12.1 ORGANIZATION OF THE RESPONSES TO COMMENTS

In total, twenty-eight comment letters regarding the Draft EIR were received from one federal agency, one State agency, six local agencies, ten organizations, and eight individuals. In addition, verbal comments and associated speaker cards were received at the Faculty and Family Student Housing Open Space Plan & LRDP Amendment Draft EIR Public Hearing that was held on May 4, 2004. Table 12-1 provides a comprehensive list of commenters in the order that they are presented in this section.

<table>
<thead>
<tr>
<th>No.</th>
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<td><strong>Federal Agencies</strong></td>
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Table 12-1 Comment Letters Received During the Draft EIR Comment Period

<table>
<thead>
<tr>
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<tr>
<td>DL</td>
<td>David T. Lange</td>
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<td>JD</td>
<td>Jenifer Dugan</td>
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<td>JG</td>
<td>Jessica Gaffney</td>
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<td>JO</td>
<td>John Olson</td>
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<td>KL</td>
<td>Kevin D. Lafferty</td>
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<td>RB</td>
<td>Ruth Bartz</td>
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<td>SG</td>
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<td>DChir</td>
<td>Darlene Chirman</td>
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<td>JLove</td>
<td>Julie Love</td>
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<td>RBart</td>
<td>Ruth Bartz</td>
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<td>SGros</td>
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<td>Mjaco</td>
<td>Michael Jacoby</td>
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<td>SBull</td>
<td>Scott Bull</td>
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<td>JHowr</td>
<td>Jill Howry</td>
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<tr>
<td>CBowd</td>
<td>Callie Bowdish</td>
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<tr>
<td>BHufs</td>
<td>Brad Hufschmid</td>
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Although CEQA only requires responses to written comments received during the public comment period, the Final EIR also provides responses to comments received at the May 4, 2004 Public Hearing regarding the Draft EIR. This section of the Final EIR contains all comments received on the Draft EIR during the public review period, as well as the Lead Agency’s responses to these comments. Reasoned, factual responses have been provided to all comments received, with a particular emphasis on significant environmental issues. Detailed responses have been provided where a comment raises a specific issue; however, a general response has been provided where the comment is relatively general. Some letters may raise legal or planning issues, rather than environmental issues. In such circumstances, the comment is acknowledged, but no specific response is provided. Generally, the responses to comments provide further explanation or clarification of information contained in the Draft EIR.

Section 12.2 contains the original comment letters and the public hearing transcript, which have been bracketed to isolate the individual comments. Section 12.3 contains the responses to those comments. As noted above, in accordance with Sections 15088(a) and 15088(b) of the CEQA Guidelines, comments that raise significant environmental issues are provided with responses. Comments that are outside of the scope of CEQA review will be forwarded for consideration to the decision makers as part of the project approval process. In some cases, a response refers the reader to a previous response when the previous response substantively addresses the same issue.
12.2 COMMENTS ON THE DRAFT EIR

12.2.1 Federal Agencies
- U.S. Army Corps of Engineers (ACOE)

12.2.2 State Agencies
- Department of Transportation (DOT)

12.2.3 Local Agencies
- Santa Barbara County Air Pollution Control District (APCD)
- City of Goleta (GOL)
- Goleta Water District (GWD)
- Isla Vista Recreation and Park District (IVRPD)
- Santa Barbara Metropolitan Transit District (MTD)
- Santa Barbara Airport (SBA)
- Santa Barbara County Association of Governments (SBCAG)
- Santa Barbara County Fire Department (SBCFD)

12.2.4 Groups/Organizations
- Santa Barbara Audobon Society (AS)
- Cannon Green-Phelps Neighborhood Coalition (CGP)
- Environmental Defense Center (EDC)
- Friends of COPR (FCOPR)
- League of Women Voters of Santa Barbara (LWV)
- UCSB Natural Reserve System & Coal Oil Point Reserve (NRS)
- Sierra Club (SC)
- Surfrider Foundation (SF)
- Santa Barbara Urban Creeks Council (UCC)
- West Campus Point Homeowner's Association (WCP)
Section 12.0
Response to Comments on the Draft EIR

12.2.5 Individuals
- David T. Lange (DL)
- Jenifer Dugan (JD)
- Jessica Gaffney (JG)
- John Olson (JO)
- Kevin D. Lafferty (KL)
- Ruth Bartz (RB)
- Steve Giddings (SG)
- Sharon Z. Terry (ST)

12.2.6 Public Hearing Transcript
- Diane Conn (DConn)
- Darlene Chirman (DChir)
- Julie Love (JLove)
- Ruth Bartz (RBart)
- Steve Gross (SGros)
- Michael Jacoby (MJaco)
- Scott Bull (SBull)
- Jill Howry (JHowr)
- Callie Bowdish (CBowd)
- Brad Hufschmid (BHufs)
FEDERAL AGENCIES
April 19, 2004

Office of the Chief
Regulatory Branch

Attention: Hammond Shari
University of California, Santa Barbara
Office of Campus Planning and Design(2032),
1325 Cheadle Hall
Santa Barbara, California 93106

Dear Mr. Hammond:

It has come to our attention that you plan to do several projects in accordance with the Faculty and Family Student Housing, Open Space plan & LRDP Amendment in the unincorporated part of Santa Barbara County, California. We received your Draft EIR on April 12, 2004, due to workload constraints we are unable to comment at this time. However these activities may require a U.S. Army Corps of Engineers permit.

A Corps of Engineers permit is required for the discharge of dredged or fill material into, including any redeposit of dredged material within, “waters of the United States” and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. Examples include, but are not limited to,

1. creating fills for residential or commercial development, placing bank protection, temporary or permanent stockpiling of excavated material, building road crossings, backfilling for utility line crossings and constructing outfall structures, dams, levees, groins, weirs, or other structures;

2. mechanized landclearing, grading which involves filling low areas or land leveling, ditching, channelizing and other excavation activities that would have the effect of destroying or degrading waters of the United States;

3. allowing runoff or overflow from a contained land or water disposal area to re-enter a water of the United States;

4. placing pilings when such placement has or would have the effect of a discharge of fill material.
Enclosed you will find a permit application form and a pamphlet that describes our regulatory program. If you have any questions, please contact me at (805) 585-2140. Please refer to this letter and 200401042-HW in your reply.

Sincerely,

[Signature]

Heather Wylie
Project Manager

Enclosures
STATE AGENCIES
April 29, 2004

Ms. Shari Hammond
University of California at Santa Barbara
Office of Campus Planning and Design
Santa Barbara, CA 93106

Dear Ms. Hammond:

Re: University of California at Santa Barbara (UCSB) Faculty and Family Student Housing, Open Space Plan and Long Range Development Plan Amendment
SCH# 2003071178

Thank you for including the California Department of Transportation (Department), Division of Aeronautics, in the environmental review process for the above-referenced project. We have reviewed the Draft Environmental Impact Report (DEIR), dated April 2004, and offer the following comments relative to airport land use compatibility planning.

1. The proposed residential projects include the development of 236 faculty-housing units on the North Campus north of Ocean Meadows Golf Course, and 151 family student-housing units along Storke Road and Whittier Drive east of the Ocean Meadows Golf Course. UCSB is also proposing to amend its Long Range Development Plan to expand the Coal Oil Point Natural Reserve by 40 acres, and to implement the Ellwood-Devereux Coast Open Space and Habitat Management Plan through the transfer of the UCSB’s planned residential development from the South Parcel to the North Parcel. This transfer would move development away from sensitive coastal resources. The proposed physical improvements under the Open Space Plan are trail restoration, construction of public parking facilities and a public restroom, beach access improvements, and habitat restoration activities. The residential components of the project are in two specific sites: North Parcel and Storke-Whittier Parcel. The North Parcel is approximately 1.5 miles west of Santa Barbara Municipal Airport (SBA) and the Storke-Whittier Parcel is approximately 1.0 mile southwest of SBA.

2. The California Environmental Quality Act, Public Resources Code Section 21096, requires the use of the Department’s California Airport Land Use Planning Handbook as a technical resource in the preparation of environmental documents for projects within the boundaries of an airport land use compatibility plan, or if such a plan has not been adopted, within two nautical miles of an airport. For your use and reference, our Handbook is published on our web site at http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php. In specific, we recommend that the safety compatibility criteria guidelines for residential density indicated in Table 9C be applied to the proposed project design.
3. Airport land use compatibility planning issues are discussed on Page 4.6-8 in the Land Use section of the DEIR. The discussion mentions that the faculty-housing site will be in Zone 2 and Safety Area 2 (Approach Zone) of the Santa Barbara County Airport Land Use Compatibility Plan. This project and its environmental document should be referred to the Santa Barbara County Airport Land Use Commission for their review and consistency determination. This determination and any conditions of approval should be made a part of the environmental record. The SBA management should also be consulted to ensure that the project is compatible with both existing and planned future airport operations and facilities.

4. The recently enacted Assembly Bill 2776 amended Section 11010 of the Business and Professions Code and Sections 1102.6, 1103.4, and 1353 of the Civil Code, relating to aviation. This bill changed buyer notification requirements for lands around airports. According to the new law, any person who intends to offer land for sale or lease within an airport influence area is required to disclose that fact to the person buying the property. We also recommend that an avigation easement be considered as a mitigation measure for the project.

5. The Public Utilities Code Section 21659 prohibits the construction of structures that penetrate the approach or transitional surfaces to an airport, unless the FAA determines that the construction, alteration, or growth does not constitute a hazard to air navigation and will not create an unsafe condition for air navigation. Depending on structural heights and their proximity to SBA, the Federal Aviation Administration (FAA) may require the filing of a Notice of Proposed Construction and Alteration (Form 7460-1) pursuant to the Federal Aviation Regulation Part 77. For further technical information and an electronic copy of the form, please refer to the FAA’s Air Traffic and Airspace Management web page at http://www.faa.gov/ats/ata/ata400/oeaaa.html.

6. The proposed project includes habitat conservation and enhancement activities along the coastal zone. Land use practices that attract or sustain wildlife populations on or near airports can significantly increase the potential for wildlife-aircraft collisions. The Federal Aviation Administration (FAA) recommends that uses that have the potential to attract wildlife be restricted in the vicinity of an airport. The FAA’s Advisory Circular 150/5200-33, Hazardous Wildlife Attractants On or Near Airports, provides technical guidance regarding this issue, and it is published on-line in the FAA’s Wildlife Mitigation web page at http://wildlife-mitigation.tc.faa.gov/public_html/index.html.

7. The need for compatible land uses around airports in California is both a local and a State issue. We strongly feel that the protection of aviation facilities from incompatible land uses is vital to the safety of airport operations, to the well being of the communities surrounding aviation facilities, and to California’s economic future.
Ms. Shari Hammond
April 29, 2004
Page 3

These comments reflect the areas of concern to the Department's Division of Aeronautics with respect to airport-related impacts and airport land use compatibility planning. We advise you to contact our District 05 office concerning surface transportation issues.

We appreciate the opportunity to review and comment on this environmental document. If you have any questions, please call me at (916) 654-5253.

Sincerely,

[Signature]

DAVID COHEN
Associate Environmental Planner

c: State Clearinghouse
   Santa Barbara Municipal Airport
   Santa Barbara County ALUC

"Caltrans improves mobility across California"
CAMINO MAJORCA LOCAL AGENCIES
May 20, 2004

Shari Hammond, Senior Planner
Office of Campus Planning and Design
University of California, Santa Barbara
Santa Barbara, CA 93106-2032

RE: UCSB Faculty and Family Student Housing and Open Space Plan and LRDP Amendment: DEIR

Dear Shari,

The Santa Barbara County Air Pollution Control District (APCD) appreciates the opportunity to provide comments on the air quality-related sections of the Draft EIR for the above referenced project.

In general, note that the project will have a significant and unavoidable air quality impacts related to traffic, and the emission reductions from the mitigation measures relating to traffic will not reduce the impact to a level of insignificance. Therefore, cumulative air quality impacts are also significant.

The emission reductions from some of the mitigation measures suggested below may not be easily quantifiable because we lack the appropriate tools and credit may not be taken to reduce air quality impacts to a level of insignificance. Nevertheless, CEQA requires that all feasible measures to reduce significant air quality impacts of proposed projects should be applied.

Wood-burning fireplaces are the cause of many public nuisance complaints that the APCD receives during the winter months. To be consistent with the other two Ellwood-Devereux related housing projects in the County of Santa Barbara and the City of Goleta jurisdictions, we recommend that wood-burning fireplaces and woodstoves be prohibited.

Particulate emissions from diesel exhaust are classified as carcinogenic by the state of California. While there are no methods to quantify the long-term public health risk from...
off-road and on-road construction equipment during the construction time period, the APCD recommends the following measures be adhered to during project grading and construction to reduce emissions from construction equipment:

- Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) should be utilized wherever feasible.
- The engine size of construction equipment should be the minimum practical size.
- The number of construction equipment operating simultaneously should be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction equipment should be maintained in tune per the manufacturer's specifications.
- Construction equipment operating onsite should be equipped with two to four degree engine timing retard or precombustion chamber engines.
- Catalytic converters should be installed on gasoline-powered equipment, if feasible.
- Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California could be installed, if available.
- Diesel powered equipment should be replaced by electric equipment whenever feasible.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

The DEIR does not include energy-conserving measures. Energy conservation measures are recommended for all projects to reduce the need for natural gas and electricity. Although Santa Barbara County does not have power plants, a portion of our electricity comes from burning fossil fuels, which contributes to regional air pollution. The following measures, beyond Title 24 compliance, could be incorporated into project building plans. For example:

- The Project could include an option to install photovoltaic cells and solar water heaters on rooftops and on-demand water heaters to offset some natural gas and electricity consumption for the development
Duct systems could be placed within the building thermal envelope, or insulated to R-8

Passive or fan-aided cooling could be planned for or designed into structures, a cupola or roof opening for hot air venting or underground cooling tubes

Outdoor lighting could be designed for high efficiency, solar-powered or controlled by motion detectors

Natural lighting could be included in buildings

Project could install energy efficient appliances and lighting

According to the U.S. Green Building Council (USGBC), construction in the United produces 30% of the total U.S. greenhouse gas emissions. Better building practices and materials can significantly reduce these gases. UCSB has implemented green building materials and pollution prevention practices for many projects on campus and even has a Platinum LEED\(^1\) rated building. Although the USGBC is still developing a LEED rating system to establish performance criteria for new single-family and low-rise multi-family residential projects, the following suggestions could be considered in the proposed building plans:

At least 50% of exterior could be of local masonry; plaster or cementitious siding; recycled, salvaged or certified sustainably harvested wood; recycled roofing material or combination cement-fiber roofing; 30-year rated life on minimum 50% of roof

At least 50% interior floor could be of tile, stone, finished concrete; cork or natural linoleum, carpet and pad (tacked) of recycled content or natural content, minimal finishes

All insulation could be of 100% recycled content, wet-blown, and/or cellulose with UL fire retardant

The Project could use light colored water based paint and roofing materials

At least 80% of interior and exterior paints and finishes could be water-based or low VOC and adhesives could be solvent-free

\(^1\) Leadership in Energy and Environmental Design (LEED\(^{TM}\)) Green Building Rating System.
- The Project could prepare a construction waste management plan to encourage material re-use and minimize waste.
- The Project could install mechanical air conditioners and refrigeration units that use non-ozone depleting chemicals.

Please call me at 961-8893 or contact me by e-mail at vlj@sbcapcd.org, if you have questions.

Sincerely,

Vijaya Jammalamadaka, AICP  
Air Quality Specialist  
Technology and Environmental Review Division

cc: Bobbie Bratz, Public Information and Community Programs Supervisor  
TEA Chron File  
\nt3\groups\pca\wp\pcacorr\ucsb faculty and student housing deir.doc
May 24, 2004

Ms. Shari Hammond, Senior Planner
University of California, Santa Barbara
Office of Campus Planning and Design (2032)
1325 Cheadle Hall
Santa Barbara, California 93106-2032

RE: Faculty and Family Student Housing, Open Space Plan, & LRDP Amendment – Draft EIR

Dear Ms. Hammond:

The City has reviewed the Draft EIR on the Faculty and Family Student Housing, Open Space Plan, & LRDP Amendment project and has the following comments:

Traffic and Circulation

Table 4.12-1: The intersection of Phelps Road/Pacific Oaks Road should be included in the traffic analysis.

MM 4.12-1(a): This mitigation measure includes improvements along El Colegio Road. The EIR must identify total costs of the improvement, which projects are assumed to be responsible for the improvement, fee amount, to which agency fees would be paid, how the improvements would be implemented, and timing of implementation. A mitigation measure is only considered feasible if it is capable of being accomplished in a successful manner within a reasonable period of time, taking into consideration economic, environmental, legal, social, and technological factors (CEQA Guidelines Section 15364). Project-specific impacts along El Colegio Road can only be considered Class II (significant but subject to mitigation) if proposed mitigation is fully funded and implemented within a reasonable period of time. Otherwise impacts would be Class I (significant and unavoidable). It is
acknowledged that this impact would occur nearby but not within the City of Goleta's jurisdiction.

**MM 4.12-1(b):** This mitigation measure includes the widening of Storke Road from Whittier Drive to El Colegio Road in the southbound direction from one lane to two lanes. The EIR should include more specific information on the improvements (including undergrounding of any utilities), identify total costs of the improvements, timing, and how the improvements would be implemented. (It is noted that the original traffic report in Volume 2 indicates that UCSB would be responsible for these improvements based on a project specific significant impact.) The EIR should also indicate that an encroachment permit from the City would be required.

**MM 4.12-1(d):** This mitigation measure includes options for improvements to the Storke Road/Hollister Avenue intersection and payment of "fair share" of fees. The EIR should note that the identified intersection improvements are not programmed and are unfunded. A mitigation measure is only considered feasible if it is capable of being accomplished in a successful manner within a reasonable period of time, taking into consideration economic, environmental, legal, social, and technological factors (CEQA Guidelines Section 15364). Payment of "fair share" of fees can only be considered feasible mitigation if funding, timing, and implementation of required improvements can be specified. The EIR must identify total costs of the improvement, which projects are assumed to be responsible for the improvement, fee amount, to which agency fees would be paid, how the improvements would be implemented, and timing of implementation.

Project-specific impacts at Storke Road/Hollister Avenue can only be considered Class II (significant but subject to mitigation) if proposed mitigation is fully funded and implemented within a reasonable period of time. Otherwise impacts would be Class I (significant and unavoidable). Payment of fees is only considered feasible mitigation for improvements that are not programmed and are unfunded in the case of significant cumulative impacts (CEQA Guidelines Section 15130[a][3]).

In any case, it is unclear at this time whether any of the options identified in the Draft EIR would, either alone or in some combination, adequately mitigate potentially significant traffic impacts at this intersection. The City is reviewing adequacy of proposed improvements as well as possible alternative improvements as part of its ongoing General Plan process.

**Impact 4.12-5:** Frontage improvements (curb, gutter, sidewalk) consistent with City Standards should be provided along Marymount Way at the location of the project.
frontage. The EIR should note the requirement for an encroachment permit from the City of Goleta.

MM 4.12-6: This mitigation measure would require appropriate traffic controls on public roadways during construction. The EIR should note the requirement for encroachment permits from the City of Goleta where applicable.

Impact 4.12-10: Please clarify that the 85 onstreet visitor spaces associated with the proposed 236 units of Faculty Housing referenced on p. 4.12-37 are on streets internal to the development.

We recognize that these comments generate the need for a meeting regarding adequacy, responsibility, and funding of certain improvements intended to mitigate significant impacts. The City is available to meet regarding its roadway improvement standards at your earliest convenience in order to assist you in preparing the Final EIR on this project. The City also recognizes the need for initiating discussions regarding a multi-jurisdictional traffic mitigation agreement and will do so in the context of the Ellwood Deveraux Joint Review Panel since that panel was established on that basis and because of the complexity of this issue.

Comments on Impacts of Proposed Trail #12 and Grading for Development

The City has concerns regarding the impacts caused by the proposed alignment of Trail #12, in particular the segment of the proposed trail that runs southward between Ellwood Beach Drive and Cannon Green Drive to the point where it crosses into the City of Goleta. The proposed trail traverses a very steep ravine along a windrow at the boundary between University property and the Ellwood Mesa. The potential impacts of this particular trail alignment include grading and erosion, possible damage to the trees in the windrow, and a less-satisfactory (and possibly reduced) access for residents in the Cannon Green area. These impacts could be avoided if the trail were rerouted to the east of the proposed alignment. The City's concern also extends to the grading in this area for the proposed residential development, in particular that the grading may adversely affect the trees in the windrow.

Thank you for the opportunity to comment on the Faculty and Family Student Housing, Open Space Plan, & LRDP Amendment Draft EIR.
Ms. Shari Hammond
May 24, 2004
Page 4

Sincerely,

[Signature]
Kenneth M. Curtis, Director
Planning and Environmental Services

cc. George Pernsteiner, Vice Chancellor, UCSB
    Tye Simpson, Director of Planning, UCSB
    Robert Silsbee, Planning and Resource Manager, UCSB
    Dianne Meester, S.B. County Planning & Development, Assistant Director
    Peter Imhof, S.B. County Planning & Development, Senior Planner
    Fred Stouder, City of Goleta, City Manager
    Steve Wagner, City of Goleta, Director Community Services
    Pat Dugan, City of Goleta, General Plan Manager
    Patricia Miller, City of Goleta, Current Planning Division Manager
    Rob Mullane, City of Goleta, Senior Planner
May 19, 2004

Shari Hammond, Senior Planner  
University of California, Santa Barbara  
Office of Campus Planning and Design (2032)  
Santa Barbara, CA 93106-2032

Re: Draft EIR and LRDP Amendment  
Faculty and Student Housing and Open Space Plan  
Goleta Water District Comments

Dear Ms. Hammond:

The Goleta Water District is a Responsible Agency under CEQA for the referenced Project. District staff has reviewed the Draft EIR and has the following comments.

The District concurs with the most important water supply findings in the document, that being that there is adequate water supply available from the District to serve the Project and there are no environmental impacts related to that service. We believe it is important to communicate with the University on certain water supply issues raised by this document to promote a better understanding of water supply issues today and for the foreseeable future for the University, its staff, and the public. The University is the District’s largest customer. The proposed Project is probably the largest single residential development project in one CEQA document the District and the University are likely to see for the foreseeable future.

We will start with some general comments and then address specific sections of the document, below.

**NORTH CAMPUS FACULTY HOUSING**

We concur with the water demand calculations for the interior uses for this part of
the Project. We note that there is a proposed community recreation facility with a swimming pool. This will obviously have a water demand that is not set forth in the document and we do not have adequate information at this time to calculate that demand. We assume that there will be other water uses within this part of the Project that will represent additional water demand. Nevertheless, the District has adequate water supply to serve all aspects of the Project.

SIERRA MADRE FAMILY STUDENT HOUSING

We concur with the water demand calculations for the interior uses for this part of the project. We note that the project includes a proposed community building with meeting rooms, laundry, and recreation facilities. There is also a proposed landscaped parking lot. The document does not include information on water demand for these uses and there will obviously be an additional demand. We do not have adequate information at this time to calculate this demand but the District has adequate supply to serve this development.

OPEN SPACE PLAN

We understand that the University is not proposing to irrigate any part of the Open Space area. We note that there is a proposed restroom with a "pit" toilet with no running water and no water service lines connected to it. Therefore, we assume that this aspect of the Project will generate no new water demand.

Page No. 4.3-24.

Impact 4.3-2. Groundwater Comment - The District agrees with the finding of no significant groundwater impact made here. In an effort to provide more accurate information on the subject we point out the following. In the first paragraph of this impact assessment, it states that the project could increase impervious surfaces and reduce groundwater infiltration and increase demand for potable water, which could affect groundwater resources. The second paragraph of this impact section addresses the issue of groundwater recharge impacts from an increase in impervious surfaces.
As the Goleta Water District is the exclusive source of water for the University, and as the District produces groundwater only from the Goleta Central Basin, and as the project location does not overlie the Central Basin, the discussion of impacts is not necessary nor is it accurate to suggest that it would have any impacts on the groundwater basin from which the District produces water.

The discussion in the last two paragraphs of this impact section regarding impacts on water supply is also not entirely accurate in that as the District currently has a significant surplus of supply over demand and more than adequate supply to serve the proposed Project, the Project will have no impacts on groundwater supply at all. Further, the District’s production of groundwater in the Goleta Central Basin is the subject of the Wright v. Goleta Water District adjudication and therefore, that judgment requires that the basin be operated in a safe yield mode. There should be a no impact finding on these groundwater issues.

Groundwater impact - The document states that water mining and seawater intrusion have resulted in some locations. This statement is misleading in reference to the University’s only supply of water as the District’s production of groundwater has not resulted in any water mining or seawater intrusion. Because of the District’s current supply/demand situation and the adjudication of the Goleta Groundwater Basin under the Wright v. Goleta Water District judgment, water mining and seawater intrusion are not an issue in the Goleta Water District service area.

Section 4.15.2 - Water Supply - Although the information in this section on Water Supply is accurate, we note that the Draft EIRs prepared by the City of Goleta for the Comstock Homes Development and Ellwood Mesa Open Space Plan and the Draft EIR prepared by the County of Santa Barbara for the Ocean Meadows Residences and Open Space Plan used the same information on water supply and the Goleta Water District, and the University has chosen to use a different approach. We believe it is in the public interest in a CEQA document prepared for public decision makers and public understanding of
issues, that the same information be used in these related CEQA documents on the same subject. If there was substantial evidence available in the record to justify using a different approach as the University has done, that could be appropriate but no such evidence exists on the issue of water supply and therefore, the District supports the University using the same information on water supply found in the other two referenced Draft EIRs. That information is found in the City of Goleta Draft EIR at pages 4.15-5-7 and in the County Ocean Meadows document at pages 4.15-6-7.

Page Nos. 4.15-8-9

Water Allotment and Usage for North Campus - The discussion of the University’s available water supply for the subject Project stated in this section is not accurate. We will briefly explain. From 1972 through 1996 the District was subject to a water connection moratorium Ordinance that restricted the availability of new water service for new development. That moratorium Ordinance was rescinded effective 1997. The University under the terms of the moratorium Ordinance was issued a permit that established its water allocation at that time. In 1991 the University and the District entered into a Water Reclamation Agreement that has a term that extends to the year 2010. At the time that the Agreement was executed, the moratorium Ordinance was still in effect. The Reclamation Agreement includes terms regarding an allocation of potable water service to the University. That restriction on the amount of water available to the University is no longer effective since the end of the moratorium in 1997. As the District is operating in a significant water supply surplus now and for the foreseeable future, the University as well as all other District customers have no restriction on the amount of water available for approved new development. The University/Goleta Water District Water Reclamation Agreement is still effective to state the fees to be paid by the University for water service once University consumption exceeds 778 AFY of potable water. As the two residential Projects that are the subject of this Draft EIR are served pursuant to a separate water entitlement acquired by the University when it acquired the property on which the Project will be developed, it does not appear likely that the University will exceed the 778 AFY use figure prior to the termination of the Agreement in 2010. These allocation issues are today arcane and we expect the discussion will be confusing to the decision makers and the public. The District has adequate water supply to serve the Projects and, with the
information referenced from the City of Goleta and County of Santa Barbara Draft EIRs cited, no further discussion should be necessary in this document on the water supply and service issue.

**Page Nos. 4.15-29**

Impact 4.15-4 - The document states that the amendment of the LRDP could require the construction or expansion of existing water treatment facilities. At pages 4.15-41-42, the document makes the correct finding that the subject Project will not require the construction or expansion of water treatment facilities or other water facilities. The document goes on at page 4.15-42 to make the correct finding that the District has already made the planning and financial commitments to provide the facilities necessary for service to the subject property and all reasonably foreseeable projects through at least 2015.

**Page Nos. 4.15-30-32**

Impact 4.15-6 - The document discusses the potential use of reclaimed water for irrigation. Although the District has adequate reclaimed water available to serve new irrigation uses, there are some constraints today on additional new service. There is a reclaimed water main in Hollister Avenue from which reclaimed water could be made available for this Project. The District is unable to meet peak demands during a few months of summer irrigation. If the Project could provide on-site storage for reclaimed water, such as in the form of lake, pond, or other reservoir, then with an appropriate irrigation schedule, reclaimed water could be made available. It should also be noted that reclaimed water is not provided as a guaranteed supply on demand. There are, at times, interruptions to the system due to maintenance, power outages and operations of the Goleta Sanitary District to meet its discharge permit requirements. Therefore, in order to provide reclaimed water for irrigation at the Project, on-site storage sufficient to irrigate during peak demand conditions, the extension of reclaimed water distribution mains and the acceptance of temporary periodic shut downs, must be factored in to the use of reclaimed water for the Project if it is to be implemented.

**MM 4.15-6 (b)**
In addition to the mitigation measures on conservation identified, the District has an active water conservation program and will look forward to cooperating with the University to implement the District’s water conservation measures.

Page Nos. 4.15-41-42

Cumulative Water Supply Impacts - The District agrees with the findings stated in this section.

Very truly yours,

Linda Sumansky
Water Resources Business Coordinator
May 24, 2004

University of California, Santa Barbara
Office of Budget and Planning
Santa Barbara, CA 93106

RE: Comments on the Preliminary Concepts for the Ellwood-Devereux Coast Open Space and Habitat Management Plan

Thank you for the opportunity to respond to the draft Ellwood-Devereux Plan Open Space and Habitat Management Plan. Our concerns are primarily with associated with the modification of the trail system at Camino Corto Open Space and the proposed parking lot adjacent to Camino Majorca. However, we do have some suggestions for the location of bathrooms and at Coal Oil Point and Camino Majorca.

1. The trail that runs between Abrego Road and the UCSB Stables should remain Type A, with improved native materials and soil stabilizer used to reduce erosion. We are concerned that the plan has failed to take into consideration; the vernal pool and other environmentally sensitive areas that require wide buffers. We don’t think this trail can be widened in accordance with LCP policies.

2. Figure 23 and 24 indicates the possible construction of either a 20 or 40 space parking lot on University property adjacent to Camino Majorca Road in Isla Vista. If a lot is constructed in this area, it should be operated consistent with the coastal access parking program on Camino Majorca Road. We are currently working with the County to maintain 40-60 coastal access parking spaces along Camino Majorca. This seems to adequately serve people who drive to Isla Vista to go to the beach.

Additional coastal access parking will increase impacts to the West Campus bluffs as well as to Isla Vista. We believe that the Camino Majorca lot should not be constructed and that it will cause unnecessary impacts to existing open space. We strongly suggest that the West Campus Parking lot be modified to allow for public coastal access as suggested in Figure 22, rather than building an additional lot at Camino Majorca.

Ell-Dev Comments 014-02 at sb.doc

5/24/2004
3. Figure 22 indicates that a new bathroom will be constructed at the southern edge of the current parking lot at Coal Oil Point. Locating a bathroom this far away from Sands Beach will not accomplish the goal of providing bathrooms to serve the large amount of beach users. We strongly suggest that the bathrooms be relocated closer to the beach while maintaining the feasibility of being connected to a municipal sewer system.

4. Figure 23 illustrates a proposed conceptual plan for the Camino Majorca Beach access and West Campus Bluffs. We believe that a bathroom should be constructed at Camino Majorca to accommodate beach users who arrive to use Devereux Point, Isla Vista Beach, or other areas and do not go to Coal Oil Point. Many people who arrive at Camino Majorca do not use the Coal Oil Point area for coastal recreation, and a bathroom at Camino Majorca would be tremendously helpful in alleviating a current public health issue. (However, this should be in addition to, not instead of, the proposed bathrooms by the county in Isla Vista.)

Thank you for considering our comments. If you have any questions, please call me at 968-2017.

Sincerely,

[Signature]

Derek Johnson
General Manager

Cc: IVRPD Board of Directors
Shari Hammond, Senior Planner  
University of California, Santa Barbara  
Office of Campus Planning and Design (2032)  
Santa Barbara, CA 93106-2032

May 20, 2004

Dear Ms. Hammond:

Re: Faculty and Family Student Housing, Open Space Plan and LRDP Amendment Draft Environmental Impact Report

The Santa Barbara Metropolitan Transit District (MTD) provides transit service for southern Santa Barbara County, including three lines that serve the Storke Road corridor between Hollister Avenue and El Colegio Road. Accordingly, MTD has a strong interest in the proposed Faculty and Family Student Housing project described in the Faculty and Family Student Housing, Open Space Plan and LRDP Amendment Draft Environmental Impact Report

Through innovative pass programs, UCSB has made a considerable effort to encourage both students and faculty to use public transit. The MTD supports and embraces this mission and encourages UCSB to continue to build the bus stop infrastructure to support these successful programs. Statistical data has shown that enhanced passenger amenities like benches, shelters, and schedule information at bus stops are some of the motivating factors considered when making the choice to utilize public transit.

As stated in the Faculty and Family Student Housing, Open Space Plan and LRDP Amendment Draft Environmental Impact Report, the MTD provides service to the Storke Road corridor between Hollister Avenue and El Colegio Road via the Lines 23-Winchester Canyon, 24x-UCSB Express and the 27-UCSB Shuttle. Currently, there are a total of 11 bus stops along this portion of the Storke Road corridor. In order to better serve the transit needs of the faculty and students who will live in the proposed Faculty and Family Student Housing, the MTD requests that the project applicant fund the improvement of two bus stops located directly adjacent to the proposed development.

The bus stops where MTD seeks improvement are located on the west side of Storke Road at Whittier Drive and on the west side of Storke Road at El Colegio Road. At the bus stop located at Storke Road and Whittier Drive, the MTD seeks passenger amenities to include a bench, trash receptacle, passenger information and a shelter, as detailed in the MTD Bus Stop Standards. For the bus stop located at Storke Road and El Colegio Road, the MTD requests that the stop be moved farther north so that it would be in closer proximity to the central portion of the proposed development. This will require the installation of a cement passenger loading platform at the re-located bus stop. In addition, the MTD seeks passenger amenities at this bus stop.
stop to include a bench, trash receptacle, passenger information and a shelter, as detailed in the MTD Bus Stop Standards

The MTD appreciates the opportunity to comment on the Faculty and Family Student Housing, Open Space Plan and LRDP Amendment Draft Environmental Impact Report. Should you have any question regarding the above comments, please contact me at (805) 963-9571 extension 237.

Sincerely,

Rachel Grossman
Transit Planner
May 14, 2004

Shari Hammond, Senior Planner
Office of Campus Planning and Design
1325 Cheadle Hall
University of California, Santa Barbara
Santa Barbara, CA 93106

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE UNIVERSITY OF CALIFORNIA, SANTA BARBARA FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN AND LRDP AMENDMENT

Dear Ms. Hammond:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the University of California, Santa Barbara Faculty and Family Student Housing, Open Space Plan and LRDP Amendment.

The proposed project would locate 236 units of single- and multiple-family faculty housing north of the Ocean Meadows Golf Course, and designate the land south of the golf course and two other areas as open space. A portion of these residential units would be located in the existing and future Approach Zone of Runway 7/25 beyond the one mile marker. It appears that the 151 family student-housing units on North Campus along Storke Road and Whittier Drive would be out of the current and future Approach Zone of Runway 7/25. It should be noted that DEIR Section 4.5.2.7 – Hazards (page 4.5-29) places the project “within” three miles of the runway end. This section should be revised to more accurately reflect that the faculty housing site is approximately 1.5 miles from the end of Runway 7/25.

The Airport is concerned about the compatibility of the faculty housing proposal with the adopted County Airport Land Use Plan (ALUP). Section 15154(a) of the CEQA Guidelines states:

“When a lead agency prepares an EIR for a project within the boundaries of a comprehensive airport land use plan or, if a comprehensive airport land use plan has not been adopted for a project within two nautical miles of a public airport, the agency shall utilize the Airport Land Use Planning Handbook
Therefore, contrary to statements made in Sections 4.5-8 and 4.6 of the DEIR, CEQA Guidelines Section 15154(a) does not exempt state agencies from the requirement to use the adopted guidance contained in the County ALUP during preparation of an EIR. Further, the DEIR makes no mention of the State of California’s Airport Land Use Planning Handbook and the project’s consistency with the guidelines provided therein.

Pursuant to the County ALUP, multiple family residences are not a compatible use within the approach zone, although single family residences compatible outside one mile of the runway end. The intent of approach zone compatibility standards is to avoid large concentrations of people in areas with high levels of aircraft activity in order to address two primary areas of concern: safety and noise. Although aircraft accidents occur at very low frequencies, the consequences of such accidents are potentially devastating. For this reason, the conclusion made on page 4.6-58 regarding the presence of existing multi-family housing in the project vicinity is irrelevant because the proposed project would result in an increase in population within Safety Area 2 and would only serve to further increase the number of persons exposed to aircraft noise and potential aircraft hazards.

Further, while the proposed faculty housing is outside of the 60 dB CNEL contour, the Airport would like to emphasize that frequent overflights could result in a noise issue for residents, as the area lies within the instrument approach path of Runway 7, beyond the one mile marker. Aircraft line up on this approach more frequently on cloudy or foggy days and nights, creating more noise for land uses along that approach. Additionally, a majority of the noise complaints received by the Airport are from residents outside of the 60 dB CNEL contour.

Therefore, the Airport does not concur with the conclusions found in Section 4.5 – Hazards (page 4.5-29 and 4.5-30) and Section 4.6 – Land Use (page 4.6-58) that the inconsistency of proposed multiple family residences with the ALUP would result in a less than significant impact. The Airport strongly recommends that the layout of the proposed faculty housing component be modified to relocate multiple family residences outside of the approach zone to reduce potentially significant environmentally impacts related to public safety.

Further, for the reasons noted above, the also Airport recommends that the discussion under Impact 4.13-7 (page 4.13-22) be revised to include a discussion of intermittent noise events resulting from frequent aircraft overflights. Further, the Airport also recommends that the following two mitigation measures be incorporated into Section 4.13 (Noise) for both the faculty housing and student family housing proposals as follows:
"Tenant notification shall be provided to all future residents within the tenant lease regarding frequent aircraft over flights and associated noise levels in the project area."

and

"The project shall incorporate soundproofing construction techniques to ensure an internal noise level of 45 decibels or lower."

We have once again enclosed an exhibit of the Approach Zone to Runway 7 at Santa Barbara Airport. Please note that this exhibit includes the existing and future approach zones. The future approach zones will be applicable after the Runway Safety Area and Runway Relocation project is complete, which will likely be within three years.

We further request that you to keep us informed of the project plans during the planning process, so that you may address possible land-use conflicts as you proceed. If you have any questions, please feel free to call me at 967-7111 or Airport Planner Laurie Owens at 692-6023. We also suggest that you contact William Yim of the Santa Barbara County Association of Governments, who is a staff of the County Airport Land Use Commission (ALUC), and David Cohen, Caltrans Division of Aeronautics pertaining to use of the California Airport Land Use Planning Handbook.

Sincerely,

Karen Ramsdell
Airport Director

Attachments: 1) Runway 7 Current and Future Approach Zones

cc: William Yim, SBÇAG Transportation Planner
    David Cohen, Caltrans, Division of Aeronautics
May 24, 2004

Ms. Shari Hammond
University of California, Santa Barbara
Office of Campus Planning and Design
1325 Cheadle Hall
Santa Barbara, CA 93106

Re: DEIR for the UCSB Faculty and Family Student Housing, Open Space Plan, and LRDP Amendment

Dear Ms. Hammond,

Thank you for the opportunity to comment on the above DEIR. SBCAG has completed the review of the above document. Our comments are organized under “general comments” and “specific comments.” The latter is more specific to the University Facility Housing proposed on the North Parcel and the Faculty Student Housing proposed on the Storke Whittier Parcel west of Storke Road.

General Comments:

As the Airport Land Use Commission (ALUC) for the County of Santa Barbara, SBCAG is disappointed with the analysis of the airport land use issues contained in the DEIR. On September 17, 2003; SBCAG responded to the NOP of the above EIR. We highlighted several airport land use issues to be addressed in the document. These issues include airport safety, aircraft noise, population/land use density, and mitigation measures on the two proposed options (Projects A and B). Incidentally, our comment letter was not incorporated in the Appendix B (Volume II) of the DEIR.

While SBCAG recognizes that the needs for UCSB to expand their faculty and student housing, the DEIR did not address the airport land use issues adequately. Staff noted that in several land use discussions (Sections 4.6 and 4.6), a concluding statement “the University is not subject to the ALUC jurisdiction and/or policy requirements” was made. The analyses appear to dismiss these significant issues to either “less than significant” or “no significance” levels. In Section 4.6, reference is made on the need for a “balancing analysis” highlighting various policy conflicts and land use compatibility with state, county and local jurisdictions. The DEIR even cited the Airport Land Use Plan (ALUP) consistency evaluation criteria, and yet the document concluded with the same statement.

The primary purpose of the Santa Barbara County Airport Land Use Plan is to help ensure compatible land uses to be developed in the vicinity of the airport in order to protect the public health, safety and welfare of the community while at the same time protecting an orderly operation and development of air transportation. Thus SBCAG does not concur with the airport land use analyses contained in the document.

Secondly, the UCSB Faculty and Family Student Housing sites are within the Airport Influence Area (AIA) boundary of Santa Barbara Airport. Figure 4.6-3 in the DEIR regarding the ALUC Planning Boundary and the existing airport zones is no longer valid because of the enactment of the AB2776 which became effective as of January 1, 2004. This boundary replaces the Airport Planning Boundary from the existing ALUP. Such information has been distributed to various agencies.

Member Agencies
Buellton • Carpinteria • Goleta • Guadalupe • Lompoc • Santa Barbara • Santa Maria • Solvang • Santa Barbara County
county agencies together with public workshops around the county. The information is also available on the SBCAG website. In addition, the existing Runway Approach and Clear Zones indicated on Exhibit 4.6-3 is outdated due to the 800 feet Runway Safety Area extension on Runway 7 which shifts the future airport approach and clear zone (RPZ) further to the west. The shifting of the Approach Zone would have some impact on the Faculty Housing site on the North Parcel, and therefore this issue would need to be addressed. Exhibit 4.6-3 would need to indicate the existing and new Airport Approach Zones. Specific details regarding the RSA extension and its impacts are available from the SBCAG website under SBCAG Board Meetings, September 2003 Agenda.

In addition, the DEIR made very little reference to the 2002 Caltrans Airport Land Use Handbook. This handbook is a primarily resource document for addressing airport/land use safety issues and determining compatible land uses surrounding airports in California. Chapter 9 on airport safety issues is particularly relevant to the DEIR. Is UCSB, as state agency, suggesting that the guidelines published by another state agency, is not relevant to your project? Staff strongly recommends the DEIR to address ALUC issues with reference from this resource.

The following section provides specific comments with respect to the issues of airport safety, overflights, population density and noise with respect to the Faculty Housing and Family Student Housing sites.

Specific Comments

Impact on Existing and Future Runway Approach Zones: SBCAG is concerned with the UCSB Faculty Housing proposed on the North Parcel. The eastern part of the site is approximately a mile or so from the existing and future one-mile marker of Runway 7. More than 80 percent of the site falls within existing and future Airport Approach Zone. Further, the entire North Parcel lies under the primarily airport arrival and departure flight tracks to and from Santa Barbara Airport. The proposed multi family units would be exposed to frequent overflights from departing turning left toward the Ocean and arriving aircraft turning final for Runway 7. The site is therefore subject to potential risk of aircraft Hazards.

Land Use / Population Density: The North Parcel is 26.5 acre in size with 236 multi-family units proposed. At the current North Parcel site, multi-family residential is generally considered incompatible. In addition, the population density of approximately 9 units per acre exceeds the density threshold of 4 units per acre. Given the site is directly under the primarily departure and arrival flight tracks, SBCAG is concerned with the airport safety issue with this proposal. In our original comment letter, SBCAG favors "Project B", is the South Parcel. The site is more favored since it is outside the Approach Zone. Should there be other environmental concerns on site B, the DEIR should address the issue in the ALUP context, or the document should address in the document how to mitigate the population issue on the North Parcel. Instead, the statement arguing that the University is not subject to ALUC policy dismisses the significance of the airport safety and population density concerns.

Noise Impacts: The North Parcel site is outside the 60 CNEL noise contour of the Santa Barbara Airport Aviation Facility Plan noise contour. However, as described earlier, the site would be exposed to relatively frequent overflights. The proposed residential units would be exposed to certain noise nuisance if not intrusion, particularly from business jets. SBCAG expects more in-depth analysis on how this impact could be mitigated.

The Storke-Whittier Parcel: This is a 14.8 acre parcel located west of Storke Road and north of the existing University family housing. The project proposes a total of 151 multi-family units for University family housing. This site is outside the existing Airport Approach Zone but somewhat close to the existing general aviation (GA) local training (Touch & Go) flight pattern. According to recent airport flight monitoring computer generated maps, the site would also be exposed to occasional overflights, particularly GA training activities during weekends. Multi-family housing at
this location is considered compatible. The site also appears to have reduced risk for overflight exposure when compared with the North Parcel. However, because of the consequence of aircraft accidents, the airport safety issues would require to be addressed in more detail. In addition, the noise issues would also require to be addressed.

In general, SBCAG recommends that the DEIR address the overflight, airport safety/population density and noise issues for each site. Staff would also recommend the following mitigation measures to be considered as well, including, but not limited to the following:

- Filing of a "Notice of Airport in Vicinity" to the Department of Real Estate with reference to AB2776
- Providing notices to tenants orOME buyers regarding possible impacts of aircraft overflights and noise annoyance
- Mitigation measures for residential units to minimize indoor noise levels to 45 CNEL noise level.

If you have any questions, please feel free to contact me or Bill Yim of my staff.

Sincerely,

Michael G. Powers
Deputy Director

Cc: Laurie Owen, Santa Barbara Municipal Airport
    David Cohen, Caltrans Aeronautics
    Kevin Ready, SBCAG Counsel
June 3, 2004

Ms. Jennifer Metz  
Senior Planner  
Campus Planning and Design  
University of California  
Santa Barbara, CA 93106

Dear Ms. Metz:

SUBJECT: Draft Environmental Impact Report –  
Faculty and Family Student Housing,  
Open Space Plan & LRDP Amendment (Volume I), Dated April, 2004  
APN: 073-090-013, 073-090-061, 073-090-062

The fire department has reviewed the draft Environmental Impact Report (EIR) for the Faculty and Family Student Housing, Open Space Plan & LRDP Amendment (Volume I), dated April 2004. The fire department normally requires a set of plans before making official recommendations. The following is based upon the limited information provided in the draft EIR.

Fire Department Impacts

Due to the cumulative impact of this and other UCSB building projects, current firefighter staffing and emergency response capabilities are not able to adequately respond to existing emergency needs. This project represents a significant additional impact upon firefighting resources and will cause a further negative impact on public safety.

1. On page 4.15-3 the EIR states: “In the past, the Fire Department has tried to follow a standard of one three-person station per 1,200 residents or one five-person station per 1,500 residents. All fire stations serving the project area meet or exceed this ratio.”

Serving: The Cities of Buellton and Goleta, and the Communities of Casitas, Cuyama, Gaviota, Hope Ranch, Los Alamos, Los Olivos,  
Mission Canyon, Mission Hills, Orcutt, Santa Maria, Santa Ynez, Sisquoc, Vandenberg Village.
a. This information is incorrect. "The Fire Department uses a countywide level of service of one firefighter/4,000 population as an absolute maximum population which can be adequately served. All of the fire stations within Goleta approach or exceed this threshold" (Goleta Community Plan, 1993, 115).

b. It should also be noted that "the National Fire Protection Association (NFPA) and the International City Managers Association (ICMA) recommend a ratio of one firefighter/2,000 population as an ‘ideal’. If a project causes either of these ratios to be exceeded, it is considered to have a significant impact on fire protection services" (Goleta Growth Management Ordinance Amendments, 1995, 33).

2. The EIR is also in error on page 4.15-4, "Station 17 is staffed with three firefighters who are trained as emergency medical technicians, and two paramedics."

a. The "two paramedics" are referring to UCSB Rescue 7. UCSB Rescue 7 is staffed with only one paramedic and one student EMT and is not a part of the County Fire Department. These personnel are not firefighters and, therefore, cannot be counted as firefighting staff.

Roads

The County Fire Department recommends El Colegio Road be widened to four lanes. The County Fire Department has serious concerns over the proposed “roundabout” roadway plan as put forth in the draft EIR.

As stated in the draft EIR on page 4.12-26, "Modify the two-lane roadway section of El Colegio Road between Stadium Road on the east and Camino Corto Lane on the west with a series of roundabouts at Camino Del Sur, Los Carneros Road, Camino Pescadero, Embarcadero Del Mar, Embarcadero Del Norte and Stadium Way. Each roundabout would be designed to accommodate a truck with a 50-foot wheelbase, and each roundabout center island would provide an area for landscaping. The roundabout at Los Carneros Road would have two lanes approaching from each of the three legs. The Camino Pescadero and Embarcadero Del Mar roundabouts would have a single lane approaching, circulating and exiting the roundabout from every direction. The Embarcadero Del Norte roundabout would have one northbound lane approaching from Isla Vista, two westbound lanes approaching from UCSB, and two eastbound approach lanes. The roundabout at Stadium Road would have a single approaching, circulating and exiting lane.

El Colegio Road is the main response artery into the Isla Vista area, as well as West Campus. The roundabout option poses a significant and unacceptable threat to the public
safety by hampering the ability of a fire engine to respond to an emergency. This
development project will significantly increase the amount of traffic along the El Colegio
Road corridor. The Fire Department supports the four lane widening plan as set forth in the
Goleta Transportation Improvement Plan.

Conclusion

This project represents a significant impact upon our ability to provide for public safety in
the communities of UCSB, Isla Vista and the City of Goleta because every campus alarm
drains resources from the surrounding communities. With the increased infrastructure and
call load that will impact Engine 11, as well as the surrounding fire stations, fire engines will
be made less available to respond to other emergencies in the surrounding communities.
Therefore, this project, combined with other proposed development projects by UCSB, is
inherently dangerous to the overall safety of UCSB and the surrounding communities.

This letter is not meant to be all-inclusive as to the concerns of the County Fire Department,
however, it represents issues that will need to be addressed prior to the final outcome of
this project. UCSB cannot continue to ignore the existing inadequate fire staffing, or
compound the problem with additional increases of infrastructure and population. It is our
hope to mutually resolve these life and safety concerns.

Yours in the interest of life safety,

Martin Johnson, Captain
Fire Prevention Division

c G. Marshall, Third District Supervisor
   H. Yang, Chancellor, UCSB
   M. Brown, Santa Barbara County Administrative Officer
   C. Wiesen, Fire Marshal, UCSB
   V. Alexeiff, Planning and Development, Santa Barbara County
   C. Brock, City of Goleta
GROUPS/ORGANIZATIONS
May 24, 2004

Office of Campus Planning and Design
Attention: Shari Hammond
1325 Cheadle Hall
University of California
Santa Barbara, CA 93106

RE: UCSB Devereux Development and Open Space Plan dEIR

Dear Ms. Hammond:

Santa Barbara Audubon has been involved in the protection and restoration of the Ellwood Mesa, lower Devereux Creek watershed, and the Coal Oil Point Reserve for many years. We wish to comment on the draft EIR on the University of California at Santa Barbara’s development proposal for faculty and family student housing, and the portion of the Open Space and Habitat Management Plan within the UCSB jurisdiction. The Environmental Defense Center (EDC) represents Santa Barbara Audubon and Save Ellwood Shores on the Devereux Ellwood Plan (Plan). Issues addressed in the EDC letter relate to Policy Consistency, impact mitigation, and the adequacy of the dEIR, and more detailed Biological issues are addressed by Santa Barbara Audubon’s biologist in this comment letter. See the attached resume of Darlene Chirman’s qualifications as a biologist.

Overall, the dEIR is not credible—no significant biological impacts were found from proposed development on wetlands and within and adjacent to sensitive habitats, and from increased human and domestic animal use in Open Space areas. We have awaited the EIR to assess the impacts to natural resources, and find the inadequacy of the dEIR precludes us from doing so. The South Parcel and the West Campus bluffs were poorly mapped with vernal pools on the bluff site and wetlands and native grasslands unmapped on the South Parcel. Also several wetlands were not mapped on the North Parcel. No detailed maps with buffers delineated are available, and no maps of proposed development superimposed on the habitats are available. Specific comments follow.

Faculty Housing Proposal, North Parcel

Significant impact to wetlands. Coastal Act wetlands of 2.95 acres are identified on the North Parcel. The dEIR emphasizes that only 1.67 acres are ACOE-criteria wetlands, they are degraded and fragmented. At least 1.54 acres of CCC wetlands would be destroyed to construct the project. Given the presence in the Coastal Zone and the State of California, the CCC and CDFG wetlands (utilizing the same single wetland character criteria) are the appropriate wetlands to be evaluated for impacts. The low functional value is stressed in the report. However, under the Coastal Act all wetlands are deserving of protection, and should be restored if they are degraded. From our informal survey 5/20/2004, the actual loss of wetlands is likely higher, given unmapped wetlands. This is a significant biological impact that can only be reduced to less than significant through avoidance of the wetlands and a buffer area.

http://www.audubon.org/chapter/ca/santabarbara
The proposal for mitigation is 3:1 replacement for ACOE wetlands, 1:1 mitigated for “non-wetlands”, and silent on mitigation for lost CCC wetlands which are not ACOE-delineated wetlands. The is grossly inappropriate, as impacts to CCC wetlands are real and have significant impacts. As noted in EDC’s letter, residential development in wetlands is not an authorized use under the Coastal Act. Therefore, all wetlands which meet the CCC/CDFG must be preserved. If any loss of wetlands is allowed, 4:1 or 3:1 mitigation is standard for the Coastal Commission.

There are no maps to show which wetlands will be lost—the text description cannot be followed to understand the potential impacts to this resource.

The Thresholds of Significance for wetlands are based on impacts to “federally protected wetland as defined by Section 404 of the Clean Water Act…through direct removal, filled in, hydrological interruption or other means.” The property is in the Coastal Zone with CCC wetlands. It is not legitimate to ignore significant impacts to CCC wetlands.

Environmentally Sensitive Habitat Areas must be identified and designated when they qualify for such designation, during the evaluation process of environmental review. The DEIR “conveniently” and erroneously discounts areas not previously designated ESHA. For example, the willow woodland in the center of North Parcel has an understory of native bunchgrasses, and qualifies as ESHA. However, it was not so designated, is proposed for destruction, and the impacts for its loss are probably (cannot actually determine from the DEIR) not proposed to be mitigated. In addition, despite the ecological importance of wetlands, their sensitivity to development and the loss of over 90% of wetlands in the State, the UCSB DEIR does not designate any previously-undesignated wetland as ESHA. UCSB must designate all wetlands that meet the Coastal Act’s definition of ESHA as ESHA. In addition, the South Parcel should be designated ESHA due to its values to rare raptors including white-tailed kite (foraging and roosting), its relationship to the Devereux Slough, its value as a wildlife corridor, and its mosaic of interacting native grasslands, riparian habitats, coastal sage scrub and wetlands.

Mapping & Functional Wetland Analysis. A walk on the North Parcel identified several wetlands apparently not mapped. Two extensive Alkali ryegrass, Leymus triticoides (FAC+), dense grasslands were not mapped, near the Coyote brush scrub (N of Site 35 & 37 on Plate 1 in Appendix C of DEIR); these are in close proximity to other wetland areas and should be classified as wetlands and ESHA. A small wetland, with several native wetland species, was noted near the intersection of Phelps Road and Canon Green, near where the entrance road would be located; this appears not to be mapped. The Phelps Ditch was classified as riparian but not wetlands due to “absence of wetland species understory”; the extensive Tule in the creek channel seemed to be overlooked. The extensive Frankenia patches were classified as non-wetlands, despite the FACW+ Wetland Indicator Status of the species. This is not defensible from a scientific perspective. Nearby extensive patches of Alkali Mallow, Malvella leprosa, were not even mapped. This species was designated in the 1988 “National List of Plant Species That Occur in Wetlands: California (Region O)” as FAC*—a tentative designation. One would think that a final determination would have been made by now; that information must be available to evaluate if these areas qualify as wetlands. The central willow woodlands was discounted as a wetland as well, although Arroyo willow is a facultative wetland species (occurs in wetlands 67-99 percent of the time). With extensive wetlands of various types nearby, the determination that the willows tap deep groundwater and are thus not a wetland is spurious. It appears that the Functional Wetland Analysis has been used to understake the wetlands that would be destroyed by development, trying to “make them go away” by redefining wetlands. It does not appear to be consistent with the Coastal Commission wetlands mapping methodology and identification criteria, and does not appear legitimate.
Phelps Ditch. The proposal includes re-engineering El Encanto Creek/Phelps Ditch to expand flood conveyance. 50 foot set-backs are proposed. Berms to prevent flooding of residential areas are described, with revegetation, and armouring adjacent to the proposed footbridge. Walking path(s) are proposed, I believe on both sides of the creek.

The current proposal does not adequately protect the creek, and the proposed mitigations would not reduce impacts as stated to less than significant. Provided are recommendations to reduce impacts to less that significance:

- Maintain a viable wildlife corridor (see below). Critical as wildlife will be funneled to this narrow band. The corridor must be restored to enhance habitat for wildlife movement and to reduce impact of increased human use, as more residents and recreational users are funneled to the trails along the creek.
- Berms, if installed to contain floodwaters, must be at outer edge of the buffer, or they will cut off the riparian buffer hydrologically, which needs the supplemental water of the creek for maintenance of the riparian vegetation.
- Trails need to be in the periphery of the buffer, preferably on top of the berms, to reduce impact to the riparian vegetation and to wildlife using the habitat and wildlife corridor.
- Only one side of the riparian vegetation should be cleared for the proposed creek widening; which side can vary in different sections, which could aid sinuosity to the creek channel, and retain specimen vegetation, such as *Black cottonwood* (not in species list; few Fremont cottonwood are present, likely planted), Red willow, and Mulefat. In general, the widening should occur on the west bank, where the Flood Control access is located at top of bank.
- The Flood Control access road must be relocated to allow for revegetation on top of bank. Periodic access points to the creek should be vegetated with rhizomatous species that can recover from disturbance when flood control activities occur: California blackberry, California rose, mugwort, Saltgrass and Alkaline Mallow would be suitable in this site.
- “Armouring” at the bridge must incorporate biotechnical bank stabilization, and the EIR needs to evaluate the lesser impact of this compared to hard structures which permanently displace habitat on the banks.

A sensitive plant species is present in the Phelps Ditch riparian corridor and not identified in the dEIR: Santa Barbara Honeysuckle, *Lonicera subspicata subspicata*, as seen on the west bank near the southern edge of the property (May 3, 2004, D. Chirman, E. Painter). Impacts to this CNPS 1B plant from re-engineering the creek was not addressed in the dEIR.

**Alternative 1.** It is a requirement of CEQA that alternatives have fewer impacts than the proposed project. The impacts of Alternative 1, which develops residential housing on the **South Parcel** are much greater than stated, and probably greater than the preferred project.

**Access.** The impact of the access road adjacent to Devereux Slough with zero buffer is not evaluated. Proposed is a culvert where a bridge must be considered to minimize the impacts; a bridge still would have significant biological impacts but would be far less damaging than the proposed culvert. The existing Venoco Road is one lane; any development project would require a two-lane road to be constructed within the 100-foot wetland buffer of Devereux Slough, and at the Devereux Creek crossing there would be zero buffer. There are also other EHSA areas—the Creek on the north side and a willow woodland qualifying as ESHA, with wetland understory species (e.g. Spikerush). Widening the road would cause significant impacts to both of these environmentally sensitive habitats.

**Raptor foraging** is extensive on this open grassland. White-tailed kites forage, roost and nest on the South Parcel. The loss if the South Parcel would be developed would be a Class I, significant impact and could not be mitigated to less than significance.
Wetlands. The dEIR states that housing could be developed on the South Parcel with 100-foot buffers. As discussed in the Access section above, this is certainly not the case for the access road, which would have to be wider than the current one-lane Venoco Road, which widening would have Class I significant impacts to wetlands, especially at the crossing of Devereux Creek and at the Willow woodland. Other wetlands, along the southern base of the two central berms, are not mapped. Site 21 with Spikerush, is mapped, but there are linear wetlands of non-native Facultative and Facultative Wetland species, Rumex crispus and Lolium multiflorum. While these are non-native species, they are wetland indicator species, as shown in Plot 23, which includes these species for 100% of dominant species OBL, FACW or FAC.

Native Grasslands. Several native Purple Needlegrass bunchgrass grasslands on the South Parcel are not mapped. The largest noted on 5/8/2004 had greater than 10% native grasses in an area at least 100ft x 100ft, are more likely 200ft. At least two other smaller patches of bunchgrass grasslands were not mapped, and would be impacted by development. These were not mapped and impacts not analyzed. Development in this ESHA would be a significant impact to the habitat.

The dEIR fails to adequately evaluate the impact of development on the Alternative 1 South Parcel site, which would not be lesser impact than development on the proposed North Parcel project site.

Sierra Madre Family Student Housing.

The proposal includes for 100-foot buffers for wetlands. The wetlands in the east tributary of Devereux Creek and its buffer become more crucial with the intensification of development, and restoration is needed to reduce impacts to the creek and Devereux Slough.

Wetlands. The wetland adjacent to Storke Road (#23) appears to be larger than mapped, with wetland vegetation found for about 200 feet rather than approximately 112 feet mapped. This discrepancy must be rectified by showing the wetland extent further north across the dirt walking path. Both wetlands in this east tributary of Devereux Creek were given a ranking of 0.52 in the dEIR. Restoration would increase the function, needed with intensification of development around them. The berm between the two appears to be fill to facilitate the current driving range land use; this fill should be removed.

Water quality. The proposed development was discussed in the dEIR as potentially increasing pollutants into Devereux Creek and Slough, but reduced by mitigation measures. The dEIR provides an inadequate analysis, as any increase can be significant given the already high levels of pollutants over the safe thresholds tested. See data presented in Table 4.3-1. The wetland is degraded, within the present driving range of the golf course. In order to provide biofiltration function, for water released from the bioswales and sheet flow when the bioswales capacity is exceeded, the wetland and its buffer must be restored with native vegetation. Any fill which is on University property from the Ocean Meadows unpermitted fill in 2001 or at other times must be removed as part of this restoration.

To protect Devereux Slough from sedimentation during the construction phase, all grading should be restricted to the dry season, April to November. Grading during the rainy season could result in significant project-specific and cumulative impacts to the slough from sediment in the run-off.

Wildlife corridor. See the section in OSHMP comments. The dEIR discussed the importance of wildlife corridors and wildlife crossings, and the cumulative impact of development that restricts wildlife movement. It then discounts the value of both Phelps Ditch and the east tributary Devereux Creek as the significant wildlife corridors they are. This deficiency must be corrected, and the significant impacts to the wildlife corridor must be mitigated. A wider wetland buffer at this location would ensure significant impacts to the wildlife corridor are mitigated. In addition, the excavation of fill and restoration of the wetland
Traffic—both developments.
Significant impacts are found for traffic. Avoidance is the key, and required to address
significant impacts, where feasible. Several alternative transportation strategies are needs and
feasible to minimize these impacts:

1) Shuttle bus from North Campus to the Main Campus is needed. This might be most
easily arranged with funding of MTD for routes. This would ease traffic congestion
in the neighborhood, and also address the parking deficit on campus.

2) Bikeways. The plan must ensure that safe bikepaths connect the development and
main campus and the local school and shopping areas.

3) UCSB must enforce the no parking on campus for those—students, staff, and
faculty—who live within a mile of campus. This is palatable to residents if and when
the transportation alternatives are convenient.

Storke Road is an impediment to wildlife movement between Devereux and Goleta
Sloughs. Widening of the Storke Road must include an undercrossing for wildlife (see Wildlife
section in OSHMP comments).

OSHMP Issues.

Snowy Plover. Increased impacts are expected, due to increased recreation use by new
residents, and new recreational users by improved access (trails, parking, beach access).
Proposed mitigations are funds for the Snowy Plover Docent Program and signage. To reduce the
impacts, condition for approval must include strategies if impacts increase to plovers despite
these measures:

1) Enforcement of leash law needed now and after project construction to mitigate
significant impacts to western snowy plovers, agreement of UCSB Campus police to
monitor Sand’s Beach, respond to requests by docents or Reserve Manager, and
ticketing of owners of off-leash dogs.

2) Agreement of UCSB and County to pursue Ordinance to prohibit dogs on Sands
beach if impacts increase and dog owners do not comply with leash laws. This is an
Audubon comment to the County dEIR as well.

3) Habitat Conservation Plan will be required by USFWS if above to not reduce
increased impacts to roosting and nesting plovers.

4) Non-native trees in COPR, COP and the vicinity serve as roost and nesting sites and
result in predatory birds such as American Crows to be more prevalent than they
would be naturally. A phased removal of non-native trees near the mouth of the
slough is needed. This should be evaluated by the EIR.

5) Least terns. The data is outdated on which the dEIR comments are made.
Mitigation measures need to apply to both species. California Least Terns are already
present as wintering birds, several pairs with fledged chicks were observed at the
mouth of Devereux Slough in 2002 and 2003, and courting behavior has been
observed in both May 2003 and May 2004.

6) Beach access impact from horses. See under trails.

Wildlife Corridors. The dEIR discussed the importance of wildlife corridors and wildlife
crossings, and the cumulative impact of development that restricts wildlife movement. It is
deficient, however, by not identifying the significant value as the wildlife corridors of the North
Finger and east tributary Devereux Creek corridors to Goleta Slough and Phelps Ditch corridor to
the north. The lower Devereux Slough ecosystem has lost, in recent decades, badger and grey
fox. The system is at risk of losing bobcat and coyote if the wildlife corridors are not maintained.
Wildlife connection to Goleta Slough, via North Finger and east tributary Devereux Creek is needed. Restoration of the tributary (Ocean Meadows Golf Course as well), and the wetland along Storke Road are required as open space is constricted by development. Also need is a wildlife crossing under Storke Road. The widening of Storke Road is proposed; this must incorporate wildlife undercrossing to Storke Ranch, and thus to the Goleta Slough and its watershed. If the Phelps Road extension is completed, wildlife undercrossing needed to maintain access to Goleta Slough for wildlife.

Phelps Ditch is the connecting wildlife corridor to the north, and the value was discussed, but the funneling of wildlife to this corridor by development of the open space on either side, and the impact of increased public use as adjacent open space is developed and more residents, is not adequately evaluated. This impact can be at least partially mitigated if the trail/Flood Control access road is shifted to the outer edge of the riparian buffer, and the top of bank is revegetated. The trail must be located on the outer buffer area, to provide for a central corridor with less human disturbance, as wildlife is funneled into the creek corridor for habitat and dispersal to the north.

Any changes to the Venoco Road crossing Devereux Creek must incorporate a wildlife undercrossing.

**Arizona crossing to culvert Venoco Road.** The Arizona crossing on the Venoco is proposed to be changed to a culvert. The alternative of a bridge with supports out of the channel must be evaluated. This is in the wetland, with no buffer, and impacts must be reduced to the extent feasible. A natural bottom and a wildlife undercrossing must be incorporated in the bridge alternative for analysis.

**North Finger/South Finger.** Belding’s Savannah Sparrow is stated to utilize Pickleweed in the Devereux Slough only; the North and South Finger are potential habitats also. As a state-listed bird, its habitat must be protected.

The conceptual plan for OSHMP described closure of the short road in the North Finger and it to a trail. The recommendation was made by Audubon to route the trail along the eastern upland margin, and remove the road and fill and restore the wetland. Even the conversion from road to trail is not in the current OSHMP proposal. Thus neither this nor the trail located on the eastern upland border is evaluated or mentioned in the dEIR.

The North and South Finger are part of Devereux Slough, and from Divide Road of North Finger, and all of South Finger in UCSB jurisdiction, should become part of the Coal Oil Point Reserve. Hydrologically, these areas are part of Devereux Slough. These should be managed jointly. This recommendation was made previously by Santa Barbara Audubon, but was not evaluated by the dEIR. The other area proposed for addition to COPR, and not evaluated, is the section of West Campus Bluff west of the COP access road/parking lot. This is the watershed for the adjacent area of the slough, and has had initial verbal pool creation by COPR. This should be managed by COPR, and keep open the public loop trail contained therein.

As development intensifies in the Plan area, improvement of the ecologically function of the remaining wetlands becomes more critical. If improvements to the hydrologic connection to the slough of these two slough fingers (by lowering the culverts) and restoration are not identified as mitigation measures for impacts, they can be accomplished with grant funding and should be identified as “opportunity projects”.

From a management as well as biological perspective, the slough, including the two slough fingers are one unit, and should be treated as such. The EIR should evaluate this and recommend the best management entity and mechanisms for restoration of these areas.
Restoration—Opportunity Projects. Restoration of coastal salt marsh habitats are not addressed in the OSHMP or the dEIR, although vernal pools, grasslands, riparian areas are. This is the core of the Devereux Watershed, and is overlooked. Devereux Slough itself would benefit from removal of sediment from South parcel erosion. The alluvial fan needs to be removed.

While the Plan addresses the significant source of sedimentation, the South Parcel, which is much needed, the sediment plug accumulated for decades from the erosion of South Parcel should be removed. This can be a grant-funded project if not identified as a mitigation measure, and thus be an “Opportunity Project”. However, this should be identified and incorporated as a goal of the amended Long Range Development Plan. Improvements to the North and South Finger wetlands would be accomplished by re-establish hydrologic connection with the slough with lower culverts, and removal of sediment North Finger. This would be the removal of fill for the road which should be closed, and evaluation if other fill is present and should be removed. Evaluation of the benefits of these measures to ecosystem health should be included in the EIR.

Native habitat restoration should be encouraged. LRDP policies such as 30240(a)4,5 should be changed. Policies now restrict removal of ornamental trees except for development purposes; this should be expanded to include removal for restoration purposes, to replace non-native trees with native vegetation.

Plants in the UCSB Plan area.

Locally occurring genomes. Importance of local genomes is discussed in the dEIR. The EIR must specify Devereux Slough watershed genomes for restoration and local native species used for landscaping and mitigation.

Santa Barbara honeysuckle, Lonicera subspicata subspicata, CNPS List 1B, is not on the plant species list for the Plan area, and is not identified as a sensitive species. It qualifies for the same level of protection and consideration as the Southern Tarweed, which has CNPS List 1B. This subspecies endemic to the Santa Barbara region and is found on COPR, Devereux Creek on Santa Barbara Shores Park, and Phelps Ditch on North parcel and possibly other sites. This must be protected, and if impacted, must be mitigated. The dEIR is deficient in not identifying the presence of the species or the potential impacts to its survival. Its present plants would likely be lost to the re-engineering of Phelps Ditch. Audubon offers proposed mitigations: use in Phelps Ditch restoration and landscape enhancement. The best propagule sources would be SB Shores Park or Sandpiper Golf Course, as genotype may differ from the dune swale population at COPR. The issue was deleted from the OSHMP and the dEIR, despite mention in Audubon comments on the conceptual OSHMP.

Supplemental Plant Species List. Attached is a list of plants not included on Plant List—not intended to be all inclusive, but to include some known species not on the Plant List, and to demonstrate the incomplete nature of the list.

Black cottonwood is present on Phelps Ditch and South Parcel; while Fremont cottonwood is present and listed, it is not the common cottonwood species on the coastal plain and was likely planted inappropriately. Black cottonwood should be planted in any riparian revegetation efforts.

Native grasslands. Native bunchgrass was not mapped on South Parcel, despite two known significant patches of Purple Needlegrass and many scattered small patches. In the SW corner, an existing trail bisects a patch of dense Purple Needlegrass and Blue-eyed grass. If this trial is to be retained and widened (unclear), there would be significant impacts to the grasslands. There is a large population of native bunchgrass at least 100 ft x 200 feet in the center of South Parcel which is not mapped. The count threshold is 10% cover of bunchgrass, the criteria used for this area is unclear. There is also a mix of native grasses at Eucalyptus in the NW corner needs to be protected as well. The definition of ESHA “predominance of native species, self-sustaining, not fragmented” is very high threshold (p 36). This needs re-evaluation, as the existing grassland
areas are of high ecological function despite fragmentation by informal trails. Despite the heavy use by recreational users, especially BMX track disturbance, the native grasses have established and spread on the site since the scraping of the area to fill Upper Devereux Slough to create the golf course in the 1960s. This indicates a self-sustaining grassland complex, despite the fragmentation. A goal of the OSHMP is reduction of this fragmentation by consolidation of trails. The grasslands need to be mapped and ESHA designation given to populations that meet the criteria of “predominance of native species of native grasses and associated grassland species which are self-sustaining.”

**Exotic Species.** Pampas grass is the most significant invasive species. The species present is *Cortaderia selloana*, not *C. jubata* as listed in appendix. Seeds are spread by the wind, so regionally coordinated efforts must be part of the OSHMP to remove all Pampas Grass from the area to protect the native plant communities. Coastal habitats are the most vulnerable to infestation by Pampas Grass. The COPR has conducted a major eradication campaign and the COPR is nearly free of Pampas Grass, but threatened constantly by re-infestation from seed blown in from surrounding stands. The UCSB project does propose to remove Pampas Grass from the South Parcel, where it is extensive; removal from the entire South Parcel should be in Phase I of the restoration/mitigation efforts on that site, which may take several years. Pampas Grass flowers in late July/August, and generally early summer is the best time for removal, when bird breeding has ended in adjacent riparian areas, the wetlands are dry, and before flowering. Removal when flowering stalks are present with viable seed is risks seed dispersal during the removal and makes disposal of the debris hazardous during transport or disposal, as new areas may be infested by the wind-blown seed.

No mention is made of the Venoco facility and the infestation of Pampas Grass. A mechanism to provide for eradication of PG is needed—modification of the lease agreement to require Venoco to remove PG, or seeking grant funding for the removal—are two options. The impact must be evaluated in the EIR—as development permanently displaces habitats, the remainder becomes more critical for healthy ecosystem function. This is a major means of habitat enhancement and natural resource protection which is touted as a goal of the OSHMP.

*Acacia* not listed as invasive plant species, but should be. Silver wattle, *Acacia dealbata*, is listed in the Exotic Pest Plant of Greatest Ecological Concern in California (1999, California Invasive Plant Council) as “needing more information” due to potential aggressiveness in natural areas. Six acres of *acacia* were removed from the dune swale on COPR, and extensive other *acacia* which were clearing naturalized from original plantings. This species is invasive in the coastal habitats of the Plan area, and should be removed—a few are found on South Parcel and North Parcel—and should be prohibited from landscape planting.

**Trails UCSB OSHMP Area.** Trails disturb and fragment native plant communities and the associated wildlife habitat. The inadequate mapping of the native grasslands on the South Parcel and the West Campus Bluffs, and of vernal pools and their plant species on the bluffs interfere with the ability to access the impact of proposed trails. Trails widening through native vegetation can cause significant impact and cannot be adequately assessed with current data. The impacts have not been adequately evaluated in the EIR.

**Vegetated shoulders.** To reduce disturbance impact and to delineate trails Audubon recommends revegetation shoulders with low-growing natives. Appropriate species include Purple needlegrass, Blue-eyed grass, Dove weed, Spanish clover and annual native fescue. In moister sites, California brome and Alkali mallow would be appropriate. In shaded areas, California brome and Foothill needlegrass should be considered. On the periphery of managed shoulders: low shrubs such as Coast goldenbush would be appropriate. The impact of fuel management along trails has not been evaluated adequately, and this suggested suite of species planted in the managed shoulders could mitigate for the impacts of trail improvements.
**East End Devereux Slough.** The current informal trail is located in wetland in places and within the 100 foot wetland buffer elsewhere. The alternative trail improvements proposed all have significant impacts not adequately addressed in the dEIR. Filling in the wetland to provide all-season dirt trail would have unacceptable impacts in wetland/buffer in ESHA in a preserve. Grading on the slope for a second trail for horses/bicycles would have unacceptable impacts to a wetland buffer in ESHA in preserve, not evaluated in the dEIR. An alternative suggested by Audubon in comments to the Conceptual OSHMP was not evaluated in the dEIR: find a way to utilize the already paved adjacent road, the internal road of UCSB Married Student Housing. This extends from the Venoco Road to Storke at El Colegio with only a 10-foot gap of Coyote bush and ruderal plants in an upland area (although within the 100-foot buffer of the slough). This would be the environmentally-superior alternative. If that is infeasible, a full boardwalk would be the least damaging, and could potentially be multi-use. The EIR should also evaluate an option of switchbacks on south side so there could be one multi-use trail. Alternatives must be evaluated, as the proposed trails would cause significant impact. Any major grading in the wetland or its buffer would cause a significant impact. None of this is evaluated in the dEIR.

The entrance road to the existing Family Student Housing is planned to be combined with the access to new student housing and Ocean Meadows development. If the road were closed to autos from the western-most parking lot, and the road to the southern lot was widened to make a two-way road from Storke Road direction, the De Anza Trail could utilize the existing road segment where environmentally sensitive habitat (willow woodland) within the wetland buffer in the Coal Oil Point Reserve, in the Coastal Zone constrains the trail site within the Reserve. Once east of the Reserve, the bikepath could go uphill, on the slope next to the Garden plots. Grading would be allowed here without significant biological impacts. This alternative, or a variation on it, must be evaluated in the EIR to avoid significant impacts to wetlands and its buffer.

**Equestrian access.**

**Equestrian access to beach.** Proposed improvements are planned for Access Point D, west of COPR. It would cause unacceptable impact to plovers in designated Critical Habitat, to increase horses on the beach and just have a sign to try to protect the plovers. If there is equestrian access to the beach, should be from one of the Ellwood/SB Shores access points, or a loop with two points of access, Point D and one to the west of it to encourage equestrians to travel west. This is critical habitat for Western Snowy Plovers. Audubon opposes improved equestrian at Access Point D unless one of these options is included. We would anticipate that the USFWS and CCC would support our position on this issue.

**Venoco Road.** The Venoco Road is identified as Trail type E in the OSHMP. It appears to contain a proposal to widen shoulders to accommodate equestrian use, is that correct? Any such improved would have to be north side, as the south side is in the COPR and is a restored slough margin. Along segments of the Venoco Road any widening would have unacceptable impacts to the wetland at Devereux Creek, the ESHA willow woodland, and to coastal sage/native bunchgrasses. Only avoidance by using the Venoco Road in these areas could avoid negative impact to native habitats.

**Parking.**

**COPR Parking.** An expanded parking lot and public parking at COPR would be unacceptable, due to increased impacts to COPR and snowy plovers. Direct and indirect impacts would increase as more people could directly disturb plovers and denude trail areas from overuse. Indirect impacts would include increased litter which attracts predators, which eat plover eggs and chicks. Location of added lot unacceptable, due to watershed of the dune swale and restoration of the area (incorrectly mapped). North of the existing parking lot may be a vernal
pool; this area would need better mapping during the rainy season if any expansion of the parking lot is planned.

**Camino Majorca parking.** Several species of wetland plants, particularly outer vernal pool species, have been reported in the parking lot footprint near Camino Majorca. Western rush, *Juncus occidentalis*, a wetland indicator species with a FACW designation, is one such species. Native Blue eyed grass (FAC) and non-native wetland indicator species, *Lolium multiflorum* and *Hordeum murinum* are also present. A recent inspection of the area was not productive, given the dry conditions and recent mowing. This area would require more careful mapping of vernal pools and native grasslands before any development such as a parking lot could be constructed, or to accurately assess the impacts. Trail improvements would also require such mapping, to avoid native grassland species and other significant plant species as feasible.

**Alternative of increased parking** may be better at Cameron Hall than at Camino Majorca. This is close to the major roads and would impact Isla Vista less for coastal access visitors from outside the immediate area. Improvements of the IV-COP trail will make cycling and walking more enticing for local residents.

**Enforcement.**

The need for enforcement mechanisms, and possibly a joint-agency enforcement agreement such as jointly funding a ranger is needed and is absent from the OSHMP. This was an issue raised by many community members, but deleted from the OSHMP. Enforcement issues include areas such as dogs on leach, prevention of construction of new BMX jumps when restoration is undertaken on the South Parcel, keeping equestrians off pedestrian-only trails. Funding enforcement is as important as finding the Snowy Plover Docent Program for success in reducing disturbance to the plovers from people and their pets.

**Summary.**

In summary, Santa Barbara Audubon finds the dEIR to be inadequate in identifying the natural resources (inadequate mapping) and in assessing the impacts from the development and increased residential/recreational users of the Plan area.

The attempts to underestimate the impacts of development include: 1) inappropriate Thresholds of Significance by ignoring CCC/CDFG wetlands for a site in the California Coastal Zone; 2) inadequate mapping of wetlands and native grasslands, 3) failure to designate areas as ESHA that meet the criteria; 4) inappropriate removal of wetland designation using suspect rationale; 5) and trying to devalue wetlands that have a low functional value. As a consequence, the impacts to these resources are understated. The impacts of the access and recreational improvements are also not adequately assessed.

Audubon has reserved judgment on the development proposal of UCSB until the impacts were evaluated by the EIR. But we find the inadequacies of the dEIR do not adequate assess these impacts, and we are sorely disappointed.

Sincerely,

_Darlene Chirman_, President
Santa Barbara Audubon Society

Copies:
Environmental Defense Center
Save Ellwood Shores
California Coastal Commission
<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Location</th>
<th>Family</th>
<th>Notes</th>
</tr>
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<tr>
<td>Astragalus pycnostachyus var. lanosissimus</td>
<td>Ventura Marsh</td>
<td>Fabaceae</td>
<td>Endangered plant, planted at several locations on COPR, under investigation by CDFG; Presumed extinct and rediscovered near Oxnard 1997</td>
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<td>Centromadia parryi</td>
<td>Southern tarweed</td>
<td>Asteraceae</td>
<td>Hemizonia parryi subsp. Australis; CNPSList 1B</td>
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<tr>
<td>Cortaderia selloana</td>
<td>Pampas Grass</td>
<td>Poaceae</td>
<td>Likely C. jubata misidentification</td>
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<tr>
<td>Delalrea odorata</td>
<td>Cape Ivy</td>
<td>Asteraceae</td>
<td>Also known as German Ivy; Senecio micanioides; not on Plant list or Exotic Plant List; COPR</td>
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<tr>
<td>Eschscholzia californica var. maritima</td>
<td>California Coastal Poppy</td>
<td>Papaveraceae</td>
<td>Variety at risk of &quot;genetic swamping&quot; if hybridized with standard CA poppy</td>
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<td>Santa Barbara</td>
<td>Caprifoliaceae</td>
<td>CNPS List 1B; local endemic subspecies; COPR and Santa Barbara Shores Park (?)</td>
</tr>
<tr>
<td>Lotus purshianus</td>
<td>Spanish clover</td>
<td>Fabaceae</td>
<td>Low-growing annual; appropriate for trail shoulder plantings</td>
</tr>
<tr>
<td>Mimulus longiflorus</td>
<td>Bush Monkey Flower</td>
<td>Scrophulariaceae</td>
<td>Monkeyflower hybridizes easily &amp; many local variants; important to use Devereux Watershed genetic material; know COPR</td>
</tr>
<tr>
<td>Phalaris sp.</td>
<td>Harding Grass &amp; relatives</td>
<td>Poaceae</td>
<td>Not identified as non-native; although serious invasive species</td>
</tr>
<tr>
<td>Rosa californica</td>
<td>California Rose</td>
<td>Rosaceae</td>
<td>COPR</td>
</tr>
<tr>
<td>Rumex salicifolius var. crassus</td>
<td>Willow Dock</td>
<td>Polygonaceae</td>
<td>COPR; elsewhere?</td>
</tr>
<tr>
<td>Solanum douglasii</td>
<td>Douglas Nightshade</td>
<td>Solanaceae</td>
<td></td>
</tr>
<tr>
<td>Stachys bullata</td>
<td>Wood mint</td>
<td>Lamiaceae</td>
<td>COPR; is Stachys albens also present?</td>
</tr>
<tr>
<td>Suaeda taxifolia</td>
<td>Wooly Sea-Blite</td>
<td>Chenopodiaceae</td>
<td></td>
</tr>
</tbody>
</table>
DARLENE BRANSTROM CHIRMAN
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My professional focus is habitat restoration/enhancement.

EDUCATION

1994  M.S. Ecology, Conservation Biology emphasis
      University of California at Davis
      Master’s Thesis: “Nutrient dynamics during establishment of understory
      woody species in California Central Valley riparian habitats”

1991  B.S. Wildlife Biology; minor in Botany
      University of California at Davis
      Highest honors; Departmental Citation, Wildlife & Fisheries Biology

1973  Associate Degree in Nursing. Santa Barbara City College

PROFESSIONAL EXPERIENCE

1998-present  DARLENE CHIRMAN BIOLOGICAL CONSULTING
      Project management for habitat restoration projects; habitat restoration
      planning. Clients include Santa Barbara Audubon, Community Environmental
      Council, Land Trust of Santa Barbara County, Santa Barbara County Parks, and
      University of California at Santa Barbara

2003  Santa Barbara County Consultant List, Biology: Botany, Revegetation,
      Restoration

      Project examples:

2002-present  Devereux Slough North Shore Restoration Project. Santa Barbara
      Audubon Society, Habitat Restoration Plan and Project Manager. Funded by
      Wetland Recovery Project

2001-present  Coal Oil Point Reserve, Consulting Biologist. Pampas Grass Control
      Project and Habitat Restoration.

2002-present  Santa Barbara County Weed Management Area. Project Biologist for
      Pampas Grass Control projects in Goleta Slough and Arroyo Burro Watershed,
      and Arroyo Burro Watershed Arundo Control Project.

2002-present  Arroyo Hondo Preserve Riparian Restoration Project. Land Trust of
      Santa Barbara County.

2001-present  San Jose Creek Restoration Plan and Monitoring. Community
      Environmental Council.

      Barbara Audubon Society; Contract Project Manager. Funded by Coastal
      Resource Grant Program, Coastal Resource Enhancement Fund

1998  Cieneguitas Creek Restoration Project, Revegetation Plan, Hope School District
      and La Cumbre Mutual Water Company
1994-96  Project Coordinator, Cosumnes Flooding and Plant Competition Experiment.  
Joint project University of California at Davis & The Nature Conservancy.  
Research site: Cosumnes River Preserve, Galt, California

1973-85  Registered nurse, primarily at the Rehabilitation Institute at Santa Barbara

RELATED VOLUNTEER ACTIVITIES

1999-present  Santa Barbara County Task Force, Southern California Wetland 
              Recovery Project

              President of Board of Directors. Representative on Goleta Slough Management 
              Committee
May 24, 2004

Shari Hammond, Senior Planner
University of California, Santa Barbara
Office of Campus Planning and Design (2032)
Santa Barbara, California 93106-2032

Dear Ms. Hammond:

Thank you for the opportunity to comment on UCSB’s Draft EIR and LRDP Amendment, Faculty and Family Student Housing and Open Space Plan. Comments submitted on behalf of the members of the Cannon Green – Phelps Neighborhood Coalition follow.

General Comments:

- **The Draft EIR is deficient overall** – especially when compared to the thorough analyses contained in the DEIRs prepared for both the Comstock development in the City of Goleta, and the Ocean Meadows Residences in the County. We note that UCSB’s DEIR was prepared by a subcontractor, EIP Associates, and not by URS, despite multiple public statements that all three Joint Proposal EIRs would be prepared by URS.

- Many **non-photo maps contained in the draft EIR are misleading**, in that they do not accurately show the neighborhood immediately adjacent to the proposed North Parcel development. The **Cannon Green Townhomes are conspicuously absent**, giving the impression this is currently open land. As a result, we feel many of the conclusions within various sections are potentially questionable.

- Our understanding of the **Coastal Act** is the balancing of alternatives which results in the destruction of wetlands is not allowed for residential development. Action on the part of the University which violates or substantially modifies existing interpretations of the Coastal Act will serve as a “slippery slope” - with **implications for all of coastal California**.

- The housing density calculations contained within the draft EIR appear incorrect. The density of the proposed development is stated as eight (8) units/acre. According to our calculations, and using acreage and housing figures contained within the draft EIR, the actual density of the North Parcel portion of the project is 10.5 units/acre. (236 units/ 26 total acres – 3.5 wetland acres)

- We note that at current zoning levels contained in the 1990 LRDP, 6 units/acre, the number of units built on the North Parcel would not exceed 138 units. This density is what neighbors of the proposed development area expected to be built.
• None of the neighborhoods immediately adjacent to the proposed North Parcel development contain **three story dwellings**. Therefore, the proposed North Parcel development would be inconsistent with the surrounding existing neighborhoods, a key objective of the proposed project (Section 3.3).

• The **funneling** of existing Ellwood Bluffs users **plus** the 500+ people who would be living in the proposed North Parcel development through the single narrow corridor proposed will cause significant environmental degradation, as opposed to the diffuse access across three major trails currently afforded. No section reference is available, as this impact was completely ignored in the draft EIR.

• We are concerned that the **community may ultimately lose access to the Ellwood Mesa and the beach**. While earlier maps in the DEIR place the trail along the northern edge of UCSB’s North Parcel, newer maps place the trail on private property. Public access cannot be guaranteed over private property. The proposed trail shown along the south side of the golf course is not a viable alternative access point as it is unsafe due to errant golf balls (which is why it is not heavily used currently).

• The area along Phelps road where existing users of the Ellwood Bluffs park is acknowledged in the draft EIR. **No additional parking is required**, other than that used historically.

4.6: Land Use

• The proposed University developments fall within the Airport Land Use Commission (ALUC) approach zone, and could therefore increase the health and safety hazards to those people who are to live in these developments (Section 4.6.2.2.1). The draft EIR dismisses these risks out-of-hand by simply stating the University is not subject to ALUC jurisdiction.

4.3: Hydrology and Water Quality

• Portions of the proposed North Parcel development fall within the **100 year flood plain**. Therefore, elevation grading of the site may lead to substantial increases in flooding of existing neighborhoods. This is not addressed sufficiently in the DEIR.

4.9: Visual Resources

• We feel the **visual impact analysis** contained in Section 4.9 is completely **misleading**. At best, it is biased. The visual impact analysis presented shows a single photograph taken at the end of Cannon Green Drive, and does not show the impact to public views along the open stretches of Phelps Road. The analysis also completely dismisses the view impacts to current adjacent private residences.
• In order to be complete, this section should acknowledge the loss of public views along the fence line trail parallel to the Cannon Green Townhomes. This trail is currently heavily used by the general public, and it will become the only public trail after proposed development. The proposed development does not provide view corridors and will therefore eliminate vistas.

• UCSB should erect story poles in order to better visualize the effects of two and three story building on public views, as was done for the development proposed by Comstock within the City of Goleta. Without story poles a complete assessment of visual impacts cannot be made.

• Please see the attached photos, taken from various locations on the trail running along the north edge of the property, directly adjacent to the Cannon Green Townhomes. Again, this will be the primary if not only trail used by the general public for access to the mesa and the beach.

4.12: Traffic and Circulation

• All of the intersections studied in the draft EIR will show significant increases in traffic. In the case of the Storke/Hollister intersection, the study indicates a widening of the freeway overpass to six lanes will be required to handle the extra 3396 average daily trips the proposed University development will create. It seems reasonable to us that the University should make a substantial contribution to the necessary widening of the Storke highway overpass north of Hollister — before project completion. The draft EIR does not mention any specific mitigations, other than the University’s statement of “paying our fair share”.

• The worst traffic impact will be from the Storke Road/Hollister Avenue intersection north to Calle Real. This area encompasses the on/off ramps and the overpass to Highway 101. As stated in the DEIR, Section 4.12, page 4.12-25, this entire area must be widened to 6 lanes to accommodate a smooth flow of the additional traffic that this project will generate. There is no money appropriated at this time for any road expansion work, nor will there be any funds available for the next several years. This means that the main corridor to this project will be a category “F” for many years to come. This figure is based on Appendix G of the CEQA Guidelines referenced in Table 4.12.5. As stated in the DEIR, “thus the impact is considered (significant and unavoidable)”.

• As traffic becomes increasingly snarled to/from Highway 101, the 41,000 plus (Section 4.12, page 4.12.25) drivers will seek alternate routes to access the Highway. This will add a significant burden to the Los Carneros and Winchester Canyon on/off rams to Highway 101. The existing traffic on Los Carneros “already exceeds the design capacity” (Section 4.12, page 16), and Winchester Canyon is not even mentioned in the DEIR, even though it will have to support more than double the traffic it now handles. This is due in part to the
The DEIR is grossly inaccurate when addressing the traffic impacts to the Cannon Green and Phelps corridors. Table 4.12-2 calculates approximately 2000 ADTs from the proposed 236 units on the North Parcel and Figure 4.12-5 states that 622 ADT's will be added to the traffic volumes along Cannon Green. Because of the single-point of entry into the proposed development at the Cannon Green/Phelps intersection, it can be assumed that 50% of the traffic flow will be a northerly flow onto Cannon Green. Therefore, this will add 1000 ADTs along Cannon Green, not 622 ADTs as stated in Figure 4.12-5. Also, the impact on the Phelps/Pacific Oaks intersection, a two-way stop, is completely ignored.

In Section 4.12.4.1, for the North Parcel Faculty housing, the DEIR states: “The standard Institute of Traffic Engineers (ITE) rates were modified to account for alternative modes of transportation that are commonly used by residents in the University/Isla Vista area (ie. Bicycles, walking, etc)”. The pre-modification of these values is not reasonable. The proposed development is much further from campus than existing housing. Therefore, it must be assumed that more UCSB faculty will drive into campus.

Figure 4.12-6 addresses Project-Added PM Peak Hour Traffic volumes for the surrounding intersections. Assessing the “Total-added Traffic Volumes” for the surrounding intersections, especially Cannon Green/Hollister and Cannon Green/Phelps, is a more accurate assessment of the traffic impacts to our neighborhood.

4.13: Noise:

The draft EIR makes several incorrect statements about noise that falsely minimize environmental impacts:

- First, the existing noise level of the North parcel is stated to be 57.9 dBA (4.13-6). It appears that the noise level used for the North Parcel is incorrect. The North Parcel is currently almost silent during the day – much like a rural or quiet suburban setting, which the draft EIR states to be approximately 25 dBA. According to the draft EIR, noise was calculated on roadway segments and not on the perimeter of the parcel, i.e., where current residents live and actually hear noise. This gives an incorrect background level of noise on the North Parcel used for subsequent comparisons. For example, noise impacts are supposed to be considered significant if the project results in a permanent increase of 5 dBA over ambient noise levels (4.13-14). Given that noise levels after project completion are expected to be 60 dBA, the increase from the current level of an estimated 25 dBA will be significant by definition.
Second, the draft EIR assumes a 30dB(A) reduction of noise when indoors (4.13-15). This is inaccurate in two respects. First, most construction will take place during the summer months when residents will likely need to open windows for ventilation during the day. Most if not all adjacent residences do not have air conditioning. Even when closed, non air-tight single pane windows do not reduce noise by 30dB(A). Therefore, a study is necessary to determine the sound deadening effects of actual windows in the adjoining residences. If the exterior-to-interior noise reduction is substantially less than 30 dBA, California’s interior noise standard may be violated not only during construction, but after the addition of HVAC equipment associated with 236 residences, roads internal to the project, increases in stationary noise and additional development traffic.

Third, given the quiet setting that exists today, the impact of HVAC equipment could present significant, i.e., more than 5 dBA increases in noise for existing residents adjacent to the proposed development. Therefore, location of HVAC equipment must be identified precisely in order to determine its ultimate impact on residents of existing homes adjacent to the proposed project.

More important, however, potential exists for significant health problems are to be expected from the noise pollution due to the 42 month construction period, construction during the summer season when children are home during the weekday, and the close proximity of residential buildings. According to the draft EIR (4.13-20):

"Construction activities would primarily impact the existing residential land uses near the project site. [...] Based on the information present in Table 4.13-9, construction noise levels could reach up to 80 dBA during the daytime at these buildings. This could be a temporary or periodic increase of more than 10 dBA over the exiting daytime noise levels at these existing residences. As such, construction noise levels could substantially increase existing noise levels at existing residential uses. This would be a significant impact."

The draft EIR incorrectly dismisses the impacts of noise during construction – largely because it consistently ignores the fact that many people are home during the weekday, and many of those who are home are children or retired individuals. Health effects must be considered. According to the World Health Organization website:

"The potential health effects of community noise include hearing impairment; startle and defense reactions; aural pain; ear discomfort speech interference; sleep disturbance; cardiovascular effects; performance reduction; and annoyance responses. These health effects, in turn, can lead to social handicap; reduced productivity; decreased performance in learning; absenteeism in the workplace and school; increased drug use; and accidents. In addition to health effects of community noise, other impacts are important such as loss of property value".¹

¹http://www.who.int/docstore/peh/noise/Comnoise6.htm
Noise pollution at the level associated with construction activities as described in the draft EIR could have permanent harmful health affects on adults, children and fetuses. This is a significant impact due to the long term of construction and its close proximity to residential areas.

- According to the db Engineering website, “Exposure to noise levels above 85 dBA for 8 hours is the Federal threshold for hearing protection. Levels above 90 dBA can cause permanent hearing loss with relatively short exposure”. Given that a sizable population lives immediately adjacent to the proposed development site, it is likely that there will be a significant impact on all those who work or stay at home during the day.

- Should any woman become pregnant and want or need to remain at home during the period of construction, permanent damage to fetal development may result from noise due to construction. According to Medical Library of the American Academy of Pediatrics website: “Results of these studies suggest that: (1) exposure to excessive noise during pregnancy may result in high-frequency hearing loss in newborns”. In addition, an EPA document on the Noise Pollution Clearing House Website warns that noise may affect birth weight: “A Japanese study of over 1,000 births produced evidence of a high proportion of low-weight babies in noisy areas. These birth weights were under 51/2 pounds, the World Health Organization's definition of prematurity”.

Children are especially vulnerable. The draft EIR consistently ignores the fact that children are often home throughout the day in the summer, and are most probably at home before 5 PM throughout the year.

- According to the same EPA document:

> Researchers looking into the consequences of bringing up children in this less-than-quiet world have discovered that learning difficulties are likely byproducts of the noisy schools, play areas, and homes in which our children grow up. Two primary concerns are with language development and reading ability. Because they are just learning, children have more difficulty understanding language in the presence of noise than adults do. As a result, if children learn to speak and listen in a noisy environment, they may have great difficulty in developing such essential skills as distinguishing the sounds of speech. For example, against a background of noise, a child may confuse the sound of “v” in “very” with the "b" in “berry” and may not learn to tell them apart. Another symptom of this problem is the tendency to distort speech by dropping parts of words,

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3 http://www.medem.com/MedLB/article_detaillb.cfm?article_ID=ZZZGY7Q669C&sub_cat=29
4 http://www.nonoise.org/library/epahlth/epahlth.htm#special
especially their endings. Reading ability also may be seriously impaired by noise. A study of reading scores of 54 youngsters, grades two through five, indicated that the noise levels in their four adjacent apartment buildings were detrimental to the children’s reading development. The influence of noise in the home was found to be more important than even the parents’ educational background, the number of children in the family, and the grades the youngsters were in. The longer the children had lived in the noisy environment, the more pronounced the reading impairment.”

In addition, noise has a negative impact on high blood pressure in children:

“The contribution of various environmental factors to the early development of high blood pressure is an important question. With respect to noise, at least two studies exist which suggest that exposure to high noise levels in schools and neighborhoods is associated with elevations in blood pressure. The blood pressure levels of children living in high noise environments were found to be significantly higher than those of children attending schools or residing in quieter areas”.

Finally, the draft EIR states that vibration levels are likely to be significant for residents living adjacent to construction (4.13-16). Given that children nap during the day, noise vibration is likely to preclude normal sleep. The EIR is therefore incorrect in its assumption that construction during the day will not have a significant effect if it does not affect “most people”.

Given the potential for permanent harm, additional study is needed to assess the potential health threats involved in the proposed construction. Even with only preliminary, non-expert research, clearly the duration of construction should be minimized if the proposal is ultimately approved.

- First, the period in which construction activity is allowed should be changed to 8 AM from 7AM. According to the County of Santa Barbara, construction noise at 50’ from the source averages 95dB(A). “Therefore, locations within 1600’ of the construction site would be affected noise levels over 65 dB(A). To mitigate this impact, construction within 1600 feet of sensitive receptors shall be limited to weekdays between the hours of 8AM to 5PM only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB(A) may require additional

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mitigation.” (County of Santa Barbara Environmental Thresholds and Guidelines Manual; 1995:11-6).

- Second, construction should be geographically limited to each phase of the project. While one of the stated objectives of the draft EIR is to minimize the disruption associated with construction by limiting the area under construction, the proposed North Parcel project plans to conduct all site preparation in the initial phase, subjecting more people to long term noise than necessary.

- Finally, noise levels at adjacent residences should be monitored throughout the construction period and mitigation measures taken immediately when the health of residents may be in jeopardy.

4.14: Air Quality:

- Table 4.14-3 on page 4.14-14 breaks down pollutants from construction equipment by year. Though these emissions are to be compared to the yearly threshold as required by the APCD, this does not tell the whole story. When looking at PM emissions, it is obvious this is the pollutant emitted in the highest concentration. PM is of most concern, particularly in a residential area, as this pollutant can bypass the body’s natural filtration system and lodge deep in the lungs. Residents will be exposed to relatively high levels of PM over a four year period. The health effects of PM include aggravated asthma, increased respiratory symptoms, and chronic bronchitis. Long-term studies of children’s health conducted in California have demonstrated that particle pollution may significantly reduce lung function growth in children (Peters et al. 1999, Avol et al. 2001, Gauderman et al. 2002).

- The EIR should include mitigation measures for the exhaust from heavy duty diesel construction equipment, including the requirement that only heavy-duty construction equipment manufactured after 1996, with federally mandated “clean” diesel engines, be used.

- The number of pieces of construction equipment operating simultaneously must be minimized to ensure the smallest practical number operating at any one time.

- Diesel particulate emissions must be reduced using EPA or California certified and or verified control technologies like particulate traps.

- Diesel powered equipment should be replaced by electric equipment whenever feasible.

4.15: Public Services and Utilities

- We strongly disagree with the conclusions of Section 4.15, that there will be “less than significant impact” to local law enforcement and fire protection agencies,
and other first responders. Our informal survey of local law enforcement personnel indicates they disagree as well. However, this impact can be mitigated with a substantial commitment by the University to increase both law enforcement and fire protection in our area.

- The DEIR should substantiate the determination of “no significant impact” to fire protection services given there will be only one entry/exit for the development and the possibility of brush fire in the open space areas adjacent to the proposed development.

Alternatives:

- **The South Parcel alternative is under-evaluated.** Assertions that North Parcel development is “better” environmentally are not adequately detailed, e.g., species studies. The benefits of development on the South Parcel are also not adequately detailed, e.g., reduced miles driven to campus. We also note that the South Parcel Alternative development is half the density of the proposed project and calls for roughly 10 times the number of single family homes as the North Parcel development – arguably better meeting the needs of the faculty.

- The South Parcel Alternative notes that “green technology” would be utilized – no similar statement is made about the North Parcel proposal. **The environmental impacts over the life of the buildings must be detailed if the North Parcel will not be equally “green”**.

- **The “no development” alternative is inadequate.** For example, UCSB – faculty partnerships which enable faculty to buy existing local homes (sometimes called equity-sharing) are ignored. Universities throughout the country have similar programs. Such a program would allow UCSB to achieve its goal of attracting quality faculty without the need to develop in environmentally sensitive areas, or require faculty to substantially sacrifice equity associated with housing value appreciation. Given the very high value of open coastal land; this alternative deserves a truthful analysis.

- **Most important, nothing precludes the University from developing any of the alternative sites, including the South Parcel, in the future.** The Long Range Development Plan can be altered. We therefore strongly advocate that the University legally relinquish development rights to any area contained in the current Ellwood-Devereux Plan not currently proposed for development.
View from existing trail along northern edge of North Parcel, adjacent to Cannon Green Townhomes

View looking across North Parcel from area currently used for public parking on Phelps Road.
View looking south from existing trail along northern edge of North Parcel

View from end of trail at corner of Phelps & Cannon Green
View of North Parcel from trail along northern edge

View of North Parcel from Cannon Green Townhomes
If you have any questions or comments, please feel free to contact us at the phone numbers or email addresses below.

Sincerely,

Stephen Sorich  
Cannon Green – Phelps Neighborhood Coalition  
685-3738  
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Frances Gilliland  
Cannon Green – Phelps Neighborhood Coalition  
685-0325  
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cc: Cynthia Brock, Mayor, City of Goleta  
Gail Marshall, Third District Supervisor, County of Santa Barbara  
Brian Trautwein, Environmental Analyst, Environmental Defense Center
May 24, 2004

Shari Hammond
Senior Planner
University of California, Santa Barbara
Office of Planning and Design
Goleta, CA 93106-2032

RE: Draft EIR and LRDP Amendment for Faculty and Family Student Housing and Open Space Plan

Dear Ms. Hammond:

The Environmental Defense Center (EDC) represents Save Ellwood Shores (SES) and Santa Barbara Audubon concerning UCSB’s Draft Environmental Impact Report and LRDP Amendment for the Faculty and Family Student Housing Project and Open Space Plan. Our following comments on the Draft Environmental Impact Report (dEIR) identify significant project-specific and cumulative environmental impacts, and feasible measures to mitigate impacts to the maximum extent feasible. SES’ and Audubon’s comments will help UCSB achieve consistency between its proposed LRDP Amendment and the Coastal Act’s clear wetland protection requirements. Significant impacts associated with biological resources and water quality can be feasibly avoided and substantially lessened while maintaining a viable project that fulfills UCSB’s underlying objectives.

I. COMMENTS REGARDING THE DRAFT LRDP’S CONSISTENCY WITH THE COASTAL ACT


The proposed project would fill over 1.54 acres of coastal wetlands, in violation of the California Coastal Act. (dEIR at page 4-6-23)¹ Wetlands are defined under the Coastal Act as any “lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed

¹ Biologists Dr. Elizabeth Painter (Attachment #1) and Darlene Chirman (May 24, 2004 Audubon letter) identified wetlands that were not identified in the text or maps in the dEIR. These wetlands near the proposed entrance road and the southern boundary of the North Parcel would be filled by the proposed project. In addition, the May 24, 2004 Audubon letter by Chirman notes that the dEIR incorrectly describes some wetlands as non-wetlands.
brackish water marshes, swamps, mudflats, and fens.” (Coastal Act §30121.) The Coastal Commission regulations provide further definition of the boundary of wetlands, as follows:

§13577(b) Wetlands
(1) Measure 100 feet landward from the upland limit of the wetland. Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts of other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitats. For purposes of this section, the upland limit of a wetland shall be defined as:

(A) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover;

(B) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or

(C) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not.

According to the dEIR, the filling of wetlands is allowed under the “balancing” provision of the Coastal Act.² (dEIR at pages 4.6-20 – 4.6-26) However, this provision does not apply to the UCSB housing project for two reasons. First, the balancing provision does not apply unless there are conflicts between policies of the Act. In this case, there are alternatives that allow development of housing on the North Parcel without destroying wetlands. (See discussion of Alternatives, below.) Therefore, conflicts can be avoided and balancing is not necessary.

In addition, and more importantly, the Coastal Act does not allow application of the balancing provision to fill wetlands for purposes of residential development. As the Court of Appeals held in Bolsa Chica Land Trust v. California Coastal Commission, 71 Cal.App.4th 493, 510 [83 Cal.Rptr.2d 850] (1999), the balancing provisions of Coastal Act

² / §30007.5 of the Coastal Act provides that: “The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.”
§30007.5 are never applicable to wetlands because the Coastal Act already contains specific exceptions allowing limited development and activities in wetlands. These exceptions are set forth in §30233 of the Coastal Act.³ As the Court stated, "[b]y its terms §30233(a) purports to set forth the purposes, in their entirety, for which coastal wetlands can be developed." Id. at 512, emphasis added. In reviewing the list of development allowed in wetlands, the Court noted that "residential development is not a use permitted in wetlands." Id. at 511, emphasis added. Therefore, the Court held that "residential development of the lowland wetlands was not permitted." Id. at 514. The Court also pointed out that where wetlands are considered ESHA, they are nevertheless protected by the more specific provisions of §30233 and thus entitled to "extraordinary protection." Id. at 514-516. The Court thus held that the balancing provisions of §30007.5 do not apply to wetlands. Id. at 516.

Kirkorowicz v. California Coastal Commission, 83 Cal.App.4th 980 [100 Cal.Rptr.2d 124] (2000) confirmed the ruling in Bolsa Chica. In Kirkorowicz, the Court made reference to its earlier Bolsa Chica decision "absolutely prohibiting" the Commission from approving any encroachment into wetlands, except for the enumerated uses permitted by section 30233." Id. at 987, emphasis added. The Court applied this strict protection to all wetlands (defined in §30121 of the Act), regardless of their quality. As the Court stated, "This is so because of the dramatic loss of over 90 percent of historical wetlands in California and their critical function in the ecosystem." Id. at 994. The Court further observed, "Simply stated, in determining whether a wetland is protected under the Coastal Act and the LCP, the quality of the wetland is essentially legally irrelevant. As City’s biologist Scheidt explained, ‘[]ll wetland areas, even those in a heavily disturbed state, are considered significant biological resources in so far as they have a potential to buffer adjacent, higher quality areas. In this case, much higher quality wetland habitat is present to the south beyond the limits of the proposed site development area.’ The logic of this argument is apparent, for the failure to preserve and protect degraded or disturbed wetlands buffering adjacent higher quality wetland will inevitably jeopardize, compromise and eventually erode the latter." Id. at 989.

The most recent application of this policy is represented by the Coastal Commission’s deliberations regarding the proposed Newport Beach Senior Housing Project in 2003. In that case, the Commission initially objected to the project due to the resulting impacts to

³ Coastal Act §30233 provides:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: [the list includes ports, energy and coastal-dependent industrial facilities; maintaining existing dredged channels, basins, mooring areas, and launching ramps; boating facilities; piers; incidental public service purposes; mineral extraction; restoration; nature study, aquaculture or similar resource-dependent activities].
wetlands. According to the July 2003 staff report (see Attachment #1), "As proposed, the project would result in the fill of wetlands to serve an unallowable purpose, residential development." (July 2003 staff report, p. 1.) The staff report explained the importance of protecting wetlands in the coastal zone and applied the Coastal Act definition to the resources on site. The report further pointed out that the areas qualified as wetlands even though they were probably created by human activities and are not considered "natural" wetlands. Nevertheless, they exhibited the features and functions protected by the Coastal Act. (See staff report, pp. 10-15.) In conclusion, the report stated "In this case, the applicants propose the filling of three wetland areas to serve residential development. Residential development is not an allowable use of a wetland area. In addition, even if the fill were intended for an allowable use, the proposed project is not the least environmentally-damaging feasible alternative available." (Staff report at p. 15, emphasis added.) Due to these concerns, the hearing was continued to allow the applicant to redesign the project to avoid the wetlands. In addition, further analysis was conducted to characterize the areas in question.

When the Commission reconsidered the matter in November 2003, the staff report restated the principles and findings from July, but concluded upon further evaluation that one of the areas did not qualify as a wetland. (See Attachment #2.) Because the project was redesigned to restore the remaining two wetlands, the project was approved.  

In this case, the dEIR must find that the proposed filling of wetlands violates the Coastal Act and must analyze alternatives (see below) that allow residential development without disturbing the wetlands.

B. Development within ESHAs and ESHA Buffers Violates Coastal Act Policy.

The proposed LRDP Amendment would allow development in wetlands, as discussed above, and other ESHA including Southern Tarplant habitat. Southern Tarplant is a special status and rare species (Table 4.4-3). Its habitat is vulnerable to degradation by human developments, as noted on dEIR page 4.4-56. Any area in which plant or animal life or their habitats are either rare or especially valuable due to their role in an ecosystem or their special nature are environmentally sensitive areas, or ESHA. (Coastal Act Section 30107.5) Pursuant to Coastal Act Section 30240(a), environmentally sensitive areas shall be protected against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within ESHAs. Additionally, Section 30240(b) states that all development adjacent to ESHAs shall be sited and designed to prevent significant disruption of habitat values in the ESHA, and shall be compatible with the continuation of the ESHA.

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4 / The report did find that use of a wetland as a detention basin to support residential development (by treating runoff) would not be an allowed use under the Coastal Act. (Staff report at p. 32.) However, because the Commission found that the areas would not be used to treat run-off and would be restored, the activity was permitted under the Coastal Act.
The three Tarplant populations in the development footprints are by definition ESHA (any area in which plant or animal life or their habitats are rare). The proposed project is not dependent on the resources of the ESHA. Furthermore, development in these three ESHAs will remove all vegetation in the three of the areas identified as Tarplant sites on Figure 4.4-2 and thus will not be compatible with the continuation of these Tarplant habitats onsite.

In addition, many wetlands on the North Parcel and the Storke-Whittier site are ESHA despite the dEIR finding that they are not ESHA. Attachment #3 explains that these areas are rare habitats, identified as a habitat of concern by California Department of Fish and Game and are thus by definition ESHA. Over 90% of coastal wetlands and riparian habitats have been lost in California, and wetlands and especially vernal pools are extremely sensitive to direct and indirect disturbance by human developments. Moreover, as noted below, species of concern such as the Western Red Bat use the North Parcel wetlands. Therefore, the LRDP is not consistent with the Coastal Act's ESHA provisions with regards to wetlands and Tarplant habitat and should designate known ESHAs as such in the LRDP amendment.

C. The LRDP should Identify the South Parcel as ESHA.

The South Parcel is being retained by UCSB and could be used for additional housing in the future. An ESHA is any area where plant or animal life is either rare or especially valuable due to its special nature or role in an ecosystem, and which is easily degraded by human activities. The South Parcel meets this definition. The Coastal Act requires that such areas shall be protected against any significant disruption of habitat values, and only uses dependent on the resources of the ESHA are allowed in it. Therefore, it must be preserved and designated ESHA in the LRDP. This will ensure the purported benefits of the Joint Proposal are long-lasting. The South Parcel is ESHA for the following reasons.

1. The South Parcel Supports Rare Species.

Figure 4.4-2 in the dEIR identifies a variety of special-status species that depend on the South Parcel for essential portions of their life cycles. Various white-tailed kite nests indicate that the South Parcel, the trees within and adjacent to it, and its grassland foraging area is important for this rare species' reproduction and survival in the Open Space Area, the second most significant area for kites in the Goleta area. (Personal Communication, Morgan Ball, Raptor Biologist, 5-23-04.) Kites also have a communal roost on the South Parcel, so the area serves another essential life cycle function for the white-tailed kite, a Fully Protected Bird under the California Endangered Species Act and Fish and Game Codes, and a federal Species of Concern. (Attachment #4, Draft Technical Report Biological Resources Evaluation University Exchange Property (1989).) There are also Southern Tarplant, a List I B rare California species present on the South Parcel. Burrowing Owl, a federal Species of Concern and proposed for State listing as threatened, has been documented on the site, which provides some of the last suitable overwintering habitat in
southern Santa Barbara County. A Monarch Butterfly (State-Protected Species of Concern) aggregation site and a Cooper’s hawk (California Species of Concern) nest site on trees abutting the South Parcel provide further evidence of its status as an ESHA. “The resident raptor population depends on unbroken tracts of grassland, sparse scrub, and wetlands south of the golf course for hunting and roosting.” (Attachment #4) The only recorded Badger (California Species of Concern) observation in the area was from the South Parcel (over ten years ago). The Pallid Bat a California Species of Concern has “excellent foraging and possibly roosting habitat” in the development footprint” and Open Space Area (e.g., South Parcel), according to the deIR on page 4.4-29. Another State Species of Concern, the Western Red Bat has a “moderate to high potential for occurrence in the project area” and forages along “wetland habitats,” presumably including those on the North Parcel threatened by the project and those mapped and unmapped South Parcel wetlands that would be threatened by Alternative 1.

2. The South Parcel Supports Rare Habitats.

There are several wetland areas in drainages on the South Parcel not identified in the deIR. Audubon biologist Darlene Chirman, who is qualified to identify wetland plant species, identified areas of wetland vegetation on the South Parcel that are not mapped as wetlands in the deIR. There are also native grasslands on the South Parcel that Chirman identified but that are not mapped or described in the deIR. The Southern Vernal Pools, Southern Riparian Scrub and Southern Riparian Forest are recognized by the Department of Fish and Game as rare habitats. Coastal Sage Scrub habitats, frequently considered ESHAs and components of larger ESHAs dot the South Parcel. The interrelated nature of these habitats and the coyote brush scrub and grasslands on the South Parcel provides for extensive use by the rare species as noted above, and helps to make the South Parcel an environmentally sensitive area. Similarly, the proximity of the adjacent Devereux Slough adds to the ecological importance of the South Parcel and use of it by rare species, rendering it even more environmentally sensitive.

3. The South Parcel is Sensitive to The Impacts of Development.

If development of the South Parcel were to proceed as described under Alternative 1, there would be significant unavoidable impacts to the habitat values of the South Parcel. As noted above and in Audubon’s letter by Chirman, there would be significant disruption to the habitat values for raptores which, due to the mix of habitats available on the South Parcel, nest, roost and forage there. There would be significant impacts to mapped and unmapped wetlands, including indirect impacts (urban runoff and modified watershed hydrology) and direct impacts (filling) of unmapped wetlands (e.g., for roads), and to the unmapped native grasslands. While reviewing a previous development proposal for the project site (North and South Parcel), biologist John Storrier found that loss of the habitat as foraging area for sensitive wildlife species is “highly significant.” Mitigation of these impacts could only be accomplished by eliminating development south of the golf course (Attachment #4). Raptor biologist Morgan Ball concludes that white-tailed kite activity
would be greatly reduced if Alternative I were built. (Personal Communication, 5-23-04)
The South Parcel contains significant and rare coastal resources including sensitive habitats
and species, and is highly vulnerable to the impacts of develop and human activities. It is
therefore ESHA.

Therefore, the LRDP Amendment should include designation of ESHA on the South Parcel.

D. The LRDP Should Require an Easement to Protect ESHA.

In the past, the University has committed to protect certain areas (e.g., the Bluffs or
the South Parcel) from development, and then either reneged on its commitment or re-
offered the same commitment in exchange for additional development. To ensure that the
undeveloped ESHA areas are protected permanently, the University should require
dedication of a conservation easement that will be held by a public resource agency or
conservation organization.

II. COMMENTS REGARDING THE DRAFT EIR

A. Biological Resources.

It is difficult to determine exactly which resources would be impacted by the
proposed development. The dEIR should be revised to include updated, complete and
accurate maps that overlay the proposed development over the biological and other
constraints.

1. Significant Impacts to North Parcel Wetlands Can Be Feasibly Avoided.

The loss of over 1.5 acres of wetlands\(^5\) on the North Parcel is a significant impact, but this
impact can be avoided by redesigning the project. Under CEQA, a lead agency must not
approve a project if there is a feasible alternative that meets most of the basic objectives, or
feasible mitigation measures, which avoid or substantially lessen a significant impact.
(CEQA Guidelines Section 15002(a)(3) and 15021(a)(2). Also see CEQA, Public
Resources Code Section 21081(a)(3) and Mountain Lion Foundation v. Fish and Game
and declares that it is the policy of the state that public agencies should not approve projects
as proposed if there are feasible alternatives or feasible mitigation measures available which

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\(^5\) The dEIR underrepresents the number and acreage wetlands present on the North and South Parcels
according to Dr. Painter and Darlene Chirman. It also confuses the amount and type of wetlands present on
the North and South Parcels. For instance, page 4.4-19 describes wetlands in three east-west trending swales
across the South Parcel, but Figure 4.4-1 does not depict them. Table 4.4-1 shows that there are 4.37 acres of
riparian "Aquatic Type" habitats and 5.42 acres total of "Aquatic Type" habitats on the South Parcel, yet page
4.4-20 states there is a total of 2.93 acres of Coastal Act wetlands on the South Parcel.
would substantially lessen the significant environmental effects of such projects." (Public Resources Code Section 21002.) Attachment #3 by Dr. Elizabeth L. Painter evaluates the loss of wetlands and concludes that it is a significant biological impact. Audubon biologist Darlene Chirman reaches the same conclusion. This conclusion is based in part on the proximity of the wetlands to other habitats, the importance of the wetlands to certain species, and the rarity of vernal pool, freshwater marsh and other Coastal Act wetland habitats.

To help UCSB avoid this significant impact, SES and Audubon mapped a 100-foot wetland buffer around all Coastal Act wetland habitats identified in the dEIR and around those not identified in the dEIR but identified by Chirman and/or Dr. Painter. The resulting wetland buffer map was overlaid on Figure 3-2, the North Parcel Faculty Housing Site Plan. At the proposed density of approximately 10 units / acre, UCSB can still achieve a considerable majority of its desired 236 units if a slight reduction in one wetland buffer near Phelps Road and Cannon Green were allowed for access. At a somewhat higher density, with this minor buffer encroachment, UCSB can realize all or most of these units while avoiding direct impacts to all wetlands and to 100-foot buffers around all but the one wetland. UCSB should therefore analyze two alternatives that avoid North Parcel wetlands in its EIR (as described below) that avoid all wetlands and 100-foot buffers (except the minor buffer encroachment by Phelps Road) and that: 1) increase the proposed density to maintain 236 units on the North Parcel, and 2) maintain the approximately 10 units / acre density, transfer the balance of the 236 units to the Storke-Whittier site, and shift a portion of the proposed Sierra Madre student units onto campus to accommodate faculty units at Storke-Whittier.

2. The dEIR Wetland Map Fails to Identify all Wetlands

Wetland habitats mapped in the dEIR exclude wetlands on the North Parcel. These wetlands occur south of the northeastern corner of Phelps and Cannon Green Drive, by the proposed entrance road, and along the northern boundary of the Ocean Meadows Golf Course and southwest of Phelps Creek. The dEIR fails to identify all Coastal Act wetlands that would be filled for the North Parcel development. In addition, the wetland near Storke Road was only partially mapped and extends approximately 90 feet further north west of Storke than shown on Figure 4.4-1. The statement on dEIR page 4.4-75 that the proposed Sierra Madre development, grading and construction would avoid a 100-foot buffer for wetlands is no longer accurate based on the new information provided by Dr. Painter and Chirman. Under CEQA and the Coastal Act, significant environmental resources must be identified accurately to facilitate impact assessment and avoidance. The dEIR is deficient for under-representing the extent of significant environmental resources: wetlands. This affects the EIR in basic ways including the impact analysis, the alternatives analysis and the policy consistency analysis. The dEIR must be augmented with this significant new information, revised to address it, and recirculated. The revised dEIR should include alternatives that avoid impacts to wetlands and comply with the Coastal Act.
3. The dEIR Should Include Restoration of Wetland and Creek Buffers to Mitigate Significant Impacts.

North Parcel
In addition to avoiding the mapped and newly identified wetlands, the project should include restoration of the wetlands and buffers to mitigate the project’s significant indirect impacts to the preserved wetlands. CEQA requires lead agencies to mitigate significant impacts to the maximum extent feasible. In addition, Section 30231 of the Coastal Act requires that wetlands’ quality and productivity be maintained and restored when feasible. The North Parcel Wetlands will be subject to increasing degradation from increasing human presence in the wetland and buffer, noise and night lights associated with the development, runoff from streets and fertilized landscapes, and pets that chase and eat wildlife\(^6\) if not actively enhanced and placed off-limits to damaging activities. Therefore, these wetlands and their buffers, and the Phelps Creek buffer, should be restored by eradicating invasive non-native plants and revegetating with appropriate native species grown from Devereux Watershed seed sources. The dEIR refers to wetland restoration (page 4.4-76), but since this is not required as mitigation, it is presumed the dEIR refers only to opportunity wetland restoration projects to be implemented in the future. Instead of deferring wetland and habitat restoration activities (e.g., to gain mitigation credit for future UCSB developments), UCSB must fund and implement restoration as mitigation for the project’s indirect wetland impacts. These actions will further mitigate significant indirect impacts to the preserved North Parcel wetlands and significant cumulative impacts to biological resources, water quality and sedimentation in Devereux Slough.

Storke Whittier Parcel
The wetland habitat and buffer along the eastern unnamed tributary to Devereux Creek, which bisects the Storke Whittier development site, should be restored. Given the history of unpermitted filling and installation of culverts in this wetland near Storke Road for activities associated with the golf course (Attachment #5, photos), habitat restoration could potentially entail excavation of this fill, as well as eradication and control of invasive non-native plants and planting of appropriate native vegetation grown from plants sources in the watershed. Excavating the eastern tributary and its wetland buffer as part of a habitat restoration effort could help mitigate the cumulative flooding impacts (Impacts Flood-1, -2, -3, -4 and -5 of Ocean Meadows Residences dEIR) by increasing the capacity of the wetlands and buffer to detain flood waters, reducing peak flows elsewhere in the watershed.

South Parcel
Wetland habitats on the South Parcel should be restored to mitigate for the indirect impacts to North Campus wetlands, rather than being identified as future opportunity projects and used as a mitigation bank for future UC projects, as suggested in the OSHMP. Instead, the wetlands on the South Parcel should be restored as mitigation for the biological effects of the proposed development of the North Campus.

\(^6\) During a May 18, 2004 site visit, EDC identified a king snake that had apparently been partially eaten by a cat or dog.
The dEIR goes to great lengths to describe the wetlands identified in the dEIR as degraded. With UCSB’s history of wetland restoration projects undertaken in the past twenty years, and its staff and expertise, restoration of the North Parcel, South Parcel and Storke-Whittier wetlands is feasible. Preserving and enhancing these wetlands and their buffers is required pursuant to CEQA (to mitigate significant impacts) and the Coastal Act.


Eastern Tributary
The Storke-Whittier project site contains a significant animal movement corridor that connects the Goleta Slough Ecological Reserve and Goleta Slough (and thus the connected Santa Ynez Mountains) to the Coal Oil Point Reserve and Devereux Slough Watershed. SES and Audubon believe, based on input from various biologists including Chirman and Dr. Painter that this corridor is critical to the ecological function of the Open Space Area. It follows the unnamed eastern tributary to Devereux Creek within the Ocean Meadows Golf Course and UCSB’s Storke-Whittier site, but was overlooked in the dEIR’s description of wildlife corridors on page 4.4-76 through 4.4-80. This description correctly notes that medium-sized mammals such as bobcat, coyote and striped skunk probably could not survive in the Open Space area without connections to larger habitats offsite. According to biologists, it is, vitally important to maintain connectivity between the Slough watersheds to ensure recolonization of species that may become extirpated as a result of this project and/or cumulative development in the Joint Proposal Area and environmental fluctuations (e.g., droughts). Small and medium-sized mammals such as grey fox (believed extirpated from this area) and those above can utilize this corridor to maintain gene flow and prevent 1) genetic isolation, and 2) extirpation from the COPR and Joint Proposal Area. If these predatory species were lost from the area, it would disrupt the food web and cause ecological consequences such as increasing rodent populations and resulting impacts to native plant and habitats. The Storke Ranch development to the east was conditioned by the County to maintain this wildlife movement corridor through that property.

As mitigation for the impact of substantially narrowing the existing east-west wildlife corridor by building both north and south of it, and to comply with Goleta Community Plan Policy Bio-GV-15.2, UCSB (and the Ocean Meadows Project) should: 1) increase the size of the wetland buffers along the unnamed eastern tributary to Devereux Creek to 200 feet or the maximum extent feasible, and 2) install a wildlife passageway (e.g., a bridge or arch-span culvert of sufficient size to pass medium-sized mammals) underneath Storke Road where it is to be widened as traffic mitigation. For more discussion of the need for this mitigation measure, please refer to the letter regarding the dEIR written by Audubon’s biologist, Darlene Chirman.

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7 Of the remaining less than 10% of the historical wetlands in California, the majority of those remaining have been degraded.
8 The proposed wetland replacement mitigation measure described in the dEIR is insufficient because under the Coastal Act, residential development must avoid wetlands.
Devereux Creek
In addition, the impacts of replacing the drainage pipes that lead from Devereux Creek on the Ocean Meadows Golf Course to the Devereux Slough have not been adequately studied. While this change could benefit the Slough and wildlife movement, it could also increase sedimentation in the Slough and cause other adverse impacts to this ESHA. California Fish and Game’s scoping letter specifically opposed channelizing watercourses. This includes culverts when bridges are feasible. Moreover, stream protection policies in the Goleta Community Plan and Coastal Act Section 30236 require keeping structures (other than structures for water supply, flood control and habitat improvement) out of creeks when feasible. Bridges are feasible ways to mitigate the impacts of culverts on wildlife movement corridors along streams. Therefore, UCSB must explore the relative impacts, feasibility and policy consistency of a bridge instead of channelizing Devereux Creek in a concrete box culvert, and if feasible and less ecologically damaging, must pursue a bridge.

5. Impacts to Southern Tarplant are Significant and Must be Avoided or Mitigated.

The Storke-Whittier project is located within three known Tarplant populations and the North Parcel development envelope contains one. Areas in which plant or animal life is either rare or valuable due to its special nature or role in an ecosystem, and which can easily be degraded by human development is an ESHA. Impact Bio-1 addresses the loss of Tarplants and potential habitat for Tarplant. Thus, the project may impact ESHA in violation of the Coastal Act Section 30240. Under this section, uses that would significantly impact habitat values in an ESHA or would not be compatible with its continuation violate the Coastal Act. Therefore, if Tarplants are found onsite during required surveys, then the County should require as a new mitigation measure that the area(s) where Tarplants are found should be evaluated as potential ESHA. If found to be ESHA, the project should be redesigned to avoid the ESHA and to avoid reducing the range and population of this rare species. Because the potential habitat will be permanently lost and it is an ephemeral annual plant, I order to mitigate this impact, even if no Tarplant is found during pre-construction surveys, population should be established as mitigation, in restored areas of Ocean Meadows (first choice), within adjacent University wetland buffers, at Coal Oil Point Reserve, and/or at the County vernal pool parcels. In addition to helping achieve consistency with the LCP and Coastal Act, this mitigation measure would also avoid a significant impact – the reduction of the range and numbers of a rare species. (CEQA Guidelines Section 15065)

6. Impacts to Raptors are Significant and Must be Mitigated to the Maximum Extent Feasible.

The loss of foraging habitats for rare raptors would be a significant unavoidable impact. The areas that support these rare species, including white-tailed kites, are ESHA and must be preserved or they will lose their ecological function. Under CEQA, the loss of over 20
acres of prime foraging habitat (North Parcel) as well as other foraging habitat, in close proximity to nesting habitat and the South Parcel kite roost, may be a significant impact. (CEQA Guidelines Section 15065) According to Morgan Ball, a raptor expert consulted by SES and Audubon, the project will cause abandonment of the white-tailed kite nest located on the Goleta Union School District property. According to Ball, the project will cause “a significant impact” to nesting and foraging areas that meet the Coastal Act definition of ESHA (any area in which plant or animal life or their habitats is rare or especially valuable). The “lion’s share” of prey captured by the breeding pairs of kites in the area is captured within the development envelope, according to Ball. UCSB’s conclusion (page 4.4-85) that the project contribution to a cumulative impact associated with loss of foraging habitat is beneficial lacks credibility and indicates a fundamental deficiency with the dEIR. This conclusion is contradicted by evidence in the record in the form of biologist Morgan Ball’s comments included in this letter. Mr. Ball concludes that “if the North Parcel project were to go through as is, these [nesting] trees would be cut off from the rest of the Ellwood Complex and their would not likely be a vole population close to these trees that could support kite breeding. In my opinion, the nest site will be lost due to destruction of the nearby foraging habitat.” (Personal Communication, 5-25-04)

Restoration of the wetland UCSB proposes to protect on the North Parcel, and restoration of South Parcel wetlands (which are not required as mitigation measures yet) if ever undertaken, would improve those habitats. However, they would not offset the significant loss of rare raptor foraging habitat or the impact of that loss on nearby nest sites. Therefore, UCSB should 1) protect foraging habitats onsite to the maximum extent feasible by increasing project density and/or transferring faculty units to the Storke – Whittier site while transferring student units to Main Campus (see alternatives, below), 2) protect wetlands and all ESHAs and buffer on the North Parcel, including those not yet identified in the dEIR, and 3) purchase and restore habitats in the Ocean Meadows Golf Course. Ball suggests that offsite mitigations are not preferable because the factors that make the North Parcel an ESHA for kites are site-specific.

B. Grading, Erosion and Sedimentation

Given the existing significant sedimentation impact occurring in Devereux Creek and the Devereux Slough, any contribution to this impact should be considered significant. UCSB’s contribution to this cumulative impact would be significant given the amount of grading proposed by UCSB in close proximity to the Slough. CEQA Guidelines Section 15130 requires the lead agency to discuss cumulative impacts and to identify significant cumulative impacts when the project’s contribution to the cumulative impact is considerable. The draft EIR classifies these erosion and sedimentation impacts, as well as cumulative geological and water quality impacts, as less than significant. However, UCSB cannot claim the contribution to this cumulative impact is not considerable, or that the existing problem from approved and planned development in the watershed is not already a significant environmental impact. The dEIRs for the adjacent Ocean Meadows project and the Comstock project identify potentially significant cumulative sedimentation impacts.
(Attachment #6, page 4.2-22 of Comstock dEIR). In addition, the 1990 UCSB Campus Wetlands management Plan, Part 2 Technical Report – Hydrology, Water Quality and Sedimentation of West and Storke Campus Wetlands, which notes on page 57 – 58 that the Slough wetlands are being filled in by sedimentation and concludes “the delta has displaced 13.29% of lagoonal habitat.” (Attachment #7) The Sandpiper Golf Course redesign will expose additional acreage to erosion if approved, and this may occur concurrently. The sedimentation impact is so bad the County Flood Control District proposed and installed a project to trap and remove sediment from Devereux Creek before it enters the Slough. The goals include reducing flooding and protecting the Slough from sedimentation impacts. (Personal Communication, Karl Triebel, County Flood Control District, 5-24-04.) Approximately 48 acres will be graded and developed by UCSB, potentially simultaneously out of about 74 acres in the Joint Proposal Area. This cumulative grading along Devereux Creek and its major tributaries includes 16 acres at the Comstock Residential Development site, 10 acres at Ocean Meadows, 23 acres at UCSB’s North Parcel, 18.6 acres at UCSB’s Storke-Whittier sites, and 6 acres for UCSB’s proposed trails. UCSB’s portion of this is considerable if not substantial.

The Regional Water Quality Control Board (“RWQCB”) notes that sediment is eroded at construction sites, transported, and deposited in creeks by rainfall and surface water. (Attachment #8, page 1) The dEIR finds that, “Much of the resulting sedimentation [from erosion on the North and South Parcels] is deposited in the Devereux Slough.” Even with erosion control measures that meet standards, large storms can result in erosion of construction sites and sedimentation of downstream waterways. Based on EDC’s monitoring other construction projects in the winter time, erosion control measures are frequently not installed or are not maintained adequately and sedimentation results from development projects. Construction of the Glen Annie Golf Course upstream from Devereux Slough is an example of failed erosion control measures. The best way to ensure this will not happen is to condition development projects so that site preparation and grading is limited to the dry season. The RWQCB’s Erosion and Sediment Control Field Manual states: “Schedule major grading operations between April and October. Allow enough time before rainfall begins to stabilize soil with vegetation or physical means.” (Attachment #8, page 23). Therefore, given the proximity to the Devereux Creek and Slough, the substantial acreage of grading involved, and the ongoing sedimentation problems already facing the Slough and Creek, grading should be prohibited during the rainy season (November 1 – April 15) if feasible. Mitigation Measures MM 4.2-2(d)(a) should be modified to prohibit grading during the rainy season at all times pursuant to the RWQCB’s Manual. This feasible limitation will ensure that development avoids potentially significant contributions to the ecologically destructive cumulative sedimentation problem in Devereux Creek and the Slough. Coincidentally, limiting grading to the dry season (i.e., April 15 through November 1) will also improve traffic safety, and reduce noise and air quality impacts to sensitive receptors at Isla Vista School.
C. Water Use and Conservation

Water for the project will come primarily from Cachuma and the State Water Project via the Goleta Water District ("GWD"). On page 4.15-41 the dEIR finds that "the GWD has indicated that an adequate water supply is available to meet the needs of the campus through 2015." It concludes based on this that there are no significant project specific or cumulative water supply impacts. However, eleven years of water supply is not adequate to serve the residents for the life of the project or their ownership period. The dEIR incorrectly states that, "State water will ensure an adequate water supply to the Goleta community during dry periods. The GWD will receive approximately 4,500 acre-feet per year from the State Water Project." However, while 4,500 AFY is the GWD’s capacity to receive State Water, the District’s August 30, 2001 Urban Water Management Plan states that the District does not receive 4,500 AFY. Moreover, this water supply faces significant shortages during droughts.

In addition, the U.S. Bureau of Reclamation’s Cachuma Project water rights permits are currently up for reconsideration by the State Water Resources Control Board. The SWB is contemplating measures including releasing more Cachuma Project water to protect federally-Endangered southern steelhead in the river below Bradbury Dam. Increased water usage may contribute to a significant impact to steelhead on the Santa Ynez River. Increased water conservation would help protect steelhead and other environmental resources, and should be required for all new development as a feasible mitigation measure.

Page 4.15-31 of the dEIR includes MM 4.15-6(a) which requires low flow toilets and showers. This requirement is helpful, however to more fully mitigate the proposed project’s cumulative impacts to steelhead and resources on the Santa Ynez River, additional measures are necessary.

Water conservation measures are identified pursuant to Policy 2-5 of the County’s Coastal Plan and GCP Policies WAT-GV-6 and -12. Since “water supply remains an issue throughout the state,” according to the dEIR, measures to mitigate impacts to water supply should be expanded to ensure they are effective at reducing water impacts on water supplies to the maximum extent feasible. Under CEQA, mitigation measures must be effective and enforceable. (CEQA Guidelines Section 15126.4(2)) In the case of Measure MM 4.15-6(a), more specificity would help to ensure that the EIR complies with CEQA. Specifically, the EIR should specify that low flow shower heads and toilets are required, and that each home be equipped with high efficiency (HE) washing machines. These water-saving devices are available and cost-effective, and the latter two were recently recommended as measures the GWD can feasibly implement to reduce its demand on Cachuma Project water, and consequently to reduce impacts on steelhead and the Santa Ynez River. (Attachment #9, Pacific Institute Report) This simple mitigation measure would help mitigate significant cumulative, indirect impacts to steelhead, and achieve consistency with the adjoining jurisdictions’ CZO, Coastal Plan and GCP Policies.
D. Views

The project obstructs scenic public vistas and must be redesigned to protect public views. Under CEQA, significant impacts to views must be mitigated to the maximum extent feasible. Section 30251 of the Coastal Act also requires that new development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, and to be visually compatible with the surrounding area. The dEIR’s analysis is incomplete. Considering the Joint Proposal Area size (>700 acres), extensive public usage, undeveloped nature, and dozens of scenic views from all portions of the Area, more than 6 vantage points should be analyzed. Based on the limited analysis, however, this project partially obstructs public views of the foothills and Santa Ynez Mountains from key viewing points within the Open Space Area and public areas near the Open Space Area (e.g., from the South Parcel, Ocean Meadows Golf Course, the Ellwood Mesa, and Storke Road). These significant obstructions of scenic views would be shared by thousands of visitors to the Open Space Area each week. Therefore, the project’s 387-units cause significant unavoidable view impacts.

Despite this, the dEIR finds that these impacts can be mitigated to less than significant by addressing building mass and landscape screening. It finds that views of the mountains would not be blocked from publicly accessible areas adjacent to the University. This is misleading because scenic public views they would be lost/obstructed from large portions of the University’s publicly-accessible South Parcel and from the public golf course. In addition, views from within the interior of the North Parcel looking north at the mountains would be blocked, but the dEIR does not consider impacts to views from within the large development envelopes. These views would be lost altogether.

UCSB should consider measures that protect coastal resources, including views, habitats and the natural terrain, to the maximum extent feasible in order to comply with CEQA and with Coastal Act Section 30251. Wider wetland buffers at the Storke-Whittier Wildlife Movement Corridor would help to minimize significant impacts to scenic views.

E. Solid Waste

The proposed project will generate significant quantities of solid waste which exceed the County of Santa Barbara’s Thresholds for significant solid waste impacts. Under CEQA, significant impacts must be mitigated to the maximum extent feasible. The dEIR found this impact less than significant based on the threshold used. Under the University’s threshold based on CEQA Guidelines Appendix G, the dEIR claims the project would not cause a significant impact because it would be served by a landfill with adequate permitted capacity.

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9 UCSB elected not to mention Santa Barbara County’s Threshold of Significance for Impacts to Solid Waste even though Santa Barbara County own and operates the Tajiguas Landfill where UCSB’s trash is shipped. UCSB elected to use the Santa Barbara County Air Pollution Control District’s air pollution impact thresholds of Significance. UCSB’s dEIR does not make it clear why it does not use the specifically relevant Solid Waste Impact Thresholds developed by the public owner of the landfill that services UCSB.
to serve the project’s needs. There are two flaws in this impact assessment. First, the Tajiguas Landfill is only permitted to receive an amount of waste equal to 15 years at the current disposal rate, which this project and other planned developments in the Tajiguas watershed would increase. This is inadequate to serve the project for the life of the project. Second, there are more appropriate thresholds to use. Santa Barbara County owns and operates the Tajiguas Landfill and has enacted a solid waste impact Threshold of 196 tons per year (Attachment #10). This is the appropriate threshold for UCSB to use because UCSB sends it trash to the County’s Tajiguas Landfill. UCSB’s project will generate 538 tons per year of trash, almost triple the appropriate CEQA impact threshold. Therefore, even if mitigation could halve the proposed waste generation, the project will remain significant unless alternative means to reduce trash generation below the threshold were identified. This could include an alternative with fewer units.

F. Recreation

The dEIR identifies less than significant and beneficial impacts to recreation including a beneficial cumulative impact. Given the proposed recreational enhancements including closure of problematic trails, consolidation of duplicative trails, creation of new trails and improvements to others, and new parking and access opportunities, the proposed project is not expected to adversely affect recreation and will enhance recreation, causing a beneficial impact.

Recreation use of the Open Space Area will increase considerably as a result of the proposed construction of 387 units adjacent to it, as the dEIR notes. Such usage will impact the rare and sensitive species present in the Open Space Area. As an example, the equestrian use of the beach has increased, and is expected to increase more unless limited, and it has caused significant impact to western snowy plovers at Coal Oil Point. Plover chicks become trapped and drown in horse hoof prints, become trampled or scared and prevented from feeding. All commercial equestrian use of the Open Space Area should be banned and equestrian use of the beach should be prohibited to avoid take of the Western Snowy Plover, to minimize other biological impacts, and to minimize water pollution, growing recreational conflicts, erosion, and other impacts.

G. Flooding, Water Quality and Runoff

The dEIR finds that the proposed project encroaches into the Devereux Creek flood hazard area (page 4.3-31), but that it will not impede, redirect or displace flood flows. SES and Audubon believe the project may cause potentially significant displacement of floodwaters resulting in flooding impacts offsite unless this impact is somehow mitigated. The dEIR for the adjacent Ocean Meadows Project, which similarly encroaches into the floodway, finds Impacts Flood-2 and -5 potentially significant (Attachment #10). This evidence suggests UCSB’s adjacent project will also cause potentially significant flooding impacts that must be mitigated if feasible. Under CEQA, mitigation measures must be determined to be feasible, effective and enforceable. (CEQA Guidelines Section 15126.4(a)(2); Kings....
County Farm Bureau v. Hanford (1990) 221 Cal.App.3d 692 [270 Ca.Rptr. 650].) Excavating the eastern tributary to Devereux Creek and its buffer as part of a wetlands restoration effort will help to mitigate this impact by providing additional capacity to hold water onsite, reducing floodwaters elsewhere.

The cumulative pollutant loading into Devereux Creek is already a significant impact, and the proposed projects, including Ocean Meadows, threaten to substantially increase this pollution. A project that adds to a significant cumulative impact by definition causes a significant cumulative impact. (Kings County Farm Bureau v. City of Hanford, 221 Cal. App. 3d 692 (1990); Los Angeles Unified School District v. City of Los Angeles, 58 Cal. App. 4th 1019 (1997)) Under CEQA, there is no longer an exception for de minimus additions to significant cumulative impacts. Furthermore, CEQA requires that a lead agency must mitigate its project’s contribution to significant cumulative impacts to the maximum extent feasible. Under the Coastal Act, water quality and the productivity of wetlands and streams must be maintained or, where feasible, enhanced. (Coastal Act Section 30231) However, UCSB’s project will contribute considerably to the existing significant problem because it will involve grading and construction of, and runoff from approximately 42 developed acres. Mitigation WQ-2 requires that measures “effectively prevent the entry of pollutants from the project site into the storm drain system.” (Emphasis added.) Attachment #12 is a water quality study commissioned by UCSB for its originally proposed North Campus Housing Project in 1998. This study concluded the project would contribute up to 5% of the pollution that would be entering the Slough. EDC, SES and Audubon believe the impacts may be significantly greater and that project-specific impact 4.3-1 is significant based on Attachment #12. In addition, this cumulative deterioration is significant given the failure to meet existing water quality standards for a number of pollutants. This increase in water pollution would not be consistent with the Coastal Act Section 30231. Water quality measures must prevent not merely minimize water pollution but to comply with Coastal Act Section 30231. Therefore, the EIR should specify design features that are capable of effectively preventing pollution, and should identify contingency measures in the event that monitoring detects entry of project-related water pollution into Devereux Creek.

All areas where pervious surfaces can substitute for impervious surfaces should be identified in the dEIR’s water quality mitigation measures to ensure water pollution is effectively mitigated. The dEIR should specify that roads, walkways, parking areas, gutters and other features will be pervious or must provide a rationale for why these areas cannot practically be pervious. Periodic cleaning of the drop inlets and storm drains, particularly before winter storms should be required to mitigate urban runoff water pollution impacts. The dEIR should specify installation and maintenance of storm drain filters, such as those proposed by Comstock and often recommended by Santa Barbara County Project Clean Water staff for new developments. The dEIR should incorporate bioswales to mitigate water pollution impacts. These should be designed to be effective at removing pollutants.

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10 Table 4.3-1 of the dEIR shows that all pollutants tested for in Devereux Creek were at or exceeded applicable water quality standards, some by orders of magnitude.
and should be planted with native vegetation from Devereux watershed seed sources
(available by advance order from Growing Solutions, Inc.) so they double as habitat
enhancers. Significant biological impacts result from use of non-native plants or non-local
native species. If the bioswales are not designed properly, pollutants that accumulate in
them could be washed into the Slough during storms that flood the bioswales. Therefore, to
be effective mitigation measures, bioswales should be designed to trap and remove
pollutants without releasing them during storms.

Excavating, expanding and restoring the wetlands and buffer along the eastern tributary to
Devereux Creek at the Storke-Whittier site can feasibly mitigate that project’s considerable
contribution to cumulative water quality impacts. In addition, limiting grading to the dry
season pursuant to the RWQCB Manual, using above ground drainages rather than culverts
and storm drains, using pervious surfaces where feasible, avoiding wetlands and buffers
which filter pollutants, and capturing rooftop runoff in cisterns for landscape use are
feasible measures to reduce the significant contribution to substantial ongoing water
pollution problems in the Devereux Creek. In addition, piping water around the Devereux
Creek bridge site during installation of a new span bridge (not a box culvert) will help
mitigate construction-related water quality impacts. This specificity will ensure the
mitigation measures for water pollution in this sensitive watershed are clear, enforceable,
and effective to the maximum extent possible.

Water quality monitoring at all storm drains leaving the project site or entering a creek,
drainage, or wetland, or buffer, should be conducted during winter rains and during summer
low-flow conditions to ensure that water quality mitigation measures are effective and
enforceable. A contingency plan should be required for the event that the project generates
detectable pollution. In addition, the landscaped areas should be subject to an integrated
pest management plan and UCSB should prohibit the use of products such as fertilizers and
pesticides that can runoff into the wetlands or creek.

H. Traffic

The dEIR finds that the proposed project results in significant traffic impacts at Storke and
Hollister, at Storke over Highway 101, and at El Colegio and Los Cameros. These impacts
can be feasibly lessened by reducing the project scope and/or implementing mitigation
measures. Of the three Joint Proposal projects, UCSB’s project will add by far the most
traffic to the impacted intersections and roads. Therefore the EIR should commit UCSB to
mitigating its project-specific and its contribution to cumulative impacts to the maximum
extent feasible. Three proposed feasible mitigation measures to address this impact are
identified: a third left turn lane from eastbound Hollister onto Storke; a third through lane
northbound on Storke through Hollister; and a longer merge lane for cars turning west onto
Hollister from southbound Storke.11 Goleta objects to at least two of these measures, which

11 The draft EIR does not adequately explain why all three mitigation measures would not be required in the
event more than one is feasible.
would be located in Goleta. UCSB claims it will not mitigate significant impacts at Storke and Hollister, though feasible, if the other lead agencies (i.e., the County for Ocean Meadows and Goleta for Comstock) do not mitigate their projects’ impacts. However, UCSB is a CEQA lead agency and is subject to compliance with CEQA regardless of whether other lead agencies comply or not. If UCSB does not mitigate its significant project-specific and cumulative impacts to the maximum extent feasible, it will be in violation of CEQA.

The dEIR is incorrect to find that the significant impact at Los Cameros and El Colegio is mitigated by Measure 4.12-1(c). The intersection operates at LOS F and the project would add another 113 peak hour trips, which exceeds the significance threshold by 108 peak hour trips. Measure 4.12-1(c) only mitigates Storke and Hollister impacts, and therefore the finding that this measure renders the El Colegio – Cameros impact less than significant in is error. This significant impact can be mitigated by implementation of creative traffic solutions (i.e., that do not rely on accommodating added traffic by making roads bigger) described below.

Since Goleta may determine that some of the three Storke-Hollister mitigation measures are infeasible, and since UCSB is rejecting widening Storke Road over Highway 101 as unprogrammed, other actions may enable UCSB to minimize its significant project-specific and cumulative traffic impacts. Specifically, the pedestrian overpass from El Encanto Heights over Highway 101 to Hollister is a needed but unfunded project that will mitigate project impacts by reducing demand on the Storke – Hollister intersection. Perhaps the most glaring omission is any commitment by UCSB to further alternative transportation. UCSB’s significant traffic challenges it is burdening the community with can be best mitigated by reducing auto use. Therefore, since there may not be a way to improve the road system to mitigate project impacts, there may be a way to improve the traffic system by providing residents free bus passes, by ensuring MTD has frequent stops for residents, by providing bikes and bike paths to residents, and by reducing or eliminating parking to encourage people to not use cars. UCSB should prohibit residents of the proposed project from parking their cars on campus. This feasible measure, which has been successful in the past, will reduce significant traffic impacts and protect Goleta’s environment. In addition, if UCSB rejects this effective, feasible mitigation measure, reduced project alternatives are feasible and can substantially lessen significant traffic impacts as required under CEQA.

Related to traffic and biological resources impact mitigation, a wildlife under-crossing beneath Storke Road where it is to be widened south of Whittier Drive will help maintain the aforementioned significant wildlife movement corridor threatened by this project. Such an under-crossing should be figured into the design and cost of the Storke Road widening mitigation measure.
I. Land Use

The dEIR identifies conflicts with land use policies relating to protection of wetlands (Coastal Act Sections 30233 and 30255). In addition, the increased water pollution in Devereux Creek and Slough would violate Section 30231 of the Coastal Act; it would also conflict with the Central Coast Basin Plan’s anti-degradation policy cited as mandatory on page 4.6-56. By developing in ESHA and ESHA buffers within the North Parcel, the project would conflict with Coastal Act Section 30240(a) and (b). The proposed Devereux Creek culvert which SES and Audubon recommend be a span bridge would be development within the Venoco Access Road in conflict with GCP DevStd LUDS-GV-2.13. The project also is in conflict with a number of policies designed to minimize grading and to preserve the natural terrain (e.g., LCP Policies 3-13 and 3-14). As noted above, Section 30251 requires protection of coastal views and this project could better protect those views while achieving the University’s underlying objectives. Through implementation of the biological protection measures: avoiding wetlands, other native habitats / ESHAs, wider buffers and a wider Storke-Whittier Wildlife Corridors, which would open up views and view corridors. Under CEQA, land use impacts include conflicts with the adopted plans or policies of agencies with jurisdiction over the project. (CEQA Guidelines Appendix G). Therefore, given the nature of the aforementioned conflicts and associated impacts to wetlands, water quality, ESHA and views, the dEIR should identify significant land use impacts relating to these policy conflicts and should identify measures to ensure consistency with pertinent environmental protection policies including the Coastal Act.

J. Air Quality

The proposed project would cause significant project specific and cumulative impacts related to motor vehicle emissions. (Impacts 4.14-3 and 4.14-4) Despite this, the dEIR also finds that, “the project could result in a reduction of VMT [vehicle miles traveled] and thus a reduction in mobile source emissions,” and, “could result in a better air quality outcome than if this project were not built.” Contradictions and illogical statements that the project’s auto traffic will exceed the County’s air quality standards but that the project may reduce air pollution overall because some may bike or bus to school render this dEIR very suspect and inadequate. Simply because UCSB encourages accommodation and use of other transit modes, including bicycles, and provides a campus shuttle bus line that will be extended does not mean people will use these modes instead of driving. Instead, since UCSB claims these alternative transportation modes are feasible (page 4.4-13), these measures should be specified as mitigation measures so that they are enforceable and effective at reducing the significant project-specific and cumulative auto air pollution impacts. The recommended measure that would not allow residents to park on campus would facilitate alternative transportation, which is feasible given the nearness of the Main Campus, and this would mitigate significant air quality and traffic impacts as required under CEQA.

In addition, the measure should specifically prohibit charcoal and wood-burning stoves, fireplaces and barbeques, allowing gas alternatives. This feasible measure (which was
included in the other two Joint Proposal dEIR to avoid significant air quality impacts), must also be required of UCSB to avoid significant impacts identified in the dEIR.

K. Landscaping and Native Plants

The dEIR’s biological mitigation measures must prohibit invasive non-native species to prevent the spread of exotics into nearby native habitats (e.g., wetlands) that are threatened by non-native species invasions (e.g., pampas grass). It must also ban non-local varieties of native plant species that could hybridize with native plants to avoid significant biological impacts related to disruption of the gene pools of native plant populations, which can be adverse to species’ long-term survival. Furthermore, the dEIR must also require that all native species be grown from seeds or other propagules collected from within the Devereux watershed to protect the Open Space Area’s and Coal Oil Point Reserve’s native gene pools. This is feasible given Growing Solutions ability to provide local plants when ordered in advance. According to Audubon biologist Darlene Chiran, these changes will avoid the significant biological impacts of 1) hybridization within local native plant populations growing within the habitats to be preserved and restored, and 2) invasion by non-native plants which displace native species and habitats.

In addition, landscaping needs to minimize the use of exotic trees that foster crow predation on western snowy plovers.

An important mitigation measure for cumulative biological impacts is controlling exotic species on the South Parcel, including Pampas grass. The cumulative development will result initially in many areas of disturbed soil and invasive exotic species thrive in those conditions, generally. The South Parcel still has areas that are prone to invasive species infestations. Major exotic seed sources exist in the project vicinity. Therefore, to prevent the direct and indirect spread of non-natives into other areas of the Joint Proposal site, including preserved habitats, UCSB must eradicate invasive non-native species on the South, North and Storke Whittier Parcels, and on the West campus Bluffs. This is needed to help mitigate the significant biological impacts caused by the proposed project.

L. UCSB’s Project is Stand Alone Project; the Comstock Residential and Ocean Meadows Residential Projects do Not Depend On the UCSB Project.

The dEIR states that the proposed project (and the Open Space Plan is more protective, on balance of the significant coastal resources in the area because it will preserve and restore a 652-acre unfragmented ecosystem. UCSB uses its relationship to the Joint Proposal and the Ocean Meadows and Comstock Projects to justify its proposed development in wetlands. However, the Comstock Project and Ellwood Landswap can proceed regardless of UCSB’s project, the 60-unit Ocean Meadows Project (including preserving the golf course), or the Joint Proposal. While the lead agencies share an OSHMP, the OSHMPs could have been coordinated with or without the Joint Proposal. The Ocean Meadows project is not even
part of the Joint Proposal, which would have downzoned Ocean Meadows to 10 units. The University's claims that the Joint Proposal makes all this land preservation possible is incorrect. The golf course protection is in the works regardless of the Joint Proposal, and the Ellwood Landswap was made possible by the applicant and Goleta, not by UCSB or the County. All of these projects could have moved forward individually while preserving the same land area. In fact, UCSB had already decided to limit development to the North Parcel after Chancellor Yang's North Campus Advisory Committee studied the issues and heard from the community. Therefore, UCSB's project (absent Comstock and Ocean Meadows) was already heading toward being concentrated in the North Parcel. The purported Open Space benefits of the Joint Proposal are concocted by UCSB in an attempt to invoke the Coastal Act's Balancing Provision to circumvent the Coastal Act's wetland protection requirements. Therefore, while as noted above 1) the balancing provision does not apply because there are no conflicting Coastal Act policies, and 2) wetlands cannot be balanced, if the provision were applicable, UCSB's alleged coastal resource benefits are specious and would not justify development in ESHA. It should be further noted that all of the other applicants and lead agencies in the Joint Proposal are not using the Joint Proposal to justify filling wetlands and instead are avoiding all wetlands on their sites even though development in wetlands would concentrate development and could, if allowed as alleged by UCSB, facilitate the Ellwood Landswap.

M. Feasible Alternatives Are Capable of Substantially Lessening Significant Impacts.

It is feasible for UCSB to avoid many of the significant environmental impacts discussed above while still fulfilling its underlying housing objectives. CEQA requires that a lead agency not approve a project if there is even one feasible alternative that meets most of the basic objectives and that would avoid or substantially lessen significant impacts. CEQA Guidelines Section 15002(a)(3) and 15021(a)(2). Also see CEQA, Public Resources Code Section 21081(a)(3) and Mountain Lion Foundation v. Fish and Game Commission (1997) 16 Cal.App.4th 105, 134 [65 Cal.Rptr.2d 580]. "The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." Public Resources Code Section 21002.

1. Alternatives That Do Not Reduce Impacts Should be Rejected.

None of the alternatives analyzed in the dEIR are environmentally superior to the proposed project. For instance Alternative 1 (207 units on South Parcel and 151 on Storke-Whittier), Alternative 3 (147 units on North, 122 on South Parcel and 144 on Storke-Whittier per 1997 LRDP Amendment), and Alternative 4 (694 units total) increase impacts and render impacts to public access, recreation, bio and water quality potentially significant. Alternatives 1, 3 and 4 also increase visual and/or traffic and air quality impacts, and 1 causes a Class I view impact. Alternatives 1 and 4 increase water pollution and geological
impacts. These should be dropped because they do not substantially lessen or avoid significant impacts. Only potentially feasible options that minimize significant impacts should be carried forward and analyzed in the FEIR.

The South Parcel – Alternative 1 is not environmentally superior. Storrer found that the only way to mitigate the biological impacts of the proposed development of the North and South Parcels was to avoid development on the South Parcel. (Attachment #4) UCSB’s blue-ribbon North Campus Advisory Committee, hand-selected by Chancellor Yang agreed that for environmental reasons, the South Parcel should be open space and development should proceed on the North Parcel instead. This committee, and Storrer, were not wrong to recommend that the North Parcel was more suited for development than the South Parcel. The 11-5-92 staff report to the Board of Supervisors notes that, “the entire area south of the golf course would be designated with either the ESH/Flood hazard or Scenic Buffer overlays.” (Attachment #13) The South Parcel Alternative would not avoid direct impacts to wetlands as noted in the dEIR as the only upside to development on the South Parcel. There are unmapped wetlands identified by Chirman in the east-west trending drainages that would be filled by development of the South Parcel. In addition, the access road across Devereux Slough would need to be widened resulting in additional direct wetland impacts that would not occur under the proposed project. The indirect impacts to wetlands from the South Parcel Alternative are greater than the project’s impacts, largely due to the adjacent Devereux Slough and the location of the large riparian habitats in the South Parcel. Alternative 1’s impacts to other ESHAs (raptor nest and roost sites, Monarch Aggregation Site #4) and rare species also increase. Therefore, Alternative 1 does not substantially lessen or avoid any of the significant impacts of the proposed project and is not the environmentally superior alternative.

2. Other Alternatives Would Duce Impacts and Should be Considered.

The dEIR concludes that it is infeasible to protect wetlands because the Reduced Density Alternative would allow only 16 units. However, the description of this alternative is vague, and SES and Audubon believe a variation on it may feasibly accomplish the project goals and comply with all Coastal Act wetland and ESHA provisions. A map should accompany the fEIR that overlays all wetland buffers and discloses the development footprint.

Densities similar to, and greater than, the proposed project could then be analyzed within this footprint. As suggested during scoping comments, an alternative that protects all wetlands and 100-foot buffers except for one buffer area near Phelps and Cannon Green could allow UCSB to meet its housing needs without filling most North Parcel wetlands. Unlike the Reduced Density Alternative which did not reduce any buffers below 100-feet, the Wetland Avoidance Alternatives A, B and C reduce this one buffer area to allow access to the main (western) part of the North Parcel. Wetland Avoidance Alternative A allows encroachment into the wetland buffer for the entrance road but maintains 100-foot buffers for all other North Parcel wetlands and increases the proposed density to maintain 236 units
on the North Parcel. Wetland Avoidance Alternative B also allows the single buffer encroachment for the access road near Phelps Road and Cannon Green but maintains the current density, resulting in a reduction of North Parcel Faculty Housing. This is offset by substituting in Faculty Housing for some Sierra Madre student housing, and moving the student units onto campus. Wetland Avoidance Alternative C would blend these approaches; there would be an increase in North Parcel density above 10 units / acre but there would still be less than 236 North Parcel faculty housing. This reduction would be offset with faculty housing located at Sierra Madre, but, unlike Wetland Avoidance Alternative B, there would not be any student units provided on campus as part of this LRDP Amendment.

In addition, an off site alternative should be considered that is in the proximity of the proposed project. The dEIR offsite alternative is approximately 8 miles away from campus. One of the vacant sites near Los Carneros, south of Highway 101 should also be pursued as an offsite alternative closer to campus. This would help UCSB avoid wetlands, recruit faculty, reduce significant traffic impacts and fulfill CEQA’s mandate to analyze reasonable alternatives that reduce or avoid significant project impacts.

The dEIR analyzes too narrow a range of alternatives that actually reduce or avoid significant or potentially significant impacts. Other than the Offsite Alternative which avoids many biological impacts and Coastal Act wetland policy violations, none of the alternatives lessen a significant impact, and all alternatives increase significant impacts. Therefore, to comply with CEQA, the EIR must analyze a range of feasible alternatives that, like the Wetlands Avoidance Alternatives and closer offsite alternatives, avoid or substantially lessen significant impacts, and achieve most of the underlying project objectives.

III. COMMENTS REGARDING THE OPEN SPACE AND HABITAT MANAGEMENT PLAN

EDC concurs with the comments regarding the draft OSHMP provided in the Audubon letter by Darlene Chirman. In addition, OSHMP issues that should be addressed in the dEIR include:

- Restoration and joint management of the North and South Fingers of Devereux Slough;
- Plant sources from Devereux Watershed only;

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12 The proposed project provides density at 10 units per acre. This density could be increased to as much as 20 units per acre, similar to the proposed Cottage Hospital housing project in the City of Santa Barbara.
13 In 2004, UCSB released a report that identified locations for thousands of student housing units on the Main Campus.
- Enhancement and restoration the Storke-Whittier Wildlife Movement Corridor, including the wildlife under-crossing below Storke Road and the ecological link between Devereux and Goleta Sloughs;
- Venoco Road - modification of Devereux Creek culverts and replacement with span bridge;
- Widening and berming of Phelps Creek should increase sinuosity and widen the creek primarily on the west side where there is the least mature wetland and riparian vegetation;
- The bridge over Phelps Creek should minimize vegetation removal and use biotechnical bank stabilization. The footings should be located outside the banks;
- Move the flood control access road and trail on the west side of the Phelps Creek further west and restore the buffer. Provide spur roads for flood control access to the bank top;
- Identification of native grasslands on South Parcel. Avoidance / mitigation of impacts to native grasslands caused by South Parcel trails;
- Revegetation / maintenance of trail shoulders;
- Prohibit or limit equestrian access to beach to protect Western Snowy Plover;
- dEIR failure to identify wetlands on South Parcel.
- Schedule for eradication of non-native plants;
- COPR Parking Lot – unacceptable due to encroachment into ESHA and impacts to water quality and rare species;
- Camino Majorca parking – need to evaluate for presence of wetlands and white-tailed kite foraging habitat;
- Enforcement: off leash dogs, off trail activities, bon fires, camping, trash, vandalism, BMX, paint ball wars, etc.;
- Adequacy and source of funds to manage South Parcel;
- Adequacy of funding for expansion of Snowy Plover Docent Program;
- Implementation of habitat restoration as mitigation for this project’s impacts rather than as opportunity projects or as mitigation for future development projects;
- Cost of proposed recreational enhancements versus environmental enhancements;
- Coastal Act prioritization of natural resource protection over access and recreation when these priority areas overlap;
- Correction to EIR regarding presence of California Thrasher nesting in Coal Oil Point Reserve (Attachment #14);
- Impacts of Trail use – wildlife disturbance.

CONCLUSION

The proposed project’s development in wetlands conflicts with the Coastal Act and must be revised to avoid the wetlands and comply with the Act. Not all wetlands were identified. Wetlands in the development envelope and on the South Parcel were not identified. Other ESHA, including native grassland habitat, was not mapped on the South Parcel. The South Parcel is ESHA. Development of Alternative 1 – the South parcel Alternative – would not
be the environmentally superior alternative. All alternatives discussed in the dEIR increase and fail to avoid or substantially lessen significant impacts. There are feasible alternatives, however, that avoid wetlands and their buffers while achieving the basic housing objectives sought by UCSB. These options also reduce other significant environmental effects identified by SES and Audubon's biologists, and comply with applicable policies and laws including the Coastal Act. Therefore to make the required CEQA findings including a finding that there is no project alternative that could feasibly lessen or avoid significant impacts, the EIR must focus on the Wetland Avoidance Alternatives.

Additional mitigation measures will also help to reduce or avoid other significant impacts. Measures to protect wildlife movement corridors from encroachment, water quality from runoff, and the Devereux Slough from sedimentation should be imposed. Additional water conservation and traffic and air quality measures are available to further reduce the impacts of the Wetland Avoidance Alternatives and comply with CEQA.

Thank you for your consideration of these comments.

Sincerely,

Brian Trautwein
Environmental Analyst

Linda Krop
Chief Counsel

Atts: 1 – July 2003 Coastal Commission Staff Report for Agenda Item W 9j
2 – November 2003 Coastal Commission Staff Report
3 - May 24, 2004 Memorandum from Dr. Elizabeth L. Painter
5 – Photos of Filled Storke Road wetlands
6 – Page 4.2-22 of City of Goleta dEIR on Comstock Residential Development
7 – UCSB Campus Wetland Management Plan, excerpt
8 – RWQCB Erosion and Sediment Control Field Manual
9 – Pacific Institute Comments on the Draft EIR for the Cachuma Water Rights Hearing, October 6, 2003
10 – County of Santa Barbara CEQA Thresholds for Solid Waste Impacts
11 – Ocean Meadows draft EIR description of Flooding Impacts
12 - Hydrologic and Hydrochemical Assessment of the Proposed North Campus Housing Project, excerpt
13 – Board of Supervisors Staff Report, 11-5-92
14 - Evidence of California Thrasher Breeding at COPR
ATTACHMENT #1
STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-03-091

APPLICANTS: City of Newport Beach and The Related Companies
(On behalf of the property owner, The Irvine Company)

AGENT: Dan Trimble, Program Administrator, City of Newport Beach

PROJECT LOCATION: Corner of Jamboree and Pacific Coast Highway,
City of Newport Beach, Orange County

PROJECT DESCRIPTION: Development of a senior affordable housing project and passive public park on a vacant 15-acre site. The senior affordable housing project will consist of 150 units in three 3-story buildings with a community center, administrative offices, a pool/patio area and 180 parking spaces on the lower 5 acres of the site. The park will contain a bike path, park benches and primarily native vegetation on the upper 10 acres. Approximately 115,000 cubic yards of grading (75,000 c.y. cut, 40,000 c.y. fill, 25,000 c.y. export and 10,000 c.y. surcharge) is proposed for view enhancement from Pacific Coast Highway, drainage, slope stabilization and site preparation. The project also involves approval of a lot line adjustment, modifying the configuration, but not the size, of each parcel.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends that the Commission DENY the proposed development due to inconsistencies with Chapter Three policies of the Coastal Act, including Sections 30233 and 30251. The subject site is a vacant 15-acre property located between the first public road and the sea (Upper Newport Bay) in the City of Newport Beach. The applicant proposes to create a public park on the upper portion of the site and a senior affordable housing project on the lower portion. As proposed, the project would result in the fill of wetlands to serve an unallowable purpose, residential development. The proposed project would also require a substantial amount of landform alteration to accommodate the new development. Due to the siting constraints presented, the proposed development is too intense for the subject property. Feasible alternatives, such as reducing the size of the development, exist, thus adding further reason why the current proposal cannot be approved. The primary issues addressed in the staff report are wetlands fill, landform alteration, public access/parking, and water quality.

At the time of this staff report, the applicants are in disagreement with the staff recommendation and oppose any significant modifications to the project. According to the applicants, the project cannot be redesigned to avoid Commission designated wetland areas and to retain natural landforms while remaining "affordable" and meeting the City's housing needs. See the Executive Summary on page 3 of the staff report for a further explanation of issue areas and attempts at resolution.

SUBSTANTIVE FILE DOCUMENTS:
City of Newport Beach Certified Land Use Plan (LUP); Circulation Improvement and Open Space Agreement (CIOSA); CIOSA Program EIR prepared by ASB Planning dated 1992; Mitigated Negative Declaration prepared by Civic Solutions, Inc. dated February 25, 2003; Preliminary Geotechnical Investigation for the Newport Senior Lower Bayview Landing, City of Newport Beach, California, prepared by NMG Geotechnical, Inc. dated December 18, 2002 and signed by T. Wright (CEG 1342) and K. Markouizos (RCE 50312); Supplemental Geotechnical Investigation and Review of Rough Grading Plan for Proposed Bayview Senior Affordable Housing and Park Project, City of Newport Beach prepared by NMG Geotechnical, Inc. and signed by T. Wright (CEG 1342) and K. Markouizos (RCE 50312), dated April 22, 2003; Phase I Cultural Resources Investigation of the Bayview Landing Project Area prepared by McKenna et al dated July 5, 2001; Phase I Environmental Site Assessment prepared by ENVIRON dated December 13, 2001; Wetlands Delineation and Field Biological Evaluation prepared by Robert ‘Roy’ van de Hoek dated April 6, 2003; Biological letter report prepared by Keane Biological Consulting dated March 21, 2003; Jurisdictional Delineation of the Bayview Property letter report prepared by Glenn Lukos Associates dated April 11, 2003; Jurisdictional Delineation of the Bayview Property letter report prepared by Glenn Lukos Associates dated April 11, 2003 (revised May 2, 2003); Hydric Soils Investigation prepared by Fuscoe Engineering dated June 17, 2003.

LIST OF EXHIBITS:
1. Vicinity Map
2. Assessor’s Parcel Map
3. Plot Plan
4. Grading Plan, Landscaping Plan, Elevations and Floor Plans
5. Lot Line Adjustment
6. CIOSA EIR Vegetation Map
7. CIOSA Constraints Map for Bayview Landing
8. Plot Plan with Approximate Wetland Areas Depicted
9. Correspondence from Wetlands Action Network dated March 10, 2003
10. Correspondence from Dr. Jan Vandersloot dated March 10, 2003
11. Correspondence from Robert A. Hamilton to Jan Vandersloot dated April 4, 2003
12. Correspondence from Robert C. Speed dated May 5, 2003
14. Correspondence from Keane Biological Consulting dated March 21, 2003
15. Memorandum from David Bramlet to Keane Biological Consulting dated March 17, 2003
16. Letter Report prepared by Glenn Lukos Associates dated April 11, 2003 with Exhibits 3 & 4 only
19. Memorandum from Dr. John Dixon dated May 14, 2003
20. Cut/Fill Graphic prepared by C.W. Poss Inc. dated April 9, 2003
21. "Request for Postponement, Response to Staff Report, and Request for Resolution of Conflicts Under PRC § 30200 (b)" from City of Newport Beach dated June 5, 2003
22. Hydric Soils Investigation prepared by Fuscoe Engineering
23. Memorandum from Dr. John Dixon dated June 20, 2003
24. Recent Correspondence—One letter of opposition & one letter of support
25. Archaeological Site Locations
evaluate impacts at a project-specific level. The City recently adopted a Mitigated Negative Declaration (MND) for the Bayview Park and Senior Housing Project. The MND concludes that coastal sage scrub replacement at a 4:1 ratio will reduce potential adverse impacts to a less than significant level.

As stated above, the Commission approved the CIOSA in June 1993, finding it to be consistent with the policies in Chapter 3 of the Coastal Act (Cal. Pub. Res. Code §§ 30200-265.5). The Commission is not a party to the agreement between the City and the Irvine Company, and consequently is not responsible for enforcing the Development Agreement. Furthermore, the Commission’s approval of the agreement does not prevent it from approving alternative proposals that do not comply with the agreement (provided that they too are consistent with the Chapter 3 policies of the Coastal Act). The Commission notes that the current proposal appears to be inconsistent with the Development Agreement approved previously. Though the standard of review for the current proposal is Chapter 3 of the Coastal Act, the Commission’s approval of CIOSA provides additional guidance on how the area should be developed.

At this time, the Commission has the opportunity to evaluate proposed development at the Bayview Landing site for its consistency with the Coastal Act at a more detailed level of analysis than what occurred during its consideration of the Development Agreement. The Development Agreement provided for future discretionary review at the coastal development permit stage. The Commission’s findings in approving the CIOSA Development Agreement acknowledge, “the development areas may be further limited at the coastal development permit stage based on new/more specific biological or geotechnical information.” As such, the current staff report evaluates the proposed project in light of new information.

B. WETLANDS

Section 30108.2 of the Coastal Act states:

“Fill” means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

Section 30121 of the Coastal Act states:

“Wetland” means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

Section 30233 (a) of the Coastal Act states,

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

Section 30250(a) of the Coastal Act states, in pertinent part,

New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

As described previously, the applicant proposes to develop the subject site with a senior affordable housing project on the lower 5 acres and a public passive park on the upper 10 acres. The environmental document (Bayview MND) utilized to approve the project at the local level determined that no wetlands exist on the subject site. However, through subsequent review, areas that constitute wetlands under the Coastal Act have been identified within three sections of the lower portion of the site. Components of the proposed development, including one of the residential structures, the entry driveway, and the detention basin, are sited within these wetland areas (Exhibit 8).

One of the main reasons for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their important ecological function. First and foremost, wetlands
provide critical habitat, nesting sites, and foraging areas for threatened or endangered species. Wetlands also serve as migratory resting spots on the Pacific Flyway, a north-south flight corridor extending from Canada to Mexico used by migratory bird species. In addition, wetlands serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands serve as natural flood retention areas.

Another critical reason for preserving, expanding, and enhancing Southern California’s remaining wetlands is because of their scarcity. As much as 75% of coastal wetlands in southern California have been lost, and, statewide up to 91% of coastal wetlands have been lost.

The Coastal Act defines wetlands as “...lands within the coastal zone which may be covered periodically or permanently with shallow water....” The more specific definition adopted by the Commission and codified in Section 13577(b)(1) of Title 14 of the California Code of Regulations defines a wetland as, “...land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes....” In discussing boundary determinations, the same section of the Regulations specifies that wetlands have a “predominance” of hydrophytic cover or a “predominance” of hydric soils. Although the definition is based on inundation or shallow saturation long enough for anaerobic reducing conditions to develop within the root zone2, in practice hydrology is the most difficult wetland indicator to demonstrate. In California, a predominance of hydrophytes or a predominance of hydric soils is taken as evidence that the land was “wet enough long enough” to develop wetland characteristics.

Correspondence regarding biological resources of the subject site, specifically the presence of wetlands, has been received from the Wetlands Action Network (WAN), Jan Vandersloot, Robert Hamilton and Robert Speed (Exhibits 9-12). In addition, Robert Roy Van de Hoek submitted a Wetlands Delineation and Field Biological Evaluation dated April 6, 2003 (Exhibit 13). The WAN letter asserts that the biological resources report prepared for the MND contains incomplete surveys of the site and did not include an evaluation of the lower 5-acre portion of the site or the upper cliff areas. As such, it asserts, the potential wetland areas of the lower portion were not recognized. The WAN letter also states that many plant species (on both the upper and lower portions of the site) were not identified in the report. Correspondence from Jan Vandersloot echoes these concerns and identifies a number of others, including inadequate coastal sage scrub mitigation, coastal landform alteration, archaeology, vernal pools at the bluff top mesa and meadow, and public parking. The biological review letter prepared by Robert Hamilton focuses on native vegetation issues, but also describes the potential wetland areas and suggests “a proper wetland delineation be conducted...” The letter from Robert Speed describes the site as “the last unprotected open space on the Upper Bay estuarine margin” and urges that the site be returned to its original condition as a “wetland margin and natural coastal habitat.” The Van de Hoek report finds “three areas of definitive wetland in the 5-acre lower portion of Bayview Landing” and discusses the hydrology, vegetation, size and dominance of each. These are shown in Exhibit 13, page 21.

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2 As demonstrated by the definitions of hydric soils and hydrophytes: “A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.” National technical committee for hydric soils, October 18, 1994; A hydrophyte is, “Any macrophyte that grows in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content...” Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. U.S. Army Corps of Engineers, Washington, D.C.
Keane Biological Consulting, the biological consultant that evaluated the site for the MND, prepared a response to the WAN letter dated March 21, 2003 (Exhibit 14). The letter refutes the statement that the lower site and cliff areas were not surveyed and cites references in the report intended to describe those areas. The Keane letter states, “the site supports no wetland soil or wetland hydrology, it is not currently associated with the wetlands of Upper Newport Bay, and it has no hydrologic source or high groundwater table to support wetlands.” Nonetheless, the Keane letter also references a subsequent survey of the site conducted by David Bramlet, a local botanist with wetland experience. Bramlet found two "ephemeral wetlands" on the site, as described in his memo to Keane dated March 17, 2003 (Exhibit 15).

The applicants later retained Glenn Lukos Associates, biological consultants, who also evaluated the wetlands in a report dated April 11, 2003 (Exhibit 16). As stated in that report,

In the lower portion of the site, two areas were identified that exhibit the characteristics of wetlands as defined by the CCC. These areas included the settling basin and the road rut areas. Both of these features exhibit evidence of standing water or soil saturation, as well as hydric soils and a predominance of hydrophytic vegetation. The sizes of these areas are approximately 400 and 750 square feet, respectively.

The Commission’s Ecologist/Wetlands Coordinator reviewed the April 11, 2003 report and noted that the delineation did not include a map showing areas having a preponderance of wetland indicator species, resulting in a potentially smaller representation of the actual wetland areas. A subsequent Glenn Lukos report dated May 2, 2003 was submitted for Commission review (Exhibit 17). In that report, the consultants provide a revised wetland map and photographs to document the topography, vegetative communities and general widths of each of the waters. In the report, the consultants acknowledge “an additional area was identified following the April 15 storm event, which may be defined as wetland by the CCC.” However, in subsequent correspondence (Exhibit 18), the consultants state,

In summary, it is our position that those portions of the basin that lack hydric characters in the soil and also are not able to hold water for more than seven days should not be considered a wetland. The area around the willows with redox in the soil meets the minimum test for wetlands. The upper basin lacks wetland hydrology because it is not capable of ponding water for sufficient periods, a fact that is confirmed by a complete absence of redox in the soil. The presence of opportunistic annual species is not sufficient in our opinion; given the range of conditions that all of these species can tolerate. Finally, while the road rut exhibits hydrology, hydric characteristics in the soil, and the same suite of opportunistic, highly adaptable annuals, it is not appropriate to designate it as a wetland, since it is only because of regular vehicular traffic, in an established parking lot maintained to serve an operating produce stand, that created the depression and compacted the soil.

After visiting the site on April 30, 2003 and reviewing all technical documents submitted by the applicant and others, the Commission’s Ecologist/Wetlands Coordinator prepared a memorandum to district staff dated May 14, 2003 (Exhibit 19). As described in the memorandum, three areas at the Bayview site were characterized as having a preponderance of hydrophytic vegetation. These were designated as 1) Settling Basin and Swale, 2) Road Rut, and 3) Upper Depressional Area in Exhibit 3 of the May 2, 2003 Glenn Lukos report (Exhibit 17, page 17). Portions of the “Settling
Basin" and "Road Rut" exhibited all three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. All three include a preponderance of hydrophytic vegetation. Therefore, applying the Commission's definition of a wetland, all three sites on the Bayview Landing site meet the definition of a wetland. A subsequent mapping would be necessary to establish the precise boundary of each area.

A supplemental survey was conducted by Fuscoe Engineering to determine the hydric soil condition for the three "observation" sites. The results of their assessment were submitted as a Hydric Soils Investigation dated June 17, 2003 (Exhibit 22). The Hydric Soils Investigation concludes that the soil in the willow site (Wetland #1) meets the hydric soils definition, because the soil is frequently ponded longer than 7 days during the growing season, but concludes that the soils in the other sites (Wetlands #2 and #3) do not meet the definition of hydric soil. The Commission's staff ecologist reviewed the new information, but concluded in a memorandum dated June 20, 2003 (Exhibit 23), "...the information in the Fuscoe Engineering report does not provide a basis for altering the conclusions presented in my memo to you of May 14, 2003." As such, the Commission maintains that all three areas meet the Coastal Act definition of wetlands.

As explained in the May 14, 2003 memorandum, the three wetland areas do not appear to be natural features. The areas were probably created by human activities and have not developed the important resource values generally associated with natural wetlands. No sensitive species appear to be reliant upon them. Nevertheless, these areas qualify as wetlands by the Commission's definition and must be treated in accordance with the provisions of Section 30233 of the Coastal Act. In addition, Section 30250 of the Coastal Act requires that new residential development be located where it will not have "significant adverse effects, either individually or cumulatively, on coastal resources." In this case, the development would have significant adverse effects on the designated wetland areas since two of the wetlands will be eliminated and the third will be converted into a detention basin. Moreover, the cumulative impact of development such as this (development that degrades or displaces wetlands) would have a significant impact. Consequently, the development must be redesigned to avoid such impacts through wetland preservation and the establishment of buffers. In view of the relatively degraded nature of these wetlands, the Staff Ecologist concludes "25-foot wide buffers would be amply protective if the buffers were planted with native vegetation appropriate to the area and invasive exotics removed from the wetlands and buffers." Buffers provide essential open space between development and coastal resources, such as wetlands. Buffers, by separating development (such as the senior affordable housing) from wetlands, will minimize the adverse effects of the development on the wetlands, thereby avoiding significant adverse effects to resources.

As compared to the June 2003 proposal, the applicants have redesigned the project to include restoration and enhancement of the "Settling Basin and Swale." Plans for restoration have been submitted through an "Illustrative Example of Water Quality and Wetlands Restoration," which is included in Exhibit 21. In this proposal, the Settling Basin area would be used as a detention basin to serve as a water quality best management practice (BMP), while also providing "valuable wetland habitat restoration." In order to address water quality impacts, the detention basin is a necessary component of the proposed residential development. The entire wetland area would be graded and substantially altered to function as an effective detention basin. Mechanized equipment would be utilized to enlarge and deepen Wetland #1. The applicant asserts that the "Water Quality and Wetlands Restoration" of Wetland #1 is allowable, as it serves a "restoration purpose," one of the eight allowable uses for wetlands. (Water quality will be discussed in Section F.) Although enhancement and enlargement of the wetland area is encouraged, use of
the wetland as a detention basin to treat runoff from a residential development is not considered an allowable use of a wetland pursuant to Section 30233(a) of the Coastal Act. The applicant's proposed "Water Quality and Wetlands Restoration" is not the principal use of the project. The principal use is the residential development. As such, the proposed development is unallowable.

Although the applicant is willing to improve and enhance the habitat value of the Settling Basin wetland area, the applicant would not be willing to avoid development in the Road Rut and the Upper Depressional wetland areas. Fill of the Road Rut and Upper Depressional wetland areas for residential development is not allowable, regardless of the types of improvements proposed at the Settling Basin wetland site. Additionally, total loss of two on-site wetlands cannot be considered the least environmentally-damaging feasible alternative, even if higher value habitat is created at one of the two sites. The on-site wetlands clearly are degraded. The degraded nature of the wetlands does not provide a basis to justify filling them. The entire lower parcel is five acres. Development of the parcel is possible without impacting the wetland habitat if a smaller footprint is used and appropriately sited. Retention of the existing wetlands is thus a feasible alternative and would be less environmentally-damaging than elimination of two of the three wetland areas. In addition, protection of all three wetland areas would be consistent with the State's "no net loss" policy, intended to prevent further loss of wetland acreage.

As stated above, Section 30233 of the Coastal Act allows the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes for eight enumerated purposes where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. In this case, the applicants propose the filling of three wetland areas to serve residential development. Residential development is not an allowable use of a wetland area. In addition, even if the fill were intended for an allowable use, the proposed project is not the least environmentally-damaging feasible alternative available. Lastly, if the wetlands fill was proposed for an allowable use and was determined to be the least environmentally-damaging alternative, a finding would have to be made that feasible mitigation measures have been provided. Mitigation for wetlands impacts typically requires a 4:1 replacement. Even if the fill was proposed for an allowable use, the proposed restoration project does not meet the typical 4:1 mitigation requirement. Therefore, the Commission finds the project inconsistent with Section 30233 of the Coastal Act and the project must be denied.

C. GEOLGY

Section 30253 of the Coastal Act states:

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The project application proposes approximately 115,000 cubic yards of grading (75,000 c.y. cut and 40,000 c.y. fill, with 25,000 c.y. of export and 10,000 c.y. surcharge).\(^3\) Essentially the entire

\(^3\) Data provided in the supplemental geotechnical report anticipates 82,700 cubic yards of raw cut and 29,200 cubic yards of raw fill, inconsistent with the figures provided in the application.
APPLICATION NUMBER: 5-03-091

APPLICANTS: City of Newport Beach and The Related Companies
(On behalf of the property owner, The Irvine Company)

AGENT: Dan Trimble, Program Administrator, City of Newport Beach

PROJECT LOCATION: Corner of Jamboree and Pacific Coast Highway,
City of Newport Beach, Orange County

PROJECT DESCRIPTION: Development of a senior affordable housing project and passive
public park on a vacant 15-acre site. The senior affordable housing project will consist
of 120 units in two 3-story buildings with a community center, administrative offices, a
pool/patio area and 146 parking spaces on the lower 5 acres of the site. A Wetlands
Restoration/Detention Basin/Pond area will also be created on the lower portion. The
park will contain a bike path, park benches and primarily native vegetation on the upper
10 acres. Approximately 38,162 cubic yards of grading (14,923 c.y. cut and 23,239 c.y.
fill, including 8,316 c.y. import) is proposed for drainage, slope stabilization and site
preparation. The project also involves approval of a lot line adjustment, modifying the
configuration and size of each parcel.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends that the Commission APPROVE the proposed development subject to
eighteen (18) special conditions. The subject site is a vacant 15-acre property, including two
small wetlands, located between the first public road and the sea (Upper Newport Bay) in the
City of Newport Beach. The applicant proposes to create a public park on the upper portion of
the site and a senior affordable housing project with a wetlands restoration area on the lower
portion. The primary issues addressed in the staff report are wetlands fill, landform alteration,
public access/parking, and water quality.

At the time of this staff report, the applicants are in agreement with the staff recommendation of
approval and oppose any significant modifications to the project. However, the applicant may
have concerns regarding certain special conditions.

LOCAL APPROVALS:
Newport Beach City Council approval of Use Permit No. 2003-003, Site Plan Review No. 2003-
001 and Lot Line Adjustment No. 2003-011 and adoption of Mitigated Negative Declaration for
Bayview Park and Senior Housing on February 25, 2003.

SUBSTANTIVE FILE DOCUMENTS:
City of Newport Beach Certified Land Use Plan (LUP); Circulation Improvement and Open Space
Commission is not a party to the agreement between the City and the Irvine Company, and consequently is not responsible for enforcing the Development Agreement. Furthermore, the Commission’s approval of the agreement does not prevent it from approving alternative proposals that do not comply with the agreement (provided that they too are consistent with the Chapter 3 policies of the Coastal Act). The Commission notes that the current proposal appears to be inconsistent with the Development Agreement approved previously. Though the standard of review for the current proposal is Chapter 3 of the Coastal Act, the Commission’s approval of CIOSA provides additional guidance on how the area should be developed.

At this time, the Commission has the opportunity to evaluate proposed development at the Bayview Landing site for its consistency with the Coastal Act at a more detailed level of analysis than what occurred during its consideration of the Development Agreement. The Development Agreement provided for future discretionary review at the coastal development permit stage. The Commission’s findings in approving the CIOSA Development Agreement acknowledge, “the development areas may be further limited at the coastal development permit stage based on new/more specific biological or geotechnical information.” As such, the current staff report evaluates the proposed project in light of new information.

B. WETLANDS

Section 30108.2 of the Coastal Act states:

"Fill" means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

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"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

Section 30233 (a) of the Coastal Act states,

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

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(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins,
necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

Section 30250(a) of the Coastal Act states, in pertinent part,

New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

As described previously, the applicants propose to develop the subject site with a senior affordable housing project on the majority of the lower 5 acres and a public passive park on the upper 10 acres. The environmental document (Bayview MND) utilized to approve the project at the local level concluded that no wetlands exist on the subject site. However, through subsequent review, areas that constitute wetlands under the Coastal Act have been identified within two (2) areas of the lower portion of the site (Exhibit 8). The applicant proposes to restore these wetland areas as part of the proposed project. Others maintain that three (3) or four (4) wetland areas exist, and should also be restored.

One of the main reasons for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their important ecological function. First and foremost, wetlands provide critical habitat, nesting sites, and foraging areas for threatened or endangered species. Wetlands also serve as migratory resting spots on the Pacific Flyway a north-south flight corridor extending from Canada to Mexico used by migratory bird species. In addition, wetlands serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands serve as natural flood retention areas.

Another critical reason for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their scarcity. As much as 75% of coastal wetlands in southern California have been lost, and, statewide up to 91% of coastal wetlands have been lost.

The Coastal Act defines wetlands as "...lands within the coastal zone which may be covered periodically or permanently with shallow water..." The more specific definition adopted by the
Commission and codified in Section 13577(b)(1) of Title 14 of the California Code of Regulations defines a wetland as, "...land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes...." In discussing boundary determinations, the same section of the Regulations specifies that wetlands have a "predominance" of hydrophytic cover or a "predominance" of hydric soils. Although the definition is based on inundation or shallow saturation long enough for anaerobic reducing conditions to develop within the root zone\(^2\), in practice hydrology is the most difficult wetland indicator to demonstrate. In California, a predominance of hydrophytes or a predominance of hydric soils is taken as evidence that the land was "wet enough long enough" to develop wetland characteristics.

Correspondence regarding biological resources of the subject site, specifically the presence of wetlands, has been received from the Wetlands Action Network (WAN), Jan Vandersloot, Robert Hamilton and Robert Speed (Exhibits 9-12). In addition, Robert Ray Van de Hoek submitted a Wetlands Delineation and Field Biological Evaluation dated April 6, 2003 (Exhibit 13). The WAN letter asserts that the biological resources report prepared for the MND contains incomplete surveys of the site and did not include an evaluation of the lower 5-acre portion of the site or the upper cliff areas. As such, it asserts, the potential wetland areas of the lower portion were not recognized. The WAN letter also states that many plant species (on both the upper and lower portions of the site) were not identified in the report. Correspondence from Jan Vandersloot echoes these concerns and identifies a number of others, including inadequate coastal sage scrub mitigation, coastal landform alteration, archaeology, vernal pools at the bluff top mesa and meadow, and public parking. The biological review letter prepared by Robert Hamilton focuses on native vegetation issues, but also describes the potential wetland areas and suggests "a proper wetland delineation be conducted..." The letter from Robert Speed describes the site as "the last unprotected open space on the Upper Bay estuarine margin" and urges that the site be returned to its original condition as a "wetland margin and natural coastal habitat." The Van de Hoek report finds "three areas of definitive wetland in the 5-acre lower portion of Bayview Landing" and discusses the hydrology, vegetation, size and dominance of each. These are shown in Exhibit 13, page 21.

Keane Biological Consulting, the biological consultant that evaluated the site for the MND, prepared a response to the WAN letter dated March 21, 2003 (Exhibit 14). The letter refutes the statement that the lower site and cliff areas were not surveyed and cites references in the report intended to describe those areas. The Keane letter states, "the site supports no wetland soil or wetland hydrology, it is not currently associated with the wetlands of Upper Newport Bay, and it has no hydrologic source or high groundwater table to support wetlands." Nonetheless, the Keane letter also references a subsequent survey of the site conducted by David Bramlet, a local botanist with wetland experience. Bramlet found two "ephemeral wetlands" on the site, as described in his memo to Keane dated March 17, 2003 (Exhibit 15).

The applicants later retained Glenn Lukos Associates, biological consultants, who also evaluated the wetlands in a report dated April 11, 2003 (Exhibit 16). As stated in that report, \footnote{As demonstrated by the definitions of hydric soils and hydrophytes: "A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." National technical committee for hydric soils, October 18, 1994; A hydrophyte is, "Any macrophyte that grows in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content." Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. U.S. Army Corps of Engineers, Washington, D.C.}

In the lower portion of the site, two areas were identified that exhibit the characteristics of wetlands as defined by the CCC. These areas included the settling basin and the
road rut areas. Both of these features exhibit evidence of standing water or soil saturation, as well as hydric soils and a predominance of hydrophytic vegetation. The sizes of these areas are approximately 400 and 750 square feet, respectively.

The Commission's Ecologist/Wetlands Coordinator reviewed the April 11, 2003 report and noted that the delineation did not include a map showing areas having a preponderance of wetland indicator species, resulting in a potentially smaller representation of the actual wetland areas. A subsequent Glenn Lukos report dated May 2, 2003 was submitted for Commission review (Exhibit 17). In that report, the consultants provide a revised wetland map and photographs to document the topography, vegetative communities and general widths of each of the potential wetland areas. In the report, the consultants acknowledge "an additional area was identified following the April 15 storm event, which may be defined as wetland by the CCC." However, in subsequent correspondence (Exhibit 18), the consultants state,

In summary, it is our position that those portions of the basin that lack hydric characters in the soil and also are not able to hold water for more than seven days should not be considered a wetland. The area around the willows with redox in the soil meets the minimum test for wetlands. The upper basin lacks wetland hydrology because it is not capable of ponding water for sufficient periods, a fact that is confirmed by a complete absence of redox in the soil. The presence of opportunistic annual species is not sufficient in our opinion, given the range of conditions that all of these species can tolerate. Finally, while the road rut exhibits hydrology, hydric characteristics in the soil, and the same suite of opportunistic, highly adaptable annuals, it is not appropriate to designate it as a wetland, since it is only because of regular vehicular traffic, in an established parking lot maintained to serve an operating produce stand, that created the depression and compacted the soil.

After visiting the site on April 30, 2003 and reviewing all technical documents submitted by the applicant and others, the Commission's Ecologist/Wetlands Coordinator prepared a memorandum to district staff dated May 14, 2003 (Exhibit 19). As described in the memorandum, three areas at the Bayview site were characterized as having a preponderance of hydrophytic vegetation. These were designated as 1) Settling Basin and Swale, 2) Road Rut, and 3) Upper Depressional Area in Exhibit 3 of the May 2, 2003 Glenn Lukos report (Exhibit 17, page 17). Portions of the "Settling Basin" and "Road Rut" exhibited all three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. All three include a preponderance of hydrophytic vegetation. Therefore, applying the Commission's definition of a wetland, all three sites on the Bayview Landing site were determined to be wetlands. The fourth potential wetland area required further analysis, but was later determined not to be a wetland.

A supplemental survey was conducted by Fuscoe Engineering to determine the hydric soil condition for the three "observation" sites. The results of their assessment were submitted as a Hydric Soils Investigation dated June 17, 2003 (Exhibit 20). The Hydric Soils Investigation concludes that the soil in the willow site (Wetland #1) meets the hydric soils definition, because the soil is frequently ponded longer than 7 days during the growing season, but concludes that the soils in the other sites (Wetlands #2 and #3) do not meet the definition of hydric soil. The Commission's staff ecologist reviewed the new information, but concluded in a memorandum dated June 20, 2003 (Exhibit 21), "...the information in the Fuscoe Engineering report does not provide a basis for altering the conclusions presented in my memo to you of May 14, 2003." As such, the Commission's ecologist maintained that all three areas met the Coastal Act definition of wetlands.
As explained in the May 14, 2003 memorandum, the three wetland areas do not appear to be natural features. The areas were probably created by human activities and have not developed the important resource values generally associated with natural wetlands. No sensitive species appear to be reliant upon them. Nevertheless, the staff ecologist determined that these areas qualified as wetlands by the Commission's definition and would have to be treated in accordance with the provisions of Section 30233 of the Coastal Act. Consequently, the development would have to be redesigned to avoid such impacts through wetland preservation and the establishment of buffers. In view of the relatively degraded nature of these wetlands, the Staff Ecologist concluded "25-foot wide buffers would be amply protective if the buffers were planted with native vegetation appropriate to the area and invasive exotics removed from the wetlands and buffers." Buffers provide essential open space between development and coastal resources, such as wetlands. Buffers, by separating development (such as the senior affordable housing) from wetlands, minimize the adverse effects of the development on the wetlands, thereby avoiding significant adverse effects to resources.

On September 12, 2003, the applicant submitted a "Wetland Determination on the Bayview Property" prepared by Charles J. Newling of Wetland Science Applications dated September 8, 2003 (Exhibit 22). The City contracted with Newling to conduct a "peer review" of the wetland work that had been done to date. Since Mr. Newling is a paid consultant to an interested party, this does not constitute a "peer review." However, according to the Commission's staff ecologist, Mr. Newling is an experienced delineator with first hand knowledge of the development of the Corps of Engineers 1987 Wetland Delineation Manual and, as a second professional opinion, his report is certainly of value. Newling found strong evidence of all three wetland parameters in area "A" (settling basin and swale) and area "B" (depression with road ruts). However, Newling determined areas "C" (upper depressional area) and D to be non-wetland. A report prepared by Glenn Lukos and Associates also concluded the fourth area to be upland (Exhibit 23).

The Commission's staff ecologist reviewed the analysis by Newling, as well as additional information in the record. Especially critical in the review were field observations, photographs, rainfall data and soil analyses. After careful deliberation of all of the additional data provided by the applicant and others, the staff ecologist prepared a memorandum dated October 17, 2003 (Exhibit 24). In it, the staff ecologist concludes that the Upper Depressional Area (Area C) does not meet the Coastal Act definition of a wetland after all. The Upper Depressional Area contains plant indicators of wetland conditions, but does not demonstrate clear hydric soil characteristics and did not pond as long as the areas concluded to be wetlands (Areas A and B). As stated in the memorandum, "...the clear presence of hydric soil characteristics, particularly oxidized root channels, in the wetland areas but not at Area C or adjacent uplands within the same relatively small, area, and the short duration of ponding at Area C at a time that nearby Areas A and B were inundated for long durations are convincing evidence of upland conditions at Area C. Therefore, based on the evidence that is now available, I conclude that the wetland indicator species present at Area C are not growing as hydrophytes and that Area C does not meet the wetland definitions in the Coastal Act and the California Code of Regulations." In light of the foregoing, the Commission hereby finds that Areas A and B (also referred to as 1 and 2) are wetlands under the Coastal Act and that Areas C and D (also referred to as 3 and 4) are not.

The applicants have redesigned their project to include restoration and enhancement of the "Settling Basin and Swale" and the "Road Rut." Based on wetland determinations prepared by the applicants' consultants, each wetland area occupies approximately 0.03 acre. Plans for restoration of these areas were submitted through a "Conceptual Restoration Plan Degraded Artificial Wetlands Associated with Bayview Landing Affordable Senior Housing and Park"
prepared by Glenn Lukos Associates dated July 2003 [Revised August 2003]. In the new proposal, the two wetland areas would be linked and expanded to 0.41 acre from 0.06 acre. All non-native plant species would be removed and replaced with native hydrophytes appropriate to the area. In addition to providing wetland habitat restoration, the area would also be used as a detention basin to serve as a secondary water quality best management practice (SMP).

Both wetland areas would be graded and substantially altered to function as an effective restoration site and detention basin. Mechanized equipment would be utilized to enlarge and deepen the wetland areas. The Commission finds the wetland restoration plan allowable, as it serves a "restoration purpose," one of the eight allowable uses for wetlands. (Water quality will be discussed in Section F.) Although enhancement and enlargement of the wetland area is encouraged, use of the wetland as a detention basin to treat runoff from a residential development is not considered an allowable use of a wetland pursuant to Section 30233(a) of the Coastal Act. However, the water entering the detention basin/wetland restoration area would be treated through underground filtration chambers prior to discharge into the basin. As such, the primary purpose of the detention basin would not be to support the proposed residential development. The primary purpose would be restoration, an allowable use under the Coastal Act.

As stated above, Section 30233 of the Coastal Act allows the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes for eight enumerated purposes where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. In this case, the applicants propose to enhance and enlarge two existing wetland areas for restoration purposes. The boundary of these wetlands was delineated in the Glenn Lukos report of May 2003 and is attached to this staff report as Exhibit 8. The boundary includes the maximum extent of observed ponding and any adjacent areas that have a preponderance of wetland indicator species. To ensure that the project is designed and carried out to maximize protection of the existing wetlands areas, the Commission imposes Special Conditions 1 and 2.

Special Condition No. 1 requires the submittal of final plans showing no development other than restoration within the delineated wetlands or 25-foot buffer. Filtered runoff may also be directed to the newly created wetland restoration area for detention. Special Condition No. 2 requires submittal of a final wetlands enhancement and monitoring program. As conditioned, the Commission finds the project consistent with Section 30233 of the Coastal Act.

C. GEOLOGY

Section 30253 of the Coastal Act states:

New development shall:

(i) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The applicants propose approximately 38,162 cubic yards of grading (14,923 c.y. cut and 23,239 c.y. fill, including 8,316 c.y. import) for drainage, slope stabilization and site preparation, which is substantially less than originally proposed. The majority of the site will be subject to some form of earthwork, with the majority of cut/excavation occurring in the upper park area and
ATTACHMENT #3
24 May 2004

Brian Trautwein
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906 Garden Street
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RE: Assessment of Native Plant Communities and Biological Resource Issues at University of California, Santa Barbara, Faculty and Family Student Housing sites

I have been asked to evaluate biological resource issues related to the proposed residential development project at University of California, Santa Barbara, Faculty and Family Student Housing sites and identify measures that will help mitigate the significant impacts to native plant communities and sensitive habitats. On 13 May 13 2004, I visited the site with biologist Darlene Chirman and we were accompanied by you. We undertook pedestrian surveys through the North Parcel and Storke-Whittier Project area. My findings are summarized below.

North Parcel

Sole use of the Corps of Engineers wetlands delineation criteria is inappropriate for this area. The land is property of the State of California and lies within the Coastal Zone; therefore, wetlands should be defined using the California Coastal Commission and California Department of Fish and Game definitions (same single wetland character criteria). Dependence solely on the Corps of Engineers criteria has led to a failure to recognize a significant portion of the wetlands on this property.

We observed wetlands that were not mapped in UCSB’s dEIR, including

1. near the intersection of Cannon Green and Phelps, east of the wetlands along Phelps indicated on Figure 4.4-1. This area has wetland Juncus, Scirpus, Eleocharis, and Rumex. Although it is disturbed, it is restorable.
2. at the boundary of the coyote brush scrub and annual grasslands in the south-central portion of the parcel. This area has a significant stand of Leymus triticoides (associated with freshwater marsh in the dEIR).
3. extensive Frankenia salina and Malvea leprosa near the southern boundary of the parcel. Parts of the area appears to have been mapped as vernal pools, although Frankenia and Malvea are more frequently found in saline marshy areas than in vernal pools. The mapped pools underestimate the area supporting wetland plants.
4. a vernal pool with Psilocarphus cf. brevissimus as the dominant in the central portion of the parcel, with Lythrum sp. and Centaurium sp. in and the pool. There are other clay barrens in the area which appeared capable of supporting vernal pool taxa, at least in wet years. Because this is a dry year, our visit was made too late in the season to determine what other vernal pool taxa were in the area. It is unclear from the map we had available if all other vernal pools were properly mapped.

The loss of wetlands identified in the dEIR would be a significant impact. The loss of these areas would have a substantial adverse effect on sensitive habitats in the area. The wetlands areas represent a wide range of wetland types, including vernal pools, freshwater marsh, salt marsh, and wetland woodlands. Loss of these would represent a significant loss of the biological diversity of the area. It would irrevocably alter the hydrology of the area, and would impact wetlands below the parcel.
I do not agree with UCSB’s assessment of the wetlands habitat quality. Even under low precipitation conditions, the majority of the wetlands do not appear to be of low quality. There the *Frankenia/Malvella* wetlands are definitely not "low quality". There are a number of vernal pool areas that support substantial native plant stands. The non-riparian willow stand is also not "low quality". Many of the wetlands compare favorably with other non-protected wetland areas along the south coast of Santa Barbara County. There are some poor quality wetlands, but these appear to be restorable, particularly if disturbances such as vehicle damage to the soils and vegetation are removed.

The wetlands need a 100-foot minimum buffer, to protect soils and vegetation. A 100-foot buffer would help maintain the hydrological connection among the wetlands.

Allowing an encroachment into the margin of the 100-foot wetland buffer for an access road south of Phelps and Cannon Green would probably not result in a significant impact to the wetlands in that area, particularly if a limited encroachment were to be mitigated by strong protection of the other wetlands on the parcel.

The non-riparian willow stand in the central area of the meets the definition of an ESHA. This area is "especially valuable due to the special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments". Not only is the stand a unique wetland in this area, but it also is bounded by a native perennial grassland dominated by *Nassella*.

We did not have time to look for unmapped native perennial grassland areas. However, we found two unmapped areas associated with the wetlands we visited: the *Leymus triticoides* grassland near the coyote brush scrub and the *Nassella* grassland around the non-riparian willow stand.

Based on the maps and the 2000 SAIC report provided to me, including Appendix A, it appears that only native grasses were included, rather than native grassland species. 'Grassland' species include a wide range of plant taxa (e.g., see Keeley 1990, Smith 1998). Please refer to Exhibit A, "possible grassland and meadow taxa." When determining the percent cover in order to establish which areas are native grasslands, all native grassland plant species present should be considered rather than merely the native grasses because native grassland plant communities are not limited to only grass species. While grasses are used as the defining element of this community type, they are not the only plant components. Therefore, to accurately reflect the extent of native grasslands, mapping should include areas where the total relative cover of all native grassland plant species exceeds 10%. Limiting mapping only to grasses underestimates the size and importance of grasslands. Inclusion of all native grassland community species would tend to increase the areas that meet the 10% relative cover threshold.

Individual patches of native grassland should be mapped together as contiguous habitat area. The patches of grasses often are not independent units. Where the patches of grasses are separated by non-native plants, rather than other native plant community types, they should be mapped together as a single habitat area.

**Storke-Whittier Project**

As indicated by the plants observed (e.g., *Scripus, Eleocharis, Rumex, Cressa truxillensis*), the wetlands at Storke-Whittier are more extensive than what has been mapped. This under-mapping of wetlands needs to be corrected before the full impacts of the project can be determined.

The wetlands need a 100-foot minimum buffer, to protect soils and vegetation. A 100-foot buffer would help maintain the hydrological connection among the wetlands.

The 100-foot minimum buffer is important to the maintenance of the animal movement corridor. A larger culvert is also needed, and the culverts need to be kept clear of soil and debris.

The fill that was added to the drainage in the area needs to excavated, to restore the hydrological connections.

The vegetation needs to be restored, with a native shrub border along the drainage to help minimize human interactions and impacts with wildlife.
Additional Comments
Vouchers for all plant taxa identified during surveys should be collected, both to confirm that a taxon occurs onsite and to allow for corrections in identifications.

Rarity of Grasslands
Keeley (1990, p. 17):
"Nearly a fifth of the State was once covered by perennial grasslands, yet today only 0.1% of those remain (Barry) 1972). Of the existing grasslands in California, less than 1% are protected within federal, state or private preserves (Jones and Stokes 1987).

Several sources (e.g., Holland and Keil 1995, Keeley 1990) identified grasslands as having occurred on much of the south coast of Santa Barbara County (Holland and Keil Fig. 11-1, p. 200; Keeley p. 2). However, examination of the land-cover classes mapped in the recent Southern California Mountains and Foothills Assessment (Stephenson and Calcarone 1999) illustrates how little remains (Figure 1.7, p.11). Perennial grasslands are now included among the endangered plant communities of California (see Schoenherr 1990).
"Perennial bunchgrass communities are one of the rarest plant communities in California (Keeley 1989; Keeley 1993) and are considered to be one of the most endangered ecosystem types in the United States (Noss et al. 1995; Peters & Noss 1995)." [Hamilton 1997, p. 42]

The rarity of this community type, both in California as a whole and in Santa Barbara County, renders it an Environmentally Sensitive Area as defined under the Coastal Act and Santa Barbara County Local Coastal Plan (LCP) and should warrant stringent protection of remaining sites.

REFERENCES
California Department of Fish and Game. 2003b. List of California terrestrial natural communities recognized by the California Natural Diversity Database. Department of Fish and Game, Sacramento, Wildlife and Habitat Data Analysis Branch, Sacramento.


ATTACHMENT #4
DRAFT TECHNICAL REPORT
(Excluding Figures 1 and 2)

BIOLOGICAL RESOURCES EVALUATION

UNIVERSITY EXCHANGE PROPERTY
(APN 73-090-13 and -50)

For Supplemental Environmental Impact Report (TM 14,003cz)

Prepared For: Planning Land Use Services
Box 30164
Santa Barbara, CA 93130

-and-

County of Santa Barbara
Resource Management Department
Environmental Review Division
123 Anapamu Street
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Submitted: February 23, 1989
The 1984 study (Envicom, 1984) made the following findings:

Based on this analysis, impacts associated with the grading, construction, and operation of the proposed West Devereaux Specific Plan may significantly reduce the biological viability of the site and surrounding natural area. This would occur through (1) direct habitat loss; (2) potential reduction in species diversity; and (3) the disturbance associated with human presence (i.e., that which occurs through human presence and domestic animals). Little or no mitigation is possible for these general impacts and as such, they are described as a significant unavoidable adverse impact in the Impact Summary of this report.

Subsequent to the certification of the 1984 EIR (Envicom, 1984) an SEIR (Envicom, 1987) was prepared that identified similar sources of impact but offered mitigating measures deemed adequate to reduce the impacts to acceptable levels. The addition of a single new mitigation measure is described in an Addendum to the EIR (Santa Barbara County, 1986), with the finding that the predicted impacts to biological resources should be reduced from Category I (unavoidable) to Category II (can be mitigated).

It is important to note that these recommendations addressed two species, the northern harrier and burrowing owl. The issues are much broader than implied, and the scope of this analysis has been expanded accordingly. The purpose of the present investigation was to re-evaluate the resource sensitivities, make independent findings of impact significance based on the evaluation, and to critically assess the validity and feasibility of proposed mitigation measures.

Direct Impacts

Direct impacts to plant and animal resources include habitat loss, individual mortality during construction, and abandonment of adjacent territories. The effects of vegetation and habitat loss are most critical to the preservation of local and regionally significant floral and faunal populations.

Grading and construction of the proposed dwellings, access roadways, and ancillary facilities will permanently eliminate native grassland, disturbed grassland, coastal scrub, and wetland habitats as currently planned. In addition to the loss of native vegetation, wildlife species currently inhabiting most portions of the site will be forced to abandon the area or to adapt to extreme changes in environmental conditions. Because of the decline in habitat values, a significant reduction in the diversity and overall quality of the biotic community is expected to occur.

Scattered patches of native perennial bunchgrass would be eliminated by residential development at the southern border of the golf course. A second stand of bunchgrass, northwest of the golf course was identified in the 1984 EIR (Envicom, 1984) and should be preserved (Figure 1). Because of the limited extent of the remnant bunchgrass stand south of the golf course, the loss of this resource is a Class II impact, mitigable by transplanting specimens to the area designated for bunchgrass preservation.

The removal of disturbed grassland and scrub vegetation is not particularly significant because of the widespread distribution of this community. However the loss of this habitat as a foraging resource for local and regionally sensitive wildlife species is highly significant. Areas north of the golf course that are dominated by coyote brush and weedy annuals do not support a particularly diverse wildlife community. These
parcels (Parcels 1-7) are not as important to the resident bird population as are more remote areas to the north (Parcels 8, and 12-14). The loss of grassland and scrub communities north of the golf course is a Class III impact.

The resident raptor population depends on unbroken tracts of grassland, sparse scrub, and wetlands south of the golf course for hunting and roosting. The prey resource is sufficient to support a resident pair of black-shouldered kites and wintering populations of northern harriers and loggerhead shrikes. Turkey vultures; red-tailed, red-shouldered, and Cooper's hawks; and other bird species include this section of land in their permanent territories. Development within Parcel 8, as proposed, would result in permanent loss of critical habitat for these species. This is a significant, unavoidable impact that cannot be mitigated (Class I).

The destruction of wetland habitats would take place along portions of Devereaux Creek and in the willow riparian area in Parcel 8. A drain culvert and earthen fill in Devereaux Creek is proposed to enable access to Parcel 8. This portion of the creek presently exists in a degraded condition. However, in the recent past, this wetland supported a substantial patch of emergent wetland vegetation dominated by salicornia (Salarcsoria virginiana). The impact at this location could be mitigated to Class II significance by choosing a more environmentally sensitive engineering alternative and by attempting a wetland restoration effort.

The project description does not specify what, if any modifications would be made to the northern tributary to Devereaux Creek known as Phelps Ditch. Drainage and flood control plans may entail concrete channelization, structural fortification, or other removal of vegetation. Because of the presence of wetland vegetation, the importance of this drainage to migrant wildlife, and its influence on the downstream estuary system, this tributary should be protected pursuant to LCP policies. Potential impacts could be mitigated to Class II significance by recognizing development setbacks and by implementing a cleanup and restoration program. Mosquito abatement efforts should be closely regulated as recommended in the County's Comprehensive Plan, Conservation Element (Santa Barbara County, 1979).

Grading and filling of the wetland area in Parcel 8 would eliminate habitat for several wildlife species that rely on this ephemeral drainage for harborage. Although it is subject to extreme impacts from current recreational use, the drainage supports several willow and poplar trees. These trees are used as habitual roost sites by a resident pair of black-shouldered kites. The destruction of this habitat constitutes a Class I impact.

Mortality among some wildlife species would be unavoidable during site clearing and grading. These losses would mostly affect burrowing and less mobile wildlife species. The losses due to construction would be limited to a few, relatively common species and are therefore considered Class III significance.

Territory abandonment will likely occur during the construction and operations phases of development. Noise, dust, and visual disturbances generated by construction will cause animals occupying adjacent habitats to temporarily vacate their territories. These effects would be most detrimental if they occur during the breeding or nesting season because reproductive success could be limited. Construction adjacent to the eucalyptus row at the western property boundary during the nesting season would be most likely to seriously affect nesting birds. These effects could be mitigated to Class II level by recognizing buffers near sensitive habitats and by scheduling construction to the non-breeding season.
Occupancy of the new homes would result in an increase in noise, lighting, and other disturbances to wildlife residing in adjacent areas. Some permanent territory abandonment could result, particularly among species less tolerant of human influence. Nest and roost sites for black-shouldered kites are particularly sensitive in this regard (UCSB Herbarium, 1982). Kites are characteristically intolerant of human activity in proximity to their nesting and roosting locations. These impacts could be mitigated to Class II significance by recognizing development setbacks from sensitive habitat areas.

Indirect Impacts

Indirect impacts are those that could affect both onsite and offsite resources during the occupancy phase of development. The source of these impacts would originate onsite, during and after construction. Indirect impacts include contamination of water resources, destruction of habitat, and disturbance to wildlife.

The relationship between site generated pollutants and the health of the Devereaux estuary was recognized in the original EIR (Enviicom, 1984). Sources of contamination include fertilizers, pesticides (through mosquito abatement), herbicides, and sedimentation. Surface runoff from urban areas commonly contains concentrations of hydrocarbons, solvents, and other chemical compounds. Sedimentation could occur through soil erosion of unprotected or unvegetated slopes. Degradation of water quality could adversely affect wetland vegetation and instream fauna. Sedimentation could be avoided or minimized by site drainage and erosion control measures as the applicant has proposed. Water quality monitoring should be performed as an element of the Biological Mitigation Program described in a subsequent section of this report. With these measures, the potential for degradation of downstream wetland habitats could be alleviated, rendering the impacts to Class II significance.

Substantial changes in the composition of existing plant and animal communities would accompany the proposed residential development. Landscaping would replace the native vegetation, resulting in a relatively homogeneous habitat for resident wildlife. The present diversity and abundance of wildlife species inhabiting the site is expected to decline. In areas where habitat values are limited by previous disturbance (i.e., north of the golf course), these changes constitute a Class III impact. The area south of the golf course (Parcels 8 and 12-14) has retained substantial merit in spite of the effects of adjacent recreational and industrial development. Loss of these resident species is a Class I impact.

A considerable increase in human population density would result from the proposed development. The effects of human recreational use on relatively undisturbed habitats are evident throughout most of the project site. Destruction of vegetation, attendant erosion, habitat loss, and disturbance to resident wildlife are a regular occurrence. This degradation of biological values stems from unregulated hiking, bicycling, and motorcycle use of the site. Domestic cats and dogs can have profound effects on local wildlife populations. These detrimental influences are expected to be compounded by additional development of adjacent lands.

Increased visitation to surrounding areas not included in the proposed development will undoubtedly occur. Onsite and offsite habitats would be threatened by this greater source of disturbance. The affected resources include the black-shouldered kite roost and nest sites, vernal pool, brackish pond, coastal sand dunes, and Devereaux Slough. The fragility of these habitats is emphasized in the LCP and Comprehensive Plan (Santa Barbara County, 1982 and 1979). Foraging and roosting areas for the snowy plover,
northern harrier, and loggerhead shrike would be subject to severe disturbance. Fencing and interpretive signs have been proposed to delineate sensitive habitat areas (SWA, 1987 and Envicom, 1984). These measures alone are not sufficient to mitigate the predicted impact. Effective mitigation is not possible given the proposed project design. The impacts are significantly adverse and unavoidable (Class I).

Cumulative Impacts

Elimination of each of the habitat types represented at the project site has previously occurred throughout the region. Coastal dunes and estuaries have been among the most severely impacted by encroachment of agricultural, urban, and industrial development. For this reason, these habitats are protected by specific land use policies as previously discussed.

The incremental loss of open tracts of grassland is a more widespread trend. Areas once held in agricultural use are being rapidly converted to urban and suburban developments. Native grasslands have long since disappeared as the prevailing vegetation along the coastal terrace. The fragmentation of extensive tracts of open grassland has had deleterious effects on the animals inhabiting this community. Among the most important of these are wide ranging rapacious bird species, including the turkey vulture, black-shouldered kite, northern harrier, burrowing owl, and loggerhead shrike. Envicom (1987) recognized the importance of contiguous expanses of this habitat for these species.

The property west of and adjacent to the project site has been recently proposed for a residential and hotel complex (Santa Barbara Shores, 1988). This property occupies approximately 255 acres along the coastal bluff, most of it annual grassland. The recently constructed West Campus Housing Project eliminated additional acreage of open grassland and sparse scrub east of Devereaux Slough. ARCO Corporation recently proposed to expand their crude oil storage facility at the Aminoil site on Parcels 12-14 (Chambers Group, Inc., 1986). The project recently denied.

The University Village Project would contribute to the loss of irreplaceable raptor foraging habitat in both a local and regional context. The sensitive species discussed in this report were undoubtedly affected by the West Campus Housing development and would be further impacted by the proposed Santa Barbara Shores and ARCO projects. The consequences of expanding development relative to these species are irreversible. When viewed from a cumulative perspective, the University Village Project would result in a Class I impact to these resources.

Summary of Predicted Impacts

Direct Impacts

- Loss of remnant native grassland (Class II)
- Loss of disturbed grassland and scrub (Class III)
- Loss of foraging and roosting habitat for sensitive wildlife species (Class I)
- Loss of streamside wetland (Class II)
- Loss of willow riparian (Class I)
- Construction related wildlife mortality (Class III)
- Territory abandonment (wildlife) (Class II)
- Abandonment of nest and roost sites by sensitive species (Class I)
Indirect Impacts

- Degradation of water quality on and off site
- Changes in species diversity and community structure
- Destruction of on and offsite resources due to increased population

Cumulative Impacts

- Incremental loss of annual grassland
- Incremental loss of foraging habitat for sensitive wildlife species

DISCUSSION OF PROJECT DESIGN ALTERNATIVES

The most important element of the proposed project with respect to biological resources is the development of Parcel 8, south of the Ocean Meadows Golf Course. Parcels 8, 12, 13, and 14 are currently inhabited by Regionally sensitive wildlife species. These include the turkey vulture, black-shouldered kite, northern harrier, snowy plover, and loggerhead shrike. The black-shouldered kite is a permanent resident of the project area and uses portions of the site for foraging, roosting, and nesting. The other bird species mentioned are seasonal residents that rely on these resources for winter sustenance.

Southern portions of the property include a riparian wetland, brackish pond, and coastal sand dunes. Parcel 14 adjoins the Devereaux Slough and Coal Oil Point Ecological Preserve. Highly sensitive sand dune and estuary ecosystems are currently afforded protection within the designated preserve area. Each of these habitats is protected by local land use policies (Santa Barbara County, 1979 and 1982).

In combination with the golf course, Parcel 8 presently functions as a buffer between the densely populated area north of the project site and these sensitive habitat areas. Unregulated recreational use of the University Exchange Property has increased immensely with the development of nearby areas. These activities have caused severe damage to soils and vegetation. Increased population pressure and the addition of public access trails is expected to have similar effects on Parcels 12-14 and the adjacent dune and estuary habitats.

Development within Parcel 8 would eliminate an important foraging and roosting area for sensitive bird species. The proposed access to the beach would facilitate pedestrian and (possibly) ORV access to the dunes and estuary. The nature of "open space" use proposed by the applicant (SWA, 1988) is not conducive to the continued use of the area by many of the wildlife species presently occupying the site.

Development would also compromise the parcel's effectiveness as a buffer zone for the sensitive habitats to the south and southeast. Similarly, the protection currently afforded these resources by the golf course would be lost. This would occur through the fragmentation of existing open, undeveloped space.

The potential for disturbance to outlying areas will result from development north of the golf course as well. This will stem primarily from the increased population density. Onsite sources of contamination could conceivably degrade the slough ecosystem. In
order to mitigate these effects, a more stringent management of undeveloped parcels is
needed. Effective mitigation could only be accomplished by eliminating proposed
development from the parcel south of the golf course (Parcel 8) and by the
implementation of a preservation, management, and enhancement program as detailed in
the following section.

MITIGATION

The following mitigations are drawn from several sources. Most importantly, the
County's Local Coastal Plan and Comprehensive Plan policies and recommendations
have been considered. Measures described in the previous environmental documents
have been incorporated and are expanded (Envicomp, 1984 and 1987 and Santa Barbara
County, 1986). Management guidelines specified in the UCSB wetlands study were
applied to the Biological Mitigation Program (UCSB, 1988). Applicant proposed
mitigation measures are also included. Finally, guidance from the planning staff of the
Santa Barbara County Environmental Review Division was solicited in the application
of land use policies (McCurdy and Gira, 1988).

Mitigation measures are presented for all Class II impacts identified in the previous
section. Findings of Class III significance do not require offsetting mitigations,
therefore none are proposed. Class I impacts cannot, by definition, be mitigated to
insignificance.

Mitigation for Direct Impacts

The loss of remnant patches of native perennial bunchgrass can be mitigated by
including the largest remaining stand in the category of "undisturbed landscape area"
(SWA, 1988). This portion of Parcel 6 should be preserved "in situ". Revegetation
efforts should include the transplanting of specimens in areas designated for parcel
build out and enhancement through supplementary planting as described in the project's
Specific Plan (SWA, 1988). Native plant preservation and revegetation are consistent
with the stated objectives of the plan and with LCP Policy 9-18.

The protection of wetland habitats, including Devereaux Slough, Devereaux Creek, the
brackish pond, and vernal pool are specified in the previous EIR (Envicomp, 1984). The
recommended mitigation includes building setbacks, protective fencing, and interpretive
signs.

Setbacks of 50 feet from the northern tributary to Devereaux Creek (Phelps Ditch)
should be recognized in accordance with LCP Policies 9-9 and 9-37. A cleanup and
restoration effort should be undertaken, and the stream corridor should otherwise be
maintained in its present condition (reference LCP Policy 9-38). Light recreational use
should be made available by installing a footpath along the stream channel, however
other potentially damaging activities should not be permitted (i.e. traffic within the
stream itself, motorized vehicle access, pets). This measure may require fencing of the
stream channel to discourage entry by people and domestic animals.

The western extent of the mainstem of Devereaux Creek is proposed for culverization
and filling. If access to southern portions of the property is required, an
environmentally preferable alternative should be considered. Limiting the amount of
fill required and restoring the presently degraded wetland vegetation would constitute
effective mitigation.
ATTACHMENT #5
Wetland in east tributary of Devereux slough after filling—see culvert in the distance in Ocean Meadows Golf Course.

Closer view of new path/road in wetland.
ATTACHMENT #6
Section 4.2

Geologic Hazards

expand when wet and shrink when dry. Repeated shrinking and swelling of the soil can result in
damage to foundations, roads, utilities, and other associated facilities. The soil expansion
potential is considered significant but feasibly mitigated (Class II).

**Impact GEO-12: Collapsible Soils.** Test results from borings collected from the Comstock
Homes Project immediately to the west of the proposed new parking lot and restroom at Santa
Barbara Shores indicate that surface soils are dry and porous to depths of 36 to 48 inches below
existing grade, and are susceptible to collapse, compression, and settlement with increasing
moisture content. Potential impacts associated with compressible and collapsible soils such as
restroom foundation or road settling are significant but feasibly mitigated (Class II).

4.2.3.3 Cumulative Impacts

**Impact GEO-13: Cumulative Impacts.** The cumulative impacts related to geologic processes
resulting from buildout of proposed projects located within the Devereux Slough Watershed
(including soil erosion) could be significant due to the potential for increased erosion and
sedimentation in Devereux Slough. The proposed Comstock Home Development project (78
homes on 36 acres) and Ellwood Mesa Open Space Plan improvements have the potential to
cause significant short-term impacts. The project’s contribution to this cumulative impact
caused by erosion and sedimentation would be potentially significant, but feasibly mitigated (Class II).

4.2.3.4 Mitigation Measures

The mitigation measures listed below reflect established standards included in the CBC and City
of Goleta Grading Ordinance as applicable to the proposed project. Additional ordinance-
required measures would be imposed on the project through the grading and building permit
process.

**Mitigation Measure GEO-1.** The grading activities for the Comstock Homes Development
and improvements requiring grading in the Ellwood Mesa Open Space Plan area shall be
performed under the observation and testing of a qualified geotechnical consultant. The results
of all such observations and testing shall be documented in a written report prepared by a
registered Civil or Geotechnical Engineer. All grading and earthwork recommendations shall be
incorporated into the final project design, including the Final Grading Plan. These
recommendations would include, but not be limited to, the following:

a. Within the footprint of proposed buildings and foundations, and extending to a minimum
distance of 5 feet beyond the foundation footprint, soils should be overexcavated to a depth
of 3 feet below existing grade, or 1 foot below bottom of foundation, whichever is deeper.

b. Foundations shall be constructed to compensate for consolidation settlement of 1 inch.

Where feasible, building areas shall be backfilled with nonplastic, low expansion soils to mitigate
the potential effects of expansive soils. Highly expansive soil will not be placed within the upper
3 feet below buildings. Measures recommended by Pacific Materials Laboratory (2002) such as
UNIVERSITY OF CALIFORNIA
SANTA BARBARA
CAMPUS WETLANDS MANAGEMENT PLAN

Part 2
Technical Report
Hydrology, Water Quality and Sedimentation
of West and Storke Campus Wetlands

A Report to
The California Coastal Conservancy
and UCSB Campus Wetlands Committee

Frank W. Davis, Principal Investigator
David Theobald
Robert Harrington
and Anuja Parikh

Department of Geography
University of California, Santa Barbara
1990
During WY 88/89, groundwater levels remained low until late December, when a series of storms raised water levels in the Finger and inundated the piezometer for the remainder of the study (Figure 30).

4.2.b. North Finger

The groundwater piezometer in North Finger was located in the center of the wetlands where the ground surface elevation was 8.62 ft. Groundwater height in North Finger was not as closely coupled to water levels in the slough as that in South Finger, and averaged 1.95 ft higher than groundwater height in the latter (Figure 29). During WY 87/88, the minimum groundwater level of 4.78 ft MSL occurred in early October. Groundwater level remained relatively constant between mid-November and April despite marked fluctuations in slough water levels, again in contrast to South Finger. Groundwater height decreased to below 3.63 ft prior to storms in mid-November, and then increased steadily to over 7 ft by late January, remaining high for the duration of the study (Figure 30). Differences between groundwater and surface water elevations probably reflect the potential head at the piezometer.

4.3. Sedimentation Patterns in Devereux Slough

Although Devereux Creek is the main source of stormwater into Devereux Slough, it does not appear to be the major source of bed load sediment. This is mainly because most of the sediments carried by Devereux Creek are deposited upstream on the golf course behind the culvert and weir located at the mouth of Devereux Creek, where the sediment is deposited prior to entering the slough. During periods of peak runoff, however, Devereux Creek may be an important contributor of fine suspended sediment.

Based on historical air photos, short sediment cores and field observations during storm events, the University Exchange Property immediately north of Devereux Slough and west of Devereux Creek has been the most significant source of sediment entering Devereux Slough for the past 25 years. This property was scraped and graded around 1965 during construction of the golf course, and was the source of fill for that project. Extensive gully erosion has occurred on the site since that time, which is now laced with erosion gullies, the largest over 800 ft long, 10-20 feet wide and 6-12 feet deep.

The University Exchange site is still only sparsely vegetated by annual weeds and scattered shrubs. Active gully formation continues and is probably being accelerated by the use of the site by trail bikers. During storm events, sediment from gullied areas enters Devereux Slough through a system of culverts at the northwest corner of the slough. As recently as 1961 these culverts discharged water onto tidal flats whose surface ranged from
4-6.5 ft in elevation. Subsequent high sedimentation has built a fan-delta with an upper surface elevation of approximately 10 ft MSL. This fan-delta is now partially covered by willow woodland. The delta continues to prograde into the slough. Recent deltaic sediments consist of interbedded reddish-brown sand and clay layers that make abrupt contact with black lagoonal clay.

An assessment of the thickness of individual depositional units within each of ten soil cores collected from the area provides evidence for rates of sedimentation and growth of the fan-delta. Approximately 100 feet south (downslope) of the fan-delta apex, individual depositional units approaching 1 foot in thickness can be observed. These units thin gradually southward to 2-3 inches thickness over a distance of 200-300 ft. Each of these units consists of a basal coarse sandy layer grading upward to finely laminated fine sand. The laminated sands are typically overlain by 0.25-0.5 inch layers of fine silt and clay that probably settled out of suspension and mark the end of a depositional event. The thickest units typically exhibit an absence of internal stratification and many include oxidized mottles of organic material. Occasional coarse sand and gravel inclusions also occur. Such features are consistent with rapid or episodic deposition, as opposed to slow and gradual accumulation of sediments. Wedge-shaped deposits are also consistent with rapid alluvial or deltaic deposition.

A hypothetical sedimentary wedge averaging 0.5 ft. in thickness would result in an estimated addition of 6000 cubic yards of new sediment to the fan-delta. Based on our observations of existing sedimentary units, such a unit of deposition could possibly result from a single, very large storm event, although events of only half that size would be more likely.

The slough delta now covers approximately 323,850 sq. ft. (delta surface above 4.0 ft MSL). The total area of the slough that is frequently tidally inundated is 2,437,390 sq. ft., so the delta has displaced approximately 13.29% of lagoonal habitat.

A conservative estimate of the volume of sediment stored in the fan-delta is 484,440 cu. ft. (17,942 cubic yards, 11.12 acre ft.). This figure is based on an average fan-delta thickness of 1.5 ft. This volume was deposited between 1965 and 1988 at an average rate of 21,062 cu. ft./year. The volume of the slough at 6.5 ft. MSL is roughly 6,472,000 cu. ft., so the delta has displaced roughly 6.5% of the slough since the mid-1960's.
ATTACHMENT #8
INTRODUCTION

Soil erosion and sedimentation pose a serious threat to the quality of our waters. Erosion is the washing away of soil by rain. Sedimentation is the accumulation of soil and other matter washed into our waterways from the land.

When raindrops strike bare soil, large amounts of topsoil are dislodged and carried downstream in storm water runoff. When land is disturbed, therefore - by construction or road building, for example - its erodability greatly increases. As soil and other particles (construction-related materials and chemicals such as paints, solvents, vehicle fluids and concrete) are washed into streams, aquatic life dependent on clean water and gravel beds are severely stressed. The cumulative toll on the environment can be devastating (For Environmental Impacts, See pages 15 to 17).

Erosion and sedimentation can also cause flooding, and nuisance problems for downgradient property owners and on adjacent streets. Other problems resulting from sedimentation resulting from uncontrolled erosion include the clogging of streams, storm drains and culverts; artificial siltation of reservoirs and other water bodies; as well as pollution of waterways and drinking water supplies.

Uncontrolled erosion is costly, violates state and federal pollution laws, exposes developers, contractors, and landowners to legal liabilities, and provides ammunition to those who argue that the development process itself is out of control.

As the flat lands are built out and as more and more development takes place on steep hillsides, the threat from erosion is increasing. In recent years, citizen groups and environmental organizations have recognized that the environmental losses and economic costs of development-related erosion are generally borne by the taxpayer rather than the polluter. More frequent citizen suits and better enforcement of environmental regulations reflect decreasing tolerance for this discrepancy.
Purpose: The project schedule should sequence construction activities with the installation of erosion and sediment control measures. The purpose is to reduce the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking and to perform the construction activities and control practices in accordance with the planned schedule.

Application: All projects involving land-disturbing activities.

Limitations: None identified.

Inspection and Maintenance:
- Incorporate the use of a schedule or flow chart to layout the construction plan.
- Work out the sequencing and timetable for the starting and completion of each item such as site clearing, grading, excavation, pouring foundations, installing utilities, etc.
- Incorporate erosion and sediment control items in construction schedule.
- Avoid or minimize land disturbing activities scheduled between October and April 1st. Extra precautions (BMP’s) should be implemented to protect the site from erosion.
- Schedule major grading operations between April and October.
- Allow enough time before rainfall begins to stabilize soil with vegetation or physical means or to install temporary sediment trapping devices.
ATTACHMENT #9
Comments on the Draft EIR for the Cachuma Water Rights Hearing

Report to the Environmental Defense Center

Dana Haasz
Peter Gleick

Pacific Institute
Oakland, California

October 6, 2003
Comments on the Draft EIR for the Cachuma Water Rights Hearing

Report to the Environmental Defense Center

Dana Haasz
Peter Gleick

October 1, 2003

Introduction

In response to the State Water Resources Control Board (SWRCB) draft Environmental Impact Report (DEIR) released in August 2003 addressing modifications to the U.S. Bureau of Reclamation’s Water Right Permits 11308 and 11310, the Pacific Institute was asked to assess the potential for improving water-use efficiency among the five major water districts (the Cachuma contractors) that play a role in the region: Carpinteria Valley Water District (CVWD), Goleta Water District (GWD), Montecito Water District (MWD), City of Santa Barbara (SB), and Santa Ynez River Water Conservation District, Improvement District #1 (SYRWCDID#1). The following analysis concludes that the contractors can reduce their take of water from the Santa Ynez River without a loss of service or quality of life. Substantial water can be freed up for environmental purposes and future expected growth simply by applying existing efficiency technologies and well-understood policies to conserve water, in a cost-effective manner. This potential has been ignored or underestimated by previous studies, including the DEIR, and should play a critical role in meeting future needs. The first section looks at the role of conservation through examination of end uses in individual water agencies. The second part questions some of the methodology and assumptions used in the EIR to project future supply and demand balances.

The recently released DEIR indicates that the proposed releases to protect steelhead and other public trust resources may cause a significant impact to the agencies’ water supplies during critical drought years unless drought contingency water conservation measures are implemented. The DEIR states that the water-supply impact during critical drought years “might be mitigable to less than significant levels if the member units were to develop and implement a drought contingency plan to cover the [temporary] water supply shortage.” However, the DEIR stops short of analyzing specific measures and alternatives that can mitigate this water-supply impact. Furthermore, it fails to describe how much water can be generated through conservation and/or alternatives or to assess whether the impact can be fully or only partially offset. This report is intended to provide the SWRCB with additional information and details regarding the feasibility of mitigating the water-supply impacts associated with the alternatives in the DEIR as well as other alternatives that may be proposed by the public, including California Trout.

More detailed analysis is necessary to determine the mix of conservation options most appropriate for the individual water agencies and the associated savings, but our initial work suggests that a wide range of alternatives are available that can reduce or eliminate the reasonable expected impacts.

These alternatives include increased water conservation, recycling and reuse, and developing new sources or enhancing use of existing sources of supply, such as increased extraction of water from existing sources, desalination, or the development of access to new sources. We identify and examine only the alternatives that are most cost-effective, and most feasible from an environmental, economic, and political perspective. It should be noted that we do not discuss agricultural water use in this report, which accounts for about 20 percent of the member agencies’ use. While an analysis of agricultural use was outside the scope of this

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1 We did not include in our analysis options that, under current conditions, would not be cost effective, devices that are new to the American market such as dual-flush toilets, or measures that are politically sensitive, such as rate structures.
report, a detailed assessment of the potential to improve efficiency of agricultural water use is strongly encouraged.

The following analysis is based on best available information collected from California Urban Water Conservation Council (CUWCC) Best Management Practices (BMP) reports, Department of Water Resources Urban Water Management Plans (UWMP), Water Conservation Plans required through U.S. Bureau of Reclamation (BoR) contract, and direct contact with the member agencies. The reports to the DWR and BoR are mandatory, (the CUWCC reports are mandatory if the agency is a signatory) but it is relevant to note that their accuracy, completeness, and quality vary widely as does the quality of data collected and available from the member agencies.

Table 1 shows year 2000 water use for the five member agencies. There is considerable variation in per-capita water use among the agencies, with that of Montecito and Santa Ynez more than double that of the other agencies. During the drought in the early 1990s, the City of Santa Barbara (SB) and Goleta Water District (GWD) implemented aggressive water-conservation programs as a way of reducing demand. Although there has been some rebound in demand post-drought, many of the measures, such as toilet-replacement programs, had permanent effect on reducing demand. Prior to the drought, per-capita residential use in SB was 120 gallons per day (gpd). During the height of the drought it was reduced to 71 gpd, and currently it stands at 88 gpd. In Goleta prior to the drought, water usage reached as high as 15,175 AFY, dropped to a low of 8,152 AFY in 1991 at the end of the drought, and has since rebounded to about 13,000 AFY. If the most efficient currently available technologies were installed, average residential use could be as low as about 65 gallons per capita per day (gpcd), 35 of which is used indoors.

Table 1: Water Use of Cachuma Contractors (year 2000)

<table>
<thead>
<tr>
<th>Population</th>
<th>Total Use (AFY)</th>
<th>Residential Use (GPCD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpinteria</td>
<td>17,900</td>
<td>4,672</td>
</tr>
<tr>
<td>Goleta</td>
<td>80,000</td>
<td>13,700</td>
</tr>
<tr>
<td>Montecito</td>
<td>17,278</td>
<td>5,338</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>96,628</td>
<td>14,881</td>
</tr>
<tr>
<td>Santa Ynez</td>
<td>8,920</td>
<td>5,152</td>
</tr>
<tr>
<td>Total</td>
<td>217,130</td>
<td>24,366</td>
</tr>
</tbody>
</table>

2 As one example, Santa Ynez only provides information on single-family accounts in its reports to the CUWCC, while the other agencies include detail on multi-family, CII agricultural, and some even have information on landscape accounts.
6 Total of all urban uses: residential, commercial, industrial, and institutional.
9 Montecito Water District Urban Water Management Plan.
11 Santa Ynez River Water Conservation District, Improvement District #1 Urban Water Conservation Plan.
Conservation Potential

We quantify conservation potential from only a subset of end uses of water based on current use and estimates of saturation of cost-effective water-efficient technologies. Actual conservation potential is likely to be higher than these estimates. We identified three primary end uses that, based on statewide and regional studies and programs, offer the greatest conservation potential from both a cost- and water-savings perspective: residential and commercial toilets, washing machines, and landscape irrigation. Table 3 summarizes our findings for these end uses. Replacing older inefficient residential and CII toilets with models meeting the current legal standard has the potential reduce current toilet use by 1,500 acre-feet per year. Replacing residential washing machines with more efficient models can save another 900 acre-feet per year. Even greater savings can be achieved by improving the efficiency of water use in landscapes – between 2,800 and 4,600 acre-feet savings can be achieved by better management of urban landscape irrigation. There are many ways in which an agency can promote such conservation, including incentives on conservation technology, education, regulation, rate setting, and information dissemination. We chose to examine ULF toilets, washing machines and landscape irrigation because these programs have already proven to save water, be cost-effective, and be acceptable to the customer. There are many other options, many current and emerging technologies, and various types of incentive programs that an agency can choose to invest in to reduce demand. As a result, these savings estimates should be considered the minimum achievable savings.

Table 2: Summary of Potential Savings by End Use (AF/Yr)

<table>
<thead>
<tr>
<th></th>
<th>Residential ULFT</th>
<th>Residential Washers</th>
<th>Landscape (a)</th>
<th>CII Toilets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpinteria</td>
<td>145</td>
<td>65</td>
<td>236-377</td>
<td>30</td>
</tr>
<tr>
<td>Goleta</td>
<td>449</td>
<td>309</td>
<td>852-1,363</td>
<td>122</td>
</tr>
<tr>
<td>Montecito</td>
<td>196</td>
<td>51</td>
<td>540-870</td>
<td>21</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>439</td>
<td>980-1,570</td>
<td>282</td>
<td></td>
</tr>
<tr>
<td>Santa Ynez</td>
<td>132</td>
<td>27</td>
<td>247-394</td>
<td>61</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>922</strong></td>
<td><strong>891</strong></td>
<td><strong>2,855-4,574</strong></td>
<td><strong>516</strong></td>
</tr>
</tbody>
</table>

(a) Including improvements in the management of water use in existing landscapes. No changes in turf area or area of water-efficient plants was included here, though these changes can greatly reduce overall water use in landscapes.

Residential Water Use

The residential sector is the largest urban water-use sector, and it offers the largest volume of potential savings compared with other urban sectors. This section describes specific indoor residential end uses and estimates the potential for improving efficiency of those uses with existing technologies.

Residential Toilets

Toilets use more water than any other indoor use, about 32 percent of current indoor residential water use. Replacing old models with 1.6 gallon per flush (gpf) ultra low-flow toilets (ULFT) yields significant savings. While many old inefficient toilets have already been replaced through rebate programs, natural retrofits, and new construction, substantial numbers of inefficient toilets are still in place.

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12 Prior to the late 1970s, all toilets typically used six gallons per flush (gpf). Effective January 1, 1978, California state law required that toilets not exceed a flush volume of 3.5 gallons. In 1992, the National Energy Policy Act reduced the maximum flushing volume of residential toilets sold in the United States to 1.6 gallons per flush, effective January 1994. Commercial toilets are now covered as well.

The assumptions we used to estimate potential savings come from two different sources. For SB and Goleta we used CUWCC information on savings per toilet because these were the only two agencies that had information on toilet stock and saturation of ULF models. The CUWCC assumption at 90% confidence is that replacing pre-1980 toilets with toilets that meet the current legal standard saves approximately 42.6 gallons per day. Replacing post-1980 toilets saves 34.1 gallons per day. For multi-family complexes, pre-1980 retrofits save 46.7 gallons/day and post-1980 toilets save 37.4 gallons/day. For the other three agencies we calculated use by population and calculated the distribution of toilets by flushing volume. Population was used as the standard measure, thus eliminating differences associated with toilet use in single-family and multi-family units. Three pieces of information were necessary to evaluate total savings:

- The proportion of the population living in new housing;
- The natural replacement rate for toilets; and
- The number of toilets actively retrofit by utility programs.

**The proportion of the population living in new housing**

Since all post-1980 housing requires lower flow toilets by law, the population living in new housing was assumed to be using the more efficient model toilets. Yearly housing estimates provided a figure for the number of new houses each year. All houses built after 1980 are assumed to have 3.5 gallon per flush (gpf) toilets and all homes built after January 1994 are assumed to have 1.6 gpf models. New housing construction estimates are multiplied by the average number of people per household, resulting in yearly estimates for the population living in new houses.

**The natural replacement rate for toilets**

The natural replacement rate refers to the replacement of equipment due to age and wear. The replacement rate used in our model was four percent per year as proposed by the ULFT subcommittee of the CUWCC (CUWCC 1992), equivalent to a 25-year life for toilets.

**The number of toilets actively retrofit by utility programs**

Carpinteria, Montecito, and Santa Ynez, unlike Goleta and Santa Barbara, have not had retrofit programs and therefore we assume that all retrofits in these districts have been due to natural replacement. The distribution of toilets was determined by calculating the number of 3.5 gpf and 1.6 gpf toilets that had been installed since 1980 accounting for all new homes and natural replacement. We estimated the total population using low-flow toilets in any given year (P_{nf}) using the following equation:

**Equation 1:** Number of people using low-flow toilets

\[ P_{nf} = \Sigma P_{nr} + \Sigma P_{nh} \]

Where

- \( P \) is the population for a given year;
- \( P_{nr} \) is the population using toilets that have already been retrofit as a result of the normal replacement cycle (see equation below);
- \( P_{nh} \) is the population in new housing.

For a given year, the number of people using toilets that have been replaced as a result of the normal toilet replacement cycle is calculated by applying the replacement rate to the population that had not had their toilets replaced by either active or passive programs, nor were they living in a newer home built with efficient model toilets.

**Equation 2:** Number of people using low-flow toilets installed due to natural replacement

\[ P_{nr \ (current \ year)} = (P - \Sigma P_{nr \ (previous \ year)} - \Sigma P_{nh}) \times TR \]

where TR is the natural turnover rate.

These calculations were done annually, providing a population distribution by flush volume. Multiplying the population in each category by flush volume and frequency of use generates total water use by year for
residential toilets. For the separate estimate of maximum practical savings, 1.6 gpf was used as the flush volume for the entire population. The REUW study found that ULFTs were flushed at a slightly higher frequency than non-ULFT toilets. The data show that ULFT toilets were flushed slightly more than five times per person per day, while residents of non-ULFT homes flushed about 4.9 times per day. Some recent data suggest that the latest ULFTs have the same flushing frequency as non-ULFTs, but we adopted the more conservative frequency estimates into the analysis. While newer, more efficient toilets are now coming on the market, such as dual-flush toilets that use a different volume of water for liquid and solid waste, or even no-water options, we have not calculated their potential for those agencies. We believe, however, that these new efficient toilets represent additional feasible water savings that could be captured if the need arises.

Our calculations assume that toilets have a life span of 25 years and therefore we conservatively estimate that only six gpf toilets are retrofit through agency programs and natural replacement. It does happen that some old toilets that would likely be replaced as part of the natural replacement cycle are replaced through agency programs. These are called free riders. This assumption has no effect on our estimates of potential savings from full implementation of ULFTs. It is, however, relevant to designing policies to capture cost-effective savings.

We estimate that if all the remaining inefficient residential toilets were replaced, current use in the five districts would be reduced by more than 900 acre-feet per year (AF/yr).

Results by agency

Goleta:
According to its 1997 report to the California Urban Water Conservation Council (CUWCC), the Goleta Water District has met the full requirements of BMP 14. GWD had the most complete information on toilet stock and saturation of ULFTs of the 5 agencies. GWD began requiring 3.5 gpf toilets 4 years before it became a state mandate and in 1985 it began a ULFT rebate program that ran until 1989, replacing 11,190 toilets with 1.6 gpf models. Our calculations show that there are, at most, about 10,000 toilets in the district that are not 1.6 gpf, out of a total stock of 50,000. Because the district started requiring 3.5 gpf models in 1974, most of the “old” stockflushes at this volume. We estimate that the 6 gpf models have approximately all been retrofit, 26% of the stock flushes at 3.5 gpf, and the remainder are ULFTs. These estimates were made assuming that no 6.0 gpf toilets were purchased in the district after 1980 and no 3.5 gpf models were purchased after 1986, in both cases preceding state regulations. Retrofitting all remaining inefficient toilets to ULFT models can save the district up to 450 AFY. 16


15 The CUWCC was created to increase efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. The Council’s goal is to integrate urban water conservation Best Management Practices (BMP) into the planning and management of California’s water resources. A Memorandum of Understanding was signed by urban water agencies and environmental groups in December, 1991; those signing the MOU pledge to develop and implement fourteen comprehensive conservation BMPs. BMP 14 addresses ULFT replacement. The requirements for BMP 14 are that savings from residential ULFT replacement programs be equal or exceed water savings achievable through an ordinance requiring the replacement high-water-using toilets with ultra-low-flow toilets upon resale, and taking effect on the date implementation of this BMP was to commence and lasting ten years (http://www.cuwcc.org/m_bmp14.lasso). For more information on the CUWCC and the BMPs see www.cuwcc.org

16 Our calculations were based on CUWCC savings assumptions and Attachment A of the 1997 CUWCC BMP report, which has information on the number of toilets in the service area. The mix of single-family and multi-family toilets was proportional to the mix of these housing units across the district.
Santa Barbara:
The City of Santa Barbara has also met the full requirements of BMP 14. The City of Santa Barbara had a ULFT replacement program that ran from 1988 to 1995. 18,842 residential toilets were replaced—50% of MF units and 34% of SF units—saving approximately 657 AFY. According to our calculations, there is probably only a negligible amount to be saved through accelerating replacement, as most models are currently ULFTs.

Carpinteria, Montecito and Santa Ynez:
None of these three agencies have had any active toilet retrofit programs. As a result, the only ULFTs in place are the result of new construction after the state and national standards were put in place, plus toilets replaced due to natural replacement during remodeling and individual efforts. As a result, the saturation results are the same for each of the districts. The distribution of toilets by flush volume is estimated as follows: 10% at 6gpf, 74% at 3.5 gpf and 16% at 1.6 gpf. Based on these data, Carpinteria, Montecito, and Santa Ynez can save about 145, 196, and 132 AF/yr respectively by replacing inefficient toilets.

Washing Machines
High-efficiency (HE) washing machines can save a typical household about 7,000 gallons of water a year, cutting per-capita indoor use by 6 to 9 percent. The vast majority of residential washing machines in the U.S. are top-loading machines that immerse the clothes in water and spin around a vertical axis. Horizontal-axis designs use a tumbling action where the washer tub is only partially filled with water, requiring far less water, energy, and detergent. Horizontal-axis washing machines, long popular in Europe where they have captured over 90 percent of the market, have only recently been introduced to the United States. HE machines did not begin to appear in significant numbers in the United States until the late 1990s, but are now increasingly available and popular. For example, in 1999, an estimated 10,000 rebates were issued for high-efficiency washers in California (based on reporting data from the CUWCC); in 2002 more than 24,000 rebates were awarded, and a total of 64,000 rebates have been awarded in the four years since 1999.

Rising pressure on water and energy resources nationwide has prompted detailed field and laboratory surveys evaluating savings from the use of more efficient washing machines. The High Efficiency Laundry Metering and Marketing Analysis project (THELMA) consisted of both a lab and field analysis of machines currently available on the market. Separately, the Department of Energy and the Oak Ridge National Laboratory conducted a five-month field study in Bern, Kansas involving 103 machines and over

19 Mayer et al. 1999
20 For typical usage, 80-90 percent of the energy use attributed to clothes is used to heat water. The partial filling of the tub means less total water is required, less hot water, and less water-heating energy (DOE 1990 in http://www.ci.seattle.wa.us/util/recons/papers/p_sh1.HTM).
20,000 loads of laundry. Both studies yielded similar results: water savings of about 15.7 gallons per load.\textsuperscript{23} Water savings from efficient machines are generally estimated to be between 40 and 50 percent.\textsuperscript{24} This potential has encouraged many utilities nationwide to offer incentives for purchase of efficient washing machines as part of their conservation programs.

Information on the penetration of washing machines and frequency of use came from the 1995 American Housing Survey,\textsuperscript{25} which found that 86 percent of households in the city of Santa Barbara have washing machines and we assumed this to be the same throughout the study area. We also assumed that 15 percent of new machines are HE and have a lifetime of 12 years, based on Energy Star estimates.\textsuperscript{26}

**Summary of Assumptions for Washing Machine Analysis:**
- Water savings from retrofit to HE models are 15.7 gallons per machine.
- The penetration of efficient washing machines prior to 1998 is negligible.
- Machine lifetime is 12 years.
- Fifteen percent of new machines now sold in the study area are HE.
- Frequency of use is 0.96 loads/household/day.\textsuperscript{27}
- The persistence of water savings from high-efficiency machines has not yet been analyzed. We assume the savings remain consistent through time.

**Results for washing machines:**
Using the assumptions above, we calculated the number of washing machines for each agency and the savings if all machines were to be replaced with average HE models. There have been no active retrofit programs in any of the agencies to date so we were calculated a standard saturation and turnover across the study area. Using these assumptions, we estimate that replacing inefficient residential washing machines can save nearly 900 AF/yr. We note that additional savings, not computed here, can be captured by replacing inefficient commercial washing machines as well (see discussion below).

**Table 3: Water Savings from Retrofit of Residential Washing Machines**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Potential Savings (AF/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpinteria</td>
<td>65</td>
</tr>
<tr>
<td>Goleta</td>
<td>309</td>
</tr>
<tr>
<td>Montecito</td>
<td>51</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>439</td>
</tr>
<tr>
<td>Santa Ynez</td>
<td>27</td>
</tr>
</tbody>
</table>

\textsuperscript{23} The two studies used a similar experimental design, the Bern study, however, examined only one efficient washing machine model while the THELMA study used three different H-axis models.


\textsuperscript{26} http://www.energystar.gov/index.cfm?c=clotheswash.pr_clothes_washers

\textsuperscript{27} We used an average of the following three studies: Kooomey, J.G., C. Dunham, and J.D. Lutz. 1995. "The effect of efficiency standards on water use and water heating energy use in the U.S.: A detailed end-use treatment." Energy-The International Journal. Vol. 20, no. 7. p. 627;

Landscape

Landscape water use in Santa Barbara County is estimated to account for about 59% of total residential use. SB County has a Mediterranean climate with generally warm, dry summers and cool, wet winters. Residential landscaped areas range from 2,000 square feet to three acres and over 50% of these lots have irrigation controllers. Properties in SB and Goleta have large landscaped areas averaging about 0.5 acres and use 37,400 to 224,400 gallons per month (0.1 to 0.7 AF per month) during the summer.

Outdoor residential water conservation and efficiency improvements have the potential to significantly reduce total water demand and improve supply reliability by reducing both average and peak demand. Savings will result from improved management practices, better application of available technology, and changes in landscape design away from water-intensive plants. In addition to the water-supply benefits, there are important water-quality benefits to proper landscape maintenance and irrigation. These include a reduction in energy and chemical use, mowings and other maintenance needs, and waste created. In fact, part of the impetus for the landscape irrigation studies in southern California has been due to the runoff and pollution problems associated with overwatering residential landscapes. Overwatering leads to contamination of local waterways with fertilizers, pesticides, and herbicides.

In 2001, both the City of Santa Barbara and Goleta Water District applied to Calfed's water-use efficiency program for funding for a distribution and installation program for the WeatherTrak ET controller. Savings estimates of 25% from the ET controllers were based on a pilot study conducted in Irvine, whose climate and landscape practices are comparable with those of the SB area. The Irvine study showed a 57 gpcd savings based on a 3,000 sq. ft. landscaped area. The proposal calculates the cost-benefit ratio of the controller program as 1:1.4.

ET controllers programs are attractive for agencies because they circumvent the "behavioral" issues associated with landscape maintenance, but there are a variety of other options for agency programs. A recent study (Gleick et al. 2003) estimated that landscape water-use reductions of 25 to 40 percent could be

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32 Efficient irrigation involves two things: proper design and proper landscape maintenance. Proper landscape maintenance requires that the homeowner be informed and diligent — difficult things for an agency to predict, control, or monitor. When an agency decides whether to invest in a retrofit program, they can reliably calculate savings from switching their existing stock to ULFTs and from that determine the costs and benefits of such a program. A similar evaluation of landscape programs is more difficult and is constrained by lack of data and consistency in homeowner behavior.
made with improved management practices and available technology, economically and relatively quickly, even without changes in landscape design and plant type. Many options are available for reducing residential landscape water use, including new technologies, better management approaches, and appropriate garden designs.32

Three of the agencies — Santa Barbara, Goleta, and Montecito — had information on water sales by month, which allowed us to use the “minimum month” method of estimating outdoor water use. This method assumes that the lowest use month represents indoor use. Use above that value is categorized as outdoor. The underlying, and conservative, assumption is that there is a month in which there is no landscape irrigation. Using this method, we found the percentage of outdoor use to be lower than the estimate from the REUW analysis. We combined all urban uses together in this calculation (we did not do separate calculations for residential and CII accounts) and to this outdoor water use value we applied a potential reduction range of 25 to 40 percent based on experience from regional case studies, audits, and technology assessments.34

For the City of Santa Barbara we averaged data on metered water sales by month for 2001 through 2003, and subtracted agricultural uses to get urban use by month. Our results indicate that about 3,900 AF per year are used for landscape irrigation, accounting for almost 50% of urban use in the warmest month. Savings potential in Santa Barbara ranges from 980 to 1,570 AF per year. Goleta had monthly data from 1997-2002 and we estimate that about 3,400 AF is used annually for landscape irrigation, yielding a savings potential of 850 to 1,360 AF per year. Montecito had monthly data from 1968 to 2003 and the highest percentage of outdoor use of the three, reaching 68% during the warmest months. We estimate Montecito’s landscapes use at about 2,160 AF/yr, which can potentially be reduced by 540 to 870 AF per year.

Carpinteria and Santa Ynez do not have accessible information on outdoor use, so estimates for these two districts were based on the information from the other three agencies. For Carpinteria we used the average urban water use for 1990, 1995 and 200035 (2,483 AFY) and applied this to the average outdoor use from Santa Barbara, Goleta, and Montecito (38%) to get an average annual outdoor water use of 944 AF. From this we estimate a potential savings of 236 of 377 AF per year from landscape improvements. We used the same procedure for Santa Ynez and found that outdoor uses account for just under 1000 AFY, yielding a potential savings of 247-394 AF per year.

Commercial, Industrial and Institutional (CII) Water Use

Conservation programs within the member agencies have targeted primarily residential water users and therefore the CII sector still offers considerable potential for water savings. As part of their ULI rebate programs, the City of SB and Goleta Water Districts offered rebates for CII toilets between 1988 and 1994. Santa Barbara replaced 2,995 toilets (14% of pre-1993 stock and Goleta has replaced about 690 units. There remain a large number of CII customers with potential for significant water savings, which we estimate at about 516 AFY.

CII Toilets

The CIIWCC has 1992 data on number of toilets by zip code broken down by sub sector, which we used to estimate the amount of water that could be saved from replacing CII toilets. To These 1992 numbers we calculated a 4% turnover rate per year to capture toilets naturally retrofit. For Santa Barbara and Goleta, the only agencies that have had active retrofit programs, we estimated the number of toilets retrofit by sector

32 For more information on the various landscape conservation options and estimates of costs and savings, see Gleick et al. 2003.
34 See Gleick et al. 2003
based on the assumption that the retrofits occurred proportionately. For example, 9 percent of Goleta’s CII toilets are in hotels and therefore we assumed that 9% of the 690 units replaced were also in hotels. For the actual savings estimates we used values from the county’s (with the City of Santa Barbara participating) CALFED funding application for CII rebate programs for ULFTs, waterless and ULF urinals, and high-efficiency commercial clothes washers. These estimates, found in Table 5, are based on information from MWD programs. Tables 6 and 7 show the results across the five agencies by CII subsector and by agency.

Table 4: Savings per ULFT Installation by Market Segment

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>Savings per installed ULFT (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I</td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>57</td>
</tr>
<tr>
<td>Food store</td>
<td>48</td>
</tr>
<tr>
<td>Restaurant</td>
<td>47</td>
</tr>
<tr>
<td>Category II</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>37</td>
</tr>
<tr>
<td>Automotive</td>
<td>36</td>
</tr>
<tr>
<td>Multiple Use</td>
<td>29</td>
</tr>
<tr>
<td>Religious</td>
<td>28</td>
</tr>
<tr>
<td>Category III</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>23</td>
</tr>
<tr>
<td>Health care</td>
<td>21</td>
</tr>
<tr>
<td>Office</td>
<td>20</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>17</td>
</tr>
<tr>
<td>Hotel/motel</td>
<td>16</td>
</tr>
<tr>
<td>School</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Urban Water Conservation Grant Application, CII ULFT Savings Study, CUWCC 2001

We used the following equation to estimate water savings from CII retrofits:

Equation 3:

\[ (T_s - (T_n + T_a)) \times S_s \]

where

\( T_s \) is the number of toilets by subsector;
\( T_n \) is the number of toilets naturally retrofit (4% per year);
\( T_a \) is the number of toilets actively retrofit, and
\( S_s \) is the savings per toilet by subsector in gallons per day.
Table 5: Member Agencies’ CII Toilet Numbers and Potential Water Savings by Subsector

<table>
<thead>
<tr>
<th>CII Subsector</th>
<th>Total Number of toilets (1992)</th>
<th>Number of toilets naturally retrofit (through 2002)</th>
<th>Number of toilets actively retrofit (through 2002)</th>
<th>Number of toilets remaining to be retrofit (2002)</th>
<th>Potential Savings (AF/Yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotels</td>
<td>7,357</td>
<td>2,943</td>
<td>726</td>
<td>3,688</td>
<td>65</td>
</tr>
<tr>
<td>Eating Establishments</td>
<td>1,105</td>
<td>442</td>
<td>118</td>
<td>545</td>
<td>28</td>
</tr>
<tr>
<td>Health Sector</td>
<td>3,413</td>
<td>1,365</td>
<td>414</td>
<td>1,634</td>
<td>38</td>
</tr>
<tr>
<td>Offices</td>
<td>9,341</td>
<td>3,736</td>
<td>1,077</td>
<td>4,528</td>
<td>100</td>
</tr>
<tr>
<td>Retail/ Wholesale</td>
<td>8,987</td>
<td>3,595</td>
<td>932</td>
<td>4,460</td>
<td>195</td>
</tr>
<tr>
<td>Other</td>
<td>2,504</td>
<td>1,002</td>
<td>229</td>
<td>1,274</td>
<td>24</td>
</tr>
<tr>
<td>Industrial</td>
<td>2,457</td>
<td>983</td>
<td>256</td>
<td>1,219</td>
<td>31</td>
</tr>
<tr>
<td>Churches</td>
<td>666</td>
<td>266</td>
<td>71</td>
<td>329</td>
<td>10</td>
</tr>
<tr>
<td>Government</td>
<td>944</td>
<td>378</td>
<td>100</td>
<td>466</td>
<td>13</td>
</tr>
<tr>
<td>Schools: K to 12</td>
<td>995</td>
<td>398</td>
<td>97</td>
<td>500</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>37,770</td>
<td>15,108</td>
<td>4,019</td>
<td>18,643</td>
<td>516</td>
</tr>
</tbody>
</table>

Table 6: CII ULFT Savings Potential by Agency and Subsector (AF/yr)

<table>
<thead>
<tr>
<th>CII Subsector</th>
<th>Goleta</th>
<th>Carpinteria</th>
<th>Santa Barbara</th>
<th>Montecito</th>
<th>Santa Ynez</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotels</td>
<td>7</td>
<td>2</td>
<td>38</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Eating</td>
<td>6</td>
<td>2</td>
<td>16</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Health</td>
<td>9</td>
<td>1</td>
<td>26</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Offices</td>
<td>26</td>
<td>6</td>
<td>60</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Retail/ Wholesale</td>
<td>40</td>
<td>11</td>
<td>108</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>2</td>
<td>11</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Industrial</td>
<td>18</td>
<td>4</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Churches</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Government</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Schools: K to 12</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td>30</td>
<td>282</td>
<td>21</td>
<td>61</td>
</tr>
</tbody>
</table>

Commercial Washers

None of the five agencies have information available on the penetration rate of commercial washers so we could not estimate the potential of replacing existing models with high-efficiency machines. Santa Barbara County requested a CALFED grant, effective 2003, to fund a CII washing machine rebate program. They plan to rebate about 176 washers and estimate an annual water savings of 156 AF at a cost of S215/AF and benefit: cost ratio of 1:1.47.
Cost-Effectiveness of Water Conservation

The previous sections identify the range of conservation and efficiency improvements that are achievable in the member agencies' urban sector using proven, publicly acceptable technologies and options. This section presents our assessment of the cost of those technologies and options. Since each water conservation measure is an alternative to a different source, or a new or expanded physical water supply, conservation measures are considered cost effective when their cost -- which we call "the cost of conserved water" -- is comparable to the cost of other water-supply options. There are a variety of ways of computing this cost. Readers should look at Gleick et al. (2003) for detailed discussion.

Table 7 shows member agencies' avoided cost of water from the different supply sources, which range from about $200 to $400 per acre-foot. The variable cost is the amount paid by the agencies for each acre-foot purchased. The difference between unit cost and variable cost is called "fixed costs," which is the amount paid by the agency regardless of whether they receive the water or not. For example, about three-quarters of the unit cost of water from the State Water Project are fixed and used to recover, among other things, the $600 million it cost to build the pipelines, pumping, and treatment plants importing SWP water to the county. Regardless of whether agencies take their entitlement, they are liable for these costs. Therefore, unless agencies are looking at major supply shortages in the future that require new projects to be built or expanded (which the Cachuma contractors are not), the avoided cost of water is the variable cost and the cost of conservation alternatives should be compared to this.

Table 7: Avoided Cost of Water ($/AF)

<table>
<thead>
<tr>
<th></th>
<th>Groundwater Purchased</th>
<th>Cachuma (Spill)</th>
<th>State Water (exchanged)</th>
<th>State Water (purchased)</th>
<th>Desalination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase</td>
<td>-</td>
<td>100.00</td>
<td>-</td>
<td>-</td>
<td>210.00</td>
</tr>
<tr>
<td>Treatment</td>
<td>4.89</td>
<td>188.43</td>
<td>188.43</td>
<td>188.43</td>
<td>188.43</td>
</tr>
<tr>
<td>Power</td>
<td>104.89</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operation &amp; Maintenance</td>
<td>13.41</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Capital Cost recovery</td>
<td>75.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Variable Cost</strong></td>
<td>198.20</td>
<td>288.43</td>
<td>188.43</td>
<td>288.43</td>
<td>398.43</td>
</tr>
<tr>
<td><strong>Unit Cost of Water</strong></td>
<td>91.5</td>
<td>412</td>
<td>1,745</td>
<td>1,500</td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows the unit cost of water for various conservation alternatives as presented in a proposal submitted by the County to CALFED and DWR for CII ULFT/washing machine and landscape conservation programs. We have also calculated in a separate analysis the costs for residential ULFTs and washing machines as $50 and $74 per acre-foot, respectively. According to our calculations, as well as

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26 For an explanation of how this analysis was developed, the assumptions and the results, see Gleick et al. 2003.
27 Cost that could be avoided if the agency used a different source of supply.
30 Gleick et al. 2003
31 We include reasonably quantifiable and financially tangible "co-benefits" of water conservation as "negative costs" (i.e., as economic benefits). A negative value for cost of conserved water means that water could be free and customers would still save money by implementing the conservation option. This happens when non-water benefits, or "co-benefits" are sufficient by themselves to pay for the water conservation investment. Co-benefits are benefits that automatically come along with the intended objective. For example, high efficiency washing machines reduce water-heating bills and sewage costs, and improved irrigation scheduling reduces fertilizer use. We have not evaluated all co-benefits, only those
those of the County, all conservation alternatives are at least comparable to member agencies’ other sources of supply (even though the County estimates do not include co-benefits). The one exception is commercial clothes washers, which according to our analysis, has a cost of about $325/AF. The discrepancy between the two results can be explained, at least in part, by the fact that our analysis internalizes energy and wastewater savings. Thus, the estimates in Table 8 are, we believe, highly conservative — in fact, the cost of conserved water is likely to be substantially below these numbers. Yet even these estimates show that the conservation potential we identify is cost effective.

Table 8: Cost of Conservation Alternatives

<table>
<thead>
<tr>
<th></th>
<th>Average Cost to Purchase Product</th>
<th>Average Lifetime Savings (AF)</th>
<th>Administrative and Marketing Cost</th>
<th>Cost of Conserved Water ($/AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET Controller</td>
<td>$200</td>
<td>9.312</td>
<td>$362</td>
<td>$60</td>
</tr>
<tr>
<td>Category 1 Tank</td>
<td>$100</td>
<td>1.223</td>
<td>$28</td>
<td>$105</td>
</tr>
<tr>
<td>Type ULFT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 Flushometer ULFT</td>
<td>$200</td>
<td>1.223</td>
<td>$28</td>
<td>$186</td>
</tr>
<tr>
<td>Categories 2&amp;3 ULFT</td>
<td>$150</td>
<td>.654</td>
<td>$28</td>
<td>$272</td>
</tr>
<tr>
<td>Waterless Urinals</td>
<td>$450</td>
<td>1.646</td>
<td>$28</td>
<td>$290</td>
</tr>
<tr>
<td>Commercial Clothes Washer</td>
<td>$1000</td>
<td>.543</td>
<td>$28</td>
<td>$1,893</td>
</tr>
</tbody>
</table>

These are costs to the water agencies. Costs to consumers are likely to be different, and often lower. And these costs do not include co-benefits such as energy savings, which are especially important for clothes washers.

Supply and Demand Assumptions in the EIR

For all agencies, water supplies are expected to be adequate through 2020 and beyond in all but a worst-case scenario critical drought year. Member agencies’ demand and supply from all sources is presented in Table 9.

that could be quantified in a reasonably objective fashion. Even so, our results are much more favorable for water conservation than less complete assessments that exclude such co-benefits. Including co-benefits dramatically affects the results we achieve; helping to explain why conservation is more economically desirable than some previous analyses have suggested.


43 Almy, R. Santa Barbara County CII Rebate Program. Proposal to CALFED.
Table 9: Water Supply and Demand Conditions for Cachuma Project Member Units\(^{44}\)

<table>
<thead>
<tr>
<th>Supply</th>
<th>Carpinteria</th>
<th>Goleta</th>
<th>Montecito</th>
<th>Santa Barbara</th>
<th>Santa Ynez</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cachuma Project (%(^{45}))</td>
<td>2,813 (22%)</td>
<td>9,321 (58%)</td>
<td>2,660 (34%)</td>
<td>8,277 (45%)</td>
<td>2,651 (22%)</td>
<td>25,722</td>
</tr>
<tr>
<td>State Water Project</td>
<td>1,000(^{46})</td>
<td>3,800-7,000(^{47})</td>
<td>2,208(^{48})</td>
<td>2,566(^{49})</td>
<td>1,000(^{50})</td>
<td>10,574-13,774</td>
</tr>
<tr>
<td>Groundwater</td>
<td>3,000</td>
<td>2,350</td>
<td>400</td>
<td>1,400</td>
<td>4,700</td>
<td>11,850</td>
</tr>
<tr>
<td>Reclaimed</td>
<td></td>
<td></td>
<td>1,500</td>
<td></td>
<td></td>
<td>1,500</td>
</tr>
<tr>
<td>Desalination</td>
<td></td>
<td></td>
<td></td>
<td>3,125</td>
<td></td>
<td>3,125</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,600(^{51})</td>
</tr>
<tr>
<td>Total Supply</td>
<td>6,813</td>
<td>16,971-20,171</td>
<td>7,715</td>
<td>18,306(^{52})</td>
<td>11,951</td>
<td>61,756-64,956</td>
</tr>
</tbody>
</table>

Demand (average)

| Current (2000) | 4,672 | 14,000 | 6,073 | 15,140 | 5,300 | 45,185 |
| Build Out (2020) | 5,423 | 16,000 | 6,835 | 15,570-17,760 | 9,050 | 52,878-55,068 |
| Difference (supply-demand) | 2,141-1,390 | 2,971-4,171 | 1,642-880 | 3,166-1,640 | 6,651-2,901 | 16,571-10,982 |

There are two major questionable assumptions in the supply and demand section of the EIR. The first is the demand assumptions and projections for the member agencies. The EIR indicates that mitigation alternatives are capable of meeting 2020, critical dry year demand (alternatives 2 and 4A-B). This projected critical dry year demand is based on current demand levels, which from the previous sections, we know can, and probably will be reduced due to continued investment in conservation programs as well as naturally occurring conservation from mandated efficiency. Shortage (in all alternatives) occurs only when the projections show increase in per capita demand in 2020. Agencies’ demand projections do not appear on the current investment in conservation measures that would reduce demand. In fact, projected per-capita residential demand actually rises for four of the five agencies (demand declines slightly for Santa Ynez, which, at over 200 AFY, would still be more than twice that of Santa Barbara or Goleta). Table 10 shows how forecasted demand is increasing at a faster rate than population. While demand is projected to increase by about 23% between 2000 and 2020, population is projected to increase by only 15%. Per capita demand should be decreasing, rather than increasing, as conservation technologies continue to penetrate the market. Efficient toilets will replace older models, washing machines will continue to capture an increasing


\(^{45}\) Member agencies’ annual deliveries from the Cachuma Project are calculated as a percentage of the total supply provided.

\(^{46}\) Entitlement is 2,000 AFY (50% average annual delivery) plus 200 AFY of drought buffer.

\(^{47}\) GWD assumes 51-60% average annual delivery of entitlement (7,000 AFY) and drought buffer (450 AFY). Current diversion is limited to 4,500 AFY due to pumping capacity.

\(^{48}\) MWD assumes 76% average annual delivery of entitlement of 3,000 AFY plus 300 AFY drought buffer.

\(^{49}\) City assumes 76% average annual delivery of entitlement (3,000 AFY) plus 39% AFY of CCWA drought buffer.

\(^{50}\) Entitlement is 2,000 AFY plus 50 AFY drought buffer.

\(^{51}\) Santa Ynez River underflow. Maximum permitted amount is 6,115 AF.

\(^{52}\) Does not include desalination, which is considered only an emergency supply.
share of the market and a host of other practices and technologies that use water more efficiently will continue to be adopted. While agencies such as Goleta and Santa Barbara have been fairly progressive in promoting conservation, others such as Santa Ynez and Montecito have made little to no investment in conservation and therefore their projections must be put to question.

Table 10: Past, Current, and Projected Water Use and Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water demand</td>
<td>23,705</td>
<td>35,337</td>
<td>40,481</td>
<td>39,820</td>
<td>44,496</td>
<td>46,562</td>
<td>48,698</td>
</tr>
<tr>
<td>(AFY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential use (AFY)</td>
<td>12,741</td>
<td>20,779</td>
<td>24,366</td>
<td>25,811</td>
<td>27,336</td>
<td>28,912</td>
<td>30,557</td>
</tr>
<tr>
<td>Total excluding</td>
<td>17,397</td>
<td>28,263</td>
<td>32,058</td>
<td>33,885</td>
<td>35,725</td>
<td>37,602</td>
<td>39,542</td>
</tr>
<tr>
<td>agriculture (AFY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Change in urban</td>
<td>-51.3%</td>
<td>-20.9%</td>
<td>0.8%</td>
<td>5.7%</td>
<td>11.4%</td>
<td>17.3%</td>
<td>23.3%</td>
</tr>
<tr>
<td>demand from 2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>221,476</td>
<td>230,428</td>
<td>238,849</td>
<td>246,880</td>
<td>255,409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Per capita.</td>
<td>171</td>
<td>172</td>
<td>173</td>
<td>175</td>
<td>176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(gpcd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Per capita</td>
<td>98</td>
<td>100</td>
<td>102</td>
<td>105</td>
<td>107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(gpcd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>0%</td>
<td>4%</td>
<td>8%</td>
<td>11%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>from 2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The other problem with this section of the EIR is the focus on the 1951 critical dry year as a basis for decision-making. Using 1951 to represent a critical drought year, the EIR examines the potential shortages experienced by the member agencies. Member units' have sufficient supply to meet demand in all years out of the 1918-1993 period analyzed except for 1951, including during a three-year drought period. During this kind of critical drought year, emergency measures are implemented. There are a number of alternatives that could and should be considered in order to meet critical drought year shortages but using this scenario to drive the planning process is not reasonable.

53 AB 1551, which is awaiting final approval, requires all newly manufactured home washers in California not to exceed a water factor of 9.5. The new standards would save about a typical family about 7,000 to 9,000 gallons per year.

54 From agency Urban Water Management Plans.
Conclusions

According to our analysis, serious efforts to implement cost-effective conservation and efficiency programs will give the Cachuma member agencies ample flexibility to mitigate the impacts of the scenarios proposed in the EIR to maintain the endangered steelhead populations on the Santa Ynez River. In addition, impacts to water supplies caused by alternatives that involve greater releases of water than proposed in the EIR can also be mitigated. We estimate between about 5,000 and 7,000 AFY of water can be cost-effectively conserved by programs to implement the conservation measures described in this report. Demand can be reduced so that the impacts of a critical dry year are considerably less severe.

More importantly, the EIR's analysis of water supply and demand is inadequate. A thorough assessment of the proposed alternatives' impacts should include not only various supply scenarios, which it does, but a section of demand scenarios as well. The EIR presents supply and demand conditions based on current demand and the projected member units' demand increases. Missing are demand projections with different, and we believe, realistic levels of conservation. As a result, the scenarios are limited to the single projection of agencies, some of who have shown little interest in conservation. Finally, the decision-making in the EIR seems to revolve heavily around the catastrophic critical dry year scenario that, in reality, would call for a variety of drought emergency measures and is not typically used as the basis for long-term planning.

For more information, contact:
Dana Haasz or Peter Gleick
Pacific Institute
510 251-1600 phone
15. SOLID WASTE THRESHOLDS

I. BACKGROUND

Santa Barbara County generates in excess of 2,000 tons of solid waste per day. This waste stream contains valuable resources such as glass, paper, metals and plastics which can be recycled, reducing environmental impacts associated with the production of new materials, and extending the life expectancy of rapidly diminishing landfill space. In addition, environmentally acceptable landfill replacement sites are scarce, politically sensitive, and expensive to bring into operation.

Currently, most of the county waste stream is buried on a daily basis in seven landfills located around the county. Estimates of the current life expectancy for six of the seven County landfills range from less than 1 to 39 years (Table 1).

A countywide average of 48.6% of the total solid waste stream is generated by residential users, while 51.4% is generated by commercial/industrial related development (Table 2). Reduction of this waste stream through source reduction practices and recycling efforts must be considered when evaluating solid waste impacts from new projects in the County. In addition, emphasis needs to be placed on encouraging the use of recycled products containing high percentages of post-consumer waste. The following is a discussion of the policies, statistics relating to solid waste generation and landfill space, and solid waste significance thresholds for projects in Santa Barbara County, as established by P&D and Public Works Solid Waste Division.

II. POLICIES

The justification for requiring recycling programs for new projects is based on the environmental impacts associated with landfill operation, expansion, relocation, and closure, as well as impacts associated with production of raw materials. The California Integrated Waste Management Act of 1989 requires city and county governments to be responsible for planning and overseeing solid waste management and recycling activities. This legislation requires each city and county to develop a Source Reduction and Recycling Element (SRRE) that provides strategies for diverting 25% of all solid waste from landfills by 1995 and 50% by 2000. These reductions are to be reached, in order of priority, by source reduction, recycling and composting, and environmental transformation (incineration, pyrolysis, or biological conversion), with land disposal as a final option. Santa Barbara County Board of Supervisors adopted the County's SRRE in February 1992. In order to meet the SRRE goals and objectives stringent thresholds and mitigation to reduce solid waste generation for new development projects will be required. Other source reduction and recycling measures would be instituted on Statewide or County basis through various mechanisms as indicated in the SRRE (i.e. variable can rates.)

In addition, Land Use Development Policy 4 of the County Comprehensive Plan, requires a finding that there are adequate public services (in this case landfill capacity) to serve new development. This Policy can also serve as justification for requiring waste reduction mitigation as conditions of project approvals.
III. WASTE STREAM CHARACTERISTICS

Of the total amount of solid waste disposed of in county landfills per year (594,045 tons), approximately 49.7% is comprised of recyclable glass, paper, metals, and plastics. An additional 195,000 tons per year (32.9%) of yard waste (grass clipping, tree trimmings, etc.), food, and wood wastes can potentially be composted and/or chipped (Table 3). Thus over 80% of the solid waste stream is comprised of recyclable and compostable material. County and private sector efforts to compost yard, food, and wood waste may be implemented on a countywide basis, and if successful, could significantly reduce the total waste stream. With an effective solid waste management program (as discussed in section VI), the solid waste stream of new development projects can be reduced by over 50%, nearly doubling the life expectancy of County landfills and reducing environmental impacts associated with landfill operations and replacement, and resource recovery.

IV. THRESHOLDS OF SIGNIFICANCE

Project Specific:

The following thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The goals outlined in the SRRE assume a 1.2% annual increase, which equates to approximately 4,000 tons per year increase in solid waste generation over the 15 year period. A project is considered to result in significant impacts to landfill capacity if it would generate 5% or more of the expected average annual increase in waste generation thereby using a significant portion of the remaining landfill capacity. Based on the analysis conducted (as illustrated in table 5), the numerical value associated with this 5% increase is 196 tons per year. As indicated above, source reduction, recycling, and composting can reduce a project’s waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable (Class 1). Project approval would then require adoption of overriding considerations. A typical single family residential project of 68 units or less would not trigger the threshold of significance.

Cumulative Thresholds:

Projects with a project specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the estimated increase accounted for in the SRRE would be considered an adverse contribution (class III) to regional cumulative solid waste impacts. One percent of the SRRE projected increase in solid waste equates to 40.0 tons per year. To reduce adverse cumulative impacts and to be consistent with the SRRE, mitigation (as discussed in section VI) should be recommended for projects which generate between 40 and 195 tons of solid waste. Projects which generate less than 40.0 tons per year of solid waste would not be considered to have an adverse effect due to the small amount of waste generated by these projects and the existing waste reduction provisions in the SRRE. A typical single family residential project of 14 units or less would not trigger this adverse impacts level.
increased truck traffic), increased flood hazard; increased runoff from an increase in impervious surfaces due to new parking lots; increased risk of localized flood hazards due to placement of new creek crossing structures; and increased pollutant load to creeks and the ocean resulting from increased equestrian and dog use of the area.

Project water resource impacts would be identified as significant if they degrade surface or groundwater quality in violation of the Central Coast RWQCB Basin Plan objectives or water quality regulations, and result in substantial degradation of water quality conditions that could affect beneficial uses of receiving waters.

The County of Santa Barbara (1996, 2002a, 2003c,d,f) provides storm water and non-storm water quality measures whereby the proposed project is required to demonstrate that it would have a less than significant impact on hydrology and surface water quality. Because the project is a new development project, it is required to incorporate and implement design, construction, and post-construction (occupancy) Best Management Practices (BMPs) to protect sensitive riparian or wetland resources, reduce the quantity of runoff, and treat runoff generated by the project to pre-project levels.

4.3.3.2 Project Impacts

4.3.3.2.1 Ocean Meadows Residences.

Flooding Impacts.

Impact Flood-I: Exposure of Site to Flood Hazards. Based on a review of the floodplain maps described above and shown on Figure 4.3-2, and review of the preliminary site layout and grading plan, certain portions of the project would encroach into the 100-year floodplain of Devereux Creek. The degree of encroachment depends on which source for floodplain limits is used. If the FIRM limits are used, approximately 1 acre, or 15% of the southern development sub-unit and none of the northern sub-unit would encroach into the floodplain. If the 2001 study by Schaaf and Wheeler is used, approximately 1.2 acres, or 20% of the southern sub-unit and 1.9 acres, or 100% of the northern sub-unit, would encroach into the floodplain. A Letter of Map Amendment (LOMA) or Letter of Map Revisions Review (LOMR) to amend or revise the FIRM map in this area has not been finalized (Parker, 2003). Since the time that the Schaaf and Wheeler analysis was completed, County Flood Control has made drainage improvements to lower Phelps Ditch and the main stem of Devereux Creek between the Slough and Phelps Ditch (County of Santa Barbara, 2002c; SAJC, 2002). These improvements have lowered the flooding hazard to portions of the University Village subdivision (K. Treiberg, 2004), but the effects of these improvements on floodwater elevations elsewhere in the floodplain have not been analyzed.

The County's Floodplain Management Ordinance requires that new construction shall have the lowest floor, including basement, elevated two feet above the Base Flood Elevation (BFE), unless such minimum elevation is lowered by the Floodplain Administrator at his discretion (but
not below the BFE). The BFE, as prepared by Schaaf and Wheeler (2001) and updated by Penfield and Smith (2003) is regarded as the best available information by County Flood Control staff for flood control planning purposes related to this project (D. Weber, 2004). These studies indicate a BFE of approximately 14 feet in the southern development area.

Therefore finish floor elevations would need to be at least 16 feet above mean sea level. The applicant proposes to construct homes with finish floor elevations ranging from 17.4 to 19.0 feet in the southern development area, therefore finish floor elevations would exceed the minimum finish floor elevation requirement, consistent with the County’s Floodplain Management Ordinance. To achieve the proposed finish floor elevations throughout the site, a 5 to 7-foot high retaining wall is proposed along the north and west facing portions of the development.

In the northern development area, the best available information, as prepared by Schaaf and Wheeler (2001) and updated by Penfield and Smith (2003) indicates an BFE of approximately 14 feet (D. Weber, 2004). Proposed finish floor elevations would be 15.0 feet at the non-habitable club house and cart barn, and 16.5 feet at the condominium site. These structures would be reviewed by County Flood Control to verify that finish floor elevations are at least two feet above the 100-year BFE, consistent with the County’s Floodplain Management Ordinance, unless otherwise approved by the Flood Control District.

Calculations provided in the applicant’s Preliminary detention basin analysis (Penfield and Smith, 2004) and summarized below indicate that the change in impervious surface from the project would result in post-development flows exceeding pre-development flows during 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year flood events over the 7.9 acres within the combined northern and southern development sites. The applicant proposes to construct two detention basins in the 6.0-acre southern development area. The southwestern and eastern detention basins would receive flows from 3.7 acres and 2.3 acres, respectively. These detention basins are sized for 100-year flood events, and are designed to provide retardation of the 2-year through the 100-year events. As summarized in the tables below, the peak post-development flows out of the combined detention basins in the 6.0-acre southern development area would be less than the pre-development flows from the entire 7.9 acre site during each of these flood events. The following calculations are provided in the Preliminary Detention Basin Analysis:

**Requirements for complete 7.9 acre site improvements (Entire Site)**

<table>
<thead>
<tr>
<th>Year Event</th>
<th>Detention Requirements for Site</th>
<th>Post-Development Flow</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Pre-Development Flow</td>
<td>4.5</td>
<td>1.2 cfs</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>7.4</td>
<td>1.1 cfs</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>9.7</td>
<td>1.1 cfs</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>12.1</td>
<td>1.0 cfs</td>
</tr>
<tr>
<td>50</td>
<td></td>
<td>14.1</td>
<td>0.9 cfs</td>
</tr>
<tr>
<td>100</td>
<td></td>
<td>16.0</td>
<td>0.9 cfs</td>
</tr>
</tbody>
</table>
Area of 3.7 acres contributing to detention basin (Southwestern Basin)

<table>
<thead>
<tr>
<th>Year Event</th>
<th>Peak Flow into Basin</th>
<th>Peak Flow out of Basin</th>
<th>Flow Detained</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2.7</td>
<td>1.4</td>
<td>1.3 cfs</td>
</tr>
<tr>
<td>5</td>
<td>4.0</td>
<td>1.9</td>
<td>2.1 cfs</td>
</tr>
<tr>
<td>10</td>
<td>5.0</td>
<td>2.4</td>
<td>2.6 cfs</td>
</tr>
<tr>
<td>25</td>
<td>6.1</td>
<td>2.9</td>
<td>3.2 cfs</td>
</tr>
<tr>
<td>50</td>
<td>7.0</td>
<td>3.4</td>
<td>3.6 cfs</td>
</tr>
<tr>
<td>100</td>
<td>7.9</td>
<td>5.9</td>
<td>2.0 cfs</td>
</tr>
</tbody>
</table>

Area of 2.3 acres contributing to detention basin (Eastern Basin)

<table>
<thead>
<tr>
<th>Year Event</th>
<th>Peak Flow into Basin</th>
<th>Peak Flow out of Basin</th>
<th>Flow Detained</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1.7</td>
<td>1.6</td>
<td>0.1 cfs</td>
</tr>
<tr>
<td>5</td>
<td>2.5</td>
<td>2.3</td>
<td>0.2 cfs</td>
</tr>
<tr>
<td>10</td>
<td>3.1</td>
<td>3.0</td>
<td>0.1 cfs</td>
</tr>
<tr>
<td>25</td>
<td>3.8</td>
<td>3.6</td>
<td>0.2 cfs</td>
</tr>
<tr>
<td>50</td>
<td>4.4</td>
<td>4.0</td>
<td>0.4 cfs</td>
</tr>
<tr>
<td>100</td>
<td>4.9</td>
<td>4.3</td>
<td>0.7 cfs</td>
</tr>
</tbody>
</table>

No site-specific hydrologic calculations were provided for the northern development site. The applicant would be required to have final grading and drainage plans reviewed and approved by County Flood Control to ensure compliance with Flood Control standards. Pending review of final design plans for conformance with Flood Control standards, flood hazards within the development sites are considered significant, but feasibly mitigated (Class II).

**Impact Flood-2: Obstruction of Floodplain.** The proposed Ocean Meadows Residences development would cover approximately 7.9 acres. As described above, portions of the development site are within the boundaries of the 100-year floodplain. The applicant proposes to raise the floor elevations of the final development above the 100-year BFE zone and surround the northern and western portions of the southern development area with a retaining wall. These design features would likely alleviate potential flooding of the development site, but development within the existing floodplain could displace floodwaters, and that displacement could result in re-direction, acceleration, or elevation of floodplain waters elsewhere in the floodplain, particularly in portions of the University Village subdivision, which has experienced extensive inundation during flood events.

The applicant proposes to construct two storm water detention basins, located at the southern and northern ends of the proposed southern sub-unit of the development. As described above,
calculations presented in Penfield and Smith (2004) indicate that after development of the site, these detention basins will reduce peak outflow from the site to less than existing (pre-development) levels. However, these basins are designed to handle surface flows originating on-site, not storm flows conveyed through the floodplain, so they would not contribute to alleviating this impact.

Drainage improvements to the lower reach of Phelps Ditch and the main stem of Devereux Creek between Phelps Ditch and the Slough were made by the County Flood Control District in 2002 and 2003 to alleviate flooding in the University Village subdivision (County of Santa Barbara, 2002c; SAIC, 2002). Ongoing maintenance is underway to maintain flood flows in this area. However, the ability of Devereux Creek to convey floodwaters to Devereux Slough is primarily restricted by the road crossing and undersized culverts that separate Devereux Creek from Devereux Slough (K. Treiberg, 2004).

As noted above, the Schäaf and Wheeler (2001) study as updated by Penfield and Smith (2003) provides the best available information for flood control planning purposes, and is more conservative than the Effective (or Regulatory) FEMA Map Data, as defined by FEMA (D. Weber, 2004). The Schäaf and Wheeler study identified the Devereux Creek Floodway. The studied Floodway is not a regulatory floodway at this time. The project would not encroach into the studied Floodway, however portions of the project would encroach into the floodplain. Development in the floodplain is acceptable as long as there are no flooding impacts resulting from the floodplain encroachment, such as re-direction, acceleration, or elevation of flood waters. Given the existing flood problems elsewhere in the lower Devereux Creek floodplain, further analysis of the magnitude of the project's potential impacts to offsite land uses is warranted, and additional project flood control design features may be required based on that analysis. The applicant would be required to obtain review and approval of grading and drainage plans from County Flood Control to ensure compliance with Flood Control standards. In addition, due to the site's location in a floodplain that has existing flood problems, the applicant would need to prepare a drainage study that provides an analysis of the amount of flood displacement due to encroachment into the floodplain, and assesses potential impacts to other land uses in the floodplain. Pending review of final grading and drainage plans, and the floodplain encroachment analysis, potential impacts related to floodplain encroachment are considered significant but feasibly mitigated (Class II).

Impact Flood-3: Increased Surface Runoff. The proposed residential development will substantially reduce the ability of the site to absorb surface water runoff, thereby potentially increasing flooding potential in the Devereux Creek floodplain. The development would reduce the ground surface area capable of absorbing rainfall and therefore potentially increase both peak flows and net increases in storm water runoff across the site.

The proposed 6.0-acre southern development area comprises the residential area. Drainage from this area would flow into two proposed detention basins located at the eastern and southwestern ends of this development area. The eastern detention basin would control flows from 2.3 acres of new development and would discharge stormwater to the unnamed tributary of Devereux.
development structural footprint would be essentially the same as the pre-development footprint. However, the proposed structures would continue to be located within the 100-year floodplain, and construction of a berm could result in further displacement of the floodplain. The applicant would be required to have final grading and drainage plans, and a floodplain encroachment analysis, reviewed and approved by County Flood Control to ensure compliance with Flood Control standards. Pending further design information on the golf course improvements concerning imperviousness, quantity of surface runoff, and floodplain encroachment, potential flooding impacts due to floodplain encroachment are considered significant, but feasibly mitigated (Class II).

**Water Quality Impacts.**

**Impact WQ-4: Pollutants.** The Ocean Meadows Golf Course property is proposed to be rezoned to Recreation. Proposed physical improvements to the existing golf facilities include reconfiguration of the golf course parking lot, relocation and remodeling of the clubhouse and golf cart barn, to be located in the same general locations as the existing structures and site improvements. Drainage from the reconfigured golf course parking lot and clubhouse area would primarily flow to a detention area in the southern portion of the golf course parking lot, and then to a bioswale along the southern edge of the development site that measures three (3) feet wide and eight (8) inches deep. Surface runoff from the bioswale would flow overload to Devereux Creek. No adverse water quality impacts are anticipated as a result of the proposed rezoning of the Ocean Meadows Golf Course. However, the proposed physical improvements to the golf course could result in increased pollutant loading in surface runoff to Devereux Creek and Slough. The applicant would be required to comply with County Public Works Department Standard Conditions for Project Approval – Water Quality BMPs. Pending further design information on the northern development area concerning changes to impervious surfaces, and the ability of detention area and bioswale to effectively process site runoff, potential impacts to surface water quality due to pollutants in surface runoff from the project are considered significant, but feasibly mitigated (Class II).

**Impact WQ-5: Erosion and Sedimentation.** Proposed physical improvements to the existing Ocean Meadows Golf Course facilities include reconfiguration of the golf course parking lot, and relocation and remodeling of the clubhouse and golf cart barn. The proposed improvements would be located in approximately the same location and would use approximately the same land area as the existing parking and clubhouse area. The proposed cart barn would be relocated further away from Devereux Creek than its present location. The proposed physical improvements to the golf course could result in increased erosion and sedimentation impacts to Devereux Creek and Slough. Drainage from the reconfigured golf course parking lot and clubhouse area would primarily flow to a detention in the southern portion of the golf course parking lot, and then to a bioswale, measuring three (3) feet wide and eight (8) deep. Surface runoff from the bioswale would flow overland to Devereux Creek.

The applicant would be required to comply with County Public Works Department Standard Conditions for Project Approval – Water Quality BMPs. Pending further design information on
Section 4.3

the northern development area concerning changes to impervious surfaces, and the ability of detention area and bioswale to effectively process site runoff, potential impacts to surface water quality due to erosion and sedimentation in surface runoff from the project are considered significant, but feasibly mitigated (Class II).

4.3.3.2.3 Del Sol and Camino Corto Reserves. Ongoing trail maintenance and habitat restoration within the Del Sol Vernal Pool Reserve and Camino Corto Reserve would continue to be managed by the Isla Vista Recreation and Park District.

Flooding Impacts.

Impact Flood-6: Flood Obstruction. The Del Sol and Camino Corto Reserves are not located within a designated flood hazard area. Potential site improvements in the Del Sol and Camino Corto Reserves, such as repairs to a footbridge and trail widening, would not result in flooding impacts, provided that any structural repairs in the riparian corridor are properly designed so as not to create flood obstructions in the drainage. Potential flood obstruction impacts are considered significant, but feasibly mitigated (Class II).

Water Quality Impacts.

Impact WQ-6: Pollutants. Pollutants from vehicles and construction in the Del Sol and Camino Corto Reserves could be carried in surface runoff into Devereux Slough, thereby degrading the quality of slough and ocean waters near the outlet. Trail improvements would be required to comply with standard water quality BMPs for construction activities. Water quality impacts to slough and ocean waters from construction and ongoing maintenance of the Reserves is considered significant, but feasibly mitigated (Class II).

Impact WQ-7: Erosion and Sedimentation. Potential site improvements in the Del Sol and Camino Corto Reserves, such as repairs to a footbridge near the North Slough Finger, and minor trail improvements within these sites, could result in short-term erosion and sedimentation impacts to the North Slough Finger riparian corridor. Trail improvements would be required to comply with standard water quality BMPs for construction activities. These impacts are considered significant, but feasibly mitigated (Class II).

4.3.3.2.4 Isla Vista and Devereux School Sites. No specific Open Space Plan site improvements are proposed at these sites, therefore hydrology or water quality impacts are not anticipated.

4.3.3 Cumulative Impacts

The cumulative hydrologic and water quality setting includes existing and pending land uses within the South Coast Hydrologic Unit, which generally includes areas south of the Santa Ynez Mountains between Carpinteria and Point Arguello, and includes lands that affect water quality and hydrologic function throughout the Devereux Creek watershed. Cumulative hydrology and water quality impacts, similar to direct impacts, result from increased impervious surface runoff,
accelerated erosion, and pollutant loading generally associated with urban and agricultural development. As discussed in the project setting, the Devereux Creek watershed is typical of coastal watersheds in the urban boundary of the South Coast in that limited data suggest various long-term water quality problems that can be linked to development. Given the generally degraded state of this coastal watershed, the Ocean Meadows Residences development and the Ellwood Mesa Open Space Plan have the potential to contribute to cumulative water quality impacts if the project, when considered in combination with existing and pending land uses, significantly contributes to the degradation of water quality or hydrologic function. Direct impacts from the residential project are not anticipated provided the impacts discussed previously are addressed through proper design and mitigation. The potential exists for the projects to cumulatively contribute to water quality degradation in the lower reaches of the watershed due to residential development and greater intensity of public use of the open space. Potential cumulative impacts associated with the project are discussed in more detail below.

**Impact Flood-7: Flood Hazard – Floodplain Encroachment.** The project, as designed, will encroach into the mapped 100-year floodplain, which could increase flood hazard elsewhere in the floodplain. As discussed in Impact Flood-2, the project would not encroach into the Floodway, however portions of the project would encroach into the floodplain, and the magnitude of potential offsite impacts from this encroachment are not known at this time. Other proposed or pending projects, including the University’s Faculty Housing and Family Student Housing Project, would be constructed in the immediate vicinity of Devereux Creek near Ocean Meadows Golf Course. The proposed project, in combination with these other proposed land uses, could result in hydrologic changes to Devereux Creek near Ocean Meadows Golf Course. Both the proposed projects and the existing land uses that are already susceptible to flooding, such as the University Village subdivision, and the golf course itself, could experience flood impacts that would not be considered significant on an individual project basis but would be cumulatively significant. The applicant would be required to have final grading and drainage plans, and a floodplain encroachment analysis that considers the cumulative effects of proposed projects in the floodplain, reviewed and approved by County Flood Control to ensure compliance with Flood Control standards. Pending review of final grading and drainage plans and the floodplain encroachment analysis, the project’s contribution to cumulative impacts related to floodplain encroachment are considered significant, but feasibly mitigated (Class II).

**Impact Flood-8: Flood Hazard – Surface Runoff.** Two storm water detention basins are proposed to capture and retain surface runoff from the southern development area. The peak post-development flows out of the detention basins in the 6.0-acre southern development area would be less than the pre-development flows from the combined 7.9-acre site. However, since separate storm water calculations are not provided for the northern development area, the potential cumulative impacts from increased surface runoff originating from the northern development area are not known. Pending further design information on the northern development area in terms of imperviousness and quantity of surface runoff, the project’s potential contribution to cumulative flooding impacts in the lower Devereux Creek Watershed from increased surface runoff are considered cumulatively significant, but feasibly mitigated (Class II).
Impact WQ-8: Pollutants – Residences. Two storm water detention basins are proposed in the southern development area. A bioswale is proposed to treat surface runoff from the northern development area. These design features would reduce the potential for polluted runoff to enter the watershed, and thus the project, as designed, would likely not contribute to the cumulative pollutant runoff and resulting surface water impacts of Devereux Creek and Slough. However, if not properly designed, installed, and maintained, the detention basins and bioswale have the potential to allow the project to directly contribute to erosion-induced siltation of surface waters and runoff of pollutants from the proposed project.

Storm water quality testing by County of Santa Barbara Project Clean Water has demonstrated that Devereux Creek and Slough is polluted by runoff containing bacteria and nutrients that exceed acceptable levels and are capable of accelerating aquatic plant and algae growth, including elevated levels of fecal and total coliform, enterococcus, pesticides, and heavy metals such as copper, lead, and zinc (County of Santa Barbara, 2003f). In addition, the Devereux Creek watershed already delivers a high sediment load to the Slough. Numerous other approved and pending future projects within the Devereux Creek watershed, including the University’s proposed Faculty and Family Student Housing project, could contribute polluted runoff. The pollutant load contribution of these projects and the resulting further degradation of Devereux Creek and Slough could result in cumulative impacts to water quality.

The applicant would be required to comply with County Public Works Department Standard Conditions for Project Approval – Water Quality BMPs. Pending further design information on the southern development area detention basins, and on the northern development area concerning changes to impervious surfaces, treatment of runoff in the northern edge of the development, and the ability of detention areas and bioswale to effectively process site runoff, the project’s potential contribution to cumulative water quality impacts in the lower Devereux Creek Watershed due to pollutants in surface runoff are considered cumulatively significant, but feasibly mitigated (Class II).

Impact WQ-9: Pollutants – Open Space Plan/Development. Although no significant increase in land use intensity is anticipated with implementation of the Open Space Plan itself, implementation of the Open Space Plan, the proposed Ocean Meadows Residences, and Ocean Meadows Golf Course modifications projects, in conjunction with the general long-term trend of increased urbanization of the Coastal Zone, could result in increased long-term public use of the Open Space Plan area. Increased public use of the Open Space Plan area could result in adverse impacts to water quality through introduction of domestic animal wastes and trash, with associated increases in nutrient loading and/or bacterial pathogens. However, the project’s contribution to this cumulative impact is feasibly mitigated through implementation of the management practices for the Open Space Plan and the Maintenance Plan for the Del Sol Vernal Pool Reserve and Camino Corto Reserve, which provide for flexible, long-term management approach based on continual monitoring of activities within the Plan area. Implementation of this management approach would ensure that impacts are mitigated, so this cumulative impact is considered potentially significant, but feasibly mitigated (Class II).
Hydrologic and Hydrochemical Assessment of the Proposed North Campus Housing Project, University of California, Santa Barbara

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The North Campus Advisory Group and
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also be invaluable in the design and placement of future water quality control structures in the Devereux Creek watershed.

5.0 CONCLUSIONS

The development of the proposed NCH project will increase the volume of runoff from a 2.54 cm storm event by approximately 1,500 cu. meters given average antecedent moisture conditions. The runoff volumes would increase by approximately 2,600 cu. meters when antecedent conditions are wet. For dry antecedent conditions, runoff volume would only increase by approximately 660 cu. meters (refer to Table 6). Model runs without the NCH south site produced an increase in runoff of approximately 1,200 cu. meters for average antecedent moisture conditions. The total volume of runoff generated from the entire watershed under the existing conditions (i.e. no NCH) model scenario is 55,300 cu. meters for average antecedent moisture conditions (refer to Table 6). The percent increase in runoff resulting from full development of the proposed NCH project is 2.7% for average antecedent moisture conditions and the percent increase in runoff for the NCH project without the south site is 2.1%. Given the small increase in runoff volume, no significant effect to surface water runoff is anticipated under either the full NCH buildout or NCH without the south site development scenarios.

The planned North Campus housing development is predicted to result in increased pollutant loading to Devereux Creek under both buildout scenarios addressed in this study. Most predicted pollutant increases are on the order of one to five percent for the entire watershed over the existing conditions (Table 5). Broad estimates for pollutant ranges provided by the current scientific literature result in very broad estimates for potential pollutant loading due to the NCH development. In order to make more precise predictions about potential pollutant loading due to the planned development, local pollutant range data which reflect the specific land use practices and physical characteristics of the Devereux Creek watershed are required.
and site-specific information. Surveys of aerial photographs and recent environmental documents were also utilized to identify where specific constraints are located and to help determine appropriate densities for affected sites. Finally, site inspections were performed by staff on over 20 sites within the GPA to verify the information described above and to help formulate land use recommendations.

Several sites in west Goleta were selected for rezoning to the new Service Industrial zone district (and companion Light Industrial land use designation). This district focuses permitted uses on the types of low employee-intensive uses that the GPAC and staff heard a strong need for: warehousing, storage and long-term parking, small business space, wholesale operations, etc. This zone does not reduce overall projected buildout on these sites, but it will reduce the number of employees and thus reduce traffic, water and other resource impacts as well as assist in the jobs-housing balance.

For more information on specific environmental or public service constraints on sites within the western region of the GPA, please see the Major Sites Workbook. Staff requests that the Commission hear public testimony and consider the following recommended changes to the land use designations for these sites.

#4 Los Carneros Community; 48.33 acre site on 29 parcels. The site has an existing land use designation (LUD) of Industrial Park/Planned Development/Office & Professional/General Commercial with an approved Specific Plan allowing 380,000 sf and 330 units. The GPAC has recommended a Light Industrial designation permitting 100,000 sf, and that the site be considered for a major transit center focused around a new train station. Staff recommends Residential 16.0 units per acre, General Commercial, and Industrial Park designations be divided as follows: 10 acres be designated as residential 16 units per acre, 7 acres of professional office, 4 acres of retail, 5 acres as general industry for a train station, 16+ acres as open space for wetland protection/restoration, and 3 acres for archaeological protection. A flood hazard/ESH overlay would also be proposed.

#6 Storke Road; 9.99 acre site on 4 parcels. The site has an existing LUD of Industrial Park with a potential buildout of 129,746 square feet. The recommended designation is Light Industrial to facilitate the Service Industrial zone district with a potential buildout of 119,998 square feet.

✓ #7 Theimer/Storke Road; 58.36 acre site on 1 parcel. The site has an existing LUD of Residential 4.6 units per acre and a Flood Hazard Overlay with a potential buildout of 268 units. The recommended designation is Planned Development and a Flood Hazard Overlay with a potential buildout of 275 units.

✓ #12 University Exchange; 239.91 acre site on 3 parcels. The site has an existing LUD of Coastal Dependent Industry/Recreation/Planned Development and Flood Hazard/Environmentally Sensitive Habitat Overlays with a potential buildout of 500 units.
The potential buildout under the Planned Development designation (covering the entire site) is proposed to be reduced to 250 units. However, the existing Ocean Meadows Golf Course would be zoned for recreational use, and the existing oil storage facility would be zoned Coastal Dependent Industry. In addition, the entire area south of the golf course would be designated with either the ESH/Flood Hazard or Scenic Buffer overlays.

#18 Girsh: 83.21 acre site on 2 parcels. The site has an existing LUD of Stripped 61 (General Commercial/Office & Professional/Residential 12.3 units per acre) with a potential buildout of approximately 1,300,000 square feet. The GPAC's recommendation is to retain the Stripped 61 designation which could result in a potential buildout of approximately 1.3 million square feet. Staff is recommending the following designations: General Commercial on the northern 40 acres, and Light Industry (Service Industrial) and Recreation on the southern 40 acres with a combined total buildout of about 500,000 square feet of shopping center with up to 300,000 square feet of Service Industrial use. A Scenic Buffer Overlay would be included on southern and western boundaries to buffer adjacent residential uses from parking lots etc.

#19 Delco: 102.30 acre site on 1 parcel. The site has an existing LUD of Industrial Park and Flood Hazard/Environmentally Sensitive Habitat Overlays with a potential buildout of 1,128,752 square feet. Portions of the site are recommended to be replaced with a General Industrial designation to facilitate a Service Industrial zone district with a potential buildout of 719,674 square feet. Four acres of undeveloped land is recommended to remain Industrial Park to allow for 50,000 SF of potential expansion of the existing Delco facilities.

#20 Raytheon: 64.38 acre site on 1 parcel. The site has an existing LUD of Stripped 65 (Industrial Park/Residential 12.3) with a potential buildout of 835,709 square feet and approximately 260 units. The GPAC has recommended the site be designated Industrial Park/Residential 8.0 units per acre with a potential buildout of 403,000 square feet and 160 units. Staff's recommendation is to retain the Industrial Park designation only, with a potential buildout of 700,000 square feet in accordance with the approved Specific Plan.

#21 San Jose Creek/Drive In: 42.83 acre site on 3 parcels. The site has an existing LUD of General Industry/Light Industry and a Flood Hazard Overlay with a potential buildout of 668,590 square feet. The recommendation is to change the designation to Light Industry only to facilitate the addition of the Service Industrial zone district with a potential buildout of 559,701 square feet.

#33 Bishop Ranch: 335.21 acre site on 3 parcels. The site has an existing LUD of Agriculture-II-40 acre minimum parcel size with a potential buildout of 9 units. The recommended designation is Agriculture-II-100 acre minimum parcel size with a potential buildout of 4 units.

#40 Patterson West: 39.92 acre site on 1 parcel. The site has an existing LUD of Agriculture-I-5 acre minimum parcel size with a potential buildout of 7 units. The
I am a doctoral candidate at University of California-Santa Barbara studying the coevolutionary interactions between birds in the mockingbird/thrashers family (Mimidae) and brood parasitic cowbirds. While my fieldwork with thrashers has primarily been conducted in Texas and back east, I have observed California Thrasher breeding behavior (e.g. singing, nest building, carrying food, feeding fledglings, or active nests) at Coal Oil Point Reserve every year from 1998 until the present.  
- Amy Musante

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Comments of Friends of Coal Oil Point Reserve to the Ellwood/Devereux Open Space and associated Housing Projects of the City of Goleta, Santa Barbara and the University of California, Santa Barbara. May 10, 2004

The following comments are addressed to all the jurisdictions involved. Increasingly, as these three EIRs have been reviewed it became apparent that significant impacts would be occurring on a cumulative basis while the individual project impacts might not rise to a level demanding more specific evaluation. Accordingly it is suggested that a joint review be made of these cumulative impacts rather than continuing to treat them as isolated and separate. This would seem to allow the dictates of CEQA to be followed efficiently and effectively.

Sedimentation (All jurisdictions)

The cumulative construction related sedimentation impacting Devereux Creek and Coal Oil Point Reserve is not examined nor is the impact of this sufficiently guarded again or mitigated.

Due to lack of vegetative cover on University land and the ongoing erosion on the Elwood property there is a current level of ongoing sedimentation of Devereux Creek and to the Slough which is damaging these resources. This entire project will introduce additional construction and soil exposure on a massive scale within the entire watershed.

The Environmental Impacts of construction originated sedimentation on Devereux Creek are not evaluated sufficiently, properly guarded against or remediated. Extensive cutting, filling and excavation will take place to construct the projects described. Without extraordinary prevention, substantial impacts can be anticipated on Devereux Creek, Devereux Slough and the Coal Oil Point Reserve as a result of this. Even worse, not described or quantified in any analysis is the cumulative effect of even small amounts of sediment releases from any or all of the projects described and anticipated in these three EIRs.

Adding to the potential for major impact is the planned reconstruction of Sandpiper Golf Course just upstream from the Comstock Homes Project. This project and its impacts are not mentioned in any of the three EIRs.

These are unacceptable omissions. The recent flood control project on Devereux Creek (Winter 2003) released significant and excessive amounts of silt into Devereux Slough to the detriment of Coal Oil Point Reserve. There was so much return of soil back into the newly dredged channel that the contractor was obligated to return to the site to redredge the channel. (This is referred to in the University’s FIR as a “Creek Restoration Project” on pp 4.3-8.)

The University has guidelines for control of Soil Transport in its LRCP which need to be followed for all the projects in the Devereux Creek watershed. This will be crucial to retaining the Devereux Slough in what is left of it’s remaining size and as a part of a research facility maintained by the University of California. As water flow increases (see reference to historical
increases on the University’s EIR pp. 4.3-15) decreased capacity in the Slough through sedimentation will result in increased breakouts of the Slough to the detriment of water quality at a heavily used recreational beach.

Changes in drainage volumes and patterns will occur because of the construction and the increases in immediate runoff from paved and developed surfaces. Short-term retention of significant volumes of water for heavy rainfall events would seem to be necessary. Calculations to this effect would also seem to be necessary.

No reference is found in any of the EIRs to documenting existing (pre-project) sediment loading in Devereux Creek or monitoring of loading during project construction. The establishment and provision of remedial measures for impacts on Coal Oil Point Reserve for sediment loads based on these measurements would be a reasonable mitigation for this impact. Without documentation this cannot be done.

Seed and Rootstock (All jurisdictions)

The use of seed and/or invasive root-stock from outside the Devereux Creek drainage area will have unacceptable impacts on Coal Oil Point Reserve.

Of all the environmental impacts which will have long term impacts, none would be more permanent than the use of invasive rootstock and seeds from outside the Devereux watershed. The proposed materials to be used for landscaping as well as erosion control are described in a variety of ways from “native” to “native South Coast” or not described at all. These terms are unacceptably vague. The use of seed and rootstock from outside the Devereux watershed will lead inevitably to the destruction of the genetic makeup of existing native plants on the Coal Oil Point Reserve. This impact is not presented in the EIR nor apparently understood. The impact of accidental introduction needs to be assessed and prohibitions established.

As a research and education facility of the University of California, Coal Oil Point deserves special attention as the University and other Governmental bodies make changes which impact such basic aspects of its environment and its reason for existing. The introduction of seed and rootstock from outside the drainage area must be prohibited and sanctions established to assure there will be no inadvertent introduction.

Water Quality (All jurisdictions)

Existing water quality in Devereux Creek, as sampled, shows regular violations of Water Quality Standards due largely to its urbanized upper watershed. Non-point source runoff from all housing projects planned will add to the already excessive loading of this stream and the Devereux Slough.

The cumulative effect of developing the entire number of housing projects is described as “less
than significant” based upon a series of assumptions that appropriate practices by each project will keep the cumulative effect to inconsiderable levels. No efforts are described to monitor and control the reality of this assurance. The current water quality of Devereux Creek would indicate that the existing standards for control of storm water drainage, point source and non point source runoff are less than what is necessary to protect Devereux Creek.

Given that, using the same practices for control of pollution, for all these projects it is less than certain that water quality degradation will not be a significant impact. Calculations based on current percentages of the drainage basin in pavement or development and associated non-point pollution would be useful with comparisons to the proposals for multiple developments.

It would appear that here, as in other areas, the cumulative benefits attach to the whole project, but the cumulative environmental impacts have been separated and minimized by considering them individually. (Given the sponsors of much of the housing planned, one would expect that water quality in the Coal Oil Point Reserve might be planned to be maintained and improved.)

A. For specific point source (or leaking sewage mains) The Comstock development is best served by a lift station to eliminate the need to depend on “projected” lining of the Devereux Creek sewage main for its sewage. While the entire project area is dependent on this improvement for improving water quality in the Creek, and this improvement needs to be part of this plan, at least for the Comstock development an assured alternative is available. We strongly favor it.

B. Given the additional volumes of rain not being absorbed some control of water volume (as well as sediment) needs to be established before release into Devereux slough. Proposed construction of a significantly larger culvert where the Veneco road crosses the Creek will only serve to accelerate water and sediment into the Slough. This impact to Coal Oil Point Reserve and the Slough needs to be evaluated.

**Filling Coastal Wetlands (County and University)**

The filling of Coastal Wetlands is prohibited under the Coastal Act. The definition of what is a Coastal wetland has been established by the Coastal Commission and upheld by the Courts. The grounds under which Coastal Wetlands may be filled have been established by the Courts.

No mention is made of the existing high water level connection between Devereux Creek drainage and the Goleta Slough. This wildlife corridor currently exists but could easily be disrupted during the construction of the housing immediately adjacent to it. This would constitute a filling of wetlands that would be particularly damaging to the ecological health of the entire area. This needs evaluation and the area needs protection.
Parking at Coal Oil Point (University)

Public parking at Coal Oil Point Reserve is an environmental impact, not a mitigation or a benefit which may be used to balance other environmental impacts. As such it must be fully evaluated in its effect on the Coal Oil Point Reserve, the natural resources therein and the neighborhood.

The University has long prohibited public parking at Coal Oil Point specifically to avoid attracting the public to this beach which is a Natural Reserve within the University system. This has been true for the past ten years. With the onset of Snowy Plover breeding in 2001, the need to protect this area became significantly higher. No impacts have been identified for this change in policy which the management of the Reserve opposes.

The impact of providing public parking at Coal Oil Point on Snowy Plover management and restoration must be evaluated over the short term and the long term. Increasing access will lead to even more desired access as more and more people learn of the opportunity. The existing use is not quantified, the immediate expected result of increased beach goers is not identified, and no system of long term monitoring is established to use in managing the expected effect of this new access.

Additionally, other impacts of this decision have not appeared in the EIR. Given the repeated errors in the Plan and the Conceptual Plan in the maps of Coal Oil Point and Slough Road, it is not surprising that the impacts of opening this area to public parking and our earlier comments to this point have not received any attention.

A. Slough Road is identified as a Public Access Trail in the Coal Oil Point Reserve. As was pointed out in our comments to the Conceptual Plan, and apparently ignored, the Slough Road (or Devereux Road) is a substandard local road with a 15 miles per hour speed limit and, at present, an unsafe mixture of pedestrians, runners, bicycle riders and automotive traffic. The pedestrian path is a narrow unvegetated trace between the pavement and the Slough with an immediately sharp drop down to the Slough. It is rarely used by pedestrians or runners who prefer to use the road surface at their own risk.

The sharp bends in the road and the narrow paved area make any increased traffic flow, much less increased pedestrian use, significantly more hazardous. Designating this road as a trail for recreational use is a hoax and it should be eliminated.

B. Increasing public automobile use of it is a threat to all other users. This is an impact on the human environment which must be examined and evaluated. No estimations of traffic increases have been presented in the EIR much less data regarding existing use. Given that on high use days there will few spaces left for the public, a new traffic impact can be expected of disappointed motorists departing Coal Oil Point to try and find parking at some other location. Speeds are likely to be increased and safety impaired in these situations.

C. The Devereux School is immediately adjacent to this road and its residents and staff use the
road for access to Coal Oil Point. On occasions residents (some with cognitive impairments) have used this road without escorts. This is an impact unrecognized in the EIR.

D. **Public parking will also introduce picnicking** to the beach at Coal Oil Point Reserve. Existing pedestrian and bicycle access limits what is carried to the beach. With only a short walk to access at Coal Oil Point from the parking lot, families can be expected to bring food and leave trash. This will vastly complicate predator control and create a need for beach cleanup. No staff is programmed for this nor are the impacts of the resulting increased predation on Snowy Plovers assessed.

**Police Protection (All jurisdictions)**

Nowhere in the EIRs is any increased police attention projected for the entire area yet increased public use is anticipated throughout all three documents. Additionally, the nature of the needed enforcement will not be traditional police protection usually based on immediate automotive access. As the existing docent program has researched and proven, a police presence is needed on the beaches to protect endangered species as well as to enforce the regulations of the COPR. With the Ellwood Open Space and the recreational use of the South Parcel planned, three jurisdictions will have significant enforcement problems given the ease of crossing legal boundaries, multiple means of entrance and exit and the inability of police officers to reach the remote sections of the area in time to enforce the law.

Recent events (May 15, 2004) at Coal Oil Point Reserve have shown that University law enforcement cannot and does not protect either the natural resources or the facilities from vandalism.

The existing Docent Program at COPR is an educational program, not a substitute for law enforcement.

Additionally, existing leash laws are not proposed to be enforced on the Ellwood Open Space despite the Snowy Plover breeding habitat on the beach (Page 65). This effect is not evaluated and will not found to be consistent with the Federal Endangered Species Act by the agencies charged with enforcement much less our organization.

The effect of unleashed dogs on upland wildlife is not evaluated, this is particularly needed given the number of trails left open across the entire area.

Unanswered in the documents is what means of access will be established to allow law enforcement to access the area to protect recreational users of the ocean.

**Rare, Threatened and Endangered Species Habitat (All jurisdictions)**

The long term cumulative effect of increasing public use of this area has not been evaluated against the mission of the Coal Oil Point Reserve and its planning to restore and improve habitats
for the native species of plants and animals which one may, or could, find in its mix of beach, coastal slough, dunes and coastal uplands. The Reserve was established to provide opportunities for these coastal ecosystems to be restored and maintained.

Long term increases of public use of areas immediately adjacent to the Reserve will inevitably produce conflict over use and damage to the resources the Reserve was established to preserve and protect. There will also be opportunities which will not occur because of this impact. To the best degree possible these impacts must be planned for, monitored and mitigated. They certainly can be expected.

The EIR seems to miss this forest for the trees (albeit it misses some trees as well). An assessment of this impact on the Reserve and the mitigations for it must be a part of this planning. Not to establish long term mitigations of these general and specific impacts will be to leave it to the budgetary vagaries of the University system, should they happen at all. Internalizing the impacts of these proposed developments to the long term benefit of the Reserve would seem to be an opportunity currently presented which should not be missed and which must not be avoided.

**Rare, Threatened or Endangered Species at risk within the area:**

**Birds:**
Bank Swallow
Belding’s Savannah Sparrow
Black Swift
Brewster’s Willow Flycatcher
Brown Pelican
Burrowing Owl
California Least Tern
California Quail
Light-footed Clapper Rail
Coast Horned Lark
Common Loon
Cooper’s Hawk
Golden Eagle
Grasshopper sparrow
Least Bittern
Lon-Billed Curlew
Merlin
Northern Harrier
Osprey
Peregrine Falcon
Prairie Falcon
Red-shouldered Hawk
Red-tailed Hawk
Rough-legged Hawk
Sharp-shinned Hawk
Western Snowy Plover
Southwestern Willow Flycatcher
Tricolored Blackbird
Virginia Rail
White-faced Ibis
White-tailed Kite
Wilson's Warbler
Yellow Warbler
Yellow-breasted Chat

**Mammals**
Badger
Pallid Bat
San Diego Black-tailed Jackrabbit
Townsend's Big-Eared Bat
Coyote

**Amphibians and Reptiles**
Red-legged Frong
California Legless Lizard

**Fish**
Tidewater Goby
LEAGUE OF WOMEN VOTERS OF SANTA BARBARA, INC.
328 East Carrillo Street, Suite A  
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May 23, 2004

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN AND LRDP AMENDMENT EIR

OPEN SPACE SECTION:

The League of Women Voters of Santa Barbara is supportive of most of the environmental analysis prepared for the Ellwood-Devereux area. We believe that the University has a need for additional housing, and the preferred project would move the housing away from the most environmentally sensitive areas closest to the coast. We have submitted specific comments to the City of Goleta on the Comstock Housing portion of the plan including comments on the Open Space and Habitat Management Plan. We are attaching those comments to this statement. We are also attaching our comments to the to County of Santa Barbara on the Ocean Meadows and Open Space Plan. We wish to stress that one of our most important concerns about the Plan is the need for a multi-jurisdictional management oversight committee that insures that the Plan continues into the future to preserve and protect these important resources and we are also concerned that any inconsistencies in the proposed policies and mitigation measures be addressed and reconciled.

MM4.4-2 We have read the EIR for this project, the Summary of Environmental effects of the mitigation. We are most concerned about the impact on the vernal pools and ask that the number that will be disturbed be reduced as much as possible. For areas that are designated ESHA, (MM4.4-2f, 4.5-3) we ask that a ratio higher than 1-1 be explored, so that many more new ESHA will be created and designated. We are concerned that construction workers, occupants of new housing, and recreational users of the property may be exposed to potentially unhealthy risks, and we strongly support the mitigation outlined.

4.15-6 We strongly support the strategies proposed for mitigation of the increased water use by the housing projects.

ALTERNATIVES

We have read the full DEIR section on the alternatives carefully because we are concerned about any loss of wetlands and other environmental damage that could caused by these projects. We oppose building on the South Campus primarily because of geologic and geologic hazards as well as because of the loss of contiguous open space. With housing on the South Campus, the benefits associated with the Open Space Plan would not be implemented. Additionally, residents would be much too close to oil storage facilities. None of the other alternatives offered any advantages over the preferred project.

In summary, we support the preferred project because it meets the goals of all the governmental
agencies involved. It would result in the implementation of the Open Space Management Plan which is very important. It would give the University additional housing which would work toward insuring that we continue to have a premier University in the Santa Barbara area.

HOUSING SECTION:
Santa Barbara County has a critical need for low/moderate income housing. We support the University building housing for its students and faculty as this will remove some of the pressures on the surrounding areas.

There is no doubt the addition of 387 students and faculty will have considerable traffic impacts. Mitigations proposed for the Hollister-Storke Road intersection have been proposed. However, what is the timeline? Who will initiate these improvements that involve fiscal sharing by the three Plan participants as well as by other private entities? Will this be one of those projects that never seem to get started?

Although no changes were deemed necessary on the Cannon Green/Phelps intersection, there is a tendency on that corner for drivers to zip around Phelps into Cannon Green. A light or stop sign should be on that corner—particularly with the open space parking area at the end of Phelps. Will the proposal to put an island at the intersection solve this problem? There may also be a similar problem along Marymount Way.

The height of the proposed residences has caused neighborhood concern. Indeed, the Goleta City Interim General Plan has a 30 foot height limit on new residences, while the University height is 35 feet. Comstock Homes is proposing reducing the quantity and the height of their homes. It would be well if the University can do some reconfiguration to reduce the impact of the mass and height of these buildings on the neighbors.

Faculty housing is to be sold to qualified faculty, although the sale aspect of the plan is not noted in the draft EIR. If sufficient faculty members do not buy the units, will they be sold to university staff or to others outside the university system?

These two properties are in the midst of wetlands. Who monitors the open space? Who sees to it that the bioswales and other mitigations (particularly those involving wetlands) are kept functioning as planned. Designated University staff must be assigned to monitor the proposed mitigations to protect and enhance these wetlands so that over time they are not spoiled or forgotten. Twenty or thirty years after these units are built, mitigations are often neglected.

Thank you for this opportunity to submit our comments.

Sincerely,

[Signature]

Catherine McCammon
To: Shari Hammond, Senior Planner  
Office of Campus Planning and Design, UCSB  
E-mail: shari.hammond@planning.ucsb.edu

From: Bill Murdoch, Director, UCSB Natural Reserve System  
Sue Swarbrick, Assoc. Dir. UCSB Natural Reserve System  
Cristina Sandoval, Reserve Director, Coal Oil Point Reserve

Re: Comments of the Coal Oil Point Reserve administration and management on the  
Draft EIR by the University of California, Santa Barbara, Office of Planning and  
Design for the Faculty and Family Student Housing, Open Space Plan and LRDP  
Amendment (April 2004).

Date: March 24, 2004

This letter includes comments by the administration of the UCSB Natural Reserve  
System and the Director of Coal Oil Point Reserve (COPR) on the Draft Environmental  
Impact Report (DEIR) of the University of California, Santa Barbara (UCSB) for the  
Faculty and Family Student Housing, Open Space Plan and LRDP Amendment (April  
2004). We address the analysis in the DEIR of the potential positive and negative  
impacts to COPR’s natural resources and function that could result from the development  
project and the implementation of the Open Space Plan, and the proposed mitigation  
measures.

The UCSB Coal Oil Point Reserve (COPR) is one of the 35 reserves of the UC Natural  
Reserve System. The mission of the Reserve System is to protect natural areas in  
California for university-level research and teaching, and public outreach. Coal Oil Point  
Reserve serves as an outdoor laboratory for researchers and students from UCSB and  
other institutions of higher education. COPR also offers environmental, educational  
opportunities to local K-12 students and the general public through field trips, tours and  
lectures. Typically, 2,000 people use the reserve annually in an official capacity to learn  
about or study the reserve’s natural resources. Many others enjoy the Reserve’s  
resources informally by observing the birds, plants and mammals on the reserve from the  
trails on its boundaries, the Dune Pond trail that passes through the middle of the reserve,  
and Sand’s beach. The ability of COPR to carry out its mission requires that it protect,  
maintain and, when necessary, enhance the quality of its environmental resources, and  
protect research and teaching activities on the reserve.

Lands that are currently zoned for development bound COPR on the north and west.  
Most of the area adjacent to the Reserve’s eastern boundary is developed or slated for  
housing in the future. The southern boundary is the high tide line along Sands beach, one  
of the most popular beaches in the area and the site of wintering and breeding Western  
Snowy Plovers, a federally threatened species. The potential negative impacts on the  
natural resources of COPR from future development on the adjacent lands and increased  
public use in the area are significant and threaten COPR’s long-term viability.
The COPR administration supports the Ellwood-Devereux Coast Open Space and Habitat Management Plan (OSHMP) and its goal to protect and enhance the open space plan area and provide for public access compatible with the conservation of its regionally sensitive resources. The collaborative effort of UCSB, the City of Goleta and Santa Barbara County to relocate development away from sensitive coastal resources and near existing development and to rezone coastal properties for recreation, designate some areas as open space and maintain existing reserves, will establish a 652-acre contiguous area along the coast that is managed for public access and natural resource preservation. The open space designation of the area surrounding COPR, given certain mitigation actions detailed below, will support the Reserve’s mission. With the proposed mitigation actions in place, implementation of the OSHMP will help reduce further habitat fragmentation of the Devereux watershed and prevent loss of species in the local area. Permanent designation of the coastal areas that border the Reserve as open space will provide long-term protection and stability for the biological resources in the area. Implementation of programs to ensure maintenance of the area, restoration and enhancement of habitats and infrastructure, and enforcement of the OSHMP policies will ensure the long-term viability of these valuable coastal resources.

UCSB has jurisdiction over 314 acres in the Open Space Plan (OSP) area. About 157 acres comprise COPR, which would be managed under the COPR Management Plan. The remaining 157 acres, including the 69-acre South Parcel, which borders COPR on the north, is current undeveloped land that would be managed under the OSHMP. The OSHMP proposes that the South Parcel become a nature park. Invasive species would be removed, erosion controlled and the area would be restored with native riparian, grassland, and coastal scrub habitats. Some of these activities, including modifications to drainage to control erosion and restoration for mitigation, would be accomplished as initial improvements; additional restoration would be future opportunities. Restoration and enhancement of the South Parcel as a nature park would benefit COPR by creating a buffer zone of restored natural habitats between the Reserve and more developed areas to the north. The nature park would also provide an alternate site for public outreach programs and tours run by COPR, thus reducing the impact of these important activities on the Reserve habitats that are used for research.

Impact of increased use of OSP area

The OSHMP proposes a number of recreational improvements (e.g. additional parking and restrooms, improved trails and coastal access points) that will attract more visitors to the open space and to COPR. The additional residences proposed in the faculty and student housing project will also increase the number of people using the area. The OSHMP and DEIR recognize the potential for negative impacts to coastal resources that will result from the inevitable increase in use of the area when housing is occupied and the open space plan is implemented.

The COPR administration is concerned about the impact of increased use on the quality and function of COPR’s biological resources. Many users drawn to the open space areas will also use the public trails through and around COPR that could result in additional
tresspass into sensitive habitats, trail erosion, disturbance of wildlife, and accumulation of trash. Trash attracts pest animals like crows, raccoons, and skunks that eat bird eggs and kill chicks. Increased human use could also result in an increase in domestic animals, which would impact wildlife by increasing disturbance and mortality and degrading the habitat with animal waste. Humans and pets can inadvertently transport seeds and thus increased use could increase introduction of exotic plants in the area.

Some of the proposed OSHMP improvements and management actions and the DEIR mitigation measures should directly reduce these impacts on COPR. These actions and measures include: (1) modifications to beach access points B and C to help protect sensitive areas, (2) improvements to the surface of the 3 public trails on COPR (Dune Pond trail, the Venoco Road access trail and along the shoulder of Devereux Road) to help control erosion, (3) fencing around the perimeter of COPR to help delineate its boundaries and prevent trespass, (4) closures of unauthorized trails, and addition of trail markers and boundaries to formalize authorized trails and help prevent trespass into sensitive areas, (4) signs designating use limitations for COPR trails and Sands beach, (5) funding support for expansion of the snowy plover management program to help prevent disturbance to birds on Sands beach, and (6) prohibiting the use of exotic plants in restoration and enhancement projects in the open space area.

Comments about specific impacts and mitigation measures.

Impacts of the proposed projects on the hydrology and water quality of Devereux creek and Devereux slough.

The proposed projects may result in numerous impacts to the hydrology and water quality of the area from erosion, and sediments and pollutants in runoff. The DEIR includes mitigation measures to control erosion and prevent sediments and pollutants from entering Devereux creek and thus reduce sedimentation and protect water quality in Devereux slough. These include a detention basin and bioswales on the faculty-housing site. The DEIR does indicate the size and location of a detention basin but not the location and size-specifications for the bioswales. Thus it is difficult to evaluate their potential effectiveness.

Currently, Devereux creek drains under Venoco Road and into the slough through 2 24” corrugated metal pipes. The existing pipes would be replaced with a 42”x 60” box culvert as part of the housing project. Potential problems that have not been addressed fully in the DEIR include the following.

1. The box culvert may be too narrow to act as an effective wildlife corridor under the road. Impact 4.4-4 describes the impacts of the development on wildlife corridors and stresses the importance of the Devereux Creek and its tributaries as conduits for wildlife movement through the developed areas. The functioning of some of the creek tributaries as wildlife corridors may be impaired by development even with the mandated 50 – 100 ft. setbacks (e.g. the tributary between the 2 student housing complexes). Venoco Rd. restricts safe movement of wildlife from the creek area into COPR. To help maintain the
value of the creek complex as a wildlife corridor, the box culvert must function as an effective conduit from the creek into the slough area. There should be an analysis that will determine whether the new box culvert will be wide enough to provide dry areas on either side of the creek in non-flood conditions that wildlife can use as corridors.

2. The function of the box culvert is to increase the rate of water movement from the creek into the slough and thus reduce the probability of a 100-year flood impacting the housing developments. However, there is no analysis of the impact of increased flow on the slough mouth during flooding events. This could have adverse effects on the organisms in the area.

Restoration, enhancement, revegetation and landscaping with native plants from local native genotypes

Native species can be adapted to very local conditions and plants from stock originating outside Devereux watershed may not be as robust or fecund as local varieties. If a non-local genotype is introduced into an area, resulting hybrid plants may not be as well adapted to the local environmental conditions. The introduction of non-local genotypes is an acute problem for COPR. Researchers use the COPR’s native habitats because they are protected and the local populations in the watershed have traits that reflect their past evolutionary history in this area. For example, COPR has a unique variety of California poppy. When plants from outside of the watershed are planted near the Reserve, pollinators or wind may transfer pollen from these non-local plants to the populations on COPR. Hybrid offspring then mix with the native populations. A researcher may no longer be able use those species that might have hybridized because their characteristics would no longer be a signature of the local environment. The OSHMP Habitat Policy 6 states that UCSB will use genetic stock for seeds and plants from the Devereux watershed in all native habitat enhancement and restoration on University-owned lands. However, the DEIR simply states that restoration and enhancement will be done using native plants and does not include the caveat that local genotypes will be used (MM 4.4-2(b)). To be consistent with the OSHMP, the DEIR should include a statement that only local genotypes of native species will be used. This policy should also extend to all native plants used for all restoration, enhancement, revegetation and landscaping projects in the housing development areas.

COPR is willing to cooperate with agencies to collect seed and plants and propagate native species from the local area. An effective method to coordinate restoration and revegetation efforts in the open space areas and the common areas of the development projects of the County, Goleta and UCSB, would be the creation of a Restoration Committee by the Ellwood-Devereux Open Space Plan Area Committee. The Restoration Committee would review the plans for the various restoration, enhancement, revegetation and landscape projects in the 3 jurisdictional areas and help coordinate acquisition of local species if needed

Introduction and spread of exotic weeds
Mitigation measure MM 4.4-2(e) addresses the potential impact of exotic plants in the project areas. The introduction of exotic weeds can come from the installation of extensive landscaping in the developed area and from increased unintentional, passive introduction of weeds to the open space area by increased traffic of users and their pets.

Mitigation Bio-5 states that to offset potential impacts associated with the spread of exotic species, the County will provide funds for exotic plant species removal at Del Sol and Camino Corto reserves. This mitigation measure alone is not the most effective mitigation for impacts of exotic plants in the open space area. Exotics in the landscaping and revegetation in the common areas of the Ocean Meadows development can be controlled by following a policy of using only native species from local genotypes in the common areas. To reduce the impact of exotics in the landscaping in private areas of the development, the CCR’s could include policies that would encourage the use of local native plants and prohibit the use of invasive exotics. Non-invasive exotics would be permitted. Mitigating for the introduction of exotics by funding the removal of exotics in the Del Sol and Camino Corto Reserves is useful, but most of the direct impact of exotics from the Ocean Meadows property will occur on the nearby University South Parcel, COPR and Ellwood Mesa areas. A more appropriate mitigation would be to contribute funding to the maintenance program at COPR and the maintenance program of the Open Space area. The Open Space area program would include exotic removal as well as other maintenance tasks like trail upkeep and litter removal. Additionally, mitigation for exotic introductions to the area could include removing exotics like pampas grass from the Ocean Meadows golf course.

**Impact of increase in users of the Open Space area on Western Snowy Plovers**

The DEIR does a good job of recognizing the negative impacts of an increase in users and their pets on the western snowy plover. Mitigation measure MM 4.4-1(j) addresses the impact of increased use on plovers on COPR and is effective in mitigating most potential impacts to the plover population on COPR. The COPR Snowy Plover Management Plan has been very successful in protecting wintering and nesting plovers. Exclusion fencing is not used to prevent disturbance to plovers by people, pets and horses (see pages 4.4-60 and 4.4-79). Instead, a simple post and rope fence bounds the plover area and signs explain access restrictions are posted along the fence. Plover docents are present during all daylight hours in the breeding season and much of the time in the non-breeding season to monitor use and compliance with leash regulations for dogs. The plover docent program has been the linchpin of the success of the plover management plan. Mitigation measure MM 4.4-1(j) provides funds to maintain and expand the plover docent program, which will enable continued protection of plovers in the face of increased use of Sands beach.

**Impacts of equestrians on Western Snowy Plovers**

Surveys conducted at COPR have shown that horses disturb shorebirds from a greater distance than dogs or people (Lafferty, K. D. 2001. Human disturbance to wintering
Western Snowy Plovers at a southern California beach. Biological Conservation 10:1-14). Plovers run or fly away from horses when they are quite far away. Thus the Reserve restricts use of the COPR beach during nesting season and discourages equestrian access to the beach in front of COPR. Horses frequently enter the Reserve’s beach from access point D and from the Ellwood mesa beach. Equestrians can pose the greatest challenge to docents trying to protect plovers because equestrians often will not stop when approached.

The OSHMP designates a single entry point for equestrians at Access point D near the boundary of COPR. There will be signs at Access point D directing equestrians to go down the beach to the northwest, thus avoiding most of the plover area. We suggest that allowing equestrians to access the beach at Access Points E or F could further mitigate potential impacts to plovers by equestrians by drawing users away from sensitive plover areas. Both access points are near the Coastal Trail, which can be used by equestrians under the current trail use plan. If equestrians were allowed access to the beach at points E or F there would be only short stretches of trails that would need to be “rezoned” for equestrian use. The preferred scenario for the COPR is to no longer allow equestrian access at Access Point D if Access Points E or F were open to equestrians. This would reduce the likelihood that equestrians would enter the COPR beach. However, if Access Point D remains open to equestrians, then also allowing equestrian access at points E or F would provide a loop that would encourage equestrians to ride to the northwest on the beach away from the plover nesting area.

Litter impacts on wildlife by attracting predators

An increase in the number of users will increase the amount of litter in the Open Space area. Litter attracts scavengers, like crows and feral pets. These pests will also prey on wildlife, particularly bird eggs, including plovers. There are no mitigation measures in the DEIR that address the impact of increase in litter in the area. UCSB should join with the City and the County to develop a maintenance program that includes collection and disposal of litter in the Open Space areas. The housing developments should also have programs that collect and dispose of litter. Trash containers with closing lids should be placed at all entrances to the Open Space area and at some sites within the area. Also all dumpsters and trashcans in the housing developments should also have closing lids to discourage pest animals. UCSB should also implement a program to trap pests (e.g. raccoons, feral cats, opossums and skunks) that are drawn to the area by the residential development and increase in litter.

Maintenance of Open Space and developed areas

The Open Space plan recognizes the need for coordination in the management of the open space area. Long-term maintenance will be key to the success of the OSHMP. The Open Space area will deteriorate without a coordinated maintenance program that is effectively implemented throughout the area. The maintenance program must include at a minimum, maintenance of area signs, trail surfaces, beach access points, and trail closures, provision of waste receptacles and removal of litter and animal waste, removal
of exotic plants. This maintenance plan should be developed, funded and implemented in the initial phases of the Open Space and development projects.

**Enforcement of Open Space regulations and policies**

Mitigation measures include signs that will be posted in the Open Space area advising users of restrictions in use of areas, regulations and policies. For examples, users will be advised that dogs must be kept on leash and mutt mitts must be used to collect waste, and that regulations will be enforced. Experience at COPR has shown that signs alone will not be enough to effect compliance with regulations; signs must be backed up by enforcement. This is particularly true for the leash regulations. For example in 2003, although leash regulations were posted at the entrance to the beach at COPR, an owner entered the area with an unleashed dog and the dog killed a plover chick before the owner could comply with the request of an on-site docent to leash the dog.

Vandalism of fences, signs, and buildings has occurred at COPR, usually at night. Constant vigilance by the reserve staff and public education seem to have contributed to a reduction of this problem in recent years. However, the potential for vandalism will increase with more visitors. Counteracting the increase in trespass and vandalism will require additional staff-hours for fence and sign maintenance, and more patrols of the area during the day and the night.

Open Space Plan states that each agency will be responsible for enforcement of restrictions within their own area. The DEIR does not discuss the UCSB plan for enforcement in the management of the Open Space area. The issue of enforcement should be considered in the DEIR. A plan should be developed and implemented, an enforcement entity should be named, and specific, measurable goals should be set to assess compliance. Coordination of enforcement efforts among agencies must be set up to make enforcement effective.

**Visual impacts trees as screens**

Trees have been proposed as landscape screening to minimize the visual impacts of the development. The use of trees as visual screening has one potential negative impact that has not been considered. Tall trees are used as roosting sites for raptors and crows. Those predators will then forage in the surrounding areas. Introducing new roost sites to areas bordering the open space area and COPR has the potential to increase predation on wildlife in the area. This increase in mortality can have negative impacts on wildlife populations. COPR is particularly interested in restricting new roosting sites for crows, which eat plover eggs. The current crow population in the area is having a negative effect on plover breeding success and mitigation measures for visual effects must not lead to increases in the local crow population. If trees are planted as screening for visual impacts in the student housing development near the open space area, they should grow no taller than 20-25 feet; if they do, they should be trimmed.
Impacts of public parking at Coal Oil Point

The COPR administration opposes the installation of 20 public parking spaces at Coal Oil Point. Public parking at Coal Oil Point would exacerbate the problems associated with an increase in the number of users in the area by allowing more direct access to sensitive habitats. Parking at the point makes it easier for users to bring pets, firewood, alcohol, etc. to the beach and will facilitate inappropriate uses of the area. It may also compromise the ability of the reserve to regulate reserve use for public outreach by K-12 students and community groups. Currently, reserve users can only get a permit to use the Coal Oil Point parking lot when they fill out a reserve application. (This does not include recreational beach users, who are not permitted to park at the point.) One of the reasons for this formal process is to provide a mechanism for educating users about the reserve so that impacts are minimized and inappropriate uses are restricted. Users must also sign University waivers. If public parking were allowed at Coal Oil Point, users might visit the reserve without first going through the application process and would not be apprised of the regulations and the sensitive resources in the area.

Public parking at Coal Oil Point will increase traffic on Slough road, a narrow windy road that has already had 2 fatal accidents. The road runs along the eastern boundary of the reserve and the trail along the edge of this road is used for public tours and class field trips. Increasing traffic on this road will increase the risk of accidents to users. Adding public parking may also sometimes create a shortage of parking at the point for official reserve users, particularly when events are scheduled at the University’s Cliff House facility.

The COPR administration does support the installation of a few handicap parking spaces for the public at the Coal Oil Point parking lot.

Additional Comments:

1. Mitigation measure MM 4.4-2(a) states that as per LRDP policy 30240(a)3, mowing of the grassland in COPR is prohibited, except for fire protection, and shall be avoided prior to the time plants go to seed. This mitigation measure should be removed or at least amended to include only native grasslands. There are both native and exotic grassland is COPR. Much of the COPR expansion area is covered with invasive exotic grasses that must be removed to restore the sites to native grasses and shrubs. The COPR management plan outlines proposed actions to remove non-native grasses that include mowing, particularly proper to the time plants go to seed to kill the grasses and prevent their spread.

2. Errors in descriptions of special status species and habitats include:
A) Table 4.4-4, California Thrasher is a common breeder on COPR and at Coal Oil Point.
B) Page 4.4-34, the California Horned lizard was observed in 2002 in the loop at Coal Oil Point.
C) Recent analysis of bird counts around COPR has shown that several pairs of terns with fledged chicks were observed at the mouth of the slough in 2002 and 2003 (Sandoval). Also a courting pair was observed in May 2004 (Sandoval, pers. comm.).

D) Page 4.4-68, Sandoval has observed small patches of native grasses on the south parcel adjacent to the road across form the entrance to the Dune Pond trail.

E) Figure 4.4-1, there was a vernal pool adjacent to the edge of parking lot #41 (Sandoval, pers. comm.). It is not shown on the map. Has this area been surveyed for vernal pools?

3. The Coal Oil Point parking lot area drains to the west into a restored site of COPR. Modifying the drainage of the area so that runoff drains to the east could require extensive grading that could interfere with the hydrology of vernal pools around the parking lot.

4. On Figure 3-5 (Proposed Trail System) the designation of the trails in the northeast corner of COPR (Anza trail) is incorrect. Trail 6a is colored green, which means it is for pedestrians and bicycles. This trail is meant to be open to pedestrians, equestrian and bicycles. The short segment of Trail 6 between Trail 6a and Devereux Road, is shown as open to pedestrians and bicycles. This trail is for pedestrians only.

5. The western boundary of the COPR expansion area is incorrect in Figure 4.2-6. This error seems to be propagated throughout the figures in sections 4.2, 4.3, 4.4, etc. The boundary between the COPR expansion area and the Ellwood Marine Terminal property runs along the line of eucalyptus trees (see attached Figure 4_COPR from the COPR management plan). Also, the boundary of COPR with the western boundary of Coal Oil Point shown in figures in sections 4.2, 4.3, and 4.4 does not seem to match the figures in the COPR Management Plan (see attached Figure 2_COPR) and should be checked to determine which is correct.

6. The DEIR identifies the need to add fencing on the north and west boundaries of the COPR and the COPR expansion area. These boundaries are currently unfenced and the site of much unauthorized access to the Reserve. The new fencing will be constructed of materials that do not inhibit views into the Reserve, but will clearly identify the Reserve’s boundary. The boundary fence will be posted with signs informing open space users of access restrictions to COPR. The boundary fence is an action that should be done as an initial improvement and therefore should be added to the list of University initial improvements in Table 11 of the OSHMP.
The following comments are addressed to all the jurisdictions involved. Increasingly, as these three EIRs have been reviewed it became apparent that significant impacts would be occurring on a cumulative basis while the individual project impacts might not rise to a level demanding more specific evaluation. Accordingly it is suggested that a joint review be made of these cumulative impacts rather than continuing to treat them as isolated and separate. This would seem to allow the dictates of CEQA to be followed efficiently and effectively.

**Sedimentation (All jurisdictions)**

The cumulative construction related sedimentation impacting Devereux Creek and Coal Oil Point Reserve is not examined nor is the impact of this sufficiently guarded against or mitigated.

Due to lack of vegetative cover on University land and the ongoing erosion on the Elwood property there is a current level of ongoing sedimentation of Devereux Creek and to the Slough which is damaging these resources. This entire project will introduce additional construction and soil exposure on a massive scale within the entire watershed.

The Environmental Impacts of construction originated sedimentation on Devereux Creek are not evaluated sufficiently, properly guarded against or remediated. Extensive cutting, filling and excavation will take place to construct the projects described. Without extraordinary prevention, substantial impacts can be anticipated on Devereux Creek, Devereux Slough and the Coal Oil Point Reserve as a result of this. Even worse, not described or quantified in any analysis is the cumulative effect of even small amounts of sediment releases from any or all of the projects described and anticipated in these three EIRs.

Adding to the potential for major impact is the planned reconstruction of Sandpiper Golf Course just upstream from the Comstock Homes Project. This project and its impacts are not mentioned in any of the three EIRs.

These are unacceptable omissions. The recent flood control project on Devereux Creek (Winter 2003) released significant and excessive amounts of silt into Devereux Slough to the detriment of Coal Oil Point Reserve. There was so much return of soil back into the newly dredged channel that the contractor was obligated to return to the site to redredge the channel. (This is referred to in the University’s EIR as a “Creek Restoration Project” on pp 4.3-8.)

The University has guidelines for control of Soil Transport in its LRCP which need to be followed for all the projects in the Devereux Creek watershed. This will be crucial to retaining the Devereux Slough in what is left of it’s remaining size and as a part of a research facility maintained by the University of California. As water flow increases (see reference to historical
increases on the University's EIR pp. 4.3-15) decreased capacity in the Slough through sedimentation will result in increased breakouts of the Slough to the detriment of water quality at a heavily used recreational beach.

Changes in drainage volumes and patterns will occur because of the construction and the increases in immediate runoff from paved and developed surfaces. Short-term retention of significant volumes of water for heavy rainfall events would seem to be necessary. Calculations to this effect would also seem to be necessary.

No reference is found in any of the EIRs to documenting existing (pre-project) sediment loading in Devereux Creek or monitoring of loading during project construction. The establishment and provision of remedial measures for impacts on Coal Oil Point Reserve for sediment loads based on these measurements would be a reasonable mitigation for this impact. Without documentation this cannot be done.

**Anza Trail** (City of Goleta)

The siting of the Anza Trail diagonally across the Ellwood Open Space must be reviewed both for its impact on the visual quality of the space and from its impact on the park's environment.

Placement of the Anza Trail diagonally bisecting the Ellwood Open Space needs to be reconsidered for its impact on the visual character of the open space and also from the impact of constructing additional trails across the slope of the hill. A more appropriate and environmentally less destructive location can be found just south of the wooded portion of the site where the gradient is less and the need for cutting and filling to provide a level surface will be minimized.

The argument that an existing trail will be utilized for the Anza Trail is not valid since the trail cross sections show clearly that the Anza Trail will be two parallel trails, one for pedestrians and bicycles and the other for horses. Construction will be necessary to create this trail. Accordingly it seems wise to examine the location of this new trail rather than using an existing pathway which cuts across the open space and populates the center of the space significantly harming views to the North and South.

While public sentiment can be found to identify and treasure every footpath that is currently in use in the area, all have been created by the wide variety of users this area has seen before, during and after it was an active oilfield. The use of a landscape architect to design a more rational and attractive system (using what exists to the maximum degree possible) would seem to be highly desirable if this plan is created, rather than making permanent the accidental trail pattern now present. What is established by this plan will be immeasurably more difficult to change later.
Seed and Rootstock (All jurisdictions)

The use of seed and/or invasive root-stock from outside the Devereux Creek drainage area will have unacceptable impacts on Coal Oil Point Reserve.

Of all the environmental impacts which will have long term impacts, none would be more permanent than the use of invasive rootstock and seeds from outside the Devereux watershed. The proposed materials to be used for landscaping as well as erosion control are described in a variety of ways from “native” to “native South Coast” or not described at all. These terms are unacceptably vague. The use of seed and rootstock from outside the Devereux watershed will lead inevitably to the destruction of the genetic makeup of existing native plants on the Coal Oil Point Reserve. This impact is not presented in the EIR nor apparently understood. The impact of accidental introduction needs to be assessed and prohibitions established.

As a research and education facility of the University of California, Coal Oil Point deserves special attention as the University and other Governmental bodies make changes which impact such basic aspects of its environment and its reason for existing. The introduction of seed and rootstock from outside the drainage area must be prohibited and sanctions established to assure there will be no inadvertent introduction.

Monarch Butterfly habitat destruction (City of Goleta)

To construct the Comstock Homes Development as designed will require the destruction of Monarch Butterfly habitat with an ESHA and cannot be mitigated. This can and must be avoided by redesign of the Comstock Homes project to protect all of this grove of trees.

A primary reason for the public’s support of the Ellwood/Devereux project and the land exchange is the permanent protection of the wintering sites for Monarch butterflies. To permit avoidable impact on this site is not only contrary to the policy of the Coastal Commission, it is contrary to the very purpose of the entire project.

The trade of lands, with the cash incentives raised from the community, is understood and agreed with. However it was never contemplated that this would include loss of butterfly roosting sites.

Water Quality (All jurisdictions)

Existing water quality in Devereux Creek, as sampled, shows regular violations of Water Quality Standards due largely to its urbanized upper watershed. Non-point source runoff from all housing projects planned will add to the already excessive loading of this stream and the Devereux Slough.

The cumulative effect of developing the entire number of housing projects is described as “less than significant” based upon a series of assumptions that appropriate practices by each project will keep the cumulative effect to inconsiderable levels. No efforts are described to monitor and
control the reality of this assurance. The current water quality of Devereux Creek would indicate that the existing standards for control of storm water drainage, point source and non point source runoff are less than what is necessary to protect Devereux Creek.

Given that, using the same practices for control of pollution, for all these projects it is less than certain that water quality degradation will not be a significant impact. Calculations based on current percentages of the drainage basin in pavement or development and associated non-point pollution would be useful with comparisons to the proposals for multiple developments.

It would appear that here, as in other areas, the cumulative benefits attach to the whole project, but the cumulative environmental impacts have been separated and minimized by considering them individually. (Given the sponsors of much of the housing planned, one would expect that water quality in the Coal Oil Point Reserve might be planned to be maintained and improved.)

A. For specific point source (or leaking sewage mains) The Comstock development is best served by a lift station to eliminate the need to depend on “projected” lining of the Devereux Creek sewage main for its sewage. While the entire project area is dependent on this improvement for improving water quality in the Creek, and this improvement needs to be part of this plan, at least for the Comstock development an assured alternative is available. We strongly favor it.

B. Given the additional volumes of rain not being absorbed some control of water volume (as well as sediment) needs to be established before release into Devereux slough. Proposed construction of a significantly larger culvert where the Veneco road crosses the Creek will only serve to accelerate water and sediment into the Slough. This impact to Coal Oil Point Reserve and the Slough needs to be evaluated.

Filling Coastal Wetlands (County and University)

The filling of Coastal Wetlands is prohibited under the Coastal Act. The definition of what is a Coastal wetland has been established by the Coastal Commission and upheld by the Courts. The grounds under which Coastal Wetlands may be filled have been established by the Courts.

For all alternative University housing proposals the above statement holds true. Extensive arguments to the fine points of “balancing” and the multiple benefits provided through the Open space Plan notwithstanding, the loss of 2.83 Acres (as identified by the applicant) of coastal wetland on the University’s North Parcel of the West Campus appears to us to mean that fewer housing units may be built on this parcel. In this regard the University is in the position of any coastal project developer seeking to maximize allowable development at the cost of filling wetlands.

The Sierra Club is opposed to any development of coastal wetlands in contravention of the Coastal Act and the court decisions which have defined it.
No mention is made of the existing high water level connection between Devereux Creek drainage and the Goleta Slough. This wildlife corridor currently exists but could easily be disrupted during the construction of the housing immediately adjacent to it. This would constitute a filling of wetlands that would be particularly damaging to the ecological health of the entire area. This needs evaluation and the area needs protection.

**Parking at Coal Oil Point** (University)

Public parking at Coal Oil Point Reserve is an environmental impact, not a mitigation or a benefit which may be used to balance other environmental impacts. As such it must be fully evaluated in its effect on the Coal Oil Point Reserve, the natural resources therein and the neighborhood.

The University has long prohibited public parking at Coal Oil Point specifically to avoid attracting the public to this beach which is a Natural Reserve within the University system. This has been true for the past ten years. With the onset of Snowy Plover breeding in 2001, the need to protect this area became significantly higher. No impacts have been identified for this change in policy which the management of the Reserve opposes.

The impact of providing public parking at Coal Oil Point on Snowy Plover management and restoration must be evaluated over the short term and the long term. Increasing access will lead to even more desired access as more and more people learn of the opportunity. The existing use is not quantified, the immediate expected result of increased beach goers is not identified, and no system of long term monitoring is established to use in managing the expected effect of this new access.

Additionally, other impacts of this decision have not appeared in the EIR. Given the repeated errors in the Plan and the Conceptual Plan in the maps of Coal Oil Point and Slough Road, it is not surprising that the impacts of opening this area to public parking and our earlier comments to this point have not received any attention.

**A. Slough Road is identified as a Public Access Trail in the Coal Oil Point Reserve.** As was pointed out in our comments to the Conceptual Plan, and apparently ignored, the Slough Road (or Devereux Road) is a substandard local road with a 15 miles per hour speed limit and, at present, an unsafe mixture of pedestrians, runners, bicycle riders and automotive traffic. The pedestrian path is a narrow unvegetated trace between the pavement and the Slough with an immediately sharp drop down to the Slough. It is rarely used by pedestrians or runners who prefer to use the road surface at their own risk.

The sharp bends in the road and the narrow paved area make any increased traffic flow, much less increased pedestrian use, significantly more hazardous. Designating this road as a trail for recreational use is a hoax and it should be eliminated.
B. Increasing public automobile use of it is a threat to all other users. This is an impact on the human environment which must be examined and evaluated. No estimations of traffic increases have been presented in the EIR much less data regarding existing use. Given that on high use days there will few spaces left for the public, a new traffic impact can be expected of disappointed motorists departing Coal Oil Point to try and find parking at some other location. Speeds are likely to be increased and safety impaired in these situations.

C. The Devereux School is immediately adjacent to this road and its residents and staff use the road for access to Coal Oil Point. On occasions residents (some with cognitive impairments) have used this road without escorts. This is an impact unrecognized in the EIR.

D. Public parking will also introduce picnicking to the beach at Coal Oil Point Reserve. Existing pedestrian and bicycle access limits what is carried to the beach. With only a short walk to access at Coal Oil Point from the parking lot, families can be expected to bring food and leave trash. This will vastly complicate predator control and create a need for beach cleanup. No staff is programmed for this nor are the impacts of the resulting increased predation on Snowy Plovers assessed.

Police Protection (All jurisdictions)

Nowhere in the EIRs is any increased police attention projected for the entire area yet increased public use is anticipated throughout all three documents. Additionally, the nature of the needed enforcement will not be traditional police protection usually based on immediate automotive access. As the existing docent program has researched and proven, a police presence is needed on the beaches to protect endangered species as well as to enforce the regulations of the COPR. With the Ellwood Open Space and the recreational use of the South Parcel planned, three jurisdictions will have significant enforcement problems given the ease of crossing legal boundaries, multiple means of entrance and exit and the inability of police officers to reach the remote sections of the area in time to enforce the law.

Recent events (May 15, 2004) at Coal Oil Point Reserve have shown that University law enforcement cannot and does not protect either the natural resources or the facilities from vandalism.

The existing Docent Program at COPR is an educational program, not a substitute for law enforcement.

Additionally, existing leash laws are not proposed to be enforced on the Ellwood Open Space despite the Snowy Plover breeding habitat on the beach (Page 65). This effect is not evaluated and will not found to be consistent with the Federal Endangered Species Act by the agencies charged with enforcement much less our organization.

The effect of unleashed dogs on upland wildlife is not evaluated, this is particularly needed given the number of trails left open across the entire area.
Unanswered in the documents is what means of access will be established to allow law enforcement to access the area to protect recreational users of the ocean.

**Rare, Threatened and Endangered Species Habitat (All jurisdictions)**

The long term cumulative effect of increasing public use of this area has not been evaluated against the mission of the Coal Oil Point Reserve and its planning to restore and improve habitats for the native species of plants and animals which one may, or could, find in its mix of beach, coastal slough, dunes and coastal uplands. The Reserve was established to provide opportunities for these coastal ecosystems to be restored and maintained.

Long term increases of public use of areas immediately adjacent to the Reserve will inevitably produce conflict over use and damage to the resources the Reserve was established to preserve and protect. There will also be opportunities which will not occur because of this impact. To the best degree possible these impacts must be planned for, monitored and mitigated. They certainly can be expected.

The EIR seems to miss this forest for the trees (albeit it misses some trees as well). An assessment of this impact on the Reserve and the mitigations for it must be a part of this planning. Not to establish long term mitigations of these general and specific impacts will be to leave it to the budgetary vagaries of the University system, should they happen at all. Internalizing the impacts of these proposed developments to the long term benefit of the Reserve would seem to be an opportunity currently presented which should not be missed and which must not be avoided.

**Rare, Threatened or Endangered Species at risk within the area:**

**Birds:**
Bank Swallow
Belding’s Savannah Sparrow
Black Swift
Brewster’s Willow Flycatcher
Brown Pelican
Burrowing Owl
California Least Tern
California Quail
Light-footed Clapper Rail
Coast Horned Lark
Common Loon
Cooper’s Hawk
Golden Eagle
Grasshopper sparrow
Least Bittern
Lon-Billed Curlew
Merlin
Northern Harrier
Osprey
Peregrine Falcon
Prairie Falcon
Red-shouldered Hawk
Red-tailed Hawk
Rough-legged Hawk
Sharp-shinned Hawk
Western Snowy Plover
Southwestern Willow Flycatcher
Tricolored Blackbird
Virginia Rail
White-faced Ibis
White-tailed Kite
Wilson’s Warbler
Yellow Warbler
Yellow-breasted Chat

Mammals
Badger
Pallid Bat
San Diego Black-tailed Jackrabbit
Townsend’s Big-Eared Bat
Coyote

Amphibians and Reptiles
Red-legged Frong
California Legless Lizard

Fish
Tidewater Goby
Shari Hammond
U.C.S.B.
Budget and Planning Department 2032
1325 Cheadle Hall
Santa Barbara, CA 93106
Fax 893-3870

Dear Ms. Hammond,

Surfrider Foundation Santa Barbara Chapter would like the following comments placed in the record of any proceedings regarding the proposed Student and Faculty Housing at Devereux (North Campus Housing Development at Devereux).

1. We are opposed to any development South of the Ocean meadows Golf Course because it threatens wetlands and other ESHA. The south Parcel Alternative is not the environmentally superior alternative because it does not avoid wetlands and increases overall biological impacts. We request that any prohibition of such development be made permanent through designation of the area as part of the coastal Oil Point Preserve or other permanent conservation easement.

2. The South Parcel is ESHA based on its support of rare species habitats.

3. The University undertakes restoration and conservation of the entire area thus facilitating enhancements of all wetlands on the University property as mitigation for this project, and not as mitigation for future developments.

4. We urge the University to amend its LRDP to include 100 foot buffer requirements for wetlands (with the possible exception of parcel #13 to allow access to the North Parcel) so as not to set an environmentally harmful precedent. The setback should remain at least 200 feet from Devereux Creek.

5. More detailed mapping of ESHA on all parcels and adjacent parcels to ensure proper protection and buffer zones. Wetlands are by definition ESHA.

6. The culvert where Devereux Creek passes through into the slough should be replaced with a span bridge rather than a box culvert.

7. Review the condition of swales previously identified by Darlene Chirman, restoration biologist, for future analysis as potential wetlands or other valuable habitat for future protection. EDC and Audubon confirmed that wetlands present on the South and North Parcels were not mapped in the Draft EIR, which is therefore flawed and in need of revision to accurately portray impacts.

8. Much greater study of landscape, construction, architecture, and other advanced designs to ensure that all non-point source pollution, and runoff be minimized. In essence we are requesting that both during the construction phase and after any housing is constructed the highest levels of “Green”, sustainable, environmentally friendly technology be employed. This would include methods to reduce traffic, cat and dog incursions into ESHAs and to prevent any increase in pollutants entering the ocean.
9. We request that the acquisition of the Ocean Meadows Golf course for the purpose of restoring it to native habitat be given a high priority.

10. The wetland along Storke Road by the proposed Sierra Madre Project was not accurately mapped and extend further north. This area must be preserved along with large buffers to protect the wetlands and maintain a wildlife movement corridor. The buffer should be restored along with the wetlands, and an undercrossing for wildlife beneath the widened Storke Road should be installed to maintain the vital connection between the Goleta and Devereux Sloughs.

Kenneth Palley
Chairman
Surfrider Foundation
Santa Barbara Chapter

[Signature]
Attention Shari Hammond

To  Shari Hammond
    Senior Planner
    University of California Santa Barbara,
    Office of Planning and Design
    Goleta, California  93106-2032

From  Mike Fealy
    Santa Barbara Urban Creeks Council
    1140 Orchid Dr.
    Santa Barbara, California  93111
    (805) 967-5025

Re: Draft EIR for Faculty and Family Student Housing and Open Space plan Wet Campus UCSB

The Proposed project would fill wetlands on the North Parcel in violation of the coastal act. Please present alternatives that would keep non permitted development out of wetlands, and wetland buffer on the North and Storke Whittier parcels. Any development should occur north of Devereux Creek, and Stay off of the South Parcel.

Sincerely

Mike Fealy

Mike Fealy
May 23, 2004

Shari Hammond, Senior Planner
University of California, Santa Barbara
Office of Campus Planning and Design (2032)
Santa Barbara, California 93106-2032

Dear Ms. Hammond,

As residents of the West Campus Point Faculty Housing (WCP), we applaud the plan to create more affordable faculty housing on North Campus and to enhance the biological characteristics of West Campus. However, we are concerned that the draft EIR does not adequately address several potential impacts of the proposed open space plan to West Campus. These potential impacts are:

1. Increased traffic on Devereux Road, and associated risks to pedestrians, as a result of public parking near Coal Oil Point Reserve;
2. The environmental impacts of a new parking lot on West Campus Bluffs:
   a. Increased traffic in the western section of Isla Vista;
   b. Degradation of the visual character of West Campus Bluffs;
3. Increased recreational use of West Campus.

As president of the WCP Homeowners’ Association, I am writing to clarify these concerns of our community.

**Increased traffic on Devereux Road**

The traffic analysis for Devereux Road is inadequate. The EIR predicts that public parking near Coal Oil Point will lead to 93 additional vehicle trips per day on this narrow, winding road (p. 4.12-32). This is based on an assumption of 4.65 trips per space, a number that is provided without justification. Indeed, given human nature, it is reasonable to assume that every visitor who wants to go to Coal Oil Point or Sands Beach via motorized vehicle will drive out to the Coal Oil Point parking lot first, returning to more remote parking when the lot is found to be full. This could only be alleviated by an electronic “lot full” sign at the entrance to West Campus, an expensive and technically challenging solution.

Implicit in the conclusion that the 93 new trips will not “result in any substantial hazards to pedestrian safety” is the assumption that this number is small relative to the existing traffic volume on Devereux Road. However, no study of the existing traffic has been performed, so this assumption is unjustified.

Furthermore, Devereux Road is a designated pedestrian route (trail 5 and part of trail 6), and is a natural route for people parking at Cameron Hall to take to Coal Oil Point. Currently there is a very narrow footpath immediately adjacent to the pavement along part of the road, but in practice pedestrians and joggers use the pavement. In figure 14 of the Ellwood-Devereux Coast Open Space and Habitat Management Plan these trails are designated Type F: “class II or III bike lane.”

The EIR notes the posted speed limit of 15 MPH. However, this limit is rarely, if ever, enforced, and traffic routinely exceeds 35 MPH, which is unsafe for vehicles on this
road, let alone vehicle-pedestrian interactions. With an increase in both vehicle and pedestrian use, and the lack of a quantitative traffic study, the finding of “less than significant” hazards to pedestrians is unjustified.

**Impacts of a new parking lot on West Campus Bluffs**

**Increased traffic in the western section of Isla Vista**

The new parking lot on West Campus Bluffs would have access solely through the residential neighborhood at the west end of Isla Vista; the parking lot would therefore increase traffic volumes on residential streets. No analysis of this traffic impact has been performed.

**Degradation of the visual character of West Campus Bluffs**

In the Draft EIR, it is stated that the proposed parking lot on West Campus Bluffs would be “adjacent to existing parking (along Camino Majorca ...) and thus would be generally consistent with the existing visual character or quality” of those locations (p. 4.29-27). This is disingenuous, for the existing parking on Camino Majorca is visually screened by the row of eucalyptus trees that separate Isla Vista from West Campus Bluffs; these trees form a backdrop for the sweep of the bluffs. In contrast, the new parking lot would interrupt the visual sweep of the bluffs. Any plantings that were sufficiently tall as to fully screen the parked vehicles from view (MM 4.9-3(h)) would be uncharacteristic of the visual character of the bluffs, either in their current state or in the proposed restoration to native grasslands and vernal pool complex.

**Increased recreational use of West Campus**

The draft EIR notes that “Project implementation could increase recreational use of the open space under University jurisdiction” (Impact 4.10-1, p. 4.10-18), and goes on to conclude that “With implementation of identified mitigation measures, this impact would be less than significant.” However, the identified mitigation measures (MM 4.10-1(a-c)) address campus active recreation facilities, COPR activities, and beach activities, not activities on West Campus Bluffs or West Campus Mesa. The additional parking on West Campus and the planned closure of two heavily-used trails that cross West Campus Bluffs will result in increased pedestrian and bicycle densities on the remaining trails. We are particularly concerned that one of the two remaining trails (labeled “2” in Figure 4.10-3) will run immediately adjacent to the WCP property along its entire southern boundary (although the open space plan designates this as an existing trail, it presently gets very little use; the WCP gardeners keep it mowed to reduce weed incursion into WCP landscaping, which makes it look more substantial than would be maintained by actual use). Vandalism, petty theft, and safety threats against residents are an increasing problem at WCP; we are very concerned that funneling pedestrians to the boundary of the complex would increase the frequency of these safety and property damage problems. None of the proposed mitigation measures address either the general problem of increased pedestrian/bicycle traffic density or the specific problem of threats to WCP residents, so we contest the conclusion that the effects are “less than significant.”
In summary, before the EIR is finalized, we request that the University perform the following analyses:

1. Traffic study of Devereux Road, and more thoughtful consideration of potential increase in both pedestrian and vehicle traffic;
2. Traffic study of western Isla Vista, and assessment of traffic increases on these residential streets associated with new parking on West Campus Bluffs;
3. On-the-ground assessment of the visual impact of the parking lot on West Campus Bluffs, laying out the footprint of the project and the projected height, as is done for other construction projects in visually sensitive areas;
4. Parking needs survey to assess the need for a new parking lot on West Campus Bluffs (informal counts by homeowners have shown that even on the busiest days the current parking is adequate to handle beach traffic, suggesting that the new lot is unnecessary);
5. Formal projections of pedestrian and bicycle use on the new trails on West Campus Bluffs;
6. Formal assessment of the need for an upgraded trail 2 (it is not a direct route to anywhere).

We also recommend the following mitigation actions:

1. Install automated "lot full" sign for the Coal Oil Point parking lot at the entrance to West Campus;
2. Commit to active enforcement of the posted speed limit on Devereux Road;
3. Eliminate the West Campus Bluffs parking lot, possibly relocating spaces to West Campus Mesa;
4. If parking at West Campus Bluffs is retained, place the parking lot below ground level, so that screening plantings need not be so tall;
5. Relocate or eliminate trail 2.

We consider ourselves to be very fortunate to live on West Campus, and we feel a stewardship towards the natural beauty and public safety of the area. It is in this spirit that we offer our comments; we hope that you will give them due consideration.

Sincerely,

Bruce Kendall
President
West Campus Point Homeowners' Association
INDIVIDUALS
May 16, 2004

Shari Hammond, Senior Planner
University of California, Santa Barbara
Office of Campus Planning and Design (2032)
Santa Barbara, California 93106-2032

Re: Devereux-Ellwood Coast Open Space and Habitat Management Plan
Draft EIR March 2004

Dear Ms. Hammond,

I am an amateur field naturalist, a seasoned Monarch butterfly observer and a long time Ellwood activist.

After reading the Draft EIR & OSHMP, I wish to point out the need to investigate an often overlooked and under appreciated element of our natural world: mainly pollinator insects.

A complete survey or inventory of biological resources in the project area should include some study of pollination ecology and an attempt to identify and quantify the insect pollinators that inhabit the Devereux-Ellwood Coast, such as beetles, butterflies and bees.

While certain important botanical resources are listed in the Draft EIR, their relationships or possible inter-dependence with pollinators needs to be considered and measures implemented to enhance or conserve their habitats.

In the Ellwood-Devereux project area I have personally observed or identified various butterflies and other pollinator insects that include:

  Common Buckeye
  Sara Orangetip
  Checkered White
Anise Swallowtail
Lorquin's Admiral
Skippers of various kinds
Sphinx or Hummingbird Moths
Bumble bees
Honey bees
Various beetles
Various flies

Many of these insects are also part of the food chain that sustains many of the avian and mammalian creatures that have special status under CEQA or other relevant guidelines.

Please direct a qualified biologist(s) to investigate further into this matter and offer methods of conservation or habitat enhancement.

The Ellwood-Devereux project area deserves a thorough listing of biological resources and should include these valuable pollinator friends.

I urge that all relevant planners and park land or open space managers use resources such as the Pollinator Conservation Handbook by the Xerces Society/The Bee Works to educate and equip themselves to monitor and conserve these most easily enhanced natural assets. Enclosed, for your use, is a web page printout describing the handbook and an order form.

Thank you for your time and consideration in this matter.

Yours truly,

David T. Lange

Encls.
Pollinator Conservation Handbook

The Pollinator Conservation Handbook is a new publication by the Xerces Society and the Bee Works. It is the first comprehensive book on the conservation of native bees, butterflies, and other native pollinator insects and is an indispensable resource for gardeners, farmers, and managers of parks, recreational areas, and wild lands. The Handbook guides the reader through the steps needed to create and enhance habitat for insect pollinators and contains information on selecting and planting forage flowers, providing nesting and egg-laying sites for bees, butterflies, and other insects, and caring for your pollinator habitat over time. The Handbook also contains an extensive, up-to-date resource section and ideas for educational activities.

Pollinators are an essential component of all environments. Without pollinators, at least 80 percent of our flowering plants could not reproduce. Despite their importance pollinators are declining in many areas as their habitat is converted to other land uses. The good news is that pollinators can survive, even thrive, in small patches of habitat and we can all contribute to their conservation by following the steps laid out in the Pollinator Conservation Handbook.

The Pollinator Conservation Handbook comes from two of the leading organizations engaged in pollinator conservation:

The Xerces Society is a nonprofit conservation organization that for over thirty years has worked to protect bees, butterflies, other invertebrates, and their habitats through advocacy, public outreach, and research. For the last six years, our Pollinator Conservation Program has focused on educating the public about the important environmental role of pollinators.

The Bee Works is an environmental consultancy founded by Stephen Buchmann, coauthor of The Forgotten Pollinators. The Bee Works conducts pollinator surveys and research on native bees, and is developing insect-identification software.

http://www.xerces.org/pubs_merch/pch.htm
Beautifully produced, the *Pollinator Conservation Handbook* features the spectacular photography of Edward S. Ross, whose work frequently appears in our popular membership magazine, *Wings*. To order a copy of the *Handbook*, click on the link below to download and print the order form. 145 pages; soft cover; 57 color photographs.

**Cost** (includes shipping and handling): **Members**: $18.45 per copy; **Non-members**: $22.45 per copy.

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http://www.xerces.org/mercform.htm

5/17/04
May 24, 2004

Ms. Shari Hammond
Senior Planner
Office of Campus Planning and Design
University of California
Santa Barbara, CA 93106-2032

Dear Ms. Hammond,

I am writing to provide my comments on the Ellwood-Devereux DEIR and OSHMP. I am a coastal ecologist by profession and also live adjacent to the proposed new parking lot on the West Campus Bluffs detailed in the OSHMP in figure 23. This proposed new parking lot (20 or 40 spaces) will have severe adverse impacts on the ecology of the bluffs, beach and coastal zone, and the traffic, noise, and air pollution will endanger and degrade the quality of life for local residents, including my family.

As an ecologist, the conversion and development of any of the few remaining undeveloped coastal zone lands in the region into parking lots is completely unacceptable and can not be justified by offsite mitigation or other measures. Our remaining coastal zone land is far too scarce, fragmented and precious to be used for parking or other unnecessary developments.

The area proposed for the new parking lot can be clearly defined as coastal wetlands based on the vegetation. Hundreds of native wetland plants currently grow on the site of the proposed West Campus Bluffs parking lot shown in Figure 3-10 of the DEIR. The wetland delineation conducted for the DEIR is obviously insufficient for the West Campus Bluffs.

I also am concerned with any actions that result in increasing public access to the beach area at the Camino Majorca staircase and the proposed new staircase at the historic Campbell beach house (jailhouse) (Figure 4.10.3). This beach is a major foraging ground for wintering shorebirds as documented in Hubbard and Dugan 2003 (paper included and also it was provided to you at the West Campus Bluffs meeting in 2003). Most populations of migrant shorebirds around the world are in serious decline, suggesting that vital condition-dependent rates such as fecundity and annual survival are being affected globally. The beach between the Camino Majorca staircase and Coal Oil Point supports high diversity (26 species) and some of the highest average numbers of shorebirds (99 birds/km) reported for an exposed sandy beach anywhere in the world. This stretch of beach provides shorebirds with a much needed refuge from winter high tides in combination with rich and readily available prey. The area in front of the Campbell Ranch beachhouse is particularly important as a foraging refuge during high tides. Enhancing the human access and use of this beach will increase disturbance to shorebirds and could significantly decrease their survival and ability to reproduce successfully. This important environmental impact is not addressed in the DEIR.
As a 13 year resident of the only remaining neighborhood of single family homes in Isla Vista, it is clear that the proposed parking lot on the West Campus Bluffs will negatively impact and significantly degrade my quality of life and that of my neighbors. These negative impacts include 1) greatly increased, unsafe, uncontrolled, speeding traffic by our homes, seriously endangering our children, visitors, and pets, 2) significantly increased noise and disturbance by cars and beachgoers, 3) increased air pollution, trash and dirt in our yards and homes 4) complete loss of views across currently open space, 5) increased crime and burglary in our neighborhood, and 6) loss of the quiet family atmosphere of a neighborhood where children and residents can play in the street. None of these impacts are considered or addressed in the DEIR.

Isla Vista is a very densely populated area with few sidewalks or paths. Camino Majorca and the major cross streets of Isla Vista are heavily used by a frightening mix of cars, pedestrians, skateboarders, and bicycles. Most of the street intersections are blind and uncontrolled in west Isla Vista, including all of the intersections of major cross streets (Del Playa, Trigo, Sabado Tarde and Pasado) with Camino Majorca and Camino Lindo. Increased traffic due to the new circulation pattern associated with the proposed parking lot will greatly increase the already considerably traffic hazards of the area to all users and residents. The open bluff top land of the West Campus Bluffs bordering Camino Majorca west of the eucalyptus row provides a much needed safety corridor from Faculty housing to the Camino Majorca beach access where walkers, runners, strollers, equestrian and bicyclists can travel safely separated from traffic. At present, these users can access this area freely from Camino Majorca through the row of eucalyptus trees. The proposed West Campus Bluffs parking lot will greatly increase the exposure and hazards to all non-vehicular users of the area and push more walkers, bicyclists and equestrians into the overcrowded street. These significant impacts to traffic, traffic speeds, recreation, noise, quality of life and pollution are not considered or addressed in the DEIR.

The proposed parking lot is not needed, since no net loss of parking spaces is noted in the DEIR. Because of the negative impacts of any new parking lot on the West Campus Bluffs and increased coastal access, I urge you to remove this proposed parking lot on the West Campus Bluffs or any variation on it from the Ellwood-Devereux Plan. I encourage you to consider all other alternatives, including better bus service, no new parking lots, and the use of existing parking lots, in revising the Ellwood-Devereux OHSMP and DEIR to reduce the environmental impacts of the proposal. The remaining single family residences of West Isla Vista and the open spaces of the West Campus Bluffs provide a much needed tranquil refuge from the overcrowding and poorly planned residential housing, traffic and parking found in the majority of Isla Vista. Please preserve this residential and environmental refuge by reducing traffic, providing alternatives, and removing the proposed parking lot from the DEIR and LRDP Amendment for the Ellwood-Devereux Proposal.

Sincerely,

[Signature]

Jenifer E. Dugan, PhD.
Shorebird use of an exposed sandy beach in southern California

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Abstract

Frequent morning surveys of birds were conducted on 1 km of beach in southern California to investigate shorebird use of an exposed sandy beach. The overall mean abundance (98.6 individuals km\textsuperscript{-1}), estimated biomass (9.6 kg km\textsuperscript{-1}), and species richness (5.5 species km\textsuperscript{-1}) of shorebirds observed were very high for a sandy beach in the temperate zone. Eight species, sanderling (Calidris alba), semipalmated plover (Charadrius semipalmatus), marbled godwit (Limosa fedoa), black-bellied plover (Pluvialis squatarola), western sandpiper (Calidris mauri), willet (Catoptrophorus semipalmatus), surfbird (Aplius virgata), and whimbrel (Numenius phaeopus), occurred in overall mean abundances >1 bird km\textsuperscript{-1} and accounted for 97% of the abundance and biomass of shorebirds. Sanderlings were the most abundant shorebird every year (64% of individuals and 35% of the biomass). Different species of abundant shorebirds exhibited distinct patterns of use of beach habitat, including fall, spring, and winter peaks in abundance. Temporal variation in shorebird use on seasonal and interannual scales was associated with migration patterns, and also with habitat availability and condition. Seasonal variation in monthly mean abundance and estimated biomass of shorebirds varied over more than an order of magnitude and followed a similar pattern in each year, reaching maxima in the fall or winter (161–280 individuals km\textsuperscript{-1} and 15.4–23.9 kg km\textsuperscript{-1}) and minima in May or June (3–11 individuals km\textsuperscript{-1} and 0.8–2.2 kg km\textsuperscript{-1}). A minor peak in shorebird abundance and biomass coinciding with spring migration was observed in April of most years. The number of species of shorebirds observed in individual surveys ranged from 0 to 11 species km\textsuperscript{-1} and was positively and significantly correlated with abundance. Monthly mean species richness and the total species observed monthly followed similar seasonal patterns, ranging from annual maxima of 7.4–9.1 and 12–17 species km\textsuperscript{-1} between August and October to minima of 0.8–2.1 and 2–8 species km\textsuperscript{-1}, respectively, during June. In contrast, species turnover was lowest (1.1–1.7) in October and November, and generally highest (2–4) during early summer (June). The amount of sandy intertidal habitat available to shorebirds on the transect was estimated using sand elevations and predicted tide heights. In the fall and winter, the abundance of shorebirds was significantly and positively correlated with tide height, possibly reflecting feeding opportunities and high tide refuge effects during the highest tides. In the spring when sand levels were low, the abundance of shorebirds was negatively correlated with tide height. Prey availability, beach condition and the local availability, and condition of alternative foraging habitats may influence these relationships. Interannual variations in shorebird use and beach condition were observed in the course of the study. During an El Nino Southern Oscillation (ENSO) event (1997–1998), the extent of sandy habitat was greatly reduced and intertidal habitat was mostly converted to rocky substrate. The overall abundance of shorebirds and the mean abundance of some common species (e.g., sanderling) were depressed, and an uncommon species (surfbird, A. virgata) was unusually abundant during the ENSO event. In summary, the results suggest that sandy beaches are important habitat for many species of shorebirds, particularly in areas where alternative coastal foraging habitats, such as coastal wetlands, have become scarce. Understanding the dynamics of and threats to exposed sandy beaches may be increasingly important for shorebird conservation in many coastal regions.

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Keywords: sanderling; plover; godwit; sandpiper; willet; whimbrel; El Nino Southern Oscillation

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1. Introduction

Populations of many species of shorebirds are declining in North America (Howe & Geisler, 1989; Morrison et al., 2001). Factors affecting shorebirds, such as loss of habitats important for breeding, staging, and non-breeding season foraging, and exposure to contaminants are important concerns for conservation and restoration of shorebird populations (Brown, Hickey, Harrington, & Gill, 2001; Burger, Niles, & Clark, 1997; Hothem & Powell, 2000; McCravy & Pierson, 2000; Powell & Coller, 2000).

Strong seasonal variation in shorebird abundance in California is driven primarily by migration patterns (DeSante & Ainley, 1980; Shuford, Page, Evans, & Stenzel, 1989). The majority of shorebird use of southern California intertidal habitats occurs during migration and over-wintering periods, July through May (Garrett & Dunn, 1981). Shorebird distributions in the region have been categorized generally as: (1) breeding (May and June), (2) fall migration (from July to October), (3) over-wintering (from November to February), and (4) spring migration (from March to May; Lehman, 1994; Paulson, 1993). Some shorebird species may be present in the region for only a few days per year (Lehman, 1994), making a complete description of shorebird use challenging.

The majority of research on shorebirds in marine systems has been conducted in protected habitats, such as bays and estuaries (e.g. Goss-Custard et al., 1991; Piersma, Degoeij, & Tullip, 1993; Recher, 1966; Shuford et al., 1989). The loss of coastal wetlands suitable as shorebird habitat has been severe in southern California with <10% of historic levels remaining today. The regional loss of protected habitats may be increasing the importance of exposed coastal habitats, such as sandy beaches, for shorebirds. Relatively little information exists on shorebird use of exposed sandy and rocky intertidal shores (Bradley & Bradley, 1993; Burger et al., 1997; Colwell & Sundeen, 2000; DeSante & Ainley, 1980; Dinsmore, Collazo, & Walters, 1998; Lopez-Urriarte, Escofet, Palacios, & Gonzalez, 1997; McLachlan, Wooldridge, Schramm, & Kohn, 1980). Many bird species, including shorebirds, use exposed shores for roosting or loafing (pelicans, cormorants, gulls, and terns), nesting, and chick rearing (snowy plovers and least terns). More than 25 species of migrating, wintering, and breeding shorebirds use exposed sandy beaches on the California coast (Colwell & Sundeen, 2000; Dugan, Hubbard, & Wenner, 2001; McCravy & Pierson, 2002).

Exposed sandy beaches comprise approximately three-quarters of the world’s shorelines (Bascomb, 1980), including much of the California coast (Smith et al., 1976). Beaches are the least understood and least studied intertidal habitat on the California coast, despite their importance as a major component of the coast, ecological, recreational, and economic resources, and potential impacts from both marine and terrestrial pollutant sources. In southern California, exposed sandy beaches support diverse and abundant invertebrate macrofaunal communities (Dugan et al., 2000; Dugan, Hubbard, McCravy, & Pierson, 2003). Invertebrate macroinfauna can attain an abundance of >80,000 individuals and biomass of >10 kg m⁻¹ of shoreline on southern California beaches (Dugan et al., 2000, 2003). Such macrofauna may be increasingly important as prey resources for shorebirds, as the function, quality, and availability of coastal wetlands decrease regionally.

Exposed sandy beaches are dynamic habitats that exhibit strong temporal variation in many characteristics, this is particularly evident in southern California (e.g. Dugan, 1999; Dugan, Hubbard, & Wenner, 1998a,b). Factors important in seasonal and long-term changes in beach morphology include: movement of sand between intertidal and subtidal zones; episodic inputs of sand from watershed and coastline sources; high rates of longshore transport; and loss of sand from the nearshore zone. Sable levels vary seasonally on California beaches (Inman, Elwany, & Jenkins, 1993), along with beach slope, widths, and sand texture. Exposed sandy beaches often reach maximum widths and elevations in the fall, and erode to minimum levels (even exposing bedrock and large cobble) in the winter and spring on the coast of southern California (Bascomb, 1980).

The southern coast of Santa Barbara County is composed mostly of bluff-backed perennial or ephemeral beaches perched on bedrock platforms (Dugan et al., 1998a,b). In the area, seasonally varying wind and wave regimes drive beach morphology through annual cycles in which beaches retreat during periods with frequent erosive wave episodes (from November to March), and accrete during summer and fall. This seasonal cycle results in changes in the extent and nature of intertidal habitats exposed for shorebird feeding. During periods of low wave energy, the sandy intertidal habitat is relatively wide, fine-textured, and flat, with a gentle swash climate. With the seasonal movement of sand to the subtidal zone, beaches become narrower, coarser, steeper, and substantial areas of cobble or bedrock may be exposed, drastically changing the nature of the habitat and altering the distribution of food resources.

Interannual variation in coastal conditions can be associated with episodic El Nino Southern Oscillation (ENSO) events in the study region (e.g. 1982–1983 and 1997–1998). ENSO winters are characterized by strong storms, extreme waves, high sea levels, coastal flooding, and beach erosion (Flick, 1998). The 1997–1998 ENSO event resulted in record sea levels in La Jolla and San Francisco, CA, with a maximum at 0.9 ft above the
seasonal average (Flick, 1998). Storm conditions associated with El Nino events may greatly increase rates of change and erosion in coastal habitats (Flick, 1998) and leave a lasting signal in morphology, macrophyte wrack input, and invertebrate communities of exposed sandy beaches (Dugan & Hubbard, unpublished data).

To investigate the importance of exposed sandy beaches to shorebirds in southern California, and to assess the influence of survey frequency on seasonal variation and annual trends of shorebird abundance, biomass density, and species richness, frequent surveys of shorebirds on an exposed sandy beach were conducted over 6 years. The hypothesis that shorebird abundance is related to the amount of available habitat, which predicts there should be higher abundances of shorebirds when more habitat is exposed during low tide was also examined. The study period included a strong California ENSO event, which produced warm sea surface temperatures, elevated local sea level, heavy rain, energetic storm waves, and extensive coastal erosion between November 1997 and April 1998 (Flick, 1998), and allowed investigation of the response of sandy beach habitat and shorebirds to a strong disturbance event.

2. Study site and methods

2.1. Study site

The 1 km survey transect extends generally east to west across a bluff-backed intertidal shoreline in the western portion of Isla Vista, Santa Barbara County, CA (west end of transect at latitude 34°24.45’ north, longitude 119°52.76’ west). The transect is isolated from adjacent sandy intertidal habitats during high tides. Physical and ecological aspects of this site have been investigated in several other studies (Dugan & Hubbard, 1996, unpublished data; Dugan et al., 1998a,b).

Like much of the shoreline of southern Santa Barbara County, the Isla Vista transect is on the protected outer coast, partially sheltered from prevailing west and north-west wind and ocean swell by the east–west orientation of the coast, and by the California Channel Islands to the south. With the exception of the westernmost 100 m of the transect, this site is further protected by its location in the lee of Coal Oil Point. The habitat is composed of perennial beach, ephemeral beach, and rocky shore with pools at low tide. The beach is chronically exposed to hydrocarbon contamination by its proximity to nearshore petroleum seeps.

Physical characteristics of the study beach were measured monthly on low tides from November 1998 to January 2001, as part of a concurrent study (Dugan & Hubbard, unpublished data). The width of the beach (bluff base to low swash level) ranged from 29 to 72 m. Mean sediment size at the water table outcrop ranged from 0.18 to 0.40 mm. The modal morphodynamic state of the beach was low intermediate, with Dean’s parameter values ranging from 0.7 to 3.8. The study beach receives large subsidies of macrophyte wrack from adjacent intertidal and subtidal rocky habitats and is ungroomed. The standing crop of macrophyte wrack was estimated as mean cover and varied from 1.29 to 7.90 m² m⁻¹ of shoreline. The beach supports a very rich community of intertidal macroinvertebrates (39 species in a single survey) with extremely high abundance (up to 91,000 individuals m⁻²) and biomass (up to 3060 g m⁻²) (Dugan & Hubbard, 1996, unpublished data). That community includes wrack-associated and suspension-feeding species, all of which may serve as prey for shorebirds (Dugan et al., 2003). The beach is subject to regular use by humans and dogs.

2.2. Methods

To characterize shorebird use of the site, birds were surveyed between February 1995 and January 2001. For each survey, two indicators of available habitat were also recorded: 1) the predicted tide height (to the nearest 0.15 m Mean Lower Low Water), and 2) the height of the sand surface at a concrete stair landing at the east end of the transect (nearest 2 cm).

All birds were counted along a standard 1 km length of coast during morning hours (mostly between 7:00 and 9:00 a.m.). Typically, birds were counted while walking through upper beach habitat on the outward leg and from the lower shore on the return, with an elapsed time of about 25 min. Birds were counted only when they occurred on intertidal sand, rock, or macroalgal wrack, in pools, or wading in the nearshore zone (not in flight). Surveys were conducted in all weather, tide, and swell conditions encountered during the morning survey window. When possible, at least three surveys were conducted in each 10-day period. Shorebirds were identified to species whenever possible, but dowitchers could not always be reliably identified. Long-billed dowitchers (Limnodromus scolopaceus) and short-billed dowitchers (Limnodromus griseus) were both observed during the study, but combined counts for both species into one category, dowitcher spp., in the analysis.

Descriptive statistics for shorebirds and environmental parameters were calculated on three time scales: (1) single survey observations are used to describe extreme values during the study (maximum values); (2) monthly means are used to describe seasonal patterns (tide height, sand level, shorebird abundance, biomass, and species richness, and abundance of individual species); and (3) standard years are used to compare shorebird abundances among years (mean abundance between February and January of the following year between 1995 and 2001). To estimate the biomass of shorebirds on the transect, monthly mean abundance of shorebirds
was multiplied by values of mass given for each species in Paulson (1993). The turnover of shorebird species was estimated among the surveys in each month by dividing total monthly richness by mean monthly richness. Hypotheses concerning variation in abundance and species richness of shorebirds were investigated using regression analyses and ANOVA. To investigate patterns of shorebird abundance relative to tide level and extent of available habitat, ordinary least squares regressions were calculated for the abundance and species richness of shorebirds as a function of predicted tide heights. Data were also pooled from each calendar month across years of the study to reduce seasonal effects, and were then tested for significant correlations between daily shorebird abundance and tide height at survey time.

3. Results

3.1. Habitat

The extent of beach habitat available for shorebirds at the study site was affected strongly by the amount of sand accumulated (sand elevation) and the tide level. The estimated extent of the intertidal habitat varied by an order of magnitude among surveys, from <1 ha during spring high tides in the winter to ~10 ha during spring low tides in the summer months.

Predicted tide levels during the morning survey window varied seasonally, with generally higher tide levels for October through February and lower tide levels from May through July. Predicted tide levels ranged over 2.6 m and varied from -0.30 to 2.30 m MLLW during the shorebird surveys. Mean predicted tide levels for the survey periods for the 72 months of the study ranged from 0.35 to 1.45 m MLLW (Fig. 1). In southern California during the 1997–1998 ENSO event, mean sea level was elevated by an average of 0.3 m with higher peaks (Flick, 1998), and predicted tide levels underestimated actual values for that period.

Sand elevations at the reference point varied seasonally with maxima in the late fall and winter months and minima in the late winter and spring months (Fig. 1). Sand elevations for individual surveys ranged from 0.0 m (exposed rock platform) to 1.54 m at the reference point on the upper beach. Mean monthly sand elevations ranged from 0.0 to 1.3 m (Fig. 1). Changes in sand level were smaller seaward from the reference point where thiner sections of sediments accumulated on the bedrock platform. The extent and width of sandy intertidal habitat increased rapidly with increasing sand levels because overall beach slopes became shallower as sand accreted at the site. Monthly mean tide heights during the morning survey window and sand levels were strongly and positively correlated ($p < 0.01$, $n = 72$).

During the 1997–1998 El Nino, mean monthly sand levels dropped to <0.2 m in the winter and remained low (<0.4 m) until the fall of 1999 (Fig. 1). During that period, a large amount of formerly sandy intertidal habitat was converted to exposed rock. The interaction of low sand levels, record sea levels, and storm surges during the 1997–1998 ENSO led to inundation of the shore all the way to the bluff on numerous occasions, eroding high intertidal sand and removing wrack deposits and upper beach macrofauna.

3.2. Shorebirds

A total of 97,750 shorebirds of 26 species were observed in 994 surveys on the 1 km transect between February 1995 and January 2001 (Table 1; Fig. 2a, b). Standardized common names are used throughout the text (refer to Table 1 for species names). There were 34 occasions (3.4% of surveys) when no shorebirds were observed; most of these being in the late spring and early summer (12 in late May, 16 in June, and three in early July). Shorebirds were present on the transect in all weather, tide, and swell conditions. Most common shorebirds typically occurred in flocks, often composed of mixed species. Two species, whimbrels and black-bellied plovers, often occurred singly.

The majority of shorebirds observed during the surveys were actively foraging in the intertidal zone of the beach. Few individuals were observed roosting or loafing on the transect. Shorebirds were observed foraging at all intertidal levels, including the swash zone, saturated, damp and dry sand, in and around macrophyte wrack, in pools, and on and around exposed rocks. Shorebirds were observed probing in the sand and wrack, pecking on the sediment surface, gleaniwrack, and catching flies. Shorebirds were observed to capture a variety of prey species on the transect including: sand
Table 1
Mean abundance, maximum abundance, and occurrence of shorebirds in 594 surveys of 1 km of shoreline, Isla Vista, CA, from February 1995 to January 2001

<table>
<thead>
<tr>
<th>Common name</th>
<th>Species</th>
<th>Mean abundance</th>
<th>Maximum abundance</th>
<th>Number of times observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanderling</td>
<td>Calidris alba</td>
<td>62.8</td>
<td>840</td>
<td>703</td>
</tr>
<tr>
<td>Semipalmated plover</td>
<td>Charadrius semipalmatus</td>
<td>8.2</td>
<td>54</td>
<td>669</td>
</tr>
<tr>
<td>Marbled godwit</td>
<td>Limosa fedoa</td>
<td>6.3</td>
<td>63</td>
<td>535</td>
</tr>
<tr>
<td>Black-bellied plover</td>
<td>Pluvialis squatarola</td>
<td>5.7</td>
<td>41</td>
<td>728</td>
</tr>
<tr>
<td>Western sandpiper</td>
<td>Calidris mauri</td>
<td>4.9</td>
<td>710</td>
<td>250</td>
</tr>
<tr>
<td>Willet</td>
<td>Calidris semipalmatus</td>
<td>3.9</td>
<td>62</td>
<td>723</td>
</tr>
<tr>
<td>Surfbird</td>
<td>Aphriza virgata</td>
<td>1.8</td>
<td>456</td>
<td>29</td>
</tr>
<tr>
<td>Whimbrel</td>
<td>Numenius phaeopus</td>
<td>1.8</td>
<td>18</td>
<td>747</td>
</tr>
<tr>
<td>Least sandpiper</td>
<td>Calidris minutilla</td>
<td>0.7</td>
<td>50</td>
<td>122</td>
</tr>
<tr>
<td>Black turnstone</td>
<td>Arenaria melanocophala</td>
<td>0.6</td>
<td>13</td>
<td>196</td>
</tr>
<tr>
<td>Greater yellowlegs</td>
<td>Tringa melanoleuca</td>
<td>0.6</td>
<td>8</td>
<td>315</td>
</tr>
<tr>
<td>Killdeer</td>
<td>Charadrius vociferus</td>
<td>0.5</td>
<td>10</td>
<td>190</td>
</tr>
<tr>
<td>Ruddy turnstone</td>
<td>Arenaria interpres</td>
<td>0.2</td>
<td>6</td>
<td>111</td>
</tr>
<tr>
<td>Snowy plover</td>
<td>Charadrius alexandrinus</td>
<td>0.14</td>
<td>7</td>
<td>71</td>
</tr>
<tr>
<td>Dowitchers</td>
<td>Limnodromus spp.</td>
<td>0.12</td>
<td>44</td>
<td>37</td>
</tr>
<tr>
<td>Red-necked phalarope</td>
<td>Phalaropus lobatus</td>
<td>0.09</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Dunlin</td>
<td>Calidris alpina</td>
<td>0.06</td>
<td>33</td>
<td>21</td>
</tr>
<tr>
<td>Spotted sandpiper</td>
<td>Actitis macularia</td>
<td>0.06</td>
<td>3</td>
<td>53</td>
</tr>
<tr>
<td>Wandering tattler</td>
<td>Heteroscelus incanus</td>
<td>0.03</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Long-billed curlew</td>
<td>Numenius borealis</td>
<td>0.00</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Red knot</td>
<td>Calidris canutus</td>
<td>0.00</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Lesser yellowlegs</td>
<td>Tringa flavipes</td>
<td>0.00</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>American avocet</td>
<td>Recurvirostra americana</td>
<td>0.00</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Black oystercatcher</td>
<td>Haematopus bachmani</td>
<td>0.00</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Baird's sandpiper</td>
<td>Calidris bairdii</td>
<td>0.00</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total shorebirds</td>
<td></td>
<td>98.6</td>
<td>886</td>
<td>960</td>
</tr>
</tbody>
</table>

crabs (Emerita analoga), talitrid amphipods (Megalorchestia spp.), polychaetes (Eupolymnia mucronata, Scolopelis spp.), and flies (Coelopa vanduzei and Fucellia sp.). Intensive feeding activity was observed for many species of shorebirds during incoming spring tides when the beach face was eroding rapidly.

The abundance of shorebirds varied among seasons and years (Fig. 2a). The mean abundance of shorebirds observed in the survey was 98.6 birds km⁻¹ (Table 1). The maximum number of shorebirds observed in a single survey was 886 birds on 10 November 1996. Monthly mean abundance of shorebirds varied by more than an order of magnitude with season (Fig. 2a) and varied significantly among months (one-way ANOVA, F = 30.105, df = 11, p < 0.001). Monthly mean abundance of shorebirds peaked in the fall months (from October to November, between 161 and 280 birds km⁻¹) and declined in the winter (from December to March) (Fig. 2a). It was generally lowest in May or June (3–11 shorebirds km⁻¹), then rose in July, August, and September as fall migrants arrived (Fig. 2a). Secondary peaks in shorebird abundance occurred during spring migration (April, 70–217 birds km⁻¹) except in 1999 (Fig. 2a).

The annual mean abundance of shorebirds ranged from 79.4 to 118.7 birds km⁻¹ (Fig. 2a). The overall abundance of shorebirds declined during the ENSO event and remained lower than pre-ENSO levels (1995–1997) through the end of 2000 (Fig. 2a). The lowest annual mean abundance was observed in 1998–1999 (79.4 birds km⁻¹) during the ENSO event. Shorebird abundance increased slowly through 1999–2000 (90.3 birds km⁻¹) and 2000–2001 (97.4 birds km⁻¹; Fig. 2a).

Overall, the estimated mean biomass of shorebirds on the transect was 9.6 kg km⁻¹. Mean monthly biomass of shorebirds decreased from annual maxima between October and April (15.4–23.9 kg km⁻¹) to minima in May or June (0.8–2.2 kg km⁻¹; Fig. 2b). The biomass of shorebirds was depressed following the ENSO (1998–1999) and recovered slowly through January 2001 (Fig. 2b).

The species richness of shorebirds varied seasonally (Fig. 3a) and significantly among months (one-way ANOVA, F = 34.582, df = 11, p < 0.001). Mean species richness of shorebirds was 5.5 species km⁻¹ during the study. The number of shorebird species observed in individual surveys ranged from 0 to 12 species. In each year, the mean monthly number of shorebird species ranged from annual maxima (7.4–9.1 species km⁻¹) between August and October to minima (0.8–2.1 species km⁻¹) during June (Fig. 3a). The total number of shorebird species observed monthly showed a pattern similar to the monthly mean number of species (Fig. 3a). The monthly total number of shorebird species observed was
highest between August and October (12–17) and lowest during June (from two to eight species) in each year (Fig. 3a). Species richness appeared to be less affected by the ENSO event than abundance.

The high frequency of surveys in this study also allowed estimation of turnover of shorebird species (total monthly species richness/mean monthly species richness) and its variation across seasons. The turnover of shorebird species among the surveys in each month varied seasonally in each year (Fig. 3b). Estimated turnover of species reached minima between October and December (1.1–1.6) and was generally highest during June (2.2–4.7) (Fig. 3b).

The mean monthly species richness of shorebirds was positively and significantly correlated with the abundance of shorebirds (Fig. 4). Peaks in the abundance and species richness of shorebirds occurred in the fall migration period, while minima occurred in the early summer (June). Conversely, species turnover was greatest when shorebird abundance was low and least when abundance was high.

Although 26 species were observed during the study, the shorebird assemblage was dominated by a relatively small number of species. Six species accounted for >90% of shorebird abundance and 87% of shorebird biomass (sanderling, semipalmated plover, marbled godwit, black-bellied plover, western sandpiper, and willet). Eight species of shorebirds occurred in overall mean abundances greater than 1 individual km⁻¹ and accounted for 97% of the total abundance and biomass (sanderling, semipalmated plover, marbled godwit, black-bellied plover, western sandpiper, willet, surfbird, and whimbrel). Some species of shorebirds were present for only a few days per year (e.g. red-necked phalarope) or occurred in only one or two surveys (red knot, lesser yellowlegs, American avocet, black oystercatcher, and Baird’s sandpiper) during the study (Table 1).

Patterns of total and mean abundance, and of occurrence differed considerably among the 26 species that were observed (Table 1; Figs. 5 and 6). The total number of individuals observed for each species ranged from one (e.g. American avocet) to 62,382 sanderlings during the study (Table 1). Six species of shorebirds occurred frequently and were observed in >50% of the surveys (sanderling, semipalmated plover, marbled godwit, black-bellied plover, willet, and whimbrel). Frequency of occurrence of a species did not always coincide directly with total or average abundance (Table 1).
Some species were observed frequently as scattered individuals, while others occurred rarely but sometimes in large flocks (Table 1). For example, whimbrels occurred in mean abundance of 1.8 individuals km⁻¹, but were observed on 747 surveys. The mean abundance of surfbirds was 1.9 individuals km⁻¹, but they were observed in only 29 surveys.

Seasonal variation in the abundance and occurrence of shorebird species in these surveys appeared to be associated with different migration patterns. Sanderlings peaked in abundance during fall migration, but occurred in large numbers for several months of each year during the non-breeding season. Many species of shorebirds, including the plover species (semipalmated plovers, snowy plovers, black-bellied plovers, and killdeer) and greater yellowlegs also reached their peak abundance in the fall migration period (from July to October). Peaks in abundance (highest mean monthly values) of the four plover species observed on the transect occurred in a distinct sequence each year. The abundance of semipalmated plovers peaked on the transect in July–August, followed by snowy plovers in August–September, black-bellied plovers in September–October, and killdeer in October–November. Other species, such as the marbled godwit, reached peak numbers in the winter. Species that
typically exhibited peak abundance during spring migration include western sandpipers, surfbirds, black turnstones, and ruddy turnstones. Species with peaks in mean abundance during spring and fall migrations included least sandpipers and the dowitcher species. Some species of larger shorebirds, such as black-bellied plovers, willets, and whimbrels occurred nearly year-round, but in low average abundances. They were the most likely species to occur through the summer months, including June.

The magnitude and duration of declines in abundance associated with the 1997–1998 ENSO event varied among species of shorebirds (Figs. 5 and 6). Abundance decreased in some common species of shorebirds (sanderling, western sandpipers) and remained depressed for over a year after the ENSO event (Figs. 5a and 6a). The lowest annual average abundance observed for the dominant species of shorebird, sanderlings, occurred between 1998 and June 1999, immediately following the 1997–1998 ENSO (Fig. 5a), and abundance did not increase to pre-ENSO levels during subsequent years. The abundance of other species of shorebirds (marbled godwit, black-bellied plover, whimbrel) decreased to the lowest levels observed, but rebounded more quickly after the ENSO event (Figs. 5c, d and 6b, d). The abundance of at least one relatively uncommon species, surfbird, increased during and immediately following the 1997–1998 ENSO event (Fig. 6c).

3.3. Accounts of common species

Sanderlings, Calidris alba, were the most abundant shorebirds in each year of the study, averaging 63 birds km$^{-1}$ and comprising 64% of the total abundance and 35% of biomass of shorebirds (Table 1; Fig. 2b). Sanderlings were observed frequently on the transect, occurring in 704 of 994 surveys (71%) and three shorebird species occurred more frequently (Table 1). The mean abundance of sanderlings, when present, was 89 birds km$^{-1}$. They were the most abundant shorebirds in 54 of the 72 months (between August and May). They were typically observed feeding in dense single species flocks in the swash zone or around stranded wrack on the upper beach at all tide levels on the transect. They were not observed maintaining individual feeding territories, or leaving the beach for alternate habitats (e.g. coastal lagoons or estuaries) at higher tide levels. The abundance of sanderlings varied significantly among months (one-way ANOVA, $F = 8.732$, df = 11, $p < 0.001$). They were relatively scarce in summer and were not observed on the transect in June, but occurred in all other months during the study (Fig. 5a). Their abundance increased from June to October or November and decreased between April and June in each year. Maximum monthly mean abundance of sanderlings ranged between 120 and 251 birds km$^{-1}$, and occurred in the fall each year (October and November). Peak abundance observed was 840 individuals on 10 November 1996. Abundance of sanderlings in the winter and spring was lower than in the fall, with maximum values between January and March ranging from 65 to 147 birds km$^{-1}$. Their highest annual abundances occurred in the first 3 years of the study. The maximum annual abundance (71 birds km$^{-1}$) occurred between February 1996 and January 1997. The lowest annual average abundance observed was 53 birds km$^{-1}$ (1999–2000, the year following the 1997–1998 ENSO event). Peak abundances of this species did not reach pre-ENSO levels by fall 2000.

Semipalmated plovers, Charadrius semipalmatus, were the second most common shorebird species observed during the study and comprised 8.3% of the total abundance and 4% of total biomass of shorebirds observed (Table 1). They were the most common shorebird observed in 9 months during the study (between May and August). They were observed frequently (669 surveys or 67% of the surveys) and in every month of the study except February and June 1998 during the ENSO event. Their overall mean abundance was 8.2 birds km$^{-1}$ (Table 1) and the mean abundance when present was 12.2 birds km$^{-1}$. Maximum abundance in a single survey on the transect was 54 individuals on 30 July 1998. They were typically observed in small flocks, feeding on wet, damp, and dry sand, and among rock outcrops. The abundance of semipalmated plovers varied significantly among months (one-way ANOVA, $F = 8.992$, df = 11, $p < 0.001$). Their abundance generally decreased from maxima in August to minima in the winter (from December to March). Maximum monthly mean abundance occurred in August throughout the study (14–29 birds km$^{-1}$) (Fig. 5b). Lowest mean monthly abundance generally occurred in May and June (0–1.7 birds km$^{-1}$). A minor peak in abundance usually occurred between March and May (Fig. 5b). Annual mean abundance was lowest in the first year of the study (5.2 birds km$^{-1}$), and highest in the last (12.6 birds km$^{-1}$).

Mean abundance of marbled godwits, Limosa fedoa, was 6.3 birds km$^{-1}$ (Table 1) and their mean abundance when present was 11.6 birds km$^{-1}$. They comprised 6.4% of the total abundance and 25% of the total biomass of shorebirds (Fig. 2b). The highest count in a single survey was 63 individuals on 15 January 2001. Marbled godwits were observed frequently, occurring in 53.9% of the surveys (Table 1). The abundance of marbled godwits varied significantly among months (one-way ANOVA, $F = 9.843$, df = 11, $p < 0.001$). Peak mean abundances ranged from 14 to 29 birds km$^{-1}$ and occurred in the fall or winter (from November to March), later than most other shorebird species reported in this study (Fig. 5c). This species was absent from the transect for several months each year, typically May, June, and July.
The mean abundance of black-bellied plovers, *Pluvialis squatarola*, was 5.7 birds km$^{-1}$ (Table 1) and their mean abundance when present was 7.8 birds km$^{-1}$. This species comprised 5.8% of the total abundance and 12% of the total biomass of shorebirds. The maximum number of black-bellied plovers observed in a single survey was 41 individuals on 27 July 1997. They were observed frequently and occurred in >75% of the surveys. They rarely occurred in flocks, and their distribution often consisted of scattered individuals located far from conspecifics and birds of other species. They occurred in every month of the study except January and February (Fig. 5d). Mean abundance of black-bellied plovers varied significantly among months (one-way ANOVA, $F = 6.004$, df = 11, $p < 0.001$) and generally reached maximum levels between August and December (Fig. 5d). Their annual mean abundance increased during the course of the study from a minimum of 3.9 birds km$^{-1}$ in the 1995–1996 to a maximum of 8.6 birds km$^{-1}$ in 1999–2000.

During the study, the mean abundance of western sandpipers, *Calidris mauri*, was 4.9 birds km$^{-1}$ (Table 1) and that when present was 19.5 birds km$^{-1}$. This species comprised 5.0% of the total abundance and 1% of total biomass of shorebirds. The highest abundance observed was 710 individuals on 21 April 1996. They occurred moderately often, and were present in 25% of the surveys. They occurred on the transect only during spring and fall migration periods and were rarely observed in the winter or during June (Fig. 6a). Most of the western sandpipers recorded in the study occurred in dense flocks (often mixed with other species) during migration periods. Their mean abundance varied significantly among months (one-way ANOVA, $F = 11.929$, df = 11, $p < 0.001$) and peaked during both spring and fall migrations throughout the study (Fig. 6a). Maximum mean monthly abundance (15–75 birds km$^{-1}$) occurred in April in every year of the study except 2000, when a fall peak was observed. Annual mean abundance of western sandpipers ranged from 2 to 7 birds km$^{-1}$. The lowest spring and fall migration peaks occurred during the ENSO event, and spring migration peaks did not reach pre-ENSO levels by spring 2000.

The mean abundance of willets, *Catoptrophorus semipalmatus*, was 3.9 birds km$^{-1}$ (Table 1), and their mean abundance when present was 9.5 birds km$^{-1}$. This species comprised 3.9% of the total abundance and 10% of total biomass of shorebirds. The highest single survey count of willets was 62 individuals on 25 February 1996. Willets were frequently observed and occurred in 73% of the surveys (Table 1). They were observed in every month of the study except June 1998 (ENSO event). Seasonal variation in the abundance of willets was less consistent than that observed in the other abundant species of shorebirds in this study (Fig. 6b). Generally, maximum abundance occurred in two periods: winter (February and March) and fall (August to November). Mean abundance of this species varied significantly among months (one-way ANOVA, $F = 2.912$, df = 11, $p < 0.01$). Their mean annual abundance ranged from 2.4 to 6.8 birds km$^{-1}$. No clear depression in willet abundance was evident during or following the ENSO event (Fig. 6b).

Surfbirds, *Aphriza virgata*, made up 1.9% of the total abundance and 3% of the total biomass of shorebirds. Their mean overall abundance was 1.9 birds km$^{-1}$ (Table 1) and the mean abundance when present was 63 birds km$^{-1}$. However, this species had a very different pattern of occurrence than the other common species. They were observed in only 2.9% of the surveys (Table 1) and were present only in two seasons. The majority of individuals were observed during spring migration (from March to May) and the remaining few individuals were observed during fall migration (between August and September) (Fig. 6c). They were the most abundant shorebird, and we observed the highest single count of 456 individuals in April 1998 during the ENSO event (Fig. 6c). Mean annual abundance of this species varied from 0.0 to 9.7 birds km$^{-1}$, with the peak occurring in 1998 during the ENSO event.

Whimbrels, *Numenius phaeopus*, comprised 1.8% of the total abundance and 7% of the total biomass of shorebirds. Overall mean abundance of whimbrels on the transect was 1.8 birds km$^{-1}$ (Table 1), and when present their mean abundance was 2.4 birds km$^{-1}$. Although they occurred in relatively low abundance, we observed them more frequently than any other species, and they occurred in 75% of the surveys (Table 1). They were present in all months except June of 1995, 1996, and 1998. Their highest single count was 18 individuals on 14 April 1996. They reached their highest monthly abundance (2–5 birds km$^{-1}$) during late summer and fall (from July to November) (Fig. 6d). A minor peak in the abundance of whimbrels occurred in each spring of the study (from February to May) (Fig. 6d). Their mean abundance varied significantly among months (one-way ANOVA, $F = 3.873$, df = 11, $p < 0.001$). Their mean annual abundance increased during the study, from 1.3 birds km$^{-1}$ in 1995–1996 to 2.3 birds km$^{-1}$ in 1999–2000.

3.4. Shorebirds and habitat

The influence of tide level (habitat availability) on the abundance and species richness of shorebirds was not consistent. Overall variation in the mean monthly abundance (Fig. 7) and species richness ($y = 1.32x + 1.40$, $r = 0.362$, $n = 72$, $p < 0.001$) of shorebirds was significantly correlated with tide height during the survey window. However, these results may be confounded by seasonal variation in abundance of shorebirds, tide level, and habitat extent. Shorebirds were most abundant in the fall and early winter, when
sandy habitat was extensive, sand elevations were high, and the mean tide height during morning surveys was generally high (Figs. 1 and 2a). Shorebirds were scarcer in the late spring and early summer, when the beach was eroded, more rocky habitat was exposed, and sand elevations and morning tides were low (Figs. 1 and 2a).

When seasonal effects were reduced by pooling data from each calendar month across years of the study, correlations between shorebird abundance and tide height were: (1) significant and positive in 3 months during the fall (October, November, and December, more shorebirds present at higher tides); (2) significant and negative in 3 months (March, April, and June, consistent with the hypothesis that increasing habitat available at lower tides supports increasing numbers of shorebirds); and (3) not significant for 6 months (Fig. 8). The hypothesis that increased available habitat (lower tide levels) leads to increased shorebird abundance during the surveys was not generally supported. Results for March, April, and June were consistent with the hypothesis, but those for the fall months when shorebird density is highest, and the highest tides of the morning survey window make the lower shore habitat inaccessible to shorebirds, suggested that more birds concentrated onto the available habitat, even though it was at a minimum.

4. Discussion

These results indicate that exposed sandy beaches, even ephemeral, bluff-backed beaches subject to heavy human use and significant temporal changes in width and condition, can support high numbers of a diverse array of actively foraging shorebird species. Overall, shorebird abundance on the study transect was very high (1.3–11 times higher) compared with the results of the majority of other studies of shorebirds on exposed sandy beaches in California and elsewhere in the world (Table 2). This is particularly interesting, given the relatively narrow and bluff-backed nature of the beach on the study transect and the dramatic variation in habitat extent and condition observed over time during the study. Sand elevation changed by more than 1.5 m and the habitat available to shorebirds varied over an order of magnitude seasonally. The only study for which similarly high mean abundances of shorebirds were reported was also conducted on a relatively narrow beach with rocky outcrops and high inputs of macrophyte wrack on the west coast of South Africa (Griffiths, Stenton-Dozey, & Koop, 1983) (Table 2).

The average species richness of shorebirds using an exposed sandy beach was also high relative to other studies of beaches in California and elsewhere in the world (Table 2). The regional species richness of shorebirds appears to be high relative to other areas (Table 2). The high frequency counts of shorebirds likely generated comparable estimates of abundance and average species richness to less frequent surveys, but yielded higher estimates of total monthly and annual species richness. High species richness of shorebirds may be related to the high diversity of microhabitat and prey types available on the study beach, which contained exposed rocks, pools, washed sand, upper and mid-intertidal beach, and abundant macrophyte wrack. More than 39 species of infaunal and wrack-associated invertebrates were observed on the study beach in a single survey (Dugan & Hubbard, in preparation), all of which could be prey for shorebirds. A variety of rocky shore invertebrates are also available to shorebirds on the lowest tides.

Shorebirds have high metabolic rates and relatively high daily energy expenditures (Kersten & Piersma, 1987), hence rich and productive prey resources are critical to the survival of breeding and non-breeding individuals. Prey availability to shorebirds can vary with tidal height (Connors, Myers, Connors, & Pitelka, 1981)
Table 2
Results of shorebirds surveys on exposed sandy beaches for the study area and other regions

<table>
<thead>
<tr>
<th>Abundance (individuals km⁻¹)</th>
<th>Species richness (number)</th>
<th>Number of sites</th>
<th>Length of transects (km)</th>
<th>Total length (km)</th>
<th>Study region</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Maximum</td>
<td>Species Mean</td>
<td>Total</td>
<td>3-40</td>
<td>&gt;60</td>
<td>S. Africa</td>
</tr>
<tr>
<td>8.9</td>
<td>14.7</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>east coast</td>
</tr>
<tr>
<td>98.1ₐ</td>
<td>—</td>
<td>&gt;6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>S. Africa</td>
</tr>
<tr>
<td>50-68ᵇ</td>
<td>117ᵇ</td>
<td>21</td>
<td>5</td>
<td>3-34</td>
<td>123</td>
<td>Outer Banks</td>
</tr>
<tr>
<td>23.9</td>
<td>—</td>
<td>19</td>
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<td>0.6-1.4</td>
<td>2</td>
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</tr>
<tr>
<td>44.0ₖ</td>
<td>124ₖ</td>
<td>2.6</td>
<td>12</td>
<td>0.5</td>
<td>20</td>
<td>USA, N. California Humboldt Co.</td>
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<td>44.0</td>
<td>603</td>
<td>3.1</td>
<td>23</td>
<td>1</td>
<td>14</td>
<td>USA, S. California Ventura Co.</td>
</tr>
<tr>
<td>77.9</td>
<td>1200</td>
<td>4.0</td>
<td>28</td>
<td>1</td>
<td>20</td>
<td>USA, California Santa Barbara Co.</td>
</tr>
<tr>
<td>98.6</td>
<td>886</td>
<td>5.5</td>
<td>26</td>
<td>1</td>
<td>1</td>
<td>USA, S. California Santa Barbara Co.</td>
</tr>
</tbody>
</table>

Abundance values are adjusted to 1 km if needed, but species richness values are not adjusted.

ₐ Value is seasonally adjusted.

ᵇ Spring/summer migration only.

ₖ Winter/spring only.

on sandy beaches. Tidal variation in prey availability depends in part on the macrofaunal assemblage present on a beach. Optimal foraging strategies of shorebirds may include interhabitat movement as reported by Connors et al. (1981) for sanderlings. The high proportion of foraging individuals observed in this study suggests that the surveyed beach is particularly important as a feeding area for shorebirds. These results also suggest that prey availability and feeding of shorebirds could be enhanced on beaches during incoming tides and in swells conditions that actively erode the beach face, exposing buried infauna.

Wrack-associated invertebrates are available to avian predators on a wider range of tide levels than are most of the suspension-feeding invertebrates, and thus may represent an important prey resource for shorebirds of many species. Sandy beaches, such as the study beach, which receive large subsidies of macrophyte, support high diversity and abundance of wrack-associated fauna, which are prey for shorebirds. On the South African beach with high shorebird abundance studied by Griffiths et al. (1983), the abundance of wrack-associated invertebrates was very high and comprised 97% of the total macrofaunal biomass. Possible relationships between prey assemblages and availability to shorebirds are supported by the results of Tarr and Tarr (1987) who reported that total shorebird abundance was positively associated with the standing crop of wrack on beaches along the west coast of South Africa, and those of Dugan et al. (2003) who found that the abundance of two visually foraging plover species (black-bellied plover and the threatened western snowy plover) was correlated with wrack cover and the abundance of wrack-associated prey. High standing crops (abundance and biomass) of invertebrates occur on the study beach, wrack-associated fauna comprised 37-94% of the total macrofauna abundance (Dugan & Hubbard, 1996, unpublished data), and secondary production of invertebrates may be substantial. Prey availability and composition may thus be key to the heavy use of the study beach by shorebirds and the high level of feeding activity observed.

The role of avian predators in exposed intertidal communities is likely underestimated in many ecological studies. Shorebirds have been shown to have a large effect on invertebrate prey resources on exposed sandy beaches (McLachlan et al., 1980). High feeding rates of up to 20 and 19 individuals min⁻¹ for hippid crabs and talitrid amphipods were observed on the study transect for several species of the most common large-bodied shorebirds (marbled godwit, whillet, and yellow-bellied plover; see Table 1 for species) (Dugan & Hubbard, unpublished data). At these feeding rates and the high abundance observed, shorebirds could potentially deplete prey resources and affect invertebrate community structure during peak periods of use on the study beach.

Shorebirds exhibit large seasonal variability in abundance that is related to migration and their use of different habitats during breeding and non-breeding seasons (Desante & Ainley, 1980; Shuford et al., 1989). Our results indicate that different species of abundant shorebirds exhibit dramatically different patterns of use.
of an exposed sandy beach habitat in southern California. Much of this variation appears to be associated with species-specific migration and over-wintering patterns (Garrett & Dunn, 1981; Shuford et al., 1989), but a portion of it may also be associated with temporal changes in habitat availability and condition. Some species, such as sandpipers, peaked in abundance during fall migration, but occur in large numbers for several months of each year during the non-breeding season. Plovers, including the abundant semipalmated plover and black-bellied plover, as well as the less abundant snowy plover and killdeer, reached their peak abundance in the fall. Other abundant species, such as the marbled godwit, reached peak numbers in the winter. Other relatively abundant species, western sandpipers and surfbirds, typically exhibited peak abundance during spring migration. Species of larger shorebirds, such as black-bellied plovers, willets, and whimbrels occurred in low average abundances nearly year-round and were the most likely species to occur through the summer months as non-breeding individuals, suggesting that significant variation occurs in the life history of some species (e.g. Lehman, 1994).

Semi-decadal ENSO events in southern California alter physical dynamics of the coastal zone, affecting water temperatures, wave heights, productivity, storm tracks, and sea level (Flick, 1998). Such changes can affect the biotic communities of all marine habitats, from kelp forests to intertidal zones through direct effects on erosion and disturbance and indirect effects on growth, reproduction, condition, survival, food availability, and larval supply. Higher trophic levels including pinnipeds, seabirds, fishes, and shorebirds may be negatively affected by changes in prey availability and habitats. The study period included a strong California El Nino event that produced warmer sea surface temperatures, elevated local sea level, heavy rain, energetic storm waves, and extensive coastal erosion between November 1997 and April 1998 (Flick, 1998).

The response of shorebirds to the ENSO event was evident in both abundance and species composition. The overall abundance of shorebirds declined during the 1997–1998 ENSO event and remained lower than pre-ENSO levels through the end of 2000. The magnitude and duration of that decline varied among species of shorebirds. Abundance decreased in some common species of shorebirds (sanderling, western sandpiper) and remained depressed for over a year after the ENSO event. The abundance of other species of shorebirds decreased to the lowest levels observed, but rebounded more quickly after the ENSO event (marbled godwit, black-bellied plover, whimbrel). The lowest annual average abundance of the dominant species of shorebird, sanderling, was observed following the 1997–1998 ENSO. In contrast, a relatively uncommon species, surfbird, visited the transect in numbers unprecedented in Santa Barbara County (Lehman, 1994) during the ENSO event. That may be related to the increased availability of suitable habitat for some species, such as exposed rocks, relative to sandy shores, during that period and stormy conditions during spring migration. Most of the surfbirds observed in the study occurred in a single month, April 1998, when storm waves and elevated sea level associated with the 1997–1998 ENSO had reduced the cover of sand on the transect to the minimum observed during the 6 years of the study, converting it to primarily rocky substrate.

Shorebirds may respond to changes in both habitat characteristics and prey availability during an ENSO event. During the 1997–1998 ENSO event, the study beach and all the surrounding beach habitat experienced considerable alteration in sand elevations, beach width, tidal inundation, and wave regime. Prey availability for shorebirds on beaches was likely greatly reduced regionally, particularly for the lower beach invertebrates. Sand crabs, Emerita analoga, one of the major prey species available on the lower beach, exhibited very low over-winter survival of adults and depressed recruitment in the spring of 1998 in the study region (Dugan, personal observation). Kelp forest growth and viability were reduced and storm waves caused disturbance and damage to existing kelp beds during the ENSO event, altering wrack dynamics. On beaches, very large inputs of drift macrophytes were followed by reduced input through 1999 (Dugan & Hubbard, unpublished data), which likely affected prey availability on all beaches in the region.

The distribution of shorebirds among habitats has been linked to a variety of factors, including: habitat preferences of species, seasonal abundance, long-term population trends, use of habitats at night, and movement between habitats (Burger et al., 1997; Connors et al., 1981; Myers, Schick, & Holenberger, 1984). Myers et al. (1984) documented movement of shorebirds between an estuary and a nearby beach, with changing tide levels exposing or covering intertidal habitats. Connors et al. (1981) reported positive relationships between the change in relative density of sanderlings and tide height on two exposed beaches adjacent to a protected tidal flat. Abundance of sanderlings on the tidal flat varied inversely with tidal level (Connors et al., 1981). No evidence was found of tidally mediated interhabitat movement in sanderlings in their study.

It was hypothesized that shorebird abundance might respond to the amount of intertidal habitat available on beaches. If shorebird abundance is related to the amount of available habitat, higher abundance would be expected when more habitat is exposed and available to birds, particularly at low tides, and also when there is more sand accumulated on the beach. On bluff-backed ocean beaches, the amount and type of exposed intertidal habitat available to shorebirds vary daily with
tides, seasonally with tide regime, sand levels, and morphodynamic condition, and interannually with sand and sea levels. The results of the present study suggest that the overall relationship between shorebirds and the extent of available habitat (tide height) is positive, with higher numbers of shorebirds using the beach when less total habitat is available, in agreement with results reported by Connors et al. (1981) for sanderlings. However, that result may be confounded by seasonal variation in the abundance of shorebirds, morning tide levels (Flick, 2000), and habitat extent. When examined on a finer temporal scale, the direction of that relationship varied seasonally, with positive correlations in the fall and winter when sand levels are high, negative correlations in the spring when the beach is most eroded, and no relationship for half of the year, winter, and summer.

The results of this analysis suggest that in some coastal regions, local topography and the availability of alternative protected or exposed intertidal habitat may affect the relationship between shorebird densities, tide heights, and sand levels on exposed sandy beaches. Local availability of alternate foraging habitats for shorebirds is low in the study region. There is little remaining protected intertidal habitat and few tidal flats within 100 km of the study beach. Tidal influence is weak and inconsistent in nearby coastal wetlands, such as Goleta Slough. The upper intertidal zone of the beach studied here and similar areas may provide important refuges for shorebirds and some of their prey resources when the highest tides inundate the shore to the sea bluffs over much of the southern Santa Barbara County coast.

The results of the present study provide clear evidence that exposed sandy beaches can constitute important habitat for wintering and migrant shorebirds in southern California and should be considered in conservation and environmental planning for this region. As human population growth and development of the coastal zone continue, sandy beaches may become increasingly important to declining populations of shorebirds worldwide. The effects of human alteration of the shoreline and coastal processes may be very large, e.g. watershed and littoral cell scales (Nordstrom, 2000). The effects of large-scale and more local scale alterations may be particularly critical in the upper intertidal zone of exposed sandy beaches. For example, coastal armoring and reduced sediment supply can reduce high tide refuges and feeding opportunities for shorebirds on exposed beaches by converting the entire intertidal zone to a wave-swept reflective state. Beach grooming can significantly depress the abundance of wrack-associated fauna, reducing the prey available to shorebirds (Dugan et al., 2003), and the construction of emergency sand berms may defaunate both upper and lower intertidal zones (Peterson, Hickerson, & Johnson, 2000). Understanding the importance of exposed sandy beaches as habitat and sources of prey to shorebirds could potentially enhance coastal conservation efforts and provide much-needed impetus for improving the management of exposed sandy beaches in many regions.

Acknowledgements

We gratefully acknowledge M. McCrery and M. Pierson for valuable input to this study and E. Jaramillo and an anonymous reviewer for insightful suggestions on the manuscript. This research was supported in part by a grant to J.D. and A. Wenner from the Minerals Management Service, US Department of the Interior. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the US Government.

References


Hi Shari,

I am an Environmental Studies student at UCSB and attended the public meeting on Tuesday, May 2nd. Here are some questions and issues that I would like addressed and included with other public comments.

1. When open space is in chunks, you have the island effect, and some species are limited to only these small patches. Certain species cannot cross from one chunk of green space to another, since they are vulnerable to predators or may simply be unable to do so. For this reason, having one large area of "open space" is infinitely preferable.

2. It seems to make more sense to have housing further from the ocean to start with, since it will be closer to existing roads, electricity lines, water pipes, and so on. Why weren't these "new" locations thought of initially?

3. How long will these open space areas be protected? I can see the potential for a large future developer to buy the huge parcel of open space, which will be facilitated by the relocation of housing.

4. Have you considered using an environmentally/benign substance to build the trails, as opposed to virgin wood? Trex, for example, is recycled plastic bags and sawdust, and requires no sealant or paint, and will last longer than wood.

5. What is "less than significant"? How is this defined, and what are the thresholds?

Thank you for your time,

Jessica

Jessica Gaffney
jessicag@umail.ucsb.edu
From: Zjolson@aol.com
Date: Mon, 10 May 2004 18:08:13 EDT
To: shari.hammond@planning.ucsb.edu
Subject: Comments to DEIR

Please accept the following comments to the draft EIR:

1) Should UCSB engage in land development? Is this not misuse of public funds?  

2) Should UCSB be allowed to transfer unit credits resulting in high density development in moderate density neighborhoods?  

3) Shouldn't the Goleta public be informed of the property tax free status of the proposed massive UCSB development that will impact surrounding government services?  

4) Why hasn't UCSB connected Phelps to Mesa as promised in the Storke Ranch project documents?  

5) Why is the enrollment cap for UCSB being ignored?  

6) Why didn't I receive a notice for the DIR meeting on May 4th even though I have signed interest lists repeatedly?  

7) Why is the important loss, to the community, of the Ocean Meadows driving range not addressed in the DEIR? Claiming improvement to the recreational opportunities of the area is generally misleading is it not?  

8) Why has the repeated requests (voiced at several public meetings) to have all the proposed projects shown on one map been ignored? Is this not suppression of the big picture by the various planners?

John Olson  
7041 Marymount Way  
Goleta, CA 93117
To: Shari Hammond, senior planner, Office of Campus Planning and Design, University of California, Santa Barbara, CA 93106-2032

From: Kevin D. Lafferty, Ph.D.

Dear Sheri, I am a 23 year resident of the planning area and have used it extensively for recreation. As a professional ecologist in the field of Conservation Biology, I have published over 60 scientific papers on topics such as reserve design, endangered species population dynamics, invasive species, snowy plovers, tidewater gobies, and balance between recreation and preservation (in journals such as Nature, Ecology, Ecological Applications, American Naturalist, Trends in Ecology and Evolution, Ecology Letters, Conservation Biology, etc). I am employed by the US Geological Survey and have professional associations with the UCSB department of Ecology, Evolution and Marine Biology, Marine Science Institute, and UC Natural Reserve System. However, my comments, suggestions and questions are not intended to represent these agencies; they are personal evaluations. I appreciate the opportunity to provide written comments. I hope they improve and clarify the project. Contact me if you have questions.

GENERAL COMMENTS
The plan avoids building houses on the most environmentally sensitive parts of the planning area. It also provides recreational opportunities for the new development as well as the community. The plan has goals of favoring preservation over recreation. It acknowledges that informal recreational use has significantly degraded habitat values (4.4.2.1) and notes that new recreational amenities will have further environmental impacts. The plan does consider some means to reduce these impacts. In contrast to the plan’s substantial recreational improvements, there appear to be few to no environmental improvements. In attempting to facilitate access and recreation, the plan does not fully achieve its goal of prioritizing preservation. In an effort to better match the plan’s goals with its actions, I provide comments on: (1) funding, (2) trails, (3) pets, (4) corridors, (5) parking, (6) Devereux Slough, and (7) habitat restoration.

1. FUNDING
Several environmental problems in need of solutions are identified in the plan. One would assume, given the plan’s priorities, that these problems would be tackled using funds from the profits of development. Some funds are slated for mitigating the environmental impacts of development ($400,000-$900,000 mitigation for destroying wetlands), but these mitigations are not net improvements. Actual net improvements to the environment are listed as opportunities and do not have funding committed to them. Substantial profits from development do go toward development to facilitate recreation. Recreational development includes: trails/access, parking, restroom, and other amenities. But the plan lists $0 for net environmental improvements. In essence, it appears that the plan’s net benefits are chiefly recreational. Given that there is a finite amount of profit from the residential development, it seems development for recreation draws funds away from environmental improvements.
It may simply be the case that the plan and DEIR gives this impression falsely because it does not do an adequate job describing how funds are to be spent. To understand the link between profits from development and funding/mitigation for the environment, it would be necessary provide a table that breaks down funding according (e.g., to the following categories, a-j). Such a table would be most useful if it separated the contributions by whether the funding is: one time, annual, or an uncommitted opportunity

a. Parking lots  
b. Trails  
c. Restrooms  
d. Direct environmental mitigation for development (habitat loss)  
e. Indirect environmental mitigation (mitigation for the effect of development on the degradation of surrounding undeveloped habitat)  
f. Direct environmental mitigation for recreation development (i.e., building of parking lots)  
g. Environmental mitigation for the effect of human visitation  
h. Non-mitigation habitat improvements  
i. Enforcement  
j. Other categories, as appropriate

2. TRAILS
Although trail density has been reduced, the proposed trail density is higher than what should occur in an area prioritizing preservation. Trail density could be dramatically reduced as several trails appear redundant. Consolidating trails is important because trails have an impact on wildlife that can be many meters wide on each side of the trail. For example, the flight initiation distance for many species of wildlife can extend 20-60 meters from humans (although fences on trails can reduce this distance). The proposed trail system both reduces the amount of habitat available for wildlife and fragments the remaining pieces. This means that trails degrade a proportion of the area preserved. To know what proportion of the area is actually undisturbed for wildlife, requires substracting the disturbed zone around trails. It would be useful to know what proportion of the habitat remains suitable for wildlife. Providing answers to the following questions would help make this information available in the DEIR.

1. If a 25 meter impact zone is placed along the outer edge of each side of each trail (e.g., figure 3-9, 3-10), how many acres of undisturbed habitat remain? Please divide by planning units, i.e., Reserve, West Campus Bluffs, South Parcel.
2. What proportion is this of each planning unit?
3. How many fragments do the trails divide the remaining habitat into?
4. How does the density of trails proposed compare with other areas where preservation is a priority (e.g., State and National Parks)?

3. PETS
The plan acknowledges off-leash pet recreation can have numerous unintended impacts on wildlife, and dogs off-leash are generally not compatible with environmental preservation goals. Since the plan favors preservation over recreation, it is important that existing leash laws actually be enforced in areas that are intended to have a habitat function. If there are places in the planning where there are no goals for leashing pets,
these places should be identified. The DEIR cites a long-standing prohibition of
unleashed dogs from campus beaches (LRDP 30240(a)15 as a means to mitigate for the
plan’s intended increase of humans and pets in the area. The DEIR promises to enforce
this policy at historical levels.

Whether this is adequate depends on if historical levels are enough to meet the
goals of the plan. Neither historical levels or specific goals area stated. The following is
my understanding of current levels of enforcement. The leash law is posted in some parts
of the planning area. UC Police Department will respond to a request for enforcement.
Contact with an owner in violation results in a warning or citation. Hundreds of dogs
visit the planning area each day. Most of these are off leash. Probably fewer than 10
citations were written in the last year.

Actions to increase leashing (in lieu of closing the area to dogs entirely) are
presently underway at Sands Beach. Because of enforcement and the snowy plover
docent program, voluntary leashing is presently around 50%. Compliance after being
asked is near 90%. But this is not the case outside of Sands Beach. Away from the
snowy plover area, enforcement is virtually absent. Leashing rates are << 10%. In my
opinion, there is room for improvement in the historical level of enforcement if the plan
is to meet its preservation goals. In particular, formal plans for accomplishing
enforcement goals are needed (see suggestions).

To adequately mitigate for the effects of increased human and pet use requires
stating specific goals for percent leashed in various parts of the planning area and
adapting effort to achieve the goals.

I have the following suggestions:

1. Set measurable goals of voluntary leashing inside (e.g., >90%) and outside
   sensitive wildlife areas (e.g., >50%).
2. Institute a no-tolerance policy for dogs off leash in areas where goals for %
   leashing are high.
3. Schedule regular visits by law enforcement (e.g., once per shift)
4. Increase or decrease frequency of visits in response to how % leashing goals are
   met.
5. Dedicate additional funds to cover law enforcement expenses.

4. CORRIDORS
The DEIR describes the need for connectivity between remaining fragments of preserved
habitats (4.4.2.3.2). Studies in Southern California have demonstrated that predators such
as coyotes and bobcats are particularly sensitive to fragmentation. When these predators
go locally extinct, the remaining animal community undergoes a dramatic decline in
biodiversity. Such a result is inconsistent with the plan’s goals.

The DEIR needs a map to place the planning area in the context of other habitat
fragments to identify choke points and opportunities to preserve and restore corridors.
The DEIR notes that development and Storke Rd constrain wildlife movement near the
Sierra Madra Family Student Housing parcel. An inspection of larger maps of habitat
fragments surrounding the planning area indicates that this location was the last linkage
between the Devereux and Goleta Slough ecosystems. A corridor between these two
ecosystems is key to the maintenance of biodiversity in the planning area. There remain relatively tractable ways to recover this essential corridor. I believe that this should have the highest priority of any habitat restoration efforts.

I have the following suggestions to help maintain biodiversity of Goleta Slough and Ellwood Devereux by providing a corridor for large and medium sized mammals as well as reptiles and amphibians. The corridor should be sufficiently planted with native vegetation to allow animals to pass undisturbed. The suggestions apply primarily to the University, but could be conducted jointly with the County to be sure that the corridor extended to Devereux Creek.

1. Restore the margins of North East finger of Devereux Slough into a wildlife corridor (see Figure 3-3). This is the area presently slated for cobbled swales and bioswales landscaped with native wetland plants (the two goals are compatible if designed properly).
2. Enlarge the culvert under Storke Rd and bike path to be a suitable wildlife undercrossing.
3. Create a wildlife corridor between UCSB Family Student Housing and Storke Ranch that links Stoke Ranch to Storke Wetlands.

5. PARKING
While the DEIR goes into substantial detail on the need for housing, it does not make a convincing argument for 74 new parking spaces at 3 or 4 locations. Nowhere is any evidence presented that parking is presently limited. This proposal clearly caters to the automobile, a philosophy that is now out of vogue in modern conservation planning.

In section 3.5.2.3.5, the DEIR mentions two options for public parking. Option A places 20 public parking spaces adjacent to Coal Oil Point Reserve at a location where parking has always been restricted (presently by special permit). Option B adds these 20 parking spaces to an already proposed parking lot of 20 spaces (making a 40 space lot) adjacent to Camino Majorca, an area where parking has never been restricted. Option B keeps parking at Coal Oil Point limited to special permit.

In the same way that the DEIR compares housing development plan A vs housing development plan B, the DEIR needs to compare the two options for parking that the plan provides.

Such a comparison (my Table 1, attached) is possible based on existing information in the DEIR. I have gone through the Project Objectives, and relevant LRDP and Coastal Act polices to determine which parking option (A or B) is the most consistent with the plan's stated objectives and policies. This exercise makes it overwhelmingly clear that B is the Environmentally Superior Option. However, option B has additional drawbacks for the adjacent neighborhood, and I provide a third option which could be superior to A or B.

If the University can demonstrate a need for 74 new parking spaces, I recommend the following plan that will provide parking for motorists, protect Coal Oil Point and minimize relief for residents. This plan would increase the number of parking spaces at the Cameron Hall lot (lot #41) from 20 to 40, (preferably, parking would be free of charge as presently occurs at the Child Care Center parking lot). This would make it unnecessary to use the Environmentally Inferior option of new parking at Coal Oil Point. It would also reduce impacts to neighbors along Camino Majorca. Lot #41 and Camino
Majorca are similar distances to Coal Oil Point (~4000 ft vs ~3200 ft) and access to Cameron Hall is much more convenient to most motorists accessing the area via Storke Rd. Additional spaces at this site seem feasible from the map provided and would have very little environmental impact or resistance from the community. This plan has many advantages.

1. Motorists who specifically desire to visit Coal Oil Point would have a free place to park within a moderate walk from Coal Oil Point.
2. If parking at Cameron Hall was advertised and provided for free (presently it is unused because it requires a UCSB parking permit), it would reduce demand for parking at Camino Majorca, and, perhaps, even preclude the need for any parking lot there.
3. Parking at Cameron Hall would not impact the safety of pedestrians and cycling along Devereux Rd.
4. The short walk from Cameron Hall to the beach would be enough to limit overuse of the Reserve from the bulk of users simply seeking convenient beach parking.
5. Cyclists and pedestrians coming from Isla Vista would still find it more convenient to walk or bike than to drive, thereby promoting alternative transportation.

6. DEVEREUX SLOUGH
The DEIR notes that California has only ~5% of its original coastal wetlands and the preservation and restoration of what remains should be a very high priority for any regional planning effort. However, a key element missing from plan is restoration opportunities for the upper half of Devereux Slough, a proposal initiated by students at the UCSB Bren School. Such restoration could accomplish several goals. It could: (1) mitigate for loss of wetlands on North Campus on a greater than 1:1 basis, (2) reduce flooding on the golf course, (3) increase beach nourishment.

The proposed culvert under the Venoco Access road, if properly designed, makes the following proposal possible:

1. Swap degraded portion of south parcel (University) for the chronically flooded part of the Ocean Meadows Golf Course
2. Enhance habitats on swapped land compatible with golfing and conservation.
3. Excavate the flooded part of the golf course (grant fundable) to increase upper slough habitat.

This approach could be an integral element of a regional plan or it could be considered an opportunity for future restoration (substantial funds could be obtained).

7. HABITAT RESTORATION
Emphasis on protecting ornamental/ruderal trees in open space, with the exception of monarch grove, is appropriate for an urban park, but inappropriate if goals are to protect native habitats. Though some wildlife species use ornamental trees, there is no shortage of ornamental trees in the neighborhoods around the planning area. Policies (e.g., LRDP 30240(a)4, 30240(a)4, 30240(b)6c, 30251.10, MM 4.4-1(b&c)) should be changed to allow habitat restoration with native species.
### Table 1. Parking options analysis: Objectives, LRDP Policies and Coastal Act Policies and relative consistency with parking option A (20 spaces at Coal Oil Point and 20 spaces at Camino Majorca) and option B (40 spaces at Camino Majorca)

<table>
<thead>
<tr>
<th>Relevant Project Objectives</th>
<th>Comparison between option A and option B.</th>
<th>Most consistent option</th>
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<tbody>
<tr>
<td>Implement proposed project components of the Joint Proposal and Open Space Plan within the University's jurisdiction and thereby provide open space, habitat and development plan that is, on balance, most protective overall of sensitive natural and coastal resources and assures improved coastal access and the preservation and enhancement of 652 contiguous acres of open space, natural reserve, and marine environmental resources.</td>
<td>Impacts to Coal Oil Point have been most apparent when parking controls and enforcement have been lax. This has led both to increased use and inappropriate use of the area with tangible impacts to sensitive resources. On balance, the most protection of sensitive resources is achieved by maintaining parking areas away from the Coal Oil Point Reserve.</td>
<td>B</td>
</tr>
<tr>
<td>Provide for improved public access and compatible passive recreation, consistent with the conservation of significant coastal resources.</td>
<td>The parking lot locations that are most consistent with conservation of significant coastal resources are those further from Coal Oil Point Reserve.</td>
<td>B</td>
</tr>
<tr>
<td>Preserve and protect and restore identified sensitive habitat areas, including wetland, native grassland, dune, back dune, and freshwater pond habitat.</td>
<td>This is best achieved by distributing parking lots away from sensitive resources.</td>
<td>B</td>
</tr>
</tbody>
</table>

### Relevant LRDP Policies

**30210.7 To provide parking for a potential seminar facility at Coal Oil Point, while protecting the area from overuse, parking for not more than 50 cars shall be provided at Coal Oil Point subject to special permit.**

This policy stipulates that the parking at Coal Oil Point is for a seminar facility, not public beach parking. It implies that parking for this facility (not parking in general) should be limited to 50 spaces to protect the area from overuse.

### Relevant Coastal Act Policies
| **30210 (\& LRDP 30210.17)** Maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from over use. | Maximum access as per Option A, is not consistent with several elements of this policy. Option A will reduce public safety (see below) and lead to greater over use of natural resources. The high population density of Isla Vista presently contributes a large amount of visitation. In contrast, Option B allows balanced vehicle access for appropriate uses of the area that have had minimal impacts to the environment. In general, when conflicts between access and resources protection occur, PRC section 30007.5 instructs that the resolution should be the one most protective of significant coastal resources. |
| **30212 (\& LRDP 30210.17)** Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where 1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, 2) adequate access exists nearby, or 3) agriculture would be adversely affected. | Although Option A best satisfies the general provision of convenient access, several exceptions are relevant. Option A has a greater impact public safety. Convenient parking at Coal Oil Point would entice new visitors. In addition, a substantial fraction of Isla Vista residents that presently walk or bike to Coal Oil Point will choose to drive there if parking is available. The project would increase traffic on Devereux Rd. which is narrow with blind curves, and has no shoulder (4.12-32). The estimate is for an additional 93 trips per day (I believe that this is a gross underestimate). This road is used heavily by pedestrians and cyclists, and the timing of their use of the road would heavily overlap with motorists seeking beach parking (unlike the present use of the road which mostly corresponds to Devereux Foundation work schedules). These motorists almost always exceed the posted speed limit. Option A is also inconsistent with the protection of fragile coastal resources. In several locations, the DEIR emphasizes the significance and sensitivity of the habitats at Coal Oil Point Reserve (the snowy plovers are mentioned in particular, though this view was held in 1990, before the plover’s listing). The DEIR states that parking areas could lead to an increase in use of Coal |
Table 1, page 3

<table>
<thead>
<tr>
<th>30214. (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Topographic and geological site characteristics</td>
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<tr>
<td>2. The capacity of the site to sustain use and at what level of intensity</td>
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<tr>
<td>3. The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential areas.</td>
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</table>

Oil Point Reserve and the snowy plover area by people and their pets (4.4-57, 4.4-71, Impact 4.12-1). It acknowledges that the option A could increase litter, disturbance to wildlife, increase in the number of off-leash domestic animals and trespass.

Adequate access exists nearby. There is frequent pedestrian and bicycle access from a variety of roads and trails. Most of the pedestrian/cyclist access comes from Isla Vista. This access is evidently enough given that the beach area near the parking lot already receives the densest recreational use in the planning region. The DEIR acknowledges that the beach at the Reserve (Sands Beach) is already (without convenient parking) one of the most heavily visited beaches in the County (4.6.2.6), receiving tens of thousands of visits annually, with hundreds of users on peak days concentrated adjacent to the snowy plover roosting-nesting area (4.10-12).

Continued regulation of parking at Coal Oil Point, as per option B, is consistent with the Coastal Act. Sands Beach has a limited capacity to sustain intensive use due to fragility of resources as already discussed. In addition, there is limited beach space for users due to dry sand closures for snowy plovers. As mentioned, other access points are sufficiently close that Sands Beach is already the most crowded section of beach in the planning area.
<table>
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<tr>
<th><strong>30230.</strong> Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.</th>
<th>Option B provides parking for visitors to tidepools and other sensitive resources at Coal Oil Point. In exchange for parking access (obtained by completing a Reserve application), the Reserve is able to gain cooperation with groups to reduce impacts to sensitive resources, avoid overuse and over-scheduling during limited low-tide periods. Option A would result in unrestricted access to tidepools and subsequent degradation of their long-term recreational, scientific, and educational purposes.</th>
<th>B</th>
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<tr>
<td><strong>30240.</strong> Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.</td>
<td>Option B accommodates a substantial amount of parking via special permit when use is dependent on the resource. Two turnouts are available along Slough Rd. for wildlife viewing and painting. Parking permits are available to use the Cliff House and for appropriate non-recreational use of the Reserve (class intertidal field trips, public tours, etc.).</td>
<td>B</td>
</tr>
</tbody>
</table>
MAY 1, 2004

TO
County of Santa Barbara,
Planners at UCSB,
the Board of Regents of the University of California,
the Governor of California.

FROM Ruth Bartz and Bartz Family / 6894 del Playa / Santa Barbara / Cal 93117
rab@sbceo.org

SUBJECT Parking Lot on UCSB West Campus

Before I discuss the various points about the Parking Lot, I want to introduce myself just a little bit. I am a graduate of UCSB (B.A. / M.A.) and longtime supporter of UCSB. I have served on Affiliates Boards and am a life time member of the UCSB Alumni Association. I am also a supporter of UCSB’s efforts to provide housing; my family and I supported the West Campus Pointe development and an early supporter of the Ellwood land swap.

My family and I were also signers of the original Coastal Protection Petition that resulted in the Coastal Commission.

I have lived at this address since 1965; my family and I have observed and (in our own way) tried to protect the natural wonders that surround us. During the most recent few years, we have become increasingly disturbed by the lack of interest / protection given to the environment by Coal Oil Point Preserve. The coastal zone east of Coal Oil Point has always been a heavy feeding area for shore birds, a hauling out place for seals (even an elephant seal now and then). Yet we see no evidence of protection for this vital area. Why is that?

The County of Santa Barbara had a public hearing during the last week of April, 2004. The purpose of the meeting was the sharing of the EIR for the Ellwood / UCSB Open Space Plan. I attended the meeting and do appreciate the chance that I had to have a free and open discussion with the officials who were there (County... UCSB...). Since I live within 25 feet of West Campus, I am interested in the future of the property. I still have questions about THE PARKING LOT (FIGURE 23) and the future plans for the property known as West Campus.

Do studies exist that show the need for a Parking Lot to give additional parking (providing parking for more cars than currently park)?
Does a study exist that shows the best place to put the parking lot (if one is needed)?
Does a study exist that shows the destination of the people who come, park, and go to the beach (Camino Majorca steps, bluff - top path for Coal Oil Point)?
Does a study exist that shows increase of =
Dust (result of prevailing wind from direction of West Campus)
Headlights (result of cars parking at level above my foundation level and direction pointing towards my house)
Fire Danger (result of unsupervised and unregulated parking)
Noise (same as above)
Camping that the proposed Parking Lot will bring to my household.
Because of the prevailing wind that blows from the direction of West Campus, EVERYTHING that happens on and to West Campus, lands in my yard and in my house (smell, sound, sight)
What plans exist to mitigate these effects? Because I know that this Parking Lot will result in the degradation of my (and my family's) quality of life, degradation of property value, degradation of health.

I do commend the EIR for mentioning the benefits of the Eucalyptus trees. Sometimes scorned as an invasive species, the trees on West Campus do provide a resting (and even nesting) spot for various raptors. The trees also provide a wind break and shelter for a variety of creatures, including humans. A number of common birds nest in the trees (Mockingbirds); these birds eat insects and eliminate the need for pesticides (at least in my garden). So I am grateful that the EIR states that none will be removed.

And speaking of vegetation that is scorned, ice plant. Currently, there is a patch of ice plant below the Eucalyptus trees between West Campus and Camino Majorca. This ice plant has served as fire suppression, according to Fire Department personnel and UCSB personnel who have come during the summer to assess fire danger.

I have some additional questions and concerns.

WHY PARKING LOT?
According to the EIR, in future parking plans for the area, there is no loss of existing parking spaces. The Parking Lot is additional to existing parking.

So why is a parking lot needed?
And why is a parking lot being put in that exact spot?
Has anyone done a traffic study? Has anyone figured out about cross traffic of cars, pedestrians, bicycles? Has anyone studied the mingling of these three groups of beach goers? And has anyone studied the loss that this Parking Lot will bring to the Handicap Access?

And speaking of traffic study, aren't we trying to reduce the numbers of cars and pollution?

? THIS AS A NEIGHBORHOOD ACCESS?
A comment was made at the hearing that the existing access to the beach needs to be for more people than just the neighbors.

The existing on-street parking has been for more people than the neighborhood for more than 40 years. Ever since Camino Majorca was paved in the early 1960's, people from all over Goleta, Santa Barbara, and elsewhere have come here and parked.

WHAT ABOUT HASKELL'S BEACH?
As supporters of the Coastal Commission, my family and I know that beach access is important.

Haskell's Beach is a County Beach - has been for a number of years. It currently has bathrooms, has showers, has a grassy play area. The beach is approachable at both high and low tides and in all kinds of weather. It may even get a lifeguard some day. There is a wide area of open space that has potential for parking lot development?
Why is Haskell's Beach not being expanded?
(To say that it is outside the planning area is curious because so is Camino Majorca - yet that "street" is included.)

GOOD NEIGHBOR POLICY
When UCSB joined our neighborhood by purchasing Devereux School property, my family and I have tried to be good neighbors to the University. On the property known
as West Campus, we have picked up trash, monitored illegal fires, controlled illegal vehicles (both cars and motorcycles), to name just a few of the problems.

We did not call UCSB and expect them to replace a large plate glass window shot out by people allowed to come onto West Campus to shoot bird.
We have not called and complained each time the wind blows UCSB’s dust into our nostrils, lungs, house - dust that UCSB causes through its failure to control erosion.
We have not called UCSB every time someone uses the trees as a bathroom.
(Although, back in the early 1970’s, I did call and UCSB refused to take responsibility.)
We do not call UCSB when tents and sleeping bags sprout on West Campus. - as they did the morning of May 2.
Daily, we deal with and take care of the trash, the noise, the dust, the fire danger that defines West Campus.
Why have we performed these functions? Because we needed to protect our property and our health and our quality of life. There is a prevailing wind that carries everything from West Campus onto our property. Everything. Noise, dust from erosion, trash...
Please, UCSB study the problems and develop a plan.
All we ask is that UCSB be a good neighbor in return.

SPITE FENCE / SPITE PARKING LOT
Is the Parking Lot UCSB’s answer to my family for the years that we have been stewards of West Campus property? True, they never asked us to do it. True, what we did helped us.
There is a concept in the County Planning / Building Departments known as Spite Fences. These are developments done by one neighbor to another - usually in retaliation for something in the past or as a result of bad feelings between the two. They are generally frowned upon the County.
What have we done to UCSB to cause them to build a Spite Parking Lot?
Headlights will shine into my bedrooms; dust will be added to existing dust; noise and trash will be added to existing noise and trash; fire danger will increase.
Why is okay for UCSB to lower the value of my property and harass my family?

ENFORCEMENT
Paved surfaces (streets, roads, highways) are governed by the Vehicle Code.
When parkers pull out a barbecue and set it up on the street, when parkers drink a six pack, each, and throw their cans / bottles out of the car, when sleepers spend the nigh, my family and I know (as well as the car driver) what is allowable.
What rules and laws will govern the Parking Lot?
Who will enforce them?
Who do I call in the middle of the night when ... (pick any type of disturbance)
I only care because my family and I are the people who will directly suffer from this Parking Lot. It is not enough to say to me to call someone...

BUILD IT AND THEY WILL COME
What is the long range plan for coastal access at this little area? Is it to be the main access for beach goers - second only to Goleta Beach?
Is this to be a county beach? At present, people come here without being invited.
There are no bathrooms, no public telephones, no way to alert anyone about fire or water emergencies - There are no access points for water rescue. When a surfer had a heart attack while in the ocean, there was no way for rescue people to go out into the water to get him; he was brought in by fellow surfers.
Are there plans to put in a bathroom? - or will people continue to use the trees and
the dirt as a bathroom? Who will monitor that?

Are there plans to have a lifeguard? This is an unpatroled beach - Isla Vista County

Beach ends east of the steps.

A parking lot is an invitation to come to this particular stretch of beach.

Has there been a study to discover or monitor the times that the steps are

passable? When the steps are unusable (high tides, high surf), how will people get to the

beach?

Has a study been done to discover the destination of the parkers?

HAS ANYONE EVER MAPPED THE RESOURCES - COMPLETELY - ON WEST

CAMPUS, INCLUDING THE CLIFF FACE?

Consider this poor chunk of land. It has been the recipient of UCSB's benign

neglect ever since UCSB bought it from Devereux School.

At first, dump trucks arrived with old concrete and gravel and "filled in" the gullies and

low places along the cliff.

Then, people from all over California and out of state arrived to hack and pick at the

cliff face, "hunting for fossils," UCSB didn't care to know or investigate. I did call UCSB; no

one cared. I don't know if there really were fossils there, or if any remain - but have any

experts at UCSB come and mapped and investigated and put the information into a

document? (When I was taking Anthropology courses at UCSB, my professors talked

about a Chumash Village that had been on West Campus and that was why the "fossils" or

midden was visible in the cliff face)

What about the surface of West Campus? Is there a document somewhere that

shows the surface resources? When the Sedgwick property was acquired, I took a tour of

the property. Much to my surprise, "rare and endangered" plants that were there seemed

similar to those on West Campus. What vegetation does exist on West Campus?

Before West Campus Pointe was built, an "expert" on Vernal Pools showed up

and walked that northern section of West Campus. But he did not come south of the

building site. So has anyone ever walked and mapped and documented the vegetation on

West Campus, south of the buildings?

Has anyone surveyed the property for cultural remains?

HISTORY OF WHY THERE IS COASTAL COMMISSION BEACH ACCESS HERE

We do not need to be told why "our little neighborhood" needs to accept its fair

share of parking. We already know. And we accept more than our fair share or parking -

without complaints

HISTORY OF THE STEPS AND WHY THIS IS A COASTAL ACCESS

The original cement steps were put in by a private developer, probably the same

private developer who subdivided Orilla Del Mar and allotted private shares to lots A, B, C.

During the winter of 1980-81, stretching into 1982, these original steps were

battered by storms, twisting and loosening from their anchors. People still used them, even

when the steps became sideways and people had to slide down the rails to get to the

beach. Alarmed for their safety as well as wishing the situation to be fixed for our own sake,

my family contacted the County. We were told that since the steps had been private, the

County was under no obligation to fix them. We pointed out that they were dangerous, a

liability problem.

The County came out and took out the steps. They said they couldn't afford to put

new ones in. We kept trying to get a new set of steps.

Finally, during the summer of 1982, the County said they could use Coastal Access

funds to put in new steps. We thought that was great. The County also put in an asphalt
path - Some of the neighbors were horrified that the County was doing this so we didn’t advertise that we were the ones to get it started. And that is why there are steps there, an official Coastal Access.
Shari Hammond, Senior Planner
University of California, Santa Barbara
Office of Campus Planning and Design (2032)
Santa Barbara, California 93106-2032

May 23, 2004

Dear Ms. Hammond:

I am writing to comment on the University's EIR for its portion of the Ellwood-Devereux and North Campus housing plan.

First, I would like to wholeheartedly applaud the University's effort to build affordable housing on North Campus. I believe that construction of quality affordable housing is essential to UCSB's future.

I would however like to express some concerns regarding two proposed developments for the West Campus area. The first is a new trail (to replace an informal existing infrequently-used path) along the southern boundary of the West Campus Point development. The second is the proposed parking lot for the West Campus Bluffs.

The need for new parking in this area has not been justified, and informal surveys by homeowners have shown that even on the busiest days the current parking is adequate to handle beach traffic. But such parking, while not needed for beach access, will have significant negative impacts:

*Increased visual blight interrupting the viewscapes of the West Campus Bluffs

*Potential for drawing increased traffic to the area, with negative impacts on both the surrounding Isla Vista community and West Campus Point. These impacts potentially include traffic impacts, noise impacts, visual impacts, and criminal activity, as well as serving as a potential magnet for loitering and drinking.

*Significant negative impact on the ecosystem of the West Campus Bluffs, which serves as habitat for multiple bird, amphibian, and mammalian species, and contains vernal pool habitat.

I therefore respectfully suggest that the proposed parking proposal be dropped from the plan, unless the need for it can be justified. If it is felt that the need is justified, the above impacts and other impacts should be thoroughly addressed.
Likewise, the need for a new trail along the southern end of WCP has not been justified by any analysis. This trail has potential impacts such as:

* Possible impact on adjacent vernal pools, and on other habitat for multiple species.
* Negative impact on WCP, through traffic, easier access for crime (vandalism, theft, etc.)

For this reason I'd suggest that this trail proposal be dropped unless the need for a new trail in this area can be justified. If so, I think that the associated impacts should be thoroughly assessed.

Sincerely,

Steven B. Giddings
May 24, 2004  
406 Reed Court  
Goleta, CA 993117

Shari Hammond, Senior Planner  
University of California, Santa Barbara  
Office of Campus Planning and Design (M/C 2032)  
Santa Barbara, California 93106-2032

Dear Ms. Hammond:

I live with my family in the University Village subdivision, close to the proposed UCSB Faculty Housing project proposed detailed in UCSB's Draft EIR and LRDP Amendment, Faculty and Family Student Housing and Open Space Plan. My husband has lived in our home since 1982; I have lived there since 1989.

I have some serious concerns regarding the proposed Faculty Housing project.

First, I'm concerned about the destruction of wetlands which will occur if UCSB builds the Faculty Housing project on this North parcel site. It is my understanding that the California Coastal Act does not allow for the destruction of wetlands for residential development. As a state entity, I would think that the University would want to abide by the provisions of the state's Coastal Act, rather than violate them, in order to build faculty housing. Building on a less environmentally sensitive site would make more sense.

Second, by building homes for faculty on an area which includes wetlands and vernal pools, the University will be guaranteeing flooding problems. The Faculty houses/condos will flood from time to time (the land on which they will be built already floods when it rains heavily) and it's quite possible that the new Faculty Housing will cause flooding problems for existing homeowners. This concern needs to be addressed in more detail than it is presently in the draft EIR.

I am also extremely concerned about the density of the proposed development, which is out of character with the surrounding neighborhoods. The UCSB Faculty Housing project will be next to the University Village subdivision of single family homes, each on lots approximately 1/3 acre in size. The Cannon Green condominium development north of the proposed Faculty Housing development is denser than our neighborhood, but it is much more in sync with our neighborhood than the proposed University housing, which is closer to 10 units per acre. It is noteworthy that the UCSB Faculty Housing project proposes such dense development by including in its plan a number of three story buildings --- in a neighborhood where there are NO three-story buildings!

The proposed project is, quite simply put, much too dense for the neighborhood.

In addition, I am worried about how much dust, dirt, noise and traffic will be caused by the trucks and workers during the proposed 42-month construction period for the project.
I have two children, one who has asthma and one who has allergies. The dust and dirt which will be kicked up during the proposed construction period will adversely affect them. I would like it to affect them as little as possible. If the construction period for the Faculty Housing project were not so long, it would help.

Also, the noise during the proposed 42-month housing construction period will have a very adverse effect noise-wise on our neighborhood. The University Village/Cannon Green area is a quiet, peaceful neighborhood, with a lot of retirees and families. The last thing we need is for the construction period for the housing (with expected dust and noise) to extend up to 42 months. Please shorten the period of construction!

Finally, I am greatly concerned by the permanent additional traffic congestion this project will bring to the neighborhood. It will cause much more traffic congestion on Cannon Green Drive and Phelps Road, the two main roads into the proposed development, and on Marymount Way and Pacific Oaks Road, which border my subdivision, to a lesser extent.

Since the University is building the housing to attract younger faculty to campus, it is reasonable to expect faculty living in the project to drive to work at UCSB and to take their children to school. Faculty spouses and children will drive as well. The car trips will add up, as the faculty & families who live in the hundreds of newly built Faculty Housing units will need to drive as part of their everyday lives.

This significant increase in traffic in the University Village/Cannon Green neighborhood due to the Faculty Housing project should be acknowledged and addressed by the University in a way that will mitigate the impact to the neighborhood.

In closing, I certainly hope the University wants to be a "good neighbor" to those of us already living in the area of the proposed Faculty Housing project. If it does, it will take concerns such as mine into account, and alter the proposed project (and its construction period) accordingly.

Sincerely,

Sharon Z. Terry
PUBLIC HEARING
PUBLIC HEARING

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

FACULTY AND FAMILY STUDENT HOUSING

OPEN SPACE AND LRDP AMENDMENT

DRAFT ENVIRONMENTAL IMPACT REPORT

Hearing Held

Tuesday, May 4, 2004

7:00 p.m.

at

Embarcadero Hall

935 Embarcadero Del Norte

Isla Vista

Goleta, California
APPEARANCES:

SHARI HAMMOND, Senior Planner, UCSB
TYE SIMPSON, UCSB
MARK HORNE, EIP ASSOCIATES

FROM THE PUBLIC:
DIANE CONN
DARLENE CHIRMAN
JULIE LOVE
RUTH BARTZ
STEVE GROSS
MICHAEL JACOBY
SCOTT BULL
JILL HOWRY
CALLIE BOWDISH
BRAD HUFSCMID

REPORTED BY: Diana L. Solis, CSR No. 9715
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GOLETA, CALIFORNIA; TUESDAY, MAY 4, 2004

7:40 P.M.

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MS. HAMMOND: The court reporter is here to record all of your comments, and if you want to speak tonight you can come up and bring me a speaker slip.
I ask that you come up and speak very clearly and loudly. If you could come up here, I know it's kind of in front of everybody, but we have our tape recorder going, and it would be easier for her to record all your comments. Speak loudly and clearly.
The first speaker is Diane Conn.

DIANE CONN,
offered public commentary on the Faculty and Family Student Housing Open Space and LRDP Amendment Draft Environmental Impact Report as follows:

MS. CONN: I am Diane Conn, and I represent Save Ellwood Shores, and we've been involved with this project as an organization since 1989, you know, '69, '79, '79, but anyway, I personally haven't been, but we are the group that originally litigated it and provided
the opportunity for the one we're seeing today, and
other groups, not us solely, and certainly not me
solely, but I have a long history with the project.

Now, when this project was first brought to
the community, the idea was to present such an
incredibly outstanding project that would protect and
restore valuable and contiguous coastal and riparian
habitat to such a degree that we could accept
destruction of wetlands. We knew there were wetlands
that were going to be destroyed around Phelps, wetlands
are wetlands, if you've ever been to a coastal
commission hearing, and destruction is a really big
no-no. I and other groups, including Audubon, have been
meeting with the University over the last two or three
years to talk about this, and we really thought that
they were saying we understand what we're asking of the
community and we're really going to come up with this
great and generous project.

Well, we expected an EIR that clearly
articated the habitat and the proposed development in
a way that we could clearly weigh the impacts and the
benefits. Sadly, we have a woefully inadequate EIR that
dismisses habitat and underestimates the impacts of the
proposed housing and recreational facilities.

For example, I did not find a map that clearly
identified the ESHA, the Environmentally Sensitive Habitat, and the required buffers, overlaying the building footprint, so we can see what exactly will be destroyed, and we've been asking for this map from the very beginning, since the north campus housing, we've been asking for this map. Maybe I missed it.

The EIR is the vehicle to designate environmentally sensitive habitat, and it has failed to do so. A new term, non-ESHA wetlands, has been created for these wetlands to be destroyed. So you're responsible for designating wetlands, then you turn around and create this nondesignation. That's very interesting.

SECA requires that the alternatives that are proposed must all be less impactful, provide less impacts than the proposed project, yet the alternatives fail to meet that criteria, except for the analysis of the south parcel, and that analysis fails to fully recognize the true impacts of getting to that area, which are substantial. You know, again, how do you get across the wetlands to the creek? There are real obstacles there, significant impacts, and the area that exists there, again, there seems to be this misconception that there is no ESHA on the south parcel.
Another example of not getting the big picture thing, the county thresholds, the county dump can handle a 196 tons per year. UCSB is going to produce 580 tons per year. Where is the trash going to go?

So when I see, you know, when I hear, nothing really significant impacts, well the class one impacts are going to result from the dust, I don't really grasp it, and I have to say I was really looking forward to trying to consider the trade-off, and that's the position I've taken since the very beginning, even though, you know, that was extremely painful position for me to take, and I'm disappointed to be getting up and saying tonight that we have an EIR, when you compare it to the other two EIR's, it doesn't really tell us a story.

So to get there, there really has to be a concerted and dedicated effort to bring that EIR into adequacy so we can lay the groundwork for talks, or else at the final draft hearing -- hopefully, you're going to have a hearing on the final draft -- the only thing we're going to be is frustrated and angry because we don't have the tools to adequately weigh the benefits and the costs of the projects, and we wouldn't be able to come to you with the kind of recommendation that we would all like to see. Thank you very much.
MS. HAMMOND: Darlene Chirman.

DARLENE CHIRMAN,

offered public commentary on the
Faculty and Family Student Housing
Open Space and LRDP Amendment Draft
Environmental Impact Report as follows:

MS. CHIRMAN: I'm Darlene Chirman, the President of
Santa Barbara Audubon Society. We're working with Save
Ellwood Shores, in terms of evaluating the project and
really mirror some of the disappointments in the
inadequacy of the impacts of construction and
destruction of wetlands, and using different thresholds
that do not recognize that this site is in the coastal
zone, and the California Department of Fish And Game
definition of wetlands, and recognizing the impacts to
those.

I'm commenting some on the development
projects, and then Julie Love will follow and talk about
some of the open space management plan considerations.

The Phelps Ditch, or El Encanto Creek, is
proposed for reengineering to release the flood
conveyance and restoration, and it's very important that
that be relooked at in a way, because of some of the
values of a wildlife corridor haven't been addressed, and I think that is really discounted and not addressed in the EIR, because we would be funneling both people and wildlife to use that corridor, where now they have a very broad space that would be developed, that it must be done in way that can facilitate movement of wildlife, and within that 50 foot buffer need to move the trails and existing flood control to the outer part of the buffer, and revegetate close to the creek so you really do have a viable habitat and wildlife corridor.

There is a proposal to widen that creek and put in berms, but I don't think it says where those berms would occur to prevent flooding outside, and it's really important for them to be on the outside of those buffers so you don't cut off this riparian buffer area from the water source that's in the creek, and would recommend that that widening only occur on one side, or alternates sides, so you can protect the existing riparian vegetation and have less impact during the construction and regrowth.

Also, wildlife corridor near the student housing that is, right now there is a very open area, but it would be funneling wildlife and people into this narrow corridor around the drainage, and once again that requires some restoration both on the county
jurisdiction property where the housing would be, and
also on the University property.

There's also a proposal to change the existing
Arizona crossing, which is at Venoco Road, to a culvert
to reduce the flooding in the housing developments.
Because that is right on the edge of Devereux Slough,
that that must be done in a way that would reduce the
impacts, it must be done in a way that would reduce the
impacts, and the impacts are not addressed adequately.
We would need some kind of a bridge, and would still
have to be within the buffer, because it's on the edge
of the slough, and there's no place to put that. So I
would like the bridge alternative to be evaluated in the
EIR.

Other restoration opportunities that really
need to be looked at are the wetlands. It really talks
about opportunities for grasslands and creek
restoration, but the wetlands of Devereux Slough, north
and south finger and the slough itself, and all the
sedimentation has occurred really need to be
opportunities for enhancement by removing that sediment
and restoring the function of those wetland areas.

Thank you.


/ / /
JULIE LOVE,

offered public commentary on the
Faculty and Family Student Housing
Open Space and LRDP Amendment Draft
Environmental Impact Report as follows:

MS. LOVE: Hello, my name is Julie Love. I serve on
the Conservation Committee for the Santa Barbara Audubon
society. I'm here to suggest some reevaluation of the
Open Space And Habitat Management Plan on some of the
following points I have here:

Firstly, a reevaluation of the impacts to the
snowy plover. An increase in recreation by the current
residents and also visitors to the area, due to an
improvement in access, I think will negatively effect
the plovers. Some measures are mentioned, like the
signs and gifts to the Coal Point Reserve, but these may
not be enough to insure the safety of the plovers and
their population.

Also the Draft EIR does not address what
measures will be taken if these proposed measures fail.
So, possibly we need to include strategies like stronger
leash laws, ticketing of people who don't comply with
these laws, and perhaps if these measures don't work
out, if people still don't comply with them and there's
an increased impact to the plovers, there needs to be possibly an ordinance to prevent dogs at all from the Sands Beach.

There also need to be a reevaluation of the horse access to the beach and its effects on the snowy plover. Signs at the access point, which is on the left side of the Coal Point Reserve, might not be enough to keep horses out of the area. Either that access point has to be moved more westward, or maybe another access point can be opened up to encourage a westward movement along the beach and out of the plover area.

There also needs to be a reevaluation of the trails, regarding the widening of these trails and the subsequent fire clearance on the edges of these trails. We suggest that native grasses be planted along the edges, that will have a low native plant cover that will delineate where the trails are and will also help in fire protection. And of course, these plants and any plant that is landscape in the area should be native, meaning it should be from Devereux Slough and as close to that as possible in order to preserve the general integrity of the plants.

Also there needs to be a reevaluation of exotic species. The removal of pampas grass on the south parcel is mentioned, but there isn't a mention of
the removal of the pampas in the Venoco area. These plants are a serious threat to the reserve. They are a source of seeds just hanging out there, threatening. So that needs to be dealt with, perhaps by Venoco, or in concert with UCSB.

Also, there needs to be a reevaluation of the impacts of increased parking at Coal Point Reserve. Definitely a closer and better look needs to be taken. An increase in access will negatively affect the plovers and the reserve itself. Thank you

MS. HAMMOND: Thank you. Ruth Bartz.

RUTH BARTZ,

offered public commentary on the Faculty and Family Student Housing Open Space and LRDP Amendment Draft Environmental Impact Report as follows:

MS. BARTZ: I know the tape won't pick this up, but just by way of identification, I live in this house right here, next to what looks like the giant empty corridor similar to what's listed on the world maps in south Saudi Arabia as the empty corridor, but we don't really know.

I'm representing myself and my family, and we
have lived in that house since the mid-sixties, we've lived in the IV area since early sixties, maybe '60, '61. I feel that my concerns are the ball in a ping-pong game between the University and the County.

I went to the County hearing last week and they had a different story about parking lots, and a different message. They, the County, said that both Coal Oil Point and west campus, empty corridor would have parking. Now, the University says either/or, so I'm not too sure.

I heard last week at the County, from the County, that the University was amending the plan, this plan, to get rid of the parking at Coal Oil Point, which definitely would place the parking 25 feet from my bedroom.

Mr. Horne, for the EIR, talked about possible degradation, and a few things like that. I can assure you that the parking lot in the empty corridor will definitely result in degradation of my lifestyle and my general routine of life, loss of property value for my house. Think of your own house, where you live, putting in a parking lot 25 feet from where your bedroom is, and a loss of health, because the county says it's going to be dirt. There is a prevailing wind breeze every day that picks up in the afternoon and blows whatever is on
west campus into my yard. Everything and anything
that's on west campus comes into my yard, wrappers,
dust, toilet paper, everything. So, I am vitally
concerned.

I'm not going to go through all my comments,
because I will be submitting them, but I want to commend
the planners for recognizing the value of the Eucalyptus
trees. A lot of times, exotic species, like Eucalyptus
trees, are sort of denigrated and pooh-poohed as not
being very valuable, but they are, because they are
high, and raptors do perch in them. We've had raptors
come in -- we haven't, we have seen raptors come in off
the islands, young ones, sometimes when the fledglings
are first starting to fly, the hawks, and not just the
turkey hawks, turkey vultures, but various styles of
hawks and falcons roost up there.

So I have a bunch of questions, which I
realize cannot be answered at this point, but first of
all, is there a study that says that a parking lot is
needed on west campus? Is there a study that says
additional parking to what is already there is needed?

Now, this may come off as a NIMBY, but I
assure you that it isn't, because my family is
responsible -- I don't want to sound egotistical -- but
we were the ones that got the County and the Coastal Act
to put in the existing steps at the end of Camino Majorca, because the original steps fell down, back in the early eighties, and we got the County -- first the County said "No," then the County said "we'll take them down" because they were unsafe, they twisted, people were falling off. Then the County said, "Oh, we have coastal funds, it's gonna be a coastal access," and we said "Fine, we live at the beach, fine, we understand." We have forever said, "yes." Anywhere you go in the world, when you live at the beach, it's beach access, of course. That's a duh, that's a given.

I don't know, it has not been shown to me, and I don't know if there is a study that says additional parking is needed, especially 25 feet from my bedroom. If a parking lot is needed, why does it have to be in that exact spot? Could there be a study done on that, and has anyone done that?

In terms of beach access, I think there should be a regional approach, not just look at this little parcel or that little parcel, or just the empty corridor, and I'll get to my euphemism there in a minute, but a regional approach.

There are some places that can expand, like Haskells Beach has plenty of room for additional parking, has bathrooms, has showers, it's a County
Beach. It's been a County Beach for a lot of years.

Camino Majorca is 25 feet or less, it's up for
debate whether it has ever been determined to be a
public street. I'm not going to go there with this, but
it's by use, used by the public. The steps, has anyone
done a study on how often the steps are accessible to
beachgoers? High tides? Low tides? High surf? Low
surf? Have those kinds of studies been done?

And talking about studies, has any study been
done about traffic for this parking lot? Traffic in
terms of cars coming in, cars going out. Who is going
to monitor the whole thing with traffic study with a
parking lot coming in and out of a street that
bicyclists use, pedestrians use. There are handicap
parking spaces that the County paid for, they had an
architect come out, and they had renderings, and it was
a big deal, and it was really expensive, and it took a
year to get them, and the driveway through the parking
lot is going to wipe those out. Has there been any
study to deal with that?

Has there been any more study or any decision
about enforcement about all the problems that go with
parking lots?

And last but not least, has anyone mapped the
resources of the empty corridor? This poor little
parcel has been sitting here for a whole lot of years, and the University has benign neglect, that has been their attitude towards it. Up till now, that's been pretty good, because originally, when the University first came into the neighborhood, and we were there before the University bought it, when Devereux still had it and there were horses there.

The University first came in, they left the horses there, but they used the gullies, the cut-ins at the cliffs as a dumping ground, and all their construction on the main campus, they would pull in along the cliffs at Devereux Point and they would dump stuff, and that's why when you go and you see the slumps where it has given way at the cliffs, that's why you'll see concrete and things.

So that stopped after a while, and we have worked, my family and I have worked with members of the University to try and keep, you know, try and control certain things, because again, there's this wind blows everything onto our house, dust and erosion and all of those sorts of things, so benign neglect has been okay. But has anybody ever really walked the property, a knowledgeable person, and mapped the vegetation?

My family and I have been members of the Audubon Society, World Wildlife, all those kinds of
things, we have gone on tours of the Sedgwick property, we have been shown the little minute grasses and the endangered species on the Sedgwick property, and we have marveled to ourselves, "oh my gosh, we've seen those in the field," and are any still there? Do they exist? Has anyone really mapped the vernal pools? There's these big circles on the empty corridor.

So you know, part of the study should include the cliff face. For years, people from all over came with their little picks and their ladders and they'd climb up and go fossil hunting in the cliffs. I don't know if there's fossils there. Has anybody ever studied fossils?

I was an anthropology minor at UCSB. I have two degrees, I'm a life member of the alumni association. I have tried to be a good neighbor to the University, my family has, but really somebody needs to do a study and walk through that area and say "these are just weeds," or "not," I don't know.

All right, so I'm done.

STEVE GROSS,

offered public commentary on the
Faculty and Family Student Housing
Open Space and LRDP Amendment Draft
Environmental Impact Report as follows:

MR. GROSS: Mr. Gross is this the proper spot?

Good evening. Can you hear? Okay, my name is

Steven Gross, I'm the Chair of the Council On Faculty
Issues at UCSB, and I'd like to address three short
comments to you folks at this hearing.

The first one is that the faculty at UCSB
desires to be a good neighbor. We want to be a good
part of this community, acting in good faith. We don't
know all the answers, but we're willing to listen. We
very much want the comments, and everything else given
here, to be part of the planning into what goes on in
this community.

We've worked with people, extensively. The
initial project was supposed to be on the bluffs. Now
we've moved it to the corners of the proposed habitat.
And in terms of parking lots and other things, as I
understand, we consider the subject to be open, we'll
continue to listen.

Already, in the report that's been submitted
tonight, we know that 88 percent of the project will be
untouched. There are significant mitigations, beaches
will be untouched, vernal pools and some of the
grasslands.

Moving on to two other comments, the first
comment I want to make is that the need for a housing
project is an absolute and urgent necessity for the UCSB
community. Many of us are very strong supporters of the
environmental movement. Many people in the community
belong to the Audubon Society, the Sierra Club. UCSB
was absolutely instrumental in making sure the Clear
Water Project didn't come to our area, but we have a
problem, it's called affordable housing.

Faculty, at any level, even the most senior
professor, cannot come to UCSB and afford housing right
now, it's absolutely impossible. Even a condominium
runs a half million dollars, which is too much for the
middle class, and it is an absolute urgent necessity
that drives us to seek even having a housing project.

I would remind you that UCSB, warts and all,
is an important part of the community, not only do we
provide education, we are a significant economic,
cultural, and environmental engine for the community.
We care very much about what happens here.

The last and short comment I want to make
concerns the environmental impact of what goes on here on a very broad basis. That is simply this: If this project doesn't take place, then we're going to have an environmental impact on Highway 101. There will be massive air pollution, huge construction and highway expansion, daily 10-to-15-mile-long traffic jams, greatly increased fuel consumption, and significant spoilage of beach area.

We have choices here folks, and I think our best choice is going to be to work together to make this work for everybody in the community. We think our quality of life is going to be improved for all of us to have it carefully planned and studied extensively, rather than shunting it on to some other city an hour away, north or south, and contributing to already serious problems on the 101. We too want to be part of the community. Thank you.

MS. HAMMOND: Thank you. Michael Jacoby.

Mr. Jacoby, that's our last speaker.

MICHAEL JACOBY,

offered public commentary on the Faculty and Family Student Housing Open Space and LRDP Amendment Draft Environmental Impact Report as follows:
MR. JACOBY: My comments may be rather long, by way of forewarning.

My name is Mike Jacoby, I'm a member of Cannon Green Phelps Neighborhood Coalition. The comments I make here tonight, and others, will be submitted in writing before the 24th.

First, and according to the Draft EIR, if existing statutes of the Coastal Act are followed, basically, only 16 housing units can be built on the north parcel. This has been emphasized, in fact, in UCSB's own Faculty Association Newsletter.

It said, nowadays, "A wetland, no matter how small, no matter how low in quality, it must be preserved." It went on to say, "Building is forbidden within a hundred feet of a patch of wetlands." Plans respecting this 100 foot setback allow perhaps 20 residential units to be built on the site near Phelps Road and Cannon Green.

Now, it's our understanding of the Coastal Act that balancing of alternatives which result in the destruction of wetlands is not allowed. We believe that action on the part of the University which violates or substantially modifies existing interpretation of this Coastal Act, will serve as a slippery slope down which the entire coast may fall.
If the University is ultimately able to go forward with the project, we find the following problems with it depicted in the Draft EIR:

First, all nonphotograph-related maps contained in the EIR are misleading in that they don't accurately show the neighborhood immediately adjacent to the proposed north parcel development. The Cannon Green Townhomes, where I live, are conspicuously absent. It gives the impression that it's open land. As a result, we feel that the various conclusions in the various sections might be questionable.

The housing density calculations in the Draft EIR seem to be incorrect. The density of the proposed development as stated is 8 units per acre. According to our calculations, and using the numbers in the Draft EIR, we find the density to be 10.3 units per acre. We also note that at current zoning levels, which is 6 units per acre, the number of units built in the north parcel can't exceed 138 units.

Also, we note that using housing and acreage figures in the Draft EIR, we're wondering why the University is proposing housing in the north parcel that is twice as dense as the current faculty housing.

Regarding some environmental impacts: The following of existing Ellwood Bluffs users, plus the 500
people that will be living in the north parcel could cause or will cause a significant environmental degradation to the single the access point they're going to be funneling those folks into. Right now it's a very diffuse access that's afforded to the bluffs. This has been completely ignored in the EIR.

For our neighborhood, the proposed north parcel exits on a hundred-year flood plain. This, along with elevation grading of the site could lead to substantial flooding of the existing neighborhoods. This isn't addressed.

The Draft EIR acknowledges the current public parking on Phelps Road, where people go down to the bluffs. We don't feel any additional parking is necessary, other than that which has been used historically.

The Draft EIR does not adequately address the health hazards associated with the 42 month, nearly four year construction period for the north parcel: In particular, we are concerned about the health impacts associated with the long term exposure to diesel exhaust from the construction equipment. We're going to address that more thoroughly in our written comments.

We feel the visual impact analysis in section 4.9 is completely misleading. At best it's biased. The
visual impact analysis presents a single photograph
taken at the end of Cannon Green Drive and does not show
any of the impacts to public views along open stretches
of Phelps Road. The analysis also completely dismisses
the view impacts to current adjacent private
residences. None of the neighborhoods immediately
adjacent to the north parcel have three story dwellings;
therefore, we find the proposed north parcel development
to be inconsistent with the surrounding existing
neighborhoods. That's a key component to the proposed
project.

For traffic, we completely disagree with the
conclusions of section 4.12. We contend that the Cannon
Green/Hollister intersection will see substantial
increases in traffic due to the single point of entry
for the north parcel development. The Draft EIR doesn't
address this. In fact, it doesn't address any
mitigation whatsoever for that.

All of the intersections studied in the Draft
EIR will show significant increases in traffic. In the
case of the Storke/Hollister intersection, the Draft EIR
finds that a widening to six lanes for Storke, north of
Hollister, is required to channel the extra traffic. So
to us it seems reasonable that the University should
make a substantial contribution to the necessary
widening of the Storke overpass.

Regarding infrastructure, we strongly disagree with the conclusions of section 4.15 that there will be a less than significant impact for local law enforcement and fire protection agencies and other first responders. Our informal survey of local law enforcement personnel indicates that they disagree, and we do too. However, this impact can be mitigated with a substantial commitment on the part of the University for an increase in law enforcement and fire protection in our area.

The proposed University developments fall within the airport land use approach zone, and could therefore increase the health and safety hazards for those people that are going to be living in those developments. The Draft EIR dismisses this risk out of hand by simply stating the University is not subject to ALUC jurisdiction.

Regarding the proposed alternatives: A development on the north parcel similar to that proposed in the south parcel alternative would result in a substantial reduction to the proposed density to the north parcel development. We also note that the proposed south parcel development is half the density and calls for roughly 10 times the number of single
family homes as the north parcel development, which is arguably better for the faculty.

The description of the south parcel alternative states the construction will use green resource technology. We could find no similar statement for the north parcel development in the Draft EIR. The Draft EIR should indicate the difference from resource use and resulting environmental impact between the alternative, with expected life of the buildings if there are not to use green technology.

We also find the No Development Alternative to be inadequate. UCSB and faculty partnerships, which enable the faculty to buy existing local homes, sometimes called equity sharing, is completely ignored. Universities throughout the country have similar programs. Such a program would allow UCSB to achieve its goal of attracting quality faculty without the need to develop in environmentally sensitive areas, or require faculty to substantially sacrifice equity associated with the rising house values.

In addition, according to the March 29th edition of UCSB Newsletter, 93106, the University is currently planning between 2,900 and 4,000 housing units. No mention of these planned housing units by the University is in the Draft EIR. To us, major
modifications to the Coastal Act seems like a mighty high price to pay for a roughly 10 percent increase in new housing.

Nothing precludes the University from developing on any of the alternative sites in the future. Current plans stating this is the case can be altered. We, therefore, strongly advocate that the University legally relinquish development rights to any area contained in the current Ellwood Devereux plan that are not currently planned for development. We feel that development of all the alternatives in the Draft EIR is inevitable unless this is done.

Finally, the Cannon Green/Phelps Neighborhood Coalition strongly objects to the views stated in the April edition of the UCSB Faculty Association Newsletter that we perceive new housing as a threat to our convenience, lifestyle and wealth. Our neighborhood coalition has always supported the aims of the Ellwood Devereux plan, even though this plan affects our neighborhood more than any other residential area in the vicinity at least of the Ellwood Bluffs. This is why we have consistently attempted to work with the University to make their proposed development of the north parcel more palatable to the surrounding community.

We at the Cannon Green/Phelps Neighborhood
Coalition continue to endeavor to work with the
University to have our reasonable concerns regarding
traffic, infrastructure, density, and environment
addressed, not as adversaries, as arbitrarily labeled by
the Chairman of UCSB's Advisory Committee on faculty and
staff housing, but in a spirit of cooperation to build a
community that meets the needs of all of its members.

That concludes my remarks. Thank you.

MS. HAMMOND: Scott Bull. After Scott, Jill
Howry.

SCOTT BULL,

offered public commentary on the
Faculty and Family Student Housing
Open Space and LRDP Amendment Draft
Environmental Impact Report as follows:

MR. BULL: Thank you, Shari. My name is Scott
Bull, I am with the Santa Barbara Chapter of the
Surfrider Foundation, and I have not actually gone
through as much detail as the Cannon Green Association,
so I'm going to be really brief.

Surfrider Foundation is really concerned with
water quality. There were water samples tested, I was
actually just reviewing in the EIR, the background
there, the bacteria levels have been off the scale. We
at the Surfrider Foundation would really appreciate no
drainage in the Devereux Creek area, the watershed at
all. The bacteria levels are already off the scale,
they're exceeding any sort of standards. We would like
to see any type of permeable surfaces, the bow swales, I
don't know if the bow swales are going to be treating
actual bacteria, but we'd like something that can be
implemented that could actually treat bacteria into the
Devereux watershed.

We're also very concerned with the west campus
bluffs. I'm really happy to see the trail improvements
that have been out in the west campus bluffs. Every wet
season those trails get rutted out, they're expanded,
they're really close to the cliffs as we speak, and
right now it's posing a big safety hazard. So we would
actually like to see the west campus bluffs, see
something happen there before next winter rains, because
it's actually becoming a problem more and more. There's
impact to sensitive habitats as the path is expanded
wider, and it's also posing serious safety hazards for
people that go out there. Sands and Devereux is
probably one of the most popular beaches to surf and
recreate on right now. On Sunday there was 89 cars just
along Camino Majorca, not counting the residential area,
of people going out there and surfing. It's a high use area, and I would really like to see something done on the west campus bluffs beforehand.

There is a parking permit program that is going in at Isla Vista. I know you want to offset some parking and provide access to this natural area, I think that's a great idea. I am concerned with the siting of the parking lot on the west campus bluffs. I don't believe the EIR adequately discusses the sensitive habitat and the resources that are out there. There's lots of native grassland species and also wetland habitat that are sensitive in that area. I think some of them are even out and around the footprint of the parking area, so we would like to have those looked at a little bit more specifically.

That's all I have.

MS. HAMMOND: Jill Howry.

JILL HOWRY,

offered public commentary on the Faculty and Family Student Housing Open Space and LRDP Amendment Draft Environmental Impact Report as follows:

MS. HOWRY: Hi, I'm Jill Howry, and I live in the
Cannon Green condominium complex, which is immediately adjacent to the north parcel. I would like to thank the University representatives at this meeting and prior ones for listening to the community concerns and implying a willingness to compromise. Your challenge at this point is to translate those words into specific actions.

Unfortunately, there is little in this Draft EIR, or in the recent public comments by the Chair of the Chancellor's Advisory Committee on Faculty and Staff Housing to lead anyone to believe that compromises will be forthcoming.

From the outset of meetings regarding proposed faculty housing on the north parcel two years ago, common themes have been raised by those of us in the community.

Number 1: The loss of the natural landscape visible to all on Phelps Road, and directly in the backyard views of many Cannon Green condominium owners. The EIR Draft concludes that there will be no visual impact to the project. This section, apparently written by a blind person, concludes that the natural beach dunes, and condominiums surrounded by public parking are exactly the same visual view.

Number 2: The negative impacts to traffic and
congestion. The Draft EIR concludes that traffic congestion in all surrounding intersections will deteriorate from current levels, yet it proposes no offsetting mitigations or solutions. The Draft EIR, 3,396 additional average daily trips will result from the proposed development. Cannon Green Drive, which is a narrow, two-lane street with low curves and minimum sight lines from entrance and egress routes, is particularly unsuited to safely incorporate this additional traffic burden.

Number 3: The negative noise and safety impacts of re situing the public parking from its current location on Phelps Road, where there are existing retaining walls that provide a buffer, into a secluded site within the Cannon Green Condominiums' backyard, we have repeatedly asked for this to be changed back to its original siting, as it is now, but the parking lot continues to be on the map.

Number 4: Compatibility of the proposed housing density with the surrounding communities. Though it's difficult to reconcile the various density figures in the Draft EIR, it is uncontested that the proposed housing is more dense than the current existing faculty housing. It also includes three-story structures, which are completely nonexistent in the
current surrounding neighborhoods. The Draft EIR appears to take this duck and calls it a swan and ignore the facts to the contrary.

My understanding of the EIR process is that negative impacts must be called out. The determination of what, if anything, is done about those impacts is less clear. While the University has been willing to listen to the community's concerns in an effort to provide a united front on the Ellwood Devereaux project as a whole, specific actions are now required, not just talk.

In the Faculty Association Newsletter, dated April 2004, Perry Nelson, the UCSB Chair to the Advisory Committee on Faculty and Staff Housing, made a concise and dramatic introduction regarding the extreme sacrifices required to own property in the Santa Barbara area. The irony, of course, is that no one understands those sacrifices more clearly than the existing homeowners of the Cannon Green and Phelps Road neighborhoods. We have made them ourselves.

Unfortunately, nowhere in Mr. Nelson's article is conceived of the idea of working with the current residents of the area, or mitigations of the negative impacts resulting directly from actions by the University to help its faculty avoid these same
sacrifices.

So I'm wondering, which is the true face of
the University?

CALLIE BOWDISH,
offered public commentary on the
Faculty and Family Student Housing
Open Space and LRDP Amendment Draft
Environmental Impact Report as follows:

MS. BOWDISH: My name is Callie Bowdish. I'm a
condo owner on Surf Ranch, across from Ocean Meadows
where they're going to be building some housing.

My biggest concern is bicycle safety. I have
to cross the street every day when I ride my bike, and I
go to the beach regularly with a surf board trailer on
my bike, and crossing that street already is a bit
harrowing. And I'm just thinking that the more cars
that are pulling out there, the harder and harder it is
going to be to cross the street. I know some people
that are afraid to ride their bikes in the IV area
anywhere because of safety issues.

I just really want to encourage this
development to work on bicycle safety, and incorporate
that in everything they do. The trail that connects
Camino Majorca to Sands Beach, that trail discourages bike use by many people, people that would probably carry their surf board and not drive in, but it's so rutted and dangerous, that people can't do it. I think there's numerous accesses to the beach, if they were really considered and made safe for bikes, we would have less parking issues and people in the community at least would not need to use the parking lots that are concerned if there were more bike-safe paths available.

MS. HAMMOND: I don't have any more speaker slips.

BRAD HUFSCHMID,

offered public commentary on the Faculty and Family Student Housing Open Space and LRDP Amendment Draft Environmental Impact Report as follows:

MR. HUFSCHMID: I'm going to step by the map.

My name is Brad Hufschmid, I have lived in this area for over 40 years, and lived for two decades and a half right next to Coal Oil Point. I earned my Bachelor's Degree at UCSB in both the Environmental and Earth Sciences, as well as the secondary Science Education. My senior thesis was on the evolution of this landscape, and how the different cultures
altered this landscape due to their cultural beliefs, practices and technologies.

My family and I have spent countless days, for 20 years, I have gone almost daily to this area. I care very much about what they're proposing and I know quite a bit about this area, as a scientist, as a neighbor and as a fellow human being on this planet. You have heard a lot of people talk about the inadequacy of the EIR, I would second all of their comments. It is a ridiculous EIR. The only impacts they seem to think of is that the people who walk, bike, and jog are causing all the harm, and that the houses have no impact whatsoever. And that's what I would like to address, because I know the rest of you have already addressed the seriousness of the inadequacies regarding the housing.

First of all, if closing the trails is their mitigation for what little impact they justify that they see in the housing, I think that's wrong. You cannot and should not try to mitigate the environmental impacts of these housing projects, the staff, the students, and the 20,000 people that come to this University every day by closing off recreational opportunities.

Hikers, joggers, bikers, and all the other people that go out there are not causing the harm. They have no science to back up any statement that we who
walk out here are harming the environment.

For over 10,000 years, this area has been one of the most densely populated areas in the United States. There were several villages all around the lagoon, the highest densities were the Devereux Lagoon and the Goleta Lagoon. 5- to 10,000 people lived up and down this coast, hunting, foraging for anything edible.

Sorry Christina, there were no plovers laying eggs for me and you to pick up when the Indians lived here. If you can find the eggs, they did too. They lived all around here searching daily for anything edible. It's a myth that people are not part of the environment and have not been part of the environment. So to suggest that we who walk out here are harming it so bad that you have to restrict us to one or two trails is ludicrous.

After the Indians were here for 10,000 years, this area was taken over by the Spanish and the Mexican periods. What did they do to this area, they graded it to the ground. But the most important thing they did was they stopped the Indians from burning the area. Did you know that the Indians managed this area as effectively as farmers do today with fire? By preventing the fire, what did it do to the native vegetation? Because it could no longer burn, it no
longer had a healthy ecosystem. If anybody can understand the environmental nature of our plant community, it requires fire. The Indians used it every year to every three years, depending on what they were trying to do.

If you look at it after the Spanish stopped the fires and grazed it to the ground, it was nothing but little ranchettes and farms. The entire cover was removed. It was dry land farming, they graded it, removed all the vegetation, and the wind blew at least a foot or two of top soil away, completely removing -- the wind that blows consistently took away the top soil and removed the plant cover.

After these ranchers and farmers, we had oil development. One of the largest oil sites in the world was right out here. You can still see it, the oil tankers that are there now. This pond, it's not a pond, it's an oil sump. It's where they dumped their stuff.

This is not an environmentally sensitive habitat. It's been altered and degraded completely beyond recognition. An Indian coming here would not recognize anything he sees. All these trees were just planted by people. They're not native. They're not natural. This area has been changed and altered for 10,000 years. To suggest that the hikers and bikers are
causing problems is ludicrous.

There are no trail closures linked to any specific impacts. You see just general statements, like we're closing trails for habitat restoration. None of this is scientifically justified, discussed, or in any measurable or quantifiable way outlined. The fact that the trails have already been closed before the draft plan has even been discussed shows the arrogance of people at this University. Go out there, they have already closed trails that the plan says will be discussed tonight. How can they do that?

The parking lot, next to my neighborhood, makes no sense at all. It is not needed because there are 20,000 people right here, why do you need another 20 spaces right there? That doesn't make any sense at all. The paved lot will cause more harm than the people who walk out here, and yet they're gonna limit our walking so they can build a parking lot there and bring more people to this area. It will force people who really want to go north of Coal Oil Point to surf and sit in the sand, like it's the only beach in Isla Vista, you're going to make them park here and walk across this habitat to get to here. When in the last LAP, this was the site that was designated for their parking. How did that get closed, without any public hearing, without any
discussions, just disappeared one day off the radar.

By the way, when they built this faculty housing, this was all vernal pools. Did you know that the vernal pools right here were bulldozed. The University, "Oh, sorry, we didn't know they were there," even though we talked to them and argued with them and tried to sue them. They just ignored us.

Santa Ynez has the Chumash Casino. We have the University and Isla Vista. They're both sovereign nations that don't give a damn what the public think. If they did, then Isla Vista would be their focus. What Isla Vista is is a degraded environment. What the University needs to do to mitigate their growth is to make this place psychologically sound again. They put the housing in Isla Vista. They need to civilize their students, and their clients, they need to make the place habitable again.

If you want real restoration and real environmental improvement, do something about the deaths of the students out here.

The proposed parking lot I talked about, okay. This leads to another assumption that all of this has no impact on Isla Vista. If you look at the last LRDP, you'll see Isla Vista was a blank map. The University doesn't acknowledge that it's there. Have
they addressed in any manner what it is going to do to
close off all this open space to the people of Isla
Vista? Where are they going to go? What are they going
to do? What's an alternative recreational use that's as
positive as going to the beach and walking out here?

Obviously, the University wants more drugs,
more parties, more out of the control students.

I'll give you the rest later, I have so much
more to talk about here. If you really want true
mitigation, don't close the trails. That's not
mitigation for all this housing. That just makes all
the problems worse.

True mitigation, don't build any houses on the
wetlands. That would be a real environmental
university, not a pseudo-environmental university. You
want to improve the environment, all of this was from
right here. This was bulldozed two decades ago to the
bare earth and it all washed right into here. You want
to mitigate, dredge it out.

You want real mitigation, all these houses out
here, especially the ones on the sand dunes, remove
them. The lights out there, go out there and look at
the night lights, it makes it like day out here. I
thought the University knew about that, about the loss
of visual, the sky at night, as well as what it does to
the sensitive birds and animals out there. How can they do that? Obviously they're not environmentally conscious.

Before any new housing is proposed, they ought to look at what the University has already done. And again, why can't the faculty live out here? When they built this faculty housing, we told them, "You buy in our neighborhood, you'll make $50,000 a year as a professor, from your house." I was wrong, I make 100,000 a year from my house. That's how much they've increased the property values. The houses they bought here, they made about $5,000 a year.

It's a detriment to the faculty to not let them own their own home. If the University doesn't pay a salary that's enough for them to afford to buy here, then that's the problem, not the destruction of more wetlands to build more houses. If the University does not pay them enough to live here, then help them with the downpayment. If they bought in our neighborhoods, they wouldn't be as arrogant. They wouldn't feel like they are different than the rest of us. That's a real problem.

The University thinks Isla Vista does not exist, and the faculty here never have to deal with the problems. In fact, the parking lot, do you think the
parking lot goes through the University property, no it
goes through my neighborhood. They want to put the
access to the parking lot in my neighborhood, when they
have the road right here. That's the arrogance of this
University. Who could do that but a university?

Since all the roads that lead into Isla
Vista, including the road to Coal Oil Point, was built
by filling in wetlands, there's another mitigation right
there, remove all these roads that are built on the
wetlands. If you need to build, put it on stilts, put
it on a pier, that would be true restoration. True
mitigation.

How many University housing units, especially
the Santa Ynez Valley units, was built on wetlands. Go
look around Isla Vista. This is an uplifted mesa, the
faulting along this area created the wetlands, that's
where the housing units are, right in the wetlands.

As a taxpayer-supported governmental entity,
the University has an obligation to the community, and
this plan does not fulfil its obligations, nor does it
live up to its reputation as a top-notch research and
educational institution. This plan not only does a
disservice to the community, but also to the
environment. The harm of this development and past
development cannot be mitigated by simply closing
trails. That's their only mitigation, closing trails.

It's bad enough that the University forces all these high density housing units on this community, already overcrowded, overburdened with traffic, noise, and all the other problems we have in this neighborhood over here, how can it make it worse except to take away all the open space from us, and that's what the proposal is, to build all this high density housing, and then take away the open space.

As a geographer, all these trails, if you were to look at them, they are very well laid out, they're very well designed, they maximize the purposes of a trail. The proposal of the University is to do the exact opposite. It is to take all the people and force them into narrow corridors where the bikes, the people and horses are all in conflict. And then what's going to happen? There'll be like a cat fight. When you're trying to walk out here, and a horse comes by or a bike comes by, everybody's is going to be angry. If you look at it now, if you look at it as a geographer, you will see these trails are very well planned, and very well designed and they're maintained by the people who use them. Every year the rains come and cover up the trails, and the people reestablish them. The trails are there, because that's where the need is there.
And finally, people will not stand up for what they are not allowed to use. By taking away our opportunity when the time comes to develop this, will I stand up and say "No, this is an environmentally sensitive habitat."?

I'll say "No, build on it, I can't use it anyway. I might as well buy a house or help somebody else buy a house there."

If you really want environmentalists in this community, then treat us as if we're real neighbors, not a third world nation. The way the University treats us as if we're just a bunch of people who don't matter. The real important people are the faculty, and they get their houses, and the UCSB researchers get their little laboratories, and they put houses on sand dunes and laugh in our faces, because we're just the common people.

Why don't you turn it around and put the common people first, and then the University can look at themselves as an educational and research institution, and every trail is studied before it's closed, every proposal has a mitigation and an opportunity to do something other than closures, and those should be tested and tried first, before you closed any trails.

As you can see, I have had a lot to say, I
could have said twice as much, but you wouldn’t want to
hear it. But like Don Quixote, I’m sure we’re just
soaking time up, because this arrogant University is
going to do what it wants, and Isla Vista is the result,
and you’ll see more of Isla Vista, and this University
will just stand up there as a top notch university.

MS. HAMMOND: Thank you for your comments. Does
anybody wish to speak?

That concludes our public hearing. I would
like to remind you that comments are due by May 24th, so
if you have any more comments, please send them to the
address on the agenda. Thank you for coming.

(Whereupon the Public Hearing on the
Faculty and Family Student Housing,
Open Space Plan and LRDP Amendment
Draft EIR was concluded at 8:39 p.m.)