoon.com

Response to Comment Letter I-56

**Response to Comment I-56-1.** Comment noted. Please also see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3, Revised Table 2-1, of the Final EIR for the full text of revised measures.

January 7, 2006

John Barnes  
 UCSC Physical Planning & Construction  
 1156 High Street, Barn G  
 Santa Cruz, CA 95064

Re: 2005 Long Range Development Plan – Draft Environmental Impact Report comments

Dear Mr. Barnes,

I am concerned about the inadequate assessment of environmental impacts that will result from the development outlined in the 2005 Long Range Development Plan (LRDP). Therefore, I'm submitting comments to the LRDP Draft Environmental Impact Report (DEIR) as a concerned community member and former UCSC student. I would like to disclose that I currently work as steward for the UCSC Campus Natural Reserve (CNR), however, the following comments are my personal opinion and do not reflect the position of the CNR.

I would like to thank the University for extending the comment period for the DEIR. I will not reiterate concerns regarding traffic/parking, housing/population, and infrastructure/municipal utilities. These issues have received attention during the public meetings, and I will defer to comments from city and county officials (e.g. Mardi Wourmhoudt, Emily Reilly, Andy Schiffrin, et al). Nevertheless, I share their concerns about these issues and believe they must be addressed in the Final EIR (FEIR). My comments are focused a few sections of the DEIR and the University's approach to the CEQA process in general

- Impacts & Mitigation Measures:

- BIO-1: What significance threshold was used to determine this impact would be less than significant following implementation of mitigation measures BIO-1A/B? Destruction of this rare plant community is a significant impact and the mitigation measures to address this impact do not bring the impact to a less than significant level. Mitigation measure BIO-1A will avoid large patches of northern maritime chaparral (> 10 acres) and establish buffers "where feasible". How will the feasibility determination be made? What criteria will be used to make this determination? Why isn't a 5-acre patch of maritime chaparral "large"? Mitigation measure BIO-1A discusses avoiding high/moderate density patches of Santa Cruz manzanita "when possible", The DEIR should define when it will be possible and how the determination will be made. If avoidance is not feasible/possible, the impacts will not be mitigated and therefore the impacts will be significant. Mitigation measure BIO-1B is adequate mitigation measure if it is fully funded. However, management and monitoring projects are notoriously under funded. I understand a program level EIR doesn't need to identify funding sources. Nevertheless, I am hesitant to believe the University will

- manage the chaparral on campus in the future, considering it is not doing so at present. 1
- BIO-3: The wetlands delineation described in mitigation measure BIO-3B should occur prior to further land use planning or environmental assessment. 2
- BIO-6: The disturbance resulting from construction in the upper campus will facilitate invasion by noxious weeds (especially annual grasses), regardless of Best Management Practices (BMPs) used. Mitigation measure BIO-6A will not reduce the impact BIO -6 to a less than significant level. In addition, the significant impacts noxious weeds will have on the rare plant species in upper campus resulting from development is not addressed in the DEIR. 3
- BIO-7: Mitigation measure BIO-7A is inadequate. Currently, bicycles are not allowed on trails in Marshall Field and yet they use it extensively. Signage and patrols are inadequate mitigation measures because they are rarely implemented and are ineffective. Impacts to the Ohlone tiger beetle conflict with the approved HCP and are a violation of the Endangered Species Act and are certainly significant. 4
- BIO-8: This impact is not less than significant, the caves systems on campus will be impacted (i.e. habitat degradation) by the changes to campus hydrology resulting from the development proposed in the LRDP. How can increasing the amount of impervious surfaces in the watershed that drain to the caves not result in habitat degradation? Again, signage and public education are not adequate means to limit a use. Furthermore, "or other appropriate measures" is unacceptable language for a DEIR. The Campus must identify these measures! 5
- BIO-9: The mitigation measures listed under BIO-9 are inadequate and will not reduce the impact to less than significant. Hydrological impacts in the Moore Creek watershed have already affected California red-legged from habitat, and these impacts will only increase with the development outlined in the LRDP. This also conflicts with the approved HCP and is a violation of the Endangered Species Act. Therefore, it is certainly significant. 6
- BIO-14: The mitigation measure proposed is inadequate to reduce this impact to less than significant. Woodrat relocation? 7

The University should revisit the mitigation measure and impacts outlined in the 1988 LRDP FEIR and reevaluate this DIER. Further studies and assessments are necessary before proceeding with the CEQA process.

Sincerely,

Sean McStay



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## Response to Comment Letter I-57

**Response to Comment I-57-1.** Significance thresholds and determination of significant patch sizes were determined through professional judgment based on an understanding of the number and relative sizes of known patches of northern maritime chaparral and Santa Cruz Manzanita occurrences within Santa Cruz County. Please refer to Master Response BIO-1 for a complete discussion of mitigation measures and the less-than-significant determination after mitigation. LRDP mitigations for the impacts to chaparral (LRDP Mitigations BIO-1A, -1B, and -1C) have been revised to increase their clarity and efficacy. Please see Final EIR, Volume IV, Chapter 3, Revised Table 2-1, for the full text of the revised mitigation measures.

**Response to Comment I-57-2.** Please refer to Master Response BIO-2 (Wetland Impacts).

**Response to Comment I-57-3.** The University acknowledges that increases in the relative and absolute cover of invasive plant species could have a substantial adverse effect on common and sensitive biological resources on the north campus, as discussed on page 4.4-48. In addition to LRDP Mitigation BIO-6 (see pages 4.4-47 and -48), which requires the use of weed-free materials and other BMPs, two other mitigation measures will be effective in reducing the impacts of non-native invasive species on sensitive biological communities. LRDP Mitigation-BIO 2A (see page 4.4-42) requires that a buffer be maintained between development and coastal prairie to reduce incursions by non-native species. Under LRDP Mitigation BIO-2A, landscaping within that buffer will be limited to plant species that are not invasive in coastal prairie. LRDP Mitigation BIO-1B (see page 4.4-39) stipulates that management of protected northern maritime chaparral must prevent increases in the relative cover of non-native species. Together these mitigations will reduce impacts to a less-than-significant level.

Substantial increases in invasive species in the upper campus area, including Marshall Field, are not anticipated as a result of development under the 2005 LRDP, because no development is planned in the immediate vicinity under the 2005 LRDP. Therefore, no significant impacts on special status plant species in the upper campus are anticipated, as stated in LRDP Impact BIO-5, on page 4.4-47 of the Draft EIR.

**Response to Comment I-57-4.** Please refer to Response to Comment I-2-4.

**Response to Comment I-57-5.** Please refer to Master Response BIO-6 (Karst Invertebrates).

**Response to Comment I-57-6.** LRDP Mitigation BIO-9 provides general procedures for the protection of California red-legged frog during construction activities. Consultation with the U.S. Fish & Wildlife Service and California Department of Fish and Game will occur on a project specific basis and detailed mitigation measures will be outlined on a site or reach specific basis. This mitigation will reduce impacts to a less-than-significant level and no violation of the Endangered Species Act is anticipated.

For information about habitat conservation planning efforts at UC Santa Cruz please refer to Response to Comment FA-1-4. The UC Santa Cruz Ranch View Terrace Habitat Conservation Plan does not cover the entire campus. Potential development included in the LRDP would not violate the conditions of the existing HCP.

**Response to Comment I-57-7.** LRDP Mitigation BIO-14 is focused on protecting San Francisco dusky-footed woodrat nests during the breeding season. Any necessary movement of nests and/or individuals will only occur during non-breeding periods.

Date: Fri, 11 Nov 2005 12:43:44 -0800 (PST)  
From: Dave Mootree <dvd7936@yahoo.com>  
Subject: UCSC student's comment on EIP  
To: lrdp-eir@ucsc.edu

I understand that the University may require more space now than it did in the past to deal with the expanded student body. However the current plan for additional construction on the UC Santa Cruz open space would destroy many trails used by the student body here for hiking and running. Both the men,s and women,s Cross Country teams use these trails frequently as do many individuals for physical fitness or simply observing the natural beauty of the campus that UCSC is so famous for. For the above reasons I urge you to consider not only the natural impact, but the effect that the natural impact will have on the quality of life for the student body.

1

Thank you for your time,

David Moutrie

House 2 Stevenson College

Response to Comment Letter I-58

**Response to Comment I-58-1.** Please refer to Response to Comment LA-2-124 for additional information about the north campus trail system.

From: Pacificoffering@aol.com  
Date: Fri, 18 Nov 2005 10:27:57 EST  
Subject: EIR Inadequate to Address Growth Impacts  
To: lrdp-eir@ucsc.edu

Dear UCSC Planning Staff,

The UCSC LRDP EIR does not adequately address traffic and environmental impacts that will occur as a result of the increase in student population to 21,000. Existing and future city infrastructure can simply not accommodate that much growth. Mitigation measures proposed, "whenever possible", will not solve the problem. Further, destruction of valuable wildlife and recreation habitat in the northern part of campus will further diminish the quality of life in the area.

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Of course UCSC, like all campuses, needs to respond to a growing state population, but the city cannot handle that much growth. The only realistic option is to build a satellite facility in Silicon Valley to accommodate future growth. Otherwise, the traffic and environmental impacts of proposed future campus growth cannot be mitigated to less than significant levels.

3

### Response to Comment Letter I-59

**Response to Comment I-59-1.** Comment noted. The Draft EIR analyzes off-campus impacts with respect to traffic (Section 4.15), housing (Section 4.11), and water supply (Section 4.16) as well as public services (Section 4.12) and recreation (Section 4.13). Please also see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3, Revised Table 2-1 of the Final EIR for the text of revised measures.

**Response to Comment I-59-2.** The comment expressing opposition to the north campus expansion is noted for the record. Impacts to biological and recreational resources from the northern expansion are evaluated in the Draft EIR, Sections 4.4 and 4.13.

**Response to Comment I-59-3.** Please refer to Master Response ALT-4 (Moffett Field Satellite Campus/Silicon Valley Center).

Date: Wed, 11 Jan 2006 19:27:26 -0500  
From: newnum6@netscape.net  
Subject: comment  
To: lrdp-eir@ucsc.edu

I think the plan is a unabashed power grab by the university. It shows the disregard for the community and its values that an uncontrolled state entity can get away with. UCSC is going to take the comments and do what it has already decided to do. The city has made known its concerns for years and has not affected ucsc actions. The city and county needs to do everything in its power to not cooperate on infrastructure for ucsc such as roads and sewers. People should hike down arroyo seco off of nobel drive with its open sewer line coming off campus in the middle of a nature trail to see the effect growth will have on the city.

The new roads on north campus are a cynical power play to grab the lands for future development.

They are not even on the existing roads but cut through the campus natural reserve. The planned bridge to empire grade below waldorf school would create a traffic nightmare on a very steep grade.

The people who plan for this growth are ruining the unique environment and culture that is santa cruz.

## Response to Comment Letter I-60

**Response to Comment I-60-1.** Please refer to Response to Comment I-45-4 for information about how all comments on the Draft EIR have been considered and incorporated into the Final EIR. Areas proposed for development in the north campus under the 2005 LRDP are shown in Draft EIR Figure 3.5, *Proposed Land Use Plan*. These areas are clustered along the new north campus loop road. This road parallels an existing fire road. The vast majority of the north campus would remain in open space land use categories under the 2005 LRDP (i.e., Campus Resource Land, Campus Natural Reserve, and Protected Landscape). Section 4.14, *Traffic, Circulation, and Parking*, indicates that the new road connection to Empire Grade Road would serve primarily employee housing located in the proposed northern growth area and proposed new campus support facilities, which would be located at the intersection of Empire Grade Road and the new connector road. This intersection would operate with acceptable levels of service under the proposed 2005 LRDP.

Gail and Mitchell Page  
535 Spring St.  
Santa Cruz, CA 95050  
831 425 1742

RECEIVED JAN 11 2006

January 11, 2006

HAND DELIVERY

John Barnes  
Director of Campus Planning  
University of California, Santa Cruz  
Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, CA 95064

RE: COMMENTS ON THE UCSC Draft EIR for the 2005 LRDP

Mr. Barnes:

Concrete filling of sinkholes may be illegal and is grossly damaging to water quality and health of the Karst system and should not be allowed. From personal observation, milky clouds of concrete entered off-campus ponds on a daily cyclical basis during the several weeks that the immense cavern under the Natural Sciences Building was plugged. Other homeowners closer to the source brought this to the attention of UCSC, which claimed it was a "natural occurrence in limestone formation". It has been standard practice of the campus to fill these voids rather than employing building methods necessary over Karst formation. Filling Karst caverns decreases the overall bank of water available for the year round watercourses enjoyed in the City of Santa Cruz, and continuing such negligent actions in future construction can potentially cut off flows to creeks and springs in the City, and most certainly will diminish them during the summer months. In the past my property was inhabited by Pacific tree frogs, which are now extinct most probably because of degradation to the water quality.

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The current storm drainage system does not meet current overall capacity requirements. The characterization of localized of areas concern is misleading. Major aspects of the system are of concern, e.g., sinkholes at or exceeding capacity. Financially viable design strategies are not the point. Strategies must be viable and not contribute to further degradation. Storm water, particularly when not treated or polluted, should be treated in a manner appropriate to the Karst geological formation extant on the lower UCSC campus. Any other body or institution must adhere to legal standards, and UCSC should conform to strict storm water standards as well.

2

The UCSC campus is causing great damage in relying on the series of natural drainage courses and sinkholes for storm drainage. Storm water drains via a network of campus installed pipes into four drainage arroyos -Jordan Gulch, Moore Creek, Cave Gulch and San Lorenzo River - which lead to a series of sinkholes (except San Lorenzo and lower

3



Moore Creek watershed). Detention basins and settling tanks serve localized building clusters, and these mitigations fail or cannot be maintained as designed.

3

Recent analysis has documented surface flooding, concentrated flows, and associated erosion in some locations. The long-term effect of sediment load on sinkhole capacity is not known and is difficult to determine. The increased storm water drainage entering the complex subsurface Karst aquifer on campus is entering waterways in the City, and bringing with it silt which is rapidly filling up watercourse capacity, damaging the riparian habitat, causing enormous expense to the city and property owners, and is a health and safety issue due to its contamination.

4

Significant impacts from storm water runoff have occurred with University related construction since the 1988 LRDP. Other impacts include erosion on the Pogonip property and increased winter flows beyond normal of adjacent creeks and waterways, and most likely the new water problems that some homeowners are finding beneath their homes. The dumping of storm water off campus during the rainy season is depleting the bank of water that creates the healthy year round network of streams and ponds enjoyed by the citizens of Santa Cruz.

5

Ranch View Terrace project is a blunder to benefit a few, will not provide affordable housing for staff and faculty, and cause severe and irreparable environmental degradation. It does not seem possible from what is now known, that the lower campus can be utilized for development due to its natural geological constraints.

The dye tracer study performed by Ozark Underground Laboratory clearly showed a connection with the wells on the lower campus, and specified that further studies would need to be performed to determine all the connections to the watercourses in Santa Cruz. The UC counsel made an agreement with our attorney when we were filing a CEQA lawsuit on the pumping of these wells, that these wells would not be pumped, after seeing the results from Ozark Underground Laboratory. The pumping of 1 million gallons in the February test pumping is the most likely cause of the total disappearance of our watercourse that July (and the only known time in history of such an occurrence). We and other downstream neighbors rely on this water and have prior rights to this water for recreation, irrigation, and wildlife. It is unacceptable on every level for the University to destroy property rights and the environment by stopping the flow of these watercourses.

6

Very truly yours,

Gail and Mitchell Page  
535 Spring St  
Santa Cruz CA 95060

### **Response to Comment Letter I-61**

**Response to Comment I-61-1.** Potential impacts associated with pressure grouting in karst are analyzed on pages 4.8-30 to -40 of the Draft EIR. As explained in that discussion, the purpose of pressure grouting is not to fill sinkholes, karst caverns or voids with concrete but to densify soft soil by injecting grout in a manner that compresses the soil. Care is taken to ensure that large amounts of grout are not pumped into bedrock voids and crevices, by taking pressure readings during grouting and, if necessary, stopping grouting for a day or two to allow the grout that has already been injected to harden so that further pumping does not force it into voids. The only way that grout could affect the quality of water in down-gradient springs would be if the grout were injected deeply enough to reach groundwater beneath the project site, and if the groundwater beneath the project site were hydraulically connected to the spring. Implementation of LRDP Mitigation HYD-5B would reduce the potential for a significant impact to water quality from pressure grouting to a less-than-significant level. Pressure grouting on campus does not decrease the overall amount of water entering the karst system, as water diverted from building foundations still eventually reaches a sinkhole.

As part of its Storm Water Management Program, the Campus will implement a BMP to characterize and evaluate the potential for pollutants in runoff from existing development to enter sinkholes, and will develop and implement measures to ensure groundwater quality.

**Response to Comment I-61-2.** The Campus proposes to implement the Infrastructure Improvements Project, which is designed to repair existing problems in the drainage system relating to capacity and erosion. Elements of the project are described in the Storm water and Drainage Master Plan prepared for the Campus (Kennedy/Jenks Consultants 2004) (see Section 4.8.1.3). Future projects will implement mitigation measures to minimize increases in runoff in campus drainage (see LRDP Mitigations HYD-3C and HYD-3D). Please also refer to Response to Comment I-37-11. The Campus is subject to MS4 Phase II regulations and, in compliance with these regulations, has prepared a Storm Water Management Program to minimize the discharge of urban pollutants into runoff to the maximum extent practicable.

**Response to Comment I-61-3.** Please see Response to Comment I-61-2 above.

**Response to Comment I-61-4.** The potential for sinkhole sedimentation to cause flooding on and off campus is analyzed on pages 4.8-35 and -36 of the Draft EIR. With respect to increased runoff from the campus, please refer to Response to Comment I-61-2.

Generally, the sediment in storm water runoff is filtered out during infiltration prior to reaching the groundwater aquifer. Once in the marble, water flows both through porous media and in open voids (caves and caverns). Some additional filtering of sediment occurs as the water flows through the porous media. However, except for some minor retention of sediment based on cave geometry, not much sediment retention or filtering occurs in the open void areas of the karst. Nevertheless, because groundwater generally moves slowly, it is not likely to carry large quantities of sediment into any off-campus watercourses it feeds. As part of the campus Storm Water Management Program, the Campus will characterize and evaluate the potential for pollutants in runoff from existing development to affect groundwater quality, and will develop and implement protective measures as needed. This will help minimize any impacts in downstream watercourses that receive discharge from the karst aquifer from existing campus development.

**Response to Comment I-61-5.** Erosion in the Pogonip watershed is discussed on pages 4.8-45 to -46 of the Draft EIR. Regarding increased runoff from the campus, please refer to Response to Comment I-61-2, and see Response to Comment I-88-10 regarding springs. The Campus directs all runoff into on-campus drainages, most of which discharge their flows into the karst system. The Campus has no evidence of a connection between the natural drainage system and any homeowner problems in the vicinity of the campus.

**Response to Comment I-61-6.** The dye tracer study (Aley, T & Weber, Hayes Assoc., January 21, 1994) verified that hydraulic connections exist between Water Supply Well 1 (WSW-1), Monitoring Well 1A (MW-1A) and Monitoring Well 1B (MW-1B), all located on the lower campus. This is consistent with the pattern of joints and fractures. The study concluded: “The data clearly indicate that Water Supply Well 1 is hydrologically associated with major portions of the karst aquifer and therefore, if pumped, is unlikely to substantially affect the discharge of any individual spring or springs.” Contrary to the commenter’s statement, the dye tracing study made no conclusion that further analysis would be necessary to determine all the interconnections to the watercourses in Santa Cruz. The University is not aware of any formal agreement not to pump from the campus well. Furthermore, there are no hydrologic data or interpretations in Aley, T & Weber, Hayes Associates (January 21, 1994) that would have led UC Santa Cruz to change its plans for pumping groundwater from the karst aquifer.

Based on the data and evaluations supplied in numerous UC Santa Cruz hydrogeologic investigations, it is not possible that the pumping test conducted in February 1989 had any effect on downstream watercourse flow in July of that same year. The seven-day constant-rate pumping test was conducted from February 13 to 20, 1989 on WSW-1, and the results of this test are presented in detail in Johnson and Weber & Associates (1989). A total of 937,450 gallons of groundwater was pumped from WSW-1 during the test at a constant rate of about 100 gallons per minute (gpm). Total drawdown in WSW-1 was approximately 2.7 feet and drawdown in nearby MW-1A was approximately 1.38 feet during the pumping portion of the test. Water levels in WSW-1 and MW-1A recovered fully very soon after pumping ended. This limited drawdown and quick recovery indicates a highly transmissive aquifer system, with the ability to produce substantial amounts of water without creating a large cone of depression. The quick recovery of water levels indicates that the groundwater removed from aquifer storage was quickly recharged, so the effects of pumping on local storage were negligible.

As part of the seven-day pumping test, flow measurements were made at several springs and spring-fed streams near the lower campus to evaluate whether pumping had any impact on spring or stream discharge. No clear effects from WSW-1 pumping were measured at any spring or stream discharge monitoring station. The size of the stabilized cone of depression, or radius of influence, of WSW-1 pumping was estimated at 270 feet. Beyond this distance drawdown was zero (i.e., groundwater levels were not affected at all by the pumping). This further indicates that impacts on spring flow in the area surrounding the lower campus are highly unlikely at a pumping rate of 100 gpm.

Therefore, the total disappearance of the watercourse fed by Kalkar Quarry Spring in July 1989 cannot be attributed to the February 1989 pumping test. The year 1989 was the third year of severe drought. This drought would be a more likely factor for the disappearance of the watercourse.

As shown in the LRDP EIR, the Campus’s planned pumping of up to 1.1 million gallons per year, at a maximum rate of 100 gallons per minute, pursuant to LRDP Mitigation UTIL-9I would not have a significant impact on local creeks and springs.

To the Campus Planning Office

I am writing in regards to the Draft EIR of the Long Range Development Plan. I transferred to UCSC as a junior last year in the fall. One of the main reasons that I chose this university was the incredible natural areas that make a large part of the campus. Now, I feel that it is my responsibility to be concerned about the development of natural areas on campus and the effects that these developments will have on the unique ecology of the area. As students and citizens it is our responsibility and our right (under the California Environmental Quality Act) to contribute to and be involved in the planning of development at the university.

It is very worrisome to me that many students, staff, faculty and community members are refraining from commenting on or participating in the planning process. This is the case *not* because they are unconcerned or uninterested in the fate of the campus. Many people are intimidated by the enormity of the draft EIR and the dry, technical-sounding language of the document. I fear that the language and size of the document is in fact *intended* to intimidate people, instead of it being a sign that the document is precise and all-encompassing. This fear is supported by the fact that others and myself have noticed mistakes and omissions in the draft EIR. The mis-identification of the Western Scrub Jay as *Aphelocoma insularis* and several instances of mistaken association of species with their habitats are some examples. These mistakes make me wonder about the quality and accuracy of the EIR as a whole. I hope that they are not signs that corners are being cut in an attempt to hurry the process along.

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When I first visited this campus I was amazed by the beauty of it. I was very impressed by the way in which natural spaces were set aside and protected. After taking classes about the natural history and geology of the region I began to appreciate even more how unique the campus is. In one class I even learned about a species of spiders that only live in Empire cave and one other cave system on the other side of Empire Grade road! I am surprised that the welfare of this species, endemic to the campus, is not taken more into consideration in the draft EIR. Such examples of the uniqueness of the ecology of the campus show that thoughtful planning is necessary not only to maintain the beauty of the university but also to protect natural resources of statewide and worldwide significance.

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To conclude I hope that the comments made by students, faculty, staff, and community members are listened to very carefully. I also hope that future planning be based only on the most accurate and comprehensive of ecological, hydrological and geological studies. The type of studies that a world-renowned research institution like ours should be able to muster, and the type of studies that our unique campus deserves.

Sincerely,

Marley Alexander Peifer  
Senior Anthropology major

## Response to Comment Letter I-62

**Response to Comment I-62-1.** The EIR has been revised to state the correct scientific name for the Western Scrub Jay as *Aphelocoma californica* (see page 4.4-9).

**Response to Comment I-62-2.** Potential impacts to karst invertebrate habitat and invertebrates in Empire Cave are discussed under LRDP Impact BIO-8 on pages 4.4-50 through -54 of the Draft EIR. Also see Master Response BIO-6 regarding impacts to special status cave species. In addition, note that a new mitigation measure has been added to the Final EIR to develop a design for a barrier for the entrance of Empire Cave that will not harm special-status species inhabiting the cave. Please see Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*, Revised Table 2-1.

Date: Mon, 09 Jan 2006 12:37:19 -0800  
From: Frank Perry <perry@cruzio.com>  
To: lrdp-eir@ucsc.edu  
Subject: LRDP

Dear UCSC Physical Planning Department

I am a UCSC alumnus and have been studying the history of the local lime industry for several years. I have some comments on the cultural resources section of the UCSC long range development plan.

It says on page 48 that the University will protect historic resources through reuse and adaptation of structures in the Cowell Ranch Historic District. Maps that I have seen show this district as located at the Bay Street entrance to the campus. The University should also protect resources such as the three lime kilns on the upper part of the campus. The University should not only protect these and the resources within the district, but also stabilize and restore structures that are in a state of near collapse (such as the cooperage and worker cabins). Two of the lime kilns on the upper campus suffered damage in the Loma Prieta Earthquake. This damage should be repaired, the kilns stabilized, and trees removed if they are causing damage or would in the future cause damage to the kilns. The collapsed worker cabins in the historic district should be rebuilt.

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Sincerely,

Frank Perry  
829 32nd Avenue  
Santa Cruz, CA 95062  
Ph. 831-462-4916

### Response to Comment Letter I-63

**Response to Comment I-63-1.** Please see Response to Comment I-22-2 with respect to resources outside the designated Cowell Ranch and Lime Industry Historic District. The Campus recognizes the need to more proactively manage the deteriorating historic structures associated with the Cowell Ranch and lime industry operations, and has recently completed a draft historic resources management plan for the resources within the historic district that includes proposals regarding stabilization, rehabilitation and possible reconstruction of historic features, including the cooperage and the worker's cabins. The Campus has begun several projects to involve students and volunteers in these tasks, and plans to seek funding to carry out the more ambitious recommendations during the LRDP planning horizon. With respect to the historic lime kilns on the central campus, the University will continue to take these features into account during project planning to ensure that they are not adversely affected by drainage improvements or other activity that might occur in their vicinity. The Campus has no plans at this time to rehabilitate or restore these features. However, the Campus has formally recorded these resources as historic features, and a campus intern has documented several of the kilns in a recent scientific illustration project. The results of this work are included in the Campus's report to the Getty Foundation on the Campus Heritage Grant (ARG and Pacific Legacy 2006).

From: "Shauna Potocky" <spotocky@hotmail.com>  
To: lrdp-eir@ucsc.edu  
Subject: LRDP comments  
Date: Wed, 11 Jan 2006 17:00:12 -0800

2005 LRDP EIR Comment  
UCSC Physical Planning  
1156 High Street, Barn G  
Santa Cruz, CA 95064

January 11, 2006

Dear UCSC Planning and Development Team,

I would first of all like to thank you and Chancellor Denton for extending the comment period in regard to the UCSC LRDP.

I have reviewed the information in the plan and I greatly appreciate your efforts in extending the upper campus open space and access roads. I would however like to share my concern for the loss of existing open space, trails and fire roads that will occur during the campus expansion. As much as possible, I would like to urge you, the planners and developers to consider creative ways to save the existing upper campus open space, trails and fire roads.

I realize that UCSC is in a unique position in many ways regarding its property. I also know that the campus continues to look for ways to create a quality relationship with its community. I believe through the preservation of the rich and unique natural environment found on campus, a special bridge can be forged with the local Santa Cruz community. Many people within the community utilize the quality open space of campus for recreation and leisure. By embracing this unique relationship, realizing the potential of this relationship, and creating ways to foster it, I believe UCSC, the community, and the natural habitat could be set up for a win-win situation.

Possibly unknowingly, the campus also has a unique recruiting tool for students, staff and faculty. As a student, I was drawn to UCSC because of the natural environment and programs. The heritage and dedication the campus held for the natural environment also drew me to the campus. The legacy of Ansel Adams, whose Charter Day address at UCSC in 1965 truly cared about and embraced the need for education, science, conservation and the protection of the environment.

I wish I had more time to give you my thoughts and ideas. Please know that



the campus has fostered some of my greatest outdoor experiences. I love the campus and the forest within its boundary. I hope as much as possible that you will see the value in keeping UCSC as unique as it is. Do what you can to keep the natural environment, the legacy of redwoods and oaks. See that the environment provides the perfect setting for making an even more unique UC campus, and provides a way to build a lasting bridge and legacy to the Santa Cruz community.

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Thank you for considering my comments.

Sincerely,

Shauna Potocky  
UCSC Staff Member  
UCSC alumni  
Santa Cruz Resident (Trail Runner, Mountain Bike rider)

Response to Comment Letter I-64

**Response to Comment I-64-1.** Please refer to Response to Comment LA-2-124 regarding removal of trails in the north campus. Please also refer to Response to Comments LA-2-42 and I-60-1 for information related to the open space lands in the north campus.

Date: Thu, 24 Nov 2005 02:57:28 +0000 (GMT)  
From: Kimberley Rain <painted\_rain13@yahoo.co.uk>  
Subject: LRDP  
To: lrdp-eir@ucsc.edu

I want to comment that I feel that the proposed LRDP will impact the environment around UCSC as well as the lives of the students so negatively that it will seriously alter the climate and create a major problem for the entire santa cruz community. I do not believe the university has done enough to involve the community and believe that if they did more they would find the entire community opposed to the idea of expansion.  
Sincerely  
Kimberley Miner

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Response to Comment Letter I-65

**Response to Comment I-65-1.** The comment is noted for the record. Please refer to Response to Comment PH-14-1 for information about involving the public in the preparation of the 2005 LRDP and Draft EIR.

Cc: assemblymember.laird@assembly.ca.gov  
From: David Sofen <sofen@cruzio.com>  
Date: Wed, 11 Jan 2006 09:14:26 -0800  
To: lrdp-eir@ucsc.edu  
Subject: lrdp eir

To whom this may concern,

I have been a resident of Santa Cruz for 31 years (the first two years as a UCSC student), and an upper West side resident for the past four years. I am vehemently opposed to the LRDP. I can understand the state's mandate to provide facilities for educating the growing population; however, there are numerous other options in this state to fulfill this mandate, and the costs for adding thousands of students and staff to our community are far too great to bear. Our water supply is already stressed, and certainly not sufficient in dry years, which occur in definite cycles. Our city is considering investing millions of dollars in a desalination plant, due to the desperate shortage of water. The traffic is unbearable, creating pollution and stressful frustration for the entire West side of Santa Cruz for hours every single day. This proposal, which would add thousands of car-trips each day, does not take into consideration the loss of quality of life already endured by thousands of local residents. It is not a tenable situation. There are no viable solutions offered in the EIR; there are no effective mitigations to be offered, other than an eastern access road, which is not only extremely unpopular in the community (politically), but opens up additional traffic problems in other areas.

The northern section of the campus is a pristine area; it sustains the spirit of innumerable community members who walk, run, and bike throughout the area. Once the trees are cut and the land is paved, that extraordinary forested land is lost forever. When I was a student at UCSC, the respect for the environment in which the University is situated was of greatest significance. The selection of building sites, and the design of those buildings, were decided with regard to the surroundings, to have the least impact as possible. Through the years, the campus has grown enormously, and the original intention of the UCSC founders to honor this unique environment with restraint in regard to campus size and design, has been continuously subverted. The beautiful environment that gives the University its singular essence is the very thing that attracts most of the students and faculty here; as the campus overwhelms its surroundings, that very essence is being drastically diminished. The quality of living and working in such an environment cannot be quantified, nor figured into a calculation of gain versus loss. It is simply invaluable, sacrosanct.

If the University goes through with this plan, it will be with the strong objection of the people and leaders of the city of Santa Cruz, and it will decidedly foster great animosity between the two entities. The community members who have lived here long enough also realize this won't be the end of the story; the University will return some years from now with yet another LRDP. I strongly object to any further disintegration of the quality of life in our city and county, and to any further growth of the facilities and population of UCSC.

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Sincerely,  
Jeanne Rosen Sofen

## Response to Comment Letter I-66

**Response to Comment I-66-1.** Please refer to Master Response PD-1 for reasons why the University is proposing to expand this campus and Master Response ALT-1, which discusses the appropriate enrollment level for the Reduced Enrollment Growth Alternative. The Draft EIR evaluates and discloses the impacts of campus growth on traffic and water supply (Draft EIR Sections 4.14 and 4.15 respectively) and mitigation measures are presented for all significant impacts. The Draft EIR (LRDP Impact AES-5) also discusses the impacts of development in the north campus and includes mitigation measures to ensure that, like central campus development, north campus development will also be clustered, that the buildings not protrude above the surrounding trees, that all new development retain a screen of mature trees, and the Campus continue its practice of tree planting and maintenance. The LRDP guidelines also state that new development would include a reasonable buffer between new buildings and major roadways. All of these measures would help maintain the visual continuity of the forested areas and reduce potential impacts of north campus development.

UC Santa Cruz 2005 Long Range Development Plan  
Draft Environmental Impact Report

NAME: Annmarie Rowland DATE: 12-13-2005

ADDRESS: 952 Windsor St.

PHONE: 831-429-6553 EMAIL: annmarierowland@yahoo.

AFFILIATION: UCSC Alumni + Santa Cruz Home owner

COMMENT:

I think the UCSC Long Range Development Plan is just a BAD IDEA! The current EIR is a JOKE! The EIR Does not go into depth the result of UC SC growth ~~is~~ (to many of possible we will do this....) The impact on the City is huge! The Traffic the noise from the Traffic, the water Usage! UCSC ~~is~~ wants to build more housing when the house they currently have is not being utilized because their rates are too expensive for students, so the students rent in town, thus more traffic. Our open space on campus is in ~~jeopardy~~ <sup>Jeopardy!</sup> for what? to build more housing the student won't use. Cut down the Red woods? This is not what UCSC <sup>UCSC</sup> was suppose to be a small liberal Arts school, where one can get a good education. The Growth of UCSC IS GREATLY EFFECTING THE QUALITY OF MY LIFE, AND I AM SURE OTHERS! THE EIR NEED TO GO DEEPER! ~~It~~ <sup>MUCH</sup> Deeper before more development

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Place your comment in the box provided at the back of the room, or if approved. There are mail written comments regarding the Draft EIR addressed to:

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, California, 95064

other UC schools that have more space + less impact on a town! Build there, let Santa Cruz ~~city~~ city grow slowly over time and build there communities back up from the economic downturn. More families less students. People that care about ~~the~~ <sup>Santa Cruz</sup> take an active part in the issue of the city! Ann Rowland

2



### Response to Comment Letter I-67

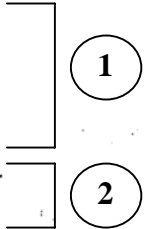
**Response to Comment I-67-1.** The Draft EIR analyzes off-campus impacts with respect to traffic (Section 4.15), housing (Section 4.11), and water supply (Section 4.16) as well as public services (Section 4.12) and recreation (Section 4.13). Also, please see Response to Comment LA-6-7 regarding revisions to proposed mitigations. Please refer to Response to Comment LA-2-25 regarding the appropriate level of detail for a Program EIR. Please also refer to Responses to Comments LA-2-42 and I-60-1 for information related to the open space lands in the north campus.

**Response to Comment I-67-2.** Please refer to Master Response ALT-2 (Proposed Program Growth at Another UC Campus or Another Site).

From: "Emily C. Ruby" <eruby@ucsc.edu>  
Subject: Submitting a comment  
To: lrdp-admin@ucsc.edu

I am all for the reduction of sprawl and the minimization of negative environmental effects. Whenever possible, please choose to build on already-developed area, as opposed to virgin forestland. Just because UCSC has a great deal of land does not mean it must all be converted to buildings and parking lots. Also, if you could move away from the "car-friendly campus" idea, that would be great.  
Thank you.

Emily Ruby, student



## Response to Comment Letter I-68

**Response to Comment I-68-1.** Please refer to Master Response ALT-6 (Increased Infill Development).

**Response to Comment I-68-2.** The Campus's TDM program has been very successful in discouraging the use of single-occupant vehicles. LRDP Mitigation TRA-2B includes further measures designed to encourage the use of alternative forms of transportation to access the campus. Also see Response to Comment I-45-30.

Date: Thu, 3 Nov 2005 15:52:08 -0800  
From: Sam Scott <saysomethingsweet@gmail.com>  
To: lrdp-eir@ucsc.edu  
Subject: Please Read

To whomever it may concern,

I walk along the many trails on campus, below campus, and in upper-campus every chance I get. These wild places that are so incredibly accessible to us offer a breath of sanity, and an escape from the chaos of obligations, stress and worries. It is these places, away from the paved roads, away from the classrooms, away from the computers, that is the reason why I chose this school, and not any other. If the redwoods, madrones and doug firs of this campus are slowly cut back, if the fields slowly paved over, if all of the eagles, kites, owls, fox and bobcat are made to find their homes elsewhere, then you will have successfully stripped this university of its most important and unique qualities.

If these developments had been made earlier, I would not have come to this school.

Thank you for listening, and for providing a forum for the public's opinions.

Sincerely,

Sam K. Scott, 4th year Environmental Studies student.

Response to Comment Letter I-69

**Response to Comment I-69-1.** Comment noted. Impacts to biological resources are discussed in Section 4.4 of the Draft EIR.

RECD JAN 10 2006

H. Reed Searle  
114 Swift Street  
Santa Cruz, CA 95060  
Phone and Fax 831-425-8721  
4 January 2006

2005 LRDP EIR Comment  
UCSC Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, Ca. 95064

re: comment on draft EIR; West Cliff Drive, Lower Westside

Dear Sir/Madam,

I have two comments on the EIR. The first of these is an echo of comments of many, many others: the city of Santa Cruz is a family in a house of limited size. It can accommodate a few more relatives and friends, but the addition of potentially another 15% or so, together with the growth which we are required by State law to accommodate, is simply more than Santa Cruz can handle. The proposed growth exceeds the carrying capacity of the City; there is no possible way to handle this growth.

1

This may not be a sound objection to the EIR, and even if it were, a statement of overriding considerations would be a probable response. Still, the University should consider whether it wants to proceed with a project that will in effect destroy Santa Cruz. I would hope that the Regents would exercise their discretion in the direction of saving our City.

The second comment deals with traffic on the lower Westside and particularly on West Cliff Drive and its adjoining streets, namely Swift, Almar, Fair and Swanton. I know of no traffic counts on West Cliff or the other named streets. What I do know is that traffic has increased very substantially on these streets, particularly in peak hours over the past few years. This traffic is generated partly by normal growth, but mostly it is attributed to Long Marine Lab and UCSC. The proposed expansions at Terrace Point, 2300 Delaware and on UCSC campus inevitably will result in far greater traffic on these streets and a further disruption and denigration of the neighborhood and of West Cliff Drive.

2

West Cliff Drive is primarily a recreational route. This is its highest and best use, as in the MTS, the West Cliff Drive Plan, Monterey Bay Sanctuary Trail etc. West Cliff should not be burdened by any additional commuter traffic or traffic seeking an attractive route from the UCSC facilities. But this is what is happening now and the proposed growth would very substantially exacerbate the traffic.

The impacts can be mitigated but mitigation is costly. The city does not have money to do this;

the University reasonably should by way of mitigating expected impacts. Neighborhood entry points, probably rumble strips, should be installed at the intersections of Delaware with Swanton, Swift, Fair, and Almar. These four streets should have traffic calming improvements such as chokers and chicanes. West Cliff Drive should have added stop signs at Monterey, Stockton, Almar and chokers or chicanes in at least two locations. The effective and enforceable speed limit should be 20 MPH. Painted pedestrian crosswalks should be at all intersections and at Bethany Curve. The bicycle/pedestrian path should be widened as earlier proposed by the City.

2

The City cannot and should not be asked to pay for these improvements. They are by way of mitigation of negative factors reasonably caused by UCSC expansion.

I request that the EIR address these issues and that any UCSC expansion be conditioned upon making of the improvements to West Cliff Drive and the lower Westside.

Sincerely,

  
Reed Searle

## Response to Comment Letter I-70

**Response to Comment I-70-1.** Comment noted. Please refer to Response to Comment PH-42-3 for information about determining carrying capacity.

**Response to Comment I-70-2.** The Draft EIR for the 2005 LRDP and the Draft EIR for the CLRDP (UC Santa Cruz Marine Science Campus) evaluated routes that are most likely to provide access any of the University's off-campus sites. West Cliff Drive is longer and more circuitous than any of the streets that provide primary access to 2300 Delaware Avenue or the Marine Labs site. For example, the distance between the 2300 Delaware Avenue site and downtown is about 3.6 miles using West Cliff Drive. The same trip using a more direct route (Delaware to Bay to West Cliff) is only 2.5 miles. Therefore, it is anticipated that a negligible amount of University-related traffic would use West Cliff Drive. West Cliff Drive's current characteristics (curves, speed, views, traffic control) serve as effective traffic calming, and discourage those, other than residents and recreational traffic, from using it as a through route.



UNIVERSITY OF CALIFORNIA, SANTA CRUZ

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SANTA BARBARA • SANTA CRUZ

BARRY SINERVO  
DEPARTMENT OF BIOLOGY  
EARTH AND MARINE SCIENCES BLDG - A316  
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SANTA CRUZ, CALIFORNIA 95064  
VOICE: (831) 459-3425 / FAX: (831) 459-5353  
E-MAIL: sinervo@biology.ucsc.edu

January 10, 2006

Re: Comment on the EIR for the LRDP, UC Santa Cruz Campus,  
To Whom It May Concern:

This comment concerns the recent discovery of a new paedomorphic form of the California Giant salamander, *Dicamptodon ensatus*, that has been found in the Empire Cave. The assertions made in the Section 4.4 bioresources of the Draft EIR for the LRDP indicating that they are "rare" and it is "speculative to consider them genetically distinct" are completely erroneous given the wealth of data afforded by the parallel systems around the world on cave salamanders.

The assertions can be refuted specifically with reference to sections of my draft report, submitted to California Department of Fish and Game, along with my re-application for my permit to study these forms. A copy of this report has also been forward to the US Fish and Wildlife Office overseeing the Santa Cruz County area.

It is extremely likely that this is the cave salamanders of UC Santa Cruz cave system are a new form, genetically distinct from surface populations. It seems premature to make formulations for an LRDP that does not take into account this extremely high probability. We currently have studies underway to measure the levels of Mercury and other heavy metals in the stream larvae found on the UC Santa Cruz Campus (collaboration with Herpetology Class, UCSC and Michael Bank, Harvard University).

A copy of my curriculum vitae is on file at the Ecology and Evolutionary Biology office, University of California, Santa Cruz.

Respectfully,  
Barry Sinervo

Professor of Ecology and Evolutionary Biology

**Synopsis of Sinervo's report, submitted to California Department of Fish & Game (1/11/2006) and to the USFWS (1/11/2006):**

**Introduction**

The California Giant salamander, *Dicamptodon ensatus*, has a complex salamander life cycle throughout most of its range in California, including an aquatic larval stage lasting months after which the salamander metamorphoses into a terrestrial adult. Occasional reports of paedomorphic forms of *Dicamptodon*, which never metamorphose and breed as aquatic adults, are found in the literature (Nussbaum et al. 1983, Stebbins 1985), but these are rare. Paedomorphic salamanders are defined to be an adult that breeds with the aquatic morphology (Sinervo & Svensson 2003), usually at the same size as the normally terrestrial form, but often at a much earlier age at maturity. We have recently discovered a location in which the paedomorphic form is the most common morphotype. Empire Cave is a large cavern located in Cave Gulch (also known as Wilder Stream) on the UC Santa Cruz campus. During the winter months the cave floods periodically. After the water subsides, several pools are accessible from the bottom of the cavern. In these pools paedomorphic salamanders were recovered each year of sampling.

We tested whether the form is locally common in the cave by rearing a sample of larvae from the adjacent stream pools (larvae of the year, < 10 cm in length) up to metamorphosis or a size that is the cutoff for establishing a paedomorphic form (168 mm) (Nussbaum et al. 1983, Chaney 2004). We found a highly significant difference in the rate of paedomorphosis in the cave form relative to the rate of paedomorphosis in the adjacent stream. These results suggest that the local population inhabiting the caverns underneath the UC Santa Cruz campus represent a new population of paedomorphic salamander. If one extrapolates from the area available for sampling (Empire Cave) relative to the entire Karstic area of Marble that would provide underground galleries, it is clear that this paedomorphic population could be quite large.

**Methods**

We used published accounts and direct observations by UC researchers of salamanders recovered from Empire cave to determine the frequency of paedomorphic forms in Empire Cave.

We sampled the pacific giant salamander larvae from a pool immediately above the point at which Wilder Stream disappears underground into the Empire Cave system of galleries. We reared 20 larvae up to metamorphic size (15 Celsius, environmental chamber). Fresh water was collected from the pools of the Wilder Stream each week and all water was changed once per week. Larvae were fed dried tubifex worms. All larvae collected from the stream pool outside of the cave metamorphosed at a size  $\leq 168$  mm.

**Results**

Paedomorphic salamanders are a unique developmental form of a normally fully metamorphosing amphibian species. The paedomorphic form breeds at an adult size, but retains its aquatic larval form. The Sinervo Lab has been sampling the cave population of *D. ensatus*, since the winter of 2001 (sampling in 2002, 2004, & 2006). In conjunction with Herpetology class, We surveyed major rain events during the winter months (on foot and with snorkeling gear), which allows one to sample a population of salamanders that enter the Empire Cave through small fissures from a cave complex of unknown size. Four paedomorphs from the Cave have been collected. A paedomorphic form is defined to be a larva of sufficient size to be

considered adult size (>168 mm snout-vent length, Nussbaum et al. 1983).

Based on the sampling we have conducted, if the cave system under UC Santa Cruz is extensive, the number of breeding paedomorphic salamanders could be considerable. The relatively small number of salamanders that have been recovered is because our ability to sample other areas of the entire cave complex is greatly restricted to a few fissures of Empire Cave. All other caves that can be accessed are above the water table. We can effectively only sample one small territory of a salamander in the area of the Empire Cave. Nevertheless, every year there is reliably one animal in this territory (the Empire Cave). The interpretation of a large population of paedomorphic *Dicamptodon* cave salamanders critically depends on the amount of permanent water in the cave complex during the summer months. Early well drilling around the UC Santa Cruz campus, suggests that this cave complex might indeed be quite extensive and there is even high-volume subterranean water flow during the summer months based on dye injection studies at sites upstream from drilling sites (early surveys of UC Santa Cruz).

Most importantly, the cave population of *Dicamptodon ensatus* appears to be fixed on the paedomorphic adult stage (4 of 4 larvae from the cave paedomorphic). In contrast, of 20 larvae sampled from the adjacent stream that were reared beyond the critical size of 168 mm, only 1 remained paedomorphic but eventually transformed at a size of 168 mm size, the cutoff for paedomorphosis. All of the remaining 19 transformed into terrestrial forms before the size of 168 mm was reached (average size was 138 mm, range 115-168). The sample of stream salamander larvae was obtained 100 m upstream of the Empire Cave Drainage, in the Cave Gulch Stream. Thus, the available evidence suggests that paedomorphic *Dicamptodon* salamanders from Empire Cave are much more common in the cave than the adjoining stream (Chi-square = 19.04, 1 d.f.,  $P < 0.001$ ). Moreover, the statistical analysis supports that it is significantly more paedomorphic than adjacent populations.

The morphology of the salamander is quite unique. All cave salamanders recovered are patternless and grey in coloration, compared to the highly patterned terrestrial form that is very dark in coloration. One cave salamander became darker in the laboratory, after being reared on tubifex worms, suggesting that the grey color is from feeding on food without pigment (e.g., the pale cave isopods and amphipods described below).

*Other Paedomorphic records for Santa Cruz County.* A few other paedomorphic salamanders have been recovered from Santa Cruz County (on record at the Museum of Vertebrate Zoology, UC Berkeley), however, all of these have been collected in streams that are also downstream of known Marble deposits (Chaney 2004). We also surveyed the salamanders of Wilder Creek, in pools below the cave boil of Empire Cave. We found a few individuals with the light grey color, consistent with the hypothesis that breeding adults in the Empire Cave release these forms into the cave stream course, and some of these larvae are pushed out of the cave during winter storms. Thus, our observations on the light colored morphs of larvae could readily explain the occurrence of paedomorphosis outside of the cave in downstream pools (e.g, the aforementioned museum collections.).

*Observations on feeding ecology.* The cave salamander feeds on cave isopods and amphipods located in the pools. The number and density of isopods and amphipods are more than enough to sustain growth to metamorphic size and adult reproduction. Population dynamic studies of amphipods in other ecosystems suggest that growth is very rapid at 12 degrees C (Sinervo & Doyle 1990), the temperature of the cave. The amphipods and isopods feed on detritus washed in from sinkholes, which are abundant across the UC Santa Cruz campus. The amphipods and isopods are often found in gour pools, which are conspicuous limestone pools of permanent standing water, that provide a refuge from predation. The furthest accessible portions of Empire

Caves have a prominent series of cave pools with amphipods in abundance. The pools where salamanders have been observed are hundreds of each species.

*Observations on unique behaviors of the paedomorphic salamanders.* These remote pools where amphipods might find refuge might provide a reliable food source during the summer months of low water flow. Given the demonstrable ability of paedomorphic cave salamanders (from Empire Cave) to climb and move on dry substrates (Sinervo personal observations), it is likely that after a salamander has eaten all of the locally available isopods and amphipods in its summer pool; it could move on to the next pool upstream or downstream by short trips out of the water. Thus, the salamanders can probably move and even feed during the summer months. During the flooding in the winter a salamander could move across the entire cave system, given the low flow rates through the cave and high water levels. Thus, the cave system under UC Santa Cruz campus is very extensive and sufficient to support a large breeding population of several hundred to a few thousand salamanders, given the number of sinkholes, underground stream beds and across stream fissures indicated by the sinkhole patterns in the published campus geological reports and campus maps of the north-south fracture system ([www.es.ucsc.edu/~es10/fieldtripUCSC/cave.html](http://www.es.ucsc.edu/~es10/fieldtripUCSC/cave.html)).

## Discussion

Based on other paedomorphic salamanders, the available evidence supports the hypothesis that the Empire Cave *Dicamptodon* are a genetically distinct population segment, given that the proportion of paedomorphic salamanders is fixed at 1.0 in the Empire Cave. The only other *Dicamptodon* in species in the genus that is completely fixed on the paedomorphic form is *Dicamptodon copei* of the Olympic peninsula, Washington State. Furthermore, the caves are old (Tinsley 1985), and two endemic species of aquatic invertebrates, a cave amphipod (*Stygobromus mackenziei*) and an as yet undescribed isopod (*Calasellus n. sp.*), are both endemic to the cave system (CDFG 2001) (Ubick 2001). Thus, it is reasonable to anticipate that other organisms, like a derived aquatic salamander, will be adapted to the Santa Cruz Karst Ecosystem.

*Potential threats.* Paedomorphic salamanders are common in karst formations around the world. Essentially every one of these species is endangered or threatened, and some have gone extinct. Most notably the olm, *Proteus anguinus*, of Slovenia has been wiped out from up to 90% of the historic caves because of hydrological contamination from pollutants of human origin. A population of *P. anguinus* has been transplanted to the Pyrenees of France to ensure its long-term survival. I will be studying this translocated form, in May 2006. I will obtain additional data on the ecology of cave paedomorphic salamanders during this visit (a collaboration with Dr. Jean Clobert, Centre Nationale pour les Recherches Scientifique).

The Barton Springs Salamander of Austin Texas faces similar difficulties of surface water contamination and is considered threatened. I had opportunity to conduct a site visit of this salamander in 1994. All of the known surface habitats of the Barton Springs salamander are found within Zilker Park. On April 30, 1997 the U.S. Fish and Wildlife Service (USFWS) added the Barton Springs salamander (*Eurycea sosorum*) to the list of endangered and threatened wildlife which receive federal protection under the Endangered Species Act. The available habitat of the Barton Springs Salamander is smaller in size to the potential subsurface cave complex under UC Santa Cruz that would serve as habitat for paedomorphic *Dicamptodon*. Observations on the Barton Springs Salamander are also illuminating about the likelihood of observing adults. In many years only 1-4 adults are observed. The remainder of the population

resides in deep fissures and is likewise inaccessible as is the case with paedomorphic Empire Cave *D. ensatus* salamanders.

Ecology, life history, and density. It is important to realize that all trogloditic vertebrates (fish and salamanders) are found at low density, given the low input of resources into a cave ecosystem, and the generally low growth rate of their food supply in the cave, and the low temperature regimes experienced by cave organisms on an annual basis. In the case of the Empire Cave the food for the paedomorphic *Dicamptodon* is largely a cavernicolous isopod species and an amphipod species (Ubick 2001). In the case of vertebrates like blind cavefish, a given cave form may live to be in excess of 60-80 years. This life history greatly buffers recruitment dynamics over long time scales and allows for such forms to exist at low population densities. Based on growth rate studies at 3 different temperatures, we estimate that the largest adult recovered from the Cave is in excess of 20 years old (Sinervo et al. in prep.). These long-lived adults can breed over decades and recruit progeny over many, many years. However, it makes them particularly vulnerable to extinction. All aquatic amphibians are extremely sensitive to a wide range of chemicals, which are routinely used in urban settings such as that found on the UC Santa Cruz campus.

Data on the actual density of aquatic cave vertebrates is in fact difficult to obtain (given most of these ecosystems are very very remote and virtually inaccessible). However, during my tenure at Indiana University, I taught an evolutionary biology course at Indiana University and we made yearly field trips to visit the blind cave fish populations adjacent to the Indiana University campus, Bloomington, IN. Each year, we surveyed a 1.5 km section of blind cave fish habitat along the drainage of Blue Springs Cave, the longest subterranean navigable waterway in North America. We recorded the numbers of adult cavefish from a boat during "blue water" conditions when the visibility is superb. This population blind cavefish is at extremely low density (< 1 fish/ 25-50 m), despite their small size (8-10 cm). The paedomorphic salamanders of Empire cave are considerably larger (>168 mm) and nearly an order of magnitude more massive. Thus, the density of adult paedomorphic *Dicamptodon* salamanders are expected to be > 50 m. The habitat in Empire Cave that is inundated by winter rains is 50 m long, and there is one adult salamander in the cave on a yearly basis. This cave system extends up to areas under Science Hill, UC Santa Cruz, and down into Wilder Ranch. The other tributaries draining the karst formation are equally extensive. Thus, the number of salamanders could number in the hundreds of adults, given published accounts of the fracturing of the Karst features and the extensive jointing system in the block of Marble underlying the UC Santa Cruz Campus: ([www.es.ucsc.edu/~es10/fieldtripUCSC/images/maps/fracture.jpg](http://www.es.ucsc.edu/~es10/fieldtripUCSC/images/maps/fracture.jpg)).

During the summer months a small puddle the size of 20-40 litres in volume would be sufficient to sustain an adult. Thus, the adults do not need large bodies of water during the summer, only large numbers of water pools, which are very common in the cave complex under UC Santa Cruz, given the abundance of recorded sinkholes.

Summary Opinion. The Empire Cave populations of *D. ensatus* may be a new species, given that it is fixed for paedomorphosis and the form is common in the area of the karst topography that we can sample (Sinervo et al. in prep.). It is also clear that this population reflects a distinct population segment of *D. ensatus*. The karst topography as a whole (Marble formation under University of California, Santa Cruz) is extensive enough in area that it might support a very large population (several hundred to thousands based on the known fracturing pattern, sinkholes, and likely presence of many underground galleries that are confluent with one another). Genetic analyses comparing the cave salamanders and the surface salamanders are critically needed to determine if the cave salamander is a new species. However, the available ecological and comparative data already supports this hypothesis.

## References

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### Response to Comment Letter I-71

**Response to Comment I-71-1.** The presence of only the neotenic form of *D. ensatus* does not confirm that the population is genetically distinct, nor does it preclude the species from breeding with non-neotenic *D. ensatus* in the vicinity of Empire Cave. As discussed on page 4.4-28 of the Draft EIR, neotony is known in all populations of *Dicamptodon* (Nussbaum et al. 1983; Good 1989). Genetic analysis has confirmed that both paedomorphic and adult forms occur within the same species (Daugherty et al. 1983; Good 1989; Steele et al. 2005). Thus, without genetic evidence or breeding experiments outside of Empire Cave, it is impossible to state with certainty that speciation has occurred and it is likely that this is not a distinct species.

REC'D OCT 27 2005  
Helen Smiel  
146 Blaine St. #G  
Santa Cruz, CA 95060

Recycled  
\* Stationary \*  
via flyers, etc.

October 25th 2005

To whom it may concern: (831) 423-9738

I am an astute, concerned, active member & citizen of my city/county/community I've dwelled here since 1969 & have felt, seen, the continuous expansion of the university here in this region-area-location of our State. I am one of many persons who chose to live in this county to get away from massive populations; traffic, and all that over-population of humans creates. I'm not some stupid, foolish, old-biddi with any head strong prejudices. I am, however, an intelligent, attractive woman in my 50's who is very aware of environmental issues. I presume I'm simply wasting my time within communication as you/your company/agency/passionate builders have made up your minds to do exactly what ever and all you wish to do with regard to developing a huge, monstrous, expanded university with which to reach the bottom line: MAKING MONEY \$\$\$\$!

ARE YOU AT ALL AWARE OF THE FACTS, REALITY OF OVERPOPULATION & ALL THE CONSEQUENCES, CAUSES, EFFECTS HERE IN OUR STATE?

California's population grew by nearly a half million people last year which will mean nearly 5 million more people over the coming decade. The perilous impacts of unending population growth on our environment infrastructure, and quality of life are already staggering! Traffic jams clog our roads, highways, our schools are overcrowded, and dysfunctional; energy & water supply shortages will continue to be causes by over-demand, and the number of Californians who can afford to buy a home is ever -shrinking. WHERE THE HELL ARE ALL THE PROJECTED 21,000 UC students going to LIVE???? When I first moved here from San Jose, the next county north of here--the pop. of Sant Cruz city was 20,000! my roots are in Calif. I am not wealthy enough to go live in Monterey, Carmel, nor would I really want to...THE UNIVERSITY FUELED THE REAL ESTATE GREED IN THIS COUNTY, initially, and then the dot-com.-gold-rush which popped. HAVE YOU NO CONSIDERATION FOR: Endangered species are threatened with extinction due to urban sprawl; nine out of ten Californians live in areas where the air is unsafe to breathe, and we can expect these problems to worsen if this State continues to grow at a faster rate than the ENTIRE United States! Solutions won't happen overnight or at the next election, I know.

I have traveled extensively in the past..I have met, related to, fornical with, shared time with--numerous peoples of various races, nationalities! So, don't call me some racist-bigot-idiot! I'm all for diversity, ie., students from all over the world--visiting for awhile..hopefully, to go home & work for changes & positive results in their nation. I knew & dated E.Indians &



Persians/Iranians in junior college in San Jose. It's now my experience & knowledge that at least--9 out of 10 people living in Santa Cruz county have only moved here, come here, chosen to live here in the last 15 years!! THERE'S NOT ENOUGH JOBS FOR THE CITIZENS LET ALONE STUDENTS!! HORRIFIC HOUSING COSTS, LACK OF HOUSING, POLLUTED BAY, MORE CRIME, FILTH, SIRENS, NOISE, TRAFFIC, AND ON AND ON AND ONE! WHY THE HELL MUST YOU EXPAND???? I enjoy the university--and often frequent there to enjoy shows, presentations, the Women's Center, art shows, workshops, etc. In a word: GET REAL! This is 2005--not 1955!!! I acquired a B.A. degree. It's worthless. I know countless people with Ph.ds' who have no work in their field of study. So, beyond EXPANDING ONE'S MIND--colleges are BRAIN FACTORIES CHURNING OUT WORKERS WHEREIN THERE ARE NEVER ENOUGH JOBS IN THE 21st CENTURY! Thank you for your *attention.*

# CALIFORNIANS FOR POPULATION STABILIZATION

*Let's Do Something About The State Of Immigration.*

## Water, Population Growth and Regional (non)Planning

By CAPS Board Member, Stuart Hurlbert, Ph.D.

The timidity, myopia and naiveté of the popular press are matched only by that of congressional and government bureaucrats in their capacity to assure continued rapid decline in water availability and the quality of life.

There has been renewed talk of severe drought and dwindling water availability to Southern California, and as the usual quick fixes are debated pro and con, the long-term solutions to water supply problems are conveniently ignored.

Tweaking the system—taking a little more water from agriculture, allowing a little more degradation of riverine, wetland and delta ecosystems, renegotiating allocation agreements, devising new transfer arrangements (that will not be legally liable for damage to third parties)—all this is to fiddle while Rome burns.

California has been growing at 1.7 percent per year, and illegal immigration has surged recently in response to Bush's promises of amnesty and jobs for anyone in the world willing to come and work at a lower wage than a U.S. citizen. Growth rates in other states in the Colorado River watershed are only slightly less.

No person or entity that pretends to solve water problems without pointing out the need to reduce population growth rates to zero percent per year (and the feasibility of doing so) should have any credibility.

Consider the fruitlessness of the same-old, same-old approaches in this way. Assume everyone in California—agriculture, industries, homeowners, parks and golf courses, etc.—reduced water usage by 10 percent per capita today.

But with a population growth rate of 1.7 percent per year, total water use in California would be exactly the same 6.25 years later as it was just before the 10 percent reduction in per capita use. Population growth is completely canceling out all the short-term fixes that politicians, lawyers, planners, and environmentalists focus on so preferentially.

The recent draft EIR for the San Diego Regional Comprehensive Plan typifies that mindset. It states that the "preferred approach" for regional growth will allow the San Diego region to capture some of the approximately 93,000 housing units that are expected to be exported from the region by 2030 under currently adopted land use plans. They want the cities and County to amend their general plans to allow for more population growth! The draft EIR states: "Based upon regional projections, approximately 93,000 housing units will be exported from the region if the RCP is not implemented." I say, "What's wrong with that?" Won't it keep the San Diego region from becoming even more vulnerable to long droughts and fire seasons than it now is?

Is a "shrinking" Colorado River the real problem? Or is it the shrinking brainpower in government and planning agencies? And in the media? And in environmental organizations?

# CALIFORNIANS FOR POPULATION STABILIZATION

*Let's Do Something About The State Of Immigration.*

## Changing Rainfall Patterns Threaten California

By Allison Solin, CAPS Senior Writing Fellow

Increases in pollution—due to a rapidly growing population—are changing rainfall patterns globally, and an already drought-prone California is destined for heat waves and less rain.

The study, co-led by atmospheric scientist Veerabhadran Ramanathan, found that the existence of a “brown cloud” of pollution, dust, and chemicals is slowing solar evaporation from oceans and causing an overall decrease in rainfall.

Tiny flecks of carbon make up only about 10 percent of this pollution, but seem to play the largest role in preventing rain. These dark particles absorb solar radiation and scatter sunlight, producing the trademark “haze” that surrounds very crowded cities like Los Angeles. The carbon particles also form nuclei that attract cloud moisture into water droplets, making clouds thicker and darker.

The Director of the Climate Change and Impacts Laboratory at UC Santa Cruz, has created a model based on population and pollution projections that shows what will happen if current trends continue. By mid-century, levels of carbon dioxide are expected to double, causing significant temperature increases, especially in the highest altitudes—the mountains that contain the snow pack that holds over one-third of California's irrigation and drinking water. In addition, the number of annual heat waves is expected to double for Los Angeles and quadruple for San Francisco, bringing related health problems.

What this means overall is more droughts and more heat as California continues to fill itself beyond capacity and population-driven pollution prevents the rain we so desperately need. “This is where the population is,” says Sloan, “and this is where the giant sucking sound for the water is.”

## Response to Comment Letter I-72

**Response to Comment I-72-1.** Section 4.11, *Population and Housing*, indicates that the 2005 LRDP designates land adequate to build housing on campus for 50 percent of all undergraduate and 25 percent of all graduate students by 2020 (Draft EIR page 4.11-15). About 6 percent of new students would live outside the County. The Draft EIR evaluates the housing impacts associated with the remainder of the new students that would be seeking housing within the city and the county (see LRDP Impact POP-3). Also, note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

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DATE: 11/16/05

TO: DRAFT EIR TO UCSC LRDP PUBLIC HEARING

VIA FAX TO:

Number of pages including this one: 13

The Habitat Conservation Plan (HCP) and Environmental Assessment (EA) are online at ucsc.edu, go to where the LRDP is discussed.

TO 2005 LRDP COMMENT

Here is what I think we have to express at the public hearings:

The Environmental Assessment (EA) explains and implies that horses and cows are thought to be compatible with the Ohlone Tiger Beetle and the Red-Legged Frog (the Plan Species). The EA repeatedly explains that cattle grazing is thought to be beneficial to the Plan Species (because grazing keeps the vegetation low and maintains trails), hence UCSC proposes to continue to allow grazing in the preserve area (only during Ohlone Tiger Beetle inactive periods). Because the effects of cattle grazing on Ohlone Tiger Beetle larvae are unknown, UCSC plans to conduct an approximate 5 year pilot monitoring study to determine such effects. Grazing will be monitored every year, and adaptations to the grazing operation may be altered to help protect and enhance the habitat for the Plan Species (within the limits of the grazing lease). The EA also clearly states UCSC can take away the grazing permit at any time, and other vegetation management tools may be utilized, including grazing by other livestock species, mowing, and raking. On pg. 2-11 of the EA, it is specifically stated that horses, at a ratio of 1.5:1 may replace cattle. This implies that horse activity is thought to be as compatible with the Plan Species (or even more compatible because more horses can be allowed than cows). The EA also repeatedly clearly states (for example, see pg. 2-10 of this EA) that on-going use of the trails helps to maintain adequate habitat for the Plan Species. Furthermore, the EA states that despite the UCSC Police patrols, bikers still illegally use the Inclusion Area A Preserve trails. On pg. 2-12 there is a footnote that specifically states that despite the fact that it is illegal for mountain bikers to use the Inclusion Area A Preserve, and despite UCSC Police patrols of the area, mountain bikers still use the area. This implies that UCSC Police patrols have not been able to stop the illegal use of the area by bicyclists.

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In conclusion, I feel that a constructive approach to management of Inclusion Area A Preserve is as follows:

- encourage controlled grazing by cattle and/or horses (with appropriate portable fencing if needed to assure protection of Plan Species);
- encourage development of a Volunteer Horse Patrol to help monitor illegal use of Inclusion Area A Preserve by mountain bikers, when such use threatens Plan Species

Moreover, the EA does not explicitly discuss other permitted land uses (such as horseback riding) besides hiking (allowed) and biking (not allowed) in the Inclusion Area A Preserve which is being created to mitigate for the damage done by the proposed developments. The suggestions above would explicitly expand the recreational activities that could be allowed on this open-space land, while still being compatible with environmental concerns.

SEE ATTACHED "ENVIROHORSE"

## EnviroHorse

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### **ENVIRONMENTAL ASPECTS OF HORSES ON TRAILS**

#### **Abstract**

Due to the urbanization of America, the general population has lost its contact with and innate understanding of most animals, including livestock. The horse, in particular, is a unique animal. Because it is large and seldom encountered, people assume that it is no different than other species of large animals. This paper is meant to help people understand horses and their interactions with the environment when they encounter equines on trails.

Every trail user potentially causes some impact to the environment by their use. For lightweight low-impact users, the effects are usually minimal. Scientific studies indicate that the horse may be more benign to wildlife than hikers, nature studiers and photographers. There are no studies that significantly implicate trail use by horses with spreading weeds. Natural erosive forces are likely to be the major alteration factors in trail erosion. Horses on trails are not detrimental to water quality according to the latest studies by NAHMS, University of Colorado and UC Davis-Tulare.

#### ***Equestrian Use of Trails is "Passive" Recreation***

Every trail user potentially causes some impact to the environment by his/her use. Compared to motorized usage, hikers, bikers and horses have been variously described as passive, light-weight, and/or low-impact trail users. The effects of passive use on trails are usually minimal. In virtually every mixed use trail reference within the State of California and the nation, the horse has been defined as a passive, low impact or light weight user, *even in the most sensitive environments: Natural Preserves.*

- Edgewood Park and Natural Preserve Master Plan Adopted May 1997 (Parks and Recreation Division San Mateo County) Pg. 11 B. Definitions 6. Definition of Low-Intensity Recreation Uses: "Define low-intensity recreation uses as passive recreation uses that will not create a direct or cumulative adverse environmental impact. Such uses include, but are not limited to, on-trail hiking, walking, jogging, horseback riding, nature observation, education, docent-led group tours, and picnicking and camping...". This is a natural preserve of rare serpentine grassland that supports numerous threatened and endangered species

- The Mid-Peninsula Open Space District (MROSD) on the San Francisco Peninsula defines Trail Use Suitability to include: Hiking, Running, Equestrian, and Bicycling throughout most of their 43,000 acres of Natural Preserves.

- Santa Clara County Countywide Trails Master Plan, 1995, "identifies hiking, horseback riding, and bicycling trails" as lightweight use.

- The USDA Region Five Shasta-Trinity Nation Forest Trail Procedure Guide builds trails to include the horse as a lightweight user.
- The US Forest Service/USDA Rocky Mountain Region Guide for Mountain Trail Development builds trails for hikers, joggers, and equestrians, all considered lightweight, low-impact users.
- The California Trails Foundation uses the California Department of Parks and Recreation Klamath District/North Coast Redwoods District Trail Manual. Section 1.4 Trail Standards for Class I Trails states, "These trails include handicapped accessible, equestrian, interpretive and hiking trails assigned a Class I point criteria value. "
- The State of Washington Department of Natural Resources' Recreation Trail Maintenance produced in cooperation with the USDA and NPS designs trails for low-impact users, including equestrians.
- The Bay Area Ridge Trail creates a multi-use trail system around the San Francisco Bay for hikers, bikers, joggers, and equestrians. All considered lightweight users.
- Marin County Countywide Trails Plan (1984 and seq.) considers hiking, horseback riding and bicycling as passive usage of its open space preserves.
- The Rocky Mountain National Park includes equestrians as low-impact users.

### **Wildlife and Horses**

Horses are prey animals. They have eyes on the side of the head. They are herbivores and leave the trace scent of an herbivore on the trail. Humans, dogs and cats are predators. Their eyes are on the front of the face. As they walk, they leave the trace scent of omnivore on the trail that can impact wildlife.

Horses are recognized by wildlife as prey animals, even when a person is sitting on their back. An approaching horse passing along a trail provides sound rhythms in the cadence of a four-footed hoofed prey animal to wildlife, which informs wildlife of a non-threatening presence. For reptiles, rodents and other terrestrial life forms, the percussion pulse of the approaching horse provides warning. Being warned diminishes flushing/flight response that consumes wildlife energy. It is not uncommon to find deer, bobcat and coyotes that allow horses to get within feet of them on trails before calmly moving off. Horses rarely step on lizards, mice and other fast moving wildlife. Riders can easily avoid slower moving wildlife.

Bennett and Zuelke (1999) undertook an extensive review of recreation effects on birds and concluded that disturbance from recreation has temporary effects on behavior and movement of birds. Direct approaches caused greater disturbance than tangential approaches, rapid movement by joggers was more disturbing than slower hikers; children and photographers were especially disturbing, and passing or stopping vehicles were less disturbing than human foot traffic. Horses and riders did not disturb birds.

Sporadic human use can disturb wildlife. However, "many animals are less afraid of horseback riders than hikers. Riders seldom dismount to touch flora or fauna. Riders can be a dedicated and energetic volunteer and advocacy group. The horse-rider relationship promotes a non-



anthropocentric worldview that facilitates ecological understanding. Horses are useful for patrols, supplying trail maintenance, and doing surveys. Horse traffic can be used to maintain firebreaks and seldom-used trails." (Williams et al, 1998)

### **Weed Seeds and Horses**

The primary vectors of weed seed spread are wind, water, avians, and rodents. There is no documented evidence of the horse spreading weeds. A Montana study by Tyser and Worley (1992) implicated timothy (*Phleum pratense*) and bluegrass (*Poa pratensis*) as species that had been included in past roadside seeding by the local highway authority. In California, the Department of Transportation (CalTrans) has recently been identified as the number one spreader of yellow star thistle by its past practices of scattering various weed-laden hays during roadside rehabilitation projects to control erosion. CalTrans has now switched to wetland chaff from rice crops for soil stabilization purposes which does not contain thistle seeds.

It is unknown to what extent high quality livestock forage available contains weed seeds. However, most horse owners would not buy junk hay for their horses. Garbage in, poor performance out! The days of large populations of lower-grade, inexpensive stock horses are long gone. Horses cost money, and the purchase price is only the down payment for ownership. Horsemen cannot afford to compromise their investments by feeding weedy hay. Responsible horse owners are concerned about getting quality feed that has been properly planted, harvested, and cured for their horse food dollar. (Berto 2001). Many horses are fed processed or pelletized feedstock. This is forage that is heated. The heat destroys weed seeds.

According to Dr. Deanne Meyer, UC Davis Manure Management Specialist, the majority of all horse excrement occurs at home in pastures or paddocks. It is, therefore, highly unlikely for the horse ever to be a major vector of weed seed spread simply from its use on a trail.

By 2003, all forage brought into trailheads on federally- and state-managed properties will be required to have a weed-free feed certificate. Equestrian trail users have been active participants in designing this program in collaboration with land managers. Information on this subject can be found at [www.weedfreefeed.com](http://www.weedfreefeed.com).

The horse has a very inefficient gut: it's a one-way through-put system. Horses are physiologically incapable of vomiting or regurgitating. If something gets stuck on the way through, the only way to get it out is by surgery or physical intervention (at arm's length!). As a consequence, horses must be fed carefully to avoid the common and potentially fatal condition of colic. The bulk of unprocessed forage consumed by California horses is alfalfa (*Medicago sativa*), rye grass (*Lolium multiflorum* or *perenne*), Timothy hay (*Phleum pratense*) and oat hay (*Avena sativa* (white cultivated oats)). If horses were a vector of seed spread, these grasses could be prevalent in our open spaces and parks, but they are not, except possibly in places where they were introduced in earlier times as grazing forage for cattle.

The California Exotic Pest Plant Council ([www.caleppc.org](http://www.caleppc.org)) lists the following plants as the major invasive culprits: Tamarisk, knapweed, and thistles. Horses do not eat these species, many of which are actually toxic to the equine. Star thistle consumed by horses can cause a potentially fatal Parkinson-like disease. Stinging nettles recently killed two trail horses at Pt.



Reyes National Seashore. Knapweeds are very toxic to horses. For the health of our animals, equestrians are keenly interested in the abatement of exotic and invasive plants.

Because the horse is not perceived as a major contributor to the spread of weed seed from trail use, trail manure has been little studied. However, there is much literature on composted horse manure. Harmon (1934) notes that composted horse manure virtually kills all weed seeds.

Janzen is the researcher who has done the most studies on seeds in horse manure. Among his conclusions are:

- Most seeds are dry or otherwise inconspicuous and are not associated with specific dispersal agents (e.g., the horse). Seeds are primarily dispersed by gravity, wind, surface water movement, soil erosion, birds, ants, dung beetles and rodents.
- The horses killed a substantial fraction of the seeds they swallowed through chewing and the inorganic acids and enzymes of digestion.
- Horse gut differs from cow gut. No horse had a seed passage rate anywhere near as fast, or a seed survival rate as high, as the cow.
- The primary sites of seed digestion in the horse are corners, folds, and eddies of the gut and the caecum (a specialized pouch for fermentation of ingested nutrients). In the horse, the caeca somehow remove hard objects (and seeds) and retain them for unknown periods of time. Only one brass button out of 57 fed was voided for the duration of a 70-day study!
- There is no evidence that passage through the horse "enhances" germination of surviving seeds
- Seeds must be sufficiently small, tough, hard, and inconspicuous to escape the molar mill and spitting response of a large mammal. Seed coats must have the ability to resist digestion during a transit period of days to months. Horses are as likely to be an intense seed predator as they are to be a possible dispersal agent. "The seed that is so impervious that the horse does not kill it by molar or chemical scarification may then be so slow to be scarified by soil processes that it has significantly fewer generations than the less impervious morph."
- The longer the seeds are in the animal (or buried in composted dung), the higher the seed mortality by digestive processes.
- If a seed germinates immediately in the dung, the community of dung-degrading organisms may kill it.
- Severe mortality to seed sprouts in a manure pile is likely, due to inter- and intraspecific crowding.
- Large herbivores do not significantly carry seeds in hair or coats.

Finally, Benninger-Truax studied edge effects of trails in Colorado. She notes that seeds can pass through horses unharmed and be deposited in feces. *She states that she found no documentation that horses are major source of exotic species in her literature search.* In her Master's thesis, Benninger did a greenhouse study on seeds extracted from horse manure. Seeds from 15 plants grew, but only 8 were identified. While all 8 were exotic, NONE of them appeared in her test plots on the trail, although she observed them elsewhere along trails. She determined that horses from the stable in the park that were not allowed to graze in the park (which had exotics along some trails) and had controlled diets were not a problem for weed seed dispersal along the trails. A simple Best Management Practice (BMP) is obvious here.

The erroneous assumption that manure is a major source of exotic species suggested by some should be put to rest by Benninger-Truax's statement: "...however, I have found no documentation of this in the literature." Neither has EnviroHorse a decade later. While some

seeds can survive the journey through the horse mouth and gut, Janzen's statement suggests its fate: " While an *Enterolobium* seedling germinating in a dung pile is picturesque, its chances of surviving the dung beetles, mice, dryness, and root exposure characteristic of dung piles are very slim."

Seeds are primarily dispersed by gravity, wind, surface water movement, soil erosion, birds, ants, dung beetles and rodents. Since the majority of horses are carefully fed domestic grasses, have physiology mitigating against seed survival, and primarily defecate in their home paddocks/pastures, it is unlikely that horses are a significant vector for seed spread when they are on trails.

### **Trails and Horses**

Soil erosion is a two-part process: soil particles are loosened largely by wind or raindrop impact (lesser by freeze/thaw, wet/dry cycles) and transported by the flow of wind and water. The four primary factors involved in erosion are climate, soil characteristics, topography and ground cover. In the United States soil erosion removes an estimated 2,100,000,000 tons of soil per year. (Gergus, 2002)

According to public testimony to the MROSD on December 16, 1998 given by Professor and Chair Gordon E. Brown Jr., Stanford University Dept. of Earth Sciences Synchrotron Radiation Laboratory Faculty, the primary causes of erosion are natural and far surpass any impact of use of horses on trails.

In a 5-year study, Summer (1990, 1996) concluded that horse traffic was not the single dominant process active on trails. Trail degradation was a function of landform, climatic and catastrophic events, and geomorphic processes. Seasonal use was important in keeping the soil exposed and vegetative cover absent on trails. Such processes as sheetwash, rilling, gullyng, and soil creep actively modified and eroded the trails and resulted in a measurable fluctuating rate of change over time. Limited data suggested that foot traffic produced effects similar to horse traffic in exposing the trail to the effects of geomorphic process or climatic events. Intensive runoff resulting from natural events can cause significant geomorphic change in a trail from such processes as gullyng and earth slumps. Erosion from these events may overshadow effects of horse use on trails.

Williams et al (1998) concur that factors other than user type are more closely linked to trail degradation. Lightly used trails may grow over and require more maintenance, whereas moderate horse activity may help to maintain a multiple-use trail. The bottom line is that horse trails can be maintained on most natural preserves without unacceptably impacting ecological values.

The physical impact of horses on trails is highly variable-dependent. In high rain regimes and certain soil types, more physical impact would be expected. Seasonal closure of some trails may be appropriate. Water should be diverted off of all trails to prevent erosion. In order to further mitigate an impact in more susceptible areas, rocking equestrian trails may be appropriate. Spreading 3/4" hard native rock, decomposed granite (DG), or basalt provides a firmer trail tread. Over time, this rock sinks into the soil and "hardens" the trail tread, improving year-round conditions for all users. Repeated rock application over time provides excellent tread surfaces for mixed users and does not significantly alter soil chemistry in sensitive

habitats (Murarka, 1996). The Clarkia Trail in San Mateo County's Edgewood Park and Natural Preserve is an excellent example of how a trail can be maintained year-round in potentially mucky black clay soil using local serpentine rock. Specifications for construction of mixed use trails can be found in Appendix A.

### ***Water Quality and Horses on Trails***

The endpoints of scientific inquiry for water quality studies are human exposure to pathogens for health implications and nutrient/sedimentation pollution for environmental implications. Excrement or wastes of any type should never be deposited or disposed of in water bodies.

#### *Human Health*

Coliforms are ubiquitous in the environment. While they are not necessarily harmful to people if ingested, coliforms are an indicator that unwanted matter is present in the water system. Their virulence is little understood; hence the precautionary care to prevent human exposure to excess amounts of them. Coliforms, however, have not been known to injure aquatic organisms or wildlife according to Dr. Michael Rugg, Toxicologist, California State Fish and Game, Yountville CA.

Recent scientific studies and their replicates confirm that adult horse guts do not significantly contain E. coli O157:H7, Salmonella, Cryptosporidium, or Giardia, which are the organisms of most concern in water-borne spread of disease. (Atwill, et al; see several references.)

#### *Groundwater*

We have found no studies that we found implicating equids in groundwater contamination. Horses eliminate primarily in their pastures and paddocks (Meyer 1997). Manure left in a loose heap in deposits on trails loses its nitrogen rapidly (New Hampshire 1990). It is inconceivable that trail horses making dispersed deposits could possibly impact ground water. Most contamination of this sort occurs from areas associated with feedlots where thousands of commercially harvested animals are confined at one time, or from excessive fertilization added to soils.

Compared to other large livestock, horse manure is relatively "dry" and "hot" due to unique digestive enzymes and flora. Once deposited, it can achieve total mineralization in as short a time as 21 days (Ajwa, et al 1994). Because it is so dry at excretion, nutrients tend to volatilize rapidly into the atmosphere. One of the challenges in preserving nutrients in horse manure is to get them turned into the soil as rapidly as possible before the nutrients are lost to the air.

#### *Surface Water*

Again, there are very little data about impacts from horses. Bacteriological and nutrient effects (on water bodies) are seldom detectable except next to stables. (Williams et al, 1998). As part of the 319(h) grants from the Clean Water Act, new data are becoming available. Five studies have taken place in the San Mateo County watersheds to date. (2002). It is important to keep in perspective that these studies involve settings where horses live 24 hours/day next to a creek. Thus far, data have not confirmed significant adverse affects on the surface waters, immediately adjacent to them. Leaking aging septic systems, residential over-fertilizing, and certain agricultural practices are suspected where data exceed recommended standards. Given this, it is difficult to conceive of a situation where the manure from a few horses on a trail could adversely impact surface water nearby. Again, most trails are not sited immediately

adjacent to water bodies and Mother Nature has a marvelous buffering capacity when even as little as 10 feet of vegetation is available at the side of a trail.  
[www.ca.nrcs.usda.gov/rts/sec4.htm](http://www.ca.nrcs.usda.gov/rts/sec4.htm)

Phosphorus and potassium are the trace constituents of most concern in horse urine. They bind to soil particles and may be eroded away into surface water bodies. They would be present only in the minutest of quantities in manure on trails, thus of little concern. For horses paddocked near streams, a recent study by Dr. Michael Rugg on accumulation of urine salts in soil in arid climates demonstrated that these salts could be dissipated in just three days by watering dry paddocks to invite biological degraders to the soil. Thus a simple BMP of turning on a sprinkler once a day will not only keep dust down, but will mitigate urine salt accumulation in paddock soils.

#### *Stream Crossings*

There is a trend to protect stream banks from erosion by trail use and discourage trail users from disturbing streams that support fisheries. Bridges are being built across historic fords. It is known that as little as 0.025ppm of ammonia in water can kill salmonoid species (Rugg).

While horses can readily defecate on trails, they do not as readily urinate on trails. (Gosslin and Wolford, 2001). Because of their physiology, horses under saddle generally signal riders of their need/intent to urinate. They are allowed to stop walking. Horses then stretch their bodies out in a rather awkward position to urinate, often standing on the front edges of their hooves simultaneously in a splayed posture. This places them in a vulnerable position if attacked by a predator. 60 million years of evolution and survival means that this is an activity not undertaken lightly by the horse. Many horses prefer the safety and security of their stall or paddock to undertake this function (UC Davis Book of Horses 1996). Because of this unique behavior, it is easy for the rider to spur the horse out of a stream to avoid urination in a water body. Because the urination posture is impossible to achieve during locomotion, it will be more apt to occur with a relaxed horse at rest (Horst 2000). Urination can be readily managed to avoid elimination in water bodies.

Equestrians are being educated not to allow their animals to eliminate during stream crossings. BMPs have evolved such as stopping prior to a crossing to allow the animal to rest, relax, and (hopefully) eliminate PRIOR to the crossing. Simply not allowing the horse to stop and dawdle in the water will also help to prevent contamination. Many horses do not like getting their feet wet and have a natural aversion to taking any more time than necessary in water. A small study is underway to collect data on horses eliminating while crossing streams. It is expected to take several years before a robust database is available. But preliminary data collected in 2000-2001 indicated that very few horses eliminated during stream crossings. In a letter to equestrians dated July 2, 2001 Dr. Michael Rugg described the risk of stream crossing to fish and aquatic species, but concluded by saying, "However, as long as the riders are aware of the risks, and make an effort to avoid having their animals urinate or defecate in or near the creek, the risks to fish and aquatic life (of horses making a stream crossing) are acceptable."

#### ***Trail Etiquette and Horse Physiology***

For safety sake, other trail users should always yield the right-of-way to equestrians. Would you argue with a Mack Truck if you were a VW bug on the highway? Stop and stand quietly off the trail until the horse passes. Failure to do so can endanger the hiker / runner as well as the

horse and rider. Fast-moving trail users may startle horses and slower-moving people. Please verbally announce your presence immediately, especially when approaching horses from behind, and ask the rider for instructions on how to pass the animal. The rider may ask you to step off the trail so he/she can ride by, or may ask you to walk by while he/she stands the horse. The circumstance may vary depending on the personality of the horse involved and physical conditions of the site.

Why do horses "spook"? Horses have large eyes that provide a wide range of peripheral vision. Each eye boasts a field of 215 degrees of monocular fixation (focusing one eye on a subject) with the fields overlapping in front of the horse's head to create 60-70 degrees of binocular fixation (where both eyes can focus on a single object). This allows the horse to view the ground ahead more sharply and with depth perception (stereopsis). However, horses have small blind spots in front of and behind them that can only be clarified by turning the head to observe with its monocular vision. Any stationary object in the horse's blind spots may seem to "jump" when its image moves in and out of the peripheral field of vision, as the horse turns its head in an attempt to focus. This can result in a typical fleeing or "spooking" behavioral response. Unlike humans, a horse must move its head up and down to focus its eyes on an object. When a horse holds its head upright and high, it is usually focusing on an object in the distance and cannot clearly see the ground directly beneath its nose. The vision of a trotting or galloping horse is not as acute as that of a stationary horse. A horse's range of vision along with its degree of visual acuity should always be taken into consideration when you approach a horse on the trail, particularly from behind. (UC Davis Book of Horses 1996)

### **Disclaimer**

EnviroHorse has prepared these materials for information purposes only and are not legal advice. Subscribers and online readers should not act upon this information without seeking professional counsel. Every attempt has been made to assure that the information contained in this publication is accurate. EnviroHorse assumes no responsibility and disclaims any liability for any injury or damage resulting from the use or effect of any product or information specified in this publication.

### **About the Author and this Paper**

Adda Quinn worked for a nationally known research institute for 21 years prior to her retirement. Her research projects focused on contaminated soil and groundwater issues. As a trail advocate, she has provided research results in a variety of regulatory debates, both nationally and locally. She is a founding member of and on the Board of Directors for EnviroHorse.

This paper is a work in progress. It is our intention to update it periodically as new information becomes available. For the most recent version, always consult the website at [www.californiastatehorsemen.com/envirohorse.htm](http://www.californiastatehorsemen.com/envirohorse.htm)

### **About EnviroHorse**

#### *Mission*

EnviroHorse identifies, gathers, and disseminates information to ensure/enhance equine access to public / private lands. Where data gaps exist, EnviroHorse sponsors research to fill them.

#### *Goals*

- 1). To establish and provide a clearinghouse for information on horses, horse trails and other related equine uses. This effort will include
  - synthesis papers on important environmental and health issues
  - hard copy of source data by subscription
  - electronic network site with linkage to other resources



- electronic database for pertinent papers
  - linkage to environmental and community benefits from horses
  - linkage to legal resources for equine issues
- 2). To identify and raise funding for research on priority issues.
- 3). To work with other equestrian organizations to assure continued equine access to public and private lands.

If you have any scientific studies that you think would be helpful, these papers are a work-in-progress and EnviroHorse would love to have copies of them. Please contact us at [envirohorse@yahoo.com](mailto:envirohorse@yahoo.com). If you have found these citations helpful, please consider a donation to EnviroHorse to help us find and sponsor more research. Papers are housed at [www.californiastatehorsemen.com/envirohorse.htm](http://www.californiastatehorsemen.com/envirohorse.htm)

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Atwill A number of excellent references are now available on horse gut pathogens  
E. Johnson, Atwill, E. R., Filkins, M. E., and Kalush, J. "The prevalence of shedding of Cryptosporidium and Giardia spp. based on a single fecal sample collection from each of 91 horses used for backcountry recreation." Journal of Veterinary Diagnostic Investigation. Vol. 9. Pp. 56-60. 1997. In the winter 2000-2001, Dr. Atwill of UC Davis-Tulare, conducted a further research study on 250 horses in the San Francisco Bay Area. Due to concerns expressed by organic gardeners about the safety of using composted horse manure as a soil amendment, Atwill determined again that insignificant levels of E. coli 0157:H7 and *Salmonella* were in adult horse guts. Composted manure showed no E. coli 0157:H7 after 24 hours in pile residence. Research results should be available in the near future. A 1998 NAHMS study on "*Salmonella* and the US Horse Population" confirms *Salmonella* is not an issue in horses ([www.aphis.usda.gov/vs/ceah/cahm/Equine/eq98salm.htm](http://www.aphis.usda.gov/vs/ceah/cahm/Equine/eq98salm.htm)).

K. N. Ford, Swinker, A.M., Traub-Dargatz, J. L., and Cheney, J. M. "The Prevalence of *Cryptosporidium/Giardia* in the Trail Horse Population Utilizing Public Lands." Proceedings of 15th Equine Nutritional Physiology Symposium. Pp. 223-237. 1997, and JEVs 18 (1) 1998. And paper available by Laurie Fio with Rob Atwill: "Cryptosporidium in the Water - Are Horses to Blame?" M. M. Peng, 1 Xiao, L., 2 Freeman, A. R., 2 Arrowood, M. J., 2 Escalante, A. A., 2 Weltman, A. C., 3 Ong, C. S. L., 4 MacKenzie, W. R., 2 Lal, A. A. 2, and Beard, C. B. 2 "Genetic Polymorphism Among *Cryptosporidium parvum* Isolates: Evidence of 2 Distinct Human Transmission Cycles." Emerging Infectious Diseases. Vol. 3. No. 4. Oct.-Dec. 1997. Pp. 567-573. University of Michigan<sup>1</sup>, CDC Atlanta<sup>2</sup>, PA Dept. of Health<sup>3</sup>, University of British Columbia<sup>4</sup>.

Bennett, KA and E. Zuelke . 1999. The effects of recreation on birds: a literature review. Delaware Natural Heritage Program, Smyrna, DE 1977.

Berto, Connie. Marin County Horse Council. Personal Conversation, 2000.

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Gosselin, Dr. Larry DVM, pers. comm. 4-10-01; Dr. Larry Wolford specializing in equids, pers. comm. 4-5-01.

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offered.

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Meyer, Dr. Deanne. 1997. "Horses spend most of their time in pastures or paddocks where the majority of their excrement is deposited, collected and managed. Horse manure is about 70-80% liquid and 20-30% solids." Personal communication, UC Davis Manure Management Specialist.

Murarka, Dr. Ishwar. Edgewood Park and Natural Preserve Master Plan Adopted May 1997, Environmental Services Agency Parks and Recreation Division, San Mateo County California. Appendix C-1 "Potential Impacts of Using Identified Non-Native Rocking Materials in Serpentine Grassland".

New Hampshire Dept. of Ag and USDA. Good Neighbor Guide for Horse-Keeping: Manure Management. 1990.

Rugg, Dr. Michael Toxicologist, Calif. Dept. Fish and Game in personal communication to Adda Quinn and Alistair Bleifuss (RCD TAC), 1998. That year, EnviroHorse provided Dr. Rugg with a bucket of soil heavily contaminated by horse urine from an equine who refused to urinate anywhere but in one spot for 10 years. His analysis indicated that urine salts could be mitigated by light watering of dry paddocks during summer. Introduction of water improves the ability of biological soil degraders to decompose urine salts in three days. A letter dated July 2, 2001 by Dr. Michael Rugg to Michael Murphy, an RCD liaison, described the risk of stream crossing to fish and aquatic species, but concluded by saying "However, as long as the riders are aware of the risks, and make an effort to avoid having their animals urinate or defecate in or near the creek, the risks to fish and aquatic life (of horses making a stream crossing) are acceptable."

Santa Clara County Countywide Trails Master Plan. November 1995. Figures G-2 and 3. Permission to use only if distributed at no cost.

Summer, RM. 1996. Geomorphic Impacts of horse traffic on montane landforms 41(2): 126-128.  
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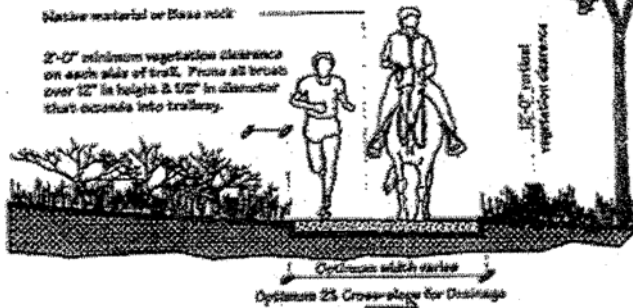
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Williams, B. and L. Conway-Durver. "HORSE TRAILS IN ECOLOGICAL RESERVES" presented at Clemson University Horse Trails Symposium, 1998. Mr. Williams holds a BS Degree in Forestry from Clemson University. He worked for the U.S. Forest Service as a River Ranger on the Sumter National, organized the Association of Forest Service Employees for Environmental Ethics and is the Executive Director of the Chattooga River Watershed Coalition.

UC Davis School of Veterinary Medicine, Ed. Mordecai Siegal. Book of Horses: A complete Medical Reference Guide for Horses and Foals 1996. Chapter 4 Equine Behavior by Carolyn Stull Pg 59.

## Shared-use Trails Natural Tread - Double Track Trail Equestrians, Hikers & Bicycles

Shared-use Trail Routes: a trail route designed, developed, and managed for all types of users. Use would be accommodated either on one Shared-use Trail or a combination of parallel limited-use (see Figure G-4) and/or single-purpose trails. (See Figure G-5).



Landscape Designation	Typ. Maximum Trail Grade	Average Terrain Slope	Optimum Trail Tread Width
Valley Floor Areas	3.3%	0-5%	12'-0"
		6-10%	8'-0"
		>10%	N/A
Foothill Areas	7%	0-5%	12'-0"
		6-10%	10'-0"
		>10%	8'-0"
Mountain Areas	10.5%	0-5%	6'-0" <sup>min</sup>
		6-10%	6'-0" <sup>min</sup>
		>10%	4'-0" to 6'-0"

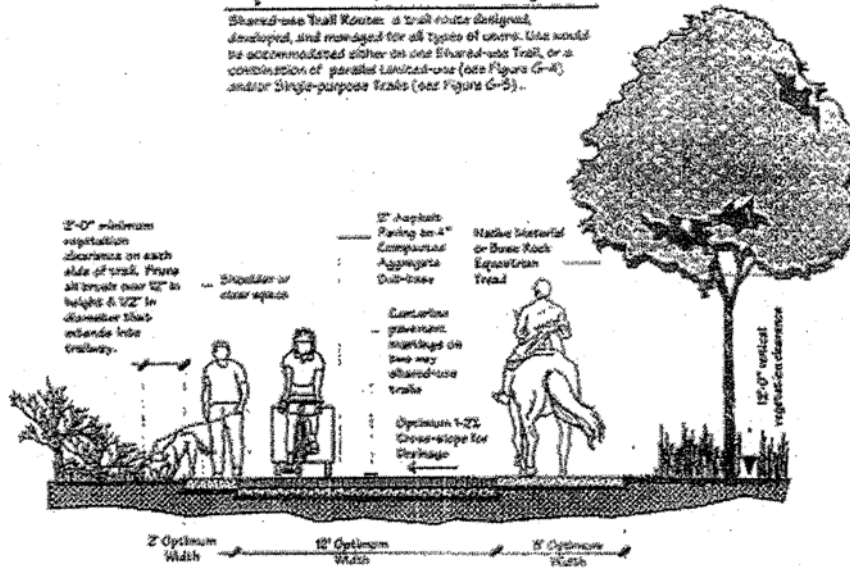
**Notes:**

- For trails typically outside of Urban Service Areas as shown on the County General Plan Land Use Map.
- "Optimum" the best or most favorable condition for a particular trail situation from the perspective of responsible management.
- Should a situation be encountered where the optimum width indicated can not be achieved or a staged development approach is used where narrower trails precede the optimum buildout width, mitigation measures should be used to provide for trail user safety. Such measures could include, but are not limited to: brush removal and clearing to augment lines-of-sight, trail pullouts at regular intervals, one-way trail management, signage, or circumventing requirements.



### Shared-use Trails Paved Tread - Double Track Trail Equestrians, Hikers & Bicycles

Shared-use Trail Route: a trail route designed, developed, and managed for all types of users. Use would be accommodated either on one Shared-use Trail, or a combination of parallel limited-use (see Figures G-4) and/or single-purpose trails (see Figures G-5).



**Notes:**

- 1. "Optimum" the best or most favorable condition for a particular trail situation from the perspective of responsible management.
- 2. Should a situation be encountered where the optimum width indicated can not be achieved or a staged development approach is used where narrower trails precede the optimum buildout width, mitigation measures should be used to provide for trail user safety. Such measures could include, but are not limited to: brush removal and clearing to augment line-of-sight, trail pullouts at regular intervals, one-way trail management, signage, or dismounting requirements.

← Back

### Response to Comment Letter I-73

**Response to Comment I-73-1.** This commenter appears to address the Environmental Assessment prepared by the U.S. Fish and Wildlife Service for the Habitat Conservation Plan for the Campus's Ranch View Terrance and Emergency Response Center projects, rather than on the Draft LRDP EIR. The Draft LRDP EIR does not evaluate management of the Inclusion Area A preserve.

**From:** Stanley M Sokolow <[overbyte@earthlink.net](mailto:overbyte@earthlink.net)>  
**To:** UCSC LRDP EIR Comment <[lrdp-eir@ucsc.edu](mailto:lrdp-eir@ucsc.edu)>  
**Cc:** Thomas Bolich <[dpw023@co.santa-cruz.ca.us](mailto:dpw023@co.santa-cruz.ca.us)>, Mardi Wormhoudt  
<[bds034@co.santa-cruz.ca.us](mailto:bds034@co.santa-cruz.ca.us)>

**Subject:** My public comment on LRDP Draft EIR

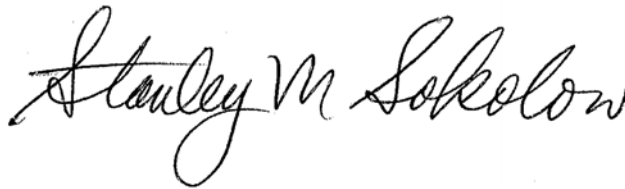
**Date:** Mon, 31 Oct 2005 09:22:25 -0800

Dear UCSC:

Please take the attached letter (.pdf file) as my public input on the draft EIR. It is a copy of the letter I am sending to the Santa Cruz County Board of Supervisors, containing my comments about an aspect of the EIR that I feel is not adequate.

Sincerely,

Stanley M. Sokolow  
301 Highview Ct.  
Santa Cruz, CA 95060



PDF document attachment (ToBOS\_ReUCSCLRDP.pdf)

**Stanley M. Sokolow**  
301 Highview Court  
Santa Cruz, CA 95060  
Telephone 831-423-1417  
Fax 831-423-4840  
Email [overbyte@earthlink.net](mailto:overbyte@earthlink.net)

October 31, 2005

Board of Supervisors  
Santa Cruz County  
701 Ocean Street, Room 500  
Santa Cruz, CA 95060

RE: UCSC Long-Range Development Plan Draft EIR (item #32.1 on the 11/1/05 agenda)

Dear Supervisors:

I am writing to urge the Board to approve Supervisor Wormhoudt's recommendation that the Board authorize her and the County staff to prepare a response to the draft EIR at the earliest possible time. In addition, I request that the Board direct staff to include in that response a detailed reply to the EIR's stormwater drainage aspects, particularly with respect to the Moore Creek runoff.

I am one of 20 homeowners who live in the neighborhood accessible only by means of Highview Drive, which crosses Moore Creek, in the unincorporated County area south of UCSC. In February of 2000, just a year or so after the University completed its Arboretum Dam spillway project which dramatically decreased the holding capacity of the Dam, Highview Drive was flooded by a torrent of storm runoff coming down the Creek from the University. The University is aware of this event, and mentions it in the EIR. Not only did the flooding cover a section of the paved road with a foot of rushing water, but also the water did damage to the embankment upon which the road sits, which we privately repaired without any help from the University. This private road has been crossing Moore Creek at this point since at least as far back as the early 1900's, half a century or more before the University acquired its campus land in 1966. The Arboretum Dam (also known as Cowell Dam) has been in existence since the late 1800's, with a storage capacity that was more than adequate to detain heavy storms of the "100 year" recurrence magnitude. The storm in February 2000 has been estimated to have been a 20 to 40 year storm event, according to UCSC documents we've read. Our most senior homeowner has lived here for more than 50 years, and in his memory, the road had previously only flooded once, and that was due to debris clogging of the inlet to the culvert pipe which is at the bottom of the road embankment to allow the creek water to flow on its natural course. We privately maintain the road and annually remove debris at or near the inlet to prevent clogging.

Starting in 1992 and completed in 1998 or 1999, the University planned and executed a project which intentionally lowered the maximum height of water that the Arboretum Dam could detain. UCSC administrators chose to do this so that the Dam would no longer be regulated by the State division that monitors dam safety. I suppose this was so the University would not have as much regulatory red-tape that might prevent it from doing what it wants, without oversight. Further, construction for lowering the capacity was going to cost about \$65,000 less than constructions to comply with the dam safety regulations. Also, the lowering of the dam capacity allowed substantial parts of the Dam basin to be used by the Arboretum for plantings. As you know, the University has taken a major part of the Arboretum's land for construction of a University employee housing project (Ranchview Terrace), so perhaps this dam land was planned to compensate for loss of that portion to be taken for housing. This decreasing of dam capacity was done by installing a 48" diameter spillway pipe that allows all of the subsequently inflowing water from the Moore Creek watershed on campus to flow out of the Dam once the Dam reaches a capacity of 29 acre-feet of water. Historically, prior to UCSC acquiring the property, the Dam had a capacity of 98 acre-feet before it

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would spill over. That capacity has never been reached in any of the storm data historically available. The water detained by the dam in a heavy storm was historically allowed to flow out and down Moore Creek at a slow and measured pace by a 14" diameter outflow pipe at the base of the Dam. But after the University's dam alterations, this protective effect of the Dam was dramatically decreased. The University documents also indicate that the outflow pipe was to be altered in the same project as the capacity reduction spillway. The contractor was to install a 12" diameter pipe in the place of the 14" diameter one, and to extend the 12" pipe toward the Empire Grade culvert. If this pipe was indeed installed as planned, the EIR is wrong when it says the outflow of the Dam is 14". With only a 12" outflow, the Dam would fill even faster during a storm and would be more likely to reach the storage limit, thereafter spilling the downpour's subsequent runoff down stream, under Empire Grade, further eroding the creek bank, then onto our road, and down the rest of Moore Creek in a torrent.

The draft EIR says that the culvert under our road is too small. Yet our culvert was historically adequate for storms until the dam capacity was willfully lowered by the University. In a repaving project which our neighborhood privately did in the 1990's, we had installed an 18" pipe culvert in addition to the existing 12" culvert. This increased the flow capability of our culvert to 325% of the pre-existing, historically adequate capacity, and would be a spillway if the lower pipe became clogged with debris. That is, we more than tripled the flow capacity to handle severe storm events. Our project was planned and completed prior to and without knowledge of the University's dam capacity reduction. The University never notified us, the neighbors downslope, about the planned reduction of detention capacity. Our added spillway pipe should have been more than enough flow to handle what comes down from upstream, if the University had not decreased its Dam's capacity. The EIR done by the University in connection with the Dam capacity reduction project, like the current draft LRDP EIR, predicted that there would be no significant adverse impact of that project, yet just a year or two after its completion, a big storm proved that prediction to be wrong.

The new LRDP EIR says that the construction, particularly the doubling of size and complete reconstruction of the Family Student Housing complex, will increase the runoff in a 100-year event by about 9% even after the mitigations are implemented, but the EIR does not consider that to be significant. I do. It is hard to believe that the improvements within the Moore Creek watershed on the west side of the campus will not significantly impact the stormwater outflow from campus down Moore Creek, particularly since we have actual experience of failure of the University's water detention system in the February 2000 storm event. The draft EIR primarily draws conclusions from a 25-year storm under normal conditions when the subterranean karst drainage is functioning ideally, not from the standardly used 100-year flood event and not in the "worst case" of siltation clogging of the karst sinkholes in the Moore Creek corridor, which is known to be a repeating and unpredictable occurrence. The more recent rainfall database used by the University's consultants showed that this February 2000 storm event would be likely to recur every 20 years. I believe that the EIR is inadequate in that it does not consider the impact of storms between the 25 year and 100 year magnitudes on downstream properties, and it gives little weight to the "worst case" condition of clogged karst drainage that is known to occur.

The recent events in New Orleans, where that City relied upon levees designed only to withstand a category 3 hurricane at most, knowing that someday a category 4 or 5 storm would come along and overwhelm the levees, sound a warning bell that should ring out now in our situation. However, here the University's Arboretum Dam already was able to withstand far more than the worst case 100-year situation and yet for its convenience and minor cost saving, the University willfully and dramatically decreased the effectiveness of its stormwater detention system by lowering the dam capacity (from 98 to 29 acre-feet) without adequate regard for the downstream problems this action would cause.

The University's position regarding our Highview Drive culvert has been that the culvert (even after we added the 18" pipe) is too small to handle what comes down the Creek. They say that we should redesign and rebuild the culvert at the bottom of the creek, which would be a major expense to us that the University refuses to pay, even though their actions have created the flash

59000 2/11/10

flooding problem. In California, it is long-established law that the downslope landowner is not required to make improvements to handle increased stormwater flows resulting from an upslope landowner's alterations to its land. That is the problem and liability of the upslope owner. The University is obligated to mitigate the effects of its construction upon its stormwater runoff. Landmark legal cases involving the Tahoe Regional Planning Agency have established that a project may be required to make distant off-site improvements to such features as stormwater management structures, if necessary to mitigate the impact of the proposed construction. The draft EIR is inadequate in dealing with the Moore Creek runoff problem that the University is creating in its long-range plan. This runoff and its flooding and erosion risks not only impact our private road and our access to our homes for travel and emergency services, but also impact the erosion problem below the County's Empire Grade culvert and the riparian bank along Moore Creek through the County and City down to the sea.

In summary, I request and urge the Board to respond to the University's draft EIR. The response should include a detailed and serious discussion of the Moore Creek runoff problem and of the cumulative impacts of the University's past and newly proposed construction, particularly regarding its calculated action in very recent years that dramatically decreased the stormwater detention capacity of the long-existing Arboretum Dam. It is my personal opinion that the University is obligated to restore the historical holding capacity of the Arboretum Dam, or at least to restore it to a full 100-year worst-case capacity, and take related actions to comply with the dam safety regulations, before beginning implementation of the new long-range plan within the Moore Creek watershed. Restoring the capacity of the Dam would be simple. It would just involve extending the vertical "glory hole" spillway pipe to a greater height by adding an extension pipe at the inlet, and then implementing the dam safety measures required by state regulations. The University's hydrology expert showed that even a small increase in spill height would be able to restore a great amount of the Dam's capacity. As an alternative, the University could improve the downstream drainage and erosion control features beyond the University boundary so that Moore Creek and the culvert under Highview Drive are able to withstand the increased outflow from the Arboretum Dam spillway in the worst case, but that would not be the best mitigation of the problem. The University's experts have already noted that erosion problems have recently been exacerbated downstream from the Dam, after the capacity was reduced. The "Best Management Practice" in this case would be to restore the dam capacity.

There's an old joke that goes something like this: "Question: Where does an 800 pound gorilla sit? Answer: Wherever it wants!" I hope that the University administration does not "sit on" us by continuing this mistake of decreasing the storm runoff protection that the Moore Creek corridor has historically had, and then telling us it's our problem not theirs. According to the draft EIR, that's exactly what they are planning to do to the County, the City, and all of the private property owners along Moore Creek. The County's public works staff should be able to provide more expert interpretation and comments about the EIR with respect to the University's past acts and planned future developments as they affect the Moore Creek stormwater problem.

Sincerely yours,



Stanley M. Sokolow

cc: Frank Bolich, Santa Cruz County Dept of Public Works;  
 Santa Cruz City Council;  
 Suzanne Healy, City of Santa Cruz Dept of Public Works;  
 2005 LRDP EIR Comment, UCSC Physical Planning and Construction;

### Response to Comment Letter I-74

**Response to Comment I-74-1.** The commenter is correct that a 12-inch-diameter sleeve was installed within the 14-inch outlet pipe from the Arboretum Dam. The EIR text has been revised to reflect this. Please refer to the Final EIR Volume IV, Chapter 3, *Changes to Draft EIR Text*.

With regard to the size of the culvert under Highview Drive, please refer to Response to Comment LA-2-81. Changes to the Arboretum Dam and its associated storage that have already occurred are part of the existing conditions for this EIR. This EIR addresses the potential impacts of increased flooding to the Highview Drive area as a result of new development under the 2005 LRDP compared to existing conditions. Project-specific details on the potential changes to flow rates and volumes in Moore Creek due to proposed development in the Moore Creek watershed will be provided in the project-level CEQA documents at the time that specific development projects under the 2005 LRDP are proposed, as described in Master Response HYDRO-1. This LRDP EIR provides a program-level estimate of impacts. The analysis that was performed already accounts for a "worst case" condition of clogged karst drainage because it was assumed that 100 percent of the Moore Creek watershed on the campus was contributing to surface runoff, while in fact, much of the water in the drainage disappears through sinkholes and swallow holes and does not leave the campus as surface flow.

The nine percent increase in runoff in the Moore Creek watershed reported in the Draft EIR was based on the best estimate of the increase in impervious area due to development under the 2005 LRDP. This estimate does not assume mitigation or other control measures that would reduce runoff volume, and does not represent the percent increase in projected volume of flow in Moore Creek that would occur at Highview Drive. The increase in flow at Highview Drive, if any, would be less than the generalized rate of increase for the entire Moore Creek watershed due to implementation of control measures to reduce flows and volumes, attenuation from sinkholes, and storage in the East, West, and Arboretum Dam, and also because little to no development is anticipated in the Moore Creek drainage below the dams.

Any new development would be required to conform to the storm drainage system standards in the Campus Standards Handbook, which require that the post-development runoff rate not exceed the pre-development runoff rate. This standard was included as LRDP Mitigation HYD-3C. The EIR also proposed LRDP Mitigation HYD-3D to minimize increases in the volume of runoff. If LRDP Mitigations HYD-3C and HYD-3D are fully implemented at all new development sites, the peak flows and volume runoff that would reach the Arboretum Pond would not increase substantially over current conditions and there would be no increase in the probability of flows overtopping the dam and thereby contributing to downstream flooding.

Based on reports of flows discharging through the Arboretum Dam spillway in February 2000 (a storm determined to be a 20- to 40-year event), it was estimated that the dam could spill during a storm greater than a 20-year event under existing conditions. Therefore, if under the 2005 LRDP conditions, the additional flows from these larger events are not controlled upstream of the pond and additional runoff reaches the pond, this additional runoff would increase the probability of the overtopping of the dam. The increase in the probability of overtopping cannot be reasonably estimated for two reasons. First, design information for the future projects in the Moore Creek watershed is not available so it is not possible to estimate new flows and the volume of new runoff that would not be detained, retained or infiltrated. Second, a large volume of runoff in the Moore Creek drainage is lost to sinkholes and swallow holes, and

the proportion of new runoff absorbed by these in-stream sinkholes and swallow holes is not known. Note also that in large storms, once the ground is saturated, water runs off pervious ground surfaces at about the same rate as from impervious surfaces. Therefore, in large storms, the runoff from the Moore Creek watershed under 2005 LRDP conditions would not be much greater than the runoff from the watershed without the 2005 LRDP development.

In addition to the controls which would be required from new development, several of the storm drainage improvements proposed for the Moore Creek watershed in the Infrastructure Improvements Project would also reduce the potential for downstream flooding in the Moore Creek watershed. Five storm drainage improvement projects would divert water from this watershed and discharge it mainly into Jordan Gulch. In addition, 11 other improvements would either decrease the amount of surface runoff that reached Moore Creek or slow the rate of runoff flow downstream during a storm by infiltrating and dissipating runoff where it is generated. Two storm drainage improvements will improve sinkhole capacity and three improvements will detain water at places upstream. All of these improvements would help reduce the risk of high flow levels downstream. Note that because the Arboretum Dam is located between Highview Drive and the Moore Creek storm drainage improvements, there is not always a direct relationship between runoff reduction upstream and runoff levels at the Highview Drive culvert; however, these storm drainage improvements will help to reduce the potential for flooding at the Highview Drive culvert.



UC Santa Cruz 2005 Long Range Development Plan  
Draft Environmental Impact Report

NAME: Kate Stafford DATE: Nov. 16, 2005

ADDRESS: 1530 Scenic Dr. Felton, California  
95018

PHONE: (831) 375-3250 EMAIL: Katecougar@aol.com

AFFILIATION: Environmental Committee for the San Lorenzo Valley  
VVC; also UCSC alum.

COMMENT:

#1) I went to Kinbo's to buy a draft EIR of the LRDP & they told me the hard-copy was not for sale, only the CD. They said I could copy it then, when I told them that I thought we could buy a hard copy, the person in charge said I was incorrect. Please tell them that they were mistaken → and make certain all staff understand that they are to sell the hard copy

1

#2) Please extend the comment period - as mentioned by several City Council members.

2

#3) Please see the campus as a unique place, an extraordinary place; I would ask you to see the campus as sacred ground while creating this plan which will touch

3

Place your comment in the box provided at the back of the room, or mail written comments regarding the Draft EIR addressed to:

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, California, 95064

so many beings.  
Please think about "carrying capacity" and what is truly appropriate scale in our County, and smallest in the State

## Response to Comment Letter I-75

**Response to Comment I-75-1.** Because hard copies of the Draft EIR were very expensive to produce and because the document was available for downloading at the UC Santa Cruz Office of Physical Planning and Construction website (<http://lrpd.ucsc.edu/draft-eir.shtml>), the Campus anticipated that the demand for these would be small. Therefore, the Campus provided Kinko's with electronic copies from which to print out hard copies as they were requested. In the case of the one complaint the University received about this during the public review period, Kinko's was prepared to print a hard copy; however, the individual who voiced the complaint expected to be able to purchase a copy on the spot rather than having to place an order and come back later to pick it up.

**Response to Comment I-75-2.** In response to public comments, the 60-day public review period was extended by 23 days and closed on January 11, 2006.

**Response to Comment I-75-3.** Please refer to Response to Comment PH-42-3 regarding carrying capacity.

January 11, 2006

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, CA 95064

RE: SUPPLEMENTARY COMMENTS ON 2005 LRDP DRAFT EIR

To Whom It May Concern:

A major concern with the DEIR is the 120 acres of new development slated for the undeveloped North Campus above the main campus core.

It is peppered with springs, seeps, and shallow groundwater that feed the lower campus watersheds and are recharged by annual rains percolating through the soil over most of the 450 acres. Large areas around the springs and seeps in the North Campus are statutory wetlands and the DEIR does not adequately discuss or analyze these wetlands.

1. Since UCSC is aware that there are statutory wetlands, why hasn't a wetlands delineation been done for the North Campus area?
2. The DEIR does state that areas of wetlands and wetland indicator plants exist on the northern campus in section 4.4 on bioresources, but there is no detailed analysis in the hydrology section. Why not?

In order for the public and UCSC to accurately assess environmental impacts from development, a wetlands delineation must be done and therefore the DEIR analysis is inadequate.

3. Development plans around wetland areas will also require involvement and approvals of other appropriate government agencies such as the Army Corps of Engineers, US Fish & Wildlife Service, US Fish & Game, the Central Coast Regional Water Quality Control Board, and the County of Santa Cruz. Has UCSC consulted with these agencies about wetland delineation on campus?

Furthermore, before designing proposed development and the footprint of such development in wetland areas, UCSC should have done a hydrologic sufficiency of wetlands support study. Otherwise, it is impossible to accurately assess the environmental impacts.

4. Why hasn't UCSC done such a study?
5. Will such a study be performed if UCSC completes a wetland delineation in the future?
6. What criteria will be used to determine whether such a study should be done?

7. What will be the impacts of alteration of the wetlands hydrology in the North Campus to the watersheds fed by these wetlands? Please be specific about the effects to the San Lorenzo River, Jordan Gulch, Moore Creek, Cave Gulch and Wilder Creeks.

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8. What will be the effects of wetland alteration to species of concern?

9. What does UCSC propose for mitigations for impacts to wetlands?

An analysis based on the wetlands delineation and hydrologic sufficiency study must be included in a revised DEIR. It will then be necessary for a revised DEIR to be re-circulated to the public for study and comment.

Thank you for your attention. I look forward to your response.

Sincerely,  
Don Stevens  
320 Cave Gulch  
Santa Cruz, CA 95060

**Response to Comment Letter I-76**

**Response to Comment I-76-1.** Please refer to Master Response BIO-2 (Wetland Impacts).

Date: Wed, 11 Jan 2006 16:25:50 -0800  
From: "Dr. John D. Stickle, D.C." <jdstickledc@sbcglobal.net>  
Subject: Comment on Draft EIR

Comment on Draft EIR

To Whom It Concern:

I attended UCSC from 1973 to 1975 when I graduated with a BA in Humanistic Psychology.  
I worked for Central Garage as a Driver during this time and up to early 1976. At this point in my life, I have about 22 years of education. I think the education that I received at UCSC was simply the best education of all the institutions that I have attended. While I was attending UCSC, I learned about listening, resolving differences among parties, doing mediation vs. confrontation, and key principles of environmental sustainability and carrying capacity. I was lucky enough to attend UCSC when the teachers and professors at UCSC were second to none. It was an exciting time to be a student and a participant. I was one of many who was instrumental in keeping the narrative evaluation alive and well at UCSC.

I write all of this as a preface because I think I am uniquely able to make comments about the Draft EIR because I was there before the development of much of the UCSC campus and I have seen the results since the LRDP has come into play.

First, I deplore the tactics and politics that have come into play between the current UCSC administration and the City of Santa Cruz in regard to the LRDP and the current EIR. To wit, UCSC is simply not living up to or adhering to the principles that I learned as a student while attending UCSC. The principles of open communication, dialog and others I listed above. This is also not what UCSC taught me about problem solving, especially problems that have many facets and involve many people.

Second, I am frankly astounded at lack of information that this document

(EIR) "provides". I have read many EIR's and this Draft EIR lacks continuity, crucial facts, documented facts, and other critical information that one would need in order to be able to assess the true impact of all the aspects. On that basis alone, the Draft EIR demands redoing.

1

Third, in 1988, I believe that there was a LRDP for UCSC put forth and adopted. Many of the issues of that plan have neither been addressed nor mitigated. These issues must be addressed and/or mitigated first before any further action is taken or any more building at UCSC takes place.

2

Fourth, based on what I learned at UCSC, we have reached, by any definition, the absolute carrying capacity and environmental sustainability of UCSC. As well, we have never resolved or adequately dealt with the primary issue of water. Even with a new desalinization plant, which will help, it will not solve this issue without making the cost, delivery and use of water yet another crucial concern for many citizens. I do not think that the City of Santa Cruz, nor the residents, should pay for the water costs due to UCSC expansion.

3

Fifth, even if the issue of getting the additional traffic up and down to UCSC is solved (which is a huge IF), parking on campus is already a horrendous challenge. It is also very expensive for students and staff and fees will no doubt have to go up even further. More folks would also mean either more parking structures and/or using more beautiful areas of UCSC as parking lots. This is also unacceptable and is not a solution.

4

Sixth, the air quality of Santa Cruz is in jeopardy. Adding more cars and more pollution is not a solution, it is an environmental crisis. The Draft EIR is inadequate here as well.

5

Seventh, any calculations that would "help" us figure out how we can utilize the remaining carrying capacity of our water system are a huge mistake. Rather, we need to focus on how we can preserve what is left, not find a way to use it up. We simply

6

can not afford  
to use up our reserve: our environment is fragile and we are linked to it  
and it to us.

6

Eighth, any more wetland loss is another huge mistake and should not be  
allowed. If one  
is reading about how there is a direct consequence to many systems when  
wetlands are destroyed  
(i.e., the wetlands around New Orleans), then we must make the right choice  
and keep wetlands.

7

Ninth, I was stunned to hear that there are 400 unrented units at UCSC.  
This should be  
addressed because even more students, staff, faculty and family will stress  
the already  
overly taxed housing available in Santa Cruz. This is yet another deficit  
in the Draft EIR.  
I have watched rents climb to truly unbelievable heights in Santa Cruz.  
More and more  
landlords and other administrative entities are doing less and less to  
provide even legally  
rentable units in Santa Cruz, let alone do any maintenance to keep them  
livable. Adding  
another 6,000 students plus staff and families will only serve to further  
damage the  
housing market in Santa Cruz. Too many good folks have left Santa Cruz  
because of the  
lack of affordable housing already. Do we really want to increase this  
problem?

8

Finally, I know that I have not addressed many, many other important issues  
and concerns  
not mentioned (or simply glossed over) in the Draft EIR for UCSC. If this  
document  
is actually worth the cost paid for it, I must have made a very poor career  
choice.  
This EIR reminds me of the scene in the Wizard of Oz where the wizard is  
making  
a lot of noise (read many printed pages) and really, not much is happening:  
it's all show.

I think if UCSC is allowed to go forward on this project as represented in  
the EIR,  
that it will be the deathnoll of both UCSC and our wonderful city of Santa  
Cruz. I  
was at UCSC when it was considered one of the most beautiful campuses in



the  
world. Frankly, I do not read about that distinction being made nowadays.  
We have  
already lost too much due to the expansion of UCSC: it is time to really  
consider what  
our choices are, what we can learn from the past, and reject any more  
development  
at UCSC. We need to be talking about preserving and protecting what we have  
now,  
so that we will have something special to have in the future.

Sincerely,

Dr. John D. Stickle, D.C.  
UCSC Alumni 1975

## Response to Comment Letter I-77

**Response to Comment I-77-1.** Please refer to Response to Comment LA-2-25 for additional information about the appropriate level of detail for a Program EIR.

**Response to Comment I-77-2.** Please see Responses to Comments SA-4-2 and LA-6-7.

**Response to Comment I-77-3.** Please refer to LRDP Impact UTIL-9 (Draft EIR pages 4.15-30 through -37) and Section 5.2.15.3 in Master Response UTIL-1 for information about the Campus's contribution to the need for a new supply source (i.e., a desalination plant) under both normal and drought conditions. In addition, in compliance with Government Code 54999, the University will pay its fair share of the cost of improvements necessary to develop a new source of water (see Draft EIR, page 4.15-38). Because the development of a new water source will be necessitated by the cumulative demand in the entire service area, not just by the campus's demand, the University is required to pay its fair share, which is less than the entire cost of the improvements. Regarding the University's obligations and Section 54999, please see Master Response MIT-1.

**Response to Comment I-77-4.** Please refer to the Responses to Comments LA-2-141 and LA-2-142 regarding parking impacts, new parking improvements, and parking supply projected under the 2005 LRDP.

**Response to Comment I-77-5.** Air pollution from additional cars traveling to and from the campus is analyzed in Section 4.3 of the Draft EIR. The analysis includes mitigation measures to minimize air pollution impacts. Section 4.14 (*Transportation and Circulation*) also includes mitigation measures to reduce vehicle trips to and from campus.

**Response to Comment I-77-6.** In recognition of the limited water resources in the project area, the 2005 LRDP Draft EIR includes a suite of mitigation measures that are designed to reduce the use of water on the campus in both normal water years and during drought years. These measures have been revised and re-organized in response to comments. Please see Master Response UTIL-2 for additional information about these revised mitigation measures.

**Response to Comments I-77-7.** The University acknowledges the importance of wetlands. Any impacts to wetlands due to development under the 2005 LRDP would have to be permitted by the U.S. Army Corps of Engineers (ACOE), the Central Coast Regional Water Quality Control Board (CCRWQCB), and/or possibly the California Department of Fish and Game, as discussed in LRDP Mitigation BIO-3D on pages 4.4-43 and 44. As stated in this mitigation measure, if the University directly or indirectly impacted wetlands, the University would restore adequate wetland acreage of adequate quality to ensure no net loss of wetland extent or function.

**Response to Comment I-77-8.** Please see Response to Comments LA-2-103 and LA-6-5 regarding on-campus housing vacancy rates. Also, please see Master Response ALT-5 (Increased On-Campus Housing Alternative).

Date: Fri, 9 Dec 2005 06:27:28 -0800 (PST)  
From: Cindie Stoops <cambar@sbcglobal.net>  
Subject: Draft Environmental Impact Report  
To: lrdp-eir@ucsc.edu

I have great concerns about the destruction of wildlife habitat that will result from your expansion. I also have concerns about the adequacy and accuracy of your biological assessment. There are a number of inaccuracies such as "Common Ravens characteristic of the grasslands on Campus". In addition, a number of the documents you reference are old and outdated. This gives me little trust in the biological assessment and makes me question the validity of other aspects of the environmental impact statement. Better data is needed prior to proceeding.

1

As a native Santa Cruzan, I also have great concerns about the impact of your expansion on the general quality of life the County, housing, traffic, etc. It's my perspective that the University never has and should take more responsibility for their impact on the community and give funding to local government bodies and community agencies to assist them in mitigating the negative effects of campus expansion.

2

Cindie Stoops  
301 Redwood Heights Rd.  
Aptos, CA

## Response to Comment Letter I-78

**Response to Comment I-78-1.** The assessment of potential impacts to biological resources in the Draft EIR is based on surveys conducted by UC Santa Cruz students, staff, and consultants. The majority of the studies referenced in the EIR have occurred since 2000 and are, thus, the most up to date information available on biological resources. Errors and inaccuracies identified during the comment period have been corrected in the Final EIR.

**Response to Comment I-78-2.** Please see Response to Comments SA-4-2 and LA-6-7 regarding the implementation of previously approved and currently proposed mitigation measures. As indicated in both of these responses, the University has contributed funds to the local government for required off-campus improvements identified in the 1988 LRDP EIR and will continue to do so with the implementation of the 2005 LRDP.

From: "Jacob J Thomas" <jjthomas@ucsc.edu>  
Subject: trees  
To: lrdp-eir@ucsc.edu  
Date: Mon, 09 Jan 2006 23:30:53 -0800

To whom it may concern:

As an artist and graduate student in literature I am very interested in working with the university to document/celebrate the trees that are going to be removed for development. I am a part of an art-collective called TATALAS and we hope to obtain a grant and permission to do art pieces that engage the trees that are slated for removal. Ideally, we would like to install paintings and ceramic pots with representations of the trees in the buildings where the trees formerly lived. TATALAS consists of Mattie Leeds, Alanni, and myself and we are actively working and self-publishing a bi-weekly newsletter. We want to be a part of the planning process if possible. Thanks.

Kindly,  
Jake

Response to Comment Letter I-79

**Response to Comment I-79-1.** Comment noted.

From: "Amelia Catherine Timbers" <timbers@ucsc.edu>

Subject: LRDP Comment

To: lrdp-eir@ucsc.edu

Date: Wed, 11 Jan 2006 15:30:21 -0800

Dear Planning Staff,

Here is my comment, both pasted in and attached. Thank you.

Amelia Timbers

UCSC student, no affiliation besides

Dear Regents et al:

In my opinion, the DEIR is woefully, horribly inadequate for the reasons to follow. It is replete with many examples of crippling vagueness, ignores some of the most substantive environmental questions facing UCSC expansion, and offers only skeletal remarks on mitigations for virtually every section aside from Cultural Resources, which seems alright and is consequently the least controversial of the topics within the scope of the EIR. If I had any power over it, I would fire the consultants. As a senior environmental studies major who has studied CEQA, I could have written a monumentally better DEIR than this one.

Further, commenting on the EIR was hardly advertised. As part of my job, my co-intern and I distributed 600 fliers around campus, however this seems like it hardly made a dent. Little effort was made to get students involved despite the fact they deeply and sincerely care for their school and the environment. However, no one can act without information, and the student body is about 99.9% unaware of the entire LRDP process. I assume this is because the student body is a surefire source of opposition the UC would rather not deal with. I have always had this problem with CEQA, that there are no measures written into it to get stakeholders actually involved, and this was proved once more in this case. Notices of preparation are inadequate to get real people, non-bureaucrats, involved in responding to development that will greatly affect their lives. Mitigations: UCSC could have informed Resident Assistants, who could have talked to residents. UCSC could have held widely publicized seminars on the LRDP with the planning staff. UCSC could have put up fliers at bus stops, the way UCSC Arts and Letters does. UCSC could have hung a banner in the Quarry plaza, or could have held a DEIR rally. The options are numerous and endless, and UCSC ignored all of them. Students are the people, second only to Santa Cruz locals, impacted by this expansion, and both of those parties were systematically disenfranchised during the comment period of this project.

I assume UCSC will also want to feel good about extending the comment time; wasn't that a move to enfranchise the public and encourage participation? Hardly. On the contrary, extending the comment period was the least that UC

could have done, as the comment period originally fell between Thanksgiving and Christmas, a time Americans are historically distracted by the holiday season and not attentive to politics. Whether or not placing the commenting then was intentional, to discourage commenting, I will never know or care to know. What is certain is that logistically, which anyone with common could figure out, it would be notably better to have had commenting in June, or September, or a similar months devoid of national holidays or popular vacation times.

I would like to note specifically that I am writing as a student, not a representative of any other group, although I will speak from experiences gained through other jobs and clubs, experiences which are my own. My job at UCSC is a new creation becoming popular at campuses around California. It is to "ease tensions" between the UCSC and the community as a "Good Neighbor Initiative" Intern. Having sat through the three-hour denouncement of this document at the City Council yesterday, I must say that this EIR comes off looking dishonest, malicious, and bullying. The public does not like it because it is so inadequate, insolently so. Its inadequacy is an insult to this community, and indicates that UCSC believes it can do whatever it wants, include making a mockery of the CEQA process by putting forth a DEIR which suggests no mitigations to avert the significance of the most important impacts on the Santa Cruz environment. No one likes this much arrogance, in any context, and it is unwise to broadcast it unless one seeks to alienate themselves from their community. This document has made my job, and the job of anyone in PR at UCSC, infinitely and exponentially more difficult than a better EIR would have.

The only rational alternative that should be endorsed is the "No Project" alternative. Rather than incremental growth, the UC Regents must recognize the need for a "Small Town Policy" which allows cities a veto power over UC expansion plans, based on a municipal evaluation of local resources. Regents removed from the local political situation are in no position, in terms of comprehending the complexity of the local community, to have the knowledge necessary to approve or reject a DEIR from a place they possibly have never been to. This system is neither democratic nor sensible, and serves only the UC profit margin, which in turn has not recently helped students or academics in the least. However, the cost in political resistance to be found in Santa Cruz is more costly than any benefit of adding students here.

In Santa Cruz, resources such as water, intact infrastructure, suitable air quality, fluid traffic and affordable housing are already maxed out. The UC system needs to find somewhere else to put the ten thousand more people they would like to direct to Santa Cruz over the next decade. The mandate to accept qualified students to the UC system does not specify that they end up in Santa Cruz. UCs cannot expand indefinitely. There is both a



spatial and political limit to expansion, and we have hit both here in Santa Cruz.

AES 3 A, B, p.17: Clarify and expand the definition of "to the extent feasible" in reference to protecting aesthetics. "To the extent feasible" is inadequate language because it provides no information, at all, about what sort of result may occur and whether the mitigation will actually materialize. Feasibility is subjective. Without clarification, the developer of the future gets to decide what is sufficient mitigation to reduce the impact to less than significant. This is inadequate, lacks oversight, and tries to hide the potentially significant impact of aesthetics from overriding concerns. If the developer decides, arbitrarily or not, that mitigation is not feasible, then there will be no mitigation and these two mitigations should be deleted from the EIR, or left as potentially significant. If there is no mitigation, this is inadequate. Mitigations, to be useful, need be clear and planned ahead of time, not left to future hopes of altruism which are already not demonstrated by UCSC development.

1

AES 5C p. 20: I leave alone mitigations that have quantities associated with "extent feasible" language. Again, please clarify what "extent feasible" means in this context by providing a figure that describes what the manner of construction will be, and what proportion of mature trees will be preserved, since neither is directly addressed in the text. Without this specification, this mitigation is inadequate since it may not exist and this aesthetic problem remains potentially significant.

AES 5D p.20: The Site Stewardship program as a mitigation are inadequate without a discussion of future funding. The Site Stewardship program already has problems maintaining the current grounds on the severely limited budget of the present (\$30,000.00 annually I believe, for the entire campus and grounds, and off campus sites). There is no reason to assume they would be able to maintain more grounds in the future without the associated increase in funding. If they cannot maintain more grounds, this mitigation is not adequate and should be removed, leaving this impact potentially significant. Please specify a source of future funding for this mitigation, which is not discussed in the explanatory text at all.

AIR-1 p.25 : Please specify when it is appropriate to apply soil binders where it says "as appropriate. Also, quantify the "extent feasible" in the limiting of construction in any one area.

2

AIR 2A p.29.30: This entire set of mitigations is inadequate for even after mitigations, NOx levels will still remain at significant levels. More mitigations need to be generated in this area to reduce the air quality impacts of future development at UCSC to below significant levels, and to

conform with legal levels without the admitted violation, in order for this EIR to be approved. The air quality of the state of California, air which all citizens breathe, should trump the Regents' concern to educate students at Santa Cruz over another campus. Unless this impact can be mitigated more fully, air quality alone should shut this project down. The UC is not above the law; it is abominably inadequate that they would admit to needing to violate air quality standards in this region, and then consider it acceptable. It is not.

Further, no discussion of the air quality due to future trips by students and faculty on and off campus in single occupancy vehicles has yet to be discovered. The figure for this, 10,590 trips, apparently refers only to the trips needed for construction activities, as according to section 4.2.2, Analytical Method. The air quality of the additional traffic generated by the students and faculty to be added must be taken account for in order for this document to be adequate. This section should also refer to mitigations for this tremendous, and unmeasured impact of student/ staff car travel on air quality.

2

AIR 4 p. 32: These mitigations are shameful and inadequate. The mitigations say "work with" but stronger language needs to replace that to be certain that this project is included in local air quality standards. Without it, this project aids in violating the Clean Air Act and the no project alternative should be chosen over knowingly violating an important environmental law which protects Californians all over the state. As stated earlier, the air quality of all the citizens of California is critically more important than the convenience of putting near ten thousand (as specified in the HYD section) more people at UCSC.

BIO 1A p. 42: "When possible" needs to be described. When will it be possible to preserve these stands of trees and prevent fragmenting more habitats? No clarification is given in explanatory text. This mitigation is inadequate without the language that specifies when it will happen, or that it will actually happen. Please add a description containing a quantifiable threshold here that would enact or condemn the mitigation.

3

BIO 11 p.58: This is inadequate. The admitted loss of habitat is harmful under the Endangered Species act, and fencing an area where there are nests is hardly adequate to a) insure adults do not abandon nests with chicks due to noise of construction and stress, or b) address at all compensation for the loss of habitat. A proper mitigation would permanently protect habitat elsewhere, or obtain the appropriate exemptions from the ESA. Otherwise, the University is harming and harassing a large population of special species predators without anywhere near adequate heed of it. Additional mitigations need to be added here for noise and stress on the animals, or an explanation of how the UC is exempt from special status animal protocol.

BIO 12B p.59: Again, what is the extent feasible in this case? What is the threshold where mitigations will be employed to protect burrowing owls and when they will not? The ambiguity with this type of language absolutely, comprehensively undermines the legitimacy of any mitigation containing such wording. It is also foolhardy to believe that owls, raptors, or any fauna will be willing to comply with a 48 window of escape from their own homes. A proper mitigation would be "If there are burrowing owls in the area of the development, we will not develop there." The choice here is between the state, and nation's biological assets, a mobile property shared by all citizens, or the UC's ability to place more students at this school. The natural resource preservation of the state should trump UC desire to expand here. The mitigations should be changed to reflect a semi permanent protection from development of all areas with burrowing owls.

3

HYD 3, p. 31-36 All mitigations: Water quality is already problematic in Santa Cruz. If mitigations are not creative enough to guarantee that this significant impact is reduced below a significant level, then the "No Project" alternative should be elected. It is not just to subject the entire Santa Cruz region to increased siltation, decreased oxygen content and overall degraded water to serve the UC's desire to increase enrollment here. This impact, if still significant with mitigation, should be a deal breaker. Water resources in Santa Cruz are already in peril, necessitating the possible building of a desalination plant. There is no discussion of these effects on the local community, whose environmental quality is obviously at stake, concurrently with decisions made at UCSC.

4

NOIS-1 pg. 17-18: It is inadequate that students living on campus will be informed of construction only "whenever possible". They need to always be informed, please edit the wording there to say "always". Further, what good does informing them a week ahead of time do? If they are already living there, they cannot move. It is more appropriate to inform all students moving into construction zones on campus before they sign a housing contract. Please address in a comment or additional mitigation. Anything short of that type of administrative transparency is fraudulent and a disservice to students.

5

Beyond that, this measure is deficient; mitigation needs to include monetary compensation to those students residing in an area subject to noise inconveniences. Here, the current and future students of UCSC are being punished, for preparation for incoming students. Students of the present and future deserve, and are paying an enormous amount of money for, a quiet, peaceful place to live. It is inadequate that this DEIR does not address this matter further, and in more detail, making specific compensatory offers to the students who will be forced to live near these construction sites. If driven off campus by noise, these students become a social problem housing them in Santa Cruz. With construction, UCSC serves

to drive students away from housing facilities they already cannot fill, by constructing more housing. Such irony is not appropriate in a DEIR and the mitigations need to reflect that.

"Extent feasible" also needs to be edited out of the part of the mitigation that describes loud construction near academic buildings to occur on weekends. This needs to be "Construction near academic buildings shall only occur on weekends." instead. It is unfair, unethical, and contradictory to violate the current students on behalf of the future ones. Students are paying for quiet, peaceful places to learn and live. They deserve that, and should take legal action to defend it if these mitigations are not altered here. Construction is already troublesome; my philosophy class was interrupted yesterday by the reverse-beeping of a truck which was so loud my professor could not speak over it. This situation is ludicrous, and this mitigation is heinously lacking in that it does not guarantee the learning environment of current or future students.

The NOIS1 impact is significant and unavoidable, even with mitigations. It should reinforce the option for "No Project" alternative if mitigations fail to reduce the impact of noise on current students. If the goal is to expand education, as is the party line I have publicly endorsed from the University, and if that is the propaganda I am expected to tell neighbors when they ask me, angrily, whether the quality of education will fall as UCSC expands, then it is crucial, it is the crux of this project, it is necessary and sufficient for any expansion, that all students be completely protected from noise impacts. It is the most critical thing that students not have a lesser education due to University ambitions to grow. Students are already suffering due to noise impacts, and the current NOIS 1 mitigations are a failure on behalf of the University, which should single handedly prohibit further expansion. CEQA needs to protect the Californians attending UCSC as well, and this DEIR does not, due to its vagueness and inadequacy in the noise portion.

Again, to make this impact less than significant, either do not work during the Sept-June school year, which would solve a host of other issues related to soil erosion or do not work at all. Further, if that comment is ignored, students subjected to construction by residential proximity need to be reimbursed and compensated. One of the aspects of my job this year is to try to figure out how to keep students on campus. We do not need to drive them further away. Finally, there needs to be a mitigation guaranteeing students protection from the harassments of construction in their education.

NOIS 2 p. 20: This is a significant impact and needs to be mitigated, and its absence in mitigation text leads to another endorsement of a "No Project Alternative". Neighbors are unduly affected by noise. It is simply a lie, and bad one, for the University to pretend, as it is doing, that the traffic increase due to increasing campus population by 10,000 people will not be matched by increased traffic noise. Neighbors have testified, along

with City Council member Ed Porter I believe, that they have measured the decibel levels outside their homes, on High St, on Bay Street, and that the decibels already exceed legal levels. This is an area where the University needs to take responsibility and mitigate off campus traffic, and the effects of that traffic. It is beyond, beyond inadequate to leave this in the EIR as is. Further, not addressing this now provides fuel for grassroots opposition, which fuels lawsuits. If that is what the UC wants, they are earning it with this type of "less that significant" declaration. The traffic is significant, the noise is significant, and ignoring it is significant.

6

POP 1, 3 p.19, 22, 23: This is inadequate. I feel angered and insulted by such a paltry, disgustingly lacking attempt to mitigate this issue. Adding ten thousand new people to the community without mitigating for housing is radically, offensively inadequate and should lead to conclusion that only the "No Project Alternative" is acceptable.

Mitigations could include finding alternative sources of funding for housing (such as private grants, federal housing subsidies or annual Regent salary cuts) to make it affordable for students to stay on campus. The University boasts that they keep a steady 41% of students on campus. That leave 59% (!), to find housing somewhere in the community, and then commute, likely in a car, to school adding to traffic woes. Just because 41% is better than most UCs, simply reflects how poorly all the UCs are doing at retaining students on campus.

According to a Good Neighbor Survey conducted on a random, even sampling of mixed gender and class of 300 UCSC students in 2005, students are driven off campus primarily due to high housing costs. Students save at least \$1,000.00 per year by living off campus, and that is if they find high rents. If they find low rents in dangerous homes, due to landlords trying to pack as many students into a property as possible (even when illegal), students can save many thousands of dollars living off campus. Many thousands of dollars is significant to students and is more than enough to motivate them to go off campus. If housing needs to be self-sustaining, then it is the University's burden to find money besides student rent to make it cheap enough to convince students to live there. Student housing at Santa Cruz is significantly higher than housing at other UCs. So far, there is no attempt that I know of on this front from UCSC administration. This dismal lack of effort, followed by an apparent disinterest in mitigating, is unacceptable and should make administrators at UCSC feel terrible for the poor job they are doing subsidizing housing to an affordable level. In conclusion, a possible mitigation is to find an alternative source of funding to lower housing costs and attract students to stay on campus rather than move off, which has yet to be addressed by the University. Further, UCSC is currently dealing with substantial political issues related to partying by students off campus. My job seems to be partly to field complaints from neighbors about student partying, which is a waste of

7

my time due to the fact UCSC seeks to not enforce their own bylaws on the issue, which state that the UC enforces UC policy if students break it off campus. One mitigation that should go here is that UCSC will develop a team of campus police who work with local police, funded by UCSC, to roam Santa Cruz neighborhoods and enforce the "Loud and Unruly Gathering" municipal code upon students living off campus. UCSC must not fail to mitigate off campus housing, and further must not fail to mitigate the students who do move off ( or are driven off campus) and their behavior. The scope of UCSC liability includes the behavior of their students off campus if they are unwilling to take the necessary steps to keep them on campus.

Another reason students go off campus, and another political problem I hear about DAILY at my job is that metro services are inadequate. The location of UCSC is isolative from a city students want to visit often. Living off campus is tied to an idea of more freedom, which could be corrected by helping Santa Cruz to improve the Metro Service.

Students are also driven off campus by parking on campus. It is very expensive to park on campus, and there are not enough spots; UCSC hires valets to double park cars because there are so few lots. Further, meters just went up in cost and in duration of operating hours. The expensive parking on campus encourages on campus residents to park cars in neighboring residential areas, an enormous political problem, and expensive parking on campus encourages off campus residents to do the same thing. Before UCSC takes one more student, they need to devise a way to get more lots on campus cheaper, or improve mass transportation in this community, which is not all up to the city. If UCSC is adding 10,000 people to the community without mitigating for population, it inherently implies a burden on the UC in terms of solving traffic/parking problems as well.

UCSC should pay, entirely, for any parking permit program that is necessary on the Westside to prevent students from taking up available parking in neighboring streets. Entire neighborhoods are up in arms about this issue, and I hear about it all the time. However, it remains non-existent to UCSC, a major mistake. UCSC, by ignoring such fundamental issues as traffic and housing, declaring them significant and unavoidable and not mitigatable, is alienating itself from Santa Cruz. It can be mitigated by paying for permit programs to protect locals who just want to live and are being troubled in that endeavor by UCSC students, and by UCSC's current failure to provide adequate, affordably priced parking and housing options.

UCSC could also mitigate by subsidizing affordable housing in Santa Cruz. Part of the problem, hardly touched on, is that students drive the housing market up. They encourage speculation on property, because landlords know there will be renters willing to pay close to the huge amount of money UCSC charges to live there. Available housing units are quickly scooped up by landlords willing to pay more money for them, when they know there will be a big short term return. This makes it problematic for any middle class family not planning to rent their home out to students to buy property in this county. Because UCSC students are willing to pay high rents (since



high rent is still better than humongous UCSC rent) they inflate rents due to demand and price tolerance, so normal renters cannot find homes. Further, student renting trends have encouraged landlords to allow more students to occupy a home than is legal. However, the city has no money to enforce codes, so another mitigation could be helping the city by funding enforcement there.

There are mitigations available, it is untrue and inadequate to declare that there are not. Just because UCSC does not like alternatives does not mean they are not available for exploration. Just because they all involve UCSC getting more money, only should indicate there is not adequate money to expand since we cannot even satisfactorily meet current needs.

To summarize possible mitigations:

1. Develop funding strategies to reduce housing costs, so that a single on campus costs \$6,000.00 or less, in order to attract students on campus.
2. Develop parking lots and programs on campus so that there is somewhere to park the cars for a reasonable ( student willingness to pay is at \$200 or less for annual parking costs) amount of money.
3. Fund all parking permit programs on the West side of Santa Cruz.
4. Figure out alternatives to cars on campus. You could ban them, entirely, and improve mass transit, you could ban them partially, and provide lots off campus, etc. There are possible mitigations.
5. Develop an enforcement team of police to aid Santa Cruz in regulating student behavior off campus.
6. Improve Metro Services so fewer students need to drive cars at all, and to make living on campus less isolative.
7. Mitigate low income housing off campus to compensate for displacing middle class citizens from Santa Cruz.
8. Recognize parking in local neighbor hoods as an impact that is significant and deserves mitigation on its own.
9. Recognize student behavior in local neighborhoods as an impact that is significant that deserves mitigation on its own.
10. Recognize that students impact the local housing market, as an impact that is significant and deserves mitigation on its own

7

It is within CEQA's jurisdiction to address the socially related impacts that are tied to environmental ones, like population growth. UCSC, as demonstrated by the DEIR, pretends these issues do not exist, which serves only to allow them fester into crises. I am tired to trying to "ease tensions" within the community concerning UCSC, when I am one of perhaps six people at UCSC meaningfully trying to do so. There are mitigations to these issues, and only the "No Project Alternative" is acceptable unless these mitigations are not adopted immediately.

8

PUB1 p.12: This is a poor evaluation of police services. UCSC requires the city to enforce parking permit programs its students fuel a need for, as explained earlier, and this is not addressed. Further, the "Loud and Unruly

9

Noise Ordinance”, passed by the city in response to student partying requires increased police enforcement as a result of UCSC students and their behavior off campus, a problem that arises because UCSC does not make it cheap enough to live and park on campus. This section needs to be revised to illustrate these points and offer mitigations, since they are significant.

9

PUB in general: What also needs to be addressed, and completely is not in this section, is the Metro Service. With 10,000 more people, 60% of whom will live off campus it is obvious that bus services will need to increase to meet demands as well. Metro funds from the school should be increased proportionally to student and staff population increases as a mitigation, and the Metro should get a section in the public services area.

REC3 pg. 14: The recreation section also needs to mitigate for the trails and fire roads of upper campus that are used for student recreation. Students do employ those trails in a significant way; classes are sometimes taught up there, and the meadows to be developed are centers for student gathering. It reflects an out of touch administration and consulting agency to declare those areas insignificant. They are, need to be declared that way and and they need to be mitigated for.

10

TRA 1 p.44: Monitoring is not sufficient to stem the clots of traffic on campus. Traffic affects housing; if traffic on campus is unreasonable, it will drive students off, or worse, encourage parking off campus in neighborhoods. It is important to not only monitor those two intersections, but fix the traffic issues that preexist expansion, like the quarter mile backup between 3 and 6 pm at McLaughlin and Hagar near the base. Please add a clause about mitigating, by solving current traffic issues as contingent on a less than significant level declaration.

TRA 2, all mitigations, p. 50, 51, etc: If the University cannot solve such quintessential issues as traffic it generates, it should not expand, and no amount of students to educate in California should over ride the priority of a municipalities’ ability to function. Even with mitigation, most of the critical intersections will be radically dysfunctional, sending drivers on short cuts through neighborhoods, which neighbors are already upset over. A mitigation that needs to be added is a creative way to keep UC drivers out of neighboring residential areas. Further more, this lack of solutions to traffic problems should make it obvious that a no project alternative is the only workable one.

11

One idea to protect neighbors is to funnel ALL UCSC traffic down Bay/ Mission by blocking High street from the main UCSC entrance, and making everyone go down Bay or Western. This protects the majority of West side neighborhoods, but subjects the four blocks of homes between Escalona and



Mission to probably standstill traffic for an hour+ every day twice a day.

UCSC could also ban cars for everyone except those who live/work on campus, in other words no commuters, and compensate by revitalizing the metro with funding and new routes. That would solve many of the TRA 2 issues.

There are traffic solutions too, but they involve alternative transportation, money, collaboration with the City and UCSC participation, none of which has been offered in a significant way.

TRA3 B p. 53, 54: These mitigations are inadequate, and there needs to be a mitigation added to address the issue of students parking off campus because on campus prices are outside of their willingness to pay margin. UCSC must not ignore this as an issue, and the city estimate 3-400 cars usurp sidewalk spots every day. UCSC should mitigate by offering to subsidize, completely, to the tune of \$60,000.00 annually, the permit programs that it would take to keep this from happening on the West side of Santa Cruz. To conclude, TRA 3 needs two additional mitigations to be adequate:

1. UCSC works on lowering parking costs to get more students to park on campus.
2. UCSC funds the permit program in Santa Cruz, which would not be necessary but for students parking in neighborhoods where they do not live.

Overall, the transportation section falls remarkably, sadly short of anything satisfactory for a final CEQA document. No specific timetables, plans or guarantees are made to compensate for the tremendous damage to be wrought by UC expansion. To improve the traffic section, add these mitigations, and solidify plans with the City to Work together to improve traffic and transportation in a meaningful, not vague, way.

UTIL 9 p. 31-38: This section is not adequate. The Regents desire to add 7,000 students and 3,000 faculty does not override the fact that Santa Cruz has reached its limit of fresh water. It is that simple. It is not ethical, or moral, or close to logical why a University would have preference over the welfare of an entire town. The mitigations are radically, ridiculously, inadequate and imply a relationship to water rights which the city denies. UTIL 9D Could be improved by eliminating landscape altogether except for fire control. UCSC does not need landscaping. It is a forest, and beautiful, and as the AES section showed, we are already trying to preserve that beauty. Why destroy it with landscaping? It makes no sense. UCSC could adopt "Forest Regeneration" as a landscaping policy, fire the landscapers (saving money) or relocate them to a different grounds service, and save all the water landscaping normally sucks up, for no apparent purpose.

UTIL 9 E could be improved by demanding the replacement of urinals

immediately, not just when the water greedy ones break. That is similar to grandfathering in energy companies in environmental law; allow the old ones to pollute. Yet, that reasoning is fallacious, when you could, if you wanted to, start conserving and protecting the environment immediately. Please alter the mitigation to begin immediately.

9F: Same idea; Why wait until 250 million gallons? Water conservation measures are already overdue. This mitigation deserves further rationalization of that number and an explanation of why they are not currently implemented. Please rationalize as an addition to this mitigation.

9G, H,: According to testimony at the 1/10/05 City Council Meeting by public works employees, the city does not have 300 million gallons of water to give UCSC. Period. Further, there is no reason explained in this document why that water should be reserved for UCSC over other Santa Cruz citizens. An explanation is deserved and should be added to mitigations. Please add and explain.

This DEIR treats water like it flows forever. Unfortunately, that is not the reality in arid California, and is not the reality in Santa Cruz County, which is already "tapped out". Anyone with a bit of intellect can realize that there is no reason to place UCSC students over other California citizens, and the main question with water is a qualitative one of equality. This section is the most astonishingly deficient, superceding the blatant ignorance of housing and traffic issues, because it involves discriminating against Santa Cruz citizens based on water consumption. The only suitable mitigation here is for another mitigation to be added: UCSC generate another water source, and pay for it on its own.

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## Response to Comment Letter I-80

**Response to Comment I-80-0.** Please refer to Response to Comment PH-14-1.

**Response to Comment I-80-1.** Please refer to Response to Comment LA-3-9 for a description of revisions to the Draft EIR mitigation measures, including those related to aesthetics. Please also see Volume IV of the Final EIR, Chapter 3, Revised Table 2-1 for the full text of the revisions. Response to Comment I-80-2, below, discusses the Site Stewardship Program in more detail, as it relates to LRDP Mitigation AES-5D.

The most important mitigations for potential visual resource impacts are the planning and design requirements included in LRDP Mitigations AES-5A, -5B, -5C, -5E, and -5F. (Please also see Response to Comment LA-6-15 for new LRDP Mitigation AES-5F.) The Site Stewardship program identified in LRDP Mitigation AES-5D will also contribute to the reduction of this impact, although the program is small and limited in scope and relies primarily on volunteer labor. The program's volunteers have provided valuable assistance to the maintenance of natural resources that contribute to the visual character of the campus. Volunteers have planted native oak trees at several locations on the main campus, performed site restoration in forests and ravines, and are currently conducting GIS and GPS mapping of mountain bike trails. The Site Stewardship Program is operated under UC Santa Cruz Ground Services, which is a funded department within the Physical Plant Unit. Grounds Service provides landscape maintenance and land management services for the campus and receives state funding for the maintenance of campus development. UC Santa Cruz Ground Services plans to continue the Site Stewardship program in the future.

**Response to Comment I-80-2.** Soil binders prevent erosion of exposed soils. The selection of the type of soil binders and the location at which they are to be used will depend on the construction site. Also, the degree that the area under construction can be feasibly limited will also depend on the construction site. Prior to construction, the contractors will determine the appropriate use of soil binders and the feasible construction area. Even without the mitigation measures, LRDP Impact AIR-1 is considered less than significant.

Please see Response to Comment I-45-74 regarding the adequacy of LRDP Mitigations AIR-2A through AIR -2C, and Response to Comment I-45-56, which explains why the Draft EIR concludes that even after mitigation, LRDP Impact AIR-2 would be significant and unavoidable.

As stated on page 4.3-19 of the Draft EIR, the analysis of emissions from mobile sources is based on 10,590 new daily trips that would be added to the study area streets by 2020 under the 2005 LRDP. These daily trips would be associated with the new students, faculty, staff, visitors and construction activities under the 2005 LRDP.

Please see Response to Comment RA-1-6 regarding the mitigation measures for LRDP Impact AIR-4. Also see Response to Comment LA-2-51, which explains why this impact is found to be significant even after mitigation. Please refer to Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 (Revised Table 2-1) of the Final EIR for the full text of revised measures.

**Response to Comment I-80-3.** Please refer to discussion on San Francisco dusky-footed woodrat in Response to Comment OPA-4-6. Please refer to discussion on burrowing owl in Response to Comments I-5-11 and I-7-4.

**Response to Comment I-80-4.** Section 4.8 of the Draft EIR identifies LRDP Impact HYD-3 as a significant and unavoidable water quality impact; however, this impact would be limited to erosion impacts in campus drainages and would not affect “the entire Santa Cruz region.” Note that water resources that supply the City of Santa Cruz with potable water would not in any way be affected by the hydrological impacts that are discussed in Section 4.8. In other words, there is no link between the hydrology and water quality impacts discussed in the Draft EIR Section 4.8 and the need for a desalination plant. Please refer to Master Response UTIL-1, which discusses the City’s current and projected water supply, and the reasons why a desalination plant is needed.

The Draft EIR analyzes the impacts of development under the 2005 LRDP at a program level. LRDP Impact HYD-3, associated with erosion in campus drainages, is found to be significant and unavoidable because it is not known whether it will be feasible to implement the proposed mitigation measures for every potential project to the extent needed to reduce the impact to a less-than-significant level. Further environmental review will be conducted for specific development projects proposed under the 2005 LRDP, including detailed analysis of impacts at specific locations. It is anticipated that sufficient mitigation will be implemented for most or all projects to reduce erosion and sedimentation impacts to a less-than-significant level, but this cannot be confirmed without knowing the details of these projects.

**Response to Comment I-80-5.** Please refer to Response to Comment LA-6-7. The University has revised the mitigation measure to delete the phrase “whenever possible”. Note that LRDP Mitigation NOIS-1 identifies a suite of measures to minimize construction noise impacts, including not scheduling loud construction activities within 100 feet of a residential or academic building during finals week, and scheduling these activities to the extent feasible on weekend, and on holidays and during school breaks when students are not around. LRDP Mitigation NOIS-1 also restricts the hours during which construction could be conducted. All of these measures would substantially reduce the noise impacts on students from most of the construction projects. Monetary compensation as mitigation is not feasible, and would not avoid or reduce the environmental impact. The reason the EIR concludes that the impact is significant and unavoidable is that it is not feasible to completely avoid loud construction activities in the infill area. However, infill construction is environmentally preferable to other options in many other respects.

**Response to Comment I-80-6.** Please refer to Response to Comments LA-9-84 and I-1-3.

**Response to Comment I-80-7.** Please see Master Response ALT-5 on issues related to increased on-campus housing. As explained in Response to Comment LA-3-41, the Draft EIR includes measures to mitigate the impacts of enrollment growth on transportation, water demand, and other resources. Furthermore, additional on-campus housing will be built as demand for such housing increases. These factors contribute to the mitigation of housing impacts. Also refer to Master Response POP-1 regarding revised mitigation for LRDP Impact POP-3. In addition, note that the Campus proposes to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which revises the Draft 2005 LRDP (January 2005) to reflect the Reduced Enrollment Growth Alternative previously analyzed in the 2005 LRDP Draft EIR and identified as the Environmentally Superior Alternative. For more information regarding the Final Draft 2005 LRDP, please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

**Response to Comment I-80-8.** Draft EIR Volume II Section 4.11, *Population and Housing*, evaluates the project and cumulative population and housing impacts of development under the 2005 LRDP. Mitigation measures are proposed throughout the Draft EIR that addresses population-related impacts. If the 2005 LRDP is approved by The Regents, these mitigations would be incorporated into the LRDP and implemented in accordance with the timing specifications noted for each measure in the mitigation monitoring program. For example, some mitigations require implementation on a project-by-project basis, others require implementation for projects that would occur in certain locations on campus, and still others would be implemented campus-wide and are not tied to project-specific development. Adoption of the lower enrollment growth numbers under the Final Draft 2005 LRDP would reduce population-related impacts (see Chapter 2 of the Final EIR, Volume IV).

**Response to Comment I-80-9.** Please refer to Response to Comment LA-9-52 for information related to 2005 LRDP impacts on police services. Section 4.12, *Public Services*, does not evaluate transit services provided by the Santa Cruz Metropolitan Transit District (SCMTD). The increased demand for transit services is fully analyzed in LRDP Impact TRA-4 (see Section 4.14, *Traffic, Circulation, and Parking*, Draft EIR page 4.14-54). A mitigation measure requiring the University to provide additional funding to the SCMTD is not warranted, as funding is accounted for in the University's service agreement with the District. Since 1972, UC Santa Cruz has maintained a service agreement with SCMTD that provides any registered student access to any regularly-scheduled transit route operating within Santa Cruz County without paying a fare (see Draft EIR page 4.14-8). In 1989, this agreement was extended to include any UC Santa Cruz faculty or staff member displaying a UC Santa Cruz Bus Pass. Under this agreement, SCMTD bills the University on a per-ride basis each month. UC Santa Cruz's payment to the SCMTD for 2004-05 was approximately \$2 million. These payments will increase over time as the campus population increases, which will support the provision of increased transit services and other transit improvements.

**Response to Comment I-80-10.** Please refer to Response to Comment LA-2-124 for additional information about the north campus trail system. Please also refer to Response to Comment LA-2-42, which indicates that the vast majority of north campus lands would be retained in open space land use categories. Moreover, none of the larger meadows in the north campus would be developed under the 2005 LRDP. Therefore, adequate open space lands would be retained in the north campus under the 2005 LRDP such that teaching and student activities could continue to take place in this portion of the campus.

**Response to Comment I-80-11.** The mitigation measures presented in the Draft EIR for LRDP Impact TRA-1 would mitigate the project's significant impacts to a less-than-significant level, and in some cases would improve existing deficiencies. For a few off-campus intersections, the EIR analysis concluded that no feasible mitigation was available that would reduce or avoid impacts. The commenter is correct that even with mitigation, the project will have some significant and unavoidable traffic impacts.

The commenter suggests a potential mitigation measure that would block High Street at the campus entrance, forcing all campus traffic to use Mission and Bay Streets and Western Drive. The City's General Plan classifies High Street as an arterial street (see Figure 4.14-1 in Draft EIR). This functional classification is intended to provide citywide mobility. Closure of High Street at the campus entrance would be inconsistent with High Street's classification and intended purpose. Additionally, closure of High Street would cause a substantial degradation of Mission and Bay and Western Drive as well as cause traffic to seek alternative routes within surrounding neighborhoods, creating other, possibly more severe, impacts.

The commenter also suggest a potential mitigation measure to prohibit all vehicles from accessing the campus unless they live or work on campus, and requiring all others to use a revitalized METRO transit system. This potential measure would have unintentional adverse consequences including west side neighborhood impacts (from commuters seeking parking near the campus and transit stops), large capital investments in new transit vehicles that would only be used during peak campus demands, and impacts to other parts of the city and region to acquire, construct, and operate park and ride facilities necessary to accommodate the displaced university students. This potential measure was not evaluated because it does not result in a balanced solution for the University's traffic impacts, and would disproportionately benefit one area while impacting other areas.

With respect to the comments on LRDP Impact TRA-3B, lowering parking costs to allow more students to park on campus would encourage more students to drive, which is inconsistent with the University's policies, the goals of the 2005 LRDP, and the concerns of the citizens of Santa Cruz regarding increased campus related traffic. Please see Response to Comments LA-4-6 and LA-2-142 regarding students parking in off-campus neighborhoods.

**Response to Comment I-80-12.** Please refer to Master Response UTIL-2, which provides further information about the proposed mitigation measures for the contribution of the 2005 LRDP to a significant impact on water supply.

The Draft EIR identifies a significant cumulative impact based on the fact that the remaining 300 million gallons of water capacity would be used for new growth on- and off-campus, including LRDP-related and other growth. The Draft EIR concludes that a new water source may need to be developed to serve future growth during normal water years (see LRDP Impact UTIL-9). Please refer to Master Response UTIL-1 (Section 5.2.15.3) for additional information about this conclusion.

Date: Fri, 30 Dec 2005 09:37:47 -0800 (PST)  
From: Andrew Todd <toadota2000@yahoo.com>  
Subject: Comment regarding UCSC planned expansion  
To: lrdp-eir@ucsc.edu  
Cc: jgumz@santacruzsentinel.com

12/30/2005

To whom it may concern:

I have been a resident and home-owner in Santa Cruz for over 25 years. I have watched the campus grow over this time. I am against any more expansion, for the following reason:

I drove up and visited the alumni offices and the Division of University Relations, which are located at the "carriage house", at the bottom of campus next to the women's center at the Cowell House. I walked around to the rear of the carriage house and noticed several full-size portable buildings with wheels, "trailers". These are used as offices for administrators and staff of one or two of the departments within University Relations. I was shocked when I saw the age and condition of these "trailers". I would guess that they were twenty years old, with no skirts covering the 4 feet of exposed under-carriage. This area is where the wheels and stabilizers and wiring, etc is located. It is against the state building code to have trailers in use without this skirting to protect curious animals and children, etc. There were several areas where the trailers had been patched to fill a hole that was obviously leaking. There was a black fungus growing on the north side of the trailers. The doors were leaking water, as the carpet was wet around the entrances. The security of the trailers were as weak as the thin layer of metal holding these trailers together. I would be surprised if the heater/air conditioner units are fully functioning. These trailers are also not in compliance with new earthquake safety standards which the state now requires.

I wonder how many similar "trailers" are located around the UCSC campus? Hidden behind buildings, in the forest, with no one concerned about their safety except perhaps the people who work in them. And I

imagine that these people do not want to "rock the boat", especially as it seems the boat may be starting to sink.

So I strongly suggest that these "trailer" offices be identified to the public, and be the first priority for the University to replace with legal and safe buildings for their many employees. One strong earthquake could be tragic and would definitely sink the UCSC ship.

1

John Todd  
Santa Cruz  
831-334-0783



Response to Comment Letter I-81

**Response to Comment I-81-1.** Comment noted. Use of temporary buildings such as trailers is not proposed as an element of the 2005 LRDP. Campus standards with respect to seismic safety and other potential hazards apply to all occupied buildings on the campus, including trailers.

From: "Jim Warner" <warner@ucsc.edu>  
Subject: comments - FSH  
To: lrdp-eir@ucsc.edu  
Cc: russj@ucsc.edu, reynales@ucsc.edu, etitus@ucsc.edu  
Date: Sat, 24 Dec 2005 14:05:46 -0800

These comments were written by the sender (Jim Warner). They were reviewed and commented on by the ITS/NTS staff with planning responsibilities:  
Tad Reynales, Russ Johnson and Ed Titus.

The campus ITS Cable Plant Group is referenced by hearsay in section 3.4.8.4 of the EIR in the section on Family Student Housing [Thompson 2005].

We welcome this as our first view and opportunity to comment on the plans to reconstruct the FSH complex.

Remodels always have surprises and difficulties that set them apart from new construction. While not a remodel, rebuilding on half an occupied complex may have the same difficulties as a remodel in occupied space. The challenge is to retain continuity of essential services while at the same time reconstructing them. The same reasons that might close the child care facility during construction might make it an unsuitable neighbor for children in residence, as the EIR notes. The proximity of the phase I and II sites would test the ability of parents to guard their kids from the fumes, dust and acroleins.

1

We note that the serving facilities for both SBC and campus telephone and data for the entire complex are located in the Northern "phase 1" section of the complex. While the EIR correctly identifies that data and phone services will be cut to the unoccupied child care buildings, we want to emphasize that this is only one area of concern. Without their distribution facilities, there will be no phone nor data service in the phase II southern section. While that would be a temporary problem for the duration of phase I, it would have a huge impact -- probably making occupancy in the phase II zone violate various life safety codes. Section 3.4.9.4 contemplates that there may be some relocated utility mainlines. But here it is not the communications "mainlines" that are being interrupted [we have that, too] but removal of the distribution facilities.

2

For completeness, as mentioned in the previous paragraph, near as we can determine, the expanded building footprints in the phase I section will

place some new building foundations on top of the existing communications conduit from Porter College. These ducts contain TV RF cables, campus phone lines, fire alarm cables and fiber optic data cables. These cable can be rerouted within the scope of disruptions the EIR contemplates. But as noted, this is "all dressed up with no place to go" during phase I in the proposed plan. That is because the distribution facilities are removed during the construction.

2

At the first EIR comment meeting, one of the speakers warned that the things not discussed are the ones to watch out for. The litanies of utilities from bicycles to wastewater that comprise the sections of the EIR do not include the fire alarm system. We don't have the information to comment on the implication of the phasing on the fire alarm system, but we think it is important.

3

Thompson (same reference) said that the FSH copper backbone cable enters from a below-grade vault along Empire Grade Rd. We do not believe this is correct. There is no vault. The cables are "direct buried" off a power pole (PGE pole number 138127). That does not meet current campus standards which require conduit duct banks with concrete cap. Existing cables meet the needs of a 200 unit complex. They are insufficient to support the build-out to 400 units. The existing SBC feed cables are presently at capacity.

4

We believe that the required expansion should trigger bringing communications services to campus standards. We wonder whether new communications ducts can accompany the new gas pipe in the trench planned out to Empire Grade Road.

5

Looking back toward the campus, in section 3.4.8.4 Thompson says that conduits lead to both Porter and College 8. As far as we are aware, the College 8 conduits are an urban legend. It makes sense looking at the campus map that there would be such a connection, but it was never installed. We would certainly welcome it.

6

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In conclusion, it is likely that the project planners have underestimated the impacts of the rebuild-in-place-while-occupied-next-door option. Outside the realm of communications, we're surprised at the tentative conclusion that the preferred plan might be too toxic (dust and chemicals) for a day care center but OK for small children to live and play around. We think that a more thorough examination of the difficulties and hazards of full scale construction next door to small children would result in a different ranking of the alternates relative to the currently preferred plan.

7

ITS would welcome the opportunity to work with the planners to achieve a workable communications system, both during the rebuild and upon completion of both phases of the project.

**Response to Comment Letter I-82**

**Response to Comment I-82-1.** Please see the discussion in the Draft EIR of air quality impacts from construction activities on pages 3-29 and 3-30 (construction PM<sub>10</sub>) and pages 3-32 through 3-34 (health risk from construction exhaust emissions). The impact due to PM<sub>10</sub> produced during construction would be reduced to a less-than-significant level with the application of dust control measures that are recommended by the MBUAPCD. The analysis of human health risk shows that the cancer risk and the chronic hazard index from exposure to construction exhaust would be well below levels that would pose a significant health threat to the residents of Family Student Housing (FSH), including children. However, the non-cancer hazard index for acute exposure (HIA) is estimated to exceed 1, which means that the modeled concentrations of Toxic Air Contaminants (TACs) (specifically acrolein) exceed the REL and therefore short-term (acute) non-cancer health effects are likely. Short-term health effects from exposure to acrolein in the construction exhaust include eye irritation, increased respiration, nose and throat irritation, teary eyes, and runny noses. As explained on page 3-34 in the Draft EIR, there is a high level of uncertainty with respect to acrolein emissions from construction equipment. Therefore, the reliability of this analysis is uncertain. Furthermore, if the modeled concentration of acrolein at the location where HIA is exceeded is examined, the value (0.28 micrograms per cubic meter) is too low to cause these short-term health effects based on available literature. An individual would need to be exposed to acrolein concentrations of 15 microgram per cubic meter or more for duration of 1 hour for short-term effects to occur. The Campus will nonetheless implement FSH Mitigations AIR-5A and -5B to minimize exposure of residents and children to toxic air contaminants. Furthermore, during the majority of the hours that construction would occur on the project site, most of the children within the FSH complex would be at the off-site childcare center that would be developed in compliance with FSH Mitigation AIR-5B and school-age children would be at school.

**Response to Comment I-82-2.** If necessary, temporary distribution facilities will be provided during construction of the first phase. This does not affect the analysis of environmental impacts of the proposed project.

**Response to Comment I-82-3.** If necessary, the head-in panel for the fire alarms will be re-located temporarily to serve the southern portion of the site during construction of the first phase. This does not affect the analysis of environmental impacts of the proposed project.

**Response to Comment I-82-4.** The information presented in Volume III of the Draft EIR, pages 3-19 and 3-66, regarding a below grade vault carrying the existing copper backbone cable has been corrected. The exact location, installation type and capacity of the cable has not been confirmed, but will be identified during detailed project design. If the line requires replacement, the new line would meet current campus standards, including conduit duct banks and concrete caps. The area that would be disturbed by trenching for replacement of the line was covered by the biological and cultural resource surveys for the proposed FSH project. The results of these surveys are summarized in Sections 3.5.4.2 and 3.5.4.3, Volume III, of the Draft EIR. FSH Mitigation CULT-1, as set forth in the Draft EIR, would apply to any utility line relocations, and would ensure that any impacts associated with installation of a new communications line would be less than significant. Please refer to Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*.

**Response to Comment I-82-5.** The feasibility of installing communications ducts in the same trench as the new gas line will be assessed during the detailed project design phase of the FSH project.

**Response to Comment I-82-6.** The text in Draft EIR Volume III, page 3-19, has been corrected to delete the reference to the conduit to College Eight. Please refer to Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*.

**Response to Comment I-82-7.** Please refer to Response to Comment I-82-1 above.

Waxman, I

Matt Waxman  
 11 January 2006  
 mwax@ucsc.edu

draft 2005 LRDP EIR response comment

*Failure of Aesthetics section to address  
 Impact of potential Graduate Village in Porter Meadow:*

*Background:*

The Aesthetics section of the draft 2005 LRDP Environmental Impact Report (EIR), section 4.1, begins by introducing the issues that received comments noted as important, and that the section will address these issues (pp. 4.1-1). In 4.1.2.2 "CEQA Checklist Items Adequately Addressed in the Initial Study" (pp. 4.1-8), the EIR goes on to claim that all items from the initial study should be addressed in the EIR, further establishing the commitment to address the list of particular issues described in the Aesthetic section's introduction. Of particular note in the list is the aesthetic impact of a Graduate Village in the Porter Meadow.

In 4.1.2.3 "Analytical Method" (pp. 4.1-9), the EIR describes its analytical method as being concerned with "the nature and magnitude of anticipated visual change resulting from 2005 LRDP development; the number of public vantage points from which this change would be visible; and the number of viewers who would be affected by this change" (pp. 4.1-9). "Analytical Method" continues to state, "the vast majority of envisioned development on the campus would be sited in the central campus forested areas as infill or in the forested north campus and is therefore not a concern from the perspective of impacts on scenic vistas because it would not be visible from or obtrusive upon scenic vistas" (pp. 4.1-9). This statement further refines the scope of the Aesthetic analysis to specifically scenic vistas of particular spaces visible from other spaces; thus, as the statement asserts, development deep within the forested campus is not being addressed because the forest hinders visibility of potentially developed areas from other areas. The section further says the on-campus views considered are the recreation and events center on the east side of campus, the new family student housing complex to the west, and the Arts area development (pp. 4.1-9). The section then claims the "view from Empire Grade Road looking north to potential campus support site south of Cave Gulch neighborhood is not considered a scenic view since the site is surrounded by forest, and expansive, long-range views to the site are not available" (pp. 4.1-9). This statement about the Empire Grade Road view is in concert with the notion that if the forest hinders enough visibility there is no impact to be analyzed; yet at the same time, this statement notes that the EIR is particularly interested in specifically "expansive, long-range views". The views the EIR chooses to analyze (and depict with visual simulations) are all "expansive, views that have been identified by the campus community as having aesthetic value" (pp. 4.1-9). These views, as listed, are: "Cowell College, Baskin Visual Arts Center, Porter College, and Oakes College" (pp. 4.1-9). From this list we can discern that long-range views from Porter College are important, and given the introductions commitment to studying the Porter Meadow, so are views from Porter College to the Porter Meadow.

Given that the introduction of the Aesthetics section dedicates itself to addressing the Porter Meadow, and that the Porter Meadow does not have “expansive, long-range views” to the same affect as views looking out to the Monterey Bay, but that the views from Porter College across the Porter Meadow are views from one space to another space that are not hindered by the forest, the Aesthetics section’s scope justifies the study of the Porter Meadow. (The study of the Porter Meadow should also be conducted simply because it was requested to be studied.) Therefore, as the views upon the Porter Meadow that would see the potential development of a Graduate Village are not long-range but short-range on-campus views, the EIR Aesthetics section also justifies the study of short-range views within specific spaces like the Porter Meadow.

*Problem:*

In discussion of LRDP Impact AES-1, for the section on “Porter College” (pp. 4.1-12), the analysis discusses the “knoll south of Porter College”. The knoll is relevant to this specific impact issue as it discusses the knoll in the context of impacts to key vantage points looking out across the campus to the Monterey Bay. Yet, in its discussion it also recognizes that “since portions of the Porter Meadow are designated for Colleges and Student Housing and Physical Education and Recreation, it is anticipated that development, including the proposed Family Student Housing Redevelopment, could occur in the vicinity of the sculpture on the knoll at Porter College” (pp 4.1-12). This statement recognizes that potential impacts may occur from development in the vicinity of the knoll at Porter College, including the Family Student Housing Redevelopment, as well as other unstated potential development.

There two problems with this assertion. The first being that, in reference to the draft 2005 LRDP land-use map (pp. 64 of draft 2005 LRDP), the Porter Meadow area is designated as the land-use of Colleges and Student Housing but not the land-use of Physical Education and Recreation. The area designated as Physical Education and Recreation lies south of Heller Drive in the area that holds the west field house tennis courts and was also designated in the 1988 LRDP as Physical Education and Research—this area is not part of the Porter Meadow. *I have prepared a map clarifying and defining the Porter Meadow and its surrounding context: see “Map 1”.*

The second problem is that it appears the EIR strategically avoids discussion of the potential Graduate Village, which the Aesthetic section’s introduction claimed would be discussed. By diverting focus to the proposed Family Student Housing Redevelopment (by raising it as the noted example of development in the way of a view) the EIR is able to consider strictly long-range views from Porter College, of which only the Family Student Housing Redevelopment would be visible within, and with minor impact.

The dismissal of the Graduate Village and other views from Porter College—notably short-range views from Porter College into the Porter Meadow cannot be ignored for three reasons (following from the information I have provided in “background” above): 1) the campus’ unique environmental fabric affords views critical



to the campus experience that are both long-range and short-range; 2) it makes common sense to consider aesthetics and views of an environment at multiple scales; 3) and most critically, the EIR's Aesthetics section Introduction (pp 4.1-1) specifies that not only had "comments identified Porter Meadow and Empire Grade as campus features of particularly valued visual importance" and that the "aesthetic impacts of locating the Graduate Student Village in Porter Meadow" should be analyzed, but that the EIR claims it is going to address these concerns within the Aesthetics section: "To the extent that these issues involve significant effects on the environment, they are addressed in this section."

*Yet, in fact, the issue of the Graduate Student Village in Porter Meadow is never addressed in the section. Given that a Graduate Student Village placed in the Porter Meadow would greatly change the visual character of that open space and the views across it from Porter College, the issue of the Porter Meadow would involve significant effects on the environment. The EIR made a false assertion about analyzing something necessary to analyze.*

In the discussion following LRDP Impact AES-5: "Development under the 2005 LRDP could substantially degrade the existing visual character of the campus and adjacent areas" (pp. 4.1-18), the EIR recognizes it's analysis considers that, "as discussed in LRDP Impact AES-2, construction of new facilities would not substantially alter the long-range views that are valued on and off campus" but there is the potential that "new construction could affect the visual character of campus areas, if the new facilities are not designed to be visually or aesthetically compatible with their surroundings" (pp. 4.1-18). By positing the possibility of development to negatively impact the campus and claiming long-range views to be an unsubstantial impact, the EIR acknowledges that non long-range views—because they are not in the category of views analyzed to have unsubstantial impact (long-range views)—could potentially have negative impacts. The views on-campus looking-out across the Porter Meadows are such short-range views that fall into the category of being affected by development not discussed in the EIR's analysis of long-range views. *For assistance in analyzing these short-range views onto the meadow, I have prepared a map clarifying three short-range views impacted by potential for development within the Porter Meadow: see "Map 2".*

The same passage acknowledges "the aesthetic character of pathways could be adversely affected by development if it substantially changed the varied visual experience of pedestrians using them" (pp. 4.1-18). A varied visual experience is defined by the pedestrian's experience of both forested and open spaces in alternating or irregular rhythms. (The draft 2005 LRDP's "warped-grid" (draft 2005 LRDP page 74) concept maps this experience.) The Porter Meadow, being an open space containing paths and being connected to existing college communities and forested spaces, becomes an important experiential component of the campus' "varied visual experience" (pp. 4.1-18). Development in the Porter Meadow would therefore substantially change the varied visual experience by altering the experiential rhythms for pedestrians. Therefore the discussion following LRDP Impact AES-5 in fact further justifies the importance of

Waxman, 4

closely analyzing the impact development can have on the short-range views and experience of the Porter Meadow.

It is not simple enough to solely follow implementation of the existing LRDP Mitigation AES-5A. As the EIR's own discussions in LRDP Impact AES-1 and LRDP Impact AES-5 justify (as mentioned above), and as the stated commitment in the Aesthetics section's introduction commits to analysis, the potential for impact from a Graduate Village in the Porter Meadow must be analyzed in a revision of the EIR.

*Conclusion:*

The issue of the Porter Meadow is handled, but very inadequately, in LRDP Impact AES-1 and LRDP Impact AES-5. The discussions of these Impacts in conjunction with the introduction to the Aesthetics section, demonstrate that a deeper and specific analysis of impacts to the Porter Meadow itself must be conducted.

*Next Steps for Revision of EIR:*

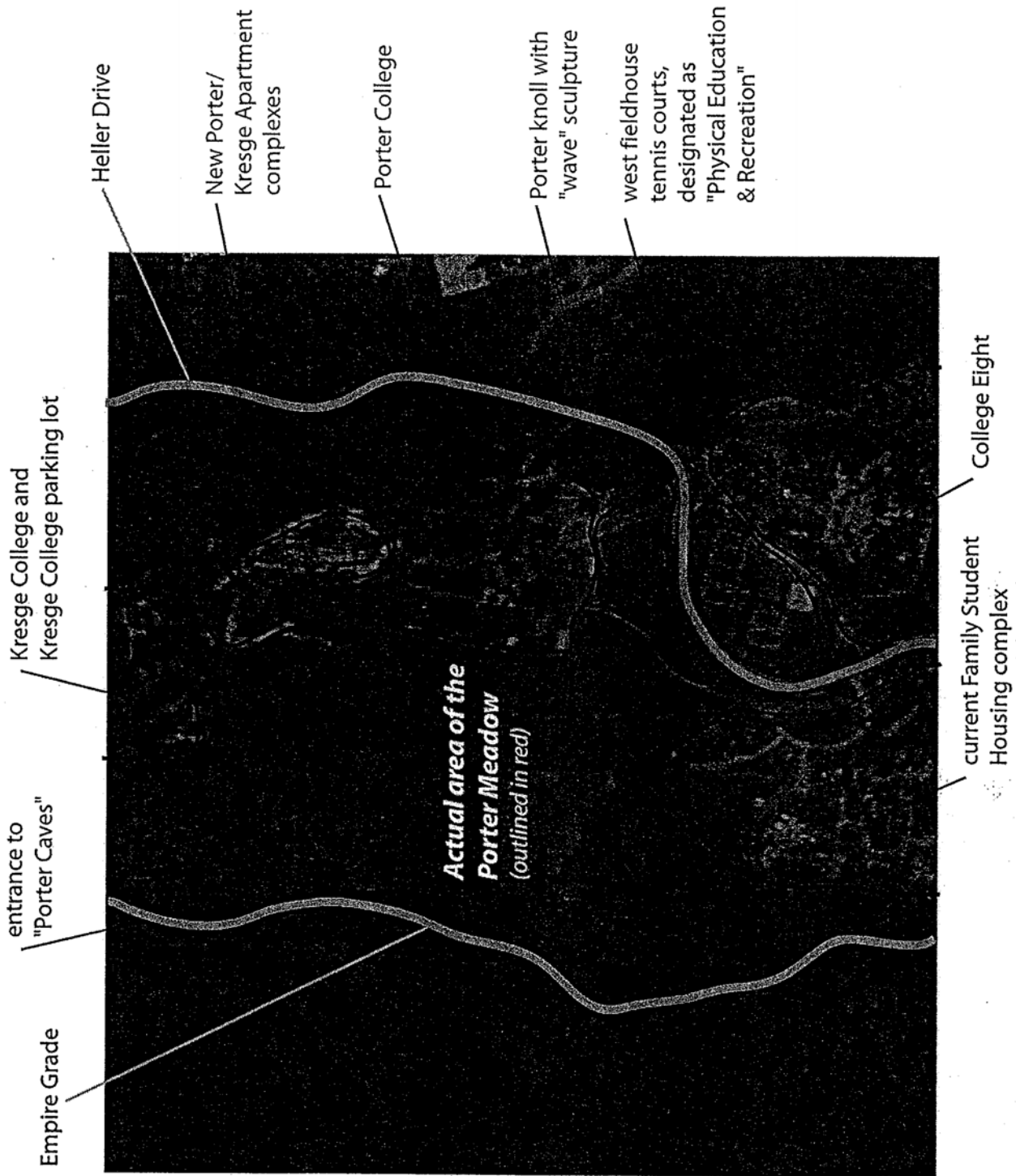
Conduct and include an analysis of the short-range views of the Porter Meadow in regard to the impacts development in the Porter Meadow (in specific the Graduate Village) can occur.

Conduct and include an analysis of potential disruption of the "varied visual experience" that development in the Porter Meadow can occur.

Revise LRDP Impact AES-1 and LRDP Impact AES-5 to reflect the further analyses of the Porter Meadow.

Please see the accompanying "Map 1" and "Map 2" for visual details as to what the Porter Meadow is and what important short-range views into the Porter Meadow are. Please also adjust any accompanying maps in the EIR to reflect the Porter Meadow views and impacts.

**Map 1: Clarification and definition of actual Porter Meadow area.**



Matt Waxman; January 2006; mwax@ucsc.edu

**Map 2: Three short-range views impacted by potential for development within the Porter Meadow**

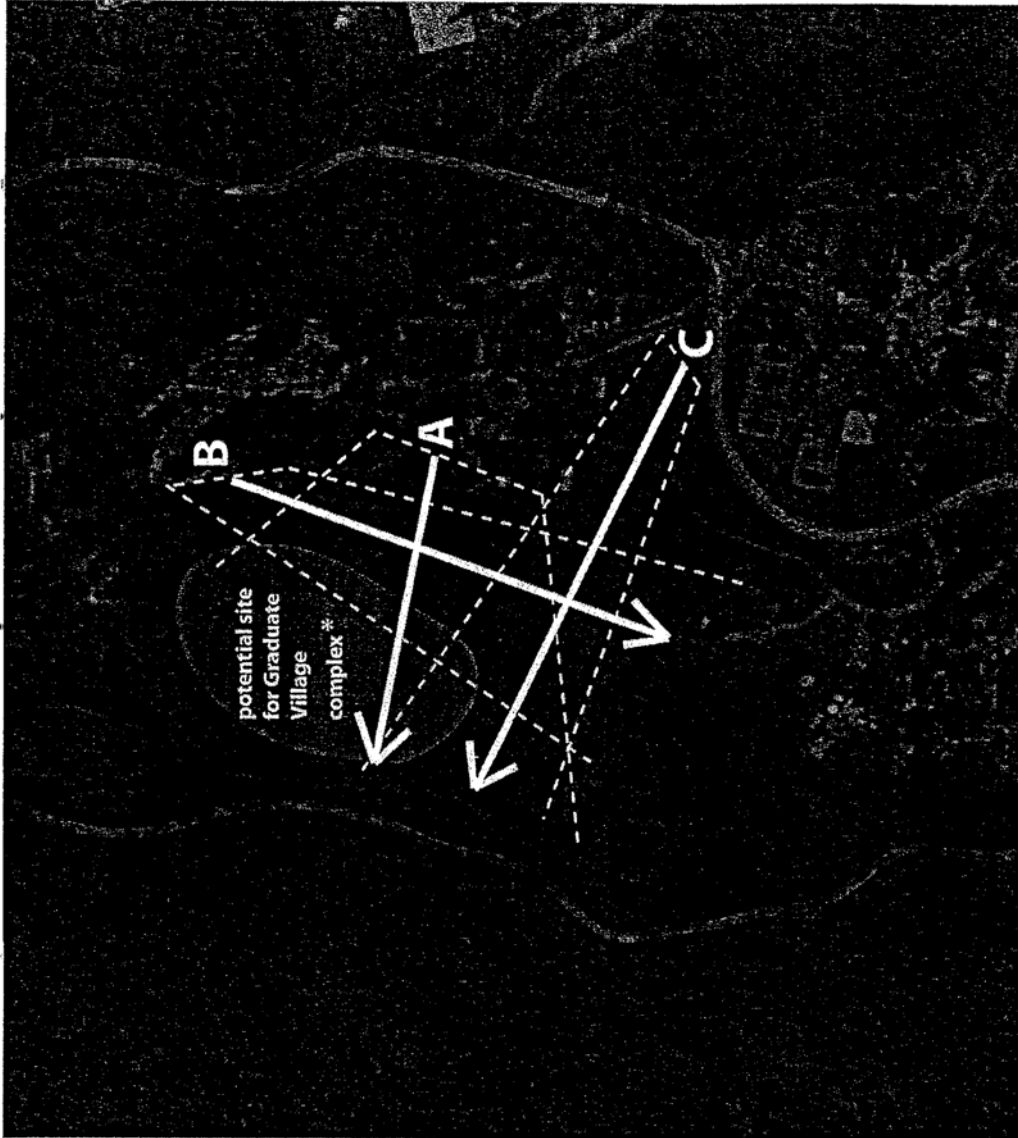
**VIEWS:**

**A.** From rear of Porter College dorm "B" Building. Visible vantage points include: many dorm room windows looking-out to meadow, rear exits and driveway (used socially and recreationally), dining hall outdoor patio, old volleyball court area south of outdoor patio. *This view is most highly impacted.*

**B.** From rear of new Kresge infill apartments and central patio space between them. View includes trail-path which travels south towards the view of the Family Student Housing Complex at the southern end of the meadow.

**C.** From Porter knoll with "wave" sculpture. Visible vantage points include: path from Porter bus-stop to Porter College, Porter "wave" sculpture as one looks back towards the meadow.

**Note:** The Porter meadow is used socially and recreationally by the Porter, Kresge and campus-wide community. It is important to also consider the aesthetic and cultural importance of the Porter Meadow to these community perspectives.



**\* potential site for Graduate Village Complex; in accord with recommendations made in Draft 2005 LRDP. This site is within the area designated as "Colleges & Student Housing".**

### Response to Comment Letter I-83

**Response to Comment I-83-1.** The introduction to the Aesthetics section (Draft EIR page 4.1-1) identifies public comments related to the aesthetic impacts of the 2005 LRDP that were raised during the scoping period for this EIR. As noted in the comment, the list of concerns raised includes the aesthetic impacts of locating the graduate student village in Porter Meadow. The introduction also states that to the extent that these issues involve significant effects on the environment, they are addressed in this section.

The aesthetic impacts of locating the graduate student village in Porter Meadow were not specifically analyzed in the Draft EIR as this project would not likely result in a significant effect on the environment related to aesthetics. The overall development anticipated in the 2005 LRDP is evaluated as it relates to changes in the visual character of the campus (LRDP Impact AES-4, Draft EIR page 4.1-18). This evaluation encompasses all potential projects, including a potential graduate student village in Porter Meadow. This impact was determined to be less than significant with implementation of LRDP Mitigations AES-5A through -5E. In particular, LRDP Mitigation AES-5A would ensure that the visual character and quality is not substantially degraded. Please also see Response to Comment LA-6-15 regarding new LRDP Mitigation AES-5F. In addition, as discussed in Chapter 2 of the Final EIR (Volume IV), the Campus will recommend to The Regents that the Final Draft 2005 LRDP (the Reduced Enrollment Growth Alternative) be considered for adoption as the new LRDP for the campus. Under that alternative, there would be no development in Porter Meadow. Please also refer to Response to Comment LA-3-10 for information about the appropriate level of analysis for a Program EIR.

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Jan 10, 2006

2005 LRDP EIR Comment  
UCSC Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, CA 95064

Via email to [lrdp-eir@ucsc.edu](mailto:lrdp-eir@ucsc.edu)

Re: Comments and questions on Draft EIR for UCSC Long Range Development Plan

Sirs,

I am currently serving on the City of Santa Cruz Transportation Commission, and served on the Master Transportation Study Steering Committee. However, the comments and questions in this letter do not reflect those bodies or the City, but rather my own observations and questions as a resident and citizen of Santa Cruz.

I believe that UC is a vital part of the Santa Cruz community and makes tremendous contributions to the region. The purpose of this letter is to help UC to recognize the effects it's past and continued growth have on the community so that it may plan for and take full responsibility for those effects, and so that it may contribute appropriately to the creation and maintenance of infrastructure needed to sustainably support it's mission.

Given my background, I have focused on transportation issues in the DEIR. Overall, the DEIR projects a very dire future for the city. It shows 5 of the 36 off campus intersections studied to be operating below their worst case standards today, and all of those currently failing intersections have significant UCSC traffic contributions. With the LRDP implemented, the DEIR predicts 20 intersections will be failing, a devastating picture of the future of our community.

The following issues strike me as problematic:

- "FTE" Enrollment as a Unit of Measure
- Standards of Significance
- Master Transportation Study Consistency
- High/Storey/King/Mission Route Congestion
- East Side and Other Congestion
- Highway 1 Congestion

- Neighborhood Parking
- Participation in Funding of Infrastructure and Maintenance

I will comment on each issue.

**"FTE" Enrollment as a Unit of Measure**

The LRDP and DEIR use the terms "FTE" student or enrollment throughout, which is described in the Executive Summary as meaning "full-time equivalent". While this "equivalency" might be appropriate for calculating classroom or instructor requirements, it is clearly not appropriate for estimating housing or transportation needs. Consider the case of two half-time students: they will have roughly the same classroom needs as one full time student, but will need twice as many beds, showers, meals, cars and such. Trip generation rates will also be higher than a single full-time student - how much so depends on variables such as the students' class schedules and living situations.

1

The DEIR analysis appears to have silently assumed that the mix of students which makes up the full-time equivalent student will remain constant. If this is the case, then it should be so stated along with details of what that mix is, so that future enrollment plans can be evaluated for consistency with the EIR. Alternatively, the planned mix should be used explicitly in the plan and analysis.

What will be the actual number of students and staff, broken down by full time, part time, graduate, undergraduate, and living on and off campus? How much error is there in trip generation rates when calculated using the "FTE" approximation? Does this error result in the DEIR having under or overestimated trip generation?

**Standards of Significance**

There are two issues here. First is that this LRDP is a continuation of UCSC development, not an independent project. Treating the impacts of the this LRDP separately from those of previous campus development amounts to dividing the total development into smaller incremental phases and thus understates the significance of UC's overall growth. Thus, traffic impacts should be evaluated by comparing LRDP levels of congestion with those which would be present without UC at all. By breaking the development of the campus up into arbitrary multi year segments, UC has avoided accounting for shortcomings in earlier LRDPs and for the total impacts it imposes.

2

How does UC justify this?

The second issue pertains to non-signalized city intersections. Section 4.14.2.3 chooses to consider as insignificant any level of delay increase at an unsignalized intersection if that intersection does not meet Caltrans warrants for signalization. The reasons an intersection may not meet the warrant specifications include situations where a signal would be ineffective at improving flow. Thus, the DEIR may have considered intersection congestion to be insignificant for the perverse reason that this one mitigation

3

method (signalization) would be ineffective. For example, intersection 41 (High/Laurent), under LRDP shows a huge increase in delay, falls from LOS D to F, and has large UC contribution (Table 4.14-15), but is deemed insignificant apparently because a stop light wouldn't fix the damage.

3

How does UC justify this?

**Master Transportation Study Consistency**

The joint UC - City Master Transportation Study (MTS), finished in 2003, concluded that the then current levels of congestion on city streets were unacceptable to city residents. The MTS set the goal of having no net increase in the number of peak hour vehicle trip though the year 2020. (Master Transportation Study. Executive Summary, page 7) The recommendations of the MTS would serve to accommodate increasing population and travel demand by shifting person trips into transportation modes which create fewer vehicle trips.

4

**"... A key outcome of the analysis is to establish target mode split goals to achieve the MTS vision with no increase in traffic congestion by year 2020."**  
(Master Transportation Study. Analysis of Future Travel, page 37)

In contrast, the LRDP DEIR states that growth in congestion to level of service D at any and all intersections would be acceptable to the City. This ignores the fact that congestion and neighborhood traffic conditions are already unacceptable to the community and UC, and that the MTS's goal was to have no net new vehicle trips generated.

There also seems to be an inconsistency in the assumptions and data between the two documents vis-à-vis peak hour trips generated by UC. For example, the MTS (based on information provided by UC) stated that there were 2,433 trips to or from UC during the peak hour in year 2000 (MTS Table 4, Page 43). The DEIR, on the other hand, asserts there are now only 2,040 such trips, based on 2003-2004 data (LRDP DEIR Table 4.14-1). This represent a discrepancy of over 20% or more, given that UC trip generation increased in the intervening years. This also suggests that different numbers of trips are generated for each person at UC under the two analyses. The MTS data works out to 0.21 peak hour trips per FTE student (2,443 trips / 11,500 students) , while the DEIR works out to 0.14 (2,040 / 14,400). The MTS trip generation rate is 42% higher. Relatively speaking, the DEIR thus understates how many trips occur now, how many will occur in the future, and consequently understates, relative to the MTS, the number of new trips which will be generated. This discrepancy should be explained.

5

In any event, the growth anticipated in the LRDP to 21,000 students is far above the maximum 15,000 assumed in the MTS. Since UC proposes no offsetting net decreases in trip generation rates, nor equivalent improvements in mode split, it would appear that implementation of the LRDP will cause the MTS to fail to achieve it's goals. Alternatively, a revision to the MTS will be needed. However, such a revision would

6



most likely (as the MTS already did) require the city and residents of Santa Cruz to invest in programs and alter their transportation behavior in order to accommodate further UC growth. These unfunded mitigations for UC growth should be acknowledged in the EIR.

6

The DEIR compares 2020 conditions with and without LRDP implementation. However, both of these cases use AMBAG projections which do not take the MTS into consideration. While this might seem a conservative assumption, determinations of significance and mitigation measures are targeted on maintaining less desirable conditions than if the MTS had been considered. Further, the MTS emphasizes measures which do not increase auto traffic capacity, preferring measures less hostile to alternate forms of transportation. The LRDP's proposed mitigations do not heed this approach.

7

Since UC supplied the MTS with the current data and projections of it's growth, and insisted that the MTS not consider the then well known and internally published, though not-yet-approved plan to grow to 21,000 students, it would be unconscionable for UC to now disavow and/or thwart the conclusions and recommendations of the MTS.

8

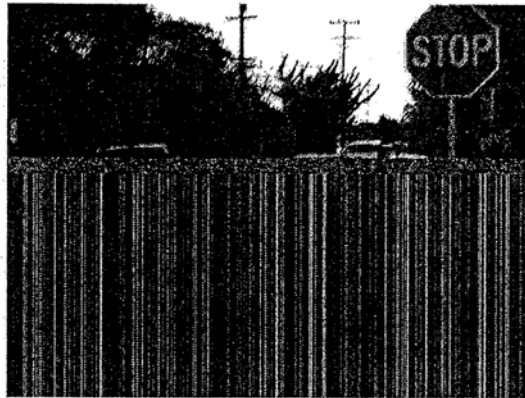
Does the University intend to maintain consistency with the Master Transportation Study and/or the principles and objectives of that study? Does UC accept the premise that traffic congestion at several locations in the City and County are currently at levels unacceptable to the residents? How does UC propose to fund the revision to the MTS called for in that document as a result of the LRDP's projections outside of the ranges in the MTS?

**High/Storey/King/Mission Route Congestion**

The LRDP acknowledges "peak period congestion" along the High/Storey/King/Mission corridor. (LRDP DEIR 4.14-4 ff) In fact, on many afternoons when UC is in full session, (not during the summer) traffic backs up over ½ mile from the Chestnut/Mission light along this route, creating delays of over 10 minutes. That is 600 seconds, by the way.

9

By way of example, here are photographs taken at 4:00 PM on Wed, 11/9/05. Traffic was backed up from Mission/Chestnut through five intersections (Mission/Chestnut, Mission/King, Storey/King, Storey/Escalona, Storey/High). Here looking down Storey from High at Storey/Escalona and Storey/King, one section of the queue can be seen at a dead stop.



The right hand photo shows that the queue continues up High Street, above Storey/High.

9

As UC TAPS staff and west side residents know very well, this is typical. It often starts around 3:30 and lasts past 4:30. This condition has existed for several years already. I have a similar set of photographs showing the same condition in 1997. It should be noted that during these periods, other approaches to the Mission/Chestnut intersection are not backed up, clearing completely on each light cycle, suggesting that UCSC creates this situation without significant contribution from other traffic generators.

By definition, this is a Level of Service F: 600 plus seconds of delay, multiple intersections backed up.

However, the LRDP DEIR, in table 4.14.9, Intersections 19, 20, 22, 23 (Page 4.14-25) indicates that these intersections presently function at various levels of service between B and E in the PM peak hour, with a worst case delay of 57.2 seconds. The Chestnut/Mission light, which in fact causes the entire back-up, is described as LOS C with 33 seconds of delay. These photos and common knowledge demonstrate that the DEIR has made an error - by a factor of nearly 20.

This situation pertains also to the Bay access route, which is regularly backed up past King in mid-day and afternoon hours.

Clearly, the DEIR traffic analysis methodology is defective. It fails to document or account for known, common existing conditions. Obviously, this methodology can not be trusted to forecast future conditions either.

10

Given the magnitude of this discrepancy, the analysis of traffic throughout the DEIR must be called into question. The methodology not only failed to predict what is readily

observable, but it also failed to warn it's practitioners that it was not capable of handling this particular situation. Thus, there is no way to know if it has failed to accurately portray conditions at the other sites in this study.

Since the existing and future conditions are incorrectly documented, their significance and mitigations can not be evaluated at this time. Thus, a new draft EIR will need to be published and new comment period opened, so that data which accurately represents current and projected conditions can be evaluated.

As a potential reliever of west-side congestion, the DEIR considers and rejects an ineffective an "eastern access" to the campus. Other projects to address this congestion have been suggested, but were not mentioned in the documents. Because much of the PM congestion occurs as vehicles queue for left turns onto Mission across incoming traffic, a method to eliminate these conflicts might dramatically improve the situation. One such method would be a one-lane fly-over onto Route 1 from the bottom of High Street. An additional exit ramp from SR 1 onto High could also keep upper west-side bound traffic off of Mission. These facilities would not decrease traffic bound for the east side of Santa Cruz, but they would remove from that traffic those vehicles bound for the freeways 17 and 1, and thus possibly dramatically reduce the congestion. While this would involve changing the bottom block of High from a quiet cul-de-sac into a main thoroughfare, the improvement in conditions on Highland, Storey, Bay, King and countless other residential streets would be tremendous. Another suggested alternative would be the installation of a modern roundabout at the Mission / Chestnut / Highland / King / Union intersection.

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Any such measure would require significant funding and cooperation between the City, UC and Caltrans. But the LRDP represents a tremendous capital investment by the state and will require additional investment by the state into it's own transportation infrastructure to support the growth. Such cooperation is called for repeatedly in the LRDP, and these kinds of projects offer opportunities to answer that call.

Have the level of service predictions of the traffic model used been verified to be accurate for intersections considered in the DEIR? What is the historically measured accuracy of the AMBAG model for projecting future population at the level of geographic specificity used in the DEIR traffic analysis? What would be the worst case impact if similar errors occurred in an adverse direction in this plan? Does UC have the budget and authority to implement mitigations which might be necessary off-campus? If budget or authority for mitigations is not assured, can such mitigations be considered in the EIR?

12

**East Side and Other Congestion**

It is clear to users of the east-side commute routes that traffic is far better there during the summer than when UC is in session. Since these routes are already saturated, worse than the DEIR's stated existing LOS's, adding more trips to these routes will severely increase delays. Because there is a bottleneck at Arana Gulch and no plans to add lanes through

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the bottleneck, improving intersections and roadways elsewhere will not help. Since this LRDP looks only at the next growth increment, it does not illuminate the total impact that UC imposes.

13

The DIER suggests that many study intersections will be functioning poorly in 2020. This will cause predictable cut-through traffic and congestion on alternative, largely residential streets such as King, Escalona, Walnut, Seabright, and many others.. This will necessitate traffic calming and other measures to maintain the safety and quality of life in these areas. The DEIR fails to consider these impacts or suggest mitigations for these obvious and predictable consequences of the conditions it anticipates.

14

The following table summarizes information in the DEIR for one interesting intersection, Highland/High:

High/Highland, Intersection 30

	Existing		2020 w/o LRDP		2020 w/LRDP	
	Delay	LOS	Delay	LOS	Delay	LOS
AM	30	D	58.9	F	104.1	F
PM	110	F	183.1	F	219.4	F

Several items deserve notice. First, the upper west side served by this intersection is largely built out except for UC, making implausible the DEIR's prediction of a 15% increase in volumes without the LRDP (LRDP EIR Figure 4.14-7b [30] vs. 4.14-9a). This may be due to the use of the AMBAG model which is regional in scope, and not appropriate for individual intersection analyses. Further, AMBAG has noted very significant errors in its predictions of population at the level of individual TAZs.

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"Models at the scale of the AMBAG model, a regional scale, are valuable for measuring changes in travel patterns and global or aggregate measures such as trip generation, travel delay, and relative changes in traffic on major corridors. Large-scale models have limited ability to accurately predict traffic volumes on individual streets or street segments." (MTS pg 37)

Since this assumption worsens the LOS of this intersection to F without the LRDP, it masks UC's impact. In any case, the DEIR predicts that the LRDP itself will nearly double the delay at this intersection, but states that this is insignificant.

Exactly why does UC consider doubling of this delay beyond acceptable LOS to be insignificant? Does UC consider Caltrans signalization warrants as appropriate measurement of significance of congestion? Does Caltrans consider their signalization warrants to be appropriate for use in the determination of whether congestion is significant?

Since High is one-way, this data also suggests that UC has chosen the wrong time period to measure its impacts. The PM traffic through this intersection is largely commute traffic returning to the residential upper west side neighborhoods, and occurs after 5PM. UC, on the other hand, has its peak PM outgoing traffic earlier, when afternoon classes

end. By measuring impacts during times of minimal impact from UC, the DEIR understates UC's impacts throughout. More appropriate would be to measure the LOS of each intersection leg at the worst case time for that leg. It is probably a blessing for this community that UC's hours and directions of peak traffic flow are different than for the other generators contributing to our traffic. But to measure UC's impact, we must look at data which reflects UC's contribution.

15

An additional peculiarity about this data is that there is seldom any PM queue here at all. In this case, the model has exaggerated the delay. Further, the traffic counts in the DEIR show a difference of only 5 vehicles per hour difference between the AM and PM hours on the busy leg, (with insignificant numbers on the other legs), but the delay is shown differing by nearly a factor of four. (LRDP DEIR Figure 4.14 7b [30]) This difference in delay from such minor traffic changes is simply not credible. Again, the method used to compute the LOS does not seem to be matching the reality, a clear indication that it is inappropriate for this study.

Another predictable reaction to the heavy congestion predicted by the DEIR will be to shift trips earlier or later. Thus, the LRDP will have an impact of lengthening the period of unacceptable congestion. This impact is not documented in the DEIR. Relying on analysis of an arbitrary one hour time to represent the impact, by design the DEIR completely fails to address the temporal spread of congestion.

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What is the duration of congestion currently? What will the duration of congestion be under the LRDP? What areas will require traffic calming under the LRDP? Will UC fund traffic calming programs necessitated by the LRDP?

**Highway 1 Congestion**

Highway 1, east (nominally south) of Santa Cruz is already far past its carrying capacity, having several hours of stop-and-go congestion every day. The SCCRTC has estimated the cost to the region of widening this highway at over \$300 million, and has also determined that even this project would not eliminate the congestion on this segment.

That UC contributes to this congestion is obvious. A circled data point, at the far right edge of Figure 4.14-8 informs us that 25% of the trips generated by this project, (and by UC as a whole) pass along Highway 1 south of Santa Cruz. This amounts to roughly 6,200 daily trips currently, with more to come under the LRDP. SCCRTC states that this highway carries 121,000 trips daily, suggesting that UC's contribution is roughly 5%. On such saturated highways, very small increases in traffic result in dramatic increases in congestion and delay. For this reason, any additional increases in load, by UC or other development, will have a profound impact on this critical segment and on the few parallel alternative roads, increasing the delays, and the duration and geographical spread of the congestion.

17

The DEIR does not acknowledge or document UC's contribution, existing or future to congestion on this highway. It only says that Caltrans plans to widen the highway,

essentially assuming it will be done and that this widening will eliminate any and all problems. Caltrans has described such a widening, but it has no plan to actually construct it, due to the total lack of funding. Further, increasing the capacity of the freeway would also serve to worsen the peak traffic flows on the roads which connect the freeway to traffic generators, thus worsening the existing and anticipated congestion on Mission, Bay, High and other streets, a factor missing from the DEIR traffic analysis.

My own hunch is that much of the growth in congestion on Highway 1 over the past 15 years has been due to past UC growth. Highway 17 volumes have not increased substantially, making the City of Santa Cruz the location of the traffic generation. In the city, many larger employers have left or remained similar in size: TI, Wrigley, SCO, the County, the City, Seaside and so on. The one traffic generator which has grown is UCSC, and due to high housing costs and limited housing growth in the city, much of the new employment/student housing is in Soquel, Aptos, Capitola, and Watsonville.

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In any case, UC's current and future impact on this critically overloaded highway should be described in detail to ensure that the state can plan to properly fund development of it's own infrastructure as needed to serve it's growing university.

What fraction of Highway 1 traffic south of Santa Cruz is attributable to existing and future UC activity? If this UC traffic were absent, what would congestion conditions on this highway be?

**Neighborhood Parking**

UC students and employees use neighborhood streets for parking to avoid UC parking fees and restrictions. This occurs especially the upper west side, but also beyond Mission, downtown and reportedly now near eastside bus stops as well. The DEIR acknowledges this phenomenon. (LRDP 25) (LRDP DEIR 4.14-13)

While UC has been exemplary in reducing SOV use through their transit and parking pricing programs, the unintended consequences of these programs have placed an onerous and undue burden on the residents and city. While permit parking programs are often successful in mitigating pay parking impact on adjacent neighborhoods, the ability of UC affiliates to use the bus has created a far larger and intractable problem here. In most situations, a small area of permit parking suffices to discourage park-and-walk uses, as is the case on Santa Cruz's east side near Santa Cruz Medical Clinic. But the "free" bus rides spread the impact along the entire bus route system.

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As a result, the city has had to add more street segments to it's permit parking zone every year for the last seven years. Each time, the problem simply moves down to the area near the next bus stop. The program is funded through fees collected from residents, a funding mechanism which is truly poisonous to UC/community relations. Staffing, signs, enforcement, council review and fees are all impacts borne by the residents and city to cope with this problem.

The DEIR states (pg 4.14-54) that "LRDP Mitigation TRA-2B, which is aimed at reducing single-occupant vehicle use and would also address parking storage demand associated with the campus, would contribute toward diminishing parking inconvenience for neighborhood residents." In fact, UC's TDM policies are the primary force creating the residential parking problems, as UC affiliates seek to circumvent the costs and restrictions of the TDM programs.

The DEIR asserts that the city's permit parking program mitigates neighborhood parking impact to an insignificant level. This merely puts the onus of mitigation on the victims of the impacts, and is, in fact, a total failure of UC to mitigate for its impacts.

Alternatives solutions might include:

- UC funding the permit program.
- UC developing policies and enforcement methods to prevent the problem in the first place.
- Creation of legitimate park-and-ride lots and shuttles to serve those students employees who are evidently not well enough served by existing transit routes and systems.

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One major objective of UC's bus pass and parking pricing program is to reduce automobile trips through the surrounding neighborhoods. Therefore, a UC affiliate driving into a neighborhood to park and then catch the bus is clearly abusing the bus pass. As such, prohibition of this behavior and enforcement of stiff penalties (through spot checking, for example) would seem not only appropriate, but a necessary component of this TDM program.

As this problem and the permit parking zone has spread, requiring residents to jump through bureaucratic hoops and then pay permit fees to park in front of their own homes, UC has earned enmity from its neighbors, block by block, year after year. This is truly regrettable, given that UC's objective all along has been to lessen its impact on these very neighborhood.

**Participation in Funding of Infrastructure and Maintenance**

UCSC enjoys certain local tax exemptions, which means that it contributes proportionally less than other developments to the city and county governments. To the extent that UC provides its own police, fire, road maintenance and other services, this may be appropriate. But UC does impose considerable use, wear and tear on the roads used by its generated trips. The funding of the ongoing maintenance of the infrastructure is not discussed in the impacts, but over the lifetime of the planned developments, these impacts will be substantial.

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Further, UCSC has been acquiring off-campus facilities, removing them from the local tax base. While UC's use of these facilities may be similar to other approved uses, those other uses did contribute to ongoing revenue stream which support services and infrastructure. The LRDP and DEIR exclude these and other future such "off campus"

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sites from consideration, but they should be included. CEQA prohibits dividing a project into smaller sub-projects because doing so can obscure cumulative impacts which would be visible in a combined analysis.

Since UCSC is by far the largest remaining opportunity for future development, and since it is likely to consume and overwhelm any remaining capacity of the nearby transportation infrastructure, the "fair share" approach to funding needed improvements may be inappropriate. In a less built-out community such a scheme may indeed be fair, but this huge development dwarfs any other potential future growth, and so may be the last possible funding source. Charging the straw that breaks the camel's back at the same rate as the rest of the payload will not save the camel. Furthermore, much of the existing traffic is generated by UCSC. Looking only at this phase of growth leaves the rest of the community to pay for the unanticipated impacts of previous UC growth. UC's impacts should be considered in total, not just incrementally. Otherwise, UC has simply divided the total project into smaller, less significant phases, sidestepping its obligation to mitigate for its own cumulative impacts.

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### **Conclusion**

I believe that UCSC is a vital part of Santa Cruz, and that it brings great benefits to this community. However, because of its size, growth potential, tax exemptions, and exemption from local planning processes, it has great power to alter the local and regional community. With this power must come responsibility for ensuring that UCSC enhances, rather than degrades its host community. CEQA offers one opportunity in the EIR to recognize and take responsibility for the UC future impact. I hope that UC will rise to the occasion and fully and accurately describe its impacts and honestly plan and fund their mitigation.

Thank you for the opportunity to share my thoughts.

Sincerely,



Scott Wedge



**Response to Comment Letter I-84**

**Response to Comment I-84-1.** Please see Response to Comment ORG-7-1 regarding the difference between and use of headcount and full-time equivalent (FTE) measures of student population. As explained in that response, the EIR uses headcount for the environmental analysis; this includes the development of trip generation rates. Student FTE, which is used for academic and budget planning, is calculated by multiplying the academic year headcount for each level by a conversion ratio, which is based on average student course load. The conversion ratio is calculated annually for each campus. Between academic years 1990-91 and 2004-05, the ratio between average headcount enrollment and three-quarter average FTE at UC Santa Cruz ranged between 0.99 and 1.02.

In 2003-04, approximately 23 percent of UC Santa Cruz employees in the City of Santa Cruz were employed part-time.<sup>1</sup> Because the EIR analysis is based on headcount projections, providing a breakdown by full-time and part-time status would not provide information relevant to the environmental analysis.

The project traffic calculations for the University uses trip generation rates derived from existing traffic counts at the University entrances. The rates are calculated by dividing actual traffic counted by an independent variable (the total population on campus including students, faculty, staff). The number of students used in the independent variable is FTE students. Because the rates are developed from actual traffic counts it does not matter whether the independent variable uses FTE students or just students as long as the independent variable is used consistently in future calculations of trip generation. Since the existing traffic generation rates are derived from the campus population (including FTE students in 2004), the use of this rate in estimating future traffic based on total campus population (including a projection of FTE students) is consistent and a proper use of the rate.

**Response to Comment I-84-2.** The traffic generated by the existing campus population is part of the baseline and not the subject of study for the Draft EIR. CEQA requires that an EIR evaluate the impacts of the proposed program or project relative to a baseline that represent existing conditions at the time the program or project is proposed or, as in the case of traffic impacts for a long range program such as the 2005 LRDP, relative to conditions that would exist in 2020 without the project. It is important to note that existing campus traffic is included in the analysis and contributes to the identified impacts. But only the impact of the increment of growth under study is compared to the thresholds of significance. Please see Master Response TRAFFIC-1 (Traffic Standards of Significance).

**Response to Comment I-84-3.** The significance criteria for unsignalized intersections are those historically used in environmental review in the City of Santa Cruz and specifically for UC Santa Cruz projects (see CLRDP EIR, page 4.15-1). Please also refer to Master Response TRAFFIC-1.

**Response to Comment I-84-4.** There is an inconsistency between the goals of the Master Transportation Study (MTS) (Fukuji Planning and Design 2003) and the City's historical application of LOS D as a threshold of acceptability. Until the MTS goals are adopted as policy in the City's General Plan, the goals cannot be used as thresholds of significance.

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<sup>1</sup> Larry Pageler, UCSC Transportation and Parking Services, September 2004, Employees by Work Site.

**Response to Comment I-84-5.** At the time that the Master Transportation Study (MTS) was prepared, 2000 and 2020 vehicle trips for the campus that were used in that study were estimated using the pre-2005 version of the AMBAG Travel Demand Model and not from campus gate counts (please see Footnote 3 in Tables 4 and 8 of the MTS, which states that the campus vehicles trips were projected from the AMBAG model). In contrast, for the Draft EIR analysis, the number of peak hour trips were derived by estimating campus-specific trip generation rates based on actual counts conducted over several weeks during Fall 2003 and Winter 2004. Secondly, at the time that the MTS was prepared, the most recent mode split data that was available for the campus was from Spring 1997. That data set showed a peak hour mode split of 50.4 percent travel by alternate transportation modes, which was substantially lower than the 58.8 percent mode split for alternate transportation modes measured in Spring 2004. For these reasons, the peak hour trip estimates in the Draft EIR differ from the numbers used in the MTS. Because the peak hour trips used in the Draft EIR analysis are based on actual recent data, they do not understate the new trips that would result under the 2005 LRDP. Please refer to Response to Comments LA-9-5, LA-9-72, and LA-9-73 for further information of the derivation of trip generation rates.

**Response to Comment I-84-6.** At the time that the MTS was prepared, the Campus had not developed a projection of enrollment increase under the 2005 LRDP. Therefore, the enrollment level of 15,000 students from the 1988 LRDP was used in that study, and not 21,000 students in 2020 as evaluated in the Draft EIR, or 19,500 students in 2020 as projected under the Final Draft 2005 LRDP. However, the campus's new enrollment projections do not conflict with the analysis of the MTS, nor do they necessitate new analysis or revisions to the MTS. This is because the MTS included a total of 3,177 pm peak hour trips for the campus in 2020 (1,782 internal and 1,395 external trips, per Table 4) which is greater than the 2,983 pm peak hours trips in 2020 estimated for 21,000 enrollment level in the Draft EIR (see Table 4.14-10) or 2,810 pm peak hour trips in 2020 estimated for 19,500 enrollment level under the Final Draft 2005 LRDP (based on main campus data in Table 2-7 in Final EIR Volume IV, and 2300 Delaware Avenue data in Table 4.14-10 in the Draft EIR). Therefore, trip generation associated with the 2005 LRDP effectively is accommodated in the total numbers used in the MTS.

The Draft EIR identifies impacts of the increased traffic that would result from increased population under the 2005 LRDP, and intersection or roadway improvements that would be needed to mitigate the impacts. Under LRDP Mitigation TRA-2A, the Campus would pay its fair share of the cost of these improvements. The Draft EIR acknowledges that because these improvements are outside the jurisdiction of the University, the impact would be significant and unavoidable.

**Response to Comment I-84-7.** The traffic analysis in the Draft EIR uses traffic projections that are based on land use changes, not vehicular capacity. The MTS focuses on Santa Cruz' transportation infrastructure, not land use. Consistent with CEQA requirements, the Draft EIR evaluates the impacts of the campus's growth on the existing transportation network, and does not assume any added roadway capacity. Proposed mitigation measures are consistent with the City's requirement to meet level of service standards. This is also consistent with the MTS, which includes a section on Transportation Systems Management emphasizing relatively minor improvements to intersection capacity as quoted from the MTS (Fukuji Planning and Design 2003) below:

**“Intersection Modifications & Innovative Solutions”**

Intersection modifications include innovative solutions at both signalized and non-signalized intersections. Traffic signal modifications include modernizing existing traffic signals, installing new traffic signals, removing unnecessary traffic signals, interconnecting and synchronizing individual signals into signal systems or networks, optimizing signal timing for traffic flow during both high and low volume hours, and providing for signal flashing during off-peak hours. Solutions include use of video cameras and a centralized control center to make real-time adjustments to signal operations to clear congestion. Posting of synchronized traffic speeds will also be considered.

Traffic operations modifications at non-signalized intersections may include various corridor and intersection changes (approach widening, channelization, addition of turn lanes, and parking removals), re-striping travel lanes, one-way couplets, installing pavement markers, and relocating transit stops. Traffic operations modifications are designed to increase the operational efficiency, safety, and capacity of the existing street system without corridor-wide street widening.”

**Response to Comment I-84-8.** Please see Response to Comment I-84-6 above regarding the effect of the 2005 LRDP on the analysis contained in the MTS.

The Campus supports the conclusions and recommendations of the MTS, and plans to minimize the increase in new peak hour trips to the campus by implementing revised LRDP Mitigation TRA-2B. This mitigation not only includes a suite of TDM measures but also the Campus’s support of the Bus Rapid Transit project, which is one of the recommended improvements in the MTS. Note that in addition to TDM, the MTS included recommendations for intersection improvements to reduce congestion (See Response to Comment I-84-7 above). The LRDP EIR also includes a mitigation measure (LRDP Mitigation TRA-2A) whereby the University would contribute its fair share of the cost of improvements to certain key intersections in the City’s Westside that would address congestion.

**Response to Comment I-84-9.** The Draft EIR recognizes the traffic problems associated with the High/Storey/King corridor, particularly in the analysis of project conditions, which shows that the controlled intersections of Mission/Chestnut, Mission/King and King/Storey are operating at LOS F. These three intersections are identified as significantly impacted by the project in the Draft EIR. The intersection of High/Storey is only controlled for the northbound movement, so the analysis of the intersection cannot compute the delay associated with the slow moving queue caused by the stop-controlled King/Storey intersection. The Chestnut/Mission traffic signal is not the direct cause of the High Street queuing. Rather it is the stop-controlled King/Storey intersection, in combination with the Mission/King traffic signal. Vehicles traveling on Storey Street towards King Street are required to stop and wait for a gap in traffic on King Street. The King Street traffic can back up and prevent turns from Storey Street. The backup on King Street is a function of the timing of the Mission/King traffic signal, which currently is not synchronized with the Mission/Chestnut signal, but backups at Mission/Chestnut can prevent traffic from King Street from turning onto Mission Street. Therefore, the Mission/Chestnut intersection may have an acceptable level of service, and still influence conditions at the Mission/King intersection. Mitigation measures to reduce impacts along the High/Storey/King corridor are identified in the Draft EIR include signalization of the King/Storey intersection (refer to LRDP Mitigation TRA-2A and Table 4.14-18 for mitigations). Additionally, Caltrans has installed a traffic signal interconnection system on Mission Street, but has not yet implemented synchronization. Once synchronized, the backups on Mission Street will reduce and the turns from King Street will be expedited.

The project's impacts to the Bay Street corridor are identified in the Draft EIR, particularly at Bay/Mission, which is the primary bottleneck intersection in the corridor. The EIR concludes that impacts at the intersection would be significant and identifies appropriate mitigation measures (Draft EIR pages 4.14-46 to 47).

**Response to Comment I-84-10.** Please refer to Response to Comment I-84-7 through I-84-9 above, which explain the Draft EIR methodology and conclusions.

**Response to Comment I-84-11.** Please refer to Master Response TRAFFIC-2 with regard to the Eastern Access route. Regarding the other potential solutions identified by the commenter, the commenter correctly states that these solutions would be unacceptable to the community because they would greatly impact the surrounding residential neighborhoods and may not be physically feasible (e.g., a flyover would require significant length for ramps to provide the required clearance over Mission Street). A roundabout at the intersection of Mission/Chestnut was not considered in the EIR as a potential improvement (see Draft EIR Table 3.14-18), because the intersection's daily traffic projections (nearly 70,000 vehicles per day) exceed the Federal Highway Administration's guidelines for the capacity of a two-lane roundabout (about 40 to 50,000 vehicles per day) (FHWA 2000). A roundabout therefore would not reduce traffic impacts.

**Response to Comment I-84-12.** Existing levels of service were calculated using the 2000 Highway Capacity Manual operations method. The University contracted with an independent traffic consultant (Fehr & Peers Associates) to conduct intersection traffic counts and calculate existing levels of service on and off-campus. The traffic consultant who prepared the Draft EIR used the data from counts conducted by Fehr & Peers Associates, and verified the Fehr & Peers level of service calculations by independently performing the calculations. These traffic counts and associated levels of service were the basis for all subsequent analyses in the EIR. The levels of service presented for existing conditions in the Draft EIR are comparable to the levels of service for existing conditions that are presented in the draft study being prepared for the City's Traffic Impact Fee study update (City of Santa Cruz undated). Regarding the accuracy of AMBAG's historical population projections, AMBAG states "AMBAG's population forecasts have in the past been shown to be close to accurate at the regional and county levels and less accurate at the city and Transportation Analysis Zone level" (AMBAG's 2004 Population and Employment Forecast). The following table compares AMBAG's 1997 projections with 2000 census data at the city level. The error in the forecasts for the City of Santa Cruz is less than 1 percent.

Because traffic volumes typically fluctuate plus or minus ten percent daily, the error introduced by AMBAG's population projections would not have a significant effect on the traffic projections. Note that the current AMBAG Travel Demand Model is based on the 2004 AMBAG forecasts and not on the 1997 forecasts.

The University does not have authority to implement mitigation measures off campus, such as off campus roadway or intersection improvements, because the University does not have jurisdiction over development off campus. However, as described in the Draft EIR, the University has committed to contribute its fair share of funding toward each identified improvement, as discussed under Master Response MIT-1.

### Comparison Between AMBAG's 1997 Forecast and the Census by City

Area	1997 Forecast Population 2000	Census Population 2000	Numeric Difference	Percent Variation
Carmel	4,477	4,081	-396	-9.7%
Del Rey Oaks	1,709	1,650	-59	-3.6%
Gonzales	8,265	7,525	-740	-9.8%
Greenfield	10,810	12,583	1773	14.1%
King City	11,600	11,093	-507	-4.6%
Marina	20,618	19,163	-1455	-7.6%
Monterey	33,130	29,673	-3457	-11.7%
Pacific Grove	17,392	15,522	-1870	-12.0%
Salinas	130,196	143,776	13580	9.4%
Sand City	243	260	17	6.5%
Seaside	29,832	31,695	1863	5.9%
Soledad	26,483	24,489	-1994	-8.1%
Unincorporated	106,152	100,252	-5900	-5.9%
<b>Monterey Co. Total</b>	<b>400,907</b>	<b>401,762</b>	<b>855</b>	<b>0.2%</b>
Hollister	29,841	34,413	4572	13.3%
San Juan Bautista	1,703	1,549	-154	-9.9%
Unincorporated	18,619	17,272	-1347	-7.8%
<b>San Benito County Total</b>	<b>50,163</b>	<b>53,234</b>	<b>3071</b>	<b>5.8%</b>
Capitola	11,172	10,033	-1139	-11.4%
Santa Cruz	55,013	54,593	-420	-0.8%
Scotts Valley	11,218	11,385	167	1.5%
Watsonville	43,620	44,265	645	1.5%
Unincorporated	136,714	135,326	-1388	-1.0%
<b>Santa Cruz County Total</b>	<b>257,737</b>	<b>255,602</b>	<b>-2135</b>	<b>-0.8%</b>
<b>AMBAG Region Total</b>	<b>708,807</b>	<b>710,598</b>	<b>1791</b>	<b>0.3%</b>

**Response to Comment I-84-13.** The Draft EIR studied 11 intersections on the east side of Santa Cruz. Existing intersection levels of service were verified through an independent study contracted by the University (Fehr & Peers Associates 2004). The future analysis encompasses existing University traffic on east side streets and intersections, in addition to growth in traffic generated by the 2005 LRDP. Applying the City of Santa Cruz' historical standards of significance did not result in any significant impacts.

**Response to Comment I-84-14.** Local neighborhood street impacts are often a result of drivers attempting to avoid congestion on arterial streets. Typically, the problems are related to speeding or cut-through traffic (traffic using a local residential street to bypass congestion on collector or arterial streets). Implementation of traffic calming measures addresses the problem of streets that are not functioning as intended. The streets accommodating campus-related traffic are functioning as intended (e.g., Bay, High, and Storey Streets as arterials, King and Escalona Streets and Western Drive as collectors). These streets have been designed to provide for longer trips, such as those between the campus and the rest of the city, and not strictly for residential access. These streets also have barriers and other safety features to ensure that the use is appropriate. For example, King Street already contains speed humps to slow traffic approaching the public school. Other than potential parking impacts (which are addressed through the City's Residential Permit Parking Program), there has been no indication from the City or surrounding neighborhoods that campus-related traffic causes speeding or cut-through traffic problems. The 2005 LRDP is not anticipated to cause impacts related to speeding and cut-through traffic. The University's commitment to pay a fair share of intersection improvement costs (see Master Response MIT-1) will help avoid neighborhood traffic impacts by mitigating the project's impacts on the primary travel routes.

**Response to Comment I-84-15.** While the commenter is correct that the west side neighborhood immediately adjacent to the University is built out, traffic generated by development in the county (Felton, Bonny Doon) is projected to use Empire Grade Road, Bay Street, and High Street.

The increase in traffic was estimated using the AMBAG model, in which corridor growth was used to derive growth factors for the above-mentioned corridors. As a regional model, the AMBAG model may not be appropriate for deriving intersection turning movements, but is appropriate for deriving corridor growth factors. That is why the Draft EIR uses a method that extrapolates from existing turning movement traffic counts at the study intersections and does not rely solely on the AMBAG model for traffic projections.

Even without the growth associated with the 2005 LRDP, the High Street corridor experiences a modest growth of about 100 trips in each peak hour, enough volume to take the intersection of High Street and Highland Avenue from a LOS D to a LOS F. Although the 2005 LRDP adds to the volume and exacerbates the level of service, this intersection does not meet the criteria for significance. For an intersection impact to be significant, under the significant criteria used in the 2005 LRDP, the intersection must both fall below the LOS threshold, and must (at an unsignalized intersection) meet a signal warrant. The intersection of High and Highland was determined to be not significantly impacted because it is an unsignalized intersection that would not warrant the installation of a traffic signal. Please also refer to Master Response TRAFFIC-1 (Traffic Standards of Significance).

The Draft EIR analyzes the highest peak hour that occurs between 4:00 PM and 6:00 PM, typically between 5:00 and 6:00 PM. This period was selected because it represents the worst case period of all

traffic combined in Santa Cruz, not just the University. Based on counts conducted at the University entrances, in the PM peak period the University traffic is highest between 4:30 and 5:30 PM. Additionally, based on counts conducted by the City of Santa Cruz, High Street’s afternoon traffic peaks at 4:00 PM. These peaks fall within the peak period analyzed. Because the University’s peak traffic generation was recorded in the intersection counts and was used to determine the future trip generation of the project, the analysis in the EIR evaluated a reasonable worst-case scenario.

The difference in level of service at the High/Highland intersection between the AM (30 seconds/vehicle) and PM (110 seconds/vehicle) peak hour is due to an adjustment factor required by the methods of the 2000 Highway Capacity Manual. This Peak Hour Factor (PHF) is a measure of the fluctuation of traffic during the peak hour so that the analysis represents the highest 15-minute period of the peak hour. The peak-hour factor (PHF) is applied to traffic counts to determine “design hour” flow rates used in the analysis. Design hour flow rates are always higher than actual traffic counts because the PHF extrapolates the worst 15-minute period to a full hour. The PHF is calculated as:

$$PHF = V / (4 \times V15)$$

Where:

PHF = peak-hour factor,

V = hourly volume from traffic counts (vph), and

V15 = counted volume during the peak 15 min of the peak hour (veh/15 min)

Based on the counts, the PHF is higher in the afternoon than in the morning at the High/Highland intersection. When applied to the traffic counts in the level of service calculations, the PHF for the AM peak hour increases the afternoon volumes on the northbound approach by over 250 vehicles more than the morning peak hour, resulting in a LOS F in the PM peak hour and a LOS D in the AM peak hour. The table below illustrates the effect of the peak hour factor. As can be seen, the standard methodology of adjusting the counts to reflect an analysis of the peak 15-minutes increases the traffic volume by about 35 percent. This increase creates an over-saturated condition in the PM peak hour where small changes in volume have significant effects on delay (and LOS).

**Effect of Peak Hour Factor on Northbound Approach of High/Highland**

	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
Traffic Count	663	703
Peak Hour Factor	0.86	0.68
Adjusted Volume	771	1033
Volume/Capacity Ratio	0.91	1.20
Delay (sec/veh)	33.3	118.3
LOS	D	F

**Response to Comment I-84-16.** One result of congestion, as noted by the commenter, is a potential lengthening of the peak period. Regardless of its length, the peak period contains the highest period of traffic by definition. Because the analysis includes the entire peak hour trip generation of the project, the

Draft EIR analyzes the reasonable worst-case level of service and identifies mitigation measures for this worst-case scenario. Measures that mitigate impacts during the highest peak hour also will mitigate traffic impacts during the lower adjacent periods of time. Please refer to Response to Comment I-84-14 above regarding cut-through traffic and traffic calming.

**Response to Comment I-84-17.** An analysis of Highways 1 and 17 has been prepared and circulated for public and agency comment in the Recirculated Draft EIR – Additional Traffic Analysis.

**Response to Comment I-84-18.** Please refer to Response to Comment LA-4-6.

**Response to Comment I-84-19.** Please refer to Response to Comment LA-9-86.

**Response to Comment I-84-20.** Campus employees working in leased building space in the City of Santa Cruz are included in the 2005 LRDP faculty/staff population assumptions (see Draft EIR page 1-2). The facility that the Campus recently acquired at 2300 Delaware Avenue in Santa Cruz is included in the 2005 LRDP EIR, and a project proposed for that facility is the subject of project-specific analysis in Volume III of the Draft 2005 LRDP EIR. Therefore, the University is not segmenting or otherwise dividing the 2005 LRDP project.

While the Campus does not pay property taxes directly to the local community, the Campus is a significant economic force in the local economy. To the extent that impacts to infrastructure are related to persons affiliated with the campus that live off campus, those persons pay property taxes, purchase fuel for vehicles locally, and pay taxes on goods, all of which contribute to the funding for infrastructure maintenance, such as repaving of off-campus streets. As discussed in Section 6 of the Draft EIR, campus-related activities and spending supports indirect and induced jobs in the local economy and generates income for the local community through sales taxes. Please refer to Response to Comment LA-6-62 for more on this point. Also, please see the Campus's analysis of the economic benefits of the University to the community at: <http://planning/UCSC.edu/budget/Reports/EconImpact/EconReport.htm>.

Additionally, as noted in various sections of the Draft EIR and Recirculated Draft EIR, the Campus has committed to pay its fair share of the construction costs for certain capital improvements needed to serve University in the context of other cumulative growth (see Section 4.14, *Traffic, Circulation, and Parking*, and Section 4.15, *Utilities*). The University will comply with its obligations to pay public utility fees for necessary utility improvements as authorized under Government Code Section 54999. Please refer to Master Response MIT-1 on fair share contributions and Government Code 54999.



From: "Russell Weisz" <RussWeisz@baymoon.com>  
To: <lrdp-eir@ucsc.edu>  
Subject: LRDP- EIR comments  
Date: Sun, 8 Jan 2006 21:30:02 -0800  
Thread-Index: AcYU3b15DH9w8/RFTHqkDhgUhoErqQ==

Dear Reviewer,

Regarding LRDP Impact GEO-3, I don't understand how the EIR can claim that erosion due to tree removal, grading, construction activities of new buildings and the proposed north campus loop road will be less than significant based on general policy statements. These activities are highly conducive to significant erosion which can affect water supplies, sensitive environmental habitat and potentially not comply with NPDES requirements. How can a determination of the individual and cumulative impacts of all the proposed tree removal, grading and construction be made without detailed information on all of the specific activities? Since this is not possible at this time or no attempt has been made, the statement in GEO-3 that impacts are less than significant is merely a goal not a fact. The analysis and detail provided in GEO-3 is insufficient and inadequate.

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Sincerely,

Russell Weisz  
319 Laguna St.  
Santa Cruz, CA 95060  
831-458-1374

Response to Comment Letter I-85

**Response to Comment Letter I-85-1.** Please refer to Response to Comment LA-2-76. Also see LRDP Impact HYD-2 in the Draft EIR regarding construction site erosion and mitigation measures proposed by the Campus.

From: "John R Williams" <jrwillia@ucsc.edu>  
To: lrdp-eir@ucsc.edu  
Date: Mon, 09 Jan 2006 15:36:39 -0800  
Subject: UCSC LRDP

To whom it may concern:

The growth of UCSC has many negative impacts on the surrounding community. I have many concerns about the subject, but wish to comment on one that impacts me directly. I live near downtown in a high rental neighborhood. Cypress Point Apartments are adjacent to my back yard. A majority of the apartments are rented to UCSC students. On my own street (Walti St.), I would guess that somewhere in the vicinity of 80% of the residents are rental. I would further guess that of those rentals, probably about 60-70% are UCSC students. I am a home owner, and therefore have a great interest in having as safe and pleasant a neighborhood as possible. Students from UCSC tend to have a different ideal. Since I bought my home about 4.5 years ago, I have been in constant battle with landlords over loud noisy parties by UCSC students that go on till all hours of the night. I have battled with landlords to rein in their UCSC student tenants over issues of refuse left in the street, and cars illegally parked. UCSC Students living in the Cypress Point Apartments, or friends of students living there, will often park at the end of our street, and break through the wooden fence that separates Walti street from the apartment complex, so they can find parking, or take a short cut. This has been misery for me. It's a never ending battle because even if a landlord does reprimand his UCSC student tenants, as soon as the semester ends, the likelihood of one group of students moving out and being replaced by a new group is very strong; and a new battle begins. Landlords love renting to UCSC students, they can pack a bunch of 'eager-to-be-away-from-mommy-and-daddy', 'eager-to-be-living-off-campus', 'financially-subsidized-by-deep-pocketed-parents' tenants into their rental units. The landlords enjoy an endless supply of renters who require little in the way of needs; needs that might be more consistent in people such as pesky families or professionals that live with a 9am-5pm routine. A routine that makes for the basis of how communities adopt ordinances - like quite after 10pm. No, landlords see that they can get much higher rents from UCSC students, with less involvement. It's very simple business for them. It's a business mecca for the landlords that have rental properties around UCSC.

Several city ordinances are in place to address the problems that UCSC students bring to our community. The process that an individual must go through to bring resolve using these ordinances to fight against problematic properties within a community is exhaustive, and can be financially burdensome. I know, I've been there. I move to have UCSC take responsibility for their spoiled and unruly children that they attract to

our community. I believe the UC system can step up and resolve this issue in several ways. Here are some of my ideas. UCSC can require it's students to live on campus for the first two years upon entering as a freshman. After the first two years, students generally become a bit more serious about their studies if they continue on, and therefore alot of the potential to party has waned. UCSC can require the students living off campus, to register their names and addresses in a database. This information to be accessible to local law enforcement. When a student living off campus breaks a local ordinance, or commits a crime - his/her name will flag when entered into the database, and the student will be liable for all corrective actions they would be subject to if they were living in an apartment or dorm on UCSC campus. UCSC shall provide funding and or personnel to help expand local law enforcement dedicated to UCSC student population within city limits. UCSC will host ongoing forums, with a regular schedule (monthly? quarterly?... certainly no longer duration then quarterly)to allow public comment specifically addressing UCSC impact on surrounding communities.

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I sincerely hope these comments are taken into consideration. I realize this has nearly nothing to do with "environmental impact", but ones environment can certainly be said to be impacted by ones neighbors. Hey UCSC, why not follow some of your own educational offerings provided by your establishment and become "SOCIALY RESPONSIBLE".

John Williams  
148 Walti Street  
Santa Cruz, CA 95060

Response to Comment Letter I-86

**Response to Comment I-86-1.** Please refer to Response to Comment I-17-1 for information about how the Campus has attempted to minimize the impact of campus students in off-campus neighborhoods.

From: "Megan Willis" <mmwillis@ucsc.edu>  
 To: <lr dp-eir@ucsc.edu>  
 Subject: Comments on the LRDP  
 Date: Tue, 10 Jan 2006 16:36:58 -0800

Dear LRDP committee,

Though I see your intentions of expanding this campus to offer more specialized and graduate opportunities, I must strongly disagree with the plan of expanding into upper campus, and much of the other expansion in general. I came to UCSC to remain in the country, to see the blue skies, walk the grassy fields, and be in a natural learning environment. This school is already oversized and needs no more reasons for even more students to come. UCSC is unique in it's beautiful redwood settings. To cut down one of these trees, which I know have been here long before all of us, is an attempt to destroy the basics of a harmonious learning environment that UCSC is striving for. I did my core project at Kresge partly on the LRDP and find that these ideas are made by a few people in control, attempting to bring more business, and a greater name to the campus. I did numerous interviews with students and asked them how they felt on the subject. The general consensus was that nearly nobody wanted this expansion. The students were all curious how to stop the destruction of our beautiful campus, and felt inferior due to the limited time of about four years each student has here.

On another subject, with your LRDP's expansion into upper campus, the trailer park is at risk of destruction itself. I feel by destructing this avenue, you will be destroying some of the only low income housing available in all of Santa Cruz. The trailer park is a symbol of what UCSC stands for, and the people there have developed a community much similar to the communities of UCSC when it was originally founded. Taking this away would be removing the heart and soul of what the free side of UCSC is living for. If the trailer park would be removed, then my worst fears of modernity come true. The new shiny, heartless and expensive buildings will sit on top of the old soul, buried deep underneath the fingers of power and money.

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Why do you crave so badly to expand the campus? New campuses are being built all over California. There is no need to cram numerous students on one campus when we can spread out all over California, and receive a better student to teacher ratio. Ultimately, I see the LRDP as an attempt to modernize, expand, and popularize UCSC. This is against my and many other students morals and see only the destruction and death of the campus that I chose for its beauty and peaceful environment. With your plan in act, I believe UCSC will no longer be the humble hide away that I crave, but rather a city built on a hill of ideals of those few and powerful people in

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charge. STOP THE EXPANSION!

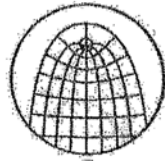
Megan Willis

Response to Comment Letter I-87

**Response to Comment I-87-1.** Comment noted. Please refer to Response to Comment LA-2-92 regarding the Campus Trailer Park. Please see Master Response ALT-5 regarding the cost of on-campus housing.

**Response to Comment I-87-2.** Please refer to Master Response ALT-2 (Proposed Program Growth at Another UC Campus or New Site).





**WHPA**  
water resource planning consultants  
www.wittmanhydro.com

2005 LRDP EIR Comment  
UC Santa Cruz Physical Planning and Construction  
1156 High Street, Barn G  
Santa Cruz, CA 95064

RE: COMMENTS ON 2005 LRDP DRAFT EIR

To Whom It May Concern:

I have the following general comments regarding the Draft EIR:

**POOR PRESENTATION OF DATA AND ANALYSIS:** As a professional hydrologist and consultant it is often my responsibility to explain the complicated relationships that exist between development and hydrologic response. This EIR does not pass the test of technical clarity and straightforward graphics. The report does a poor job of explaining how this particular project would alter the hydrograph or the stream condition in any part of the campus area. This impact analysis would be an ideal application of GIS maps and landscape modeling. In short, the hydrology section of this EIR does not satisfy the primary purpose of the report – to explain how the proposed project would alter the site and then present the technical argument as to whether these anticipated changes could be mitigated.

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**INCONSISTENCY BETWEEN THE DATA AND CONCLUSIONS:** While it is clearly stated that the proposed project would significantly alter rainfall – runoff relationships in the project area as well as the flow regime in the local karst aquifer, there is hardly any text or graphical presentations that explain these impacts in a way that can be interpreted by the reader of the EIR. The report declares that the impacts will be “significant” and it is clear that all previous efforts to mitigate those development impacts have been ineffective, but in spite of this record of underestimation of flows, erosion, and the overall hydrologic impacts in all previous projects the reader is being asked to believe (there is no data presented that would indicate otherwise) that this project will be different.

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**Wittman Hydro Planning Associates, Inc.**

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STORMWATER DISCHARGE IS INJECTED INTO THE KARST AQUIFER: As the President of the Monroe County (Indiana) Drainage Board, I am responsible for the administration of a very effective karst ordinance (attached). One of the key elements of this ordinance is to protect the quality and quantity of the natural inflows into the karst aquifers in the area. The general approach has been to require 25 – 50 foot undisturbed vegetative buffers around the last closed contour of the sinkholes throughout the county. The main idea of this ordinance is to protect the vulnerable aquifer from sediment and pollution and to preserve the natural features and values of the ecosystems that exists in these environments. Our county would not allow the direct discharge of stormwater into the subsurface as is described in this EIR. The modeling that is (very indirectly) presented to support the claim that the impacts will be acceptable is not applied in a way that illustrates the how the erosion and sedimentation of the swallow holes and karst sinkholes will alter the rate of inflow into the karst or the storage capacity of the karst. If this project is, in fact acceptable, what level of impact would have been too great to support the same finding? It is my understanding that this may not be acceptable practice in drinking water aquifers in California.

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HYDROLOGY OF THE SPRINGS IS MISREPRESENTED: In the text of the report it is suggested that any reduction in flows in the springs would potentially be attributable to the impacts of pumping a well off-site. While the well identified in the report might alter aquifer water levels near the well, based on the information presented in the EIR, the most likely cause of a decrease in flows would be a decrease in recharge from clogged sinkholes at the surface. If these springs have reduced flows there are likely to be changes in wetlands extent and quality (yet to be formally delineated) as well as changes in local biota. These are the kind of impacts that can be both anticipated and understood and are ideal for presentation to the reader.

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The following specific comments on the Draft EIR:

- p. 4.8-39 *“Although the increase in impervious surfaces would be substantial, for the most part it would not significantly reduce recharge of the karst aquifer.”* This needs to have some technical reference because in the source document (the DSWMP) indicates that there has not been any predictive modeling of the changes in impervious area and the subsequent impacts on runoff timing or volume. In fact, the experience that other communities have with managing karst is that the primary issue is engineering adequate storage in the developed landscape to assure that the hydrograph is unaltered in timing, volume, and peak discharge. Springs may be affected in water quality and flows with this change. Again, based on the experience of other communities dealing with this same impact, the developed landscape should not be drained to sinkholes without adequate undisturbed vegetative buffer.
- 4.8.2.3 references is made to modeling the increases in runoff that would result from the proposed development. This new modeling – offered as a suggestion in the DSWMP – was done to estimate the effects of the increases

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in impervious area with the new construction. Unfortunately no data are presented in this section (instead the reader is referred to an appendix) and the general sense of the text is that the evaluation was done. The outcome of such an analysis should have been used to support the conclusions in the EIR rather than being buried in the Appendix. The section on surface water draws no conclusions about whether the proposed project would alter the hydrograph and the section on groundwater simply states that outflows will equal inflows. No data is presented, no conclusions are drawn, and the reader is left with no additional insight to the impacts that were modeled.

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- In Section 4.8.2.4 a summary of impacts are presented with findings of significance. The indication is that the project will cause "... substantially degrade water quality." As the DSWMP clearly indicated (e.g., page ES-3), indicates that these techniques have historically not been effective. The mitigation strategy – erosion control BMPs that are in no way different than what was used historically – and other more aggressive and less disruptive construction techniques (e.g., low impact development design) would be more likely to achieve the desired outcome.
- LRDP Impact HYD-3: drainage pattern changes and runoff impacts. This section concludes that the development will cause significant alteration of the system from the increases in runoff, erosion, and siltation of the system (surface streams and karst). There is no data to suggest that the mitigation strategy being proposed – public education – can be effective. In fact, the data from the DSWMP suggests the opposite conclusion.
- LRDP Impact Mitigation HYD-3B: This section indicates that the erosion problems that would be caused by the proposed development would be "mitigated" by "design measures" that would reduce the peak flows into the system. What are these design measures? It is incumbent upon the proponent to explain how they will mitigate, not that they will mitigate the impacts of the development. Without that information it is not possible to consider the likelihood of success or the risk of failure.
- Same section, page 34: "In summary, because of the existing problems in the four watershed on campus, new development can not increase flows in the channels without increasing the risk of erosion. Implementation of the LRDP mitigations HYD-3C and HYD-3D would require that every new capital project under the 2005 LRDP that would add new impervious surface shall include design measures to ensure that post-development peaks stormwater flows do not exceed do not exceed pre-development stormwater flows and designe measures to maximize infiltration of runoff. The campus has *so far been successful in avoiding increases in peak flows from new development*. Therefore, there is reasonable certainty that the campus will be able to maintain peak flows from project sites at pre-development levels." (Emphasis added.)
- The text and general findings of this section directly contradict the findings of the DSWMP that was used in part, as technical reference (see especially Section 1.4, page 11 bullets at top of page). In the draft stormwater master

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plan there is a clear understanding of the limits of development mitigation: "It is not feasible to reduce the peak runoff from the upstream impervious area."

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- Section 4.8.1.8 – This section introduces the tables of data (statistical summary information) about flows and water levels over the last two decades. The relevant information about the effects of development on these hydrologic parameters may be masked in this statistical summary. For example, it is likely that the variance of flows has increased from earlier periods to later periods in the record. So, rather than identifying the temporal change, the differences are hidden in the lumped statistic. Further, the monitoring schedule outlined in the document indicates that the sampling was not appropriate for the wet season analysis: (p. 4.8 – 20) "Dry season monitoring has indicated that UC Santa Cruz activities and development have not created a measurable increase or decrease in flow rates at any of the springs and streams monitored and have not affected groundwater elevations in on-campus monitoring wells." When in the same section it is admitted that the ad-hoc monitoring schedule may not produce data of the quality and character needed to make this assessment. "Because wet-season measurements are influenced by the amount and timing of rainfall, there is more variation in wet season measurements." The problem with this analysis is that the base flows (already very low in most cases) are less sensitive than the duration that the stream is at base flow conditions. In other words, the reduction in inflows into the karst system may be responsible for increasing the length of time that the streams are in low flow (or no-flow) conditions. In this case the statistic of interest is the *change* in the 7Q10 of the watershed.
- In this same section (4.8.1.8) the text indicates that there is a correlation between rainfall and stream and spring flows, there is not indication or analysis of the hydrologically and ecologically more important changes in storage (or initial abstraction in runoff models) that determine how the hydrograph has been affected by development, particularly in wet weather conditions.
- P 4.8 – 35: In this section of the EIR the text is describing the analysis of impacts predicted from the proposed development. It is unclear how the determination of significance is limited to impacts on structures. "However, because there are no facilities in the areas near these sinkholes that could be adversely affected by this flooding, the impact would be less than significant." While this may be appropriate for the assessment of structural impacts, it is clearly an impact on the ecosystem. This finding also contradicts the earlier statement (paragraph 1 of p. 4.8 – 35) that impacts have been observed on Highview Drive where the culvert has not been able to handle the stormwater flows. The reference in the text is to the detention of additional flows behind the East and West dams but no data or reference is given for results of a hydraulic model or analysis of the changes in inflows to the Arboretum Pond that will be the recipient of the new stormwater discharge from the new development. Additional data and analysis is needed to support these conclusions in the EIR.

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Sincerely,

Jack Wittman, Ph.D.

President  
Wittman Hydro Planning Associates, Inc.



**WHPA**

**JACK WITTMAN**

PRESIDENT, CHIEF HYDROLOGIST  
*jack@wittmanhydro.com*

EDUCATION

**Ph.D. Environmental Science (Groundwater Modeling)**, November, 2000. School of Public and Environmental Affairs, Indiana University, Bloomington, IN 47405. Dissertation: Multi-scale groundwater modeling for water supply protection. Advisor: Henk Haitjema.

**M.S., Watershed Science (Hydrology)**, June 1987. Department of Natural Resources, Utah State University, Logan, UT 84321. Thesis: Spatial Distribution of Trampling Effects Under the Influence of Two Grazing Systems. Advisor: Jim Dobrowalski.

**B.S., Environmental Studies**, December 1978. Department of Natural Resources, Utah State University, Logan, UT 84321

PROFESSIONAL AREAS OF INTERESTS

- Water Supply Planning
- Watershed Response Modeling and Analysis
- Stream-Aquifer Interactions
- Mine Impacts on Water Supplies
- Groundwater Modeling
- Hydrologic Impact Analysis
- Contaminant Transport Modeling
- Water Shortage and Drought

PROFESSIONAL EXPERIENCE

**1988 - present**      **President** Wittman Hydro Planning Associates, Inc. Bloomington, IN. WHPA, Inc. specializes in water resource analysis, aquifer and stream-system modeling, and water supply development and planning. Technical responsibilities include water supply analysis, well field modeling, source water protection, technical representation and advocacy, mine impact analysis, watershed modeling, storm water analysis, and bank filtration simulation.

**1995 - 1998**      **Senior Research Scientist**      Center for Urban Policy and the Environment, School of Public and Environmental Affairs, IUPUI, Indianapolis, IN 46204. Responsible for research on flow and transport of contaminants with application to community water supply planning and protection. Principle investigator on research funded by the Electric Power Research Institute (EPRI) that uses contaminant transport modeling experiments to determine the factors that affect the risk of community well field contamination. Developed a technique for locally refining regional groundwater flow models to properly simulate flow near wells in large well fields.

**1990 - 1995**      **Research Scientist**      SPEA Groundwater Modeling Laboratory, Bloomington, IN. Research hydrologist and administrative staff assistant to Dr. Henk Haitjema at the School of Public Policy and the Environment at IUB. Responsible for supra-regional modeling research effort as well as writing proposals, managing budgets, supervising graduate students in their modeling research, and working as a graduate teaching assistant for several courses taught by Dr. Haitjema. Increased research funding for research from approximately \$20,00 to \$250,000 per year with projects funded by the U.S. Department of Energy, the U.S. EPA, the U.S. Army Corps of Engineers, the U.S. Geological Survey, and the Indiana Department of Environmental Management.

- 1988 - 1990**            **Consulting Hydrologist**    Consulting hydrologist in Yakima Washington. Primary projects were related to developing background monitoring data for long-term water quality assessment of aquifers on the Yakima Indian Reservation. Sampled wells, developed conceptual model, and regional simulation of flow in the regional aquifers used for water supply in central Washington. Obtained grant funds from the USEPA, the USBOR and the USBIA for the Yakima Indian Nation.
- 1986 - 1988**            **Technical Program Manager - Yakima Indian Nation.**    Toppenish, WA. Managed a staff of scientists at the Tribal office and administered outside geotechnical engineering support contracts with national firms. Annual budget for technical staff and contractors was over \$3.7 million per year. Wrote grant requests for the office and managed the technical review of the proposed Hanford Nuclear Repository. Served on several national review committees tracking the U.S. Department of Energy's plans to develop a deep geologic repository for spent nuclear fuel rods.
- 1985 - 1986**            **Associate Director - High Level Nuclear Waste Office.**    Utah Governor's Office, Salt Lake City, UT. Served as the technical lead for the State's response to the U.S. Department of Energy's proposal to site a deep geologic repository for nuclear waste in southeastern Utah. Coordinated the review of environmental impact assessments of the repository testing program by state agency staff and the Utah Geological and Mineral Survey. Wrote and delivered congressional testimony for the State and represented the governor's office in interactions with the Nuclear Regulatory Commission.
- 1984 - 1985**            **Mine Reclamation Hydrologist**    Utah Division of Oil Gas and Mining, Salt Lake City, UT. Evaluated mine reclamation plans for coal mines (statewide) and precious metal operations (Kennecott's Magna pit operation) under the U.S. Surface Mining Control and Reclamation Act of 1977.
- 1981 - 1984**            **Graduate Watershed Hydrology Student**    Utah State University, Logan, UT. Conducted field research on the impacts of grazing on infiltration rates in semi-arid grasslands.
- 1980 - 1981**            **Drinking Water Treatment Plant Operator**                      Salt Lake City, UT. Junior Operator at the City Creek Water Treatment Plant.

**RESEARCH**

Flow and Transport Modeling to Evaluate the Risk of Drinking Water Contamination. Contamination of water supplies is a problem throughout the county. This research uses flow and transport models to consider how the risks of contamination are conditionally dependent on the geology of the site, properties of the chemical, and characteristics of the release. The approach uses numerical experiments (one, two, and three-dimensional flow and transport models) to test the sensitivity of a solute pulse in the well to changes in different release characteristics.

Climate Change Impacts on Groundwater Availability. Analytic element groundwater flow models are extremely well suited to very large scale modeling. This analytic element technique, coupled with a set of one and two-dimensional numerical models, was used in this research to investigate how long-term reductions in regional recharge rates could affect stream flow and groundwater availability in the regional Silurian-Devonian limestone bedrock aquifer in Indiana and Ohio and the overlying unconsolidated aquifers. This work was funded by the U.S. Department of Energy's National Institute for the Global Environmental Change.

Hydrologic Behavior of Glacial Aquifers. One of the problems we have in describing the hydraulic behavior of unconsolidated glacial deposits is the fact that limited data are available to describe the extent of the more permeable zones within the section. Consequently, hydrologists often simplify the picture by averaging the effect of these zones within the section. While this can be demonstrated to properly account for water balance, the implications of flow occurring through these discrete pathways on residence times and contaminant transport are extreme. This research has investigated the scale at which these local openings can alter the behavior of the system.



HONORS AND APPOINTMENTS

- 2001-2003 Board of Advisers, Indiana Center for Excellence in Environmental Systems Modeling.
- 2000-2004 Governor's TMDL Advisory Committee Member, Indiana Department of Environmental Management.
- 1997 Best of ACSP Award for the paper: *Using indices in environmental planning: Evaluating policies for wellfield protection* by the Association of Collegiate Schools of Planning and the American Institute of Certified Planners. Co-author with G. Lindsey and M. Rummel.
- 1993 Visiting Hydrologist, Institute for Inland Water Management (RIZA), The Netherlands. Invited to work with a team of hydrologists to validate a new multiple aquifer, variable density, analytic element model used for the national groundwater modeling program NAGROM.

TEACHING EXPERIENCE

- 1998-1999 Indiana University - Bloomington. SPEA E475 Techniques in Environmental Science. Taught this class as an introduction to environmental investigations. Students were introduced to experimental design, sampling, and statistics, while laboratory sessions provided experience conducting experiments in environmental toxicology, aquatic chemistry, waste management, and wetlands delineation.
- 1992-1994 Indiana University - Bloomington. SPEA E555 Soil Science and Engineering. Taught a one semester graduate environmental science course on the behavior of soils with emphasis on the current methods for remediation (e.g., sparging, venting, bioremediation).
- 1992 Indiana University - Bloomington. SPEA E554 Groundwater Modeling. Teaching assistant to Dr. Henk Haitjema. This course covered the basics of groundwater flow modeling, data analysis, and problem solving. Lead several recitation sessions and lead the student teams in their course project.
- 1983 Utah State University - Logan, Utah. WS 542 Small Watershed Hydrology. Teaching assistant to Dr. Pete Hawkins. This course covered the basics of rainfall-runoff relationships and watershed modeling, data analysis, and problem solving. Lead recitation sessions and student teams in their course project.

PROFESSIONAL ASSOCIATIONS

- Indiana Water Resources Association, President, 2002.
- American Water Works Association, Member, Indiana Section Water Utility Council
- Indiana Rural Water Association Member
- ASTM Member, Section D18 (Soil & Rock) Subcommittee Member
- National Ground Water Association Member
- American Geophysical Union Member

CIVIC ACTIVITIES

- Board Member, Sycamore Land Trust, Bloomington, IN.
- Vice President, Monroe County Drainage Board, Bloomington, IN.
- Founding Member, Greater Ellettsville Neighborhood Association, Ellettsville, IN.

CERTIFICATIONS

- National Ground Water Association, Association of Ground Water Scientists and Engineers, Certified Ground Water Professional (#3015475)



PUBLICATIONS

*Articles*

1. Wilsnack, M., V. Kelson, and J. Wittman. 2005. An Application of the Analytic Element Method in Modeling Florida Everglades Hydrology. *Journal of American Water Resources Association*, (In Press).
2. Lindsey, G., J. Wittman, and M. Rummel. Using indices in environmental planning: Evaluating policies for wellfield protection. *Journal of Environmental Planning and Management*, 40(6) 685-703, 1997.
3. Wittman, J., Haitjema, H.M. and L. Studebaker. Recycling input data during analytic element modeling near Indianapolis, Indiana. *Journal of the American Water Resources Association*. 33(1) 47-54, 1997.

*Recent Technical Reports*

1. "A Tool for Assessing Contamination Risk in Wellhead Protection Areas". J. Wittman and B. Hensel. EPRI, Palo Alto, CA: 2000. EPRI Report 1000790.
2. "Contaminant source inventory of the Indianapolis Water Company wellhead protection areas". J. Wittman and J. Rubleske. Final report to the Indianapolis Water Company. 1998.
3. "Capture Zone Delineation for the White River, Webb, and Sugar Creek Wellfields". J. Wittman, WHPA, Inc. Final report to the Indiana American Water Company.
4. "Evaluation of Risks of Potential Contaminants in Well Field Protection Areas". J. Wittman and J. Mundell. Report for Marion County Wellfield Technical Committee, Center for Urban Policy and the Envir. Report #97-E02. 1997.
5. "Capture Zone Delineation for the Municipal Well Fields, Columbus, Indiana". H.M. Haitjema, V. Kelson and J. Wittman for SIECO, Inc., Columbus IN, October 21, 1996.
6. "WhAEM: Program Documentation for the Wellhead Analytic Element Model". H.M. Haitjema, J. Wittman, V. Kelson, N. Bauch. U.S. EPA document EPA/600/R-94/210. 1994.
7. "Alluvial Aquifer Response to a Flood Pulse; Using Transient Boundary Conditions in a Local Screening Model". J. Wittman, J. Mundell, and J. Berndt. Contract Report to ATC, Inc. 1995.

INVITED PRESENTATIONS

1. "Horizontal Collector Well Modeling: Tools and Techniques" J. Wittman. Invited Presentation to the Berlin Wasser operations team, Berlin, Germany. May, 2004.
2. "The Problem of Groundwater Contamination in Indiana" J. Wittman. Invited speaker at the Indiana Realtors Association Meeting. September, 1998.
3. "Well Field Protection in Indiana" J. Wittman. Invited speaker at the annual meeting of the Indiana Association of Planners. September, 1998.
4. "Use of Geologic Mapping in Groundwater Flow Modeling" J. Wittman. Invited panel member at the Great Lakes Geologic Mapping Forum. Indianapolis, IN. March 1997.
5. "Uncertainty in Capture Zone Delineation" Presentation to members of the Indianapolis City-County Council. December 1996.
6. "Hydrogeology of the Fall Creek Aquifer" Field trip / presentation for the Indiana Academy of Science Spring Meeting. April 1995.

SELECTED PRESENTATIONS

1. "Design and evaluation of high capacity ground water supplies: Considering the potential for riverbank filtration" P. Johnson and J. Wittman. Presented at the NGWA Midwest Focus Conference Chicago, IL, April, 2002.

2. "Management and Analysis of Ground-Water Elevation and Water Quality Data in the Electric Power Industry" K. Ladwig, B. Hensel, J. Wittman, and V. Kelson. Presented at the NGWA Association of Ground Water Scientists and Engineers Annual Meeting. December 2001.
3. "A New Tool for Organizing and Managing Hydrogeologic Data," J. Wittman and V. Kelson. Presented at the MODFLOW 2001 and Other Odesseys conference. September 2001.
4. "Potential Effects of Climate Change on Groundwater Availability," J Wittman and H.M. Haitjema. Presented at the American Water Resources Association Specialty Conference on Potential Consequences of Climate Variability and Change to Water Resources of the United States. Atlanta, Ga. ISBN 1-882132-45-9. May 1999.
5. "Evaluating the Risks of Potential Contaminants in Well Field Protection". J. Wittman. Presented at the 2nd Symposium on the Hydrogeology of Washington State. Olympia, WA. August 1997.
6. "Comprehensive Well Field Modeling for Marion County, Indiana" J. Wittman, H.M Haitjema, and G. Lindsey. Presented at the International Conference on Analytically Based Method of Groundwater modeling. Nunspeet, The Netherlands. April 1997.
7. "Evaluating the Risks of Chemical Compounds". J. Wittman. Presented at the Indiana Water Resources Association Fall Meeting and Symposium, Lafayette, IN. December 1996.
8. "Well Field Protection and Capture Zone Modeling in Indiana". J. Wittman (presenter) and H.M. Haitjema. Presented at the Midwest Groundwater Conference, Columbia, MO. October 1995.
9. "Large Scale Groundwater Flow Model of Regional Bedrock Aquifers in the Midwest". J. Wittman and H.M. Haitjema. Presented at the international conference "Analytic Element Modeling of Groundwater Flow", Indianapolis, IN. April 1994.
10. "Towards a State-Wide Groundwater Modeling Plan". J. Wittman. Presented at the Indiana Water Resources Association Symposium. Spring Mill State Park, Mitchell, IN. June 1994.
11. "Climate Change Impacts on Groundwater Availability: An Application of Supra-Regional Groundwater Flow Modeling". J. Wittman and H.M. Haitjema. Presented at the International Association of Hydrological Sciences Fall Meeting, Orlando, FL. 1993.
12. "Impacts of Irrigated Agriculture on Shallow Aquifer Water Quality near Toppenish, Washington". J Wittman. Presented at the NGWA International Conference in Moscow, Russia. June 1989.

CHAPTER 829

ZONING ORDINANCE: KARST AND SINKHOLE DEVELOPMENT STANDARDS

**829-1. Purpose and Intent**

The purpose of this chapter is to establish review procedures, use limitations, design standards and performance standards applicable to site developments that encompass or affect sinkholes or other karst features. The intent of this chapter is to protect the public health, safety and welfare by requiring the development and use of environmentally constrained areas to proceed in a manner that promotes safe and appropriate storm water management and ground water quality.

**829-2. Policy**

Unless expressly stated otherwise or contrary to context, the provisions of this chapter shall be interpreted and applied in accordance with the following policies:

(A)Development in areas that encompass or affect sinkholes or other karst features (i.e., in “sinkhole areas”) is prohibited unless expressly permitted by this chapter or until it is demonstrated that the development would have no significant detrimental impact on storm water management or ground water quality.

(B)Potential impacts on storm water management and ground water quality must be identified, assessed and addressed through written studies at the earliest stages of the development approval process (e.g., during the preliminary plat, development plan or site plan approval stages).

(C)The extent and sophistication of any required study should directly reflect the nature and complexity of the proposed development and of the development site (e.g., the more complex the karst features, the more extensive and sophisticated the study).

(D)All applicable Federal, State and Local permits shall be obtained prior to construction.

**829-3. Development Requirements**

(A) This chapter shall apply to all public, private and institutional land disturbing activities, with the following exception:

(1) Logging, mineral extraction, and agricultural uses.

(a)Accessory structures and roadways used for mineral extraction uses shall comply with the Ordinance if there is an anticipated impact on any adjacent property;

(b)Accessory structures and roadways used for logging and agricultural uses shall comply with the Ordinance; and,

(c)The above notwithstanding, the filling or plugging of a sinkhole with any material (e.g. earthen, manmade, animal or vegetable) in a way that adversely affects stormwater management or groundwater quality is prohibited.

(A) Any report, study, plan, calculation or proposal required by this chapter shall be provided by the petitioner at the petitioner's cost.

(C) Sinkhole conservancy areas (SCA) shall be established to the following minimum standards in all sinkhole areas subject to the sinkhole evaluation requirement of Section 829-4:

(1) For sinkholes less than or equal to one quarter (0.25) acre in area, the SCA shall, at a minimum, encompass the entire sinkhole and all of the area within twenty-five (25) feet of the sinkhole rim.

(2) For all sinkholes greater than one quarter (0.25) acre in size, the SCA shall, at a minimum, encompass all of the area within fifty (50) feet of the post-development sinkhole flooding area as determined in 829-6 or all of the area within twenty-five (25) feet of the sinkhole rim, whichever is less.

(3) For compound sinkholes, the SCA shall be established in accordance with parts (1) and (2) above for each component sinkhole and for the compound sinkhole. For example, if the compound sinkhole is greater than one quarter (0.25) acre in area, the SCA shall comply with part (2). The SCA for sinkholes that are less than one quarter (0.25) acre in area and that are within the compound sinkhole must comply with part (1). It is possible that areas within the rim of a compound sinkhole will not be subject to a SCA.

If a SCA is required to be established on a parcel that was not, or will not be created by recorded plat, a legal description of the SCA shall be included on the recorded deed of the parcel.

(A) Setbacks and Use Restrictions. The following setbacks and use restrictions are established.

(1) No new construction of any of the following shall be permitted within the SCA:

- (a) Commercial or industrial structures;
- (b) Private drives, streets, and highways unless the County Highway Engineer and Drainage Engineer conclude that traffic safety considerations outweigh stormwater and water quality considerations;
- (c) Storage yards or parking lots for materials, vehicles and equipment;
- (d) Residential structures and accessory structures;

(A) Public, semi-public and office facilities;

(B) Swimming pools and other amusement and recreational services unless expressly permitted; and/or

(C) Stormwater detention features that have not been approved by the drainage board.

(1) Construction of the following shall not be permitted within twenty-five (25) feet of the sinkhole rim regardless of size of sinkhole:

(a) structures for storage of hazardous material(s); and/or

(a) any structure associated with a use allowed in Light Industrial (LI) or Heavy Industrial (HI) zones.

(3) Residential, commercial, and industrial structures and public, semi-public and office facilities shall not be constructed within the sinkhole rim unless the lowest floor elevation is a minimum of five (5) feet above the sinkhole flooding elevation, or one (1) foot above the lowest elevation on the sinkhole rim, whichever is less, and provided that a statement of a registered professional engineer or geologist is submitted to the Administrator (see definitions Chapter 801) indicating that foundation conditions are suitable for such structures.

(4) Individual Wastewater Systems

(a) Septic tanks shall not be located within the SCA.

(b) Septic Disposal Fields or wastewater stabilization ponds (lagoons) shall not be located within twenty-five (25) feet of the SCA.

(5) Pesticides and fertilizers may be used in sinkhole areas only in accordance with the rules and regulations of the State of Indiana Pesticide Review Board and with industry standards.

(6) Operation of heavy construction equipment is prohibited in the SCA unless:

(a) it is demonstrated to the Administrator that the operation of such equipment is necessary to prevent clear and imminent danger to persons and property;

(a) the operation of such equipment is necessary to implement a drainage and/or erosion control plan approved by the Drainage Board; and/or

(a) if the operation of such equipment is required for the removal of material from a previously filled sinkhole.

(7) Underground utility lines, equipment and facilities shall be installed in a manner that does not disturb a sinkhole eye or disrupt the natural pattern of storm runoff into the sinkhole. Sanitary sewer lines installed within a SCA shall be water grade pipe.

(8) Recreational facilities such as unpaved hiking, jogging, and bicycling trails, playgrounds, and exercise courses, are permitted within the SCA.

- (9) Golf courses and grass playing fields are permitted within the SCA subject to approval of a Management Plan for use of pesticides and fertilizers by the Administrator.
- (10) Clearing and pruning of trees as well as understory, and limited grubbing of roots is permitted within the SCA provided that equivalent or improved protective living vegetative ground cover is maintained.
- (11) Landscaping and minor gardening is permitted in the SCA provided erosion and sediment discharge is limited through use of minimum tillage and mulches. Normal yard and landscaping maintenance is permitted.
- (12) Construction of light incidental landscaping and recreational structures (such as gazebos, playground equipment, etc.), is permitted in the SCA but not within the sinkhole eye. Such structures may not be placed within a SCA on excavated foundations or concrete pads but may be placed on small concrete post-hole foundations.

The above notwithstanding, no land disturbing activity may occur within a SCA if that development, construction or use is determined by the Administrator to violate the intent of this chapter.

- (E) Newly formed or pre-existing sinkholes that become active in a way that causes an immediate threat to nearby structures, roadways, persons, and/or property may be stabilized and filled provided existing drainage patterns are not changed. This subsection authorizes conditional, emergency action to remediate a hazardous condition. However, within thirty (30) days of the action, the person responsible for taking the action shall submit a report to the Administrator detailing the actions used to stabilize and/or fill the sinkhole. The report shall be reviewed by the County Drainage Engineer and County Surveyor to determine whether existing drainage patterns were changed by the action. If the Engineer and Surveyor find that existing drainage patterns were changed, the person responsible for the action shall promptly take all measures necessary to restore the drainage patterns and to otherwise comply with this Chapter.
- (F) Stormwater Detention in Sinkholes. The Administrator, upon the Drainage Board's recommendation, may waive detention requirements to allow increased runoff into sinkholes and may authorize excavation within a sinkhole flooding area in order to provide additional water detention storage, upon finding that:
  - (1) the flooding concerns expressed through Section 829-6 will be satisfactorily addressed;
  - (2) there are no other areas on the site suitable for detention; and
  - (3) there will be no significant impact on the karst system or upon water quality.

In cases where concentrated runoff is directed to sinkholes, temporary and permanent erosion control measures, as detailed in a plan approved by the Administrator shall be implemented to prevent channel erosion.

- (G) Modification of Sinkholes to Increase Outflow Rates. Increasing outflow rates of sinkholes by excavating the sinkhole eye or installing disposal wells for diverting surface runoff to the groundwater system is prohibited, unless:

- (1) it is demonstrated to the satisfaction of the Administrator and/or the Drainage Engineer that such an action is necessary to safeguard persons or property from clear and imminent danger; or

- (2) such an action is required to implement a drainage and/or erosion control plan that was approved by the Administrator.

- (H) Altered Sinkholes. Filling or altering of sinkholes without an improvement location permit constitutes a zoning violation. In the event, corrective measures must be taken. No corrective or remedial measures shall be undertaken until a remediation plan has been approved by all relevant County entities or representatives and the Administrator has issued an improvement location permit for the plan. No building permits will be issued, or zoning or subdivision approvals granted until the remedial measures specified in the improvement location permit have been completed and approved.

(I) Airport Evaluation. With respect to all land owned, used and/or held by the Monroe County Board of Aviation Commissioners (BAC) for airport purposes, a Section 829-4 sinkhole evaluation (Airport Evaluation) may be made for the entire property (Airport Property). If made for the entire Airport Property, the Airport Evaluation shall be submitted to the Administrator, the Monroe County Drainage Board and the Monroe County Plan Commission for their review. Upon a finding of compliance with this chapter and with other relevant County Code chapters, the foregoing entities shall approve the Airport Evaluation.

- (a) All future development, construction and land disturbing activities (Development Activities) at the Airport Property shall be:

- (a) Consistent with the approved Airport Evaluation;

- (b) Remedial actions suggested by the Airport Evaluation and required as a part of the Airport Evaluation approval may be implemented at one time or may be implemented in phases in conjunction with future Development Activities; and,

- (c) For each proposed Development Activity, BAC shall seek site plan approval and, in connection with that process, shall submit for review and approval that portion of the Airport Evaluation relevant to the proposed Development Activities.

- (b) The original Airport Evaluation shall remain in full force and effect for a period of five (5) years from the date it is approved by the County Planning Commission. During that period of time, Development Activities at the Airport Property are subject to the approved terms and provisions of the Airport Evaluation and to the zoning and drainage regulations in effect on the date the Airport Evaluation was approved.

- (c)The Airport Evaluation shall be re-evaluated after a five (5) year period.
- (a)The BAC may apply for additional five (5) year extensions without limitation;
- (b)Each request for a re-evaluation of the Airport Evaluation shall be reviewed by the Administrator and may be approved administratively, subject to compliance with current law; and,
- (c)If the Administrator finds that further extension of the Airport Evaluation is not possible under the Federal, State or County Code regulations in effect at the time of review, the BAC shall be promptly notified and shall be given a period or one (1) year beyond the expiration of the current five (5) year period to bring the Airport Evaluation into compliance with the relevant regulations.
- (2)The Airport Evaluation shall be consistent with the Federal and State authorities with respect to Airport Property development requirements.
- (1)Federal and State standards and requirements will supersede local standards in the event of a conflict or discrepancy; and
- (2)In the event that Federal and/or State standards change during the period Airport Evaluation approval, activities may continue in accordance with such changes until the end of the period for which the Airport Evaluation was approved.

**829-4. Sinkhole Evaluation and Plan Requirements**

A Sinkhole Evaluation shall be performed for each site subject to this chapter (i.e., sites upon which sinkholes are fully or partially located and/or which drain to sinkholes). A Sinkhole Evaluation shall include the information set forth in subsections A through F of this section.

The following types of developments or sites may be excepted from full compliance with the Sinkhole Evaluation requirements upon the petitioner's request and a finding by the Administrator that significant drainage or water quality impacts will not result from the development or the use of the site:

- (1)administrative and minor subdivisions;
- (1)lots created greater than 10 acres for agricultural and residential uses; and
- (2)existing lots of record for which single-family residential use is proposed.

The above notwithstanding, neither the Administrator nor the Drainage Board may except a development or a site from subsection 829-4 (E). The burden of proof for establishing that there will be no significant impacts shall rest with the petitioner.

- (A) A plat or site plan for the proposed subdivision or development, setting forth the following information for each of the enumerated items:
  - (1) Sinkholes



on

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- (a) Location and limits of the area of the sinkhole depression as determined by field surveys or other reliable sources as may be approved by the Administrator. Location of sinkholes based solely upon USGS 7 ½ Minute Series Quadrangle Maps will not be considered sufficient unless field verified by a registered Indiana Surveyor, Engineer, or geologist.
  - (b) Location and elevation of the sinkhole eye or low point.
  - (c) Topographic contours at maximum intervals of two (2) feet, and spot elevations sufficient to determine the low point the sinkhole rim and the profile of the potential overflow areas.
  - (d) Minimum floor elevations of any existing structures located within the sinkhole rim.
  - (e) Elevation of any public or private roadway or drive located within or adjacent to the sinkhole.
- (2) Flooding limits as determined in Section 829-6.
  - (3) Water considerations specified in Section 829-7, including, without limitation:
    - (a) The approximate location of public or private water supply sources such as springs or wells within 500 feet of the
    - (b) Boundaries of any known recharge areas to wells or springs.
  - (4) Other geologic features: location of caves, springs, faults and fracture trends, geologic mapping units.
  - (5) Proposed discharge points: the location, type and size of all points at which concentrated discharges of stormwater into the sinkhole are proposed. The drainage area to each point of discharge shall be delineated on the plan and the area noted.
  - (6) Existing watercourses which drain into the sinkhole.

(1) All other information required to demonstrate or assess compliance with this chapter, as specified by the Administrator.

(2) The location of the foregoing items with respect to the location of the proposed or existing roads, detention ponds, significant landscaping features, property lines, underground utilities, and other structures.

- (B) A drainage area map showing the sinkhole watershed area, and where the site is located in a sinkhole cluster area. This map shall be extended to include, in the watershed area, any sinkholes located downstream of the site which may receive overflow drainage from the site.

(A) Proposed SCA in accordance with Chapter 829-3 (C).

- (D) An analysis of the orientation and flow of the sinkhole drainage system, as detailed on the subsection (B) map. The use of dye trace injection testing to produce an accurate mapping of the system may be required by the Administrator when the system drains towards an area that has known flooding problems and for which the flow pattern has not been established through previous dye testing, and when significant increases or decreases in the runoff to sinkholes is expected to result from the proposed development. Significant increases generally occur if the residential density is greater than one lot per two acres (or a commercial development with equivalent impervious surfaces).

- (E) The approximate location of karst features must be shown on the final plat based on the best available mapping and/or noted on the deeds if no plat is recorded for the subdivision.

(A) All other information deemed necessary by the Administrator.

**829-5.**

**Permit Requirement**

No person or persons shall engage in the grading of land or modification of a sinkhole within the SCA or the area that would be covered by a SCA as described in 829-3 (C) without first securing an improvement location permit from the Administrator .

- (I) The owner of the property or person having an interest therein shall submit an application for a permit to the Administrator along with the sinkhole evaluation required by 829-4. The Administrator shall submit all applications to the County Drainage Engineer for review and comment and may, upon the Drainage Engineer's recommendation, submit an application to the Drainage Board for review and comment.

- (B) Upon review of the information presented by the applicant, the site, and other information as may be available, the Administrator may issue a permit for work to be performed in the SCA.

(1) All work shall be performed in accordance with the requirements of the Zoning Ordinance and any conditions of permit approval; and,

(2) The Administrator may designate certain areas where grading or construction equipment is not permitted or is otherwise limited.

- (C) Karst-Related Non-Buildable Areas. In addition to establishing a plan for grading and use of construction equipment, the Administrator may, based upon the topography, geology, soils, history of the sinkhole (such as past filling) and the developer's engineer's storm water analysis and plan, establish sinkhole-related non-buildable areas:

(1) No buildings, parking areas, grading or other structures shall be permitted within the sinkhole-related non-buildable area unless otherwise authorized by the Administrator; and

(2) No private drives, streets, and highways shall be permitted within the sinkhole-related non-buildable area unless the County Highway Engineer and Drainage Engineer conclude that traffic safety considerations outweigh stormwater and water quality considerations.

829-6. **Flooding Considerations**

- (A) Sinkhole Flooding Area. Except in cases in which the annual exceedance probability (AEP) of 1% (100 year storm) has been determined in a published flood insurance study, the sinkhole flooding area shall be determined for each sinkhole for both pre-development and post-development conditions, assuming no subsurface outflow from the sinkhole.

Where the estimated volume of runoff exceeds the volume of the sinkhole depression, the depth, spread and path of overflow shall be estimated using methods established by the Drainage Board and shown on the plan.

The overflow volume shall be included in determining the maximum estimated flooding elevations in the next downstream sinkhole. This analysis shall continue downstream until the lowest sinkhole of the sinkhole cluster is reached or overflow reaches a surface watercourse.

The volume of runoff considered shall be that which results from a rainstorm with a 1% AEP and a duration of forty-eight (48) hours. The runoff volume shall be determined by the method set forth in the Natural Resource Conservation Service's TR-55 Manual.

No further flooding analysis will be required provided that:

- (1) The post-development flooding area of any sinkhole which receives drainage from the site is located entirely on the site.
- (2) A drainage easement covering the post-development flooding area is provided for any off-site sinkhole or portion of a sinkhole which receives increased peak rates of runoff from the site. If the receiving sinkhole is not contiguous to the site, an easement must also be provided for the waterway which connects the site to the sinkhole.
- (3) The minimum floor elevation of any existing structure is at least two (2) feet higher than the estimated flooding elevation from the 1% AEP 48-hour storm.

- (4) The increase in volume of runoff from the site does not cause the flooding depth on any existing public road to exceed the maximum depth as determined by the Drainage Board.
- (B) Detailed Flooding Analysis. In cases where the conditions set forth in (A) above cannot be met, a detailed flooding analysis will be required if any increase in runoff volume is proposed or expected. As part of the detailed flooding analysis, a runoff model must be made and a reservoir routing analysis performed for the sinkhole watershed using hydrograph techniques as established by the Drainage Board.
- (C) The following alternative methods may be proposed and approved, singly or in combination, to keep flooding levels at pre-development levels:
  - (1) Diversion of Excess Runoff to Surface Watercourses. Where feasible, increased post-development runoff may be diverted to a surface watercourse, provided that
    - (a) Any increase in peak runoff rate in the receiving watercourse does not create or worsen existing flooding problems downstream; and
    - (b) The diverted storm water remains in the same surface watershed.

Storm sewers, open channels and other appurtenances provided for diversions shall be designed in accordance with applicable sections of these Design Criteria.

The effect of diverted water on downstream watercourses and developments, and requirements for additional detention facilities prior to release of runoff to the surface watercourse shall be determined as established by the Drainage Board.
  - (2) Storage of Excess Runoff within the Sinkhole Watershed. If consistent with the intent of this chapter, detention facilities may be constructed within the sinkhole watershed or the area of the sinkhole outside of the sinkhole flooding area as determined for post-development conditions.

(A)The flooding considerations set forth in this section are designed and are intended to ensure that:

(A)Inflow rates to the sinkhole are maintained at or below pre-development values; and

(B)Sediment and erosion control and water quality considerations set forth in this chapter can be satisfied.

829-7. Water Quality Considerations

Because sinkholes provide direct recharge routes to groundwater, water quality in wells, caves, and springs may be affected by discharge of runoff from developed sinkhole areas. Consequently, and as more fully specified in subsections A through D below, the Sinkhole Evaluation must address potential impacts of proposed development on receiving groundwaters and must propose water quality management measures to mitigate such impacts.

- (A) Receiving Groundwater Use. The Sinkhole Evaluation Report shall identify whether the site lies within a critical area or a sensitive area based upon the following classifications.
  - (1) Critical Areas. The following areas are classified as critically sensitive to contamination from runoff and thus, are critical areas for purposes of this chapter:
    - (a) Areas within 100 feet of private water supply wells.
    - (b) Areas within 300 feet of public water supply wells.
    - (c) Areas within 500 feet of springs used for public or private water supply.
    - (d) Areas within 1000 feet of caves providing habitat to rare or endangered species.

The distances listed above may be extended by the Administrator where the recharge areas for a well, spring, or cave have been determined by studies by a qualified engineer or geologist. The length of the extension may be no greater than necessary to achieve the policies of this chapter.
  - (2) Sensitive Areas. Sinkhole areas that are not within critical areas are classified as sensitive for groundwater contamination for purposes of this chapter.
- (B) Groundwater Contamination Hazard. The relative potential for groundwater contamination shall be classified as low, moderate, or high depending upon the nature of the proposed land use, development density and amount of directly connected impervious area. The Sinkhole Evaluation shall identify whether the proposed development poses a low, moderate, or high hazard to groundwater uses, as defined below:
  - (1) Low Hazard. The following land uses are classified as posing a relatively low hazard to groundwater contamination:
    - (a) Residential developments on sewer, provided directly connected impervious areas discharging to the sinkhole are less than or equal to one (1) acre in total area;
    - (b) Parks and recreation areas;

- (c) Low density commercial and office developments, provided directly connected impervious areas discharging to the sinkhole are less than or equal to one (1) acre in total area; and
  - (d) Discharge from graded areas less than or equal to one (1) acre.
- (2) Moderate Hazard. The following land uses are classified as posing a relatively moderate hazard to groundwater contamination:
- (a) Concentrated discharge from streets, parking lots, roofs, and other directly connected impervious areas having an area greater than one (1) acre and less than or equal to five (5) acres;
  - (b) Multifamily residential developments and higher intensity office developments, provided the directly connected impervious areas discharging to the sinkhole are less than or equal to five (5) acres; and
  - (c) Discharge from graded areas greater than one (1) acre and less than or equal to five (5) acres.
- (3) High Hazard. The following land uses are classified as posing a high hazard to groundwater contamination:
- (a) Collector and arterial streets and highways;
  - (b) Railroads;
  - (c) Concentrated discharge from streets, parking lots, roofs, and other directly connected impervious areas having an area greater than five (5) acres;
  - (d) Commercial, industrial, and manufacturing areas;
  - (e) Individual wastewater treatment systems;
  - (f) Commercial feed lots or poultry operations; and
  - (g) Discharge from graded areas greater than five (5) acres.
- (C) Water Quality Management Measures. The majority of sinkholes drain a limited watershed area. For sinkholes where the surrounding drainage area is small enough that the area draining to the sinkhole flows predominantly as sheet flow, potential impacts on water quality can be addressed in many cases by erecting and maintaining reliable silt control barriers around the sinkhole during construction and providing a vegetative buffer area around the sinkhole to filter out potential contaminants.

When the volume of runoff into the sinkhole increases to the point where flow becomes concentrated surface flow, the degree of effort required to capture and filter out contaminants increases significantly.

Concentrated surface flow occurs naturally when the sinkhole watershed area reaches a sufficient size for watercourses leading into the sinkhole to form. Concentrated surface flow results as urbanization occurs due to construction of roads, storm sewers, and drainage channels. Subsurface flows can become concentrated through utility trenches.

(D) Mitigation of Stormwater Runoff. The following water quality management measures may be used to mitigate the impact of storm water runoff quality. Temporary sediment controls are required for all sites. The other measures listed may be used singly or in combination as needed based upon the potential groundwater contamination hazard of the proposed development.

(1) Sediment and Erosion Control

(a) Nonconcentrated (sheet) flow: existing ground cover shall not be removed within twenty-five (25) feet of the sinkhole flooding area and a temporary silt barrier shall be erected and maintained around the outer perimeter of the buffer area during the construction period. Vegetative cover must be of sufficient quality and density to provide desired filtration. If existing vegetative cover is sparse, it must be improved to sufficient quality and density to provide the desired filtration.

(b) Concentrated surface and subsurface flow: a sediment basin will be required at each point where concentrated flows are discharged into the sinkhole. Sediment basins shall be designed according to criteria set forth in the *Indiana Handbook for Erosion Control in Developing Areas*. A permanent sediment basin may be required by the Drainage Board in some cases. This requirement shall be based on the watershed area, the disturbance that the proposed project will create, and the availability of suitable sites for a sediment basin.

(2) Minimizing Directly Connected Impervious Area.

(a) The groundwater contamination hazard category for impervious areas may be reduced by reducing the amount of directly connected impervious area. This is the area of roofs, drives, streets, parking lots, etc., which are connected via paved gutters, channels, or storm sewers.

(b) Directly connected impervious areas can be reduced by providing sized grass swales, vegetative filter strips or other Best Management Practices to separate paved areas.

(3) Diversion of Runoff.

- (a) Concentrated discharges to sinkholes can be reduced to manageable levels or avoided by diverting runoff from impervious areas away from sinkholes where possible.
  - (b) Diversions shall be done in a manner that does not increase flooding hazards on downstream properties and, generally, shall not be directed out of the surface watershed in which the sinkhole is located.
- (4) Filtration Areas. For areas having a low groundwater contamination hazard and where flow into the sinkhole occurs as sheet flow, water quality requirements can be satisfied by maintaining a permanent vegetative buffer area with a minimum width of twenty-five (25) feet around the sinkhole flooding area.
- (5) Grassed Swales and Channels.
- (a) For areas having a low groundwater contamination hazard, concentrated flows from directly connected impervious areas of less than one (1) acre may be discharged into the sinkhole through grassed swales and channels.
  - (b) Swales and channels shall be designed for non-erosive velocities and appropriate temporary erosion control measures such as sodding or erosion control blankets shall be provided.
- (6) Storage and Infiltration. Storage and infiltration basins shall be designed to capture the first one-half (0.5) of an inch of runoff from the tributary drainage area and release the runoff over a minimum period of twenty-four (24) hours. Standard outlet structures for sedimentation and infiltration are shown in the *Indiana Handbook for Erosion Control in Developing Areas*. Storage and infiltration will be required in the following cases:
- (a) All areas having a high groundwater contamination hazard.
  - (b) Areas having a moderate groundwater contamination hazard and where concentrated inflow occurs.
- (7) Hazardous and Toxic Materials. Facilities which involve storage or handling of hazardous or toxic materials shall comply with the State of Indiana Department of Environmental Management.

[end of chapter]



**Response to Comment Letter I-88**

**Response to Comment I-88-1.** Please refer to Master Response HYDRO-1 (LRDP Impact HYD-3).

**Response to Comment I-88-2.** Historic data presented in the EIR that show that drainages on the campus are experiencing erosion problems related to both un-detained runoff from pre-1989 development and the increased volume of runoff from newer development. With respect to new development under the 2005 LRDP, the Draft EIR acknowledges that with the addition of new impervious surfaces and increased runoff, erosion problems in the campus drainages would worsen. To address this impact, the EIR includes LRDP Mitigations HYD-3A through -3E (as revised in the Final EIR). Please refer to Response to Comment I-34-47, which explains why the mitigation measures proposed in this EIR would be more effective than past practices in controlling erosion on the campus.

Although implementation of these mitigation measures would reduce the impact to a less-than-significant level, the EIR concludes that at some project sites it may not be feasible to implement these measures and at such sites the impact would be significant and unavoidable. Also see Master Response HYDRO-1.

**Response to Comment I-88-3.** The aquifer that underlies the campus is not currently, and nor is it planned for use in the future, as a drinking water aquifer as implied by the commenter. The Draft EIR includes LRDP Mitigations HYD-3C and -3D, which are intended to keep runoff in the campus streams to pre-project flows in terms of both rate and volume, and to maintain recharge to the aquifer below the campus. The infiltration measures will also assist with the treatment of runoff before it is discharged into the karst aquifer. The Campus will also implement its Storm Water Management Program (SWMP) that will include BMPs to reduce both the rate and volume of runoff from new development. As part of its SWMP, the Campus will implement a BMP to characterize and evaluate the potential for pollutants in runoff from existing development to enter sinkholes, and will develop and implement measures to ensure groundwater quality. Also, the SWMP will contain BMPs, such as the use of vegetated swales and filter strips, and, in some locations, engineered treatment facilities, to treat runoff from developed areas before it is discharged to a stream or sinkhole. As noted in Response to Comment LA-2-82, water quality monitoring data in Draft EIR do not show an increase in pollutant concentrations over time in campus runoff.

**Response to Comment I-88-4.** As explained in the discussion on pages 4.8-40 to -41 of the Draft EIR, the University agrees that existing data indicate that extraction of groundwater from the existing well would have little to no effect on the karst aquifer. The University has included LRDP Mitigation HYD-5C in the Draft EIR in response to concerns expressed in the past by members of the public that extended pumping from this well could affect flow in downgradient springs and streams.

The Draft EIR page 4.8-39 addresses the potential that aquifer recharge could be affected by sediment filling sinkholes, and notes that the Campus would implement LRDP Mitigation HYD-3C to avoid erosion and sedimentation of creeks and sinkholes, so that the runoff would continue to recharge the karst aquifer. In addition, LRDP Mitigation HYD-3D emphasizes infiltration, which would also help with aquifer recharge. Because measures are included in the EIR to maximize infiltration and recharge, the discharges at the downgradient springs would not be affected. Please also refer to Response to Comment I-88-10 below.

**Response to Comment I-88-5.** Please refer to Response to Comment I-88-6 below, which explains that modeling to show the changes in the hydrograph of the streams on campus cannot be performed at this time because the details of future projects that would be built within the watersheds are not yet available. The commenter is referred to the paragraph on Draft EIR page 4.8-39 following the statement cited by the commenter, which explains why recharge would not be significantly reduced. Even though with increased impervious surfaces more runoff would be created, the runoff would still continue to enter the karst aquifer through sinkholes and swallow holes in the drainages. Also, LRDP Mitigation HYD-3D calls for project designs to incorporate measures to maximize infiltration, preferably near the area where the new runoff is generated, and LRDP Mitigation HYD-3C calls for project designs to include features so that the post development peak flows and volume do not exceed predevelopment peak flows and volumes. This is intended to minimize changes in the hydrology of the drainages and thereby minimize any changes to the recharge of the karst aquifer.

With respect to the difficulty of providing adequate storage and infiltration in areas that are underlain by karst, the Draft EIR acknowledges that because of site constraints and other factors, it may not be possible for all future projects to meet the performance standards laid out in these mitigation measures. However, failure to infiltrate the runoff where it is generated would not increase or decrease the amount of water that would enter the karst system because the runoff would still enter the karst system by way of the surface creeks; therefore, the spring flows should not change. Please also refer to Response to Comment LA-9-28.

Regarding the concern related to water quality and the need for adequate vegetative buffers around sinkholes, please refer to Response to Comment I-88-3 above.

**Response to Comment I-88-6.** The detailed technical analyses that underlie the information presented in Section 4.8 are presented in an appendix to the EIR. The discussion of impacts from increased impervious surfaces begins on page 4.8-32, and the results of the analysis, including the associated increase in runoff from Appendix D2, are provided for each major watershed with proposed development.

Because the EIR, as the CEQA Guidelines recommend, analyzes the entire 2005 LRDP, which is a land use plan, the analysis is written at a programmatic level rather than at a project level. Project-level changes in the hydrograph of the streams on campus cannot be provided at this time, because the details of future development projects that would be built within the watersheds are not yet available. The type of analysis included in this EIR is appropriate for a program-level EIR. Prior to approval of specific development projects under the 2005 LRDP, specific details of such projects will be used to perform a detailed hydrologic analysis in order to determine the specific design measures required to mitigate the project-specific impacts. This EIR stipulates the performance standards (contained in LRDP Mitigation HYD-3C) that the specific development projects would need to meet in order to minimize impacts.

Data used to calculate average annual recharge of the groundwater aquifer are presented in Draft EIR Table 4.8-4, and the analysis that leads to the conclusion that the volume of groundwater that would be extracted using the on-campus well would be a small fraction of the total volume of water in the aquifer is presented on pages 4.8-40 and -41.

The Storm Water and Drainage Master Plan (Kennedy/Jenks Consultants 2004) states that UC Santa Cruz began using detention systems in 1989, and that because these systems do not address runoff from facilities and roads built prior to that time, the detention systems have not been adequate to stop on-going

channel erosion and spilling of sinkholes (see page ES-3 of the Master Plan). Detention facilities are an effective way to reduce peak flows. When combined with design features intended to maximize infiltration and thereby reduce runoff volume, as prescribed in LRDP Mitigation HYD-3D, increases in peak flows and runoff volumes can be minimized. As discussed in detail in Volume III of the Draft EIR, the Campus proposes to implement several storm drainage improvements under the Infrastructure Improvements Project to remedy existing erosion problems.

The analysis presented under LRDP Impact HYD-3 concludes that campus growth under the 2005 LRDP could significantly affect water quality. This water quality impact is related to the potential for increased erosion and sedimentation in some drainages where it may not be possible to avoid all increases in the volume of runoff that would result from new development. Although LRDP Mitigation HYD-3D is provided to minimize this impact, until the details of specific development projects are available, it cannot be determined whether it will be possible for all projects to avoid increasing the volume of runoff to the extent that existing erosion conditions would not be exacerbated.

**Response to Comment I-88-7.** Public education and outreach is one of the six measures required of operators of Phase II-regulated small municipal separate storm sewer systems (MS4s), including the Campus, to meet the conditions of its National Pollutant Discharge Elimination System (NPDES) storm water permit. The additional mitigation measures (HYD-3B to HYD-3D) would directly address and minimize the impacts of increased runoff, erosion, and siltation through construction site controls and design measures.

**Response to Comment I-88-8.** Please refer to Master Response HYDRO-1 (LRDP Impact HYD-3). LRDP Mitigation HYD-3C provides performance standards that individual development projects must meet. Once the details of future projects are known, specific measures will be designed to minimize the increase in volume of runoff and prevent erosion problems in order to implement revised LRDP Mitigation HYD-3D. These measures may include low impact development design measures, retention and detention basins, dispersion manifolds, and vegetative swales.

**Response to Comment I-88-9.** The Storm Water and Drainage Master Plan findings refer to pre-1989 development. The Campus has incorporated detention systems to avoid increases in peak flows for new development since 1989. Under the 2005 LRDP, the Campus plans to avoid increases in peak flows and volume through use of not only detention facilities but also infiltration and dispersion of runoff near where it is generated.

**Response to Comment I-88-10.** It may be true that previous development on the campus has changed the duration of low flows in the springs or base flows in the streams. However, LRDP Mitigation HYD-3D, along with measures that will be included in the Campus Storm Water Management Program, would minimize the impact of the 2005 LRDP on the springs and streams by maximizing infiltration and dissipation of runoff. Sufficient spring flow data for calculating the 7Q10 (defined as the lowest flow over seven consecutive days expected to occur once in 10 years) are not available. While there may not be enough data to observe changes in the duration of low flows with statistical confidence, the data that have been collected for a number of springs do not indicate that base flows have changed over time. The monitoring data presented in Draft EIR, Appendix D, Table D1-1 show that spring flow rates vary between years, and especially between the wet and dry seasons, but there is not a consistent trend to indicate that spring flows or groundwater levels have either increased or decreased over time. The only exception is the Bay Street Spring, which appears to have had higher dry season (June – October) flows

prior to 1992. Based on a statistical analysis of the data, the 95 percent confidence interval for the mean dry season flow from 1984 through 1991 was between 115 and 124 gpm. The 95 percent confidence interval for the mean dry season flow from 1992 to 2004 was between 81 and 97 gpm. The dry season data suggest that the flows dropped in 1992 compared to previous years. If values from this year are excluded, the mean dry season flow at the Bay Street Spring after 1992 would still appear to be lower than the flow prior to 1992.

The cause of the apparent decrease in dry season spring flows at the Bay Street Spring has not been determined. Factors that could potentially affect the flow measurements include errors associated with the method used to measure flow, structural or operational changes to the pipelines carrying flow to the sampling location, and/or development or other activities. Prior to 1988, flow measurements of the Bay Street Spring were determined from the depth of water above the lip of a standpipe at the sampling location on Bay Street. In the summer of 1988, the City of Santa Cruz performed maintenance that caused the standpipe to become submerged in the pool that surrounds it. Since then, measurements have been made at the outlets of two culverts draining the pool using a "bucket-and-stopwatch" method, which is estimated to be able to measure up to approximately 300 gpm (Johnson and Weber & Associates 1989). In recent years, some tree roots have impaired the ability to collect some of the flow. One source of the flow measured at the Bay Street Spring is actually located approximately 500 feet to the northeast beneath the Bay Street reservoir and is piped to the sampling location. Based on measurements taken at a weir within the pipeline of approximately 80 gpm over a period longer than a year (and prior to 1988), it is probable that there are other sources feeding the sampling location at the Bay Street Spring (Johnson and Weber & Associates 1989).

**Response to Comment I-88-11.** It is unclear what the commenter is requesting because three items are referred to:

- Change in storage;
- Initial abstraction; and
- Changes in the hydrograph.

Surface storage (e.g., depression storage) may have changed as a result of campus development, because the buildings and parking lots and other forms of development may have less depression storage than the natural ground. However, it is unlikely that previous development has had a significant impact on aquifer storage in the watershed, because very little of the aquifer has been lost. Regarding the potential for rainfall to enter aquifer storage, even though development would have prevented infiltration over discrete areas, some of the runoff would still infiltrate farther downstream since a significant portion of the surface streams on campus are captured by sinkholes and recharge the groundwater storage. Implementation of LRDP Mitigations HYD-3C and -3D will continue to keep the volume of rainfall entering aquifer storage essentially the same, with the intent being to infiltrate any additional runoff due to new development close to where it is generated.

In many runoff models, the initial abstraction, or the rainfall loss before runoff begins, is estimated for the entire watershed as a whole. Runoff coefficients are used to describe the type of surface (e.g., developed or vegetated), which affects the timing of runoff. For this reason, there is no change in the initial abstraction of the watershed for developed conditions compared to pre-development conditions.

Changes to the runoff hydrograph and the effects on erosion due to campus development are discussed on page 4.8-9 of the Draft EIR in the section titled *Existing Channel Erosion on Campus*. Also explained in this section is the fact that as part of new development, the Campus has been constructing detention facilities to minimize the effect of development on the runoff hydrographs. However, changes in the runoff hydrograph would occur over a period of hours, or perhaps as much as several days, and any changes to the spring flows would occur over a much longer period of time. As stated in Section 4.8.1.8 in the Draft EIR, it is not clear from the monitoring data that these changes in the runoff hydrographs have had any effect on the spring flows, although as the commenter pointed out in Comment I-88-10, it is possible that changes could have been measured if more data had been collected. The only changes observed in the spring flow data were for the dry season flows at the Bay Street Spring after 1992. As discussed above in Response to Comment I-88-10, the reason for the change in the measured flow rates is unclear.

**Response to Comment I-88-12.** Because the campus is on a hillside, there are only a few locations where flooding is an issue. Please see Section 4.8.1.5, which explains that historically flooding has occurred on the campus in the area of a few sinkholes, and southwest of the campus where Moore Creek flows through a culvert under an off-campus private road, Highview Drive. Please refer to Response to Comments LA-2-81 and I-74-1 for a discussion of flooding at Highview Drive.

With respect to the areas around the sinkholes, the Draft EIR explains that the flooding of these areas is not a concern because under the 2005 LRDP no new structures would be built near these sinkholes. Even though increased runoff could increase the amount of flooding at some of the sinkholes during smaller storm events, during larger storm events the amount of runoff draining to and flooding the sinkholes under 2005 LRDP conditions would be similar to that under existing conditions (see Response to Comment I-34-47). The EIR also identifies LRDP Mitigations HYD-3C and -3D, which would minimize any increase in flooding from new development by maximizing infiltration, preventing peak flows from increasing, and minimizing any increase in runoff volume. For a discussion of increased runoff on the karst cave species, please see Master Response BIO-6.

From: "Thomas Mullen" <tjssmullen@worldnet.att.net>  
To: <lrdp-eir@ucsc.edu>  
Subject: UCSC's Draft EIR  
Date: Wed, 11 Jan 2006 21:39:22 -0800

I think that the thought of expanding the University without an eastern access is ridiculous. A university of that size with basically one entrance and exit is laughable.

]

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Tom Mullen

Response to Comment Letter I-89

**Response to Comment I-89-1.** Please refer to Master Response TRAFFIC-3 regarding the Eastern Access.

Date: Thu, 12 Jan 2006 08:36:00 -0800  
From: "Lawrence J. Reeves" <ljr@sysresearchassoc.com>  
Organization: Systems Research Associates  
To: John Barnes <barnesj@ucsc.edu>, lrdp-eir@ucsc.edu  
Subject: [Fwd: Re: My Comments on Draft EIR]

John

I have not been participating due to my work in Monterey at the Naval Postgraduate School, but wanted to weigh in after reading John Aird's comments. I take a divergent view from CLUE and feel solutions are hand if the city and county step up to the plate. That includes the university and its regents.

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Lawrence J. Reeves  
President  
Systems Research Associates

----- Original Message -----

Subject: Re: My Comments on Draft EIR Date: Thu, 12 Jan 2006 07:59:51 -0800  
From: "Lawrence J. Reeves" <mailto:ljr@sysresearchassoc.com><ljr@sysresearchassoc.com> Organization: Systems Research Associates To: <mailto:johnaird@earthlink.net>johnaird@earthlink.net CC: elston13 <mailto:elston13@earthlink.net><elston13@earthlink.net>, Don Stevens <mailto:stevens@nuclearwhales.com><stevens@nuclearwhales.com> References: <mailto:410-22006131121538274@earthlink.net><410-22006131121538274@earthlink.net>

Dear John,

I appreciate the diligent work you have done and faithful pursuit of solutions to a vexing problem that impacts thousands of residents in the city and particularly in the Westside where most of the traffic flow terminates. I continue to be disappointed in the university, city, and county inability to employ modern systems analytical methods and modeling that has solved nearly identical problems with mitigation that had measurable benefits to those impacted, eg, the people who live along residential streets being made into ad-hoc highways by the city.

With respect to your analysis of noise introduced into homes that were never designed or built to thwart constant acoustic intrusion, does the model or models employed by the university and/or the city (including its consultant) take into account aging of roads, tires, faulty or illegal



exhaust systems, aging cars (Santa Cruz has a preponderance of old noisy cars), and composition of traffic (cars, trucks, buses). From what little I looked at in the past, none of the engineering analytics used by the "traffic engineering" community account for the factors mention above. This might be the basis for faulty work in the CEQA process along with mitigation that cannot stand the test of science. We also talked about the medical impact to residents in terms of air quality, dirt, cancer-causing agents becoming airborne, vibration causing foundation fractures and damage, hearing loss, sleep deprivation, and possibly inducing psychological problems that would otherwise not have been there. These may be factors that are more important for the large number of residents over 60 and many into their 80s. Is this elder abuse by the city, county, and university?

The university does not control the streets - the city and county does along with CalTrans. Passing ordinances that thwart traffic and block roads has been employed in several cities and apparently there is lack of sufficient will on the part of the city and county to employ these mitigation measures that have direct benefit to the residents and not to the university. Once the camel starts living in your tent because you invited him in, the cleanup can become unmanageable. Time to throw the camel out of the tent into his own backyard, and that is the city and county's job backed up by unrelenting demands by the citizens.

I agree with you that we are the crossroads and the university needs to understand we, the voters, residents, taxpayers, have our limits, and so does the city council and board of supervisors. They cannot continue to coddle or negotiate away our quality of life and well-being to an entity that has a track record of being less than reliable.

Thank you again for being a friend and always out there in front.

Larry

John Aird wrote:

Debbie and Larry:

Much that the University received on traffic impacts was good and showed the complete inadequacy of the University's Draft EIR. FYI, here's what I added to the mix.

Best - John

John Aird

<mailto:johnaird@earthlink.net>johnaird@earthlink.net

----- Original Message -----

From: <mailto:johnaird@earthlink.net>John Aird  
To: <mailto:lrdp-eir@ucsc.edu>lrdp-eir@ucsc.edu  
Sent: 1/11/2006 1:39:42 PM  
Subject: Comments on Draft EIR

To: John Barnes  
To: Whom It May Concern

Please find attached my comments formally submitted on the Draft EIR.  
Should there be any questions or need to reach me, this can be done by  
calling me at (831) 429-1361 or email at the below address.

Thank you.

John Aird  
<mailto:johnaird@earthlink.net>johnaird@earthlink.net

Response to Comment Letter I-90

**Response to Comment I-90-1.** Comment noted.

Sally Morgan, 1/27/06 9:52 AM -0800, Comment on cave hydrology

2

X-EN-User: unknown  
X-UCSC-CATS-Information: This message was scanned by the ITS MailScanner  
X-UCSC-CATS-MailScanner: Found to be clean  
X-UCSC-CATS-MailScanner-SpamCheck: not spam, spamassassin (score=1.62,  
required 8, autolearn=disabled, FORGED\_RCVD\_HELO 0.05,  
MISSING\_SUBJECT 1.57)  
X-UCSC-CATS-MailScanner-SpamScore: s  
X-UCSC-CATS-MailScanner-From:  
srs0=1tbybx=3x=snyder-haye.com=daniel@yourhostingaccount.com

Dear folks,

While reviewing the draft EIR I happened upon a substantive error in the discussion of campus hydrology that I'd like to comment on. In Volume II, 4.8 p. 41, the report states that only Empire Cave and Bat Cave are located on the east wall of Cave Gulch, and thus are the only known Cave Gulch caves that might be affected by campus runoff. This is an error. Stump Cave is also on the east wall, and is more pertinent to the discussion than Bat Cave, since a small perennial spring emerges from the east bank directly below it. Bat Cave, on the other hand, has no known present-day associations with springs, pools, or streams.

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To whom would I direct this comment?

Thanks!

Dan Snyder

### Response to Comment Letter I-91

**Response to Comment I-91-1.** In light of this comment, the text on pages 4.8-41 and -42 of the Draft EIR has been corrected to state that by virtue of their location on the eastern wall of Cave Gulch, Empire Cave and Stump Cave have the potential to be affected by groundwater that has its origins on the campus. Note that as discussed in the Draft EIR and further explained in Master Response BIO-6 (Karst Invertebrates), the impact on cave hydrology and water quality would be less than significant. Please refer to Final EIR Volume IV, Chapter 3, *Changes to Draft EIR Text*, for revisions to the text.

REC'D MAY 1 2006

H. Reed Searle  
114 Swift Street  
Santa Cruz, CA 95060  
Phone and Fax 831-425-8721  
28 April 2006

2005 LRDP RDEIR Comment  
UCSC Physical Planning and Construction  
1156 High St., Barn G  
Santa Cruz, Ca. 95064

re: objections to Recirculated Draft EIR re additional traffic analysis

Dear Sir/Madam,

This comment relates to matters contained in the RDEIR. The RDEIR deals primarily with freeway related traffic, but also and inevitably deals with local streets as well; it is primarily to the latter that this letter is directed.

Projects currently on the drawing board in the Santa Cruz area include UCSC expansion, Terrace Point, 2300 Delaware, Tannery, La Bahia Hotel, Monterey Bay Sanctuary Center. The RDEIR does not consider the cumulative effect of the proposed UCSC expansion together with these projects and normal traffic growth.

Table 2-19, page 2-29, describes some alleged implementation measures. Level 1 measures are simply window-dressing, unenforceable and most probably unworkable. Level 2 measures, could not result in any traffic reduction on major arterials or freeways.

Several measures refer to a Westside multi-modal hub and Westside Park and Ride facilities. If anything, these would increase traffic in the affected areas and clog traffic on routes from the facilities to the campus. The EIR is inadequate unless the location, size, effect on impacted neighborhoods, and general operation are discussed and quantified. Since the implementation of these purported mitigation measures is highly qualified, they do not constitute proper mitigation measures. I think the RDEIR and the DEIR are inadequate unless mitigation measures are specific and guaranteed of implementation. To condition mitigation measures on cooperation appropriate agencies is simply wishful thinking.

An additional measure talks of exploring opportunities to construct new housing. Is UCSC to finance and own these? If so, what is the fiscal impact on the City? The RDEIR should discuss these issues.

The RDEIR does not quantify the impact on the Lower Westside neighborhoods of traffic seeking rat-runs through residential areas. Because of the impacts on freeway and other major

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streets (High, Western, Delaware, Mission, Bay) , rat-runs are inevitable and quality of life in neighborhoods is likely to be diminished. The probable impact of these are not discussed in the RDEIR. Further, to the extent that Delaware is used, impact at Bay/Delaware and Bay/West Cliff will be substantial.

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An increasing amount of traffic from UCSC, Terrace Point, Long's Marine Lab and 2300 Delaware inevitably will choose to use Swanton, Modesto, West Cliff Drive, Swift, Almar and Fair. Probable impacts on these streets and neighborhoods should be quantified and appropriate implementation measures suggested. Traffic calming measures substantially could mitigate these problems. The purpose should be to reduce traffic speed to an effective maximum speed of 15 to 20 MPH on the named streets. I think the RDEIR is insufficient until and unless it proposes appropriate measures to insure that objective. Traffic calming measures do work; I think UCSC should design and contribute at least it's fair share, to the cost.

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Sincerely,

  
H Reed Searle

## Response to Comment Letter I-92

**Response to Comment I-92-1.** The Draft EIR developed future traffic volumes based mainly on development growth as forecasted by AMBAG, and a few specific development projects such as the proposed Home Depot. The Draft EIR's analysis focused on local Santa Cruz intersections. The RDEIR used historical traffic counts on Highways 1 and 17 to develop future traffic projections. Historical traffic growth reflects not only growth in local development but also reflects growth in regional and through traffic. CEQA recommends two approaches to analyzing cumulative impacts, including those associated with increased traffic volumes: (1) the list approach, and (2) the projection approach (see CEQA Guideline Section 15130 (b) (1) (A) and (B)). The list approach needs to "identify all past, present, and probable future projects" that could contribute to cumulative effects, requiring a very detailed estimation of specific developments to the year 2025. This approach typically is not practicable for long-range projections, particularly on highways, which accommodate large volumes of through traffic from neighboring jurisdictions. The projection approach uses projections contained in planning documents or other sources. In the case of the RDEIR, the sources of the projections are future trends derived from actual traffic counts. Because the projections approach was used in the RDEIR, specific development projects were not specifically included in the analysis.

**Response to Comment I-92-2.** As part of LRDP Mitigation TRA-2B, the University will evaluate the effectiveness of the Level 1 and Level 2 TDM measures shown in the Draft EIR Table 4.14-19 and will implement those measures within the University's jurisdiction that are determined to be feasible and effective. The University is in the process of implementing some of the Level 1 measures identified in the table, including discussions with a car share provider. Collectively, the TDM measures in the table, or equally effective alternatives, are expected to have a significant impact on peak hour travel to and from the campus. The University's TDM programs have been very effective in reducing the number of single-occupant vehicles that travel to the campus, as discussed in Response to Comment LA-2-128. Improvements in mode share through the campus gates also represent reductions of single-occupant vehicles on regional roadways. The Campus is committed to maintaining and improving this share of travel as part of implementing the 2005 LRDP.

**Response to Comment I-92-3.** The establishment of a westside intermodal facility is one of many potential TDM measures identified in Table 2-19. This measure is only conceptual at this stage, and no specific location has been identified. The concept envisions an intermodal hub where local and regional transit systems connect, potentially with timed transfers. University buses would shuttle students, faculty and staff to the campus. The facility would provide pedestrian and bicycle facilities, a drop-off/pick-up area, and possibly parking. The planning and implementation of such a facility must be done collaboratively with local and regional agencies, and cannot be guaranteed at the programmatic EIR stage. Should it be determined, through this collaboration that a westside intermodal facility is an effective TDM measure, it will be proposed by the agencies involved and a project-specific environmental assessment will be conducted. Please see Response to Comment LA-2-154 with respect to LRDP Mitigation TRA-2B. That response explains why further specificity cannot be provided for the TDM measures the University included in the Draft EIR. Furthermore, many of the University's TDM programs must be coordinated with those of regional transit and other agencies in order to be effective. Therefore,



coordination with and cooperation of regional agencies is an essential feature of many elements of this mitigation measure.

**Response to Comment I-92-4.** Table 2-19 in the RDEIR presents a suite of TDM measures, including the potential housing development referenced in the comment, that the Campus will evaluate and implement as appropriate during the 2005 LRDP planning period in order to reduce single occupant vehicle trips to the campus. In this context, the Campus will participate in planning efforts with regional agencies to explore the feasibility of constructing housing along transit corridors. How this housing will be developed is not known at this time; therefore, its fiscal impact cannot be determined. Note also that evaluation of fiscal impact is outside the scope of CEQA documents.

**Response to Comment I-92-5.** The RDEIR focuses on the impacts of the 2005 LRDP on the state highway system. Local streets were evaluated in the Draft EIR, including key roadways within the westside neighborhoods that would potentially be affected by increased traffic from implementation of the 2005 LRDP, including traffic related to the 2300 Delaware Avenue site. Impacts to key intersections on these local streets are addressed in the Draft EIR and mitigation is provided for those intersections that would be significantly affected.

**Response to Comment I-92-6.** Please refer to Response to Comment I-92-5 above. With respect to traffic calming, please see Response to Comment I-84-14.

**John, 3/22/06 9:39 AM -0800, LRDP - Water and sewer issue****1**

Date: Wed, 22 Mar 2006 09:39:00 -0800  
Subject: LRDP - Water and sewer issue  
From: John <scruz@scvolunteercenter.org>  
To: <lrdp-eir@ucsc.edu>  
X-UCSC-CATS-Information: This message was scanned by the ITS MailScanner  
X-UCSC-CATS-MailScanner: Found to be clean  
X-UCSC-CATS-MailScanner-SpamCheck: not spam, spamassassin (score=2.075,  
required 8, autolearn=disabled, HTML\_20\_30 0.50, HTML\_MESSAGE 0.00,  
MISSING\_SUBJECT 1.57)  
X-UCSC-CATS-MailScanner-SpamScore: ss  
X-UCSC-CATS-MailScanner-From: scruz@scvolunteercenter.org

During the process of developing the EIR for the planned population increase for the University, several potentially significant impacts were identified. Among them were water supply, sewer capacity, traffic and housing, to name a few.

The EIR and subsequent answers to comments still has not proposed any real solution to the issues about the water and sewer impacts and that a method be developed to insure that the mitigation measures are undertaken and completed.

During previous campus development, environmental mitigation measures were identified but, for any number of reasons, they were not all completed and the general population of the City was significantly impacted with no means of relief.

To insure that the general City population is not impacted again, mitigation measures must be installed as a predecessor to the action that would cause the impact.

For example:     Develop a new water source before the increase in student population.  
                  Increase the sewer capacity before the need arises for the capacity.

In Short:

Solve the problems the University has already created, solve the future problems before they become problems.

John McGuire  
johnandcarol@att.net  
415 National Street  
Santa Cruz, CA 95060

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### Response to Comment Letter I-93

**Response to Comment I-93-1.** Impacts on the City's water supply and sewer system are evaluated in Section 4.15 of the Draft EIR and mitigation measures are included to reduce the impact of the 2005 LRDP on water supply to the maximum extent feasible. Please also see Master Response UTIL-2, which provides more information regarding 2005 LRDP EIR mitigation measures for water supply impacts. The proposed project would not result in a significant impact on the City's sewer system and therefore no mitigation measures are proposed in relation to the sewer system. Please refer to Master Response MIT-1 regarding the University's fair share payments for utility improvements under Government Code 54999.

James Gill, 4/3/06 10:29 AM -0800, DEIR/REIR question

1

Date: Mon, 3 Apr 2006 10:29:40 -0800  
To: Sally Morgan <morgans@ucsc.edu>  
From: James Gill <jgill@pmc.ucsc.edu>  
Subject: DEIR/REIR question  
X-UCSC-CATS-Information: This message was scanned by the ITS MailScanner  
X-UCSC-CATS-MailScanner: Found to be clean  
X-UCSC-CATS-MailScanner-SpamCheck: not spam, spamassassin (score=1.57,  
required 8, autolearn=disabled, MISSING\_SUBJECT 1.57)  
X-UCSC-CATS-MailScanner-SpamScore: s  
X-UCSC-CATS-MailScanner-From: jgill@pmc.ucsc.edu

Dear Sally

You must have had a busy Winter replying to Comments and know the documents almost by heart by now. In that expectation, here's what may be a simple question.

In the TDM Table (4.14-19 of the DEIR, repeated as 2-19 in the REIR) there is a second-tier Implementation item that reads as follows:

"Work with appropriate agencies to identify and develop a Westside Santa Cruz multi-modal hub to connect Westside shuttle service with expanded automobile and bike parking and (ultimately) regional access via the adjoining rail right-of-way."

I live on the westside and neighbors have asked what this means. Does it refer to use of parking adjacent to the railroad at the 2300 Delaware property? Is the concept that people would drive there, park, and take a shuttle to the main campus? At least, can you direct me to someone who would know?

Thanks and best wishes  
-Jim

--  
Jim Gill  
Professor of Earth Sciences  
UC Santa Cruz  
Phone: 831-459-3842  
Fax: 831-459-3074

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Response to Comment Letter I-94

**Response to Comment I-94-1.** Please see Response to Comment I-92-3.

**David Eselius, 3/27/06 6:00 PM -0800, UC Regents – Long-term Planning and Environme**

**1**

Date: Mon, 27 Mar 2006 18:00:11 -0800  
From: "David Eselius" <deselius@gmail.com>  
To: lrdp-eir@ucsc.edu  
Subject: UC Regents – Long-term Planning and Environmental Impact Report fiduciary obligations, Santa Cruz County"  
X-UCSC-CATS-Information: This message was scanned by the ITS MailScanner  
X-UCSC-CATS-MailScanner: Found to be clean  
X-UCSC-CATS-MailScanner-SpamCheck: not spam, spamassassin (score=1.904, required 8, autolearn=disabled, HTML\_40\_50 0.09, HTML\_MESSAGE 0.00, MIME\_MISSING\_BOUNDARY 0.25, MISSING\_SUBJECT 1.57)  
X-UCSC-CATS-MailScanner-SpamScore: s  
X-UCSC-CATS-MailScanner-From: deselius@gmail.com

**David G. Eselius**  
1312 Laurel Street  
Santa Cruz CA 95060

March 27, 2006

To: Arnold Schwarzenegger  
President of the UC Board of Regents  
Governor of California  
State Capitol, Sacramento, CA 95814

cc: Robert C. Dynes, UC President  
Chancellor Denice D. Denton, UCSC Chancellor  
UCSC 2005 LRDP, Comment, [lrdp-eit@ucsc.edu](mailto:lrdp-eit@ucsc.edu)  
Sam Farr, Member of Congress, 17th District California  
Joe Simitian, 11th Senate District  
John Laird, 27th Assembly District  
Sean Walsh, Director Office of Planning and Research (OPR)  
Mike Chrisman, California Secretary for Resources  
California Coastal Commission, Central Coast District  
Santa Cruz County Supervisors, members  
Cynthia Mathews, Santa Cruz City Mayor

David Eselius, 3/27/06 6:00 PM -0800, UC Regents – Long-term Planning and Environme

2

Santa Cruz *Sentinel*

Subject: UC Regents – Long-term Planning and Environmental Impact Report fiduciary obligations, Santa Cruz County

Dear: Arnold Schwarzenegger

President of the UC Board of Regents

This letter is intended to highlight the need actions that must be taken in anticipation of University of California Santa Cruz's (UCSC) intended expansion and to call attention to certain aspects of University of California Board of Regents (UC Regents) operational management and management practices. UC Regents' management practices have resulted in "piecemealing" of California Environmental Quality Act (CEQA) legally required environmental filings, which has resulted in breaches of the public trust of UC. To prevent UC Regents from further piecemealing of county, state, and national resources, a proper CEQA planning sequence is identified.

UCSC plans to grow from 15,000 to 21,000 students and from 4,077 to 5,600 faculty and staff, over 15 years (2005-2020). The UC Regents understands its obligations are to expand the 2,000 +/- acre campus-construction-site, as necessary to support the projected UC's 2005-2020 enrolment numbers. This growth is occurring without a viable Long-Range Development Plan (LRDP) or an appropriate CEQA Master Environmental Assessment, Master EIR, and Project EIRs.

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The proposed UC long-range CEQA planning sequence is identified within the *Guidelines for Implementation of the California Environmental Quality Act*. The California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) both protect against environmental piecemealing. Piecemealing is a process of chopping of a large project into many little ones---each little project with a potential impact on the environment---which cumulatively may have disastrous consequences.

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Under state and federal laws the existing UCSC 2005-2020 LRDP and 2005-2020 EIR constitutes an improper piecemealing of the UCSC planning and projects. Since the 1980s, UCSC inadequately represented campus and county resources within CEQA EIRs. I believe that these CEQA EIR omissions and ambiguities indicates a calculated piecemealing of UCSC campus growth. Lacking full and timely disclosures, UCSC has short changed the County of Santa Cruz. A recent Santa Cruz article has identified a portion of the piecemealing affect upon Santa Cruz County.

*But the addendum's limited scope and its ambiguity only left local officials and residents feeling as if their concerns went ignored.*

Attachment 1

Specific concerns regarding the accusation of UC Regents mismanagement through their inadequate exercising of public trust fiduciary requirements, of specific Santa Cruz County's environmental

resources, will be provided by this author, upon request.

With the proper application of long-range CEQA planning sequence, by UCSC, the environmental conflicts within Santa Cruz County can be minimized. The CEQA planning sequence builds upon each previous planning sequence. The sequence helps to prevent inappropriate piecemeal degrading, of the county and campus environment and other resources.

Proper application CEQA procedures for UCSC long-term planning is comprised of developing the following:

- Master Environmental Assessment shall identify and organize UCSC and Santa Cruz County/cities regional environmental information. The Master Environmental Assessment will contain an inventory of the physical and biological characteristics of the area for which it is prepared and may contain such additional data and information as the public agency determines is useful or necessary to describe environmental characteristics of the area. The Assessment will include; identification of existing levels of quality and supply of air and water, capacities and levels of use of existing services and facilities, and generalized incremental effects of different categories of development projects by type, scale, and location.
- A new UCSC 2005-2020 LRDP, is to plan campus development and identify relevant environmental elements, contained within the Master Environmental Assessment.
- With the provided affected government agencies cooperation (county, cities, state parks, etc.) providing relevant data, the UCSC 2005-2020 Master EIR shall evaluate (to the greatest extent feasible) the cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment of subsequent projects. The environmental impacts specifically include the affected areas of Santa Cruz County and cities concerning transportation, water, housing, local economy, high-order natural environment, and cultural resources.
- The Project EIR examines the environmental impacts of a specific development project, and all projects identified within the UCSC 2005-2020 Master EIR.

3

**UC Regents Management, Background** -- The UC Regents are best understood as a body of corporate elites, or managerial leaders, whose influence and power is put to use by shaping policy within the economic mill that is the University of California. The UC Regents are also the operational managers of the University of California.

Much of the important work of the UC Regents is carried out through the committee structure. The UC Regents manage the university by dividing work into many necessary committees, and then cross serve on these committees where they have certain expertise and experience. The UC Regents Board operates through seven standing committees: Audit, Educational Policy, Finance, Grounds and Buildings, Health Services, Investments, Oversight of Department of Energy Laboratories.

For the last 127-years, the State Legislature has provided scant oversight and limits to the operations of the UC Board of Regents. By a self-imposed extension of the 1879 Constitutional Article IX (Section 9) articles for a "public trust," the UC Board of Regents has assumed the position of a loosely defend principal of "sovereign immunity," and have manage the University of California "without restrictions." Thus, the University of California Regents Monarchy has come in conflict with its constitutional fiduciary obligations.



**David Eselius, 3/27/06 6:00 PM -0800, UC Regents – Long-term Planning and Environme**

4

Since the 1960s, burgeoning growth in its campuses and facilities has led to the UC Regents' responsibility of what amounts to a UC multibillion-dollar taxpayer funded business, with 150,000 employees and 200,000 students. The UC Regents Monarchy has not appropriately developed an independent administrative management structure that should support the Regents' operation of the multibillion-dollar business.

It must be understood, that by not having in place a properly empowered senior operations management team within the UC Presidents' Office, the UC Regents directs the operations the University of California by having campus staff directly report to the UC Regents (committees), for project funding approval. The UC Regents have obliged themselves to the day-to-day decisions, of the University of California operations.

**Santa Cruz County and UC Planning** – The UC Regents' Grounds and Buildings Committee is the approving facilities funding agent and therefore is the responsible authority for University of California's long-term facilities development.

Title 14, California Code of Regulations, within Chapter 3 of the *Guidelines for Implementation of the California Environmental Quality Act*, identifies various types of CEQA EIRs. The EIR document types are tailored to different situations and intended uses. These variations are not exclusive. Lead Agencies (such as the UC Regents) may use other variations consistent with the Guidelines to meet the needs of other circumstances. For a large significant development such as a UCSC 2005-2020 LRDP, the following CEQA documentation sequence applies.

15169. Master Environmental Assessment -- General. A public agency may prepare a Master Environmental Assessment, inventory, or database for all, or a portion of, the territory subject to its control in order to provide information, which may be used or referenced in EIRs or Negative Declarations. Neither the content, the format, nor the procedures to be used to develop a Master Environmental Assessment are prescribed by these Guidelines. The descriptions contained in this section are advisory. A Master Environmental Assessment is suggested solely as an approach to identify and organize environmental information for a region or area of the state.

(b) Contents. A Master Environmental Assessment may contain an inventory of the physical and biological characteristics of the area for which it is prepared and may contain such additional data and information as the public agency determines is useful or necessary to describe environmental characteristics of the area. It may include identification of existing levels of quality and supply of air and water, capacities and levels of use of existing services and facilities, and generalized incremental effects of different categories of development projects by type, scale, and location.

Discussion: The Master Environmental Assessment was developed as a way of providing a database for use with later EIRs. If an agency prepared a Master Environmental Assessment, the agency could reduce the amount of work necessary to prepare later EIRs. The environmental setting would have been fully analyzed, and the likely environmental effects in the area could be anticipated. Thus, the Master Environmental Assessment could help focus initial studies as well as EIRs.

15175. Master EIR -- The Master EIR procedure is an alternative to preparing a project EIR, staged EIR, or program EIR for certain projects which will form the basis for later decision-making. It is intended to streamline the later environmental review of projects or approval included within the project, plan or program analyzed in the Master EIR. A Master EIR shall, to the greatest extent

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feasible, evaluate the cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment of subsequent projects.

#### 15125. Environmental Setting

(c) Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context.

(d) The EIR shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans. Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans, habitat conservation plans, natural community conservation plans and regional land use plans for the protection of the Coastal Zone, Lake Tahoe Basin, San Francisco Bay, and Santa Monica Mountains.

(e) Where a proposed project is compared with an adopted plan, the analysis shall examine the existing physical conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced as well as the potential future conditions discussed in the plan.

15161. Project EIR -- The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The project EIRs shall examine all phases of the project including planning, construction, and operation.

UC Planning, Legal Analysis (planning and project piecemealing) -- The UC Regents' long-term planning and the current UCSC 2005-2020 LRDP and 2005-2020 EIR constitutes an improper "piecemealing" of the UCSC planning and projects under state and federal laws:

As a general rule, an environmental document such as an EIR must describe the entirety of a project, including reasonably foreseeable future actions that are part of the project (14 CCR & 15378 (a); *Laurel Heights Improvement Association v. Regents of U.C.* (1988) 47 Cal.3d 376, 395 ("Laurel Height 1")). The California Environmental Quality Act and the National Environmental Policy Act ("CEQA/NEPA") both protect against environmental considerations by "...chopping a large project into many little ones---each with a ...potential impact on the environment---which cumulatively may have disastrous consequences" (i.e., piecemealing) (*City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1452).

The Request -- To aid in the prevention of "piecemealing" of the UCSC projects, the court rulings of *Laurel Heights Improvement Association v. Regents of U.C.* (1988) and *City of Santee v. County of San Diego* (1989) are to be considered when developing the new UCSC *Master Environmental Assessment, 2005-2020 LRDP, 2005-2020 Master EIR, and Project EIRs.*

**David Eselius, 3/27/06 6:00 PM -0800, UC Regents – Long-term Planning and Environme****6**

The 2005-2020 long-term planning environmental impact assessment general topics are to include at least the following UCSC relationships to Santa Cruz County and cities:

- Transportation
- Water
- Housing
- Economic
- High-order natural environment
- Cultural Resources (with specificity concerning the historical cultural resources of ca. 1791-1961 Cowell Home Ranch lime production and ranching)

UCSC 2005-2020 planning affects the University of California, City of Santa Cruz, the County of Santa Cruz, California State Parks, California Office of Historic Preservation, and the California Coastal Commission. These government agencies are to review and comment upon UCSC long-range planning CEQA EIR documentation.

It is evident that UC Regents operational management of the UCSC campus operations and growth does have a significant environmental impact within the State of Californian and the County of Santa Cruz. The cultural resources of Cowell Home Ranch's historic lime production facilities, within the possession of UCSC, have national significance.

Sincerely,

David G. Eselius

Attachment 1: *UCSC cool to community concerns*, Santa Cruz Sentinel, March 26, 2006

Attachment 1: *UCSC cool to community concerns*, Santa Cruz Sentinel, March 26, 2006

March 26, 2006

**6**

***UCSC cool to community concerns***

By JONDI GUMZ

Santa Cruz Sentinel staff writer

SANTA CRUZ – UC Santa Cruz, like all the UC campuses, is under pressure to serve more of California's top students and figure out a way to add the facilities to do so.

Demand is growing. More than 106,000 students applied last fall for one of the coveted UC spots, including 70,000 high school seniors, 8 percent more than the year before.

UC Santa Cruz, which has 15,000 students and 3,760 employees, has mapped out a long-range development plan – a controversial plan in some quarters – that by 2020 could nearly double construction on the 2,000-acre campus atop High Street, accommodating 21,000 students and 4,700 employees.

That plan is expected to put another 4,600 cars on the road, and that's one of the top concerns of people who live nearby.

After two years of meetings, nothing in the state-mandated environmental review – which presents ways to deal with issues like traffic – has appeased critics, whose numbers include city and county officials.

Last week, the campus issued an addendum to the three-volume environmental review – focusing on traffic.

But the addendum's limited scope and its ambiguity only left local officials and residents feeling as if their concerns went ignored.

The two sides appear so far apart on the issue of campus growth, they may end up in court. That is what happened last year when UC Berkeley declined to revise its expansion plans and mitigations to the satisfaction of city residents.

"It is clear that local community opposition will need to resort to legal action," predicted Hal Levin, an environmental consultant who lives north of the campus.

UCSC is not subject to city planning regulations since it is a state entity. Final approval is up to the UC Regents, and the timetable calls for approval this summer or, at the latest, fall.

**Addressing public comment**

The university's 45-page addendum deals solely with traffic.

Some of the traffic to the campus is expected to be diverted to the former Texas Instruments plant nearby on Delaware Avenue, where employment is expected to expand from 159 workers, the current number, to 760.

Campus architect Frank Zwart noted that the university's analysis has been expanded to cover stretches of Highway 1 from the "Fishhook" to State Park Drive in Aptos and Highway 17 to Granite Creek Road in Scotts Valley, specifically because of public comments. The initial report, which ran to 900 pages, focused on traffic impacts only on campus and at city intersections.

In the new analysis, the consultants concluded the impact on Highway 17 would be negligible because it would add no more than 50 car trips, but that congestion would worsen during commute hours on Highway 1, where traffic is already at a crawl during the late afternoon.

The solution proposed by UCSC is to pursue the same two mitigations offered in the initial report on Highway 1. The first mitigation involves stepping up traffic-reducing strategies like vanpools, bike shuttles, and car-sharing. The second is to negotiate a payment for road improvements, although that is unlikely if the city of Marina loses a court case against CSU Monterey Bay on the issue of paying for off-campus road improvements.

In January, city officials called the mitigation measures vague. When the city's legal expert, Sacramento attorney James Moose, sent in his review, he called the document "so inadequate the city cannot yet formulate a fully formed position."

But from the campus' point of view, changes to the initial report is the second instance of slowing down the process in response to critics. The university's schedule called for the UC Regents to approve the long-range plan this summer, but that deadline is likely to be delayed for several months.

Last year, UCSC Chancellor Denice Denton agreed to extend the 60-day comment period – which was to end Dec. 19 – until Jan. 11. Both county Supervisor Mardi Wormhoudt and then-mayor Mike Rotkin had asked for additional time to respond to the hefty document.

**Community concerns**

From the critics' point of view, the new revisions are inadequate.

**David Eselius, 3/27/06 6:00 PM -0800, UC Regents – Long-term Planning and Environme****9**

They're merely a response to Caltrans' request to look at freeway interchanges and do not address any of the issues raised by the city, said Rotkin, who stepped down as mayor but remains on the City Council.

Wormhoudt was pleased to see more analysis of campus traffic impacts on Highway 1, but at the same time, she was disappointed.

"I saw a variety of comments that raised very significant points that needed to be addressed," she said, citing water usage and traffic generated by a proposed 4,000-seat event center.

She contends the campus must do more to mitigate the impacts of a growing enrollment on traffic, water, and the redwood-studded forest that makes the Santa Cruz location special. In her opinion, the environmental impact report doesn't comply with the state law mandating environmental review.

Levin, an environmental consultant who taught at UCSC 25 years ago, concurred.

He contended that "grievous errors and omissions in the basic data used" to prepare the report undermined the analysis.

This makes it difficult for people trying to protect the quality of life in Santa Cruz, he said. It's quite a change from the early 1980s, he added, when the UCSC campus could not meet its student population target of 7,500 and launched an ad campaign, "An Ideal Becoming Real."

Most students were busy with finals this week.

But Amelia Timbers, a student who has followed the development issue and took time to read the new report, noted the city's backlog of road maintenance is in the millions. She wishes the campus would specify an amount of money for infrastructure improvements. She also wishes a solution could be reached without going to court.

"I have noticed that suing UCSC results in using up time and money that would otherwise be used to solve important issues," she said.

Contact Jondi Gumz at [jgumz@santacruzsentinel.com](mailto:jgumz@santacruzsentinel.com).

**If You Go**

**How to comment on plan**

Comments on the addendum to the environmental report must be submitted in writing. The deadline is

5 p.m. May 3. They can be mailed or hand-delivered to UCSC's Physical Planning office, Barn G, 1156 High St., Santa Cruz, CA 95064,

or e-mailed to [lrdep-eir@ucsc.edu](mailto:lrdep-eir@ucsc.edu) .

The addendum is at the downtown branch of the Santa Cruz library and on campus at the McHenry and Science & Engineering libraries. A printout may be purchased from

Fed-Ex Kinko's on Laurel Street in downtown Santa Cruz or on campus at XpressIt!, next to the Bay Tree Bookstore. The document is also on the Web at [www.lrdp.ucsc.edu](http://www.lrdp.ucsc.edu) .

**UCSC's traffic solutions**

- Car-sharing, regular shuttle service to off-campus work sites on Delaware Avenue and Shaffer Road, and more commuter van pools and bike shuttles.
- Charge less for off-peak parking, shift meetings to off-campus locations, consider building student housing off campus along bus routes and propose park-and-ride lots for the Westside and Eastside.
- Negotiate payment toward improvements such as the three-year project to revamp lanes on Highway 1, as long as other developers pay their share. (This strategy has been challenged in court by the city of Marina.)

You can find this story online at:

<http://www.santacruzsentinel.com/archive/2006/March/26/local/stories/04local.htm>

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## Response to Comment Letter I-95

**Response to Comment I-95-1.** The 2005 LRDP is the physical development and land use plan for growth of the campus projected to occur by 2020-21. The 2005 LRDP EIR is the appropriate CEQA document for disclosing the potentially significant environmental effects of this projected growth and land use plan. Note that this potential growth would occur over a 15-year period, but would not begin until the 2005 LRDP EIR is certified and the 2005 LRDP is adopted by The Regents. Master Environmental Assessments, Master EIRs and Project EIRs are not the appropriate CEQA documents for the 2005 LRDP. Please refer to PRC Section 21080.09, which defines higher education projects and states that the approval of a long-range development plan requires the preparation of an EIR.

**Response to Comment I-95-2.** The 2005 LRDP EIR is designed to avoid the underestimation of environmental impacts that can result if a larger project is broken down into many smaller projects and each project is evaluated individually for its environmental impacts. “Where individual projects are, or a phased project is, to be undertaken and where the total undertaking comprises a project with significant environmental effects,” CEQA Guidelines Sections 15165 and 15168 provide for the preparation of a program EIR. The 2005 LRDP EIR has been prepared consistent with these CEQA sections. The 2005 LRDP EIR is a program EIR that evaluates the effects of all the potential growth that is projected for UC Santa Cruz within the next 15 years. Note that in addition to this EIR, which presents the overall effects of projected growth, the Campus will also conduct a focused environmental review of specific development projects under the 2005 LRDP as they are proposed for review and approval.

**Response to Comment I-95-3.** The appropriate environmental document to evaluate the potential environmental effects of the 2005 LRDP is a program-level EIR. A Program EIR is prepared for a series of actions that can be characterized as one large project and either are related geographically; govern the conduct of a continuing program; or are carried out under the same regulatory authority and are expected to have similar environmental effects, which can be mitigated in similar ways. See CEQA Guidelines Section 15168(a). A program EIR is appropriate because the 2005 LRDP fits all three of these criteria. A Master EIR, by contrast, is typically prepared for a large project that consists of smaller individual projects that will be carried out in phases. A Master EIR is required to include a description of anticipated subsequent projects that are within the scope of the Master EIR, including information with regard to the kind, size, intensity and location of these subsequent projects.

The Campus will prepare additional CEQA compliance documents, including EIRs if necessary, for specific development projects as and when those projects are proposed.

**Response to Comment I-95-4.** Please refer to Response to Comment I-95-3 above.

**Response to Comment I-95-5.** Please refer to Response to Comment I-95-2 above.

**Response to Comment I-95-6.** Please refer to Response to Comment I-95-1 above. All of the resource areas listed in the comment are addressed in the Draft EIR and RDEIR. Copies of the Draft EIR and the RDEIR were provided to the City of Santa Cruz, the County of Santa Cruz, and to the California Coastal Commission. In addition, 15 copies of both documents were sent to the State Clearinghouse, the agency that is responsible for sending copies of CEQA documents to state agencies such as the California Office of Historic Preservation and the California State Parks Department.



Edward J. Davidson

200 Button Street #15  
Santa Cruz, CA 95060  
TEL/FAX 831 423-9294  
May 2, 2006

5/2 05/03/06 PM 3:13 PJC

**Comments on UCSC 2005-2020 LRDP; Recirculated DEIR Transportation Analysis**

These comments relate to Section 4.14, Traffic, Circulation, and Parking of the DEIR and the City of Santa Cruz letters of January 11, 2006 and April 13, 2006.

I disagree with the conclusions regarding the Eastern Access on Page 4.14-51 since it would substantially mitigate the off-campus traffic impacts resulting from university growth. CEQA guidelines Section 15096 (g) to disapprove a project where alternate feasible mitigations within its power would substantially lessen significant effects on the environment. The argument against the Eastern Access mitigation relates to the City and County resistance to its construction.

In 1960-61 both the City and County of Santa Cruz adopted agreements with the Regents of the University of California. Among the provisions in the agreements was the County's construction of an eastern access. This was a key inducement for the Regents to locate a campus in Santa Cruz. The 1965 LRDP for the campus shows a six-lane road from the vicinity of the Eastern Remote Parking area to the intersection of Golf Club Dr. and Highway 9 at the southern edge of the Pogonip. While the 640-acre Pogonip property was subsequently annexed to the City of Santa Cruz and acquired by the City with State Park Bond funds, the agreements remain in force. A 60-foot right-of-way for a two-lane road using Encinal Street would require taking 3 or 4 acres at Pogonip's southern edge, less than 1% of the 640-acre property.

The DEIR summarizes, at the bottom of p. 4.14-50, that an Eastern Access would eliminate the traffic contribution of the proposed 2005 LRDP at key off-campus intersections including Mission, Bay, and High Streets. By way of comparison, the DEIR consideration of mitigations for the off-campus intersections would retain significant and unavoidable impacts. (See p. 4.14-43 and Table 4.14-19.)

Mitigation **TRA-2A** would require the university to contribute its fair-share of costs to off-campus improvements such as traffic signals. These improvements would not reduce the deteriorating LOS from projected traffic growth.

Mitigation **TRA-2B** would expand existing Transportation Demand Management programs. The City commented that programs for car-pooling, bicycles, transit are near their maximum impact and unlikely to provide much relief for the projected 2020 traffic. Additional on-campus housing is unlikely to mitigate traffic impacts since it is staff and faculty traffic that coincides with AM and PM peaks.

Although the Eastern Access alternative would eliminate the significant and unavoidable impacts of the proposed mitigations, the DEIR, on p. 4.14-50, concluded that the benefits

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would be marginal. I question several of the assertions found on pp. 4.14-49 to -51 and Table 4.14-20.

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The assertion that the Eastern Access would divert between 25 % and 40 % of main campus traffic away from Mission, Bay and High Streets has no apparent empirical basis. I question the accuracy of only a two-minute delay at the Mission/King/Union St intersection during PM peaks. While the peak impact from the campus may be before the PM peak, clearing that intersection in one extra signal cycle would be welcome indeed.

Increased delays with the Eastern Access at the Highway 1/River St. intersection seem illogical. The same volume of campus traffic to and from Highways 1 & 17 will cross that intersection with or without the Eastern Access. For AM traffic where a free right turn is available onto Highway 9, I would expect most of that traffic would avoid the Mission/High St. route for the shorter route to campus. How would that double the delays at that intersection?

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PM peak traffic would add to Harvey West traffic thus the left turn onto Highway 1 would need a longer portion of the signal cycle. This would be somewhat offset by San Lorenzo Valley/Scotts Valley traffic turning left onto Highway 9, avoiding the intersection altogether. This could be improved by future improvements associated with the Fishhook, including the intersection itself and widening the San Lorenzo River Bridge to six-lanes.

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I would also question traffic assumptions for the Summer Quarter in Table 4.14-17. The Beach Area Plan showed increased weekend traffic with visitor traffic more outside the weekday AM and PM peaks. There would also be expected a reduced local traffic volume during these peak hours. If many of the students attend Summer Quarter only, on-campus housing use would have a higher percentage occupancy than the remaining school year.

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My conclusion is that after forty years in delays in honoring their commitment to construct the Eastern Access, the City and County should cooperate with the University and complete the project. This is the only mitigation available to eliminate the significant off-campus traffic impacts from the 2005 LRDP. The EIR should have considered it.

Respectfully submitted,

*Ed Davidson*  
Edward J. Davidson

**Response to Comment Letter I-96**

**Response to Comment I-96-1.** Please refer to Master Response TRAFFIC-3 (Eastern Access).

**Response to Comment I-96-2.** Please refer to Master Response TRAFFIC-3 regarding the Eastern Access. Some of the intersections studied in the Draft EIR would incur significant but unavoidable impacts with implementation of the 2005 LRDP under cumulative conditions, even after implementation of the recommended mitigation measures. This would be the case, even if the Eastern Access were constructed.

Regarding LRDP Mitigation TRA-2A and the installation of traffic signals, Table 4.14-18 (page 4.14-47) in the Draft EIR shows that impacts, to those intersections where installation of a traffic signal is recommended as mitigation, would be fully mitigated by the recommended improvement.

LRDP Mitigation TRA-2B, which would expand the existing Transportation Demand Management (TDM) program, is intended to maintain the existing modal share even while the campus population grows. The expansion of the TDM program was not used to reduce the projected traffic volumes used in the impact analysis, but is proposed as one means of mitigating traffic impacts, by reducing the magnitude of traffic increases. The University's programs for carpools, vanpools, bicycle facilities and services, and transit either have unused capacity or are being expanded at present to keep up with demand. There remains substantial opportunity to increase capacity, facilities and services of these alternative transportation facilities to keep up with future growth of the campus population.

Similarly, additional on-campus housing is part of the proposed 2005 LRDP program and is not a mitigation measure. However, more on-campus student housing would improve traffic conditions and reduce transit capacity impacts, because students living on campus, while still needing to make off-campus trips, do not need to make trips off campus to reach to their residences. On-campus residents also have the option to make necessary trips off campus outside the commute peaks hours. The reduction in trips for on-campus housing in the Draft EIR is applied to student-related traffic generation, but not to faculty and staff traffic generation (please refer to Responses to Comments LA-9-72 and LA-9-73 for more details on the derivation of trip generation rates).

**Response to Comment I-96-3.** Please refer to Master Response TRAFFIC-3 (Eastern Access).

The delay reported for the intersection of Mission/Union/King is the average delay for the highest 15-minute period of the morning and afternoon peak hours, (between 7:00 and 9:00 AM and between 4:00 and 6:00 PM). Based on recent 24-hour counts at the campus entrances, the University's afternoon peak occurs at 4:30 PM and is captured in the peak hour analyzed in the Draft EIR. The proposed mitigation measure for the intersection of Mission/Union/King would improve the average delay from more than 150 seconds to about 90 seconds, which is a 45 percent improvement. While the intersection would continue to operate at a LOS F, the measure would lessen the proposed project's impact by reducing the length of the delay. If the Reduced Enrollment Growth Alternative is adopted as the new LRDP for the Campus, as the Campus will recommend to The Regents, the magnitude of this delay would be reduced, but the Mission/Union/King intersection would still operate at LOS F. Please see Final EIR, Volume IV, Chapter 2, *Project Refinements*.

**Response to Comment I-96-4.** Please refer to Master Response TRAFFIC-3.

**Response to Comment I-96-5.** Please refer to Master Response TRAFFIC-3.

**Response to Comment I-96-6.** While summer traffic might be higher in off-peak hours than in the AM peak hour, the PM peak hour continues to be the highest peak of the day in the summer and non-summer periods based on a comparison of traffic counts on Ocean Street between October and July in 2002 (City of Santa Cruz 2005b). Therefore a weekday PM peak hour analysis remains a reasonable worst-case scenario in the summer quarter. Regarding on-campus housing, if, as the commenter notes, a higher proportion of students live on campus during the summer quarter, it would result in a greater benefit in traffic conditions. However, on the basis of historical patterns, the summer traffic analysis did not assume a higher percentage of students living on campus during the summer compared with other times of the year.

**Diane Brookes, 3/20/06 1:31 PM -0800, Busses**

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**1**

Date: Mon, 20 Mar 2006 13:28:29 -0800  
To: lrdp-eir@ucsc.edu  
From: Diane Brookes <dbrookes@ucsc.edu>  
Subject: Busses  
Cc: dbrookes@ucsc.edu  
X-UCSC-CATS-Information: This message was scanned by the ITS MailScanner  
X-UCSC-CATS-MailScanner: Found to be clean  
X-UCSC-CATS-MailScanner-SpamCheck: not spam, spamassassin (score=1.57,  
required 8, autolearn=disabled, MISSING\_SUBJECT 1.57)  
X-UCSC-CATS-MailScanner-SpamScore: s  
X-UCSC-CATS-MailScanner-From: dbrookes@ucsc.edu

Is there any discussions happening between the SC City Schools to possibly house campus shuttle busses or busses in the future?

thanks  
Diane

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Response to Comment Letter I-97

**Response to Comment I-97-1.** The comment is not relevant to the Draft EIR or the RDEIR.

**From:** "David Eselius" <deselius@gmail.com>  
**Subject:** California Coastal Commission Public Hearing April 12, 2006, Item W15c, UCSC-CLRDP, UCSC Marine Science Campus  
**Date:** Mon, 10 Apr 2006 12:00:23 -0700  
**To:** lrdp-eir@ucsc.edu  
**Cc:** staff@communitytv.org



**David G. Eselius**  
1312 Laurel Street  
Santa Cruz CA 95060

April 10, 2006

To: California Coastal Commission – members  
Central Coast District  
725 Front Street, Suite 300  
Santa Cruz, CA 95060-4508

cc: Chancellor Denice D. Denton, UCSC Chancellor  
UCSC LRDP/CLRDP, Comment, lrdp-eir@ucsc.edu  
Sam Farr, Member of Congress, 17<sup>th</sup> District California  
Joe Simitian, 11<sup>th</sup> Senate District  
John Laird, 27<sup>th</sup> Assembly District  
Sean Walsh, Director Office of Planning and Research (OPR)  
Santa Cruz County Supervisors, members  
Cynthia Mathews, Santa Cruz City Mayor  
Santa Cruz City Council, members

CLUE

Santa Cruz *Sentinel*

Subject: California Coastal Commission Public Hearing April 12, 2006

Item W15c, UCSC-CLRDP, UCSC Marine Science Campus

Dear: California Coastal Commission

This letter is intended to highlight the actions that must be taken in anticipation of University of California Santa Cruz's (UCSC) long-range growth, from 140,000 sq. ft. to 700,000 sq. ft., of UCSC Marine Science Campus, which is located upon the coastline of Santa Cruz County California. This issue is scheduled to be addressed within your Public Hearing of April 12, 2006, Item W15c.

Until UCSC, Santa Cruz County, and Santa Cruz City can resolve the identified concerns regarding UCSC long-term growth vs. regional infrastructures, the California Coastal Commission is requested to take NO ACTION regarding UCSC's Coastal Long Range Development Plan (CLRDP).

UCSC's management of Long Range Development Planning (LRDP) practices have resulted in "**piecemealing**" of California Environmental Quality Act (CEQA) legally required environmental filings. This piecemealing of university, county, city infrastructures, and cultural resources of national significance has resulted breaches of the public trust of the UC long-range planning process.

Under state and federal laws interpretations, to avoid piecemealing environmental considerations, the existing UCSC LRDP and LRDP EIR are to be revised to more disclosing and to include all affected UCSC campuses:

- UCSC Main Campus 2,000 +/- acre site
- UCSC Marine Science Campus 40 +/- acre site



- proposed build up of the UCSC Texas Instruments 18.5-acre site

UCSC Maine Campus plans to grow from 15,000 to 21,000 students and from 4,077 to 5,600 faculty and staff, over 15 years (2005-2020). UCSC Marine Science Campus facilities are to grow from 140,000 sq. ft. to 700,000 sq. ft. UCSC Texas Instruments site employment is expected to expand from 159 workers, the current number, to 760 workers. The piecemealing of UCSC campus growth will result in the overwhelming of Santa Cruz city's infrastructures. Something has to be done to correct the situation.

The new UCSC *CEQA Master Environmental Assessment* and *CEQA Master EIR* long-term planning environmental impact assessment are to identify properly at least the following UCSC growth relationships to Santa Cruz County and cities:

- Transportation/Traffic
- Water
- Housing
- Economic
- High-order natural environment
- Cultural Resources (with specificity concerning the historical cultural resources of ca. 1791-1961 Cowell Home Ranch lime production kilns, quarries, trails, and ranching, 12,000 +/- acres)

It is acknowledged that the community surrounding UCSC is responsible for providing the common infrastructure. UCSC is responsible for contributing its fair share to the development of essential infrastructures. The current process of Santa Cruz City's withholding water and transportation/traffic improvements has not affected limiting UCSC growth, Santa Cruz City growth, or county growth. The north county political coterie's handling of the providing of infrastructure development has only adversely affected the regional residential quality of life.

Since the 1980s, UCSC has inadequately represented campus and county resources within CEQA-EIRs. I believe that these UCSC's CEQA-EIR omissions and ambiguities indicate a calculated piecemealing of UCSC campus growth and has shortchanged the County/City of Santa Cruz by not properly identifying its impact upon water, transportation/traffic, historic cultural resources, surrounding high-order natural environment, housing, local economy, refuse/recycling, and sanitary sewer services.

UCSC is only a part of an unchanging multibillion-dollar UC Regents operation of a taxpayers business (i.e., higher education). UCSC growth will continue to expand, without: a viable Long-Range Development Plan (*LRDP*), an appropriate *CEQA Master Environmental Assessment*, or *CEQA Master EIR*. If there is no lawsuit to protect the resources of the community, the existing modus operandi of using *CEQA Project EIRs* to mask assessment of the true environmental impact upon Santa Cruz County resources will continue. Actions of the local politicians and the north county political coterie are also counter productive when it comes to providing for the local community infrastructures.

**State and National Environmental Acts** – Several State and Federal acts apply to UCSC's growth/expansion. All state agencies must comply with the same set of Federal and State environmental laws. Over the last 20 years, UCSC continues to act defiantly of the following acts:

- NEPA -- National Environmental Policy Act
- CEQA -- California Environmental Quality Act
- CEQA-EIR – CEQA requirements for Environmental Impact Reports (EIR)
- NHPA -- National Historic Preservation Act
- NHPA Section 106 – Section 106 of NHPA

This author, upon request, will provide additional specific concerns regarding the accusation of county/cities/university under-whelming management, and less than adequate exercising of public trust fiduciary responsibilities, of specific Santa Cruz County/Cities environmental and infrastructure resources.

A recent Santa Cruz Sentinel opinion has identified a portion of the piecemealing affect upon Santa Cruz County and Santa Cruz City.

*The long history of lies and distortions by university officials regarding the town-gown relationship has run its course and it is time that the community took effective action to prevent this disastrous proposed growth plan from coming into reality.*

Attachment 1

**CEQA Guideline -- Legal, Overview, Technical, and Lead Agency** -- The proposed UC long-range CEQA planning sequence is identified within the *Guidelines for*

*Implementation of the California Environmental Quality Act.*

**Legal** -- Piecemealing is a process of chopping of a large project into many little ones---each little project with a potential impact on the environment---which cumulatively may have disastrous consequences.

As a general rule, an environmental document such as an EIR must describe the entirety of a project, including reasonably foreseeable future actions that are part of the project (14 CCR & 15378 (a); *Laurel Heights Improvement Association v. Regents of U.C.* (1988) 47 Cal.3d 376, 395 ("*Laurel Height 1*"). The California Environmental Quality Act and the National Environmental Policy Act ("CEQA/NEPA") both protect against environmental considerations by "...chopping a large project into many little ones---each with a ...potential impact on the environment---which cumulatively may have disastrous consequences" (i.e., piecemealing) (*City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1452).

**Overview** -- Proper application CEQA procedures for UCSC long-term planning is comprised of developing the following: *CEQA Master Environmental Assessment*, *UCSC Master LRDP*, *CEQA Master EIR*, and *CEQA Project EIRs*.

- **CEQA Master Environmental Assessment** shall identify and organize UCSC and Santa Cruz County/cities regional environmental information. The *Master Environmental Assessment* will contain an inventory of the physical and biological characteristics of the area for which it is prepared and may contain such additional data and information as the public agency determines is useful or necessary to describe environmental characteristics of the area. The Assessment will include; identification of existing levels of quality and supply of county/cities/university air and water, capacities and levels of use of existing services and facilities, and generalized incremental effects of different categories of development projects by type, scale, and location.

- A new **UCSC 2005-2020 Master LRDP**, is to plan campus development and identify relevant environmental elements, contained within the *CEQA Master Environmental Assessment* for UCSC Main Campus, UCSC Texas Instruments, and Marine Science Campus.

- With the provided affected government agencies cooperation (i.e., county, cities, state parks, etc.) providing relevant data, **the UCSC 2005-2020 CEQA Master EIR shall evaluate (to the greatest extent feasible) the cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment of subsequent projects. The environmental impacts and infrastructures specifically include the**

**affected areas of reporting of Santa Cruz County and Santa Cruz City infrastructure water, transportation/traffic, historic cultural resources, surrounding high-order natural environment, housing, local economy, refuse/recycling, and sanitary sewer services.**

The **CEQA Project EIR** examines the environmental impacts of a specific development project, and all projects identified within the *UCSC 2005-2020 CEQA Master EIR*. Project EIRs would include construction within UCSC Main Campus, UCSC Texas Instruments site, and Marine Science Campus. Project EIR are the current format for UCSC's LRDP-EIRs

**Technical** -- Title 14, California Code of Regulations, within Chapter 3 of the *Guidelines for Implementation of the California Environmental Quality Act*, identifies various types of CEQA EIRs. The EIR document types are tailored to different situations and intended uses. These variations are not exclusive. Lead Agencies (such as the UC Regents) may use other variations consistent with the Guidelines to meet the needs of other circumstances. For a large significant development such as UCSC LRDPs and EIRs, the following CEQA documentation sequence applies.

**15169. Master Environmental Assessment** -- General. A public agency may prepare a Master Environmental Assessment, inventory, or database for all, or a portion of, the territory subject to its control in order to provide information, which may be used or referenced in EIRs or Negative Declarations. Neither the content, the format, nor the procedures to be used to develop a Master Environmental Assessment are prescribed by these Guidelines. The descriptions contained in this section are advisory. A Master Environmental Assessment is suggested solely as an approach to identify and organize environmental information for a region or area of the state.

(b) Contents. A Master Environmental Assessment may contain an inventory of the physical and biological characteristics of the area for which it is prepared and may contain such additional data and information as the public agency determines is useful or necessary to describe environmental characteristics of the area. It may include identification of existing levels of quality and supply of air and water, capacities and levels of use of existing services and facilities, and generalized incremental effects of different categories of development projects by type, scale, and location.

Discussion: The Master Environmental Assessment was developed as a way of providing a database for use with later EIRs. If an agency prepared a Master Environmental Assessment, the agency could reduce the amount of work necessary to prepare later EIRs. The environmental setting would have been fully analyzed, and the likely

environmental effects in the area could be anticipated. Thus, the Master Environmental Assessment could help focus initial studies as well as EIRs.

15175. Master EIR -- The Master EIR procedure is an alternative to preparing a project EIR, staged EIR, or program EIR for certain projects which will form the basis for later decision-making. It is intended to streamline the later environmental review of projects or approval included within the project, plan or program analyzed in the Master EIR. A Master EIR shall, to the greatest extent feasible, evaluate the cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment of subsequent projects.

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#### 15125. Environmental Setting

(c) Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context.

(d) The EIR shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans. Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans, habitat conservation plans, natural community conservation plans and regional land use plans for the protection of the Coastal Zone, Lake Tahoe Basin, San Francisco Bay, and Santa Monica Mountains.

(e) Where a proposed project is compared with an adopted plan, the analysis shall examine the existing physical conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced as well as the potential future conditions discussed in the plan.

15161. Project EIR -- The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The project EIRs shall examine all phases of the project including planning, construction, and operation.

**Lead Agency** -- The *fatal-flaw* within UC's CEQA environmental requirements are the lack of provisions to prevent UC Administration dual-responsibilities of both "CEQA-EIRs environment Lead Agency" and "campus land-use/development Lead Agency." Within the UCSC campus, there is a conflict of interest with UC Administration real estate planning vs. retention of cultural historical resources of Cowell Home Ranch/lime production and the accompanying surrounding high-order natural environment.

It is the responsibility of the Lead Agency to also identify the UCSC affected areas by reporting Santa Cruz County and Santa Cruz City infrastructure water, transportation/traffic, housing, local economy, refuse/recycling, and sanitary sewer services.

UCSC CEQA Master Environmental Assessment, CEQA Master-EIR, and CEQA Project EIRs affect the University of California, City of Santa Cruz, the County of Santa Cruz, California State Parks, California Office of Historic Preservation, and the California Coastal Commission. These government agencies are to review and comment upon UCSC long-range planning and CEQA documentation.

**The North Santa Cruz County Political Coterie** -- Over the years, Santa Cruz County and Santa Cruz City have inadequately identified or developed infrastructure and environmental long-term planning, within the fundamental areas of increasing surface water supplies, ground water reserve depletion, and the increasing transportation/traffic level of service and safety within major transportation corridors. The inadequate development of necessary infrastructures has been the Santa Cruz County political coterie's long-term cornerstone of political staying power.

Santa Cruz City, Santa Cruz County, and UCSC have never acknowledged the existence or attempted to preserve the extant Cowell Home Ranch lime production facilities, a historical cultural resource of national significance.

It appears retention of important cultural resources is in conflict with doing political coterie business in the County, City, and by UCSC.

Santa Cruz City has long rejected necessary economic development within the city. The Santa Cruz City's General Fund budget currently has a structural deficit. Without

continuing budget reductions and/or additions to the City's tax base, expenditures will continue to outpace revenues. Additional expenditures, e.g., to improve needed basic infrastructures, or improve city services, may not be possible without measures to increase Santa Cruz City revenues.

The liberal-progressive Santa Cruz City is in no financial position to require of UCSC city infrastructures that for 25 years the Santa Cruz City political coterie has resisted development for its own residents.

North Santa Cruz County political coterie existence depends upon opaque access to block votes, finances, and legal support provided by the Sierra Club (Ventana Chapter), and the UCSC campus vote. In the past, the highly organized Sierra Club leadership has been able to leverage its influence over the 3,000 +/- Sierra Club membership block vote, as directed by the leadership, either for or against candidates. The Sierra Club has ample nonprofit tax-exempt contributions to support any legal or "grassroots" political causes deemed appropriate. Without the Sierra Club support, the north county political coterie will not exist. The public is ignorant of this situation.

Neither Santa Cruz County nor Santa Cruz City has in place any viable long-term planning. Important Santa Cruz City/County decisions will most likely continue to be politically decided, day by day, with its infrastructure and economic needs unacknowledged and its environmental and economic future unidentified.

**Please Note:** Liberal-progressive Santa Cruz City Councils retain tight control over the "grassroots" amateur commissions and committees that do the City planning. The main City general plan is now scheduled (for political comfort) to be completed some time after the November 2008 election (if it to be completed at all).

Previously the Santa Cruz City Council has established important areas of understanding with the UCSC Administration:

**Water** – The Santa Cruz City water district is operating at an average of 93% capacity. The City relies upon surface-water storage capacity. This storage capacity has been under developed relative to current populations. City residents and retailers will face chronic water shortages during the next substantial drought.

The main obstacle to increasing either in-line or off-line surface water storage capacity is that the Sierra Club does not want to change its opposition to surface water storage increases. City administrators and technicians can say what they want, in Santa Cruz; politicians are elected with the help of the Sierra Club, and then the politicians stay elected by towing the political line, by doing nothing.

The Urban Water Management Planning Act (Assembly Bill 797 in 1983) requires water agencies to evaluate and describe their water resource supplies and projected needs over a twenty (20) year planning horizon. This has never been done by the liberal-progressive Santa Cruz City Councils.

Senate Bills 610 and 221 (2001) require water agencies to provide detailed assessments of their long-term water supplies to city and county decision makers prior to the approval of certain development projects. The bills also require cities and counties to make findings to verify that adequate water supplies are available before development can proceed. This detailed assessment has been completed by the Santa Cruz City Water Department (see *2005 Urban Water Management*).

Santa Cruz City's *2005 Urban Water Management Plan* is a very important document, but it is not a water management plan. The document contains the information necessary from which the Santa Cruz City Council is required to make a twenty (20) year planning horizon urban water management plan based upon the water resource supplies and projected needs.

The lack of water management planning appears to be based upon long standing political coterie attachment to the Sierra Club leadership.

The City Council's current water supply solutions rely upon the Federal Policy Act of 1992, concerning Low Flow Plumbing Fixtures and requiring ultra low flow toilets (1.6 gallons per flush or less). A City low-flow retrofit rebate program is available.

A City facility for Monterey Bay saltwater desalination has also been previously proposed. For the City's expected needed water capacity, saltwater desalination is extremely expensive and would be a large consumer of electrical energy. Global warming, increased by the burning of hydrocarbon fuel for the electrical demands of California desalination plants, is not a pretty picture:



"The enormous dark mass moved like some death ship in a Norse legend, escorted across the night by armored creatures with spiral wings. We weren't sure how to react. It was a terrible thing to see, so close, so low, packed with chlorides, benzenes, phenols, hydrocarbons, or whatever the precise toxic content. But it was also spectacular, part of the grandness of a sweeping event, like the vivid scene in the switching yard or the people trudging across the snowy underpass with children, food, belongings, a tragic army of the dispossessed. Our fear was accompanied by a sense of awe that bordered on the religious."

Passage from Don DeLillo's novel, *White Noise*, 1985.

Having 50-60 inches of annual rainfall within the Santa Cruz hills, and has the ability to increase in-stream/off-stream storage facilities; Santa Cruz City does not lack the ability to have available surface water supplies. The problem is that the liberal-progressive north County political coterie follows the Sierra Club policies concerning water. The big political coterie lie is their claim that county/city growth by prevented by limiting water of supplies (as well as more bicycle paths will limit growth).

While reviewing UCSC's *Campus Community Work Group White Paper*, April 2004, we find UCSC understandings with the Santa Cruz City Council regarding increased water capacity developments:

Footnote 43 - If water resources prove to be inadequate, UCSC has agreed to provide financial assistance for development of increased water production—provided the City dedicate such marginal capacity to serve the on-campus need.

Footnote 44 - More precisely, in the case of these water/sewer University Assistance Measures, the campus is awaiting completion of City master plans to determine need.

*UCSC Campus Community Work Group White Paper*, April 2004

UCSC has at least three reserve groundwater pumps (numbers 2, 4, and 6). UCSC water pumping capacity and restriction has not been publicly identified. To protect its investments, there appears to be no legal reason why UCSC should not pump ground water as needed. The impact of over pumping ground water reserves (and possible groundwater saltwater intrusion from the Monterey Bay) is a major regional concern.

It would appear that the City water district supply/demands capacities have been discussed by the Santa Cruz City Council and UCSC. The Santa Cruz City Council has no intentions to change a political water policy. To protect their interests, UCSC will pump groundwater as necessary. Within the bigger picture, Santa Cruz City residents will have to deal with a water shortage problem as best they can, without the liberal-progressive City Council's assistance.

**Transportation/Traffic** – The north county political coterie has long placed obstacles in the way of improving city arterial flow of vehicular traffic. The political coterie's drive to control transportation remains very determined, very comprehensive, and very specific. Santa Cruz City politicians still control the Metro Board decisions and the majority within the Santa Cruz County Transportation Commission (SCCRTC).

In order to justify alternative transportation, the liberal-progressive Santa Cruz political coterie long ago decided to let transportation/traffic infrastructures decay, and to purchase of the Union Pacific 32-mile railway single right-of-way for conversion into a bicycle path.

The Santa Cruz City Council's *Master Transportation Study* was developed with \$250,000 of UCSC funds. The study represents the agreements between the liberal-progressive political coterie and the Sierra Club leadership (specifically, the editor of the Sierra Club Ventana Chapter newsletter). It appears the agreement was to promote alternative transportation and do nothing to provide for the continuing rate of growth of automobile trips for the growing population of Santa Cruz City and UCSC.

Four main objectives emerged from the community participation process associated with the *Master Transportation Study* (dated 7/23/2003):

- (i) Expand and offer new travel choices for people who live, work, play and visit Santa Cruz;
- (ii) Provide relief for citywide vehicle traffic congestion;
- (iii) Enhance community livability; and
- (iv) Achieve a sustainable transportation future.

*UCSC Campus Community Work Group White Paper, April 2004, page 6*

UCSC has done what it can to improve campus transportation/traffic. Santa Cruz City Staff and UCSC do understand traffic level of service and safety problems (and solutions):

Footnote 24 -- In a memorandum (Ron Marquez to Chris Schneiter & Ken Thomas re "LRDP Community Committee Transportation Background" dated 4/15/2004) based upon information prepared by Fehr and Peers Transportation Consultants, four of the 26 intersections on the west side were operating at poor levels of service (i.e., "E" or "F"): Empire Grade (High Street) and Western Drive (PM delays at this two-way stop sign intersection averaged 76 seconds—LOS "F"); Bay Street and California Street (PM delays at this two way stop sign intersection averaged 37 seconds—LOS "E"); Bay Street and Escalona Drive (AM delays at this two-way stop sign intersection averaged 73 seconds—LOS "F"; PM delays averaged 46 seconds—LOS "E"); and Mission Street and Chestnut Street (PM delays at this signalized intersection averaged 35 seconds—LOS "E").

*UCSC Campus Community Work Group White Paper, April 2004*

The information concerning transportation (along with other issues) is piecemealed within UCSC long-rang planning.

Footnote 33: The UC Santa Cruz Marine Science Campus CLRDP Draft EIR (January 2004) contains detailed "current conditions" information about many of the relevant roads and intersections. (This information was provided to the work group.) The projected growth rates, however, are restricted to impacts related to anticipate development at the Marine Science Campus.

*UCSC Campus Community Work Group White Paper, April 2004*

Transportation impacts caused by UCSC growth is intentionally divided over several years between three different UCSC Project-EIRs: UCSC Main Campus, UCSC Marine Science Campus, and UCSC Texas Instruments Site. The liberal-progressive Santa Cruz City Council still considers that alternative transportation is the only solution to city/county transportation and traffic concerns.

**Historic Cultural Resources and Surrounding High-Order Natural Environment –**  
Since UC acquired the campus land in 1961, UCSC has not appropriately identified

Cowell Home Ranch lime production cultural historic resources within any UCSC EIR reports. Additionally, important elements within UCSC EIRs do not report the cumulative construction impact upon the cultural resources, and the surrounding high order natural environment.

Although small in relative area, UCSC's portion (2,000 +/- acres) of Cowell Home Ranch cultural historic resources (ca. 1791 to 1947 within 12,000 +/- acres), the campus is centrally located and retains a very important elements of Santa Cruz County's historic lime production facilities and supporting ranching facilities. The same 12,000 +/- acre Cowell Home Ranch historic lime production facilities area is intertwined within Santa Cruz County's high order natural environment and park systems.

The government organizations associated with Cowell Home Ranch lime production and high-order natural environment are:

- Wilder Ranch State Park (east and north section),
- UCSC South Campus,
- UCSC North Campus,
- City of Santa Cruz's Pogonip City Park,
- Henry Cowell Redwoods State Park,
- Henry Cowell Redwoods State Park, Fall Creek Unit

The UCSC campus development of Santa Cruz County's historic Cowell Home Ranch started before enactment of appropriate Federal and State environmental legislation directives of NHPA, Section 106 (of NHPA), NRHP, NEPA, CEQA, and EIR (of CEQA).

1955 Samuel Henry Cowell died (age 93).

1960 Fewer than ten workers living on Cowell Home Ranch 12,000 +/- acres, the Cookhouse is closed. An era of continuous California lime production and history, stretching back to the 1790s, ends.

1961 The University of California Regents entered into negotiations with the S. H. Cowell Foundation for purchase of 2,000 +/- acres of Cowell Home Ranch.

1964 Construction was underway by mid-1964 on UCSC buildings sufficient for instruction of the first UC Santa Cruz class in fall, 1965.

1966 National Historic Preservation Act (NHPA) was enacted by US Congress. The

NHPA Act identifies the spirit and direction of the Nation, reflecting our historic heritage. **Section 106** (of NHPA) requires federal agencies to review all actions which may affect a property listed on the National Register of Historic Places (**NRHP**), or which may affect a property eligible for listing. (Note: Registration within the National Register triggers cultural resources federal protections of NHPA, Section 106, NEPA, and CEQA. In the world of Sacramento special power interest, a cultural resource that is "property eligible for listing" has little to no environmental recognition. California politics favors ignoring, or repressing, property eligible for listing. It is easier for government agencies to work within CEQA if the agency can ignore properties only eligible for listing. Of course, the eligible cultural resource is to be lost.)

1969 US Congress enacted the National Environmental Policy Act (**NEPA**).

1970 California Legislature enacted the California Environmental Quality Act (**CEQA**). Like the federal 1969 NEPA. California CEQA is primarily a means to require public agency decision makers to document and consider the environmental implications of their actions. A major element of CEQA is defining Environmental Impact Report (**EIR**) needs.

**Comment:** Federal guidelines are established in accordance with the provisions of NRHP, NEPA, NHPA, and Section 106 (of NHPA). California's CEQA contains the State's environmental law provisions and EIR (of CEQA) requirements.

Complete cultural fabric destruction of UCSC's portion of Santa Cruz County's natural environmental and contiguous historical cultural resources will have occurred by the time the 2020-2035 campus' construction is to start. Most likely, in 2035, UC Administration will then erect campus-signs identifying what had been historically present, and how important the high-order natural environment and cultural historic resources were to the UCSC students.

Because of known UCSC inconsistencies and omissions of historic cultural resource reality, an unknown number of sections of all published UCSC LRDPs and EIRs cannot be accepted at face value. The reviewer is now faced with figuring out which sections of UCSC EIRs are to be believed and which sections contain significant omissions. This fact is a very sad situation.

UCSC's construction impact upon Santa Cruz County's high-order natural environment and Cowell Home Ranch cultural historical resources really does accumulate, and really does make a difference to the quality of life of Santa Cruz County residents. It is essential that University of California, City of Santa Cruz, County of Santa Cruz, California State

Parks, California Office of Historic Preservation, and the California Coastal Commission review UCSC's CEQA documents for accuracy and for complete infrastructure content.

Since UCSC receives both Federal and State funding, UCSC campus construction is to take into account obligations to the environmental law provisions of Federal NHPA, NHPA-Section 106, NEPA, and California's CEQA, and CEQA EIR. However, UC only obeys laws when they have to, mostly when it is required by court orders and litigation.

**Conflicts of Interests Within Santa Cruz City** -- Until UCSC is held accountable for the completion of comprehensive CEQA long-term planning, the Santa Cruz City political decisions will continue to be made day by day, with its infrastructure needs unacknowledged, and its future in doubt.

Besides the political problems encountered with the Sierra Club concerning water and transportation/traffic, there has always been my concern over why the Santa Cruz City Council has been ineffective and lackluster when it came to taking a stand against UCSC's destruction of historic cultural resources and the destruction of the continuity of high-order natural resources.

The Santa Cruz City Council has longstanding conflicts of interest when dealing with the interests of Santa Cruz City vs. UCSC growth interests. Five (5) of the seven (7) City Council members derive family incomes from the university. All five (5) of the City Council members' conflict-of-interests (i.e., the majority of the City Council) need to be excused from further discussions and decisions involving UCSC interface with the community. Under these circumstances, it is unknown how the City Council can now exercise its fiduciary obligations.

The Sierra Club is also now up to its eyeballs in its own pickle brine. Although the Sierra Club leadership (Ventana Chapter) has worked under various group names, the Federal and State tax-exempt status of contributions made to the Sierra Club are now called into question.

Under Section 501(c)(3) of the Internal Revenue Code, the Sierra Club Foundation is classified by the Internal Revenue Service as exempt from taxes. However, the IRS does identify what can and cannot be done within tax-exempt organizations.

Under the Internal Revenue Code, all section 501(c)(3) organizations are absolutely prohibited from directly or indirectly participating in, or intervening in, any political campaign on behalf of (or in opposition to) any candidate for elective public office. Contributions to political campaign funds or public statements of position (verbal or written) made on behalf of the organization in favor of or in opposition to any candidate for public office clearly violate the prohibition against political campaign activity. Violation of this prohibition may result in denial or revocation of tax-exempt status and the imposition of certain excise tax.

#### Political and Lobbying Activities

(Adapted from IRS Publication 1828,

Tax Guide for Churches and Religious Organizations - February 2004)

Anyone who has observed, or participated within north county political coterie politics, knows that for the last 25 years the Sierra Club has abused its non-profit status by improper lobbying and election influences. The Sierra Club leadership (Ventana Chapter) has directly and indirectly participated in, and intervened in, almost all north Santa Cruz County political campaigns on behalf of (or in opposition to) any number of candidates for elective public office. Now it is necessary to review the Sierra Club tax-exempt status, for violation of campaign prohibitions. This review may result in denial or revocation of the Sierra Club's tax-exempt status and the imposition of certain excise tax.

Santa Cruz County and cities Water Policies, Transportation/Traffic Policies, and Historical Retention Policies of Cowell Home Ranch, is generated through the Sierra Club leadership via the Sierra Clubs direct and indirect interventions within the Santa Cruz County elections process. Because of these policies, UCSC growth will have a much greater adverse affect upon the community infrastructures.

**The Request** – Who is to represent Santa Cruz County/City vs. University of California Regents, concerning UCSC's CEQA piecemealing of county/city resources of the environment, cultural resources, and infrastructures?

Whoever takes up the cause does have legal precedence and CEQA options. To aid in the prevention of "piecemealing" of the UCSC projects, the court rulings of *Laurel Heights Improvement Association v. Regents of U.C.* (1988) and *City of Santee v. County of San Diego* (1989) are to be considered when developing the new UCSC *Master Environmental Assessment, 2005-2020 LRDP, 2005-2020 Master EIR, and Project EIRs.*

UCSC LRDP and LRDP EIR are to be revised to include the growth of UCSC Main Campus, UCSC Marine Science Campus, and the proposed build up of the UCSC Texas Instruments site.

UCSC long-term planning affects the University of California, City of Santa Cruz, the County of Santa Cruz, California State Parks, California Office of Historic Preservation, and the California Coastal Commission. These government agencies need to review and comment upon UCSC comprehensive long-range planning CEQA documentation: i.e., *CEQA-Master Environmental Assessment, or CEQA-Master EIR. CEQA-Project EIRs.*

It is request that the California Costal Commission take NO ACTION upon the April 12, 2006 meeting Item W15c, UCSC-CLRDP, and UCSC Marine Science Campus. NO ACTION will allow necessary time for UCSC to develop of the UCSC CEQA *Master Environmental Assessment, Master EIR, and Project EIRs.*

Sincerely,

David G. Eselius

Attachment 1: *Denton fuels the city planning conflagration, Sentinel - Opinion, April 2, 2006*

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NOTE: Coalition for Limiting University Expansion (CLUE) is a non-profit public interest group and has no legal standing as a City of Santa Cruz representative.

April 2, 2006

### **Denton fuels the city's planning conflagration**

UC Santa Cruz Chancellor Denice Denton may be the only one on campus who can put a stop to the madness. She inherited a mess in terms of town-gown relations and campus planning, but she doesn't need to keep fueling the conflagration.

It is not apparent to me how involved the new chancellor has gotten or how knowledgeable she is about the LRDP process, the EIR process, and the past 18 months of related documents and processes at UC Santa Cruz. But it must be apparent to her that there is very strong community opposition to the plan and detailed critical comments on the DEIR. Certainly at this juncture, she has an opportunity to avoid jeopardizing or exacerbating the reputation and standing of the Santa Cruz campus with UC's Office of the President or the regents by not sending the flawed documents forward and inviting legal action.

The university's announcement of the RDEIR to deal only with traffic issues reveals the enormity of the ignorance and arrogance of the university officials responsible for this project. The rejection of the city's request for withdrawal and revision of the DEIR and re-issuance for public comment illustrates the difficulty faced by responsible members of the community who wish to protect the quality of life and the natural and human-made environmental quality in the greater Santa Cruz area.

It is appalling that the university is not withdrawing the entire Draft EIR and revising it. It is appalling that campus officials plan to go forward in total disregard of the concerns expressed in the comments on the draft EIR submitted by the city of Santa Cruz, CLUE and many other citizens. This is another example of the university's consistent disregard for the concerns and well-being of the community.

There are grievous errors and omissions in the basic data used for preparation of the

DEIR that undermine the analysis performed by the staff and consultants and that remove from those wishing to comment responsibly on the draft the opportunity to view and analyze the proposed project in an appropriate and effective manner.

Given that it is highly unlikely that the regents will hold hearings to enable all concerned parties to comment on the Final EIR and LRDP before adoption, it is clear that local community opposition will need to resort to legal action as well as appeals to the Legislature to prevent the adoption and/or implementation of the project. It is sad to consider the impacts the proposed plan will have and that the university is willing and potentially capable of ignoring such impacts. The long history of lies and distortions by university officials regarding the town-gown relationship has run its course and it is time that the community took effective action to prevent this disastrous proposed growth plan from coming into reality.

I believe it would be wise to withdraw the current DEIR and revise it to address at least the vast majority of community comments rather than simply going forward knowing full well that the community city, CLUE, perhaps others, too are prepared to wage a court battle to stop this LRDP from being implemented even if it is adopted.

The University of California was taken by surprise in the late '80s and early '90s when its obligations under the California Environmental Quality Act CEQA were tested in court regarding the Laurel Heights campus in San Francisco, and the university's proposed project was delayed for several years. Since Santa Cruz is the smallest of the campuses, but not the least expensive on which to build or expand, it may just strike the regents as downright foolish to invite a CEQA fight over the 2005-2020 LRDP.

Back in the early '80s, when the UCSC campus could not even fill its 7,500-student population target articulated in the 1975 LRDP, an advertising campaign was launched. Its slogan was "An Ideal Becoming Real." Whether valid or not at that time, it is clear now that the "ideal" is becoming "real estate."

Hal Levin is a Santa Cruz resident.

You can find this story online at:

<http://www.santacruzsentinel.com/archive/2006/April/02/edit/stories/04edit.htm>

lrdp\_archive\_admin@ucsc.edu Archive/Recirc Comments Message

<https://cruzmail.ucsc.edu/Session/145876-BpnmImgZggLJB9le6Utm...>

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## Response to Comment Letter I-98

**Response to Comment I-98-1.** The comments contained in this email are not relevant to the Draft EIR or the RDEIR.

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1 UNIVERSITY OF CALIFORNIA AT SANTA CRUZ  
2 SANTA CRUZ, CALIFORNIA  
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10 REPORTER'S TRANSCRIPT OF PROCEEDINGS  
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13 WEDNESDAY, NOVEMBER 16, 2005  
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20 HELD AT:  
21

22 UNIVERSITY INN  
23 611 OCEAN STREET  
24 SANTA CRUZ, CALIFORNIA 95063  
25

1        SANTA CRUZ, CA, WEDNESDAY, NOVEMBER 16, 2005, 7:05 p.m.

2                MR. COOPER: Good evening. My name is Dave Cooper.  
3 I'm the Executive Vice Chancellor at U.C. Santa Cruz, and I'd  
4 like to welcome you to this event.

5                This is the first of two public hearings for the  
6 2005 LRDP Draft Environmental Impact Report. The next one --  
7 just to let you know in case you are blessed and want to do  
8 this twice -- is November 30th, and you're certainly welcome  
9 to come to that event, too.

10               This process has involved a lot of communication  
11 over two years. The City, members of the public, members of  
12 the campus have all been discussing what we're going to be  
13 talking about tonight for a long time. I want to thank all  
14 the people who have been participating in the process up to  
15 now. And I really appreciate the time and effort that you've  
16 put into this multi-year effort to update our Long-Range  
17 Development Plan.

18               I believe the process is really helping to clarify  
19 the planning process, and the planning challenges that face  
20 our campus and help us to fulfill our mission as a  
21 university. I also hope this process is shedding light on  
22 the opportunities that we have to work together on these  
23 challenges with the City. And tonight's public meeting is  
24 one way, for those of you here, to participate in this  
25 important process. We welcome your involvement, both those

1 people who came here to criticize the University and those  
2 people who came here to support the University. I thank you  
3 for coming and participating in the process.

4 Just to let you know, and for full public  
5 disclosure, as Executive Vice Chancellor, it's in my interest  
6 to make sure that the University works well, and so it's  
7 important to me to have a good process for the Long-Range  
8 Development Plan. And as a 34-year citizen in west side  
9 Santa Cruz, it's important to me for the City to work well  
10 and to make sure that the City and the University work  
11 effectively together.

12 Before I turn over the microphone to Frank Zwart,  
13 I'd like to reassure you that I'm not here to record your  
14 comments. We have a court reporter here who will be  
15 recording everything that's said tonight, so that we will be  
16 sure that we have a good record of all the oral comments so  
17 that we will be able to respond to them later.

18 Again, I want to thank you for coming tonight. I  
19 really appreciate the time that you've taken out of your  
20 schedules to help us work through this Environmental Impact  
21 Report process. Thank you.

22 MR. ZWART: Thank you, Dave. I'd like to join  
23 Executive Vice Chancellor and welcome you all to this  
24 official public hearing on the Draft Environmental Impact  
25 Report, or Draft EIR on U.C. Santa Cruz 2005 Long-Range

1 Development Plan, or LRDP.

2 The hearing is formally open. Its purpose is to  
3 receive public testimony regarding the environmental impact  
4 analyses presented in the Draft EIR. Tonight's hearing  
5 provides one of several chances to comment for the record on  
6 the Draft EIR. An official transcript of this hearing will  
7 be prepared by the court reporter, who's recording our  
8 comments here to my left.

9 As Dave said, I'm Frank Zwart, the Campus Architect  
10 and Vice Chancellor for Physical Planning and Construction  
11 for the campus. With me tonight to my right is Shabnam  
12 Barati, the Project Manager who prepared the Draft EIR,  
13 representing URS Corporation. Campus Planning Staff are  
14 throughout the room, and in particular at the table in the  
15 back of the room that you passed on the way in. It has some  
16 informational handouts, a box for receiving written comments  
17 and speaker cards, and I'll talk about each of those in a  
18 moment.

19 If you wish to comment on the Draft EIR tonight,  
20 please plan to speak at one of the two microphones on either  
21 side of the room. You may also provide a written comment in  
22 the comment box at the back of the room. Either way, both  
23 your comment and the University's response to it will be part  
24 of the final EIR. We invite and we welcome your input since  
25 it will assist us in ensuring that our analysis is complete,



1 and that all potential environmental impacts of our proposed  
2 project have been considered in the EIR.

3 The California Environmental Quality Act, or CEQA,  
4 provides for a 45-to-60-day public comment period for any  
5 draft EIR. Tonight's public hearing and a second one  
6 scheduled for November 30th up on campus are both part of  
7 that public process. We are providing a 60-day public  
8 comment period because we recognize that campus growth is an  
9 issue of particular importance in the Santa Cruz community,  
10 and our draft EIR is a lengthy and complex document.

11 The public comment period will end at 5:00  
12 o'clock p.m. on December 19th. We will give serious  
13 consideration to each and every comment we receive during  
14 that period. Our response to each comment formally submitted  
15 during the period, whether it comes to us orally at one of  
16 the public hearings or in writing, will be included in the  
17 final EIR.

18 As you may know, the 2005 Draft LRDP, is the  
19 University's proposed plan to accommodate potential future  
20 enrollment and development for the Santa Cruz campus. The  
21 draft LRDP includes a proposed Land Use Map that depicts the  
22 types of uses and areas of development envisioned for the  
23 main campus through 2020. A copy of the Land Use Map is on  
24 the easel at the front of the room here to my left, and  
25 copies of the map are included on the handout that's

1 available at the information table at the back of the room.

2 The 2005 Draft LRDP includes goals and policies  
3 that provide a framework or program for campus development  
4 over the next 15 years. The LRDP does not dictate or even  
5 propose specific development. Rather, it is a maximum  
6 envelope of development that would be considered over the  
7 next 15 years.

8 The 2005 LRDP draft EIR is a programmatic analysis  
9 that looks at the potential environmental effect on the  
10 campus and in the region by the year 2020 if the campus were  
11 to be developed to the level and in the ways envisioned in  
12 the draft LRDP, and if student enrollment on campus were to  
13 grow to 21,000.

14 As you can see, the LRDP Land Use Map includes only  
15 campus lands. But because development on the campus may have  
16 wider reaching environmental impacts, the Draft EIR also  
17 assesses the potential for the 2005 LRDP to result in  
18 environmental impacts in the City of Santa Cruz and in our  
19 wider region. The cumulative impacts of campus growth would  
20 be accommodated by the LRDP, are also considered in  
21 conjunction with the potential effects of growth envisioned  
22 by other entities in the region.

23 Finally, the Draft EIR assesses the potential  
24 environmental effects of several alternatives to the proposed  
25 LRDP, and compares the effect of the alternative with those

1 anticipated to result from the proposed plan.

2 In addition to identifying and disclosing the  
3 environmental impacts related to full implementation of the  
4 proposed 2005 Draft LRDP program, the EIR also includes  
5 analysis of three specific projects: The 2300 Delaware  
6 Avenue Project, the Family Student Housing Redevelopment  
7 Project, and the Infrastructure Improvement Projects. It  
8 also proposes mitigation measures to reduce or eliminate the  
9 identified impacts of those three particular projects.

10 For those of you who wish to speak tonight,  
11 speakers cards are available on the information table at the  
12 back of the room. If you wish to speak, please fill out a  
13 card and bring it to the microphone on either side of the  
14 front of the room. The staff persons there, Dean Fitch,  
15 Alisa Klaus, will collect your card at the microphone so that  
16 your name can be recorded correctly in the hearing  
17 transcript. This is for the benefit of the court reporter,  
18 so we ask your handwriting be legible on her behalf.

19 For those of you who would prefer to submit written  
20 comments tonight, there's a box for comments at the back of  
21 the room at the information table. Your comments can also be  
22 submitted by mail, e-mail, or by hand-delivery to our office  
23 on campus. Details on how to do that can also be found on a  
24 handout at the information table.

25 All comments made tonight and at the second hearing

1 on November 30th will be recorded by the court reporter.  
2 These and the written comments received during the public  
3 comment period will become part of the final impact report  
4 for the project. We will not respond to your comments  
5 tonight, but written responses to all comments received  
6 throughout the public comment period will be included in the  
7 final EIR.

8 The final 2005 LRDP EIR will be presented to the  
9 Regents of the University of California for review and  
10 consideration in conjunction with their consideration of the  
11 proposed 2005 Long-Range Development Plan. We anticipate  
12 that the Regents will consider the final EIR and the LRDP for  
13 final certification in early 2006.

14 Again, details about the hearing of November 30th  
15 up on campus, about how to get access to the draft LRDP and  
16 draft EIR documents and about how to submit written comments  
17 on the LRDP and the draft EIR are available on a handout on  
18 the table at the back of the room.

19 We are asking each representative of a public  
20 agency or public official limit his or her comments to five  
21 minutes. And if there are such in the room, we would  
22 appreciate your identifying yourself when you start your  
23 comments. Each speaker from the general public will limit  
24 his or her comments to three minutes. If we have time at the  
25 end, people who would like to make longer comments may speak

1 again after everyone has had a chance to speak once.

2           Speakers who agree with previous speakers may just  
3 indicate their agreement in order to allow more time for  
4 speakers to comment. We will have a timekeeper in the front  
5 row who will raise a yellow card when there are about 30  
6 seconds left, and a red card when the three-minute-or-five-  
7 minute limit has been reached.

8           I'm happy to answer any procedural questions about  
9 the hearing before we start. Are there any?

10           UNIDENTIFIED SPEAKER: Are there different types  
11 of -- I mean, are there different processes that we can go  
12 through? My understanding is this process is limited in its  
13 scope, and it doesn't go that much into future developments.  
14 It's a programmatic approach versus some other type of  
15 approach in CEQA.

16           MR. ZWART: I don't understand what your question  
17 is about tonight's procedures.

18           UNIDENTIFIED SPEAKER: Are there different ways of  
19 approaching this problem, different methods of approaching  
20 this issue?

21           MR. ZWART: I'm going to say that's a question not  
22 related to the procedure about tonight's hearing, so I'm not  
23 going to answer it.

24           UNIDENTIFIED SPEAKER: Thank you.

25           MR. ZWART: Yes.

1 UNIDENTIFIED SPEAKER: Your limit on three to five  
2 minutes, where's that come from?

3 MR. ZWART: It's based on an estimate of the number  
4 of people who are here. It's to give more people an  
5 opportunity to speak. And as I said, if everyone who wishes  
6 to speak has had a chance, we will add time at the end.

7 UNIDENTIFIED SPEAKER: Second question -- no,  
8 that's good.

9 MR. ZWART: Okay. Yes.

10 UNIDENTIFIED SPEAKER: This map that we have, this  
11 is the future -- this is what's been proposed?

12 MR. ZWART: That's right. That's the Land Use Map  
13 that's included in the Draft Long Range Development Plan.

14 UNIDENTIFIED SPEAKER: None of this exists now?

15 MR. ZWART: The campus exists now. This is how the  
16 campus could grow in the future.

17 UNIDENTIFIED SPEAKER: Okay. Is that the core,  
18 then? Is what is there now is the core?

19 MR. ZWART: It's a more complicated answer than  
20 that, and I'm not going to take the time at this hearing to  
21 go over it with you.

22 UNIDENTIFIED SPEAKER: I want to understand if this  
23 is what's going to happen in the future. It's quite  
24 something.

25 MR. ZWART: It is.

1 UNIDENTIFIED SPEAKER: Will you answer questions or  
2 is this input?

3 MR. ZWART: This is input. The final questions  
4 will be answered in the final EIR in writing. This is input;  
5 you're right on the money. So, I would -- yes.

6 UNIDENTIFIED SPEAKER: Frank, if I understand  
7 correctly, what you said is that we're only going to find  
8 offered mitigations as they apply for three specific  
9 projects, the family student housing. The general plan has  
10 no mitigations.

11 MR. ZWART: I certainly didn't mean to say that.  
12 There are also mitigations measures prepared in the draft EIR  
13 for the entire plan. Thank you for clarifying that.

14 UNIDENTIFIED SPEAKER: What does CRL stand for?

15 MR. ZWART: Campus Resources Land. And it's  
16 explained in the text of the Long Range Development Plan  
17 document itself.

18 UNIDENTIFIED SPEAKER: It says -- is that housing?

19 MR. ZWART: It may be. It's land we don't  
20 anticipate using in this LRDP without further environmental  
21 analysis.

22 (No response.)

23 MR. ZWART: So I would like to invite as first  
24 speaker, Mayor Mike Rotkin, and he will be followed, as a  
25 representative of the County, County Supervisor Mardi

PH-1

1 Wormhoudt.

2 MAYOR ROTKIN: Thank you. I am Mike Rotkin, Mayor  
3 of the City of Santa Cruz. And I've been sent here  
4 specifically by the Santa Cruz City Council to make some  
5 brief comments this evening.

6 First of all, I can't help but -- I should point  
7 out that I'm a lecturer also at U.C.S.C., just for -- in  
8 terms of full disclosure. It's pretty important these days,  
9 I guess.

10 We, at the City Council -- the first thing I want  
11 to say to make sure I get it in my five minutes is that we  
12 would like to formally request additional time for this  
13 review process. We are not doing that to just delay the  
14 process for the sake of delay.

15 We're in a situation in the City of Santa Cruz that  
16 we do not have a Planning Director, we do not have an  
17 Assistant Planning Director because of retirements and  
18 shortfalls of funding. And our future Planning Department,  
19 which would normally help us work out the draft of a response  
20 to the DEIR, is decimated, quite frankly, in terms of the  
21 numbers of people there.

22 So I do, at this time, formally request -- and I  
23 know the response now, but I do want to formally request of  
24 the University that they consider an extended period of -- at  
25 least 30 days, or perhaps something less, but at least

1



1 additional time, because we simply need the time to give an  
 2 adequate response to the complexity of this document.

3 As I'm sure most people in the audience know and  
 4 University officials know, this is a huge document -- it's  
 5 about a foot thick in the three volumes. And as it turns  
 6 out, I'm sure by a huge oversight, I ended up with two Volume  
 7 II's and no Volume I. So that will be corrected shortly.  
 8 And I've read Volume II and Volume III.

9 I'm not a technical expert in the area of  
 10 environmental review, but I do have some comments that I'd  
 11 like to make just in terms of initial impressions, and that's  
 12 all these are. The City will be responding with a formal  
 13 written response to this EIR, and I want to make that clear.

14 My -- the impressions that I have that make me  
 15 nervous, frankly, are the areas of the vagueness and  
 16 generality of a lot of the mitigations. When I'm -- the City  
 17 does EIRs -- and we do lots of them; we see these kinds of  
 18 documents on projects not as large as this one -- typically,  
 19 EIR's are very, very specific about the nature of the problem  
 20 that's anticipated or that's been discovered or that's to be  
 21 studied. And then mitigation that's going to address that is  
 22 usually very concrete and usually says, this will be  
 23 mitigated to a level of insignificance or to a small  
 24 significance or to a great significance, and there's usually  
 25 a very detailed plan for exactly what will happen. How, for

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1 example, if you're dealing with water runoff issues, how you  
 2 will monitor those issues over the future and so forth.

3 At least from my first impression -- and I am  
 4 missing one of the volumes here of this document -- an awful  
 5 lot of the mitigations are very, very general. They suggest  
 6 further study, they suggest special -- what I would describe  
 7 as contingent mitigations. If we look at this, if this  
 8 happens, then we'll do something else to try and respond to  
 9 it.

10 And I'm hoping that in the final version of this  
 11 EIR, that when the City and other members of the public make  
 12 comments about the Draft EIR, that we get a much more  
 13 specific level of mitigation as a way of responding to these  
 14 kinds of concerns. It's not very helpful for us to identify  
 15 that there's going to be housing and -- large housing and  
 16 traffic impacts, for example, which in my mind perhaps is the  
 17 two largest immediate impacts of growth. To say that we need  
 18 to address these and there needs to be some plan -- and, of  
 19 course, it is the truth that it can't be done by the  
 20 University alone.

21 The University will have to work with the City, the  
 22 County and the surroundings region to solve the traffic  
 23 problems. But we know that there's going to be serious  
 24 traffic problems, and I say this as much as a lecturer on  
 25 campus as the Mayor of Santa Cruz.

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1           If you start to anticipate an additional 6,000  
2 students, and say half of them use cars -- which is the  
3 current practice -- the other half take the bus, what would  
4 happen with 3,000 more cars at the Mission intersection every  
5 afternoon? You would expect to see a mitigation in this plan  
6 that would say, you know, something about the order of  
7 magnitude at least of the cost of trying to address something  
8 like the Bus Rapid Transit System.

9           What the EIR says that there will be mitigation,  
10 that there will be something like the Bus Rapid Transit  
11 System, but there's no dollar figures associated with it,  
12 what the University imagines the level of that would have to  
13 be, what some of the impacts of that project would be.

14           So I am really, honestly deeply concerned that the  
15 mitigations here are not adequate of what an EIR is supposed  
16 to do, either on a legal basis, or more importantly, just in  
17 terms of the public understanding, how are we going to  
18 respond to the consequences of this growth?

19           So I'm not going to go into a more detailed  
20 response. I'm sure you'll hear a lot from the public and I  
21 want to leave as much time as possible. I want to say, in  
22 response to VC Cleaver's previous comment about whether  
23 people are here to support the University or to criticize it,  
24 the comments are welcome. I just want to say that I think  
25 probably, like most of the people here, I'm here to support

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1 the University by criticizing it, so it's not a matter of  
2 choosing one or the other. (Applause.) Thank you.

3 MR. ZWART: We will seriously consider your request  
4 for an extension and get back to you. We will also get you a  
5 Volume I as quickly as we can. But I can't help but wonder  
6 whether or not if one of your colleagues on the council might  
7 have two Volume I's or no Volume II.

8 SUPERVISOR WORMHOUDT: My name is Mardi Wormhoudt,  
9 and I am the Supervisor, County Supervisor who represents the  
10 City of Santa Cruz and most of the University.

11 I'd like to begin by joining the Mayor in  
12 requesting an extension of the comment period. This is an  
13 exhausting, if not exhaustive document, and I don't believe  
14 that 60 days is really adequate for the public to deal with  
15 this document and submit comments. I would hope you would  
16 extend the period -- the comment period another 30 days and  
17 hold an additional public meeting in town sometime near the  
18 end of that additional 30 days.

19 Now, I agree with Mike: The University is an  
20 enormous asset in this community, but we all know that too  
21 much of a good thing can be devastating, and I believe that  
22 the current plan as proposed is definitely too much of a good  
23 thing.

24 The community cannot absorb the proposed growth as  
25 documented in the Draft EIR. The impacts will be

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1 overwhelming and will cause a major deterioration in the  
2 entire community's quality of life. And, of course, that  
3 includes the University quality of life as well. The EIR --  
4 DEIR itself admits that University growth will cause ten  
5 significant and unavoidable impacts, and it seems to me this  
6 is an understatement.

7 I would like to begin by discussing the impact on  
8 the campus itself. The proposed LRDP will cause the  
9 destruction of about 50 acres of sensitive habitat and about  
10 a 120 acres of redwood and mixed evergreen forest, of which  
11 61 acres are second-growth redwoods, about 13 percent of the  
12 redwood forest on campus. It will add 218 acres of  
13 impervious surface.

14 In relation to population growth, the campus  
15 population growth will be greater than the total  
16 non-university growth predicted for the City of Santa Cruz  
17 between 2003 and 2020. The combined on-and-off campus  
18 population currently is about 22.8 percent of the City's  
19 population. If the University grows as proposed, the total  
20 campus population would represent 254 percent of the City's  
21 proposed growth. And the total campus population living in  
22 the City would equal about 34.2 percent of the City's  
23 population. And this doesn't count the induced growth that  
24 would happen with the University expansion.

25 In relation to housing, University growth would

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1 consume between 55 and 68 percent of all the new housing  
2 units built in the City. By 2020, the future supply of new  
3 housing in the City is projected to be 1,684 units. Without  
4 University growth, the City could meet the population growth  
5 generated demand. With University growth, I think you see  
6 what the results will be.

4

7 In relation to traffic, despite a significant under  
8 estimation of the traffic impacts from new growth, the DEIR  
9 documents that, while four intersections currently operate at  
10 Level of Service F during peak hours, and only one is at F  
11 during both peak hours, in 2020, with University growth, 15  
12 intersections will operate at Level of Service F, with nine  
13 of these at Level of Service F during both the morning and  
14 afternoon peak hours.

5

15 While the traffic impact analysis in the DEIR  
16 contains many errors actually and is not adequate, it still  
17 finds that University growth will have a significant and  
18 unavoidable peak-hour impact at eleven intersections. I'm  
19 not going to speak about impacts on water tonight because I  
20 know that the Chair of the Water Commission is here and has a  
21 very thorough presentation.

22 While the Draft Environmental Impact Report  
23 documents some of the major impacts of the proposed LRDP, it  
24 contains numerous inadequacies, and it does need to be  
25 revised and recirculated. I will be submitting detailed

1 comments on the LRDP, the County will be submitting separate  
2 comments, but I would like to briefly note what I consider to  
3 be some very major inadequacies of the report tonight.

4 One --

5 MR. ZWART: Excuse me, your five minutes are up and  
6 we would be delighted to hear them, but I think we do want to  
7 give the public a chance to speak.

8 FROM THE FLOOR: No, let her talk.

9 MR. ZWART: Fire away.

10 SUPERVISOR WORMHOUDT: Thank you. Thank you very  
11 much. I'll try to go as quickly as I can.

12 The multiplier effect of university growth is  
13 analyzed separately than its impact, and that's a problem.  
14 The DEIR does not indicate the dimension or height of  
15 buildings like the Event Center, so it is impossible to have  
16 any way to evaluate the visual impacts, and the simulations  
17 are inadequate. In fact, aesthetic impacts could very well  
18 be significant and unavoidable, and we have no way to know  
19 that.

20 In evaluating the biotic impacts, the DEIR doesn't  
21 consider relevant City and County policy or present the  
22 visual information in a way that the public can understand  
23 easily. Many of the mitigation measures contain the words  
24 "if feasible" or "if possible."

25 Mitigation measures represent a commitment to

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1 changing the project to reduce the environmental damage.  
2 They are assumed to be feasible or they shouldn't be  
3 included, and the impact should be accepted as significant  
4 and unavoidable.

5 The DEIR says that the plan is not expected to  
6 conflict with the City or County General Plans. Not only is  
7 there no analysis of the City or County General Plans, but  
8 the proposed growth is in direct conflict with the existing  
9 General Plans of both agencies. The DEIR does not evaluate  
10 the land use conflict of the new north campus entrance with  
11 the rural quality of the Cave Gulch area.

12 The DEIR finds that 90 percent of the new students  
13 and 80 percent of the new employees would find affordable  
14 housing, paying no more than 30 percent of their income for  
15 it. No clear evidence is provided to back that up, and  
16 frankly, given housing prices in this community, I find that  
17 a rather absurd statement on the face of it.

18 The DEIR doesn't evaluate the traffic impacts of  
19 campus growth on Highway 1 going south, although it is  
20 estimated that 25 percent of the campus traffic will use it.  
21 The traffic analysis of off-campus vehicular trips  
22 significantly understates the magnitude of the traffic  
23 impacts. I'm not going to talk about water demand.

24 The analysis of induced growth resulting from the  
25 LRDP is inadequate because it is tacked on at the end of the

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1 DEIR, and the results are not incorporated in other sections  
 2 like housing and water.

3 Now, I have donated a lot of my time to this  
 4 particular project, knowing it or understanding it. I served  
 5 on a Long-Range Development Planning Committee, I served on  
 6 the Community White Paper Task Force. I have done everything  
 7 to make these concerns known as we've gone through the  
 8 process. Last year, because the County Board of Supervisors  
 9 felt we could not make an impact, we went to the State  
 10 Legislature and to say, Help us, please. And we asked for  
 11 legislation that we thought was fair. That would say, When  
 12 there is growth and there are impacts, let's decide what the  
 13 cost of those impacts are, assign them fairly to the agency  
 14 that's responsible.

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15 Have the University build its share into the budget  
 16 for a project, and not go on to new projects until all of the  
 17 mitigations have been accomplished. (Applause.) You know  
 18 what happened? The University Hall came down like the wrath  
 19 of God. The pressure on the Legislature to reject that  
 20 legislation was enormous. It never even made it out of  
 21 committee. I was astonished. And when I asked, What is the  
 22 problem? Why is the University so upset about this idea, I  
 23 was told, Well, the University can't accept this because it  
 24 would cost them billions of dollars.

25 Now, I ask you: If University growth in this state

1 will cost billions of dollars and if the University is not  
2 willing to pay for that growth, who will? Who will pay for  
3 it is our host communities, often poor, underfunded and  
4 without the resources to support a state agency.

5 Now, I find it particularly odious that in the same  
6 year in which I was told the University could not afford to  
7 pay for its growth, almost \$900 million of unreported bonuses  
8 were given to University employees.

9 I beg the University: Take your responsibility to  
10 this community seriously. Thank you very much. (Applause.)

11 MR. ZWART: Do we have another speaker?

12 MR. SCHIFFRIN: Good evening. My name is Andy  
13 Schiffrin. I'm speaking tonight as the Chair of the Santa  
14 Cruz City Water Commission. I also teach a class at U.C.S.C.  
15 on CEQA.

16 I'll only speak tonight about the water analysis in  
17 the EIR. The treatment in the Draft EIR of the LRDP impact  
18 on water -- on water demand are seriously inadequate and  
19 don't fulfill CEQA's requirements. The Draft EIR needs to be  
20 revised in a number of areas and recirculated for public  
21 comments on the corrections.

22 First, the Draft EIR relies on outdated and  
23 inaccurate water projections when revised data is available.  
24 The projections need to be redone using this new information.  
25 CEQA requires that the Draft EIR analyze project impacts, and

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1 the University is obligated to base this analysis on the most  
2 recent data. The Draft EIR does not analyze -- a second  
3 problem is that the draft does not analyze the LRDP's impact  
4 on future water demand as a separate environmental impact,  
5 but assumes it under a Cumulative Water Demand Analysis.  
6 This is just not adequate under CEQA.

7 CEQA requires that the EIR evaluate a project  
8 impact independent of the cumulative impact. The  
9 University's growth impact on water will be significant and  
10 probably unavoidable. By not considering the project's  
11 impact separately, the Draft EIR illegally avoids identifying  
12 an additional significant and unavoidable impact of the  
13 project.

14 Third, the Draft EIR, in discussing the cumulative  
15 water demand impact of the proposed University growth,  
16 doesn't incorporate the effects of off-campus or induced  
17 growth; it only looks at on-campus growth. The Draft EIR  
18 justifies this on the basis that the City has included this  
19 in its water projections. However, using outdated City  
20 projections that don't include University growth plans is not  
21 acceptable.

22 CEQA requires that a project's potentially  
23 significant impacts be fully analyzed. The EIR is, in large  
24 part, an informational document, and the public has the legal  
25 right to know the full extent of project impacts. Only

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1 including the on-campus water demand impact seriously  
 2 understates the LRDP's impacts on water demand as can be seen  
 3 from the following analysis.

4 The Draft EIR estimates an increased water demand  
 5 from on-campus growth of about 174 million gallons a year,  
 6 which, in itself, is about 43 percent of the City's remaining  
 7 capacity. Using the Draft EIR's estimates for the amount of  
 8 both off-campus and induced growth -- population growth taken  
 9 from other parts of the EIR and the Water District Service  
 10 Area and applying the current per capita use of water of 75  
 11 gallons per day, the impact of the proposed University growth  
 12 would actually total about 215 million gallons a year. This  
 13 means that about 75 percent of the City's remaining excess  
 14 supply in normal rain years will be used to service  
 15 University growth. The EIR must recognize this.

16 Fourth, the Draft EIR admits that the City would  
 17 have to expand its water supply facilities as a result of the  
 18 University's growth, but it impermissibly understates the  
 19 project's role in necessitating this expansion. As I  
 20 mentioned before, it only identifies 43 percent of the future  
 21 demand, when, in fact, it will be at least 75 -- about 75  
 22 percent. Even understating the draft -- the LRDP's impact,  
 23 the Draft EIR documents that the City would not need to  
 24 expand its water supplies without U.C.S.C. growth. It does  
 25 not, however, face up to the fact that the University's

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1 growth causes the need for these expanded facilities.

2 One consequence of the Draft EIR ignoring the  
3 responsibility for additional water supply facilities is that  
4 it offers no mitigation measures for this impact. A  
5 reasonable and feasible mitigation measure would be for the  
6 University to pay for the cost of construction and operation  
7 of this facility. Although the other rate payers in the  
8 water district have no ability to regulate the University's  
9 growth, the Draft EIR would make them responsible for paying  
10 the lion's share of the cost of the facilities necessary to  
11 supply water for that growth.

12 The EIR needs to recognize that the project's  
13 growth will necessitate the construction of additional water  
14 facilities in the water district by 2020, and include  
15 mitigation measures to require the University to pay the full  
16 cost of construction and operation. This is its fair share,  
17 since the facility would not need to be constructed without  
18 the project.

19 Finally, because the expansion of the  
20 desalinization facility, if the City approves it, is an  
21 indirect consequence of the LRDP. The EIR needs to identify  
22 this expansion as part of the LRDP project and evaluate its  
23 potential impact, especially the growth-inducing impact. In  
24 the San Joaquin Rapid case, the court found that the  
25 construction of a sewer treatment plant, which became

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1 necessary as a result of the project, had to be analyzed as  
2 part of that project despite the fact that a separate EIR had  
3 been prepared on the facility. A similar circumstance occurs  
4 here, where the LRDP project will require the expansion of a  
5 water supply facility that otherwise would not be necessary  
6 for 2020. The expanded facility itself may induce additional  
7 population growth which this EIR must evaluate.

8 MR. ZWART: Pardon me, Mr. Schiffrin. Your five  
9 minutes is up.

10 MR. SCHIFFRIN: The Draft EIR legally deficient and  
11 must be revised and recirculated. Thank you.

12 MR. ZWART: Thank you for your comments. We will  
13 be alternating the microphones to my right and to my left.

14 MR. LONGINOTTI: My name is Rick Longinotti. I  
15 live on the west of Santa Cruz, and I wanted to talk about  
16 the housing part of the draft EIR.

17 I'm disturbed by the fact that the University makes  
18 no -- sets no goals for housing of a percentage of its  
19 students. The housing, of course -- you know, housing the  
20 increased enrollment would go a huge way not only to lower  
21 the impact on rents and housing costs in the rest of Santa  
22 Cruz County, but also on traffic and the number of trips  
23 people need to take.

24 The University absolutely says, you know, the only  
25 thing -- the only mention of a goal is that it sets aside

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1 land for the potential of housing 50 percent of its students.  
2 It seems to me that's one of the major important features to  
3 address in an EIR.

4 And there was an article in the paper today which  
5 noted that there are 400 empty beds on campus; that students  
6 are opting not to live on campus due to the high cost, and  
7 the Draft EIR mentions nothing about why those costs are so  
8 high.

9 We had a developer here in Santa Cruz not too long  
10 ago, Maynard Manson, who was proposing to build housing near  
11 the University at a much lower rent -- rental basis. And he  
12 had to buy the land and pay taxes on the land, something the  
13 University doesn't have to do, so why are these costs for  
14 housing so high.

15 MR. ZWART: Thank you.

16 MR. LEVIN: I'm Hal Levin. I spoke to a minor  
17 dislocation in your scoping and feel the draft EIR ignored  
18 most of the suggestions I made for scoping the document.  
19 I'll attach a copy of my scoping comments to the comments  
20 that I'm submitting tonight, and you can plan on getting more  
21 comments later.

22 The 1978 LRDP points out that the then-developed  
23 portion of the U.C.S.C. campus covered more land area than  
24 the entire Berkeley campus or the entire UCLA campus, which,  
25 at that time were about 30,000 students, and at that time,

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1 U.C.S.C. was under 7500 students.

2 The present plan to expand the campus to cover the  
3 entire area of the land would be justified by referring back  
4 to the original plan for the campus, but I would point out to  
5 you that that plan was for a college system of undergraduates  
6 that would all be housed on campus. That there would be a  
7 community built on the hill, and that the hill would not  
8 spill into the town.

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9 I've attached four maps off Google Earth, taken  
10 today, one at 10,000 and one at 20,000 feet of UCLA and  
11 U.C.S.C. You can see very clearly the point made back in the  
12 1978 LRDP.

13 Secondly, I'd like to comment that the alternatives  
14 considered in the plan do not, in my opinion -- and  
15 hopefully, if necessary in the future, in the opinion of a  
16 court, meet the requirements of CEQA as serious alternatives  
17 to the plan as proposed. Considering 19,500 students instead  
18 of 21,000 when you're currently at something in the  
19 neighborhood of 14 is not a serious alternative. Dismissing  
20 a new campus in the Silicon Valley as quickly and with as  
21 little attention to it as has been given in the Draft EIR is  
22 not appropriate.

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23 The LRDP describes the built-out campus as a  
24 sustainable one. There's no evaluation of the sustainability  
25 of the plan in the DEIR. My comments submitted during the

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1 scoping provided substantial information that could have been  
2 used to develop sustainable environmental targets and  
3 evaluate the sustainability of the plan. It simply hasn't  
4 been done.

5 For example, in housing, it's apparent to any  
6 casual observer that the impact of the campus on housing  
7 alone is not sustainable in the community. It appears to be  
8 the University's position there is significant -- as the DEIR  
9 says -- but unavoidable impact involving 30 or even 40  
10 percent of the single-family residences in Santa Cruz being  
11 student-renter occupied, while present residents are  
12 displaced due to the unaffordable rental and purchase market,  
13 is unavoidable. And that is simply not the case.

14 MR. ZWART: Three minutes, thank you.

15 MR. MALONE: Good evening. My name is Bill Malone.  
16 It seems to me when I looked over the EIR, that I have two  
17 comments. One of them is, in looking over the EIR, most of  
18 the problems revolve around housing. Traffic impact and all  
19 these other items, it's all because of the housing. There is  
20 the question, Where are you going to house the students? And  
21 I feel that the University should house all of their students  
22 on the campus, and if you do that, most of the problems will  
23 go away, most of the impacts on this city. So that's my  
24 first recommendation is to house all of the students on the  
25 campus.

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1           Second suggestion or recommendation is not to use  
2 the way of getting out of trying to mitigate the problem by  
3 saying that it's unmitigatable; therefore, there's nothing we  
4 can do, or however you say that in CEQA talk. Because if you  
5 do that, and you shirk the responsibility for solving the  
6 problem, then you leave it up to the City to do whatever they  
7 feel is necessary. And I think, in that case, that it's  
8 fair, if you're not going to be fair and responsible, then  
9 the City should be responsible and do whatever they think  
10 necessary to mitigate the problems.

11           And I suggest if necessary, take extreme measures  
12 -- close roads, put toll roads down, tax the students. Let's  
13 get creative. Try to figure out a way so it doesn't have a  
14 big impact on the citizen.

15           But, I urge you, first of all, to make good  
16 efforts, a reasonably good, realistic effort at mitigating  
17 the problems, not just dismissing it, and saying they can't  
18 be mitigated. Otherwise, it's up to the City to do whatever  
19 they think is responsible. Thank you.

20           MR. ZWART: Thank you.

21           MR. COONERTY: Good evening. I'm Ryan Coonerty.  
22 I'm on the City Council and I'm also a lecturer at U.C.S.C.

23           MR. ZWART: Are you speaking in your capacity as a  
24 City Councilmember?

25           MR. COONERTY: I am, but I won't take the full five

1 minutes.

2 I'm here to echo Mayor Rotkin's request that you  
3 extend the comment period. That came from a unanimous City  
4 Council, that came from our staff who is trying to respond to  
5 this enormous document, and we simply don't have the time and  
6 the resources to respond within the limited time that we  
7 have. That extension would allow us to respond properly to  
8 what is the biggest planning issue facing the City over the  
9 next 25 years.

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10 The current EIR -- and I've only had a chance to  
11 read it briefly -- I have concerns about it, both from a  
12 legal point of view -- and you've heard excellent  
13 descriptions of that tonight -- but also from a good-faith  
14 point of view. The City Council unanimously and at the  
15 request of our City staff voted to comment on the scoping of  
16 the Long-Range Development Plan, and the answers we got back  
17 were not as detailed as our questions had asked for. And so  
18 from both a legal point of view as well as the good-faith  
19 point of view, we would hope that you would go back, revisit  
20 the EIR, and revisit the questions the City brought forth.

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21 In addition, from a good-faith point of view, we  
22 need to -- the phrases that were used, "if feasible," "if  
23 possible," are problematic especially when looking back at  
24 the previous Long-Range Development Plan which had much more  
25 and stronger verbiage in terms of a commitment to building

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1 housing on campus that would house 70 percent of the  
2 students. And it committed to that and never got there, and  
3 they're -- as we're all aware, we have very few legal  
4 mechanisms to hold the University accountable.

5 So it's a little disheartening when even those  
6 mitigations aren't as enforceable as most people in this room  
7 would like them to be, and then the language in the current  
8 EIR is even less forceful in terms of the University's  
9 commitment to mitigating the impacts on the community as a  
10 whole.

11 So, both for legal reason as well as policy and  
12 good-faith reasons, I urge you to extend the commenting  
13 period and then relook at the EIR in light of the City's  
14 comments and in light of the citizenry's comments. Thank  
15 you.

16 MR. ZWART: Thank you.

17 MS. KIPPING: Hello, my name is Susan Kipping and  
18 I'm a Felton resident.

19 First off, I'd like to say that I think that the  
20 University is already growing out of control, and I don't  
21 think the sentence or politicians or anybody is going to be  
22 able to control you. I think you're going to do what you  
23 want to do exactly.

24 That worries me because, first off, in San Lorenzo  
25 Valley, 80,000 people get their water from our valley. And

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1 that 80,000 -- in Santa Cruz, you're taking water out of that  
2 valley and we don't mind. These communities are all mixed  
3 together. I shop in this community; I make sure I do. My  
4 daughter goes to school down here, we're all one. But you're  
5 not acting like that when you have this kind of growth  
6 without really looking into the future.

7 We have water issues in our valley. We deal with  
8 them as a community. I don't see any of you down there  
9 helping us with these huge problems that we're having, but  
10 yet you want to put all this added population onto our backs.  
11 I also worry about ambulances, Police Department, Fire  
12 Department. We're having problems with these things in our  
13 community, and I'd imagine in this community, you are, too.

14 I live in Santa Cruz, and I really feel for the  
15 people in these neighborhoods. I can't believe the way  
16 they're being treated. It's just totally disrespectful and  
17 disgusting. I have this worry that you want to put a road  
18 through portions of -- over Highway 9. That's totally  
19 unacceptable and inaccessible; I hope you don't even try to  
20 do that. But somehow you have to reread that.

21 Now, when I look at this -- at your map and the way  
22 you're going to grow, you already -- if people could see from  
23 the air the amount of building -- you think you see trees  
24 there, but that's just a fence made to fake you out. That's  
25 what it's all about. It's about faking you out, keeping you

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1 quiet so you won't make any problems.

2 They have so much growth up there that my daughter,  
3 who's coming out of Cabrillo College -- I've been here 16  
4 years with her, living here. She was supposed to go to  
5 U.C.S.C., and she told me, "Mom, you know what? I don't want  
6 to go there now." She planned to be a doctor. She's going  
7 to go to another U.C. because you people are so confusing,  
8 and the lack -- the quality that we have up there has gone  
9 down the tubes.

10 I went into that tent city for a whole week. I  
11 worked with the students to see what was going on. The way  
12 you treated those students was terrible. You brought in the  
13 Berkeley police, and you used torture tactics on those kids,  
14 and they are the sweetest, most even-minded sweethearts, you  
15 wouldn't believe it. And you tortured them.

16 You've also -- they're living up there because  
17 you're putting up a 67 percent hike on their fees, and now  
18 another seven percent. So, see, poor people and regular  
19 people can't go up there. It's going to be elite. It's  
20 going to be elite people, and we're going to pay for it.

21 And also we are looking for trash, places to dump  
22 our trash, and the City people here are seeing your  
23 infrastructure and your water slot. Who's going to pay for  
24 this? You're bringing in all these people, you're going to  
25 put in a nanotechnology lab by 2008, and you're trying to

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1 bring in the military to pay for this.

2 I'm very, very concerned. I think you guys are a  
3 monster growing up. Thank you.

4 MR. ZWART: Thank you.

5 MR. BARCLAY: Good evening. My name is Jack  
6 Barclay. I'm an ornithologist, and I'm here to comment on  
7 the Wildlife Resources section of the Draft EIR, and  
8 especially the section about western burrowing owls, a  
9 species I've been researching for 16 years.

10 I want to point out one error in Ron Wishman's  
11 section about specialized wildlife species. The western  
12 burrowing owl is no longer a federal species of concern,  
13 which is a burrowing designation as stated in Table 442. It  
14 is instead now designated as a National Bird of Conservation  
15 Concern by U.S. Fish & Wildlife Service, and a bird of  
16 conservation concern in Region 1, which includes California.

17 Section 449 and Table 442 should include Cooper's  
18 hawk, which is a California species of special concern, and  
19 it's given the same status code, including breeding in Santa  
20 Cruz County, as the destruction hawk in the Checklist of  
21 Birds of Santa Cruz County.

22 The mitigation measures in the Draft EIR are  
23 inadequate and poorly conceived for burrowing owls. In the  
24 first paragraph of mitigation bio 12B, it says, "The campus  
25 will avoid all burrowing owls nest sites to the extent

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1 feasible." This measure should be absolutely rephrased and  
 2 "to the extent feasible" removed, because burrowing owl nests  
 3 are explicitly protected by the Migratory Bird Treaty Act and  
 4 the California Fish & Game Code.

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5 Migratory over-wintering burrowing owls no longer  
 6 occur in the campus -- in all of the campus grasslands, but  
 7 they are regular annual visitors in the grasslands in the  
 8 East Meadow, a portion of which is proposed for development  
 9 according to Figure 445.

10 This portion of the campus grasslands possesses  
 11 important ecological values for this species. To say that  
 12 the loss of grasslands is less than significant and imply  
 13 these owls will go elsewhere is arbitrary and dismissive.  
 14 The loss of grassland habitat on the campus occupied by  
 15 burrowing owls meets the definition of a significant effect  
 16 in the CEQA Guidelines, which calls for a mandatory finding  
 17 of significant if a project has the potential to  
 18 substantially reduce the habitat of a wildlife species or  
 19 reduce the range of a rare animal, and the burrowing owls  
 20 meet the definition of a rare animal under CEQA. The recent  
 21 loss of burrowing owl habitat on campus is a significant  
 22 impact according to the standards or CEQA.

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23 I cannot come to any other conclusion except the  
 24 burrowing owl section of the Draft EIR is inadequate, because  
 25 it was prepared without presenting all of the available



1 information about this species' occurrence on the campus  
2 without acknowledging the significant ecological value of the  
3 grasslands in the East Meadow and without following the  
4 standards of significance in CEQA.

5 I'll argue that development of habitat occupied by  
6 one special status species and the use of foraging habitat by  
7 at least five other special status species is clearly a  
8 significant impact according to the standards of significance  
9 listed in Section 4421 and in CEQA. One more sentence.

10 Finally, the burrowing owl section of the EIR is  
11 inconsistent with the University's commitment to maintaining  
12 the campus's strong tradition of environmental stewardship as  
13 articulated in the Long-Range Development Plan Executive  
14 Summary.

15 MR. ZWART: Thank you.

16 MR. ESELIUS: I'm David Eselius from Santa Cruz.  
17 I've had a long history with this University regarding  
18 cultural resources, which is historical in my context.

19 One of the things that I've noticed within EIRs and  
20 LRDP's is that the devil is in what's not spoken. That a  
21 great number of issues can be covered by not addressing it,  
22 which is what some of the speakers have addressed. So, it's  
23 not so much what you read, it's -- and a lot of it is what  
24 you don't read.

25 That said, I move on to housing, in that it seems

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1 to me that the housing issue is an enterprise issue for the  
 2 University, in that they -- as an enterprise, they make money  
 3 off the housing and then the money goes into a general fund  
 4 and then is redistributed. This happens within the City of  
 5 Santa Cruz. They own a golf course, and the golf fees pay  
 6 for the upkeep and everything else. It's an enterprise, it's  
 7 a standard method of operation.

8 But it should be identified within the EIR because  
 9 it has a great deal of impact on how the University wants to  
 10 present the housing element within the EIR. They make money,  
 11 so it affects how many houses they have available and what  
 12 the price is.

13 The other item is -- which is my main interest  
 14 which is the Cowell Ranch, which was a line production  
 15 facility from 1790 to 1947, and then ranching up to 1961.  
 16 It's 12,000 acres. The University has the central core of  
 17 it. There's 11 kilns; three or four of them are on the  
 18 campus property. They are extraordinarily unique, and they  
 19 have been ignored. The University has -- the University of  
 20 Cal has for years not looked at their possession of these  
 21 kilns, particularly the upper six kilns which formed a  
 22 cluster from 1850 to 1855.

23 This is in direct violation of NHPA, which is the  
 24 National Historical Preservation Act of 1966, which came in  
 25 after they bought the University grounds. But it's an

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1 indication of -- I mean, this stuff is -- I mean, it's huge  
2 in its implication to ignore this stuff. But it's an  
3 implication of what you can get away with by ignoring it, for  
4 years!

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5 So if you're going to critique this thing, find out  
6 what isn't said. That's all I can say. Thank you.

7 MR. ZWART: Thank you.

PH-11

8 MR. GIACCHINO: Good evening. My name is Aldo  
9 Giacchino, I'm here representing the Santa Cruz County of  
10 Sierra Club. We will submit much more extensive comments,  
11 but tonight, I just -- given the brevity of the time, I want  
12 to highlight just a few things.

13 The Draft EIR has identified nine significant  
14 impacts to our environment that will result from the proposed  
15 doubling of the campus building area. While this number is  
16 breathtaking in itself, it is really a much understated  
17 affair. The number of significant impacts is well over 20,  
18 and we will detail them when we submit our written comments.  
19 Amongst them are comical positions that have already been  
20 highlighted, but I'll mention a few more.

21 Where the EIR says that, "Mitigation will occur to  
22 the extent feasible," one of them is, "New buildings will not  
23 obtrude above the redwood canopy 'to the extent feasible.'"  
24 Well, will they obtrude or won't they?

25 Another remark is that the development would "avoid

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1 removing patches of Northern California chaparral larger than  
2 ten acres, and manzanita patches larger than two acres 'when  
3 possible.'" What's that mean? Why don't you get serious and  
4 submit something that means something instead of being  
5 evasive and confusing. (Applause.)

6 Another example, it says that "development on karst  
7 features might lead to collapse of structures built on it."  
8 The proposed mitigation is to "require adequate engineering."  
9 I assume that all other buildings will not have adequate  
10 engineering, just the ones with cars.

11 In addition to those silly ones, there are areas  
12 that I -- which have been identified as problems, but are  
13 hugely underrated and are not classified as serious problems,  
14 which is what they are. The impact of bicycles on sensitive  
15 biological habitat and species is rated as minor, I assume,  
16 because signs will be posted to prohibit bicycles on certain  
17 trails. This mitigation is already in effect and is  
18 ineffectual. The signs are ignored and the trails are being  
19 destroyed right now. (Applause.)

20 The impact of the fragmentation of the wildlife  
21 habitat will have on wildlife corridors is grossly  
22 underrated. Chopping up the habitat into sections which are  
23 separated for development makes it extremely difficult for  
24 wildlife to find their way around. Like the campus  
25 bicyclist, they can't read the sign.

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1           In effect, this fragmentation is a huge reduction  
2 in wildlife habitat and should be recognized as such.

3           MR. ZWART: Three minutes.

4           UNIDENTIFIED SPEAKER: I'll give him my time.

5           MR. ZWART: Thank you.

6           MR. GIACCHINO: As much as 120 acres of timberland  
7 will be lost to campus development. This must be viewed as a  
8 major, substantial impact. One hundred twenty acres is a  
9 huge tract of forest, regardless of how much other forest  
10 land is in the region.

11           The impact of traffic and circulation have already  
12 been highlighted as well as the water issues. I won't repeat  
13 those.

14           But because of all these very significant impacts  
15 -- they identify nine in the EIR plus the ones mentioned  
16 above -- it is really imperative that a more serious  
17 discussion be undertaken of the alternatives to growth,  
18 either in the Silicon Valley Satellite or through much  
19 reduced growth target. It is clear in the alternative  
20 analysis that it is a merely perfunctory exercise and that it  
21 has not been taken seriously.

22           At a recent meeting, the Chancellor asked the  
23 citizens of Santa Cruz to become ambassadors for the  
24 University. I think that if this development plan is  
25 approved by the Regents, we will have a guerilla environment

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1 here instead of ambassadors of goodwill. I strongly urge you  
2 to take these comments that you hear tonight and modify the  
3 plans substantially. Thank you.

4 MR. ZWART: Thank you.

5 MR. ASSINK: Hi, my name is Josh Assink, and I'm a  
6 student and a resident of the Santa Cruz community. I want  
7 to be clear that my remarks aren't to any individuals, but to  
8 the larger U.C. and the people who fund it.

9 I do think it's very appropriate at the  
10 programmatic level to discuss the very core concept of growth  
11 in general. And the mission of the University of California  
12 is to provide 1200 something percent of the high school  
13 graduates in the state with a college education. I'm fully  
14 supportive of that goal. College life is one of the most  
15 amazing life experiences that one can have.

16 However, I also want to acknowledge the very witty  
17 individuals that compiled the objectives section of the DEIR.  
18 They did a very good job of articulating the objectives of  
19 the project. They are dedicated to the campus of U.C.S.C.  
20 and not to that larger mission of the U.C.S.C. mitigation.

21 This growth, I think -- you know, educating more  
22 students in the state can be accomplished at other campuses,  
23 and there are communities that wish to embrace this growth.  
24 Like Merced, for instance, where they already have a campus  
25 begun, and expanding that campus can alleviate a lot of

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1 community problems here.

2 I also want to talk about something that's not  
3 necessarily directly related to the legal requirements of the  
4 CEQA process, but from a more ethical perspective. As  
5 people, we need to engage our interactions in a way that's  
6 self-reflective. Not just as individuals in our personal  
7 capacity, but individuals, as the actors within the  
8 institutions that lead the big change within our state.

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9 We need to realize how our actions and interactions  
10 affect each other, and what the repercussions are of that.  
11 We need to limit that as much as possible if they're  
12 negative. If they're positive, great. You're doing a good  
13 job. But if not, we need to consider alternatives, and I  
14 think increasing U.C. enrollment in other locations is in  
15 line with the spirit tonight. I urge you to take it  
16 seriously.

17 So I would hope in the future that the Regents  
18 especially could be concerned about what they're doing to the  
19 communities if they acted right. They keep maintaining they  
20 wish to be a good neighbor and engage everybody in a positive  
21 manner, but, in fact, they're suing every one of us that live  
22 in the City right now over water, because they don't think  
23 that they should pay as much for water.

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24 It's really sad, and I hope it can be improved in  
25 the future. Thank you.

1 MR. ZWART: Thank you.

2 MR. STEVENS: Hi, my name is Don Stevens. I  
 3 represent the Coalition For Limiting University Expansion. I  
 4 guess that says something about my point of view.

5 I want to make one general comment to start off  
 6 with. And that is, the Regents were given their  
 7 Constitutional authority back in 1868 to develop our  
 8 university system where they -- this is where they derived  
 9 their Constitutional authority. I'd like to say that it's  
 10 extremely clear to me -- and, I think, to everyone in this  
 11 audience -- that what we are witnessing here is an  
 12 undemocratic process.

13 This talk about partnership and working with the  
 14 community and listening to the community and taking our input  
 15 so far has amounted to zero. The University's doing exactly  
 16 what they intend to do without listening to us. And  
 17 according to the State Constitution, the University is  
 18 supposed to be able to do that regardless of what we think.  
 19 So we have -- we are being denied our democratic rights, in  
 20 my opinion.

21 The draft EIR does not discuss the concept of the  
 22 carrying capacity of our community. I was a student at  
 23 U.C.S.C. in biology, and I studied the concept of carrying  
 24 capacity in animal populations, and I think that the  
 25 environmental analysis is severely deficient in not

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1 addressing this little-known issue which is addressed in Bio  
2 1A and 1B and 1C. We only have so much water, we only have  
3 room for so many houses. The roads are the way they are;  
4 they will not accommodate much more traffic, and we must  
5 analyze how much room for growth is available. How much  
6 should be apportioned to the University? How much should be  
7 allowed to the City?

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8 If the University goes through with this expansion  
9 plan, virtually -- I would take slight issue with Andy  
10 Schiffrin, which is probably more knowledgeable than I in  
11 certain ways. But I think he was using the figure of 306  
12 gallons of water that would be needed by the University's  
13 expansion and induced growth.

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14 According to my calculations and discussions with  
15 Bill Kocher, head of the Water District, there's -- actually,  
16 there'd be about 270 million gallons of water supply  
17 remaining, which means that basically the University  
18 expansion could take up all of the remaining water supply in  
19 the City. Which means that, oh, say in ten years, plus or  
20 minus a few years, there will be no more water hookups  
21 available for anyone, including businesses.

22 And I think that's another area that the Draft EIR  
23 has not analyzed fully, is the fact that University expansion  
24 will choke off other economic growth.

3

25 MR. ZWART: Three minutes.

1 MR. STEVENS: Are there any other members who would  
2 be able to cede me a couple of minutes? Thank you. Is that  
3 okay? Can I --

4 MR. ZWART: That's not -- okay.

5 MR. STEVENS: Thank you. I'll try to wrap it up  
6 very quick.

7 So I think that the environmental impact of what  
8 happens to our city and our community when the county and  
9 city governments are struggling to survive economically, to  
10 keep the basic services funded? What happens as our tax base  
11 further degrades -- we are unable to attract new business, we  
12 are unable to have more water hookups? The City's financial  
13 and County's financial position will further deteriorate and  
14 they won't even be able to maintain parks -- county parks or  
15 city parks and state parks, so there will be additional  
16 environmental degradation that the Draft EIR has not looked  
17 at.

18 Just a couple more quick points. I think the  
19 analysis for an emergency evacuation plans, and for  
20 earthquake or whatever tragedy could potentially strike in  
21 this area has not been analyzed by the University,  
22 specifically with respect to Bonny Doon, Cape Gulch, and all  
23 residential that would need to use the Empire Grade Road.  
24 There would be inadequate capacity on that road in the event  
25 of an emergency. There's a total lack of analysis there.

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1 And, of course, also mentioned is the fragmentation of  
2 habitat, the connectivity between Pogonit and Wilder Ranch  
3 State Parks; that would be pretty much urbanized and  
4 decimated, and in general, deleterious to the environment.

5 I think that's about all the things I'm going to  
6 say for now. I will add written comments, and anyone out  
7 there who would like to support CLUE, I'm taking this  
8 opportunity to encourage you to go "info@santacruzclue.org"  
9 and get in touch with us. Thank you.

10 MR. ZWART: Okay.

11 MS. LEUTHOLD: My name is Eva Leuthold. Fifteen  
12 years ago, I lived on High Street and State Street to the  
13 east side.

14 This hearing, this kind of gathering, like the  
15 meeting of the Santa Cruz neighbors and the Chancellor on  
16 Monday, that should have happened, in my opinion, way in the  
17 beginning of this long-range planning. Nonetheless, I  
18 welcome the Chancellor's invitation for input from the  
19 public, for openness and sincerity.

20 She stated that the efforts to inform the public  
21 were exceeding the requirements. For me, and I guess for  
22 many others, they were still insufficient. I learned two  
23 weeks ago at the Santa Cruz neighbor's meeting about the  
24 vastness of this U.C.S.C. expansion plan. So during the  
25 60-day -- and I have not the time or the nerve to read the

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PH-14

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1 paper.

2 But for me, the enormity and its impact on  
3 environment, life quality, whatever, is reason enough to  
4 stand here and speak. Two of us went to the farmer's market  
5 last week to hand out flyers with some information and talk  
6 to people. And most -- I mean -- yeah, the farmers' market.

7 Most people knew, if anything at all, very little  
8 at all about this plan. All but one had reservations about  
9 it, put it very mildly. I think the process so far has gone  
10 over and by the heads of most of those affected by this  
11 expansion plan.

12 Also this hearing happens at the 12th hour. I urge  
13 you to mind the following. And by the way, I confess to be  
14 naive enough to have expected the Regents to be here, because  
15 I heard that they are the ultimate decision-makers. I ask  
16 the Chancellor -- and I think they should hear this. They  
17 should see us, and they should not just maybe get it second,  
18 third hand. It would save them a lot of money because they  
19 could hear and get a summary, and not have to read so much.  
20 But, no, they are not here. And thank you for those who are  
21 here.

22 Do what you can to dispel this notion of they can  
23 do what they want anyway among the Santa Cruz population.  
24 Communicate as much as needed and not merely required,  
25 without time restriction and deadlines. Go into a true

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1 dialog with the people of Santa Cruz. Please consider  
2 seriously to provide the newborns of today with adequate  
3 college spaces by bringing a new U.C.S.C. to one more city in  
4 California so it, too, can get the -- be enriched, like Santa  
5 Cruz has been, by it's cherished U.C.S.C..

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6 MR. ZWART: Three minutes. Thank you.

PH-15

7 MR. CURRY: My name is Renwick Curry. And in  
8 contrast to the "ambiguities" and "impossibles" and  
9 "infeasibles" pointed out by other people, I'm going to give  
10 something very concrete, something you can dig your teeth  
11 into.

12 I compared the traffic analysis in the DEIR with  
13 that done for the Terrace Point CRLDT, and the comparison  
14 raises serious questions. As a reminder for those of you who  
15 aren't traffic wonks, the Terrace Point Traffic Analysis  
16 assumed 19,000 students, and, of course, here we're talking  
17 about 21,000 students.

18 So the first question is this: Why do they predict  
19 the delay times -- when you assume 21,000 students, part of  
20 these delay times is less than the delays assuming 19,000  
21 students. In other words, the increase in the student  
22 population is two times that of the Terrace Point analysis,  
23 yet your delay times are less. Somehow, that doesn't  
24 compute. This happens at Empire Grade and Western Mission  
25 and Gray, and Mission and Chestnut.

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1           Second question: You predict delays of about one  
2 to two minutes at Delaware and Swift, which is five to ten  
3 times larger than the Terrace Point analysis which predicted  
4 delays of 15 seconds. That's a significant difference in  
5 level of service. And because of this, your analysis says  
6 there's no significant project impact because the  
7 intersection is in bad shape to begin with. So I think if  
8 you did a proper analysis, you would find there was a  
9 significant impact there.

10           Third point, the Terrace Point analysis had a table  
11 of development projects that were included in the trip  
12 generation. Your report is not clear which projects are  
13 included and which ones are not, so it needs to be clarified.  
14 And I just point out, I think I saw in there, one phrase that  
15 you're including some employee traffic for a home development  
16 center in the industrial lands to the west side, and if you  
17 mean the Home Depot project, you can take that off your  
18 traffic analysis. It's not going to happen. Thank you.

19           MR. ZWART: Thank you.

20           MR. WEISZ: My name is Russell Weisz, and I'm a  
21 City of Santa Cruz resident. I just have a couple of  
22 comments. I haven't had time to fully read and digest the  
23 DEIR, so I also would like an additional 30 days to be able  
24 to do that.

25           One area that I did look at and have a concern was

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PH-16

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1 on the LRDP impact at 3. And the analysis says that it's not  
2 significant because the General Plans in use in the cities  
3 and the county expect to handle the increased housing through  
4 2007 without the conversion of farmland to housing. And I'm  
5 concerned about two issues here.

6 One, that the General Plans that are mentioned here  
7 just go through 2007 rather than 2020, which is necessary to  
8 kind of impact -- look at the impact for the fully affected  
9 time frame. And also, the -- I don't believe the General  
10 Plans anticipate them -- the massive new U.C.S.C. growth, so  
11 that would make those General Plans incomplete and  
12 insufficient.

13 So I think this analysis is incomplete and  
14 insufficient. The other points have been mentioned  
15 previously, but I just want to add my comments.

16 On the alternative -- the expansion alternative to  
17 instead have 2,000 students and 450 faculty situated at  
18 Moffette Field in Santa Clara County, that alternative in the  
19 analysis is quickly dismissed. I think it's viable and  
20 should be fully described and actually pursued. I think that  
21 the proximity to the larger population center with the  
22 services and infrastructure needed to support a campus is an  
23 important point there.

24 I would expect little environmental degradation by  
25 having a campus there. The large population could be served

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1 directly by the U.C. and -- so along with evaluating that in  
2 more detail, I think that should be combined with the no  
3 growth alternative in Santa Cruz County, which is -- okay. I  
4 guess I'm done?

5 MR. ZWART: You can finish your sentence.

6 MR. WEISZ: Okay. Yeah, which is the  
7 environmentally superior alternative. That's it.

8 MR. ZWART: Thank you. Richard Harrington.

9 MR. HARRINGTON: My name is Richard Harrington and  
10 I'm a resident of the town of Santa Cruz, or what used to be  
11 a town since -- off and on since 1958. And I came in late  
12 because I had to be at a meeting over at the City Hall. So  
13 maybe someone has made this point before, so I'll be very  
14 brief in case I'm repeating something somebody else said.

15 But as I recall, when the University of California  
16 administration in Berkeley sent a couple of employees, a few  
17 employees down here, including Dean McHenry and Paige Smith,  
18 the concept, the fundamental concept they had was to create a  
19 campus, one single campus of all the University of California  
20 campuses that would rival the small, liberal arts colleges  
21 like Williams College in Massachusetts and Pomona College in  
22 Southern California. And the original idea was to keep  
23 enrollment down as these colleges do, to three to 5,000  
24 students with a very low student faculty ratio to make it  
25 like a small liberal arts college. And if high school

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PH-17

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1 students need to be served, as somebody else brought up, they  
2 should be served at the other campuses, so at least one  
3 campus of the University of California system would be like a  
4 small liberal arts college.

5 So I would recommend where the Long-Range  
6 Development Plan says, "Enroll up to 21,000 students with  
7 proportionate increases in faculty and staff," that be  
8 changed to, "Reduce enrollment of students down to 5,000  
9 students," with proportionate decreases certainly in staff,  
10 maybe not faculty.

11 MR. ZWART: Thank you.

12 MS. BECKHAM: My name is Marie Beckham, and I'm a  
13 resident of Aptos and a long-time volunteer at the Arboretum  
14 at U.C.S.C. and recently a member of CLUE. I just want to  
15 reiterate what people already said because I'm so far down  
16 the line.

17 But anyway, I think that the idea of almost  
18 doubling the student -- or the population at the University,  
19 if you increase the number of students by a third, then the  
20 support staff and faculty will mean a doubling probably of  
21 the University population. But that is unacceptable; we just  
22 cannot do that.

23 The other thing is that the campus is an  
24 environmental treasure which should be preserved, and I --  
25 rather than building on it, it should be -- what is not built

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PH-18

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1 on already should be used for scientific research.

2 One of the points of this campus has been  
3 environmental studies, one of the big academic pursuits  
4 there. Why -- how can we say to the students, you know,  
5 "We're going to pave all this over, but don't pay any  
6 attention to what we're doing. Do what we're telling you in  
7 books, but not in practice."

8 And then the final thing is that, as many people  
9 have said this evening, we do need more time to examine this  
10 document. It's just too huge for the public to have the time  
11 to scrutinize it very carefully. Thank you.

12 MR. ZWART: Thank you.

13 MR. GRODBERG: Thanks for having this forum  
14 tonight. My name is Eric Grodberg, I'm a 1987 graduate of  
15 U.C.S.C.

16 I heard a lot of negative comments tonight. I want  
17 to say something positive. I want to thank you for sharing  
18 my financial future. That's right. I'm a -- I also own  
19 rental property, and with this plan, you -- I don't have to  
20 go to a financial consultant. You made me. I'm going to be  
21 really specific though.

22 Population three, growth of the campus under the  
23 2005 LRDP in conjunction with other regional growth would  
24 create a demand for housing that, combined with demand  
25 created by other growth in the county, will exceed the

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PH-19

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1 supply." Well, what's the mitigation? "The campus shall  
2 work with the City of Santa Cruz to identify a means of  
3 providing additional housing in the City including affordable  
4 housing."

5 Affordable housing? You charge \$974 for a single  
6 dorm room, \$854 for a double. That means two University  
7 students sharing a dorm room are paying over \$1700 a month.  
8 And if they happen to live at Kresge College or another  
9 apartment, they're required to take a meal plan. So two --  
10 two double dorm rooms, those students are paying \$3420 a  
11 month, say -- even if they're -- plus meals, what do you  
12 think they could rent -- is that affordable housing? I don't  
13 think so. I mean, they could rent luxury housing downtown.

14 So that's why, when I have one of my units listed,  
15 oftentimes student will come to me, and they'll offer me more  
16 than what I'm asking. Now -- so, once again, I thank you.  
17 Thank you very much.

18 MR. ZWART: Thank you.

19 MR. AKOL: My name is Kim Akol, and I'm a U.C.  
20 alumnae. I want to talk to a couple of issues.

21 The first is the lack of a bike plan in the EIR.  
22 The fact that there's really no bike plan now, and the  
23 University is sacrificing its eligibility for some state and  
24 federal funding as it stands.

25 Now, I'd like to talk a little more about the

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PH-20

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1 development issue. And it seems that if the University is  
 2 really going to mitigate the impact of the increased  
 3 students, if they were just another private developer or  
 4 builder, such as myself, they would be paying about \$40,000  
 5 per house impact fees, which would be school impact fees,  
 6 police, parks, rec., child care, drainage, sewer, and water.  
 7 So that's about \$10,000 per person. So 5,000 students times  
 8 10,000, that's fifty million bucks! They should be writing a  
 9 check to somebody for \$50 million in impact fees.

10 Now, I'm just trying to be serious and pragmatic  
 11 about this, because the University is an 800-pound gorilla.  
 12 There is no stopping it. It's here, they're omnipotent.  
 13 They're exempt from the State Subdivision Map Act, if you  
 14 didn't know, so they certify their own EIRs. They're here.

15 So let's just make the most of it. Let's extract  
 16 what we can while we can, just like we would any other  
 17 developer. This is ridiculous. Let's not -- let's, you  
 18 know -- and really, I think that -- let's not leave anything  
 19 behind the door.

20 Let's not hide anything because those poor  
 21 residents in the upper west side are being tortured. Why is  
 22 it that we can't consider the eastern access? This is not  
 23 sacred ground. There is -- there's no buried Indians there.  
 24 They used to play polo there. You have some kind of  
 25 back-door agreement with the City that you're not going to

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1 discuss this in the EIR until 2015 or 2020 or something.  
2 Maybe some of these Council members can tell me. When's the  
3 sunset on our agreement, because it's ludicrous? We're  
4 torturing these people.

5 And once again, there's this huge double standard  
6 to where they're not paying impact fees. I really think that  
7 they're here to stay, so let's just extract from them what we  
8 can and get on with it. Let's make life better for everybody  
9 around here. Thank you.

10 MR. ZWART: Thank you.

11 MR. FERARU: Hi! My name's Brian Feraru. I'm a  
12 student at U.C.S.C. I was originally coming up here just to  
13 say that I would like to throw my support behind everything  
14 that Mike Rockman and that two people after him -- everything  
15 that they said, and specifically with regard to a couple of  
16 things.

17 One being, we need more time to discuss this. I'd  
18 like to see an extension of the date; and two, specifically  
19 something that a lot of people have mentioned is the huge  
20 oversight in that, how can you actually put "whenever  
21 possible" into the EIR? Like I understand legalize, and I  
22 understand, like, your side of it, but your job is to say  
23 when it's possible and when it's not possible, as far as I  
24 understand.

25 I admit a certain amount of naivete on the subject,

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PH-21

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1 but that seems really important. Your job is to do that.  
2 But even beyond that, something that one of the gentlemen  
3 recently said was, he talked about the homogenization of  
4 schools, and that's definitely a problem, because all the  
5 U.C.'s are becoming the same school.

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6 As the LRDP is currently set out, it is making  
7 U.C.S.C. look like every other school. Obviously, we can't  
8 stop that just by stopping the LRDP. But I came to the  
9 University of Santa Cruz because of the small school,  
10 relatively speaking, and the environment. And the way the  
11 building plan currently is established, it's destroying both  
12 of those things, and I personally don't like that.

13 MR. ZWART: Thank you.

PH-22

14 MS. FIELDS: Hello, my name is Rachel Fields, and I  
15 am also a student at U.C. Santa Cruz, and I'm also a resident  
16 now of the City of Santa Cruz.

17 And the first thing I would like to say -- and I'm  
18 not going to pinpoint this with you because I feel that  
19 you're not the developers; you're not the people who are  
20 doing this. You simply wrote the LRDP Environmental Impact  
21 Report, I believe you said E.

22 I would like to say that I hope that we consider  
23 the -- the campus trailer park as a cultural resource because  
24 by not doing that -- by not doing that, we disregard the  
25 personal history of the campus and of the City, and in a

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1 larger extent, that gives off homogeny and blendization of  
2 the campus.

3 Also I would like to say that, how can you feel  
4 comfortable expanding into north campus and upper campus if  
5 current architecture and building is not environmentally  
6 sustainable and is not environmentally aesthetic with what's  
7 going on there?

8 I would like to read something, a quick something  
9 for inspiration to everyone. This is from The Natural  
10 History of the U.C. Santa Cruz Campus.

11 "Dean McHenry, the first Chancellor of U.C. Santa  
12 Cruz, felt strongly about conserving the natural beauty of  
13 the campus. He decreed all redwoods over ten inches in  
14 diameter would be cut only with his permission. And he  
15 specifically sighted roads and buildings to save the trees.  
16 For instance, the road leading to McHenry Library from the  
17 Performing Arts parking area is only one lane wide because of  
18 such a conservation effort."

19 And I like to note that, right now, they are  
20 cutting down lots of trees right in front of the McHenry  
21 Library near that road, and not being innovative with their  
22 architectural design to incorporate the trees into the  
23 building.

24 "On another occasion, the new Chancellor was  
25 surveying campus construction work when he came across an

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1 uprooted redwood stump. He immediately ordered the  
2 surroundings shrubs and ferns be replanted and demanded that  
3 in the future, all stumps be removed only with his approval.  
4 The next day he found the stump replaced with a plaque  
5 attached to it which read, "Chancellor's Stump. Do not  
6 Molest."

7 I hope you take that into account when we molest  
8 the upper campus and the culture of Santa Cruz.

9 MR. ZWART: Thank you.

10 MR. ALTSHULER: Hello, my name is Eitan Altshuler.  
11 I'm a student at U.C.S.C. I've been here off and on since  
12 '98, and I believe I've seen the campus change dramatically  
13 in my time here.

14 Essentially, though, I want to tell you how I found  
15 out about this meeting. I was doing my usual weekend routine  
16 of taking a long hike -- which is an incredible asset to the  
17 students here on this university who require inspiration from  
18 nature, who came here to be inspired by beauty, and allows  
19 us, our minds to soar to new heights and think in different  
20 ways.

21 I was lucky to come across a circle with a totem  
22 pole on my hike, which I don't think you'll see at many  
23 Universities across the country. I read a very interesting  
24 definition of the word "sacred," to which I'd like to read to  
25 you. "Sacred" is something that has value beyond its

PH-23

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1 usefulness for human events; and that it itself becomes the  
 2 standard by which our acts, our economies, our laws, and our  
 3 purposes must be judged."

4 The environment and the natural beauty around us is  
 5 sacred to, I think, everyone in this room. It's just kind of  
 6 the obvious point, most of the -- in fact, I'd say almost all  
 7 the best minds at U.C.S.C. come for one reason, the trees.  
 8 Students that are better qualified to go to more prestigious  
 9 schools come here for a different experience, because they've  
 10 grown up in urban environments that are congested, and they  
 11 want something to highlight their growing mind.

12 I think if you take away that element to the  
 13 University, you're going to change Santa Cruz culture, which  
 14 has already been changing a lot. And I think we need to  
 15 realize what this precious ground that we're sitting on, what  
 16 the value is to Santa Cruz. And Santa Cruz's value, in my  
 17 mind, has always been those trees. It's always been this  
 18 natural beauty. So that's about it. Thanks.

19 MR. ZWART: Thank you.

20 MS. ELSTON: My name is Deborah Elston, and I am a  
 21 neighbor of U.C.S.C. Where to go and where to start all the  
 22 topics and aesthetics, to hydrology, water quality. Fourteen  
 23 EIR areas to comment, and I only have three minutes? Three  
 24 minutes. Okay, so here goes.

25 So I'm just going to give you four points that I

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PH-24

1 saw at first glance that absolutely popped out at me.  
2 Traffic, two, multiple surface, eleven off-campus  
3 intersections. They're already significant. U.C.S.C. will  
4 contribute to its fair share, and following that mitigation,  
5 it will be significant and unavoidable. Okay. It is  
6 avoidable. Don't grow until you fix the problems that you've  
7 already created on those intersections.

8 Back to a comment I've made before. The cumulative  
9 traffic effect is big, you keep adding one percent, one  
10 percent, one percent, and they say one percent is less than  
11 significant. But after you do one percent, one percent, one  
12 percent for every new faculty person, every new person, every  
13 new project that comes up on that University -- let me see.  
14 After 25 years or more, you've got 25 percent significant  
15 effect, so that really needs to be looked at.

16 Traffic 2B pertains to increasing sustainable  
17 transportation modes above 55 percent. I'm really confused  
18 by this. Fifty-five percent. What does that really mean?  
19 That means probably you're trying to be admirable -- using  
20 the busses and doing the sustainable transportation, which is  
21 wonderful. But if you're going to grow the campus, you're  
22 going to grow that 55 percent; that 55 percent number means  
23 nothing. It means nothing because you're still going to be  
24 growing the people on the road.

25 Which leads me to noise, two. Interesting

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1 phenomenon happened when the bus strike happened. It was  
2 noticeably quieter in the neighborhood without the busses.  
3 It was pretty amazing. It's no secret that U.C.S.C. drives  
4 and subsidizes the Metro system. If you do want to add the  
5 students and then you add more busses to keep this 55  
6 sustainable transportation number, you cannot possibly think  
7 that noise will not be noticeable. It can't be less than  
8 significant.

9 Last point: Public services, one and two, you  
10 mention the facilities for the Santa Cruz Police Department  
11 and the Santa Cruz Fire Department will have no impact.  
12 Well, maybe not on the facilities, because we have a new  
13 Police Department, and they can expand without building  
14 facilities if they need officers.

15 But see, you're commenting about the facilities,  
16 but that says nothing about the Police Department and the  
17 Fire Department need more people to answer the emergency  
18 calls that happen up near the University. That cannot  
19 possibly be a less-than-significant impact. That's  
20 impossible. I know there are more sirens going on up on High  
21 Street and Bay Street on a weekly basis. I mean, five years  
22 ago, you barely heard a siren. Now, it seems to be on a  
23 weekly basis. Well, wait a minute. That should go back to  
24 noise.

25 MR. ZWART: That's your three minutes.

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PH-25

1 MS. ELSTON: Thank you.

2 MR. BENHARI: Hi, my name is Ted Benhari, and I'm  
3 the Chairman of the Rural Bonnie Dunes Association.

4 I'd like to reiterate the requests the other  
5 speakers have made for an extension of this deadline. We're  
6 talking about a 15-year plan; I don't see what the rush is  
7 for another 30 days. Let people digest this huge report, and  
8 all the errors and misrepresentations it contains.

9 (Applause.)

10 Over and over, you say "if feasible," "to the  
11 extent feasible," "if it's possible." This whole thing is a  
12 joke; it's ridiculous. Who's going to decide whether it's  
13 feasible? It's going to be you guys -- your administrators,  
14 your engineers, the people that you hire.

15 You say in other sections, in the environmental  
16 sections, you'll remove nests, trap animals, relocate them,  
17 erase wetlands, erase habitat. You've got the arrogance to  
18 think that you can just fool Mother Nature and everything  
19 will be just fine with all these animals and plants you think  
20 you can just move around to other habitats. This is  
21 incredible *hudspah* (phonetic) on your part.

22 Let me turn to something more relevant to Bonnie  
23 Dune. There's indications for turning the Cave Gulch  
24 neighborhood into a suburb, with noise, lights, traffic.  
25 This is a huge impact, and you don't have any mitigation for

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1 that. It's totally against the concept of the urban services  
2 line, and it's totally against the County General Plan.

3 The corporation yard is part of that whole thing.  
4 It will turn Empire Grade into a traffic nightmare. Heavy  
5 trucks will be lugging up this road. It will be particularly  
6 dangerous to bicycles. With no bike lane there, it will be  
7 injuries and death, and you guys will have blood on your  
8 hands when you do this. I know it's serious, but whoever  
9 rides a bike there now just with the trucks going back and  
10 forth with the granite quarry up there.

11 We will be submitting more detailed comments before  
12 the written deadline. And again, I urge you to extend that.  
13 Thank you.

14 MR. ZWART: Thank you.

15 MR. McCOMBE: I'm George McCombe. Good evening.  
16 Thanks for allowing me to advocate for the flora and fauna  
17 and the environment. The upper campus is a very beautiful  
18 environment. It connects to Gray Whale and Wilder. It's  
19 home to the spirit of the mountains.

20 And I'd just like to advocate for all the silent  
21 creatures. There's been a little bit of development lately  
22 at U.C.S.C. The infill concept makes a lot of sense to me,  
23 building up in the nice vertical buildings that I'm seeing.  
24 It kind of makes sense to continue that concept. And,  
25 please, do not build on the upper campus. Thank you.

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PH-26

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PH-27

1 MR. ZWART: Thank you.

2 MR. PORTER: My name is Ed Porter. I'm a member of  
3 the Santa Cruz City Council, and I would like to add to the  
4 other members of the City Council and others who commented  
5 that we need more time to properly evaluate, analyze, and  
6 submit comments on this massive document of over 900 pages.

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7 My remarks right now are intended to mostly address  
8 what I consider to be the very scanty definitions of  
9 mitigations in this Draft EIR. And also to focus on the fact  
10 that the Chancellor seems to like the idea of approaching  
11 problems like this with an engineering approach, an  
12 engineering solution, so I want to suggest some ways that  
13 that could be done.

14 And I'll start off by talking about 6,000 new  
15 students, and I'm ignoring the staff and others who will be  
16 involved. Just 6,000 students. And just for the sake of  
17 discussion, say that that would require somewhere between  
18 1,000 and 1,500 housing units depending on what the occupancy  
19 of those units were. If we take the track record that we  
20 have over the last several years, that would mean between a  
21 thousand and 1500 housing units on campus and a thousand to  
22 1500 units off campus. That's if we can keep doing things  
23 the way we've been doing for a while.

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24 And just taking the average project size of a  
25 hundred units, that would be between ten and fifteen large

1 housing projects on the campus and ten to -- between ten and  
 2 fifteen large housing projects off the campus, somewhere in  
 3 the City. And like I said, this doesn't include staff, it  
 4 just means that these numbers are already insufficient.

5 So if we assume ten to fifteen large housing  
 6 projects in the City of Santa Cruz, well, how many does the  
 7 City of Santa Cruz typically build? Thinking back about ten  
 8 years or so, it seems that the City of Santa Cruz has built  
 9 seven significant housing projects, right now completing the  
 10 Branciforte Commons, the Reedler Housing; in previous years,  
 11 Shaffer Road, 10th and Pacific Avenue, Gault Street Senior  
 12 Housing, housing down near the beach, Sycamore Commons up by  
 13 Neary Lagoon. That's only seven, and the needs of the  
 14 University would require between ten and fifteen projects of  
 15 that caliber.

16 I think that one of the speakers earlier -- I think  
 17 it was Supervisor Wormhoudt -- said that we would -- this  
 18 plan would require 234 percent of the Santa Cruz planned  
 19 growth in housing during its lifetime. What does that do to  
 20 a city if you take and build 234 percent of the housing that  
 21 it otherwise needs? It means you have no new housing for any  
 22 other purpose.

23 So, what has happened in the City in recent years  
 24 because of the behavior of the University in having --  
 25 assuming that housing will be -- will take place in the City?

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1 And I see it sort of like, we have people come to town and  
2 they ask us to do events or they want to get permits to do  
3 events. Imagine for a moment if you were going to have  
4 several thousand 15, 16, 17-year-olds coming to town, you're  
5 going to have wonderful seminars and classes, and excursions  
6 to the beach and everything wonderful, and this promoter is  
7 going to provide housing for half of them?

8 Well, is it any different for 17, 18, 19  
9 20-year-olds? Why should that be different? What does this  
10 mean when we only house half of them? What it means is that  
11 what is happening in our residential areas will continue to  
12 happen at a much accelerated rate: 234 percent of the rate  
13 it's been happening. In the last few years, we've closed  
14 schools because the economics of this kind of a situation no  
15 longer supports families in this town. It's becoming purely  
16 a university town. (Applause.)

17 So the real question is, does the University, by  
18 building such a huge nest in the City that overflows into the  
19 entire city, does it want to destroy the entire city by  
20 building this big nest? I hope not.

21 U.C.S.C. has the opportunity to do what it says it  
22 wants to do. That's be a good partner with this community.  
23 In order to do so, I think the opportunity to prove it, which  
24 is to be a good partner and really intends to do so, it needs  
25 to adopt some principles of cooperation. Those should

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1 include, but not be limited to lowering the growth target;  
2 zero growth in automotive trips; provide one hundred percent  
3 of the housing that is needed for the expanded population.

4 And I would just add that an environmentally  
5 friendly eastern access is possible with current rapid  
6 transit which is capable of doing all of the trips needed to  
7 the University and absorbing some of the overflow that we  
8 shouldn't have right now. Thank you.

9 MR. ZWART: Thank you.

10 MR. AIRD: Hello, my name is John Aird. I'd like  
11 to speak to this in a number of ways.

12 What is obvious here is a collusion between a  
13 public responsibility and a responsibility to the public, not  
14 just in terms of students, but in terms of the public that is  
15 a host community. And I think it has become obvious, and  
16 increasingly obvious since 1988 is that this community has  
17 been a host to the University and the University has been  
18 misusing that privilege, number one.

19 Number two, I think that effectively what's  
20 happening here is a taxation without representation in this  
21 particular regard. It's clear throughout this Draft EIR,  
22 which I think is inadequate in every respect other than in  
23 length. What is clear is that by the gap, the delta between  
24 the problems that are created by this and what the University  
25 is absorbing as their responsibility, that delta is a

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PH-28

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1 taxation on this community. It's a taxation in two ways.  
2 Number one, who do you think's going to pay for the  
3 additional roads? Who do you think is going to pay for the  
4 additional housing? It's going to be this community one way  
5 or another.

6 Throughout this, the document states, "We will  
7 contribute our fair share," or, "if it's feasible." Well, as  
8 every other speaker has said, I think it's time to get damned  
9 specific about what you're going to step up to and what  
10 you're not. I also hope that there's not just a written  
11 transcript of this. I wish there was a verbal, audio  
12 transcript or audio version that could be sent forward to the  
13 University Regents so they hear what's happening to this  
14 community.

15 I'd like to just give you two numbers here to think  
16 about. You're supposed to be looking at the cumulative  
17 impacts on housing, which means, from the 1988 plan and  
18 dealing with those issues, the unmitigated parts of that  
19 until today. In the 1988 plan, a goal and a specific  
20 commitment was to house 70 percent of students on campus.  
21 Because of economic disincentives that were identified  
22 earlier by Eric, wrong-headed policies and passive leadership  
23 on this issue, a level of 44 percent on-campus housing has  
24 been achieved.

25 Can somebody give me a few minutes of their time?

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1 UNIDENTIFIED SPEAKER: Take mine.

2 MR. AIRD: Thank you. Now, surrounded by a  
3 community that has very little developable land, not enough  
4 affordable housing itself currently, not any housing to speak  
5 of to attract new business, no water, as we've heard about,  
6 and streets that are choking with university traffic, you  
7 have the gall to come forward with a new plan in the 2005 --  
8 in this 2005 version that doesn't continue the 70 percent  
9 commitment, but drops it to 50 percent. That's 10,500  
10 students that are going to have to be absorbed by this  
11 community.

12 What is really being said up here? That instead of  
13 sustaining the level of 50 percent where you'd have -- with  
14 70 percent on campus, where there would be 14,700 students on  
15 campus and 6,300 students off, the result of just that gap is  
16 devastating for this community. It's 4,200 students that  
17 must, according to your plan, be somehow accommodated here in  
18 this community. If it takes 350 square feet for each  
19 student -- and that's pretty conservative -- that's  
20 one-and-a-half million square feet of either existing housing  
21 or developed housing that has to be accommodated. That's  
22 simply unacceptable.

23 Finally, on the traffic, I am at the -- literally  
24 at the launching pad to the University at the corner of High  
25 and Highland. High and Highland, right where the stop sign

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1 is next to the Piedmont Court. There is constant traffic  
2 there. The -- the Councilmember Ed Porter came up to my  
3 house one day and we put out a sound thing -- it's not  
4 supposed to go over something like 70 decibels -- on my  
5 porch. You couldn't be close to the street, but on my porch,  
6 it was constantly over 80 decibels on a steady stream.

7 There are cars going up there as if they're going  
8 into Disneyland or something. That's at 20,000 cars per day  
9 that are going up two streets now, Bay and High, and the  
10 projections here are for 35,000. It's flat out unacceptable.

11 The carrying capacity issue here for a college  
12 which has prided itself on environmental sustainability and  
13 all those fine words, it's time that the University actually  
14 follows its own lectures and what you're teaching our  
15 students. Thank you.

16 MR. ZWART: Thank you. I don't see anyone lined up  
17 to speak. And as I said earlier, if we have adequate time at  
18 the end, people who ran out of time would be invited to  
19 finish their comments. And I'd like to offer them that  
20 opportunity now. We will do this in three-minute increments.  
21 And I'd like you to identify them.

22 MS. KIPPING: Susan Kipping, Felton resident. And  
23 all I want to do, I do not -- I did forget to say about the  
24 extension. I really, really think we need an extension just  
25 as a goodwill. That was a huge piece for all of us to

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PH-29

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1 digest. And if our politicians can't even take it on, I  
2 would like to go on the record as saying, we do need an  
3 extension. Thank you.

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4 MR. ZWART: Thank you.

PH-30

5 MR. LEVIN: I'm Hal Levin. And I barely got  
6 through a portion of the comments that I wrote down that I  
7 had intended to make tonight. I'll repeat something I said  
8 to you, Frank.

9 Back about a year ago when the plan was tried out  
10 in this room, that it's too general, I said too vague, you  
11 said too general, I'd say both. It's too general and too  
12 vague for preparation of an adequate EIR. So mass specs are  
13 at the project level and others were at the program level,  
14 and mixing these two together creates very confusing  
15 documents responsive to from the point of view of meeting  
16 CEQA.

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17 I'm next particularly concerned about addressing  
18 cumulative impacts, such as those pointed out by John Aird  
19 when we look back at the failure to fulfill the goals and the  
20 mitigations of the 88 LRDP. I'll say that the files in the  
21 electronic versions have been formatted in a user unfriendly  
22 way so that one trying to comment responsibly and clipping  
23 portions out cannot actually copy using Adobe Acrobat 7.0  
24 Professional. This is a choice made by those who formatted  
25 the file. These files could be formatted so that we could

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1 incorporate portions of the EIR as appropriate in our  
2 comments.

3           The document is full of findings of significant  
4 environmental impacts that are claimed to be unavoidable.  
5 Most of the determinations of unavoidable are questionable at  
6 best. A more serious investigation and consideration of  
7 alternative methods of mitigation would likely reveal that  
8 numerous impacts can be avoided if the University chooses and  
9 agrees to take on the responsibility that they ought to  
10 rightly own. Significant impacts must be aggressively  
11 mitigated, and as a public institution, the University is  
12 obliged to be a good citizen. Skip the rest of that comment.

13           The population estimates for Santa Cruz and the  
14 Monterey Bay Unified Air Pollution Control District's Plan  
15 referenced in your plan showing the population growing in  
16 Santa Cruz from 56,900 to 59,000 in the fifteen-year span of  
17 the plan. University growth alone would contribute an  
18 increase of triple that to the City of Santa Cruz. So  
19 there's a real need to consider the impact on air quality  
20 that has not been previously considered.

21           There are errors in your own tables. You cite the  
22 absence of a state eight-hour ozone standard where you're  
23 comparing the metric values that are -- in fact, in your own  
24 table, you recognize that earlier this year, ARB adopted a  
25 new value standard of ".07 parts per million" and the

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1 monitoring station you cite actually exceeded .07. It was  
2 .077 in 2004. So you have a significant problem with air  
3 quality already which the University's growth will only  
4 exacerbate.

5 I had one more comment from my comments on the  
6 draft EIR, and that is that the costs of improvements and all  
7 mitigations -- I made this in your scoping and submitted it  
8 in writing. "The cost of improvements and all mitigations  
9 should be identified and be part of the plan itself.  
10 Approval of the plan should include approval of the funds for  
11 implementation of the mitigations of negative impacts as well  
12 as approval of the plan itself."

13 This out that you've left for yourselves which you  
14 used in your reporting on the implementation of the 88  
15 mitigation measures that the funds were not available is  
16 simply unacceptable. And it must be considered, given that  
17 history, in the approval of the 2005-2020 plan. Thank you.

18 MR. ZWART: Thank you.

19 MR. DeSELIN: David De Selin. This is just of  
20 point of procedure back to when I walked through this door a  
21 few hours ago.

22 I've been to about four of these, made many  
23 comments, other people have as well. And I've been to about  
24 another half dozen project EIRs, made comments. Not all of  
25 which are ever reported -- not reported correctly. So I'm

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PH-31

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1 just wondering, what's going to happen to these comments?  
2 What effect does it have upon the -- this EIR or the LRDP if  
3 this is just a recording session? It's a question that I'd  
4 like to have responded to. Thank you very much.

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5 MR. ZWART: We will take note of that.

PH-32

6 MR. HARRINGTON: Richard Harrington, again. I was  
7 the one who recommended that enrollment be reduced down to  
8 three to 5,000 students. And afterwards, I listened to other  
9 speakers taking the plan and the environmental impact, of  
10 course, and everything.

11 Seriously, I thought, well, maybe they thought I  
12 was joking. So I just wanted to say, I was not joking. I  
13 wasn't being facetious. I think that what happened up there,  
14 what is happening and what is being planned is a joke. It's  
15 a tragic joke. I'm not joking. I think enrollment should be  
16 reduced to three to 5,000 students.

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17 MR. ZWART: Thank you. Name, please?

18 MR. WEISZ: Russell Weisz.

19 MR. ZWART: Thank you.

PH-33

20 MR. WEISZ: I just wanted to finish up. On the  
21 reduced enrollment/growth option, let's see. It's currently,  
22 given at 19,500, and I'm not clear why that number was  
23 chosen. I think that's much too large a number. I think  
24 that a number, like, maybe 16,000 would be a reasonable  
25 number, a sustainable number, and so I'd like to suggest that

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1 that be substituted.

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2 And then on the -- I just think that the premise of  
3 the LRDP and the DEIR are somewhat incorrect, in that,  
4 really, the enrollment increase to 21,000 FTE students is a  
5 given, and then the mitigations to -- you know, the  
6 environmental and other impact mitigations are vaguely  
7 stated. That they'll be done to the extent feasible to meet  
8 that number, and I think that's backwards, that U.C.S.C.  
9 should take into account an awareness of the infrastructure  
10 and constraints of the host city and host county. That  
11 should be the given, along with full and complete mitigation  
12 measures, and then the number of students that can be  
13 accommodated taking those realistic -- you know, those  
14 considerations into account fully and realistically should be  
15 arrived at, not stated as a given. Thank you.

PH-34

16 MR. ZWART: Thank you.

17 MR. ALTSHULER: I got served -- I had a lot of  
18 nervous tension and I couldn't think anymore.

19 MR. ZWART: Name?

20 MR. ALTSHULER: Eiton Altshuler. I want to talk  
21 about preserving natural and cultural treasures at U.C.S.C.

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22 First of all, the trailer park cannot -- should not  
23 ever be touched. That place looks like it came straight from  
24 the '60s. It's the coolest thing on campus. I recommend  
25 everyone take a walk through that.

1           The other thing I was disturbed about this summer  
2 was I noticed on my favorite tree on the walkway across to  
3 McHenry Library, one of the limbs was severed for some  
4 reason. I don't know why. It was incredibly beautiful. The  
5 other tree by the Media Arts Center, it was a very  
6 interesting tree. Had a kind of a nose sticking out of it.  
7 Kind of interesting. It was completely cut down, and I can't  
8 understand why. Most of the people in my peer class are  
9 alumnae, and they said, "If you ever touch tree nine, they're  
10 storming the campus."

11           The next thing is, the new buildings are absolutely  
12 hideous, and quite embarrassing. More aesthetic  
13 consciousness needs to be put onto the campus itself. It's  
14 just -- we need something to inspire us; we need something to  
15 make it feel that we're not just living in a drab world.  
16 Aesthetics are important. Thank you.

17           MR. ZWART: Thank you. A new speaker, I think.

18           MS. BETH: Yes, I am a new speaker. My name is  
19 Kaye Beth, and I have a residence on High Street.

20           It is a ramp up to the University. I wanted to  
21 speak to a full color map, a photograph that is on Page 78 of  
22 the draft. It's figure 24 with vehicle access, and it shows  
23 -- in the legend, it has "existing arterial."

24           Well, High Street isn't even on this photograph.  
25 It's -- the yellow lines show -- they do show High Street

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PH-35

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1 going up to Graham Hill, but going down to the City, there's  
2 no yellow. I mean, it's not -- High Street isn't considered  
3 an arterial on this.

4 Now, this is just a discrepancy in your own report.  
5 I looked at this, and I thought, Well, they can't be serious.  
6 I have to look further. And indeed, further on, you do have  
7 a circulation network and roadway classification, figure  
8 4.14-1. And the arterial streets -- High Street is just  
9 one of -- I don't know, 30, maybe 30 streets. But High  
10 Street at least is recognized on this as an arterial, and my  
11 blood pressure did go down a bit when I saw that. So thank  
12 you.

13 But I don't know why this is misrepresented here,  
14 that the -- it looks like you're just trying to have Mission  
15 Street and Bay Street as the only entrance to the University,  
16 and we know that's not true. So I would like you to correct  
17 this, and put the yellow line going up -- from Highway 1 up  
18 to Mission and Highland, and right straight up High Street  
19 because it's not here.

20 Also I want to speak quickly about air quality  
21 control on High Street. When everybody's backed up waiting  
22 to go down Story Street, you can't even be in your front yard  
23 because of the fumes from the cars. At least at that point,  
24 it's quiet -- quieter, so there's that, but it just -- the  
25 air quality for the cars staying at the stops and having a

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1 longer time period, you are -- you are strangling us. You  
2 are suffocating the residents on the street. This is just  
3 not acceptable.

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4 MR. ZWART: Thank you.

PH-36

5 MR. GRADBERG: My name is Eric Gradberg, and I just  
6 wanted to clarify that. Despite my attempts at humor, I was  
7 trying to make a serious comment on the mitigation measure.

8 In population three, "That campus shall work with  
9 the City of Santa Cruz to identify new and additional housing  
10 in the City, including affordable housing," on two points:  
11 One, the University hasn't cooperated in any meaningful way  
12 with the City, so that there's no reason for anyone to  
13 believe that that is a genuine mitigation in the future.

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14 And secondly, my point about the affordability.  
15 You know, you have those two elements first, and certainly  
16 your housing rates are not affordable, so we can't expect  
17 that that part of the mitigation is realistic either.

18 And I would also like to submit for the record the  
19 most recent statistics from the U.C.S.C. Community Rental  
20 Housing Office listing the average cost of various types of  
21 house. That supports my assertion that the cost of housing  
22 on campus is way out of line and not affordable. It's just  
23 to say it into record. The average cost of a room in a  
24 household is \$592 -- this is in the community. For -- I'll  
25 just do a few of them. For a four-bedroom house is \$244 --

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1 \$2,442, which, if you take my example of two -- that's a  
 2 four-bedroom house.

3 So if you take my example of two double dorm rooms,  
 4 which I think is probably the most common, that's \$854 per  
 5 person per month. That would be around \$3,420 per month that  
 6 the four students would be paying on campus. Whereas, off  
 7 campus, they can get a whole house for \$2,442, which is --  
 8 you know, I don't have the math in front of me, but it's a  
 9 huge order of magnitude of difference. So I'm going to  
 10 submit this for the record.

11 MR. ZWART: Thank you. John.

12 MR. AIRD: Yes. I would just like to say one more  
 13 thing that kind of picks up on Eric's point --

14 MR. ZWART: For the record, John Aird.

15 MR. AIRD: Yes. You're going to need to come up  
 16 with some big solutions and different policies, because if  
 17 the same policies are followed that are already not working,  
 18 they are not going to be adequate to the challenge that this  
 19 kind of growth requires. I am against the growth, and that's  
 20 clear. But if there is going to be growth, it needs to be  
 21 mitigated.

22 A couple of suggestions I would make in that  
 23 regard, if there was to be growth, that I would like included  
 24 as suggestions, and I'd like your response to be in whatever  
 25 way you do that.

1           Number one, I think the University should have a  
2 policy to require all freshmen and sophomores to live on  
3 campus. There's no reason that -- other universities and  
4 colleges do this. If you want to come to this campus, that's  
5 what you do. If you don't want that kind of campus, go  
6 somewhere else.

7           Secondly, just through a lottery system or some  
8 such, effectively require that 60 percent of juniors and  
9 seniors also live on campus. This gives an opportunity for  
10 40 percent -- it could be through a lottery, it could be  
11 under particular circumstances -- could live off campus.  
12 Those two mitigations together would result in 4200 students  
13 living off campus by 2020 if this plan was to be approved,  
14 which is just under the 30 percent figure which meets the  
15 standards that you originally had in your 1988 plan.

16           The point being this kind of thing could be done  
17 with the implementation of that sort of policy. Secondly,  
18 regarding traffic, I think the -- as a mitigation, I think  
19 you should support the closing of High Street in three years  
20 to all University traffic. During that time, you work with  
21 the City to develop and pay for whatever kind of rapid  
22 transit might be necessary on Bay and to develop another  
23 access route and entrance to the University somehow.

24           So those are some specific recommendations that I  
25 would like included and addressed in your mitigations. Thank

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1 you.

2 MR. ZWART: Thank you. Please state and spell your  
3 name.

4 MS. ROLAND: My name is Ann Marie Roland,  
5 R-O-L-A-N-D.

PH-38

6 I want to say I came to Santa Cruz in 1983 as a  
7 student, and I'm still here. I remember when I started as a  
8 freshman, I lived on campus, and I remember reading the  
9 issues with the University and the community in 1983 when I  
10 came here. Now, it was significant back then, and I know  
11 that because I didn't read a lot of papers then, but it was  
12 impressed upon me when I went into town, and I can see why.

13 Being a resident right now, this is huge. When I  
14 left U.C.S.C. in '87, the growth of U.C.S.C. had increased so  
15 much that I couldn't even fit into my classroom to hear the  
16 speaker. I kind of believe that U.C.S.C. tends to grow  
17 before they're ready, and this is a great example of growing  
18 before the community is ready for them to grow.

19 U.C.S.C. lands, I think, are a natural treasure and  
20 I think should be kept a natural treasure. I don't think  
21 they should be built on. I think the environment should be  
22 protected. And I think the impact of this university on this  
23 community is huge. I want to live here. I bought a house  
24 here. I want to stay here. I don't want to live next to  
25 students. I want to live next to families. I want to grow



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1 up next to these families. Students living in back of me,  
2 students living in front of me, on the side of me, they don't  
3 care about their community. I do. I live here. I'm going  
4 to stay here.

5 I want this University and I want the Regents to  
6 care about their students by not growing before their time.  
7 Care about the community because they're impressing such a  
8 big impact on this community. Otherwise, we both lose. The  
9 students lose and the residents of Santa Cruz lose.

10 So I think you should allow more time, like has  
11 been stated before. And I don't believe in growth at this  
12 point. We're just way too impacted by traffic, students,  
13 housing. It's just too big. Thank you.

14 MR. ZWART: Thank you.

15 MS. ELSTON: Deborah Elston, again. I'm just  
16 glancing through this thing, and I'm picking out things.

17 On table 4, 14-16, you list intersections that you  
18 will hopefully take care of, specifically intersections. And  
19 I'm just wondering about the streets that will then become  
20 the next intersections, and there's no allowance for even  
21 looking at those streets when streets get backed up because  
22 of a street light, and that's your mitigation. A street  
23 light in a neighborhood doesn't necessarily work where  
24 there's already a stop sign. So that's one point.

25 And then down on the bottom, Number 41 is High and

PH-39

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1 Laurent Street. It's already an F, and it says, "With this  
2 2005 LRDP significant impact," it says "no." I can't even  
3 believe that. It is backed up from King and Storey sometimes  
4 all the way back up to Laurent and High, so I can't believe  
5 that you can say "none" there. That's my comment.

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6 MR. ZWART: Thank you. Hi, there.

PH-40

7 MS. TIMBERS: My name is Amelia Timbers, and I'm  
8 here to also ask the lead agency to grant at least 15 more  
9 days of comment period. And I'm aware that CEQA has already  
10 been satisfied and we have gone above and beyond that. But  
11 clearly, it would be wise, and on behalf of the user group to  
12 keep a vent open for all the pressure that's building up in  
13 the community.

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14 There's no clear argument against allowing more  
15 comment on various things in the document. It doesn't have  
16 to be unlimited, but it seems like a grand folly at this  
17 point not to offer more comment time. It's going to be a  
18 slow process anyway, so we might as well slow it down where  
19 it counts, rather than being slowed down later by lawsuits.

20 MR. ZWART: Thank you.

PH-41

21 MR. CREMIN: My name is John Cremin, and I'm a  
22 former staff member at U.C.S.C. And I want to say that I  
23 don't think the Environmental Impact Report can get a fair  
24 review as long as the Regents are the body that reviews the  
25 Impact Report, as long as they're the ones initiating the

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1 growth. They need to consider this further, locating the  
2 growth in San Jose or in other areas that are already  
3 impacted that could more easily absorb the growth. Thank  
4 you.

5 MR. ZWART: Thank you. I don't see anyone else  
6 wishing to speak.

7 We will stay here, since we advertised that the  
8 hearing would be open until 10:00 o'clock, unless other  
9 people come by. But I don't anticipate a lot more in the way  
10 of comments. So I thank you very much for your attendance.

11 (Off the record, 9:22 p.m. to 10:04 p.m.)

12 MR. ZWART: This hearing is now closed.

13 (End of record, 10:05 p.m.)  
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10 REPORTER'S TRANSCRIPT OF PROCEEDINGS  
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13 THURSDAY, NOVEMBER 30, 2005  
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20 HELD AT:

21 UNIVERSITY OF CALIFORNIA SANTA CRUZ  
22 STEPHENSON COLLEGE DINING HALL  
23 SANTA CRUZ, CA 95060  
24  
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1        SANTA CRUZ, CA, THURSDAY, NOVEMBER 30, 2005, 7:05 p.m.

2                MR. VANI: Good afternoon, everybody. Thank you  
3 for coming today. I'm Tom Vani, and I'm the Vice-Chancellor  
4 for Business and Administrative Services at UC Santa Cruz.

5                I would like to welcome you to the second of two  
6 public hearings on the 2005 LRDP Draft Environmental Impact  
7 Report.

8                I'd like to talk instead of read, but this is  
9 important, so I have to read it.

10               As many of you know, the campus has been working on  
11 the Draft 2005 Long-Range Development Plan and the Draft EIR  
12 for over two years. The process has involved a good deal of  
13 communication between the campus, the City, other public  
14 agencies and members of the public.

15               Thank you to all of you who have participated in  
16 the process to date. We truly appreciate the time and effort  
17 you've put into this multi-year effort to update our  
18 Long-Range Development Plan. I believe this process is  
19 helping clarify the planning challenges that face our campus  
20 we endeavor to fulfill our commission. I also believe this  
21 process is shedding light on the opportunities we have to  
22 work together on these challenges. Today's public meeting is  
23 one way for those of you here to participate in an important  
24 part of this process, and we welcome your involvement.

25               Before I turn the microphone over to our campus

1 planner, John Barnes, I would like to reassure you that I am  
2 not the official record-keeper. We have qualified personnel  
3 that will document people's oral comments. But, as a  
4 believer in the value of ongoing dialogue between the campus  
5 and community, I do plan on being a good listener.

6 Again, thank you for your interest and willingness  
7 to contribute to this process. John Barnes will not fill you  
8 in on the details of this afternoon's hearing and the EIR  
9 process.

10 MR. BARNES: Thank you, Mr. Vani. I am John  
11 Barnes, Director of Campus Planning for UCSC. With me this  
12 afternoon is Shabnam Barati, the Project Manager who prepared  
13 the Draft Environmental Impact Report, representing URS  
14 Corporation. Campus Planning Staff are available at the  
15 table in the back of the room with an informational handout,  
16 a box to receive written comments and speaker cards.

17 If you wish to comment on the Draft EIR today,  
18 please plan to speak at one of the microphones in the front  
19 of the room. You may also provide your written comments in  
20 the comment box at the back of the room. You can do both, of  
21 course -- as well as providing us information or comment  
22 through the website or e-mail. Either way, or any way, your  
23 comments and U.C.S.C.'s response to it will be part of the  
24 Final EIR.

25 We invite and welcome your input analysis, since it

1 will assist us in ensuring that our analysis is complete and  
2 that all potential environmental impacts of our proposed  
3 development have been considered in the Environmental Impact  
4 Report. The California Environmental Quality Act, CEQA,  
5 provides for a 45- to 60-day public comment period for Draft  
6 EIR.

7 Today's public hearing, and an earlier one held on  
8 November 16th at the U.C.S.C. Inn are all part of that public  
9 comment process. The campus has decided to extend the public  
10 comment period beyond the original 60 days. The public  
11 comment period will now end at 5 p.m. on January 11, 2006.

12 We give serious consideration to each comment we  
13 receive. Our response to each comment formally submitted  
14 during the public comment period, whether it is submitted  
15 orally or in writing, will be included in the final EIR.

16 As you may know, the 2005 Draft Long-Range  
17 Development Plan is the University's proposed plan to  
18 accommodate future potential enrollment and development on  
19 the Santa Cruz campus. The Draft LRDP includes a proposed  
20 land use map that depicts the types of uses and areas of  
21 development envisioned for the main U.C. campus through 2020.  
22 The copy of the Land Use Map is on the easel over here, and  
23 copies of the map are also included on the handout that you  
24 may pick up over here to my left.

25 The 2005 Draft LRDP includes goals and policies

1 that would provide a framework, or program for campus  
2 development over the next 15 years, the LRDP does not dictate  
3 or even propose specific development; rather, it is a maximum  
4 envelope of development that would be considered over the  
5 next fifteen years.

6 The 2005 LRDP Draft Environmental Impact Report is  
7 a programmatic analysis that looks at the potential  
8 environmental effects on the campus and in the region by the  
9 year 2020 if the campus were developed to the level  
10 envisioned in 2005 Draft LRDP, and if student enrollment on  
11 campus were to grow to 21,000.

12 As you can see, the LRDP land use map includes only  
13 campus lands; however, because development of the campus may  
14 have wider reaching environmental effects, the Draft EIR also  
15 assesses the potential for the 2005 LRDP to result in  
16 environmental impacts in the City of Santa Cruz and in our  
17 wider region.

18 The cumulative effects of campus growth that would  
19 be accommodated by the 2005 Draft LRDP are also considered in  
20 conjunction with the potential effects of growth envisioned  
21 by other entities in the region. Finally, the Draft EIR  
22 assesses the potential environmental effects of several  
23 alternatives to the 2005 Draft LRDP and compares the effects  
24 of several alternatives with those anticipated to result from  
25 the proposed plan.



1           In addition to identifying and disclosing the  
2 environmental impacts related to full implementation of the  
3 proposed 2005 draft LRDP program, it also includes analysis  
4 of three specific projects: The 2300 Delaware Avenue  
5 Project, the Family Student Housing Redevelopment Project,  
6 and the Infrastructure Improvement Project.

7           The Environmental Impact Report proposes mitigation  
8 measures to reduce or eliminate identified impacts, both of  
9 proposed growth under the LRDP and of these three projects.

10           For those to who wish to speak this afternoon,  
11 speaker's cards are available on the information table at the  
12 back of the room. If you wish to speak, please fill out a  
13 card and bring it to one of the microphones at either side of  
14 the front of the room. A staff person will collect your card  
15 at the microphone so that your name can be recorded  
16 accurately in the hearing transcript.

17           For those of you who wish to submit written  
18 comments today, there is a box for comments on the  
19 information table. Written comments can also be submitted by  
20 mail, or e-mail, or by hand delivery to our offices on  
21 campus; details on how to do that can also be found on a  
22 handout at the information table.

23           It's important that you state your name for the  
24 record. The court reporter will be handling that. A staff  
25 person will collect your card at the microphone so your name

1 is spelled correctly in the hearing transcript.

2 For those of you who wish to submit written  
3 comments, there's also a box for that on the information  
4 table. You may also submit written comments by mail, regular  
5 mail, e-mail or by hand-delivery to our offices on campus.  
6 Details on how to do that can also be found on a handout at  
7 the information table.

8 All comments made this afternoon will be recorded  
9 by the court reporter. These and the written comments  
10 received during the public comment period will become part of  
11 the Final Environmental Impact Report for this project.

12 We will not respond to your comments today, but  
13 written responses to all comments that we receive through the  
14 public comment process will be included in the Final EIR.

15 The final 2005 LRDP EIR will be presented to the  
16 Regents of the University of California for review and  
17 consideration in conjunction with their consideration of the  
18 2005 LRDP. We anticipate the Regents will consider the final  
19 EIR for certification in summer, 2006.

20 Once again, details about how to access the 2005  
21 Draft LRDP and the Draft EIR documents, and about how to  
22 submit written comments on the LRDP EIR are available in a  
23 handout at the information table.

24 We are asking each representative of a public  
25 agency or public official to limit their comments to five

1 minutes. I don't think that there's too many folks here  
2 today. We have plenty of time, so, you know, go ahead and  
3 talk, but try not to filibuster since we have to record all  
4 of this. And make sure any of your detailed comments that  
5 you want to make sure are really in there and that we haven't  
6 missed, please give us those in writing, as well.

7           Anyway, that's everything I have. The one change  
8 for some of you who did follow this, we did extend the  
9 comment request for City Council. They asked us to extend  
10 the public comment period; we've extended it to January 11th,  
11 one day after their City Council meeting in January of 2006.  
12 They've been informed of that directly this morning and  
13 there's a press release that's gone out about that this  
14 afternoon. Is that it?

15           MR. BARNES: It appears to be.

16           MR. VANI: Thank you, Tom. Okay. We are ready  
17 for your comments, please. C'mon up. Don't be shy.

18           MR. BARNES: Please step up to the microphone and  
19 give us your comments as you see fit.

20           MR. STEVENS: Hi, my name's Ron Stevens. I'm a  
21 resident of Santa Cruz, and I gave some comments at the  
22 previous public hearing.

23           I've had a chance to do some further review of the  
24 LRDP, but by no means is it a thorough review, because it  
25 takes a lot of time to get through 900 pages and understand

1 what's going on.

2 But my initial comments are: The LRDP has  
3 substantial inconsistencies throughout the documents, and in  
4 the various sections and between the various sections, and  
5 that, therefore, it's something that the general public just  
6 can't understand. It's so confusing with so many  
7 inconsistencies that to make sense of it is darn near  
8 impossible.

9 So I would request that the University try to come  
10 up with a better way to enable a full understanding of the  
11 scope of the project and the details, and to try to avoid  
12 the vague statements about, something may be done or may not  
13 be done, or something may be funded or may not be funded.

14 Some specifics that come to mind are campus  
15 resource lands, which the University -- the LRDP is saying  
16 that will not -- will probably not be developed unless it's  
17 necessary or something. I think that's really impossible  
18 for many of us to understand the effects when we don't know  
19 if you're really going to do it. That's sort of my general  
20 comment.

21 The other factors that I think may not have  
22 been -- I mean, I hadn't viewed the Coastal LRDP for the  
23 Marine Science Campus. That's not -- I know it's not the  
24 topic here today, but it's from a year or two ago. It uses  
25 a different cumulative analysis of expected campus growth to



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1 19,000 students, and this one is doing 21,000 students.

2 The traffic projections don't agree. Not only are  
3 there inconsistencies within this LRDP, but there are  
4 inconsistencies between the two LRDPs. And also, my opinion  
5 is that I don't understand why there are two LRDPs for  
6 campus-related expansion. The Marine Science Campus, as  
7 it's now known, is projected to be close to 550,000 square  
8 feet, yet it's being separated from the main campus in the  
9 LRDP. It's in all or part of the community of Santa Cruz,  
10 and should be considered as a whole.

11 So that's my comment for the moment. Thank you  
12 for this opportunity. And I guess -- actually, I would like  
13 to say one more thing, just to get it on the record.

14 Nowhere in the LRDP is the subject of carrying  
15 capacity addressed. When I was a student here -- I'm an  
16 alumnus from 1976 in biology -- one of the courses I had was  
17 in natural ecology. I'm sure many people here have studied  
18 such concepts or read about them.

19 You have to look at the carrying capacity of any  
20 habitat, humans included. We've reached a point in the  
21 evolution of human society here in 2005 where we know that  
22 there is not an infinite amount of growth that is possible  
23 in Santa Cruz. We know that our water supply is limited;  
24 therefore, at some point, you have to pick a point at which  
25 there can be no more growth.

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1           We don't know at what point that will be, but for  
2 the University not to acknowledge that in the LRDP, I think  
3 is missing the boat here. We don't know if Santa Cruz can  
4 accommodate another 5,000 people or 10,000 people or 25,000  
5 people or one hundred thousand people.

6           So if you look at that in regards to carrying  
7 capacity to all the impacts, especially in regards to  
8 traffic, housing and water, then you have to come up with an  
9 idea of how much remaining -- how much of the remaining  
10 growth is possible from the standpoint of carrying capacity  
11 does this LRDP account for?

12           So a lot of times, cumulative effects are  
13 analyzed, but, hey, if this growth takes us beyond the  
14 carrying capacity, that is something that should be stated.  
15 Is desalination sustainable as a way of life for 50 years  
16 into the future? Is that how the University's going to rely  
17 on water supplies, by burning fossil fuels to create enough  
18 water to grow? Is that something that is sustainable over  
19 time. I don't think it is. Thank you.

20           MR. GRODBERG: Hi, my name is Eric Grodberg. I'm  
21 also an alumnus. And although there are many things to  
22 comment on, I'm just going to confine myself to one small  
23 question.

24           In the Population and Housing Section, Chapter  
25 4.11, the EIR denies that the high price of housing on

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**PH-43**

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1 campus is an environmental effect and does that with the  
2 simple assertion: It says, "Except in a few years recently  
3 when more housing became available in the City of Santa Cruz  
4 due to the economic downturn, and students were able to find  
5 housing off campus, the housing on campus has been fully  
6 occupied. Thus, typically, only those employees and  
7 students who cannot find housing on campus will be expected  
8 to live off campus." This says everyone wants to live on  
9 campus no matter what price it is, and it's only an  
10 aberration of a few years when they've seen people move off  
11 campus.

12 This argument is completely specious for the  
13 following reasons: It defies common sense. I'll give you  
14 solid numbers. It also defies basic market principles.  
15 There's just an assertion, no analysis, no facts at all  
16 about why students would live on campus or off campus. The  
17 figures cited deeper in the chapter actually support the  
18 kind of argument that price is a factor, and U.C.S.C.'s own  
19 proclamations, the Administration's proclamations contradict  
20 this assertion.

21 So currently, on-campus housing costs \$974 a month  
22 for a single dorm room, not including food service; \$857 a  
23 month for a double. Once again, this is without food  
24 service. That means that two students sharing a double are  
25 paying over \$1700 a month. I mean, four students sharing

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1 two doubles are paying \$3,428 a month for sharing two double  
 2 dorm rooms, again no food service included.

3 I printed out some statistics, and these are the  
 4 most recent statistics available, or published. A  
 5 two-bedroom apartment or condo they're listing has an  
 6 average rental price of -- this is downtown or in town  
 7 off-campus -- \$416. That's -- so you take two -- two sets  
 8 of double dorm rooms, four students, and they can rent an  
 9 apartment in town for \$1416. That's a huge difference. And  
 10 I calculated that out. That is, to live on campus -- they  
 11 would be paying \$242 percent more to live on campus than to  
 12 live off-campus. That's just an astounding figure. I don't  
 13 understand how in your EIR you can assert that that huge  
 14 economic disincentive to live on campus doesn't exist.

15 So that's just common sense. It's also, I think  
 16 -- to say it more formalized, in economic terms, the  
 17 elasticity of demand. As it gets more expensive, it gets  
 18 less desirable. I think you need to address that as an  
 19 environmental concern because it certainly creates more  
 20 students, or students who live off campus which does create  
 21 more traffic.

22 Also, as I mentioned, you didn't back it up by any  
 23 data. You said -- you just asserted it, you didn't -- and  
 24 you said that the -- that typically, only -- quote, "Only  
 25 those students and employees that cannot find housing on

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1 campus would be expected to find housing off campus." You  
 2 didn't cite any numbers for on-campus or off-campus.

3 You report the condition by Bay Area Economics  
 4 that states that the rental price of housing off campus is  
 5 relatively stable. So while the price of campus --  
 6 off-campus housing was stable, the price of on-campus  
 7 housing increased. Therefore, the pressure -- the economic  
 8 pressure to move off campus increased and you're not taking  
 9 that into consideration at all.

10 So really I think your data supports the fact that  
 11 price does have an effect. Also, on a number of occasions  
 12 in public forums, Chancellor Denton says, "The reason  
 13 students live off campus is because of lifestyle choices."  
 14 So that's really a counter-argument, because in this report,  
 15 you're saying that, once again, typically only those  
 16 students and employees that cannot find housing on campus  
 17 would be expected to live off campus."

18 But Chancellor Denton is saying, "You can't keep  
 19 students living on campus if they want to move off campus  
 20 because they want the freedom," and blah, blah, blah. And  
 21 she said that several times.

22 You can't have it both ways. You can't say that  
 23 everyone wants -- you'll have a hundred percent occupancy  
 24 because everyone wants to live on campus, and then saying,  
 25 you know, the next time, "Well, we can't keep people on

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1 campus because the amenities downtown are too attractive."

2 So, for all these reasons, I think your report is  
3 very inadequate in terms of this one question, cost of  
4 housing. And it's -- really, to be honest, it's a farce. I  
5 don't even know why you guys even attempted to make this  
6 argument. Thank you.

7 MR. BAIN: Hello. My name is Michael Bain and I'm  
8 a student here at U.C. Santa Cruz. One of the main things  
9 I've heard when talking to students here at the campus about  
10 why they chose U.C. Santa Cruz over other U.C.'s was that it  
11 seemed very environmental, and that it had a lack of  
12 development. That is, that it seemed more like buildings  
13 surrounded by forest rather than forest surrounded by  
14 buildings.

15 My question is, if you have considered this? If  
16 you've considered how many potential future students would  
17 choose another college over U.C. Santa Cruz because U.C.  
18 Santa Cruz seemed too developed.

19 In summary, I'm just asking that expanding the  
20 campus by adding dorm rooms, roads, facilities may drive  
21 away the very students that it's expanding for.

22 MR. BARNES: Thank you.

23 MR. AIRD: Hello, I'm John Aird. I'm a resident  
24 here, and I'd just like to play off of that comment that we  
25 just heard.

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**PH-44**

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**PH-45**

1 I find the whole process here, which some of you  
2 know I've been following very closely for the last  
3 year-and-a-half, or whatever, is really a paradox. The  
4 planning from the very beginning never did a good job  
5 defining the drivers behind a growth strategy that has never  
6 been defined other than the generalization about population  
7 growth in California.

8 But the fundamental reason as to what is behind  
9 this massive growth is that no plan, no matter how much of  
10 it is the aspirations academically of the faculty, how much  
11 of it is to do our fair share for California students that  
12 are coming down the line, and how much of it has to do with  
13 administrative ego is simply just not clear.

14 Similarly, I think the alternatives to this  
15 campus -- this campus's growth are woefully inadequately  
16 described. They're simply listed and dismissed out of hand.  
17 Clearly, people have come -- the legacy of this campus is as  
18 an alternative campus within the University system, and  
19 faculty and students have been drawn to this campus because  
20 of those differences.

21 When you think of, what are the ingredients that  
22 really bring about that difference, it is the small size, it  
23 is the environmental ethic which was discussed, it's the  
24 nature of the offerings here academically, and it's part of  
25 a community that's on the coast that's a small community.

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1 And if you look at those ingredients and simply tick off  
2 what will this plan do, does it drive it in a more positive  
3 direction or in a more negative direction of those various  
4 indices?

5 Without exception, every one of them goes in a  
6 negative direction, and I think that kind of environmental  
7 effect is not described in any kind of -- which really is  
8 the essence of why this should be -- this plan should be  
9 undertaken to begin with. It's not growth for its own sake.  
10 It's because it's purportedly to achieve certain objectives.  
11 But when it is so out of sync with both the heritage here as  
12 well as this community, one's got to ask, "Why there hasn't  
13 been much, much more rigorous scrutiny of it? Let me just  
14 tick off a number of the things that I think are so  
15 obviously going to be degraded.

16 If you look at the campus itself, and the plan,  
17 the footprint, I mean, it's going to be doubled. We're  
18 essentially putting a second campus as large as the one that  
19 exists on top of this one. The problem is it's not on top  
20 of it, it's spread out on all sides so it is going to eat up  
21 and change forever this -- the beauty of this campus, and  
22 that can't be hidden.

23 I heard the architects go through this wonderful  
24 little description of how every vantage point was looked at  
25 to make sure that certain trees and so forth would be

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1 preserved. I think it's ludicrous. You cannot build four  
2 million square feet of property on these meadows and within  
3 these forests and pretend that you're saving the existing  
4 ecological gem that this campus is.

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5 Secondly, it's ironic that while purporting to  
6 look at all these environmental concerns, there is no  
7 environmental concern as it plays out in the surrounding  
8 area that is the host of this campus. Whether it be housing  
9 as was just described, whether it be traffic, there's only  
10 two access routes now.

11 If you happen to live on them, which I do live on  
12 one of them, all you see day in, day out are cars and busses  
13 going by your home. These are no longer residential  
14 communities, they're not neighborhoods; they are  
15 thoroughfares up to the University.

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16 Basically the launching pad is like a loading dock  
17 at a manufacturing plant. That's really what it is. And  
18 students who go by, I can understand why they don't think  
19 much about this. But if you live in this community, it  
20 changes this community, and this plan will do that even  
21 more.

22 The water has been spoken to. Traffic, housing,  
23 the environment, all of these, the mitigations that are  
24 stated in here, if people will just thumb through Chapter 2,  
25 they will see on the major items that are identified as

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1 being negative implications of this plan, they are defined  
2 as being significant. When you get to the part as to what  
3 are the mitigations that are going to be implemented, almost  
4 without exception, all the major ones are labeled as "S.U.,"  
5 significant but unavoidable.

6 How a public institution can use taxpayers' money  
7 and the goodwill of the community and not address  
8 significant negative implications for the campus and the  
9 community within which it resides and simply go through and  
10 say time after time, these are significant, negative  
11 implications, but they're unavoidable and should be  
12 unacceptable.

13 I would urge the Regents and the planners that are  
14 behind this to much more seriously look at the information  
15 our five alternatives -- which were identified in the  
16 beginning, but as I said before, I think have been woefully  
17 and inadequately researched.

18 I think there are other alternatives to those that  
19 haven't even been looked at which I think should be  
20 considered. Thank you.

21 MS. HAFF: Hi, my name is Tonya Haff. I'm on  
22 staff here at the University at the Museum of Natural  
23 History and the Environmental Studies Department. I want to  
24 comment on the Biological Resources Section of the Draft  
25 EIR, which, to tell you the truth, has been all I've been

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6

1 able to read.

2 I'm glad that you extended the time period for  
3 comments, but I wish you would extend it a bit farther.  
4 Nine hundred pages is almost impossible to digest and  
5 understand. It's taken me over 16 hours to go through the  
6 Biological Resources Section alone and draft comments which  
7 I will also be submitting in writing.

8 First of all, I would just like to say that I'm  
9 concerned about the quality of -- of consulting that went  
10 into drafting the Biological Resources Section. There are  
11 many, many mistakes just at a very basic level that I find  
12 very concerning. I actually told the Planning Office about  
13 some of these mistakes before the EIR was drafted and they  
14 are still in the EIR, which I find a little bit upsetting.

15 For example, the report says that Douglas  
16 squirrels are common in the redwood forest on campus, and  
17 Douglas squirrels are common and found farther south than  
18 gray squirrels. Western gray squirrels, however, are common  
19 in the redwood forest and the mixed evergreen forests on  
20 campus.

21 The report states, "Downy woodpeckers are common  
22 in the redwood forest." This is not true. Downy  
23 woodpeckers are not a forest species; hairy woodpeckers are.  
24 They are probably all within sight and sound. So if you had  
25 poor biological consulting or careless consulting, these



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1 kinds of mistakes could occur and magnify.

2 I'm also concerned by just the general species  
3 list for habitats that are discussed. There's more  
4 mistakes, and I've detailed them all in writing. It's  
5 actually too long to go into. But I feel that, in many  
6 cases, the real significant indicator species of particular  
7 habitats on campus are overlooked in favor of more  
8 generalist species. So I'm not necessarily indicating that  
9 this is somehow contrived or insidious, but it has a poor --  
10 it looks bad, basically.

11 For example, in the grasslands, a grassland  
12 associated species is listed as ravens. Ravens do fly over  
13 the grasslands; however, they're not associated with  
14 grasslands at all. And golden eagles are associated with  
15 the western prairie where they are directly associated with  
16 grasslands in the east meadow, the top of which is slated  
17 for development. I believe that this is one of the most  
18 sensitive areas on campus that's being considered for  
19 development in the LRDP.

20 I am also concerned about how vague the language  
21 is, especially in terms of the mitigations that are  
22 proposed. It's always "when possible," "when feasible," "if  
23 economically viable." And also no -- the mitigation plans  
24 that are offered are extremely vague, so extremely vague as  
25 to be almost meaningless.

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1           For example, when talking about mitigation for  
2 increased use by human pedestrians and bike use of the  
3 meadows that are used by the Ohlone tiger beetle, the plan  
4 calls for reduced human use, but there's no specific plans  
5 for how that would be accomplished. If there would be  
6 increased patrolling and enforcement by people, and how that  
7 would be funded, and if that would actually happen. Because  
8 it's all fine to say, "Well, we will control it somehow,"  
9 but I think more specific plans need to be described. And  
10 that's not just for the Ohlone tiger beetle, but for all the  
11 mitigation measures that are proposed.

5

12           I'm also really concerned about the section,  
13 Biological Effects, Section 12, maybe -- oh, no. The Cave  
14 and Vertebrate section discussing the forest species of  
15 special concern that inhabit Empire Cave on campus and also  
16 inhabit caves in the Wilder Ranch property, but use the same  
17 drainage.

18           First of all, in case people don't know, these are  
19 considered Species of Special Concern by the federal  
20 government, and they probably should be listed as endangered  
21 species considering the fact that they're only found in that  
22 drainage and no place else.

6

23           The section says that no significant effect,  
24 direct or indirect, is going to happen with the development,  
25 and obviously, that area is not being developed so direct

1 impacts are -- won't be happening. But one thing that they  
2 talk about in terms of indirect impacts is just increased  
3 human use of the cave.

4 It's a place that people like to go and hang out  
5 and party. And they say, "Well, for one thing, we don't  
6 think that there will be any effects because these things  
7 are cave dwellers and so they're not going to be around the  
8 cave entrance where the people really like to hang out and  
9 party.

10 That's untrue. The cave spider is a twilight  
11 dwelling spider. It only inhabits areas around the cave  
12 mouth, and it's very sensitive to human disturbance. Also,  
13 people regularly go spelunking in the cave. I think this is  
14 a wonderful resource for students on campus, but at the same  
15 time, I think it does need to be controlled and that the  
16 University is doing nothing to control its access. Its  
17 plans to control future access are quite frankly pathetic,  
18 saying, "We will give out signs and fliers through the  
19 natural reserves."

20 So I spend a lot of time around these areas, and  
21 the signs are almost always torn down and there's no  
22 literature available. I just think that it's woefully  
23 inadequate, their plans for protecting cave invertebrates.

24 And talking about runoff, which has another  
25 potential effect on cave invertebrates, it says they are

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1 controlling the runoff during storms, so it will make a  
2 25-year-flood event, but there's no -- no more than a  
3 25-year-flood event, which the invertebrates should be able  
4 to handle.

7

5 But there's no mention of the fact that with  
6 increased runoff, that 25-year-flood event may occur much  
7 more frequently than 25 years, and there's no study how that  
8 may effects the cave fauna.

9 I'm also concerned that badgers aren't mentioned  
10 at all in the Biological Resources Section. These badgers  
11 historically have been present on campus, and, in fact, Kim  
12 Gling at Echo Systems West found a fresh skull in the meadow  
13 last year. They are a Department of Fish & Game Species of  
14 Special Concern and should be discussed in the EIR.

8

15 Also, in terms of migration and movements, they  
16 should be discussed as well. It's kind of funny that,  
17 instead of badgers or the long-tailed weasel, which also  
18 occur on campus, the movements of racoons are considered.  
19 Racoons are misopredators that are commensurate with humans;  
20 they will do fine no matter what we do. I just thought it  
21 was a bit inappropriate that racoons -- the movement of  
22 racoons was covered where the more sensitive species were  
23 overlooked. A couple more things.

9

24 In terms of nesting birds, which are covered by  
25 the Migratory Bird Treaty Act, and they by acts of the

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1 California Fish & Game -- I think it's Code Section 3505.  
2 The EIR talks specifically about how it will protect raptor  
3 nests from construction, which is putting in fencing within  
4 250 feet of every nest it finds or that consultants find  
5 during the breeding season.

10

6 That's highly unlikely to protect a nest from  
7 deprecation or abandonment if there's construction going on  
8 around it. Actually, it also doesn't address the nesting  
9 songbirds, which are also covered under those Acts. So I  
10 would like to see that specifically addressed.

11 And finally, I would like to know why the  
12 unsilvered fritillary butterfly is not considered in the  
13 Draft EIR, because, although its nearest breeding population  
14 is in Big Basin State Park, its host food, johnny jump-ups,  
15 are found in abundance on campus, the larval host food. In  
16 the same Jones and Stokes Report that I read that says  
17 chicories are abundant on campus, squirrels are abundant on  
18 campus, it says the unsilvered fritillary is not.

11

19 The reason why it was not considered in the EIR is  
20 because, given the considerations, I'm surprised these  
21 things like the California -- the San Francisco lacewing and  
22 other invertebrates that are much less likely to occur here  
23 were considered, and the unsilvered fritillary were not.

24 So, those are my comments. Thanks.

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25 MR. HARDER: Hi. Thank you for having the public

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1 comment period. My name is Dan Harder. I'm an adjunct  
2 faculty member and on staff here. I'm the Executive  
3 Director of the Arboretum.

4 I guess my comments are based on the fact that I  
5 should be on the inside of this process and be fully aware  
6 of what's going on. I did spend a considerable amount of  
7 time reading the entire document.

8 The Arboretum recently has gone through a planning  
9 attempt, and what our plans are, we presented them to the  
10 consultants within that LRDP. The Long Range Development  
11 Plan, you see, is the first chance anybody on this campus  
12 has had to see whether all of our plans are integrated into  
13 this document.

14 Long-range development plans tell you all the  
15 things you could possibly do; then, over the year, you try  
16 to reach the hundred percent goal, so you talk about the  
17 hundred percent goal that you want.

18 We spent considerable time with my Board,  
19 community members, campus faculty and other members of the  
20 campus community to develop this, including the long-range  
21 red-legged frog. We have all the things that are integrated  
22 into the plan about the sensitive habitat of the Arboretum  
23 and the plants that are evident there.

24 One thing I see as a flaw in the process, since  
25 this is the first chance I've seen it to go through it to

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1 make sure everything of ours is in there. In going through  
 2 it, I gleaned quickly 22 items that are glaringly missing  
 3 from the Arboretum planning documents that were provided to  
 4 the consultants for this and are missing from the document.

5 Sighting of the golden eagle, breeding habits of  
 6 the bobcats are just some of the things we see. Mountain  
 7 lion evidence. Not just as a consultant coming here every  
 8 three weeks, but people who drive to the Arboretum every day  
 9 are going to see them. We have pictures we can show that  
 10 show mountain lions and bobcats, since both animals do occur  
 11 at the Arboretum and other campus lands.

12 I think within the LRDP there's very little  
 13 opportunity to provide detail. For those of us who have,  
 14 some detail for what we want developed should be provided to  
 15 the citizens. It's been done. It's been brought up. It's  
 16 hard to get a grasp on what's being proposed when you're  
 17 talking about square footage of space and how it's going to  
 18 be used and phased in.

19 I think that the process in general has little  
 20 opportunity to provide detail on projects that we have good  
 21 evidence of. I don't know if this is shielding or not  
 22 allowing additional comment.

23 One of the things we've included in our plans is  
 24 to provide a wildlife fence so that when we actually develop  
 25 the jointly managed area, which is on the western edge of

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1 the Arboretum just north of the Empire Grade there, north of  
2 the Arboretum, it will be a 40-acre plan managed with the  
3 campus natural research. We also have plans to develop a  
4 California native plant teaching garden there, teaching  
5 recreated plans within California and restoring the coastal  
6 prairie habitat.

7 It requires a fence to keep the animals out, and  
8 the fence was never mentioned in any of the documents except  
9 in the mitigation. If that sort of detail comes out in the  
10 mitigation, how're we going to deal with the mitigation  
11 without the details of even proposing to have a fence? It  
12 seemed kind of backwards to me.

13 I don't know how to engage in this process because  
14 I already provided what I thought was going to in there.  
15 Now I find out things are missing, and I don't know if the  
16 next process is providing more substantive content for the  
17 LRDP so we know what those are. We know what we want, and I  
18 think details should be provided.

19 I think that's all I have. Thank you.

20 MR. BECKETT: Hello, my name's Julian Beckett.  
21 I'm an alumnus. I've been here about twenty years, in Santa  
22 Cruz. When I got here, the motto was "an ideal becoming  
23 real." What they meant by that was a small, basically  
24 undergraduate college or university that focused on  
25 undergraduates, and keeping things, you know, small. It now

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1 seems like the only message from the Regents has been grow!  
2 Grow! Grow!

3 I mean, I just can't ever recall speaking to one  
4 person or hearing from one person -- friends in town,  
5 students, former students -- who have ever approved of that,  
6 who have ever liked the idea of grow, grow more. I mean,  
7 residences are being built, you know, same money, same state  
8 money. Why can't they just build -- why can't more  
9 university be built elsewhere? One's going up in Merced;  
10 that's awesome. But just visually, I just want to take  
11 visuals.

12 I was a Stevenson student. There were eight  
13 hours, eight dorms. Now there's these new ones, 9, 10, 11  
14 or something. How can you clear these? They're visually  
15 atrocious. Who designed that? You know, I mean, it's --  
16 they just totally, boom! It's just, like, there. It's so  
17 big, it just -- you know, it's just horrible. Just this  
18 white thing that, you know, blocks out the trees. In the  
19 old ones even, there's a little bit of a slant, but here are  
20 these white boxes. Boom! There they are! No sense of  
21 caring for the visuals of the environment or anything.

22 So aside from just jamming more students in,  
23 stealing more money -- you know, 2,000 bucks for one room  
24 for a month is basically stealing, you know, just more news  
25 and so forth. It's not just the Stevenson one, but the new

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1 bookstore. The old ones were nice, a wood design, kind of  
2 tucked in there. They jammed this metallic thing right up  
3 against the road. You know, it looks terrible. I mean, who  
4 did that? Who's responsible for that?

5 The buildings between Kresge and Porter are a  
6 little bit better, I guess, but, you know, they're still  
7 just way overground, you know. I mean, there's such a thing  
8 as limits, and the Regents -- you know, who's -- who's doing  
9 this in Sacramento? Are they all just thinking, Karas, give  
10 him a few days to say something, and boom! Boom! Boom!  
11 That's the way it seems.

12 Everybody from elected representatives to Marty  
13 Waumhouse to long-term residents, to students, faculty and  
14 staff, not one comment that I was -- I was -- at the first  
15 meeting, I did hear someone say, "Yeah, it's kind of a good  
16 plan. No, no! Everybody's like, no! I mean, that's the  
17 basic word, no!

18 You know, it's not acceptable from carrying  
19 capacity to visuals, and not just visuals. It's a way of  
20 walking around and seeing that things are, you know, placed  
21 as they should be, not, you know, just this bulky mess.

22 So basically, that's my comment. I think it's  
23 just summed up in one word: No.

24 MS. LA TOTTE: I spoke already at the last  
25 hearing. My name is Eva La Totte. And please bear with me,

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1 my limits of English. I want to talk to the process, the  
2 hearing period process.

3 To hear, they need someone to speak, and those who  
4 speak have to be informed. The last two weeks I spent  
5 getting a great deal of talk to my neighbors, friends,  
6 colleagues. Most of the them don't know or know very  
7 little. Same thing I said last time.

8 I welcome that you extend the hearing period, and  
9 I missed this morning when you went to the "Sentinel," that  
10 there's an ad, preferable first page, "Come all to the  
11 hearing at Stevenson College Dining Hall, 3:00 o'clock until  
12 6:00, free parking. We want to hear from you. If you don't  
13 know yet, we tell you. We have material."

14 My suggestion and request is that you do much  
15 more. Do your utmost to solicit the opinion of all Santa  
16 Cruzians who are at all capable of doing it. That means  
17 that you inform them first. We are not informed. It took  
18 me a great deal to know what I know now. I'm an outgoing  
19 person, I'm a people person. Not everybody is that. And  
20 so, you need to inform Santa Cruz. You need to make this in  
21 writing. You need to make this known that you are having  
22 the hearing.

23 I hope you will have one more hearing at least,  
24 ideally in the civic auditorium, and really listen to us.  
25 We are concerned. Everybody I talked to and who learns

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1 about this -- I don't know the English word, are  
2 flabbergasted and even worse. And it's -- it's grim. I  
3 think it's --

4 I have the feeling you don't know what you're  
5 doing really to Santa Cruz with this plan. If you live  
6 here, you would eventually get to the point. It's enough.  
7 It's just fine as it is, and no more of it. Thank you.

8 MR. PROBEK: How do you do? I'm an undergraduate  
9 about to finish. I'm Ryan Probek, and I want to review back  
10 on that just a little bit.

11 It's just that I hope we get another chance to  
12 speak as a community against this or constructively with  
13 this. But the lack of feeling that it will be constructed  
14 just -- it seems like talking into a deep abyss that you're  
15 not sure anyone's actually listening back, and how that  
16 process goes on on the other side of the screen.

17 It's very mystifying and not making it feel  
18 satisfying that it's a process that we're developing,  
19 something together which I feel is quite a necessary part.  
20 I just learned about this meeting, like, sitting at a bus  
21 stop yesterday. So I didn't have a chance to, like, go  
22 through the whole LRDP, all 900 pages, I guess, which I will  
23 try to do some of.

24 But just in general, looking at the plan that's  
25 most prominent, one of the things that struck me is just how

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1 much we're spreading. I'm an ecology student, and one thing  
2 we learn about is how we are extending our edge effect into  
3 new areas instead of consolidating and using the spaces  
4 we've used already, places we've already degraded and places  
5 in between buildings and such.

6 As we refer to ourselves as "City on the Hill," I  
7 think that a tree would reflect the City much more than  
8 urban sprawl suburbia and spreading out as much as possible.  
9 That's just one of the major things that struck me as well.

10 I went to another planning meeting about a  
11 possible sports facility -- I think Dan spoke to this a  
12 little bit, about how there's lots and lots of generalities  
13 and no specifics about what will go into the spaces for  
14 physical education and all these different spaces.

15 It seems that when I went to that meeting, that it  
16 was -- it was just repeating a lot of stuff we already heard  
17 and consolidating in one building what the west field house  
18 and east field house already offer. So it's an unnecessary  
19 addition.

20 So I guess that speaks more to my lack of reading  
21 and, like, going into the specifics of the plan, but this is  
22 just general stuff that I've picked up that I guess I want  
23 someone to hear, I think. Thank you.

24 MR. STEVENS: I don't want to deny someone else  
25 the opportunity to speak, but I had a couple of additional

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1 comments if that's okay. It's Don Stevens again. You  
2 should know me by now.

3 A couple more comments I had just on the public  
4 process itself. Before the scoping period for the LRDP,  
5 when the LRDP was first issued back a little over a year ago  
6 in October, the public was invited to make comments on the  
7 proposed expansion plan and what kinds of things should be  
8 included.

9 I know that -- I don't know how many dozens or  
10 perhaps over a hundred or close to 200 comments were made  
11 from the community to the University, and we were promised  
12 that these would be circulated to the appropriate people,  
13 and considered and responded to.

14 No one that I know of in the greater Santa Cruz  
15 community has had any feedback on those comments that were  
16 made back when the LRDP was first released. So the -- while  
17 the University was making a show of trying to say that we're  
18 getting all this input, a lot of input was submitted and we  
19 could tell absolutely that there was no change in the LRDP  
20 from the public comment, nor do we have any evidence of what  
21 was done with those public comments. One thing that -- once  
22 again, bank on sustainability.

23 U.C.S.C. is known for its Environmental Studies  
24 Department and for being big on sustainability, but yet,  
25 this plan seems unsustainable. I'm not sure if that has any

1 relevance to this process, but I want to throw that in  
2 there.

3           There doesn't seem to be any analysis in the  
4 biotic section on what the effect of urbanization of the  
5 northern campus will have on the Ohlone tiger beetle and the  
6 other sensitive species in the sense that, when there is  
7 more human activity and you have people living on the  
8 northern campus, walking out and riding their bikes, and  
9 kids -- and I understand where -- playing out on the meadows  
10 where the Ohlone beetles are, and there's no plan to prevent  
11 the destruction of that habitat.

12           And speaking of which, from the 1988 LRDP and the  
13 mitigations that were identified for storm water, which were  
14 never funded, when it reached the point where the campus's  
15 own study said, "The U.C. campus is at a turning point, and  
16 if current erosion rates continue, the campus watersheds  
17 will be irrevocably altered."

18           So that's a case of where a lot of environmental  
19 damage has occurred to the point where it may be permanent.  
20 By adding another four or five million square feet of  
21 impervious surface up here, how do we have any assurance  
22 that the campus will address the storm water problem so that  
23 further damage does not occur?

24           In fact, I don't think we have any assurance  
25 because throughout the document, it says, "if feasible," or,

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1 "if there's money." I think that kind of funding should be  
2 earmarked and those kinds of projects put in place before  
3 development is allowed to occur so that this kind of damage  
4 doesn't continue in the future. This study was done by  
5 Balance HydroLogics from Berkeley in conjunction with  
6 Kennedy & Jenks from September of 2004. When -- in their  
7 Executive Summary, when they say the campus is at a turning  
8 point, I think that's a serious statement.

9 Now, the campus has said that they were going to  
10 be implementing some storm water mitigations in 2015 and  
11 2018. I certainly hope that's the case, but those  
12 mitigations certainly won't address the problems that  
13 another four or 5,000 square feet of development would  
14 entail. So I think when it comes to mitigations, there has  
15 to be specific funding earmarked rather than maybe.

16 And I guess those are my final comments for the  
17 moment, except just stick where you are. I mean, one of the  
18 founding people -- when the campus was founded, an official  
19 photographer was Ansel Adams. He came here and photographed  
20 this, and said, "This is a unique opportunity in the world.  
21 There's no other campus like it and it's a precious  
22 experiment." And that vision by Ansel Adams was in response  
23 to this campus. It's being abandoned. It's sad. Perhaps  
24 there's a case for an Environmental Effects Study that did  
25 not occur in the LRDP to my knowledge.

1           What happens when faculty and students who come to  
2 this campus because of its history and heritage and precious  
3 environment, unique environment, what happens when they get  
4 distressed or distracted, or they can't afford to live here  
5 and the campus is getting so big that it's destroying the  
6 environment that attracted them here? Then they're going to  
7 leave. Then who's going to come here, and then who's going  
8 to protect the environment? Oh, just -- that's it. Thank  
9 you.

10           MR. POMERANTZ: Good afternoon. I'm Ron  
11 Pomerantz, a long-time Santa Cruz resident, also an alumnae.  
12 I guess I'm struck by the thoughtful comments, the  
13 inadequacies, the flaws, the shortcomings of this Draft EIR  
14 from the last meeting and today. What strikes me is to show  
15 the Santa Cruz community that this is not a charade, this  
16 process.

17           So throw this Draft EIR in the shredder, start it  
18 over. Meet with all the groups that have given you  
19 information, make sure that's included. Slow it all down  
20 and make sure this things's done right. Based on what I've  
21 said, based on what I've heard, I think the University's  
22 getting taken.

23           There's a lot of money that's gone into this  
24 process and with very little results. So, once again, I  
25 would like to see this thing take a big step back, start

**PH-52**

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1 this thing all over, get input from the most knowledgeable,  
2 and then proceed forward. (Applause.)

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3 MR. GRODBERG: My name Eric Grodberg. I know this  
4 isn't the forum to answer questions, but I do have a  
5 question that I would like answered in some way.

6 The pronouncements are that this is just a plan  
7 for potential growth and we might never actually reach that  
8 potential. But almost all the growth is dependent on  
9 putting -- building that new loop, basically paving over the  
10 north part of the campus, and it seems like, once you put in  
11 that infrastructure, the ballgame's over.

12 You can't -- you're not going to incrementally  
13 grow. You build the roads, you put in the utilities, it's  
14 done. So I don't really see where the incremental growth --  
15 where there's potential for incremental growth.

16 It seems like, yeah, it might be stated over the  
17 course of the next 15 years, but it seems very disingenuous  
18 to think that it is just a potential. If you really had a  
19 plan that was going to serve the needs of the growth as they  
20 actually occur, you wouldn't do it in a way that was so  
21 impactful.

22 Clearly, you don't have to be building --  
23 environmental experts would see the cost of building in the  
24 north campus like that are going to be done are just  
25 tremendous, not only in the cost but in the effect on the

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1 environment. So I would like to see that question addressed  
2 in some form. Thank you.

3 MR. BARNES: I'm curious if there are other  
4 questions or comments at this time? Well, we can sit here  
5 silently or we can relax a little bit. I'd rather not close  
6 the hearing, but --

7 UNIDENTIFIED FEMALE: Can one speak off record?  
8 Can we have a discussion or not?

9 MR. BARNES: We're not going to have a discussion  
10 today, I'm sorry.

11 UNIDENTIFIED SPEAKER: It was never announced who  
12 you are.

13 MR. BARNES: My name is John Barnes, and I'm the  
14 Director of Campus Planning. Let's take a five-minute break  
15 and resume at 4:30, if that's okay with everyone.

16 Why don't we take a five- or ten-minute break and  
17 then we'll pick up. There may be people who get off work  
18 and would like to come a little later.

19 (Break from 4:23 p.m. to 5:10 p.m.)

20 MR. BARNES: Back on the record. So what we'd  
21 like to do for the time until 6:00 o'clock is keep everyone  
22 talking in informal groups, but if someone comes to the  
23 microphone, we would appreciate silence while they speak.

24 MR. VANI: We would like to make them aware they  
25 can make comments. That if someone who has spoken already

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1 wishes to come up and make comments, they may do so.

2 MR. BARNES: And maybe every five or ten minutes,  
3 we will just interrupt to give people a chance to comment.

4 MR. HALEY: My name's Andrew Haley, and I'm an  
5 undergraduate. Basically, I don't really want to address  
6 anything that's already been addressed. This just came up  
7 while we were talking during the break.

8 Basically, I would just be more interested in  
9 seeing an increase in students' involvement or incentives  
10 for students' involvement. As you notice, the room's pretty  
11 empty here, and it's only the diehards and the ones who  
12 found out about it in the first place who are actually  
13 attending.

14 But I just think any long-range development plan  
15 for this campus should have a high amount of student  
16 involvement and student opinion, and that there's lots of  
17 ways you might be able to facilitate that. It could be  
18 credit, classes, internships. All these things could really  
19 produce a greater amount of student cooperation and  
20 involvement and just get the knowledge out in general.

21 We have some environmental studies majors here and  
22 engineering majors, and all of these could be greatly  
23 beneficial to, I'm sure, any planning that would be going on  
24 in the future. And they also would give a greater amount of  
25 voice and agency to those which this development is most

1

1 affecting, which is the student population whose tuition  
2 fees drive this whole engine.

3 It just seems to me that you-all get paid for what  
4 you're doing, and that students getting involved should also  
5 be paid in some way, whether it be through credits or just  
6 experience -- work experience. All of this can be sort of  
7 just beneficial in every way.

8 So that's my thoughts on that. Thank you.

9 MR. BARNES: Thank you.

10 MR. CODIGA: My name is William Codiga, I'm a  
11 resident of Santa Cruz County for not quite 57 years. I'm  
12 also, I think, a long-term supporter of the University.

13 I happened to work in a law office with the State  
14 Senator who worked to bring this university to Santa Cruz.  
15 I remember the shouting in Senator Grunsky's office when  
16 they were talking about eastern access, and, of course, he  
17 had to be involved with that as everyone else did.

18 I guess what I have to say is that there's certain  
19 things that are inalienable, indisputable facts, and that is  
20 that this wonderful university has grown to a point that it  
21 has become a burden on the lives of the people that live  
22 here in a way that isn't needed and certainly shouldn't be  
23 exacerbated.

24 Who can deny that one more car trip in the grid of  
25 Santa Cruz -- which has not been changed in four decades

**PH-55**

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1 while the City itself doubled or tripled, not counting any  
2 university people. Who can deny that one more trip in this  
3 grid is not a denigrating factor for safety, health, and for  
4 everything else that makes sense under the sun? Who can  
5 deny that one more student will not increase that burden?  
6 Who can deny that one more support person with any new  
7 student that has to come here will also increase that  
8 burden?

1

9           So we're told the University can do what it wants  
10 to do. Well, I used to work in the legislature. I don't  
11 think that's true. I mean, I don't think it ought to be  
12 true. I think the University ought to make sure that this  
13 kind of thing that we're headed for, this blind rape of  
14 Santa Cruz, has got to stop. Somebody's got to start taking  
15 responsibility for parking for the students, for housing the  
16 students.

17           Let's take a look at what the University's done so  
18 far. They've broken many of their promises in the last  
19 LRDP, if that's what it's called. They never gave us  
20 eastern access. They always want to play footsy with  
21 anybody in the city who didn't want to run a road through  
22 there. They haven't told the truth in many ways. They have  
23 not taken care of their own toxic problems in many cases.  
24 In many cases, they just flat haven't told the truth.

2

25           So this is an institution of higher learning.

1 What does that imply? It implies integrity not at the  
2 lowest level or the medium level; it implies integrity at  
3 the highest level. This university's present management or  
4 management, perhaps, over a period of time, has not shown  
5 integrity, period. The recent flap in financial matters  
6 shows that they have no integrity in terms of their fiscal  
7 responsibility as well.

8 Can you imagine any corporation, any business  
9 corporation going through what's been gone through here and  
10 nobody on the Board of Directors calling for an internal  
11 audit? The Board of Regents is going to push all that under  
12 the rug. Somewhere, there's going to be a lawsuit.

13 I just read in the paper where students in San  
14 Diego are signing petitions, as well they should. So the  
15 management here does not have the requisite integrity. And  
16 I'm hoping that -- first of all, that's a terrible thing to  
17 teach students up here because they see it every day. You  
18 know, the parking fees are so high as set by the University  
19 that everybody has to be in front of my house and your  
20 house.

21 Go down to Peyton Street and you'll see 35 cars  
22 parked along the streets day and night on a street that's  
23 sometimes 35 feet wide. You can't have two cars passing  
24 each other without somebody having to pull over. Go over  
25 down to High Street and see how many times the busses go

1 across the line in front of my house. State standards are  
2 being violated there every day.

3 So if the management doesn't have the requisite  
4 integrity, then how about the students and the faculty?  
5 Where are they to be heard on what's going on here? It's  
6 faldederal that students can't be executed -- educated.  
7 Executed? We certainly don't want that -- at some other  
8 campus.

9 My mother, who's 95, told me that things should  
10 turn out the way they should turn out. I've done a lot of  
11 work for U.C.S.C. Some people here know about it. And I've  
12 every faith that the intelligence and the ability is here to  
13 get a hold of this thing and start doing some real planning.  
14 Basically just quit patting the heads of the people in town  
15 by saying, "Yes, we'll have another meeting."

16 And then, "By the way, we're telling our lawyers  
17 what we want to do with the money that you folks are  
18 imposing upon us." "We're telling our lawyers not to give  
19 any continuances. We're telling our lawyers to get  
20 everything we can get." Take that railroad train, put it on  
21 the track, take it to the courthouse and break the people in  
22 half because, quote, "We can do anything we want to do."

23 In the meantime, we pat people on the forehead and  
24 say, "Oh, yes, we'll address your problems." Address, yes,  
25 but not ameliorate. So it's hokey. The kids here, the

1 people here, the students here don't miss that. The people  
2 in town don't miss that.

3 The people in town, the only reason the people in  
4 town don't have banners and torches is because they love  
5 what's up here; they're trying to protect it. They don't  
6 want to have that kind of advocacy; they don't want to be  
7 bothered by it. But their lives are being unundated by it.  
8 The time will come -- people have already talked about it,  
9 seen lawyers about civil disobedience.

10 What would it be like if three or four hundred  
11 from the west side decided they would just walk across all  
12 the crosswalks when the students are trying to come up here  
13 to go to school? Do you think they'd stop? They'd stop.  
14 Is that really necessary? Is integrity on the basis of the  
15 student body, the professors, the cadre here enough to not  
16 force people to do that if that's what it takes?

17 That's what's going to happen, because our homes  
18 and lives are being destroyed. It's -- it's a conundrum  
19 that it's hard to believe could occur in a society like ours  
20 with the money that this university has. That all it has to  
21 do is grant and to give and we can't say something like,  
22 "All right. We won't wreck you." "We'll build our eastern  
23 access." "We'll park on campus." We'll build more things  
24 on campus: Look at the money up here. It's fierce. It's  
25 all over the place. It's dripping off the walls.



1           So, what can I say? Somebody has got to get real  
 2 and in a hurry. I'm looking at a gentleman over here who is  
 3 a graduate of this university who's already been the  
 4 instigator of filing two lawsuits and others are on the way.  
 5 Why? Because there's no amelioration for management here.  
 6 If the courts have to tell you to obey the rules, fine. You  
 7 do have this wonderful thing in the law that says, you can  
 8 do just about what you want to do.

9           Somewhere, somehow, some day, legislators,  
 10 combinations of legislators, people on the Board of Regents,  
 11 whatever it is, have to sit down and decide what to do with  
 12 a situation like this. Assemblyman Laird is trying to do  
 13 something about it, but it's all pussy-foot; it's not  
 14 getting it done. Somebody has to now act now, to have the  
 15 integrity to prevent killing the child. That's pretty  
 16 automatic, isn't it?

17           MS. CAROL: Apparently I'm going to make a  
 18 comment. The comment? I just thought it was a -- it's  
 19 unfortunate that this meeting for public comment came on the  
 20 last week of instruction for students, because I know a lot  
 21 of the people that I talked to wanted to come out and had a  
 22 lot of -- had things to say mainly about the current plan,  
 23 that U.C. is trying to develop itself too fast, and, like,  
 24 you know, then the City can't support a lot of the expected  
 25 growth, and just that sort of idea.

1           But anyway, this hearing -- you know, the timing  
2           for it on the last week of classes, like, a lot of kids kind  
3           of had to make a choice between coming out and saying  
4           something that, you know, there's not a lot of optimism  
5           about, whether their opinion would actually matter to  
6           anyone, or, you know, getting their papers written and  
7           studying for finals, because it is, like, the last week of  
8           class.

9           So, like, out of all the times that would have  
10          been good for the public -- for getting public input, this  
11          might have been one of the worst times, on the last week of  
12          class. But I don't know, you know, if that was just an  
13          oversight or what it was. That's all.

14          MR. ZWART: Thank you.

15          JANE MEO: My name is Jane Meo and I came just in  
16          time to make my comment.

17          MR. BARNES: Sorry, please go ahead.

18          JANE MEO: And I do need to bore you with the fact  
19          that I am an old-time resident of Santa Cruz. And actually,  
20          when I moved to Santa Cruz, it was as big as your campus  
21          will be after you have reached your goal. So considering  
22          how big Santa Cruz is now, with that addition, it will be  
23          very uncomfortable, and the quality of life will be severely  
24          affected.

25          Furthermore, at my neighborhood meeting, to which

1 the Chancellor was able to come, she mentioned how high the  
 2 financial impact is of having young students. And I do want  
 3 to say that most of us in Santa Cruz have patiently raised  
 4 many of the students, with their behavior that wasn't  
 5 socially acceptable, in our neighborhoods, and, you know, we  
 6 did it willingly. Sometimes, it was -- it was hard on us,  
 7 but if we consider that there will be so many more young  
 8 people coming that need all the extra help to make it in  
 9 society, you're asking a lot of us as the host.

10 If you remember, you know, I am known to not  
 11 really read all the little parts in these reports, but I  
 12 didn't see anyplace where there was a recategorizing of the  
 13 pay for all the people up at the University. Because if it  
 14 grows that much, we definitely will be out of the rural  
 15 category and we should be in the urban category. But I  
 16 didn't see anything that was saying all the employees will  
 17 be getting more money, which then would trickle down to all  
 18 us peons down in the city.

19 I also didn't see anything that was saying  
 20 something in regards to giving extra money for police, et  
 21 cetera, et cetera. And I would love to see the campus be an  
 22 example of exquisite architecture that fits in  
 23 landscape-wise to building green, of really being in the  
 24 forefront in using the campus to the best possible  
 25 advantage. I got lost and I saw the new buildings. I know

1 you put a lot of time and money into it, but they're not  
2 beautiful. They're utilitarian, but not beautiful.

3 So, thank you very much. And sorry I'm so late.

4 MR. VANI: Thank you.

5 MR. BARNES: Thank you.

6 PAUL CAROL: I'm going to make another comment  
7 real quick. When I was -- I'll talk into the mic. The  
8 other thing, just real quick, I only heard about this  
9 meeting yesterday. So far as I know, I was informed from a  
10 flier that the students put up. I don't know if there was  
11 any outreach done to get people to come to this meeting, to  
12 get comments, but I didn't -- personally, I didn't see  
13 anything besides what a student had put up.

14 That's it. Thank you.

15 MR. BARNES: Thank you. It's closed.

16 (End of record, 6:00 o'clock p.m.)  
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**PH-56**

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1 STATE OF CALIFORNIA )  
2 COUNTY OF MONTEREY ) ss.  
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8 I, JOANNE C. BUSHAW, a Certified Shorthand  
9 Reporter, License No. 4334, duly certified by the State of  
California, do hereby certify:

10 That the foregoing proceedings were taken before  
11 me at the time and place first herein set forth;

12 That the foregoing transcript, pages 1 through 49,  
13 is a true-and-correct record of the proceedings had at the  
14 time and place of said hearing, as recorded by me  
stenographically, to the best of my ability, and thereafter  
prepared into transcript form;

15 I further certify that I am a disinterested  
16 person, and that I am in no way interested in the outcome of  
said action.

17 DATED this 29th day of December, 2005.  
18  
19  
20

21 \_\_\_\_\_  
22 Certified Shorthand Reporter  
23 State of California  
24  
25

1 STATE OF CALIFORNIA )  
2 COUNTY OF MONTEREY ) ss.  
3  
4  
5  
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7

8 I, JOANNE C. BUSHAW, a Certified Shorthand  
9 Reporter, License No. 4334, duly certified by the State of  
California, do hereby certify:

10 That the second session of the hearing was  
11 inadvertently omitted from the original transcription  
12 prepared on or about December 29, 2005. That the omitted  
13 transcript, beginning at Page 39, Line 19 and ending on Page  
49, was duly recorded by me stenographically, to the best of  
my ability, and thereafter prepared into transcript form  
under my direction;

14 Therefore, the foregoing transcript, being pages 1  
15 through 50, now truly constitutes the complete verbatim, and  
16 true-and-correct record of the proceedings had at the time  
and place first herein set forth;

17 I further certify that I am a disinterested  
18 person, and that I am in no way interested in the outcome of  
said action.

19 DATED this 27th day of April, 2006.  
20  
21

22 \_\_\_\_\_  
23 Certified Shorthand Reporter  
24 State of California  
25

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## Responses to Public Hearing Comments

### **Response to Commenter PH-1**

**Response to Comment PH-1-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Comment PH-1-2.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures. Please see Response to Comment I-51-3 regarding the significant unavoidable impacts of the 2005 LRDP. Also refer to Response to Comment LA-2-25 regarding the appropriate level of analysis for a Program EIR.

**Response to Comment PH-1-3.** Comment noted.

**Response to Comment PH-1-4.** Section 4.14, *Traffic, Circulation, and Parking*, of the Draft EIR evaluates the impacts of the 2005 LRDP on the on- and off-campus roadway system. LRDP Mitigation TRA-2A references Table 4.14-18, which lists off-campus roadway improvements that would mitigate impacts. However, the impact would be significant and unavoidable at some intersections, even with the implementation of these improvements. LRDP Mitigation TRA-2B (which references Draft EIR Table 4.14-19) provides for TDM improvements that will help to minimize traffic increases.

LRDP Mitigations TRA-4A through -4E provide for improvements to the on- and off-campus transit system in order to maintain and improve efficiency and capacity of the public transit system serving the University.

**Response to Comment PH-1-5.** The comment is not sufficiently specific to allow a response. However, please refer to Responses to Comments PH-1-1 through PH-1-4 for responses to specific comments about 2005 LRDP EIR mitigation measures.

### **Response to Commenter PH-2**

**Response to Comment PH-2-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Comment PH-2-2.** Comment noted. While the numbers given are accurate deductions from the LRDP Draft EIR analysis, it is important to note that the total impact is highly unlikely to occur. The analysis assumed, as a reasonable “worst-case”, that the full extent of each development area would be developed, which is not anticipated. This was done to provide a worst-case scenario for analysis of the potential impacts of the LRDP.

**Response to Comment PH-2-3.** Comment noted.

**Response to Comment PH-2-4.** Please refer to Response to Comment LA-2-107 regarding the 2005 LRDP-related population as a percentage of the City’s total 2020 population, and to Response to Comment LA-2-110 regarding the impact of 2005 LRDP growth on projected housing in the city.

**Response to Comment PH-2-5.** The Draft EIR does not underestimate the number of new trips that would be generated by campus growth. Regarding the methodology used to estimate the new trips, please see Response to Comments LA-9-72 and -73. As Table 4.14-9 shows, under existing conditions there are five intersections that operate at unacceptable levels of service (LOS E or F) during peak hours. Even

without campus growth, the number of intersections operating at unacceptable levels of service will increase to 17 (see Table 4.14-13). The Draft 2005 LRDP would result in significant traffic impacts at a total of 11 intersections (Table 4.14-15). Under the Final Draft 2005 LRDP, a total of 10 city intersections will be significantly affected (see Traffic Section in Chapter 2, *Project Refinements*, in Final EIR, Volume IV).

**Response to Comment PH-2-6.** Please refer to Response to Comment LA-2-26.

**Response to Comment PH-2-7.** Please refer to Response to Comment LA-2-36 for a discussion of the building height and size information used in the visual simulations. Also, please refer to Final EIR, Volume IV, Chapter 3, Table 4-1, for more detail on assumed facility dimensions.

**Response to Comment PH-2-8.** Because local standards do not directly regulate UC Santa Cruz activities, City and County standards were referred to in the EIR only in situations where State and Federal requirements or policies were not available. With regard to biological resources, State and Federal law would apply and not local policies.

**Response to Comment PH-2-9.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures.

**Response to Comment PH-2-10.** Please refer to Master Response LU-1 (Consistency with Local Plans and Policies) and Response to Comment LA-3-15, which address the County's concern regarding consistency with City and County general plans. Please refer to Response to Comment ORG-4-2 for a discussion of land use compatibility issues related to the Cave Gulch neighborhood.

**Response to Comment PH-2-11.** The analysis of the proportion of students and employees who would live in the city of Santa Cruz and those that would live within the rest of the county presented in the Draft EIR (Section 4.11) is based on an analysis conducted by Bay Area Economics (BAE 2005). The BAE memorandum is cited in the Draft EIR, and is available for review during regular business hours at UC Santa Cruz, Physical Planning and Construction, Barn G, Santa Cruz.

**Response to Comment PH-2-12.** An analysis of project impacts on Highways 1 and 17 has been prepared and circulated for public and agency comment in the Recirculated Draft EIR – Additional Traffic Analysis (UC Santa Cruz 2006).

**Response to Comment PH-2-13.** The analysis of growth inducing effects of the proposed LRDP is presented in Section 6.3, because it is a CEQA-mandated section. Please see Master Response UTIL-1, which explains why the analysis in the Draft EIR is adequate and that the effects of induced growth on water supply do not require additional analysis. Also see Response to Comment LA-2-107, which explains why the induced population associated with the multiplier effect cannot be added to the evaluation of impacts in Section 4.11.

**Response to Comment PH-2-14.** UC takes positions on numerous bills that come before the State legislature, including bills related to long-range planning and environmental review. If a bill has the potential to affect the University's ability to maintain student access, or singles out UC to bear costs not borne by similar state or educational entities, UC will work with the bill's authors to amend the legislation. UC remains committed to working with local jurisdictions to resolve issues of mutual concern, which involves implementation of the fair share principles and mitigation measures presented in



its environmental review documents. Please see Section 4.14, *Traffic, Circulation, and Parking*, and Section 4.15, *Utilities*, and also Master Response MIT-1 regarding Government Code 54999 obligations and fair share contributions.

### **Response to Commenter PH-3**

**Response to Comment PH-3-1.** Please refer to Master Response UTIL-1, which explains why it was not necessary for the University to prepare new water demand estimates for the City's service area.

**Response to Comment PH-3-2.** Please refer to Master Response UTIL-1, which explains why the evaluation of a "project-only" impact would not be meaningful.

**Response to Comment PH-3-3.** Please refer to Section 5.2.15.3.2 in Master Response UTIL-1, which provides further information regarding the effect of LRDP-related off-campus population on water supply.

**Response to Comment PH-3-4.** Please refer to Section 5.2.15.3.2 in Master Response UTIL-1, which reiterates the analysis in the Draft EIR (LRDP Impact UTIL-9) and explains that cumulative demand, including demand from the University, could result in the need for a new water supply source for normal water year conditions. Please refer to Master Response UTIL-1 (Section 5.2.15.3) for additional information about this conclusion and descriptions of recent findings made by the City since the Draft EIR was published. The Draft EIR identifies mitigation measures (LRDP Mitigations UTIL-9A through -9I) to address the impact of campus growth on the remaining water supply. Please also refer to Master Response UTIL-2 for additional information about these mitigation measures.

In addition, the University will pay its fair share of the cost of improvements necessary to develop a new source of water. (See Draft EIR, page 4.15-38 and Master Response MIT-1). Because the development of a new water source will be necessitated by the cumulative demand in the entire service area, not just by the campus's demand, the University is required to pay its fair share, which is less than the entire cost of the improvements.

**Response to Comment PH-3-5.** Please refer to Master Response UTIL-1 (Section 5.2.15.3) regarding the Campus's contribution to the need for a new water source. Please also see Section 5.2.15.4 of Master Response UTIL-1 for information about the environmental effects of developing a desalination plant.

### **Response to Commenter PH-4**

**Response to Comment PH-4-1.** As discussed in Master Response POP-1 and Master Response ALT-5, University housing is self-supporting and new housing is built on campus in response to evidence of demand. Sufficient land is designated in the 2005 LRDP to accommodate housing at the levels indicated. The University is continuing to explore ways to make on-campus housing more affordable and appealing to a wider range of students. Also refer to Master Response POP-1 regarding revised and additional mitigation for LRDP Impact POP-3. Please see the Final EIR, Volume IV, Chapter 3, Revised Table 2-1 for the full text of these measures.

**Response to Comment PH-4-2.** Please refer to Master Response POP-1 and Master Response ALT-5 regarding occupancy levels for campus housing and cost of on-campus housing.

**Response to Commenter PH-5**

**Response to Comment PH-5-1.** The 1978 LRDP (page 22) included a goal of providing housing on campus for “approximately one half of the students enrolled”, not 100 percent of undergraduates as stated by the commenter. That LRDP also noted that a significant portion of the student population at that time already resided in the City of Santa Cruz.

**Response to Comment PH-5-2.** Please refer to Master Response PD-1 (Magnitude of Enrollment Growth) and Master Response ALT-4 (Moffett Field Satellite Campus/Silicon Valley Center Issues).

**Response to Comment PH-5-3.** Please refer to Response to Comment I-45-7 for information about a sustainability analysis in the Draft EIR.

**Response to Comment PH-5-4.** The Draft EIR concludes that the proposed project’s effect on housing (LRDP Impact POP-3) would be significant, because the project-related demand for housing would constitute a significant portion of the future housing demand in the study area and the future housing demand would exceed projected housing supply. Please see Master Response POP-1 and Final EIR, Volume IV, Chapter 3, Revised Table 2-1 (LRDP Mitigations POP-3A, -3B, and -3C) with respect to revised mitigation to address this impact.

**Response to Commenter PH-6**

**Response to Comment PH-6-1.** Comment noted. See Master Response ALT-5 which explains why the Campus has determined that there is unlikely to be a demand for housing for more than 50 percent of the 2020 undergraduate student population on the campus.

**Response to Comment PH-6-2.** The University has included in this EIR mitigation measures to reduce the impacts of campus growth to the maximum extent feasible. The University has also evaluated other alternatives that could avoid or reduce the significant impacts of the proposed LRDP. The University does not have any jurisdiction over off-campus facilities, including roads, but the EIR does include several fair share mitigation measures to address off-campus impacts (see Master Response MIT-1). The University does not have the power to tax students as a means of acquiring funding. However, students have voted in the past to impose fees on themselves, such as the transit fee. This fee, for example, pays for and encourages student use of public transit, which serves to reduce the impact of increasing traffic in the region.

**Response to Commenter PH-7**

**Response to Comment PH-7-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Comment PH-7-2.** The comment regarding general concerns about the EIR and about the EIR’s responsiveness to scoping comments is noted for the record. Please also refer to detailed responses to local agency comment letters LA-2, LA-9, and LA-10.

**Response to Comment PH-7-3.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3, Revised Table 2-1 of the Final EIR for the full text of revised measures.

**Response to Commenter PH-8**

**Response to Comment PH-8-1.** Please refer to Master Response UTIL-1 (Section 5.2.15.3) regarding the effect of the LRDP-related off-campus population on other water districts.

**Response to Comment PH-8-2.** Section 4.12 of the Draft EIR evaluates the effects of campus growth under the 2005 LRDP on police and fire protection services, schools, and libraries (see pages 4.12-1 through 4.12-21).

**Response to Comment PH-8-3.** The 2005 LRDP does not envision construction of any Eastern Access. Please refer to Master Response TRA-3.

Response to Comment PH-8-4. Comment noted.

**Response to Comment PH-8-5.** Please refer to LRDP Impact UTIL-4 for a discussion of the effects of development under the 2005 LRDP on the volume of municipal solid waste that would require disposal. It should also be noted that the Campus is legally obligated and committed to pay its fair share of the cost of off-campus utility system improvements that are needed in order to serve the campus, as described in Master Response MIT-1.

**Response to Commenter PH-9**

**Response to Comment PH-9-1.** The Draft EIR has been revised to note that the western burrowing owl is designated a National Bird of Conservation Concern by the U.S. Fish and Wildlife Service. See Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*, Table 4.4-2. “Species of Special Concern” is an abandoned designation.

**Response to Comment PH-9-2.** Cooper’s hawk has been added to the list of raptors assessed in the Draft EIR (see Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*, Section 4.4 *Biological Resources*). Potential impacts to Cooper’s hawk could occur as the result of development proposed under the 2005 LRDP. Cooper’s hawk is known to nest in second-growth conifer stands or in deciduous riparian areas. While development is not proposed within riparian areas on campus, second growth conifers (specifically redwoods) would be affected by development in the north Campus. Mitigations associated with LRDP Impact BIO-11 will apply to this species and would reduce any potential impacts in the north campus to less than significant.

**Response to Comment PH-9-3.** Please refer to discussion on burrowing owl in Responses to Comments I-5-11 and I-7-4.

**Response to Comment PH-9-4.** Please refer to discussion on burrowing owl in Responses to Comments I-5-11 and I-7-4.

**Response to Commenter PH-10**

**Response to Comment PH-10-1.** Please refer to Master Response POP-1 regarding the cost of on-campus housing. The Campus does not receive any payment from Colleges and University Housing Services other than direct payment for services provided.

**Response to Comment PH-10-2.** Please refer to Responses to Comments 1-22-1 and 1-22-2.

**Response to Commenter PH-11**

**Response to Comment PH-11-1.** Please refer to Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures including revisions made for greater clarity, and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures.

**Response to Comments PH-11-2.** Please refer to Master Response BIO-1.

**Response to Comment Letter PH-11-3.** Please refer to Responses to Comments ORG-1-8 and LA-2-78. All buildings on the campus, and not just those constructed on karst, will have adequate engineering. All building sites will be investigated for a variety of hazards (karst, lateral spreading, liquefaction, expansive soils, etc) in compliance with LRDP Mitigation GEO-1, and the building designs will incorporate the recommendations of the site investigations (see pages 4.6-15 through -18 of the Draft EIR).

**Response to Comment PH-11-4.** Please refer to Response to Comment I-2-4.

**Response to Comment PH-11-5.** Please refer to Master Response BIO-5 (Wildlife Movement).

**Response to Comment PH-11-6.** As explained on page 4.4-69 to -70 of the Draft EIR, the potential impacts of the removal of trees under the 2005 LRDP on aesthetics, biological resources, cultural resources, soils, hydrology and water quality, are analyzed in appropriate sections of the EIR (see page 4.4-70 of the Draft EIR for specific section references). The loss of timberland as a commercial resource is not within the scope of CEQA, but is discussed on page 4.4-69 of the Draft EIR to provide background that may be used in CDF's review of the University's application for a timberland conversion permit. In addition to the large area of timberland in the Santa Cruz Mountains, this discussion also cites the average to below-average quality of the redwoods on campus as a commercial resource, and the lack of trees of sufficient size and density to be considered a commercial resource in other types of forest on campus. Also, please see Responses to Comments SA-7-3 through SA-7-14.

**Response to Comment PH-11-7.** Please refer to Master Response ALT-1 (Magnitude of Enrollment Growth) and Master Response ALT-4 (Moffett Field Satellite Campus/ Silicon Valley Center Issues) with regard to accommodating enrollment growth at the Silicon Valley Center.

**Response to Commenter PH-12**

**Response to Comment PH-12-1.** Please refer to Master Response ALT-2 (Proposed Program Growth at Another UC Campus).

**Response to Comment PH-12-2.** Comment noted.

**Response to Commenter PH-13**

**Response to Comment PH-13-1.** Carrying capacity is an ecological concept that refers to the maximum number of individuals of a given species that a habitat area can support without causing deterioration of the site. It is typically applied to non-human species. The application of this concept to human populations is controversial because it fails to take into account human's ability to substitute resources and to change the environment to create more favorable conditions for a desired use. CEQA documents, such as the 2005 LRDP EIR, do not typically determine the carrying capacity of a given project area.

**Response to Comment PH-13-2.** Please see Master Response UTIL-1, which presents more information about the campus's water demand estimate, and compares it to the available supply under existing and 2020 conditions.

**Response to Comment PH-13-3.** Economic impacts are not considered to be environmental impacts under CEQA and are not the subject of analysis in the EIR. However, the University has conducted a study of the economic benefits of the University on local communities (UCSC 2003). The report is available for review at: <http://planning.ucsc.edu/budget/Reports/EconImpact/EconReport.htm>. Also, see Response to Comment PH-13-4, below.

**Response to Comment PH-13-4.** An assessment of the City's finances and ability to provide services to the community is not required by CEQA, because this information relates to social and economic forces, not physical effects on the environment. Furthermore, while the Campus does not pay property taxes directly to the local community, the Campus is a significant economic force in the local economy. Please see Response to Comment I-84-20 for more on this topic. Also see Master Response MIT-1 with regard to the Campus's obligations for utility improvements costs under Government Code 54999 and University fair share contributions for the cost of other mitigation measures.

**Response to Comment PH-13-5.** Please refer to Response to Comment ORG-4-3.

**Response to Comment PH-13-6.** Please refer to Master Response BIO-5.

#### **Response to Commenter PH-14**

**Response to Comment PH-14-1.** Public meetings have been held throughout the process of preparing both the 2005 LRDP and 2005 LRDP EIR. The 2005 LRDP Committee held a series of five well-publicized public workshops during 2003 and 2004 (see Draft 2005 LRDP Appendix B for meeting details). (The public meetings on the LRDP were publicized in display ads in four local newspapers, in flyers posted on campus, and were announced on KZSC.) As indicated in Chapter 1, *Introduction*, three EIR scoping meetings were held in February 2005 to solicit input on the contents of the 2005 LRDP EIR. Two public hearings on the Draft EIR were also held in November 2005. Additionally, The Regents will consider the 2005 LRDP for approval in the summer or fall of 2006 in a public meeting where public comment will be heard.

Throughout the process to date, regular press releases have kept the campus and the broader community informed of opportunities to become involved in this campus planning process. Periodic updates were also posted on UC Santa Cruz's Long Range Development Plan website (<http://lrdp.ucsc.edu>).

**Response to Comment PH-14-2.** Please refer to Master Response ALT-2 (Proposed Program Growth at Another UC Campus).

#### **Response to Commenter PH-15**

**Response to Comment PH-15-1.** The Marine Science Campus CLRDP (referred to as the Terrace Point CLRDP by the commenter) and the 2005 LRDP Draft EIRs are based on different traffic projection methodologies. Subsequent to the publication of the CLRDP Draft EIR, AMBAG completed its update to the regional model. The preparers of this EIR were requested by the City of Santa Cruz and the University to use the recent AMBAG model to ensure consistency with other regional planning projects. The

different methodologies can result in different future traffic projections. See also Response to Comment I-16-1.

**Response to Comment PH-15-2.** Please refer to Response to Comment PH-15-1, above.

**Response to Comment PH-15-3.** The Draft EIR for the 2005 LRDP is a programmatic EIR, which addresses the broad impacts of traffic through the year 2020. When individual projects are proposed as part of the LRDP, the University will undertake a focused project-specific evaluation, which will identify the phasing of individual mitigation measures consistent with the overall program evaluated in the programmatic Draft EIR.

Pursuant to the CEQA Guidelines, the analysis of cumulative impacts may be based on a summary of growth projections. The AMBAG travel demand forecasting model was used in the development of the cumulative traffic projections for the 2005 LRDP Draft EIR. The AMBAG model is based on population and employment forecasts and does not rely on specific development proposals.

**Response to Commenter PH-16**

**Response to Comment PH-16-1.** The Draft EIR (page 4.2-7) notes that the General Plans do not cover the time period 2005 to 2020, which is the planning horizon of the 2005 LRDP. However, the Draft EIR utilizes information from these plans, as that is the most current information available for the study area. In the case of the City's General Plan Housing Element, which is for the period 2000 to 2007, new housing is expected to be developed through infill and redevelopment of sites. The manner in which additional housing would be developed after 2007 is not known at this time. However, because there is limited undeveloped land within the city, it is expected that new housing will continue to be developed through infill and redevelopment. Further, with the exception of one land parcel, there are no agricultural parcels within city limits. An important point to note in this regard is that according to AMBAG forecasts through 2020, the City is planning to develop only 1,684 new housing units. This number is lower than the number in the City's Housing Element. Therefore, if housing development in the City occurs consistent with AMBAG forecasts, development of new housing should not result in conversion of farmland. To the extent that the one agricultural parcel in the city is developed for housing and other uses, the cumulative impact on agricultural land would be less than significant because the amount of agricultural land that would be converted is very small.

With respect to agricultural land in other communities and unincorporated county, the Draft EIR (page 4.2-7) presents information on the distribution of Important Farmlands. A review of the Important Farmland mapping for the areas surrounding the city of Santa Cruz and other nearby communities including Capitola, Live Oaks, Soquel, Aptos, Scotts Valley, and Felton shows that the surrounding undeveloped lands near these communities are almost entirely Other Lands (forested areas) or Grazing Lands. Parcels of Prime Farmland or other Important Farmlands are limited to the lands on the coastal terraces between the ocean and Highway 1 to the west of Santa Cruz, additional parcels between the highway and the coast south of Aptos, and a number of parcels in the Soquel Valley and the Watsonville area. The parcels located in the Coastal Zone are afforded protection from urban development, both under the County General Plan and under the California Coastal Act. Therefore, the likelihood that these coastal agricultural lands would be converted to urban uses is very low. Additional parcels of Important Farmland in the Soquel Valley area could experience development pressures; however, given the County General Plan policy to protect agricultural resources and the County of Santa Cruz's growth management

ordinance, it is considered unlikely that these areas would be converted to urban uses. The Watsonville area is experiencing increasing housing pressure due to regional growth. However, given the distance of this area from the campus, however, only a small proportion of the campus-affiliated future population would be expected to reside in the Watsonville area (an estimated 297 persons based on Table 4.0-3 on page 4-7 of the Draft EIR). These persons would make a very small proportion (about 0.5 percent) of the projected 2020 population of the City of Watsonville of about 65,473 residents, and the contribution of University growth to development pressures in this area, therefore, would be less than significant. Furthermore, the City of Watsonville has recently adopted a new General Plan to guide the growth of the City between 2005 and 2030. The new General Plan provides for about half of the population and housing growth via infill and the remainder by expansion into three new specific plan areas. The expansion into these areas would result in the conversion of designated farmland, the impacts of which are adequately evaluated and mitigated in the Program EIR prepared by the City for the new General Plan. Also note that this expansion of the city is located within the Urban Limit Line that was approved by voters under Measure U (City of Watsonville 2006).

**Response to Comment PH-16-2.** Please refer to Master Response ALT-4 (Moffett Field Satellite Campus/ Silicon Valley Center).

#### **Response to Commenter PH-17**

**Response to Comment PH-17-1.** The original master planning for UC Santa Cruz conceived of the development of the campus as a series of small colleges, each consisting of a small cluster of academic and administrative development with its own housing, similar to the model of small private colleges. The 1963 Long Range Development Plan for the campus, the original master plan for the campus, envisioned that the majority of the campus site would be developed over time by the gradual addition of new colleges, with an envisioned student population of 27,500 by 1990. The original master land use map for the campus is included in the Final Draft 2005 LRDP for reference. Also, please refer to Master Response and ALT-3 (Proposed Program Growth at another UC Campus).

#### **Response to Commenter PH-18**

**Response to Comment PH-18-1.** Comment noted.

**Response to Comment PH-18-2.** Comment noted.

**Response to Comment PH-18-3.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

#### **Response to Commenter PH-19**

**Response to Comment PH-19-1.** Regarding the cost of on-campus housing, please refer to Master Response POP-1 and Master Response ALT-5. Also see Master Response POP-1 regarding revised and additional mitigation measures to address LRDP Impact POP-3. For the full text of these mitigation measures, please see Final EIR, Volume IV, Chapter 3, Revised Table 2-1.

#### **Response to Commenter PH-20**

**Response to Comment PH-20-1.** The Campus has prepared and published a Draft Bicycle Plan, which includes policies, programs and proposed bike facilities. The plan is available for review at <http://www2.ucsc.edu/taps/pages/bikeplan.html>.

**Response to Comment PH-20-2.** Please see Response to Comment LA-3-9 for revisions to Draft EIR mitigation measures and Volume IV of the Final EIR, Chapter 3, for the full text of the revisions. Moreover, the Campus will fulfill its fair share obligations with respect to the cost of utility improvements, as described in Master Response MIT-1.

**Response to Comment PH-20-3.** Comment noted. Please refer to Master Response TRAFFIC-3 regarding Eastern Access.

**Response to Comment PH-20-4.** Please see Response to Comment PH-20-2.

**Response to Commenter PH-21**

**Response to Comment PH-21-1.** Please see Response to Comment I-75-2 regarding extension of the public review period on the Draft EIR. Please also see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3, Revised Table 2-1 of the Final EIR for the full text of revised measures.

**Response to Comment PH-21-2.** Comment noted.

**Response to Commenter PH-22**

**Response to Comment PH-22-1.** It is recognized that the Campus Trailer Park is a valued element of the Santa Cruz campus community, as discussed in the Draft EIR, page 4.5-1. However, the Campus Trailer Park does not appear to meet the criteria that define a historical resource under CEQA. A resource less than 50 years old typically is not considered to be eligible unless it can be demonstrated that it is of exceptional historical significance and that sufficient time has passed to obtain a scholarly perspective on its significance. The Campus Trailer Park is an assemblage of house trailers and buses of various vintages, brought together at the site less than 25 years ago. It is not associated with a significant person or event in history. Further, although the residences form a community, the facility does not embody the distinctive characteristics of a type, period, region or method of construction, or possess high artistic value; nor does it have the potential to yield data important to history. Thus, the Campus Trailer Park does not rise to the level of exceptional historic significance at this time and is not considered to be a historical resource.

**Response to Comment PH-22-2.** Draft EIR page 4.1-18 concludes that impacts on the visual character of the campus (LRDP Impact AES-5), including the north campus, would be reduced to a less-than-significant level with implementation of LRDP Mitigations AES-5A through -5E. In particular, LRDP Mitigation AES-5A, requiring review of all project designs by the UC Santa Cruz Design Advisory Board, will ensure that buildings do not degrade the visual character of the campus. Please also see Response to Comment LA-6-15 for new LRDP Mitigation AES-5F.

Additionally, the Planning Principles included in the 2005 LRDP commit the campus to promoting sustainable practices in campus development, promoting sustainable practices in campus operations, and encouraging broad-based sustainability initiatives. The Draft 2005 LRDP provides additional information about these sustainability principles (LRDP page 46).

**Response to Comment PH-22-3.** Tree removal to allow for development proposed in the 2005 LRDP would be minimized with implementation of LRDP Mitigations AES-5A through -5D. Please also see



Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures.

### **Response to Commenter PH-23**

**Response to Comment PH-23-1.** The Draft EIR recognizes the value of trees to the campus's unique visual character. LRDP Mitigations AES-5A through -5F will protect that character. In particular, LRDP Mitigation AES-5C will ensure maximal preservation of mature and healthy trees. Please see Response to Comment LA-6-15 and Final EIR, Volume IV, Chapter 3, Revised Table 2-1 for new LRDP Mitigation AES-5F.

### **Response to Commenter PH-24**

**Response to Comment PH-24-1.** As discussed on page 4.14-47 of the Draft EIR, the improvements at most of the 11 affected intersections would improve the level of service to LOS D or better. However, at four intersections, even with mitigation, the levels of service would remain at E or F during the AM peak hours or PM peak hour or both. Therefore, the impact would be significant and unavoidable at these four intersections. In addition, the feasibility and/or implementation of all of these improvements at the 11 affected intersections cannot be guaranteed by UC Santa Cruz because the improvements are the responsibility of other jurisdictions, and detailed planning, environmental review, and engineering have not yet been completed. Therefore, this impact would be significant and unavoidable.

With respect to the impact of the past growth in traffic due to campus growth, pursuant to University Assistance Measures that were established following the approval of the 1988 LRDP, the Campus has committed to its fair share of the cost of traffic improvements at the affected city intersections (see Response to Comment SA-4-2 and Master Response MIT-1). Also see Response to Comment I-21-14, regarding mitigation for off-campus traffic impacts.

**Response to Comment PH-24-2.** The Draft EIR evaluates the cumulative impact of campus growth to an enrollment level of 21,000 students, plus associated faculty and staff. The purpose of the LRDP EIR is to evaluate and disclose the effects of the entire projected growth due to the 2005 LRDP and avoid understating the impacts that would result if only one building were evaluated for its environmental effects at one time.

**Response to Comment PH-24-3.** Please refer to Response to Comment LA-4-3.

**Response to Comment PH-24-4.** Please refer to Response to Comment I-21-5.

**Response to Comment PH-24-5.** Please refer to Responses to Comments LA-9-52 and LA-9-56 for information related to 2005 LRDP impacts on police and fire services. With respect to noise from sirens, please see Response to Comment PH-24-6, below.

**Response to Comment PH-24-6.** Although noise generated by police/emergency vehicle sirens is high, it is of very short duration and random. Noise impacts are generally associated with exposure to high noise levels from constant sources of noise (such as roadway traffic) over an extended period of time, or from high, momentary but repetitious events such as aircraft over-flights. Therefore, noise impact analysis focuses on loud noise sources that last long enough to result in effects on humans, such as hearing loss, sleep loss, and/or interference with daily activities. Random, momentary increases in noise, such as those associated with sirens, are not likely to affect human health, unless the frequency of these events is very

high (for instance in the vicinity of a fire station or a hospital). Although it is possible that the number of emergency vehicle trips to the campus would increase as the campus population increases, it is unlikely to be so great as to result in a significant noise impact. Also note that the CEQA standard of significance related to temporary noise indicates that a project would have a significant impact if a substantial temporary or periodic increase in ambient noise levels in the project vicinity would occur above levels existing without the project. Substantial temporary increases in ambient noise are typically associated with construction activities, because they can generate excessive noise levels during daytime hours over a fairly lengthy period of time (i.e., 6 months to 2 years). As a result, in the EIR, a substantial temporary increase in ambient noise was evaluated based on a  $L_{eq}(8h)$ , which is an average measurement over an 8-hour period, or a typical construction day (see Draft EIR page 4.10-11). By contrast, potential increased siren noise would not cause a substantial temporary or periodic increase in ambient noise levels, as the noise level increases associated with this source at any given location would be so transitory in nature that they would not likely affect average noise levels.

### **Response to Comment Letter PH-25**

**Response to Comment PH-25-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Comment PH-25-2.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures.

**Response to Comment PH-25-3.** The purpose of the EIR is to disclose the full range of potential impacts associated with the UC Santa Cruz 2005 LRDP and to avoid, minimize, and/or compensate, in that order of priority, for potential impacts to species and habitats. As the EIR discloses, implementation of the 2005 LRDP would have biological consequences; therefore, the EIR proposes mitigation measures to reduce identified impacts to a less-than-significant level or eliminate them altogether.

**Response to Comment PH-25-4.** Please refer to Response to Comment ORG-4-2 for a discussion of land use compatibility issues related to the Cave Gulch neighborhood.

**Response to Comment PH-25-5.** Please see Response to Comment SA-5-11.

### **Response to Commenter PH-26**

**Response to Comment PH-26-1.** Please refer to Master Response ALT-6 (Increased Infill Development).

### **Response to Commenter PH-27**

**Response to Comment PH-27-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Comment PH-27-1.** The Draft EIR estimates and reports on pages 4.11-22 through 4.11-24 the number of housing units that would be required to house the additional students under the Draft 2005 LRDP (January 2005). For off-campus areas within the city of Santa Cruz, the number of units that would be required for new students is estimated at 751 units. The Draft EIR also evaluates the demand for housing associated with the Draft 2005 LRDP compared to the projected housing supply in the city of Santa Cruz, and notes that if the 2005 LRDP-related demand is compared to projected supply, there

would be enough housing in the city to meet this demand. However, because LRDP-related demand cannot be evaluated in isolation from other regional demand for housing, the Draft EIR combines the 2005 LRDP-related demand with demand from other growth in the area, and compares this total demand to the projected supply and concludes that the cumulative demand would exceed supply. There would therefore be a significant cumulative impact related to housing, and the proposed project would make cumulatively considerable contribution to the impact. This would mean that some of the new population would live outside the study area. Please see *Population and Housing* in Section 2.1.6 of the Final EIR (Volume IV), which presents a revised analysis of population and housing impacts based on the Final Draft LRDP (September 2006), which reflects the Reduced Enrollment Growth Alternative analyzed in the Draft EIR, Section 5.4.2. Under the Final Draft LRDP, the housing impact would still be significant, although a smaller portion of the new population would live outside the study area.

**Response to Comment PH-27-2.** Please refer to Master Responses PD-1 (Magnitude of Enrollment Growth) and Master Response ALT-5 (Increased On-Campus Housing Alternative).

**Response to Comment PH-27-3.** See also Response to Comment I-45-30 regarding reducing automobile trips and Master Response ALT-5 with regard to increased on-campus housing.

**Response to Comment PH-27-4.** Please refer to Master Response TRAFFIC-3 for a discussion of Eastern Access.

### **Response to Commenter PH-28**

**Response to Comment PH-28-1.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures. The Draft EIR provides a definition of how the University's "fair share" would be determined (page 4.14-46). Also, please refer to Master Response MIT-1. The amount the University would contribute to off-campus improvements cannot be specified until the cost of each improvement is determined by the appropriate agency or jurisdiction.

**Response to Comment PH-28-2.** Please refer to Master Response POP-1 regarding 1988 LRDP housing goals. According to the analysis presented in the Draft EIR, the total number of students seeking off-campus housing would be 3,143 new students. Please see pages 4.11-22 and -23 of the Draft EIR, which explain how the number is derived. Also refer to Response to Comment LA-9-46.

In addition, please refer to Master Response ALT-5, regarding increased on-campus housing. It should be noted that the population and housing analysis in the Draft EIR did not take into account students who would already be living in the study area at the time of enrollment. During the preparation of the Final EIR, the Campus examined historical enrollment data and estimated the proportion of students who would already be living in the study area and therefore would not require housing. In addition, the Campus has decided to recommend to The Regents the adoption of the Final Draft 2005 LRDP (September 2006), which reflect the Reduced Enrollment Growth Alternative analyzed in Section 5.4.2 of the Draft EIR. The Final Draft 2005 LRDP (September 2006) reflects the lower enrollment target identified under that alternative. The reduced growth in campus population reduces the projected housing demand somewhat. Please see Chapter 2 in Volume IV of the Final EIR (*Project Refinements*), where the student numbers and housing estimates for the Final Draft 2005 LRDP are reported.

**Response to Comment PH-28-3.** Please refer to Response to Comments I-1-2 and I-1-0 regarding noise levels along High Street. As Figure 4.10-5 shows, a 24-hour noise measurement conducted at LT-3 on High Street in February 2005 did not record noise levels over 70 decibels. Even along Mission Street, which is a much more heavily traveled roadway, hourly noise levels did not exceed 80 decibels (see Figure 4.10-6). The raw data from the sound meter put out on High Street was examined and at a few points in time over the 24-hour period, noise levels up to 80 decibels were recorded.

**Response to Comment PH-28-4.** Comment noted.

**Response to Commenter PH-29**

**Response to Comment PH-29-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Commenter PH-30**

**Response to Comment PH-30-1.** Please refer to Response to Comment LA-2-25 for additional information regarding the program and project-specific evaluations provided in the 2005 LRDP EIR.

**Response to Comment PH-30-2.** Please refer to Response to Comment SA-4-2 for information about the 1988 LRDP Mitigation Measures.

**Response to Comment PH-30-3.** The comment regarding the format of the electronic versions of the Draft EIR is noted for the record.

**Response to Comment PH-30-4.** Please refer to Response to Comment LA-3-9 regarding revisions to increase the specificity of mitigation measures.

**Response to Comment PH-30-5.** The Draft EIR estimates the additional emissions that would result from the projected growth in campus population and the construction of new campus facilities, and finds that the emissions would result in a significant impact on regional air quality (See LRDP Impact AIR-2). The Draft EIR also proposes mitigation measures to reduce emissions from the major emission sources associated with the campus growth. Please also see Response to Comment LA-10-20.

**Response to Comment PH-30-6.** Please refer to Response to Comments I-45-42 and LA-2-46 regarding the new state 8-hour ozone standard.

**Response to Comment PH-30-7.** Please see Response to Comment SA-4-2 regarding the identification of funding sources for mitigation measures.

**Response to Commenter PH-31**

**Response to Comment PH-31-1.** Please refer to Response to Comment I-45-4 regarding the University's response to public comments.

**Response to Commenter PH-32**

**Response to Comment PH-32-1.** Please refer to Response to Comment PH-17-1 and Master Response PD-1 (Magnitude of Enrollment Growth).

**Response to Public Commenter PH-33**

**Response to Comment PH-33-1.** Please refer to Master Response PD-1 (Magnitude of Enrollment Growth).

**Response to Comment PH-33-2.** Please see Response to Comment LA-3-9 regarding revisions to 2005 LRDP EIR mitigation measures and Volume IV, Chapter 3 of the Final EIR for the full text of revised measures. As explained on page 1-2 of the Draft EIR, the EIR is an informational document, which The Regents must consider when deciding whether to approve the 2005 LRDP. The Regents may not approve the 2005 LRDP unless it finds that the benefits of the 2005 LRDP outweigh its unavoidable environmental effects. This balancing process is explained in findings known as a Statement of Overriding Considerations. Please also refer to Response to Comment I-51-3, which indicates that all feasible mitigation measures have been identified in the Draft EIR and Recirculated Draft EIR.

#### **Response to Commenter PH-34**

**Response to Comment PH-34-1.** Please refer to Response to Comment PH-22-1.

**Response to Comment PH-34-2.** The tree trimming noted by the commenter is not part of the 2005 LRDP. Under LRDP Mitigation AES-5C, projects will preserve healthy and mature trees and, under LRDP Mitigation AES-5f, will assess the aesthetic value of trees potentially affected by proposed projects. Please refer to Final EIR, Volume IV, Chapter 3, Revised Table 2-1 for the full text of new and revised mitigation measures.

**Response to Comment PH-34-3.** Please refer to Response to Comment I-3-2.

#### **Response to Commenter PH-35**

**Response to Comment PH-35-1.** Figure 24 in the Draft 2005 LRDP has been revised in the Final Draft 2005 LRDP to show High Street as an arterial.

**Response to Comment PH-35-2.** The comment with respect to poor air quality on High Street is noted. CO concentrations increase with increasing traffic congestion. Therefore, the Draft EIR (pages 4.3-28 through -30) includes an evaluation of carbon monoxide impacts at six of the intersections in the study area with the longest traffic delays and the largest traffic volumes. One of the six intersections analyzed is the intersection of High Street and Highland Avenue. The CO analysis shows that predicted CO concentrations would be below the significance thresholds at all six intersections analyzed. Because the intersections analyzed for CO also had either the highest delay or the highest traffic volumes, the other intersections that were not analyzed for CO are expected to experience even smaller, less-than-significant impacts related to CO concentrations because they had less traffic. Please also see Response to Comment I-45-68.

#### **Response to Commenter PH-36**

**Response to Comment PH-36-1.** Please see Master Response POP-1. Mitigations have been revised and added to the Final EIR to address LRDP Impact POP-3. Please refer to Final EIR, Volume IV, Chapter 3, *Changes to Draft EIR Text*, with regard to housing costs.

**Response to Comment PH-36-2.** Please refer to Master Response POP-1 and Master Response ALT-5.

#### **Response to Commenter PH-37**

**Response to Comment PH-37-1.** UC Santa Cruz guarantees on-campus housing to all freshmen and sophomores, and also to all transfer students. Also refer to Response to Comment I-51-1.

**Response to Comment PH-37-2.** Students choose their place of residence based on many factors. Please see Master Response ALT-5 (Increased On-Campus Housing) and Response to Comment PH-37-1.

**Response to Comment PH-37-3.** Please see Master Response TRA-2 regarding the previously proposed Eastern Access. Also note that the Campus will continue to work with the City on transit improvements and other means of reducing traffic associated with the campus, as addressed by LRDP Mitigations TRA-2b and -4A.

**Response to Commenter PH-38**

**Response to Comment PH-38-1.** Comment noted.

**Response to Comment PH-38-2.** Comment noted.

**Response to Comment PH-38-3.** Comment noted.

**Response to Commenter PH-39**

**Response to Comment PH-39-1.** Please see Response to Comment OPA-1-1 regarding upstream intersection effects.

**Response to Comment PH-39-2.** The intersection of High and Laurent currently operates at a LOS D in the AM peak hour and a LOS C in the PM peak hour. These levels of service are verified in the draft study prepared for the City's Traffic Impact Fee update (City of Santa Cruz undated). In 2020 conditions with the 2005 LRDP, although the level of service would degrade to a LOS F, the intersection would not meet warrants for the installation of a traffic signal, which is one of the significance criteria for the evaluation of impacts at unsignalized intersections. Please also refer to Master Response TRAFFIC-1 for information on the thresholds of significance used in the Draft EIR to evaluate traffic impacts.

**Response to Commenter PH-40**

**Response to Comment PH-40-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period.

**Response to Commenter PH-41**

**Response to Comment PH-41-1.** Please refer to Response to Comment I-15-4 for additional discussion of the University approval of the 2005 LRDP.

**Response to Comment PH-41-2.** Please refer to Master Response ALT-2 (Proposed Program Growth at Another UC Campus or New Site) and Master Response ALT-4 (Moffett Field Satellite Campus/Silicon Valley Center).

**Response to Commenter PH-42**

**Response to Comment PH-42-1.** Please see Response to Comment LA-2-20.

**Response to Comment PH-42-2.** Please refer to Response to Comment ORG-1-1 for information about why the Marine Science Campus Coastal LRDP and the 2005 LRDP for the main campus were not combined in one EIR. As indicated in Response to Comment ORG-1-1, the Coastal LRDP for the Marine Science Campus also considered possible future growth on the main campus in the cumulative analysis, to the extent that it could be estimated at the time without a new LRDP for the main campus in place. The population figure for the main campus that was used in the Coastal LRDP EIR was lower than that used

in the 2005 LRDP EIR, as indicated in the comment. However, the cumulative analysis provided in the 2005 LRDP EIR reflects the growth at the Marine Science Campus and, therefore, provides an updated cumulative analysis that accurately reflects growth on both campuses, as well as other growth in the area.

**Response to Comment PH-42-3.** Please see Response to Comment PH-13-1 for a discussion of carrying capacity.

**Response to Commenter PH-43**

**Response to Comment PH-43-1.** Please refer to Master Response POP-1 and Master Response ALT-5 regarding on-campus housing costs and housing demands.

**Response to Comment Letter PH-44**

**Response to Comment PH-44-1.** The 2005 LRDP continues planning principles that have guided the campus to date, including maintaining the key aesthetic and campus community features that have drawn students here since the campus's inception.

**Response to Commenter PH-45**

**Response to Comment PH-45-1.** Please see Master Response PD-1, which presents more information as to the purpose and need of the proposed project. Regarding the suggestion that the projected enrollment growth should be accommodated at a new campus, please refer to Master Response ALT-2. Also see Master Responses ALT-1 through ALT-5 regarding the various alternatives to the proposed project that were evaluated in the Draft EIR.

**Response to Comment PH-45-2.** Comment noted.

**Response to Comment PH-45-3.** The 2005 LRDP plans to avoid development in meadows, and to keep development below the level of the surrounding forest. Aesthetic impacts, and mitigation measures to address impacts, are discussed in the Draft EIR, Section 4.1.

**Response to Comment PH-45-4.** Comment noted.

**Response to Comment PH-45-5.** All of the resource issues mentioned by the commenter have been evaluated in the EIR, and mitigation measures have been identified to reduce the impacts to the maximum extent feasible. Please see Master Responses HYDRO-1, UTIL-1, and POP-1 regarding significant and unavoidable impacts. With respect to significant and unavoidable traffic impacts, the University is committed to paying its fair share of intersection improvements that would mitigate the identified impacts, as described in Master Response MIT-1.

**Response to Comment PH-45-6.** Please refer to Response to Comment PH-45-1.

**Response to Commenter PH-46**

**Response to Comments PH-46-1 and PH-46-2.** Revisions to the discussion of wildlife in redwood forest communities (pages 4.4-7 and 4.4-8) further describe the wildlife communities as presented in the Draft EIR. This description will enhance the discussion of common wildlife species found within these habitats. These changes do not change the EIR's analysis of or conclusions regarding impacts to special-status species. Please refer to Final EIR Volume IV, Chapter 3, *Changes to Draft EIR Text*, for revisions to the text.

**Response to Comment PH-46-3.** The discussion of the wildlife species associated with grassland habitats on campus has been enhanced to clarify species dependence on grassland habitats on campus (see page 4.4-12). Please refer to Final EIR Volume IV, Chapter 3, *Changes to Draft EIR Text*, for revisions to the text.

**Response to Comment PH-46-4.** Please refer to Response to Comments I-29-4 and LA-3-9 regarding increased specificity in mitigation measures.

**Response to Comment PH-46-5.** Please refer to Response to Comment I-2-4.

**Response to Comment PH-46-6.** Please refer to Response to Comment I-29-28.

**Response to Comment PH-46-7.** Please see Master Response BIO-6 (Karst Invertebrates).

**Response to Comment PH-46-8.** A discussion of the American badger and wildlife movement is presented in Master Response BIO-5.

**Response to Comment PH-46-9.** Please refer to Master Response BIO-5 (Wildlife Movement).

**Response to Comment PH-46-10.** LRDP Mitigation BIO-11 states, “If active nests of sharp-shinned hawk, golden eagle, northern harrier, long-eared owl, and white-tailed kite (or other species protected under the Migratory Bird Treaty Act and the California Fish and Game Code)...” This mitigation measure provides for the protection of all nesting songbird species. A 250-foot buffer between the nest site and ongoing construction is considered adequate, and is approved by CDFG as adequate to avoid nest abandonment. Monitoring at some construction sites has shown that even smaller buffers (160 feet) may be adequate to avoid potential effects of construction noise on nesting birds.

**Response to Comment PH-46-11.** Please refer to Response to Comment I-29-1.

#### **Response to Commenter PH-47**

**Response to Comment PH-47-1.** Development envisioned at the Arboretum is described in detail in the 2005 LRDP EIR, Chapter 3, *Project Description* (Volume I, Draft EIR page 3-21). The discussion focuses on new structures and buildings, but also acknowledges the expansion of outdoor growing areas and defined gardens and collections. The discussion does not specifically mention the need for fencing around plantings, but LRDP Mitigation BIO-15 acknowledges planned fencing. This measure, which indicates that the fencing shall be constructed to allow for the movement of mammals across or around the barrier, is needed to ensure that new fencing does not interfere substantially with the movement of wildlife.

The planning and design of Arboretum projects, such as the native plant teaching garden and related fencing, would be developed by the Arboretum and reviewed and approved, as appropriate by the University. The design of any new fencing would comply with LRDP Mitigation BIO-15, and must be consistent with the 2005 LRDP. The 2005 LRDP allows for limited new building associated with the Arboretum and other future approved research programs on lands designated Site Research and Support.

The sightings of mountain lions and bobcats at the Arboretum are noted. While Draft EIR page 4.4-34 does not specifically acknowledge bobcat and mountain lion sightings at the Arboretum, LRDP Impact BIO-15 considers the potential impacts of the 2005 LRDP on both species on campus, including at the Arboretum (see Draft EIR page 4.4-61). This impact is considered to be less than significant with the implementation of LRDP Mitigation BIO-15, which indicates that new fencing planned for installation



around the Arboretum shall be constructed to allow for the movement of mammals across or around the barrier.

#### **Response to Commenter PH-48**

**Response to Comment PH-48-1.** Please see Master Response PD-1, which presents more information as to the purpose and need of the proposed project.

**Response to Comment PH-48-2.** Regarding the suggestion that the projected enrollment growth should be accommodated at a new campus, please refer to Master Response ALT-2.

**Response to Comment PH-48-3.** The buildings noted by the commenter are not part of the 2005 LRDP. Under the 2005 LRDP, Mitigation AES-5A, which requires design review by the UC Santa Cruz Design Advisory board, will protect the visual character of the campus.

**Response to Comment PH-48-4.** Comment noted.

#### **Response to Commenter PH-49**

**Response to Comment PH-49-1.** Please refer to Response to Comment I-75-2 regarding extension of the comment period. Please refer to Response to Comment PH-14-1 regarding the public meetings that have been held on the 2005 LRDP and EIR.

#### **Response to Commenter PH-50**

**Response to Comment PH-50-1.** Please see Master Response ALT-6, which explains why it is not possible to accommodate all the future growth on the campus by infilling in areas that are already developed.

#### **Response to Commenter PH-51**

**Response to Comment PH-51-1.** Please refer to Response to Comment LA-2-9 for information about how public comments received on the Draft LRDP (September 2005) were handled.

**Response to Comment PH-51-2.** Please refer to Response to Comment I-2-4.

**Response to Comment PH-51-3.** Please refer to Response to Comment LA-6-7 regarding mitigation timing. The LRDP is a plan for development over the next 15 years. Funding allocations are generally made on an annual basis; therefore, funding of specific projects and the appropriate mitigation would be determined during the design and environmental analysis of specific development projects at the time they are proposed. Please see Response to Comment LA-3-9 regarding increased specificity in the mitigation measures.

#### **Response to Commenter PH-52**

**Response to Comment PH-52-1.** Please see Response to Comment I-45-4 regarding the University's responses to public comments.

#### **Response to Commenter PH-53**

**Response to Comment PH-53-1.** As stated in the Draft EIR (page 2-1), the 2005 LRDP is a comprehensive plan to guide the systematic development of the campus over the next 15 years. This plan has been developed in response to projected growth in enrollment, anticipated changes in academic programs, and to accommodate the expansion of research programs. All of these are related to the mission

of the University. If the enrollment or research programs do not grow as currently anticipated the University would not build improvements, including the facilities in the north campus.

**Response to Commenter PH-54**

**Response to Comment PH-54-1.** Please refer to Response to Comment PH-14-1, which describes the efforts made by the Campus to solicit input from the campus community as well as the general public during the preparation of the 2005 LRDP and the LRDP EIR.

**Response to Commenter PH-55**

**Response to Comment PH-55-1.** The Draft EIR contains a detailed evaluation of the potential environmental impacts of the proposed project related to additional traffic, traffic-related air quality, and population. Please refer to Sections 4.3, 4.11, and 4.14 of the Draft EIR.

**Response to Comment PH-55-2.** Please refer to Response to Comment LA-6-7 and SA-4-2 regarding timing and implementation of mitigation and the status of previously identified mitigation measures.

**Response to Commenter PH-56**

**Response to Comment PH-56-1.** A legal advertisement placed in the Santa Cruz Sentinel announcing publication of the Draft EIR included information about the two public hearings. Display ads were placed in the Sunday edition of the Santa Cruz Sentinel for three weeks before the hearings, and in the Metro, City on a Hill, and Good Times for two weeks. The hearings were listed in the November 1 edition of UC Santa Cruz Currents, and in the online campus calendar. The University also mailed a notice to members of the public who had previously requested to be notified of CEQA documents for UC Santa Cruz projects. The notice included details about how to obtain online access to, or review or obtain copies of the Draft EIR and included information about the two public hearings.