

CALIFORNIA COASTAL COMMISSION

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Prepared March 30, 2006 (for April 12, 2006 hearing)

To: Commissioners and Interested Persons

From: Charles Lester, Deputy Director
Rick Hyman, Central Coast Chief Planner
Dan Carl, Coastal Planner

Subject: UCSC Marine Science Campus Coastal Long Range Development Plan (CLRDP)

Proposed CLRDP for UCSC's Terrace Point property located in the City of Santa Cruz to be presented for public hearing and action at the California Coastal Commission's April 12, 2006 meeting to take place at the Hotel Mar Monte, 1111 East Cabrillo Blvd. in Santa Barbara.

Summary

CLRDP General Context

The University of California at Santa Cruz (UCSC) owns approximately 100 acres of land located just within the western border of the City of Santa Cruz and entirely within the coastal zone. The site has been known locally as Terrace Point and is currently home to UCSC's Long Marine Lab (LML) and its related facilities, as well as other affiliated marine science labs (including California Department of Fish and Game (CDFG) and National Oceanic and Atmospheric Administration (NOAA) marine labs). The UCSC property includes the 25 acre Younger Lagoon Reserve (YLR), a component of UC's Natural Reserve System, and it is located at the transition from urbanized Santa Cruz City into Santa Cruz County's rural north coast. The entire site is located within the City of Santa Cruz, but is not subject to the City's certified Local Coastal Program (LCP), in part because this area was deferred LCP certification in 1981, and in part because portions of the site have been in University ownership since 1975. Existing development at the Terrace Point site has been authorized by a series of coastal development permits approved by the Commission (over three dozen Commission permit actions since the first LML approval in 1976) that have allowed approximately 140,000 gross square feet of existing buildings/facilities and additional areas of related infrastructure on the 75 acre terrace above YLR (including related NOAA development).

As an alternative to project-by-project coastal permit review, Coastal Act Section 30605 allows the University to develop a long range development plan (LRDP) for the site that can be certified by the Commission. Similar to an LCP, the University would be the responsible entity for ensuring that future development on the site was consistent with a certified LRDP, subject to Commission oversight. After several years of preparation, UCSC has now submitted a proposed coastal LRDP (or CLRDP)¹ to the Commission to govern coastal development at the Terrace Point property (now called the Marine Science Campus by the University). The proposed CLRDP would provide for an increase of about

¹ This LRDP is called a coastal LRDP (or CLRDP) to distinguish it from the non-coastal LRDP that applies to the main UCSC campus outside of the coastal zone pursuant to an authority other than the Coastal Act.



California Coastal Commission

April meeting in Santa Barbara

Staff: D. Carl Approved by:
UCSC CLRDP stfprt 3.30.2006

680,000 square feet of new Campus facilities mostly within three distinct development zones (occupying about 35 of the 75 acres on the terrace) for an expanded Marine Science Campus. Roughly 417,000 gross square feet of new facilities would be in new one and two story buildings up to 36 feet tall, with the remainder in outdoor research and support areas. Additional areas of parking and roads (an addition of about 20,000 square feet to what exists now), and some drainage facilities, would also be developed outside of the development nodes. The proposed CLRD P also provides for an expanded public access trail system and natural habitat restoration in those wetland and open space areas on the terrace that are not part of the proposed development zones (roughly 40 acres). Once the CLRD P is certified, direct development review authority for most of the site would be transferred to UCSC.

Previous CCC Issue Identification

In December of 2000, the Commission reviewed UCSC's CLRD P issue identification paper at a public hearing and provided comments to the University for their use in the preparation of a CLRD P for this site.² The Commission's comments at that time were focused primarily on ensuring that the CLRD P would: avoid, protect, and enhance wetlands, environmentally sensitive habitat areas (ESHAs), and other related habitats; maximize public access to the site consistent with the resource protection requirements of the Coastal Act; protect the public viewshed, including through appropriate mass, scale, and location of development; not adversely affect the viability of adjacent agricultural operations, and only allow conversion of on-site agricultural lands for high Coastal Act priority uses; manage and treat runoff to protect water quality; avoid the use of shoreline armoring; maintain a stable urban-rural boundary, including through avoiding the extension of public services upcoast to the rural north coast; and provide clear and explicit procedures for implementing the provisions of the CLRD P.

Proposed CLRD P

UCSC spent the years since the 2000 issue identification hearing preparing a draft CLRD P and supporting information for the Commission's consideration. CLRD P preparation intensified in late 2004 when the University began a series of meetings with Commission staff to identify and resolve potential Coastal Act issues with respect to the University's draft CLRD P. Commission and University staff have been working closely together since that time to resolve remaining issues, and the University made a series of modifications to its proposed CLRD P – including submitting a revised proposed CLRD P at the end of January 2006 – in response to those ongoing discussions (see Exhibit E). The University has also supplemented this January submittal with an addendum dated March 28, 2006 that makes additional adjustments to the January submittal, many of which are minor clarifications in response to on-going discussions with staff (see Exhibit F). This addendum also highlights continuing areas of disagreement between the University and the staff, and proposes alternatives to the staff recommendation. It is the January 2006 revised proposed CLRD P as modified by the addendum (hereafter proposed CLRD P or CLRD P) that is before the Commission at this time.

The CLRD P would provide for a development expansion of the Terrace Point site designed to

² The Commission's regulations allow for State Universities to submit issue identification papers to the Commission for review and comment as a means to guide preparation of CLRD Ps.



accommodate a full-fledged UCSC Marine Science Campus. Development would take place largely within the three identified development zones that would be connected by roads and trails, and separated by areas of grassland and wetland. The result would be three areas within which structures would be densely sited (totaling about 35 acres) with the remainder of the terrace area (about 40 acres) left mostly free of development (other than roads, trails, some parking areas, and drainage basins). An expanded system of public pathways would be provided, as would some public access parking. YLR would remain undeveloped and be maintained as a natural reserve. The CLRDP would allow for up to about 417,000 additional square feet of buildings and related structures, including 112 housing units and 10 overnight units, and up to roughly 150,000 square feet of outdoor research area. Roads, parking, pathways, patios, and other such facilities would also be commensurately increased. Overall, and based on the University's current best estimate as to the Campus layout at buildout, the CLRDP would provide for a Campus roughly three times the scale of the existing Campus (including the NOAA facility) overall, and roughly four times the scale of the existing building development (including the NOAA facility) on the Campus overall.

The CLRDP also proposes the permanent protection of the natural areas surrounding the proposed development zones, as either open space or areas of resource protection and buffers (such as delineated wetlands). Appendix A of the CLRDP is a Resource Management Plan, to be implemented by an independent Scientific Advisory Committee, that will provide for restoration, maintenance and protection of the remaining natural areas of the campus in perpetuity. Appendix B is a Drainage Concept Plan that proposes to use state of the art water quality BMPs in treatment trains to support new development. The DCP would rely heavily on soft technologies, maximizing infiltration, and natural vegetated basins for detaining, filtering, and treating runoff. Finally, the CLRDP contemplates significant public access improvements, such as trail development, provision of overlooks, and public parking.

Coastal Act Consistency Issues

The CLRDP is a comprehensive land use and development document, and the University has put significant time and effort into balancing coastal resource constraints, including those identified by the Commission early in this process, against the scope and scale of development desired by the University. The result is a plan that allows the University to meet its identified Campus expansion needs, albeit at a reduced scale and intensity from their original concept, while still mostly protecting the resources of the site and its surroundings. Nonetheless, certain issues remain that require discussion and, in some cases, modifications to the CLRDP as proposed in order for it to be found consistent with the Coastal Act.

Priority Land Uses

There is no question that the proposed campus, with its coastal dependent and related uses, is a high Coastal Act priority. The University's objective is to develop a world-class integrated marine research facility where researchers, faculty, students, and the public can interact and participate in a comprehensive marine and coastal science research program. Such a facility could make a significant contribution to on-going efforts to understand, learn, and educate society about the marine and coastal environment. Creating such an institutional context, though, requires a significant building program and



commitment of resources. For the most part the CLRDP anticipates marine research buildings and uses that would take advantage of their co-location with the existing and potentially expanded seawater system. Potential building would include laboratories, classrooms, and other support infrastructure.

The CLRDP also anticipates significant public access improvements and natural resource management, including wetland and grassland restorations. In addition to these high priority land uses, staff is recommending that a significant amount of potential housing requested by the University be authorized for the site if, through future project review, the housing is shown to be necessary to meet demand from persons that will be directly associated with marine research activity on the campus. The University has made the case that support housing for visiting scientists and researchers, graduate and undergraduate students, educators, and new faculty and researchers is needed to assure that the Marine Science campus and programs are as successful as possible. In this sense, the housing component arguably is integral to the success of the overarching coastal-related land uses contemplated by the CLRDP and thus itself can be considered coastal-related.

Intensity of Development

Beyond the proposed use of land, the primary issues with the CLRDP as proposed relate to the potential impacts from the scale and scope of development allowed by the plan on habitat resources and public views, and the ability of the site and Campus development to continue to function as a critical transition zone between urban areas to the east and significant rural areas to the west. (Given its location on the urban-rural boundary of the City of Santa Cruz, the site of proposed campus has a long history of conflict concerning appropriate types, scale, and intensity of development, including the fact that LCP certification for the area was never accomplished.) The University and staff have worked productively together, though, and impacts from the proposed plan have been largely reduced to an acceptable level, particularly when considered in the context of the proposed high-priority use, and the opportunity to finally plan for and build out this critical transition site in a way that otherwise maximizes coastal resource protection and public access and recreation.

Wetlands Protection

In particular, the University has completed a wetlands delineation for the site in consultation with the Commission's staff ecologist. As a result, approximately 7 acres of wetlands at eight distinct locations on the terrace have been delineated, in addition to the 25 acres at Younger Lagoon (see Exhibit E, p. 56). In addition, a wetland area has been identified at a ninth location that has not been formally delineated yet (data point 59). In consulting with the University and reviewing the wetland delineation for the site, the Commission staff has applied the wetlands definitions found in Coastal Act section 30121 and section 13577(b) of the Commission's regulations. However, Terrace Point presents a challenging set of circumstances with respect to the various indicators of soils, vegetation, and hydrology that may typically indicate the presence of wetlands. Because of the difficulties in relying on soils or vegetation as reliable indicators, a methodology for evaluating site moisture was developed in consultation with Commission staff. As discussed in detail in the findings and in a memorandum from Dr. John Dixon (Exhibit H), a method for identifying saturated soils was developed and used in the delineation of wetlands. Staff believes that the wetland delineation is a conservative assessment (more



protective) that adequately identifies existing wetlands on the site as defined by the Coastal Act. In addition, the CLRDP contains requirements to conduct future wetlands delineations in areas of proposed development, to account for the possibility of changed circumstances in intervening years. With the proposed wetland restoration work, wetland buffers, which are generally 100 feet but up to 150 feet for a more significant seasonal pond, and with proposed measures for protecting any additional wetlands that may be identified at the time of proposed development, the CLRDP is consistent with Coastal Act 30233, which requires the protection of wetland resources.

Other Sensitive Habitat Protection

In addition to wetland resources, the proposed campus site supports a variety of sensitive species and habitat resources, including significant raptor foraging areas and wildlife values in relation to resource areas up and down coast from the site. Although much of this area is not ESHA, staff is recommending that certain CLRDP provisions be strengthened to more clearly protect habitat resources, particularly for the California Red-Legged Frog (CRLF). The most significant of these modifications are recommendations to expand the wildlife corridor and protections for the CRLF on the northern part of the site. These recommendations will significantly reduce development potential in the proposed upper development zone. However, in an effort to strike a reasonable balance between coastal resource protection and providing for the University's desired building program, staff is also recommending that the development potential planned for the upper terrace be transferable to an open space location in the middle terrace, provided that the development potential of the upper terrace is permanently extinguished.

Public Access to the Beach

The other most significant suggested modifications to the CLRDP concern public access to Younger Beach. The public has been prevented from accessing Younger Beach on the west side of the Campus since 1981 (as reviewed and allowed by the Commission on a temporary basis in 1981, and again in 2001). Although the CLRDP has not explicitly tracked the Commission's 2001 reevaluation requirements, the CLRDP and its documentation provide adequate information with which to reevaluate this decision as previously required by the Commission. In sum, staff, including the Commission's staff ecologist, does not believe that the sandy beach portion of Younger Lagoon Reserve should be considered ESHA. Therefore, staff is recommending that public access to it should be allowed consistent with the Coastal Act mandate to maximize public access, consistent with resource protection. Modifications are suggested to clearly distinguish the sandy beach area in this respect, and to allow low intensity use of it, including disallowing access inland of the beach and into the heart of YLR itself. The intent here is not to require a substantially different beach access to be developed and advertised, but rather, to acknowledge the historic and current use (notwithstanding the University closure) of the beach area, primarily for surfing access, and to accommodate such use as well as general potential use of the beach area by the public. It is expected that use of the beach will remain extremely limited, in part because the existing access path to the beach is uneven, narrow, and includes a "goat trail" descent/ascent where it meets the beach itself. Improvements to this accessway would only be required if demand and public safety warranted. Other modifications are recommended to assure maximum public access, particularly concerning the maintenance and provision of adequate free parking for the



public on the site.

Conclusion

The CLRDP is a thorough, complex, and specific planning document designed to guide development at the Campus site for the foreseeable future. It is critically important that it function as a coherent whole to effectively address Coastal Act requirements within the context of the unique circumstances of the Campus site. Although there will be impacts to coastal resources from the proposed building program, these impacts have been largely reduced to an acceptable level through proposed policies and other measures. Very few significant modifications are necessary to assure consistency with the Coastal Act. Several minor modifications are needed, such as limiting exceptions to specified building heights, to assure that the intensity of development on the site remains reasonable.

Staff is recommending that the CLRDP be approved, if modified as suggested to assure coastal resource protection. As modified the CLRDP will be able to function effectively to both protect coastal resources consistent with the Coastal Act, and to provide the University with an expanded marine science campus that meets their goals and objectives. Over time, it is expected that with the CLRDP the Campus will integrate effectively into its surroundings, provide significant public use and recreation, including use of its access facilities and features, and will enhance the natural habitats that surround developed areas. Overall, the Marine Science Campus will educate the public thus fostering a broader appreciation of marine and coastal resources, and it will be able to provide significant contributions to our understanding of the marine environment, ultimately contributing to improved coastal resource management.

Modifications

The following table provides an index to the suggested modifications to the CLRDP. Although twenty-nine distinct modifications are listed, there are very few distinct issue categories. Most of the modifications concern the ESHA determination for the beach at Younger Lagoon and providing public access to this beach. The first nine modifications listed in the table summarize modifications located in the text of this staff recommendation below. The remaining modifications may be found in Exhibit E, which is a complete copy of the proposed CLRDP as suggested for modification. The second column of the table below identifies the page number of Exhibit E where each modification may be found. Finally, it is noted here that Exhibit F, which is the University's most recent addendum to the CLRDP, contains both proposed changes to the January submittal, and identifies areas of continuing disagreement with the staff. Only those changes indicated as "agreed to" are considered as part of the amended submittal in front of the Commission (Exhibit F, items H-P). "Replacement pages" referred to by this addendum have been inserted into Exhibit E.



Table 1. Suggested Modifications

#	Exhibit E Page	CLRDP Chap. & Pg.	CLRDP Section	Nature of Modification	Issue
1	--	General		Cleanup	Document Modifications
2	--	General		Final Documents	Post-certification figures
3	--	General		Cleanup	Figures Update
4	--	5	5.2.2	Add text, new IM	Transfer of Development Potential
5	--	DCP	DCP	Modify text/policy	Drainage/Water Quality
6	--/129	5, 16	5.3.2	New IM 3.2.10	Habitat Restoration/RMP
6	--/130	5, 17	5.3.2	New IM 3.2.11	CRLF Protection
7	--/136	5, 23	5.4.2	Modify IM 4.2.3	Visual Impacts
8	--/138	5, 25	5.4.2	Replace Policy 4.3	Habitat/wildlife protection
9	--			Amend Figures	YLR Beach Access/ESHA
10	45	3, 4	3.1.1	Add Text	YLR ESHA Determination
11	60	3, 19	3.7.3	Modify text	Recognition of wildlife use
12	61	3, 20	3.7.3	Delete Text	YLR Beach Access/ESHA
13	63	3, 22	3.7.5	Add Text	YLR ESHA Determination
14	81	4, 10	4.2.4	Add Text	YLR Beach Access/ESHA
15	97	4, 26	4.4.1	Add Text	YLR Beach Access/ESHA
16	104	4, 33	4.4.2	Add Text	YLR Beach Access/ESHA
17	119	5, 6	5.2.2	Delete Text	Wetland/ESHA Protection
18	130	5, 17	5.3.2	New IM 3.2.12	USFWS consultation required
19	132	5, 19	5.3.2	New IM 3.6.3	YLR Beach Access/ESHA
20	132	5, 19	5.3.2	New IM 3.6.4	YLR Beach Access
21	139	5, 27	5.5.1	Add Text	Free Public access parking
22	145-6	5, 32-3	5.5.3	Modify IMs 5.3.3, 5.3.5, 5.5.1, 5.5.2	Free Public access parking
23	149-50	5, 36-37	5.6.1	Add Text (3 places)	YLR Beach Access
24	153	5, 40	5.6.2	Modify IM 6.2.3, 6.2.4	Access to Resource Areas
25	154	5, 41	5.6.2	Modify IM 6.2.10	YLR Beach Access
26	172-3	6, 8-9	6.4.3	Text	YLR Beach Access
27	197	7, 14	7.2.6	Modify Text (3 places)	Public access/overlooks
28	222	9, 4	9.1.1	Amend Fig 9.2	YLR Beach Access
29	222	9, 4	9.1.2	Fig. 9.3	Access/Overlook B improvements

With the identified modifications, staff recommends that the Commission find that the proposed CLRDP is consistent with the Coastal Act and certify the CLRDP.



Staff Report Contents

page

I. Staff Recommendation – Motions & Resolutions	9
A. Deny Certification of UCSC CLRDP as Submitted	9
2. Certify UCSC CLRDP if Modified.....	9
II. Suggested Modifications.....	10
III. Findings and Declarations	15
A. What is a Coastal Long Range Development Plan?	15
B. Marine Science Campus Background.....	17
1. Marine Science Campus Location	17
2. Marine Science Campus Existing Development	18
C. Development of the UCSC CLRDP	19
1. Development Controversy	19
2. Preliminary Development of CLRDP	19
3. Submittal of CLRDP for Commission Review.....	20
D. UCSC's Proposed CLRDP	21
1. CLRDP Overview	21
2. Marine Science Campus Objectives	21
3. CLRDP Coastal Resource Protection Framework.....	21
4. CLRDP Development Framework.....	23
5. CLRDP Procedures.....	26
E. Coastal Act Consistency	27
1. Land Use	27
2. ESHA, Wetlands, and Associated Habitat Resources	43
3. Public Access and Recreation.....	68
4. Public Viewshed	76
5. Coastal Hazards	82
6. Cultural Resources.....	87
7. CLRDP Procedures.....	89
F. California Environmental Quality Act (CEQA)	97
IV. Exhibits	
Exhibit A: Marine Science Campus Location Maps	
Exhibit B: Marine Science Campus Time Series Air Photos (1972-2004)	
Exhibit C: Correspondence	
Exhibit C1: Correspondence received since January 26, 2006	
Exhibit D: Campus CLRDP Buildout Photosimulations ³	
Exhibit E: Proposed CLRDP with Coastal Commission Suggested Modifications ⁴	

Click on the first link
at left to go to
Exhibits A-D and the
second link to go to
Exhibit E..

³ Exhibit D consists of photos over which are superimposed depictions of Campus facilities at buildout under the CLRDP if it were to develop pursuant to CLRDP Figure 7.2. Note that Figure 7.2 is an illustrative example and thus only represents one way that the Campus could develop pursuant to the proposed CLRDP. As a result, the photosimulations need to be understood as one example of Campus buildout according to the proposed CLRDP building program.



Click on the link below to go to Exhibits F-I.

Exhibit F: UCSC March 28, 2006 Addendum to Proposed CLRDP

Exhibit G: Required Figure Changes: CRLF Protection, Development Transfer, Public Access, etc.

Exhibit H: Wetlands Memorandum, Dr. John Dixon to Charles Lester, March 29, 2006

Exhibit I: Ex Parte Communications

I. Staff Recommendation – Motions & Resolutions

Staff recommends that the Commission, after public hearing, certify the proposed UCSC CLRDP only if modified. The Commission needs to make two motions in order to act on this recommendation.

A. Deny Certification of UCSC CLRDP as Submitted

Staff recommends a **NO** vote on the motion below. Failure of this motion will result in denial of certification of the UCSC CLRDP and the adoption of the following resolution and findings. The motion to certify passes only by an affirmative vote of a majority of the appointed Commissioners.

Motion (1 of 2). I move that the Commission **certify** the UCSC Coastal Long Range Development Plan as submitted.

Resolution to Deny Certification. The Commission hereby **denies** certification of the UCSC Coastal Long Range Development Plan and adopts the findings stated below on the grounds that the Plan is inconsistent with Chapter 3 of the Coastal Act. Certification of the Plan would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse effects that the approval of the Plan would have on the environment.

2. Certify UCSC CLRDP if Modified

Staff recommends a **YES** vote on the motion below. Passage of this motion will result in certification of the UCSC CLRDP as modified. The motion to certify passes only by an affirmative vote of a majority of the appointed Commissioners.

Motion (2 of 2). I move that the Commission certify the UCSC Coastal Long Range Development Plan if modified as suggested in the staff report.

Resolution to Certify with Suggested Modifications. The Commission hereby **certifies** the UCSC Coastal Long Range Development Plan as modified and adopts the findings stated below on the grounds that the Plan as modified is consistent with Chapter 3 of the Coastal Act. Certification of the Plan if modified as suggested complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been

⁴ Exhibit E consists of the text of the proposed CLRDP. The cross-through and underline text identifies Commission suggested modifications. Exhibit E (without the Commission's suggested modifications) constitutes the submitted proposed CLRDP.



incorporated to substantially lessen any significant adverse effects of the plan on the environment, or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the Plan on the environment.

II. Suggested Modifications

The Commission hereby suggests the following modifications to the proposed UCSC CLRDP, which are necessary to make the requisite Coastal Act consistency findings. If UCSC accepts and agrees to each of the suggested modifications within six months of Commission action (i.e., by October 12, 2006), the CLRDP will become effective upon Commission concurrence with the Executive Director's finding that this acceptance has been properly accomplished. Where applicable, text in ~~cross-out~~ format denotes text to be deleted and text in underline format denotes text to be added.

1. **Document Modifications.** The CLRDP document shall be modified as directed and as shown in Exhibits E (suggested modifications), except as these modifications may be modified below.
2. **Post Certification Figures.** The University shall provide two (of each figure) large scale printed copies (at least 18" by 24") of Figures 5.2, 5.4, 5.5, 5.5a (as renumbered), 5.6, 6.7 (as renumbered), 7.2, 9.1, A-6 (i.e., Figure 6 of Appendix A as renumbered), B-1 (i.e., Figure 1 of Appendix B as renumbered), and the new figures for (a) heights (see last pages of Exhibit E), and (b) Campus boundary and CLRDP jurisdiction (see suggested modification 4 above), all as modified by changes identified by the University and as modified in Exhibit E.
3. **Figures Update.** All relevant figures, such as 5.2 and 5.4, shall be updated to the show: the 100 meter no development buffer around the occupied aquatic CRLF habitat in the upper terrace; a 90 meter wide dispersal corridor/overlay in the upper terrace, subject to IM 3.2.11; the public access trail to Younger Beach; and potential development subarea 17 (see Exhibit G). For the trail, show this from the ocean overlook along the bluff and existing goat trails to beach, and label as PT 15, for Figures 5.6 and 9.1, and all other applicable figures and text of the CRLDP.
4. **Transfer of Development Potential --Upper Terrace.** Modify relevant Figures, including Figures 5.2 and 5.4, and the CLRDP to reflect the following new CLRDP text, policy, and implementation measure, and modification to figures (see also Exhibit G):

New CLRDP text (to be added between Sections 5.2.2 and 5.2.3):

Transfer of Development Potential (TDP) Program

The CLRDP is structured so that almost all development, and all building development, will only be located within land designated Marine Research and Education Mixed Use (MREMU). The converse is also true that almost no development will be allowed in areas designated Resource Protection, Resource Protection Buffer, Open Space, and Wildlife Corridor. The intent of the



CLRDP is that areas outside of the Marine Research and Education Mixed Use designation (non-MREMU) will be maintained as undeveloped coastal resource areas in perpetuity, and the CLRDP does not provide for nor is it intended that these coastal resource protection provisions will ever change in the non-MREMU area, even should resource conditions in that area change (see, for example, Policy 3.14).

Within the MREMU area it is also possible that resource circumstances may change to such a degree that new areas of wetlands and/or ESHAs are identified in these MREMU areas (see, for example, implementation measures 3.3.1 and 3.4.4). However, in contrast to the non-MREMU area, changed resource conditions may affect the degree of potential development in these areas by virtue of the fact that the newly identified wetlands and/or ESHA need to be avoided and properly buffered. In such a case, the University is not allowed a transfer of any lost development potential from within the MREMU area to outside of it; all allowed CLRDP development must be accommodated within the MREMU area. As a result, changed circumstances such as the discovery of wetlands and/or ESHA within the MREMU area would decrease the available land to accommodate the University development program, and by extension would likely decrease the development program provided for by the CLRDP overall.

The only exception to the above situation is in relation to the Upper Terrace Development Zone. In that area, resource and other conditions, such as the need to provide a California Red Legged Frog dispersal corridor, may dictate that development not be pursued north of the realigned Campus access road and the Middle Terrace development zone. In such an event, the University is allowed and may choose, pursuant to IM 2.3.6, to transfer the general development potential of the Upper Terrace into an area located between De Anza Mobile home park and the Middle Terrace development zone, and between the realigned Campus Road and the northern buffer to Wetland W4 designated as subarea 17 (see Figure 5.2). This receiver location will be considered to be designated MREMU, and the Upper Terrace will revert to Resource Protection (unless site specific evaluation indicates that it should be designated Resource Protection Buffer, Wildlife Corridor, or Open Space instead). In such an event, the resource protection policies, implementation measures, and related provisions of the CLRDP (including the RMP) shall apply to the Upper Terrace area, and the MREMU provisions shall apply to the receiver site. No matter how much of the receiver site is designated MREMU and used development (i.e., any amount greater than zero), all development potential in the Upper Terrace must be extinguished. Also, up to 127,000 square feet of subarea 17 may be used, no matter what actual development potential is available in the upper node due to identified resource constraints. Thus, the intent of this Transfer of Development Potential (TDP) program is to provide an opportunity for the identified building program of the CLRDP through the use of subarea 17, while providing increased protection of resources in the upper terrace.

One effect of the transfer of development potential in this manner will be to make some CLRDP figures and text incoherent (for example, references to development in the Upper Terrace, Shaffer Road improvements that would no longer be necessary, etc.). It is the intent of the



CLRDP that the transfer of development potential in this manner will be accompanied by enforceable mechanisms to “clean-up” the CLRDP figures and text to reflect this transfer premise, including ensuring that the CLRDP continues to provide for equal or better resource protection (including resource restoration, enhancement, and management) following such a transfer. An amendment to the CLRDP to make such necessary corrections will be required of any development project that initiates this transfer of development potential.

New IM (to be added to Chapter 5, section 5.2.3):

Implementation Measure 2.3.6. Transfer of Development Potential -- Upper Terrace Development Zone to Subarea 17. The general development potential/building program planned for the Upper Terrace development zone may, through the approval of a development project, be transferred to an approximate 127,000 square foot open space area (subarea 17) located immediately adjacent to subarea 8, below the relocated Campus access road and above the buffer to Wetland W4, and up to a north-south line 50 feet west of the Campus’ eastern property line (see Figures 5.2 and 5.4). All of subarea 17 may be used, regardless of what developable area may remain in the upper development zone in relation to identified resource constraints, such as the protection of CRLF. Any approved transfer of development potential shall result in the concurrent and enforceable: extinguishment of all development potential in the Upper Terrace development zone; extension of CLRDP Resource Management Plan restoration, enhancement, and management activities into this area; and the designation of the entire Upper Terrace development zone as Resource Protection (unless site specific evaluation indicates that it should be designated Resource Protection Buffer, Wildlife Corridor, or Open Space instead). Similarly, subarea 17 shall be redesignated from Open Space to Marine Research and Education Mixed Use. If development potential is transferred to it in this manner, then development in subarea 17 shall be limited to a maximum of two stories and 26 feet from existing grade; and a maximum of 40% site coverage. Warehouse, storage facilities, and workshop uses planned for the Upper Terrace development zone may be located in subarea 8.

Approval of a development project that transfers development potential shall be conditioned upon the University submitting within six months of development project approval a “clean-up” CLRDP amendment to the Coastal Commission that is designed to reflect this transfer, including revised text and figures reflecting the transferred development potential and correcting any internal CLRDP inconsistencies, and including ensuring that the CLRDP continues to provide for equal or better resource protection (including resource restoration, enhancement, and management pursuant to the CLRDP Resource Management Plan or otherwise) following such a transfer.

Amend Policy 3.14:

To account for the potential implementation of IM 2.3.6 (development transfer), amend proposed Policy 3.14 as follows:



The University shall maintain, in perpetuity, the land use designations of Resource Protection, Resource Protection Buffer, Open Space, and Wildlife Corridor as shown in Figure 5.2, except as they may be modified through implementation of IM 2.3.6.

Changes to Figures 5.2 and 5.4:

1. Identify subarea 17 as a polygon with dashed lines. Do not change underlying open space designation within dashed lines. Rather, put an asterisk notation there.
2. Put an asterisk notation at Upper Terrace Development Zone (subarea 1).
3. Add asterisk footnote: “The University may choose to transfer the Marine Research and Education Mixed Use designation from the Upper Terrace development zone to the open space area adjacent to the Middle Terrace Zone (see CLRDP Section 5.2 and IM 2.3.6).”

5. Drainage Concept Plan Changes.

- a. Modify the text of the Drainage Concept Plan to indicate that filter strips and swales shall include adequate permeability in their solid beds, including through adjusting the soil bed composition, in order to maximize their infiltration capabilities.
- b. The text referring to specific drainage projects to be undertaken (as identified in the Drainage Concept Plan on pages 23 and 24, in Chapter 9, and elsewhere in the CLRDP) shall include language that assures that all such improvements shall be eliminated, modified, or replaced with equivalent or better projects as necessary to maximize existing wetland and other natural area function and value, consistent with any original coastal development permit authorizations.
- c. Modify the DCP to clarify that pollutants may be dropped from the monitoring program for individual treatment trains if they do not present in two consecutive storm seasons, including Year 3 of a Research monitoring phase. Require the reinstitution of research monitoring for any treatment train receiving significant new water flows due to new development.

6. Habitat and CRLF Implementation Measures. Replace suggested Implementation Measures 3.2.10 and 3.2.11, and modify Figure 5.2, as follows:

- a. IM 3.2.10 (Exhibit E, p. 129). Replace with UCSC proposed IM 3.2.10 (Exhibit F, p.5):

Implementation Measure 3.2.10. – Natural Areas Habitat Management. Within six (6) months of the date this CLRDP becomes effective, the University in consultation with the Executive Director of the California Coastal Commission shall convene a scientific advisory committee (SAC) to oversee the restoration and management of natural areas (i.e., all areas outside defined development zones, except for Younger Lagoon Reserve) on the Marine Science Campus (see Appendix A). The SAC shall be responsible for developing Specific Resource Plans as described in Appendix A, and shall complete its work on the Specific Resource Plan for Phase I restoration



efforts within four (4) months of convening. The content of Specific Resource Plans shall be consistent with the performance standards set forth in Appendix A, which may be adapted periodically based on findings from ongoing restoration work. The University shall file a Notice of Impending Development for Phase I work within one (1) year of the date this CLRDP becomes effective. The timing for subsequent phases shall insure completion of the entire natural areas restoration within 20 years of beginning Phase I work as specified in Appendix A.

b. IM 3.2.11 (Exhibit E, p. 130). Replace with the following:

Implementation Measure 3.2.11. RLF Protection. No development other than that allowed in the “Resource Protection” or “Resource Protection Buffer” land use designation shall occur on the Campus within 100 meters of the identified Red Legged Frog occupied aquatic habitat at the north end of the Campus (see Figure 5.2). The wildlife corridor along the northern boundary of the campus shown in Figure 5.2 shall be 90 meters wide, but shall be shown as an “overlay” area on the upper development zone. This overlay may be reduced, removed from the development zone, or expanded, in consultation with the Executive Director, CDFG, and USFWS, if warranted based on substantial new evidence developed since the time of certification (e.g. new CRLF surveys). Protocol surveys for Red Legged Frog shall be conducted prior to authorization of any development project within 100 meters of identified wetland resource. Development projects shall include construction and post-construction safe passage and other mitigation measures (e.g. barriers along development perimeters) as appropriate.

c. For Figure 5.2. Modify the Upper Terrace Development Zone so that the northwestern portion of that zone excludes all area within 100 meters of the California red-legged frog pond location. Areas so removed from the Upper Terrace zone shall be shown as Resource Protection Buffer.

7. Implementation Measure 4.2.3 Building and Other Structure Heights. Modify proposed IM 4.2.3 to limit the size of screened rooftop enclosures for mechanical equipment to 20% of the length of a building’s ridgeline.

8. Policy 4.3 Visual Intrusion and Lighting. Replace Policy 4.3 with the following:

Development on the terrace portion of the Marine Science Campus shall be sited and designed so that the impacts of activity and direct light on wildlife outside of development zones is minimized to the extent feasible.

9. Younger Lagoon Beach. Update all figures to identify the boundary to the “Beach” area to which access would be allowed. The Beach area boundary is located at the approximate location of the beginning of back beach dune morphology and significant vegetation (to the north), the toe of the bluffs to the east, the toe of the bluffs and the lagoon outlet to the west, and the Pacific Ocean to the south.



III. Findings and Declarations

The Commission finds and declares as follows:

A. What is a Coastal Long Range Development Plan?

Coastal Act Section 30605 allows for the University of California to propose, and the Commission to certify, a Long Range Development Plan as a means to implement the Coastal Act on University lands in the coastal zone. Section 30605 states:

***Section 30605.** To promote greater efficiency for the planning of any public works or state university or college or private university development projects and as an alternative to project-by-project review, plans for public works or state university or college or private university long-range land use development plans may be submitted to the commission for review in the same manner prescribed for the review of local coastal programs as set forth in Chapter 6 (commencing with Section 30500). If any plan for public works or state university or college development project is submitted prior to certification of the local coastal programs for the jurisdictions affected by the proposed public works, the commission shall certify whether the proposed plan is consistent with Chapter 3 (commencing with Section 30200). The commission shall, by regulation, provide for the submission and distribution to the public, prior to public hearings on the plan, detailed environmental information sufficient to enable the commission to determine the consistency of the plans with the policies of this division. If any such plan for public works is submitted after the certification of local coastal programs, any such plan shall be approved by the commission only if it finds, after full consultation with the affected local governments, that the proposed plan for public works is in conformity with certified local coastal programs in jurisdictions affected by the proposed public works. Each state university or college or private university shall coordinate and consult with local government in the preparation of long-range development plans so as to be consistent, to the fullest extent feasible, with the appropriate local coastal program. Where a plan for a public works or state university or college or private university development project has been certified by the commission, any subsequent review by the commission of a specific project contained in the certified plan shall be limited to imposing conditions consistent with Sections 30607 and 30607.1. A certified long-range development plan may be amended by the state university or college or private university, but no amendment shall take effect until it has been certified by the commission. Any proposed amendment shall be submitted to, and processed by, the commission in the same manner as prescribed for amendment of a local coastal program.*

Section 13502 of the California Code of Regulations (CCR) defines an LRDP:

“Long Range Development Plan” hereinafter referred to as “LRDP” means the relevant portions of the land use plans and policies for the physical development of campuses and educational facilities of the University of California or the California State University and Colleges, which are sufficiently detailed to indicate the kinds, location and intensity of land uses,



the applicable resource protection and development policies and, where necessary, a listing of other implementing actions.

CCR Section 13511(b) provides additional detail in this respect:

With regard to LRDPs, the level and pattern of development selected by the governing authority shall be reflected in a long range land use development plan. The LRDP shall include measures necessary to achieve conformity with the policies of Chapter 3 of the California Coastal Act of 1976. Any plan submitted pursuant to this subchapter shall contain sufficient information regarding the kind, size, intensity and location of development activity intended to be undertaken pursuant to the plan to determine conformity with the policies of Chapter 3 of the Coastal Act. Such information shall include, but is not limited to the following: (1) the specific type of development activity or activities proposed to be undertaken; (2) the maximum and minimum intensity of such activity or activities (e.g., number of residents, capacity and service area of public works facility, etc.); (3) the proposed and alternative locations considered by any development activities to be undertaken pursuant to the LRDP; (4) a capital improvement program or other scheduling or implementing devices that govern the implementation of the LRDP; and (5) other information deemed necessary by the executive director of the Commission.

The University of California at Santa Cruz has submitted an LRDP to the Commission which it has termed a “Coastal” LRDP (CLRDP) to distinguish it from its LRDP for the main campus mostly inland of the coastal zone. As defined in the Commission’s regulations, this “CLRDP” is similar to a Local Coastal Program (LCP).⁵ Like an LCP, the CLRDP must contain a land use plan, must delineate the kinds, locations, and intensities of development allowed pursuant to it, and must include implementing measures similar to those found in LCP zoning ordinances.

CLRDP and LCP documents do differ somewhat in their expected level of detail. Generally, a CLRDP is more geographically specific in terms of the application of land use policies. This is largely because University lands tend to cover less area than, for example, a whole city or county. Whereas an LCP might contain general policies that are applicable to an entire city or county, a CLRDP tends to prescribe specific policy language tailored to a much smaller geographic area – in this case a 100-acre site. A CLRDP also must provide specific information regarding potential development projects to be covered by it (such as identifying the specific type of development, including maximum and minimum intensities, alternatives considered, capital improvements programs, timing and schedules, etc.).

The level of specificity expected in a CLRDP partly relates to the second main difference between LCPs and CLRDPs – the manner in which development is authorized. Under a certified LCP, a local government is delegated primary coastal permitting authority to approve and deny coastal permits for proposed development. This delegated permitting authority is similar to that of the Commission prior to LCP certification. In certain cases, those local government decisions can be appealed to the Commission, which can also approve or deny coastal permits for development. With a certified CLRDP,

⁵ Again, for purposes of UCSC’s Marine Science Campus, the term coastal LRDP (or CLRDP) is used hereafter in this report. That said, the CLRDP is in all respects an LRDP as that term is understood in the Act and the Commission’s regulations.



however, the concept of approving and denying coastal permits for proposed development doesn't apply. Rather, University development of specific projects contained in a certified CLRDP can proceed without a coastal permit provided the University sends a notice of impending development ("NOID") to the Commission prior to undertaking development, and either the Commission deems the identified development project consistent with the CLRDP (with or without conditions to make it so) or doesn't timely respond to the NOID.⁶ Pursuant to Coastal Act Section 30605 and 30606, the Commission is limited to imposing conditions on such development project proposals if it finds them inconsistent with the certified CLRDP. It is in this respect that the level of specificity in a CLRDP is amplified. Once certified, the CLRDP establishes the universe of development that may be authorized with more limited oversight by the Commission than is typical of LCP implementation. Effective implementation of the CLRDP may well depend, therefore, on how well it identifies and specifically defines future development project scenarios.

These differences mean that it is critical that a certified CLRDP provide detailed specifications applicable to potential development projects, including detailed specifications related to mitigation and associated offsetting improvements (e.g., habitat restoration, public access improvements, etc.) that can be relied upon for ensuring development project consistency.

B. Marine Science Campus Background

1. Marine Science Campus Location⁷

UCSC's Marine Science Campus site, the subject of this CLRDP, is located directly adjacent to the Monterey Bay National Marine Sanctuary just within the western border of the City of Santa Cruz in Santa Cruz County (see Exhibit A). The Campus site has been known locally for years as Terrace Point. The main UCSC campus is located roughly two miles inland of the Marine Science Campus in the rolling foothills northwest of downtown Santa Cruz. The Terrace Point site (hereafter referred to as "the Marine Science Campus") is located at the outskirts of the City, seaward of Highway One, at the transitional boundary between the urbanized City area to the east and the rural north coast of the unincorporated County to the west. The Santa Cruz County north coast area is well known to the Commission for its sweeping vistas of both coastal agricultural fields and natural landscape framed by the undulating coastal range. Much of this area is in extensive State Park and other undeveloped public land holdings, and all of it is traversed by a rural stretch of Highway One. Although there are some limited residential enclaves (e.g., Davenport and Bonny Doon) in these mostly pastoral areas, this north coast area is part of the stretch of largely undeveloped coastal lands extending nearly 50 miles to Half

⁶ Coastal Act Section 30606 requires that the University provide notice of an impending development at least 30 working days prior to pursuing it. CCR Section 13548 requires that the Commission take action within 30 working days of filing of the NOID. CCR Section 13549 provides that a NOID is only filed following Executive Director review of the NOID and supporting materials to ensure there is sufficient information for making the consistency determination. In sum, if the Commission does not take action within 30 working days of filing of the NOID, the identified development project is deemed consistent and can proceed.

⁷ See Exhibit A for location maps and photos of the Campus area. See also Section 2.1 of Chapter 2 of the proposed CLRDP for further description of the site and surrounding areas (see Exhibit E).



Moon Bay upcoast. The Campus site is located at the beginning of this stretch of coast as one heads upcoast out of the City of Santa Cruz and, by extension, out of the urbanized portion of northern Monterey Bay.⁸

The Campus is primarily made up of a relatively flat terrace area (roughly 73 acres) sloping gently from north to south (to the ocean) with the remainder occupied by a large arroyo on the west of the site making up Younger Lagoon Reserve (YLR) (a 25 acre component of UC's Natural Reserve System), at the base of which lies Younger Lagoon, an estuarine lagoon that outlets (at times) to the ocean. The terrace portion of the site includes within it a 2.5 acre federally-owned parcel completely surrounded by UCSC property. Altogether, the Campus (including the federal inholding) is about 100 acres. In the general Campus vicinity, agricultural land extends to the west along the coast beyond YLR and the western Campus boundary, to the north is the Union Pacific Railroad tracks, the Raytek industrial facility, and Highway One, to the south lies the Sanctuary and the Pacific Ocean, and to the east is the densely packed De Anza Mobile Home Park (residential) and past that Natural Bridges State Park.

2. Marine Science Campus Existing Development⁹

The Campus site is currently developed with a number of facilities, some of which are leased by the University to other entities and agencies, and others that operate as primary UCSC facilities. Nearest the ocean are the main LML complex of facilities, including the Seymour Marine Discovery Center, separated from YLR by a 10-12 foot constructed berm. In the center of the site (on the federal property) lies the NOAA Fisheries Lab. West of the NOAA facility there are a series of greenhouses, some abandoned, and some that UCSC leases to other entities, and a UCSC storage yard nearest YLR.¹⁰ Just north of the greenhouses is the CDFG Marine Wildlife Veterinary Care and Research Center, the State's primary wildlife center for oil spill response, and related to it, UCSC's Avian Facility. Access to the Campus is at the intersection of Shaffer Road and Delaware Avenue by means of a narrow west-east access road (known as Delaware Avenue Extension) that curves to the south near the western Campus boundary (and becomes McAllister Way) extending to the shoreline and connecting all Campus facilities. A public trail loop extends along the campus access road, along the bluffs, and along the Campus boundary with the De Anza Mobile Home Park (MHP), and includes a blufftop ocean overlook at the end of McAllister Way. Two additional overlooks requiring docent supervision are located west of LML. The site is served by City of Santa Cruz water and sewer. Because the majority of the Campus site is within an area where the Commission deferred LCP certification prior to the University's

⁸ The City of Santa Cruz is located at the upcoast end of the larger urban portion of the north Monterey Bay that extends downcoast, including unincorporated Live Oak, the City of Capitola, and the more urban south County (i.e., the Aptos-Rio del Mar-Seascape areas). Though defined by city limit boundaries, these more urban areas all blend together as an urban zone.

⁹ See Exhibit A for air photos of the site. See also Sections 2.2 – 2.5 of Chapter 2 of the proposed CLRDp for further description of existing Campus development (see Exhibit E).

¹⁰ The storage yard is not permitted and the greenhouses were authorized by the Commission on a temporary basis only (until 2004). As of the date of this staff report, the University and Commission staff continue to discuss potential resolution scenarios, but this matter has not been resolved. In any case, these areas are located within an area where certain development would be allowed pursuant to the CLRDp.



acquisition,¹¹ and because the remainder has been in University ownership since 1975, all development authorized on the site to date has been by virtue of Coastal Commission action – some three dozen such Commission actions to date.¹²

C. Development of the UCSC CLRDP

1. Development Controversy

As witnessed by its origins as part of an area of deferred LCP certification, the Terrace Point Campus site has been the center of ongoing development planning and public controversy for many years. Because the City and Coastal Commission could not reach agreement on appropriate land use for the area, initial certification of the City's coastal land use plan in 1981 left out ("white holed") this area. The 1981 LCP submittal proposed primarily residential development of up to 840 units. This and subsequent Terrace Point development proposals,¹³ have raised core Coastal Act issues including questions about the appropriate type, scale, and intensity of development, the loss of open space/agricultural lands, protection of wetland and other natural habitat resources, and the provision of public access, among others. In addition to direct impacts from proposed development, there have also long been concerns that piecemeal development over time may effect the pattern and intensity of development on the Terrace Point property in such a way as to prejudice future coastal development decisions there (whether coastal permit, LRDP, or LCP), and to lead to cumulative coastal resource impacts. These issues relate to the fact that the Terrace Point site is located outside of the urban-rural boundary, was long cultivated for agriculture and subsequently remained mostly undeveloped, while also lacking a certified LCP (see also time series comparison of air photos in Exhibit B).

2. Preliminary Development of CLRDP

Most of the Campus site had been in private ownership until UCSC acquired it from Wells Fargo in the late 1990s, adding considerable land to its adjacent marine lab holding acquired in 1975. Soon thereafter, UCSC embarked on a preliminary CLRDP planning process. This process included a series of meetings and public workshops with interested parties, including Commission staff and the City of Santa Cruz. These preliminary efforts culminated in December 2000 when UCSC submitted their

¹¹ Most of the terrace portion of the Campus (i.e., the area east of McAllister Way and east of the western property line above the intersection of McAllister Way with Delaware Avenue Extension), together with the property located between the Campus and Antonelli Pond, was deferred certification when the City of Santa Cruz LCP was originally certified in 1981, and the City chose not to accept the Coastal Commission's suggested modifications designed to limit development of this area. At that time, the University did not own any of the land within the area of deferred certification. Thus, the current Campus area, including that portion that was owned by the University in 1975 and that that was part of the area of deferred certification in 1981, has always only been subject to Coastal Commission direct permit authority.

¹² See air photos from 1972 to 2004 showing incremental development over time (from agricultural production to the current development pattern) of the land that now makes up the current Campus boundaries (Exhibit B).

¹³ For example, just prior to University acquisition, Wells Fargo Bank pursued significant development on that portion of the current Campus that was part of the area of deferred certification, including plans that would have accommodated marine research development similar in scope to that contemplated by the University, and including in addition to that 169 residential units.



CLRDP issue identification paper for Commission review at a public hearing. The Commission's comments at that time were focused primarily on ensuring that the CLRDP would:

- Avoid, protect, and enhance wetlands, environmentally sensitive habitat areas (ESHAs), and other related habitats;
- Maximize public access to the site consistent with the resource protection requirements of the Coastal Act;
- Protect the public viewshed, including through appropriate mass, scale, and location of development;
- Not adversely affect the viability of adjacent agricultural operations, and only allow conversion of on-site agricultural lands for high Coastal Act priority uses;
- Manage and treat runoff to protect water quality;
- Avoid the use of shoreline armoring;
- Maintain a stable urban-rural boundary, including through avoiding the extension of public services upcoast to the rural north coast; and
- Provide clear and explicit procedures for implementing the provisions of the CLRDP.

Following issue identification, the University prepared a draft CLRDP along with CEQA and other supporting documentation.¹⁴ Commission staff provided comments during this time, including identifying many of the issues discussed in this report. In late 2004 and early 2005, and prior to the University's initial submittal, Commission staff met with UCSC staff on multiple occasions in an effort to further identify potential Coastal Act consistency issues and their potential resolution.

3. Submittal of CLRDP for Commission Review

In March 2005, the University provided their first proposed CLRDP for Coastal Commission review. In response to continuing discussions with Commission staff, UCSC amended that original proposal in April 2005, August 2005, and most recently in January of 2006. Following a request for supporting information, the University submitted additional documentation on September 23, 2005. The CLRDP package was deemed submitted on September 29, 2005.¹⁵ The University has also supplemented this submittal with an addendum dated March 28, 2006 that makes minor adjustments to the January submittal in response to on-going discussions with staff (see Exhibit F). It also highlights continuing areas of disagreement between the University and the staff, and proposes alternatives to the staff recommendation. It is the January 2006 revised proposed CLRDP as modified by the addendum

¹⁴ See also CEQA findings at the end of this report.

¹⁵ The term "submitted" is the term that applies to CLRDPs and is akin to filing an application (per CCR Section 13520); it identifies the date when all the necessary supporting information has been provided to allow a CLRDP to be reviewed for Coastal Act consistency.



(hereafter proposed CLRDP or CLRDP) that is before the Commission at this time.

D. UCSC's Proposed CLRDP

1. CLRDP Overview

The proposed CLRDP is made up of a preface, nine chapters and two appendices. The first four chapters describe the context and general framework for Campus planning and development, including the planning and development that went into the CLRDP itself. Chapter 5 includes the CLRDP's land use development plan, including its detailed Campus building program, and the bulk of policies applicable to development project review. Chapter 6 provides further guidance relative to development project siting and design. Chapter 7 includes preliminary design studies of several potential CLRDP development projects as well as an example of what the Campus site plan might look like at build out.¹⁶ Chapter 8 is the CLRDP's procedural chapter and it describes the process for University and Coastal Commission review of proposed CLRDP development projects. Chapter 9 provides details on capital improvements to be undertaken both in tandem with development projects pursuant to the Campus building program and separate from it, including improvement schedules reflecting the University's commitment to implement the improvements specified there. Appendices A and B provide significant implementation detail, including identifying specific requirements and schedules, relative to Campus natural resource management and Campus drainage and water quality provisions, respectively.

The proposed CLRDP and a recent addendum is attached as exhibits E and F.

2. Marine Science Campus Objectives¹⁷

UCSC's primary objective with the proposed CLRDP is to expand the existing LML core and the other UCSC facilities inland of it on this site into a world-class Marine Science Campus research and education facility (including seamless integration of the NOAA facility within the Campus). The concept is to provide state of the art facilities in a setting that fosters and facilitates interaction and collaboration among researchers, educators, and students. The CLRDP is meant to provide for the physical plant necessary to support and enable such a marine research community. Ultimately, and implicit in the objectives of the CLRDP, the marine research undertaken at the Campus is meant to enhance society's understanding of marine resources, and to promote better protection and management of them.

3. CLRDP Coastal Resource Protection Framework

¹⁶ This build out site plan scenario in Chapter 7 represents the University's best guess as to how development may be located according to the CLRDP. That said, it is intended only as an example, and not a governing site plan per se. Campus development may or may not be sited as shown in Figure 7.2 per the proposed CLRDP.

¹⁷ See also Chapter 4 of the proposed CLRDP, as edited there, for further description of the University's Marine Science Campus objectives (see Exhibit E).



The CLRDP is premised on avoiding adverse resource impacts to the degree feasible given the building program envisioned. Toward this end, the CLRDP includes maps that depict ESHA, wetland, and other resource areas on the Campus, and that depict buffers from these resources. In some cases, these resource areas and buffers are a function of other resource and/or site constraints being avoided (such as geologic hazards, identified public view corridors, etc.).¹⁸ These areas are then designated by the CLRDP as “Resource Protection,” “Wildlife Corridor,” “Resource Protection Buffer” (where the buffer designation is applied to areas designated either Wildlife Corridor and Resource Protection), and “Open Space” (see the proposed CLRDP Figure 5.2). These CLRDP mapped depictions are supported by information regarding the extent of Campus ESHA, wetland, and other resources. All told, these resource and buffer areas occupy about 65 acres of the Campus (including the 25 acres within YLR). For the most part, facility development in these areas is prohibited by the provisions of the identified land use designations, and complementary CLRDP policies and requirements. Exceptions to this generalized development prohibition are provided for certain cases, such as some roads and parking areas, certain public access trails and related amenities, seawater system components, and drainage detention ponds in certain circumstances. Otherwise, and for the most part, allowed uses and development in these areas are required to be resource-dependent in various ways (see, for example, proposed CLRDP Land Use provisions in Section 5.2; Exhibit E).

In addition to the direct avoidance measures described above, the CLRDP also includes a number of siting and design criteria meant to avoid and minimize coastal resource impacts. For example, CLRDP requirements are designed to ensure that Campus development projects: do not adversely impact habitat resource areas (e.g., through screening, noise attenuation, and lighting requirements, etc.); maintain significant public view corridors; are set back sufficiently from coastal bluffs to avoid the need for armoring; are set back sufficiently from adjacent agricultural operations (by 500 feet for residential development, and 200-300 feet otherwise); are consistent with the site and surrounding area viewshed and aesthetic; include water quality best management practices (BMPs) to be applied in a treatment train, including predominantly natural systems, to adequately filter and treat all runoff and other site drainage; etc. (see, for example, proposed CLRDP Chapters 5 and 6 in Exhibit E).

The CLRDP also commits the University to a series of coastal resource improvements intended at least partially to offset some of the impacts from Campus facility development over time. These include such measures as restoration/enhancement of terrace wetland, wildlife, and grassland areas; public access trail and overlook improvements; road and parking improvements; and drainage/water quality improvements (see, for example, proposed CLRDP Chapter 9 and Appendices A and B in Exhibit E).

One of the significant resource protection components of the plan is Appendix A, which is the Resource Management Plan. The RMP provides a framework for restoration and protection of wetland and grassland habitat areas surrounding the proposed development zones. Among other things, this framework establishes a scientific advisory committee to oversee the adaptive restoration and management of the campus’s natural areas:

¹⁸ See also proposed CLRDP Chapter 3 that describes the University’s site constraint analysis exercise (see Exhibit E).



Implementation Measure 3.2.10. – Natural Areas Habitat Management. *Within six (6) months of the date this CLRDP becomes effective, the University in consultation with the Executive Director of the California Coastal Commission shall convene a scientific advisory committee (SAC) to oversee the restoration and management of natural areas (i.e., all areas outside defined development zones, except for Younger Lagoon Reserve) on the Marine Science Campus (see Appendix A). The SAC shall be responsible for developing Specific Resource Plans as described in Appendix A, and shall complete its work on the Specific Resource Plan for Phase I restoration efforts within four (4) months of convening. The content of Specific Resource Plans shall be consistent with the performance standards set forth in Appendix A, which may be adapted periodically based on findings from ongoing restoration work. The University shall file a Notice of Impending Development for Phase I work within one (1) year of the date this CLRDP becomes effective. The timing for subsequent phases shall insure completion of the entire natural areas restoration within 20 years of beginning Phase I work as specified in Appendix A.*

The University has recently clarified in its March 28 addendum that the proposed SAC will be made up of independent experts, selected in consultation with the Executive Director (Exhibit F, p.6):

All natural open space area restoration, enhancement, and management shall be guided by a Scientific Advisory Committee (SAC) that is made up of independent professionals and academicians experienced in and knowledgeable about the habitats of the Campus natural open space area that are to be restored, enhanced, and managed (e.g., native grassland, coastal scrub, wetlands, etc.). The SAC shall meet on a regular basis and provide overall direction for restoration, enhancement, and management.

The University has also recently clarified its intent that the natural areas surrounding the proposed development zones will be protected in perpetuity. Proposed Policy 3.14 states:

The University shall maintain, in perpetuity, the land use designations of Resource Protection, Resource Protection Buffer, Open Space, and Wildlife Corridor as shown in Figure 5.2.

The RMP also makes clear that the University is obligating itself to managing and maintaining the natural areas as high quality open space and habitat in perpetuity (Exhibit F, p.6).

4. CLRDP Development Framework

The CLRDP development framework is primarily premised on avoidance of the resource areas identified (as described above) and shaped by other identified constraints (like coastal erosion, etc.). The end result is that the CLRDP provides for three distinct areas of the terrace within which development is to be clustered to avoid resources and to respond to other constraints. The three development zones are called the Upper Terrace, Middle Terrace, and Lower Terrace development zones. These areas constitute the portion of the Campus that is not designated in one of the resource categories described above.



The Upper Terrace development zone is just over 3 acres in size and is located in the northeastern part of the Campus adjacent to Shaffer Road and near the Union Pacific Railroad tracks (see Figure 5.2 in Exhibit E); this development zone is currently undeveloped. The Middle Terrace development zone extends from near Delaware Avenue Extension through to and including the southern edge of the NOAA inholding, and from near YLR towards De Anza MHP. This area is about 24 acres in size (including NOAA's 2.5 acre parcel). This area is currently developed with the CDFG facility, NOAA's Fisheries Lab, the Avian facility, the temporary greenhouses, and UCSC's storage yard. The Lower Terrace development zone is about 8 acres in size and is the site of the main LML complex of facilities nearest the shoreline and the location of the most developed portion of the Campus currently. All told, these three development zones occupy about 35 acres of the Campus.

The CLRDP land use designation for the three development zones is "Research and Education Mixed Use" (again, see CLRDP Figure 5.2 in Exhibit E). This is the only facility development land use designation in the CLRDP, and it allows for all of the CLRDP Building Program elements within it (such as research labs, educational facilities, outdoor research areas, meeting rooms, auditoriums, food service, support housing, equipment storage and maintenance, etc.).¹⁹ The CLRDP identifies the maximum scale for each potential type of facility to be developed in the building program (see CLRDP Section 5.2), and allows for structural heights up to 36 feet (see CLRDP Section 5.4). The maximum size of individual new buildings would be 25,000 gross square feet (gsf) in the Lower Terrace development zone, 37,500 gsf in the Upper Terrace zone, and 40,000 gsf in the Middle Terrace zone. Campus housing, other than two caretaker's units, would be limited to the Middle Terrace zone east of McAllister Way, except that certain researcher overnight rooms could be dispersed through the middle zone west of McAllister; all longer-term housing (such as apartments) would be located further from the shoreline than shorter term housing (such as overnight units). The CLRDP requires development to include articulation and avoid boxiness, and to be similar in scale and design to rural farm-type buildings and existing site development (see, for example, the design guidelines in proposed CLRDP Chapter 6).

The bulk of new Campus development allowed by the CLRDP is located within the Middle Terrace development zone (see, for example CLRDP Figures 5.2 and 7.2). This zone is the largest of the three, and is the area within which the majority of Campus development could be sited. Development allowed within the Upper Terrace zone would be primarily warehouse and equipment maintenance, while development allowed within the Lower Terrace zone would be limited to additional LML facilities (50,000 gsf of buildings, 10,000 square feet of outdoor research space, 2 caretakers quarters) and seawater system expansion (limited to 12,000 gsf total).

Campus drainage systems would be guided by a drainage concept plan (see CLRDP Appendix B) premised primarily on using natural water quality BMPs applied in series. Source control BMPs limiting the generation of potential pollutants would be augmented by treatment BMPs to ensure that the quality of runoff and other drainage meets established water quality standards (including standards that meet

¹⁹ See CLRDP Section 5.2.1 in Exhibit E for a detailed description of the CLRDP Building Program, and Section 5.2.2 for a detailed description of the land use designations.



those identified in “California’s Management Measures for Polluted Runoff,” Section 6217 (g) of the Coastal Zone Amendment and Reauthorization Act (“the g-guidance”), and the RWQCB Central Coast Region Basin Plan). Natural infiltration would be promoted, and drainage filtered and treated by a series of natural swales, filter strips, and ultimately minimally constructed vegetated basins in the open space zones. For areas subject to specialized pollutant generation (e.g., parking lots, maintenance areas, laydown areas, food service washdown, etc.), specific requirements would apply in addition to the natural BMPs (e.g., containment systems and shelters, plumbed outlets to sanitary sewer, engineered stormwater treatment units, etc.). In addition to infiltration throughout the drainage trains and site design requirements articulating promotion of natural drainage, filtered and treated runoff would be directed to Campus wetland resources to protect/enhance their hydrologic function. As proposed, the vegetated basins would be allowed in the “non-development” area, including the area designated open space and including some resource protection buffer areas (see CLRDP Appendix B and Section 5.7).

In summary, Campus development would be mostly located within the three development zones, where the zones are connected by Campus roads. The expected result at build out would be an array of large buildings and related development located in the center of the site, an expansion of the main LML complex nearest the ocean (roughly double LML’s current gsf), and a completely new area of large buildings and outdoor laydown space near the railroad tracks. Figure 5.4 of the plan shows in more detail the anticipated maximum development in 16 sub areas (see Exhibit E, p. 137). An accompanying chart indicates the size of each subarea, the allowed number of stories, and maximum heights, footprint and coverage in each subarea. Building development outside of the subareas is not allowed, although other at grade development, or minor development such as fencing and parking light standards, could occur in the areas of the development zones that are not within a subarea, subject to the scale and height limitations that apply to such development, and subject to all other applicable provisions of the CLRDP. Also, the University has recently clarified in its addendum that the intensities of development shown in Figure 5.4 are maximums (Exhibit F, p. 11). In addition, Implementation Measure 1.1.1 states that the size and intensity of development contemplated by Figures 5.1-5.4 are maximums, subject to consistency with other provisions of the CLRDP:

Implementation Measure 1.1.1 – Figures of Chapter 5. Figures 5.1, 5.2, 5.3, and 5.4 show the kinds, locations, and maximum size and intensity of development allowed by this plan if such development is otherwise consistent with Chapters 5, 6, 7, 8, 9, and Appendices A and B. Development shall not be authorized unless it is of a type and location contemplated by Section 5.2. The locations of potential development and the maximum heights shown in Figure 5.4 shall be presumed consistent with Policy 4.1 and IM 4.1.1 with respect to protection of distant, non-campus public views, if such development is otherwise consistent with the LRDP.

The table below generally identifies existing Campus gsf, the increase that would be allowed under the CLRDP, and expected total Campus gsf at buildout for the three development zones:



	Existing Development at Site	Increase allowed by CLRDP ²⁰	Potential Development at Buildout
Buildings and related structures	140,000 gsf	417,000 gsf	557,000 gsf
Roads and parking areas	147,000 gsf	152,000 gsf	299,000 gsf
Other areas (e.g., outdoor research, laydown, etc.)	37,000 gsf	108,000 gsf	145,000 gsf
Total	324,000 gsf	677,000 gsf	1,001,000 gsf

Overall, Campus development at maximum buildout would be roughly three times the scope of Campus development currently (including the NOAA facility), and nearly four times the amount of existing permitted gsf in buildings and related structures at the site (including the NOAA facility). Given that there would be additional development outside of the three development zones (roads, parking, wet ponds, etc.), the potential full extent of Campus buildout would be somewhat higher overall than these figures. UCSC has prepared photo simulations representative of the scale and scope of the Campus at buildout that help articulate this concept (see Exhibit D).

5. CLRDP Procedures

The CLRDP's proposed procedural section provides for Campus development pursuant to the aforementioned Notice of Impending Development (or NOID) process (where the University submits a NOID for a proposed development project identified in the CLRDP to the Commission for review, and the Commission has certain time limits within which to find a development project consistent with the CLRDP, or make changes to it to make it consistent). The CLRDP also provides substantial detail on the development project review process, including the preliminary steps leading up to the NOID and procedures for specific scenarios (emergencies, amendments, etc.). These procedures are generally summarized below; see CLRDP Chapter 8 for the full procedural chapter (Exhibit E).

The general development review process proposed in the CLRDP would be that the Director of UCSC Campus Planning would prepare a detailed project report describing a proposed development project and evaluating its consistency with the CLRDP when such a project is proposed. When this report was available, it would be distributed to the UC Regents and the Commission. All proposed development projects must then be authorized by the Regents or their designated representatives. At least thirty days prior to a NOID being sent, a notice of intent to submit a NOID would be provided to the Commission. At least thirty working days prior to commencing construction, a NOID would be sent to the Commission and other interested parties, and posted at the Campus and the development site. The NOID submitted to the Commission would be accompanied by supporting information necessary to make the required CLRDP consistency finding. The Commission would then have the opportunity to review the proposed development project for CLRDP consistency at a public hearing. At that time, the Commission could either find the proposed development project consistent or inconsistent with the CLRDP. In the

²⁰ "Increase allowed" is based on the amount of new development gsf allowed minus the amount of existing development allowed to be removed to accommodate it. In other words, these figures somewhat underestimate the total amount of new development that would be allowed, but are consistent otherwise with what would be expected at buildout (where replaced gsf is not specifically counted).



case of the latter, the Commission could then require conditions to make it consistent. As discussed above, denial of proposed development project is not an option afforded by the Coastal Act or the Commission's regulations.

The CLRDP also includes a series of development project categories that would be excluded from the typical NOID development review process, including certain types of repairs, maintenance, and improvements on the Campus (see proposed CLRDP Section 8.3); standards for amendments to previously approved (both pre- and post-CLRDP certification) Campus development (CLRDP Section 8.5); identification of expiration and effective dates for CLRDP authorizations (CLRDP Section 8.6); details regarding the Commission's retained coastal permitting jurisdiction (CLRDP Section 8.7); specifications for University monitoring of CLRDP development and overall implementation over time (CLRDP Section 8.8); a description of enforcement parameters (CLRDP Section 8.9); procedures for emergency CLRDP authorizations (CLRDP Section 8.10); and standards for non-conforming uses and structures (8.11).

E. Coastal Act Consistency

The Coastal Act consistency analysis that follows has seven sections. The first section describes the land use context for the CLRDP, including a discussion of priority uses, agricultural protection, provision of public services, and the urban/rural boundary. The second section details habitat-related issues, including those related to ESHA, wetlands, and water quality. The third details public access and recreation issues. The fourth section describes public viewshed issues, including analysis of the scale and scope of development proposed. The fifth section describes the coastal hazards context for the site, and the sixth those issues related to cultural resources. Finally, section seven details the procedural aspects of the CLRDP.

The standard of review for measuring CLRDP consistency is the Coastal Act. Coastal Act Section 30605 also indicates that such plans need to be consistent to the fullest extent feasible with certified LCPs.²¹

1. Land Use

A. Applicable Policies

Priority Use Policies

Coastal-dependent and coastal-related development are among the highest priority Coastal Act uses. Section 30001.5 provides context for the Coastal Act's Chapter 3 policies, stating in part:

30001.5: The Legislature further finds and declares that the basic goals of the state for the

²¹ In this case certified LCPs applicable to areas surrounding the site, the City of Santa Cruz and Santa Cruz County.



coastal zone are to: ... (d) Assure priority for coastal-dependent and coastal-related development over other development on the coast. (e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

Coastal Act Sections 30222 and 30222.5 state:

Section 30222. *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Section 30222.5. *Ocean front land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.*

Coastal Act Section 30255 also provides:

Section 30255. *Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.*

The Coastal Act defines coastal-dependent and coastal-related as follows:

Section 30101. *"Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able to function at all.*

Section 30101.3. *"Coastal-related development" means any use that is dependent on a coastal-dependent development or use.*

Agricultural Protection Policies

The question of the conversion of historic agricultural lands to other uses, and the compatibility of these other uses with adjacent agricultural operations, is also applicable to the land use question in this case. The Coastal Act requires the preservation of both prime and non-prime agricultural lands. In particular, the Act sets a high standard for the conversion of any agricultural lands to non-agricultural uses. Significantly, Coastal Act Section 30241 requires the maintenance of the maximum amount of prime agricultural land to assure the protection of agricultural economies:

Section 30241. *The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:*



- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.*
- (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.*
- (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.*
- (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.*
- (e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.*
- (f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.*

Coastal Act Section 30241.5 identifies specific findings that must be made in order to address the agricultural “viability” of prime lands around the periphery of urban areas subject to conversion requests. These findings include an assessment of gross revenues from agricultural products grown in the area and an analysis of operational expenses associated with such production. Subsection (b) specifically requires that such economic feasibility studies be submitted with any LCP or LCP amendment request (and, by extension, proposed CLRDPs). Section 30241.5 states:

Section 30241.5. *(a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation containing at least both of the following elements:*

- (1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.*
- (2) An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.*

For purposes of this subdivision, "area" means a geographic area of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for those lands included in



the local coastal program or in the proposed amendment to a certified local coastal program.

(b) The economic feasibility evaluation required by subdivision (a) shall be submitted to the commission, by the local government, as part of its submittal of a local coastal program or an amendment to any local coastal program. If the local government determines that it does not have the staff with the necessary expertise to conduct the economic feasibility evaluation, the evaluation may be conducted under agreement with the local government by a consultant selected jointly by local government and the executive director of the commission.

Section 30242 establishes a general standard for the conversion of agricultural lands:

Section 30242. *All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.*

The next section addresses protection of the soil resource itself:

Section 30243. *The long-term productivity of soils ... shall be protected....*

Finally, the definition of prime land is found in Section 30113:

"Prime agricultural land" means those lands defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code.

These Section 51201 paragraphs define such lands as:

- 1. All land that qualifies for rating as class I or class II in the Natural Resource Conservation Service land use capability classifications.*
- 2. Land which qualifies for rating 80 through 100 in the Storie Index Rating*
- 3. Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.*
- 4. Land planted with fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre*

In terms of existing LCPs applicable to surrounding lands, the Santa Cruz City LCP does not identify specific required agricultural buffer distances; rather, buffers are to be "appropriate" to the case at hand. Santa Cruz City Land Use Plan Policy LU 3.1.3 does state support for "County policies and programs aimed at preservation of agricultural/grazing uses on the North Coast." The Santa Cruz County LCP



provides for a 200 feet buffer between existing agricultural uses and new developments, with some exception, if site-specific analyses support a lesser buffer.

Public Services Policies

General development siting and public service issues are mainly the purview of Coastal Act Sections 30241(a) (cited above), 30250, 30252 and 30254.

Coastal Act Section 30250 states:

Section 30250(a). *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. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.*

Section 30250(b). *Where feasible, new hazardous industrial development shall be located away from existing developed areas.*

Section 30250(c). *Visitor-serving facilities that cannot be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.*

Coastal Act Section 30252 states:

Section 30252. *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.*

Coastal Act Section 30254 states:

Section 30254. *New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not*



induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

In general, Chapter 3 of the Coastal Act establishes clear parameters for the location, intensity, type, and design of new development in the coastal zone. First and foremost, Section 30250(a) requires that new development be concentrated in and around existing developed areas with adequate development capacities. Where such areas are not available, development must be located where adequate public services exist, and where the development will not have significant adverse effects, either individually or cumulatively, on coastal resources. Generally, public works such as water, roads and sewer systems, must be sized to serve planned development. Agricultural lands are to be preserved.

The Coastal Act also establishes a set of priority uses that operate within the locational and resource constraints for new coastal development. For example, if public services are adequate to support only a limited amount of urban growth, land use potential must be first allocated to coastal dependent uses, essential public services and vital industry, public and commercial recreation, and visitor serving development (Section 30254). The Coastal Act also requires that public recreational uses take precedence over private residential and general industrial or commercial development, but not at the expense of agriculture or coastal-dependent industry (Section 30222).

There are only limited exceptions to the general development requirements of the Coastal Act. Hazardous industrial development may be located away from developed areas (Section 30250(b)); and coastal-dependent industry may be permitted outside developed areas if other locations are infeasible or environmentally damaging, and the effects of such development are mitigated (Section 30260). Under Section 30250(c), visitor-serving facilities may also be located outside of urbanized areas, but only if urban locations are infeasible for such development. Visitor-serving facilities may also be located in existing isolated development nodes or at select points of attraction for visitors.

Finally, adequate separation between agricultural and urban uses is required. Overall, these requirements reflect a fundamental goal of the Coastal Act: to protect coastal resources by limiting new development to existing developed areas.

B. Applicable Provisions of Proposed CLRDP

As previously described, the CLRDP generally only allows development on the Campus that is directly associated with marine research and education (see proposed CLRDP Section 5.2, Land Use).²² A fundamental component of such development is the Campus seawater system that provides high quality seawater for use in research and education activities throughout the Campus. Public services to the site

²² Two exceptions to this are specified in the University's recent addendum: Organic agriculture as an interim (up to 5 years after CLRDP certification) use in Subarea #6; and Temporary coastal dependent applied science or testing. These uses are specified to allow the interim continuance of existing greenhouse operation and marine bioassay testing facility; and in anticipation of a proposed temporary desalination test facility being pursued by the City of Santa Cruz.



are purposefully limited to that necessary to serve only anticipated Campus development and not for any additional urban development on or off-site (see for example proposed CLRDP Section 5.2.3, Stable Urban/Rural Boundary, and Section 5.8.3, Utilities Policies). Part of this commitment includes a permanent one-foot wide utility prohibition zone at the western edge of the Campus established by the CLRDP through which new sewer and/or water utility lines and/or expansion of existing such lines are prohibited (again, see proposed CLRDP Section 5.2.3). To protect against potential conflicts that could harm the viability of adjacent agricultural operations, the CLRDP includes requirements: to cluster development within the three development nodes; to site and design development in response to wind patterns; to provide 200-foot setbacks from the western property line for non-housing uses (and 300 foot setbacks from established crop lines) and 500 foot setbacks for housing uses; to provide vegetative screening (including large scale windbreaks), and to include hold-harmless and indemnification agreements between UCSC and adjacent agricultural operators (again, see proposed CLRDP Section 5.2.3, and see Policy 3.8).

C. Coastal Act Consistency Analysis

1. Priority Uses

Bracketing the question of conversion of historic agricultural lands (see below), the Coastal Act gives priority to coastal-dependent and coastal-related development over other types of development proposed along the shoreline. As the Commission has previously found for the Terrace Point site, the existing LML campus core and the related CDFG and NOAA facilities have become, by location and co-use of coastal-dependent seawater facilities, an enclave of coastal-dependent/related marine research facilities separated from the residential and industrial uses of the urbanized areas of Santa Cruz to the east. Appropriate and available siting for such specialized and public serving coastal-dependent/related uses are rare in the coastal zone, and this site provides an important opportunity to pursue other integrated coastal-related research facilities.

If the site is to be developed at the scale proposed by the CLRDP (see also public viewshed findings), including converting historically agricultural lands to urban development (see also agriculture findings), such development must continue to be consistent with the Coastal Act's land use priorities. The CLRDP mostly accounts for this, including limited the bulk of development to marine research and education uses, but it also provides for a series of supporting facilities. While many of these facilities are difficult to separate from the seawater-based research they support (such as offices, food service, conference/meeting space, etc.), the connection between the proposed housing units and marine research is less direct.

Specifically, the CLRDP allows for up to 110 short-term (3 year maximum stay) housing units (including 80 apartments and 30 researcher housing "rooms"), 10 overnight rooms, and 2 caretaker quarters (see Section 5.2.1). The University and CLRDP make a compelling case that the housing units may be needed to accommodate persons directly related to Campus marine research programs that require their on-site presence much of the time (e.g., certain researchers, employees, etc. – see also Section 4.2.3). As described on pages 8 to 10 of Chapter 4, the University has made the case that support housing for visiting scientists and researchers, graduate and undergraduate students, educators,



and new faculty and researchers is needed to assure that the Marine Science campus and programs are as successful as possible (see Exhibit E, pgs 79-81). In particular, the University has articulated a vision for the campus that would provide for close interaction between members of the research community, including by being able to live at the Campus. In this sense, the housing is integral to the success of the overarching coastal-related land uses contemplated by the CLRDP.

The University has committed to only developing such housing as demand warrants. In addition, housing units will only be provided for and used by persons directly involved with marine research programs on the Campus, will only be provided to those persons who need to be present on the site on a regular and substantial basis, and will only be used by persons who continue to satisfy such requirements (see, for example, CLRDP Policy 2.4 et seq, Support Housing). No housing will be provided in the lower development node, or in the core of the middle node, where marine research and education is the primary anticipated land use. Because of these policy commitments, the Commission can find the CLRDP's support housing provisions generally consistent with the land use priorities of the Coastal Act inasmuch as such housing is directly related to the effectiveness of the coastal-dependent/related use it supports. Clustering of residential uses to the east in the middle development node appropriately protects the concentration of higher priority marine research land uses. It also minimizes potential impacts to wetland and habitat uses from typical activities associated with residential development (see also habitat findings below).

An important piece of the land uses contemplated by the CLRDP is the University's clear commitment to maintaining and protecting the natural areas surrounding the proposed development zones as open space in perpetuity. This commitment has been affirmed most recently in the University's March 28, 2006 addendum to the CLRDP with the addition of Policy 3.14:

Policy 3.14 Permanent Protection

The University shall maintain, in perpetuity, the land use designations of Resource Protection, Resource Protection Buffer, Open Space, and Wildlife Corridor as shown in Figure 5.2.



It is clear that much of the site should be protected from development in perpetuity as part of the vision for the Marine campus. In particular, the site contains sensitive wetland areas, significant undeveloped coastal bluff areas, and valuable open space and natural areas that should be protected, particularly south of wetland 4 and north of McAllister surrounding the upper development zone. The permanent protection of these areas also offsets the significant and intense building program that would potentially be allowed in the identified development zones.

One exception to this that should warrant discussion is an open space area between the middle development zone and De Anza Mobile Home park. This area provides important open space to buffer the proposed building program. And while it does have some habitat value, such as providing raptor foraging area, it does not constitute ESHA. As discussed below, though, the upper terrace is more sensitive from a habitat perspective, and there is a need to provide increased protections for CRLF that significantly reduce, and may further reduce in the future, the identified development zone in the upper terrace. In an effort to provide for the University's building program, while protecting coastal resources, it is reasonable to consider the potential transfer of the building program planned for the upper terrace to the open space area described above in the middle terrace, if all development potential in the upper terrace were extinguished. Thus, a different balance between development areas and open space/natural resources than has been proposed may also be appropriate to protect resources while providing for the requested building program.

Therefore, modifications are recommended that would provide for the transfer of development potential from the upper terrace to the middle terrace ("subarea 17"). Of course, were such transfer option exercised, the permanent protection anticipated by Policy 3.14 would need to be transferred from subarea 17 to the upper terrace. Therefore, modifications to the proposed policy 3.14 are needed to make this exception clear (see Modification 4 above). The Commission would expect that in the event that this option were exercised by the University, that the restoration and enhancement work of wetlands and natural areas in the upper terrace, as well as public access improvements, proposed by the CLRDP, would still occur as proposed. However, improvements to Shafer Road that are potentially triggered by development in the upper development zone, would not be required if no development were to actually occur in the upper development zone.

2. Agricultural Conversion

The Campus is a former brussel sprouts field. Prior to 1976, the entire Campus site (except for what is now Younger Lagoon Reserve) was actively farmed (see time series air photos in Exhibit B). Terraced areas to the west of McAllister Way were converted starting in 1976 from row crop agricultural use to marine laboratory use; some with an agricultural component.²³ The remainder of the property (east of McAllister Way and north of Delaware Avenue Extension) was in active brussel sprout production until 1988.

²³ The Commission's initial approval of marine lab use on the lower portion of the terrace west of McAllister Way (i.e., within the current main LML node) was conditioned on the middle portion (i.e., that portion of the current Middle Terrace zone west of McAllister Way) remaining in agricultural use (coastal development permit P-1859 in 1976).



The Environmental Impact Report (EIR)²⁴ for the CLRDP describes that some of the Campus contains prime agricultural soils:

Three soil types occur on the terrace portion of the project site – Elkhorn sandy loam #132, Elkhorn sandy loam #133, and Watsonville loam #178. Of these three soil types, only Elkhorn sandy loam #132 soils are classified as prime soils by the California Department of Conservation, Division of Land Resource Protection, provided that they are irrigated. Elkhorn sandy loam #132 soils occupy about 26 acres, and occur on the eastern 1/3rd of the upper terrace and the majority of the middle terrace area.

However, the EIR also summarizes a site-specific report for the area east of McAllister Way as demonstrating that the soils should not truly be considered prime, because the former irrigation well collapsed.²⁵

The proposed land use does not literally meet either test of Section 30241 for allowing agricultural land conversion, but does satisfy equivalent parameters embodied in each test – particularly when considered together. The first test allows conversion where the viability of existing agricultural use is already severely limited by conflicts with urban uses. Information provided by the University indicates that viability is already severely limited, as summarized in the EIR for the CLRDP:

The project site was surveyed and, following the California Department of Conservation Land Evaluation and Site Assessment (LESA) Model analysis, a determination of agricultural suitability was conducted for the 54.5-acre terrace property acquired by the University and added to the Marine Science Campus. Five agricultural scenarios were evaluated by the LESA Model in order to demonstrate potential agricultural uses ranging from no-restrictions farming to 500-foot pesticide setbacks. In each scenario, the project site was shown to be a less-than-significant agricultural resource... A further agricultural viability analysis was conducted that compares anticipated crop production costs and revenues with the water supply and infrastructure costs. That analysis...showed that the project site was not economically viable for

²⁴ Pursuant to the California Environmental Quality Act (or CEQA). See also CEQA findings at end of this report.

²⁵ The agricultural significance of the three soil types on the terrace portion of the site can be assessed using capability class and Storie Indices from the USDA Soil Survey for Santa Cruz County. Prime soils are considered to have a capability Class of I or II, or a Storie Index of 80 to 100. (The capability class assesses the ability of the soil to be used for field crops such as beans, sugar beets, grains, etc., while the Storie Index portrays the soil suitability for overall crop production.

About 26 acres of the terrace is Elkhorn sandy loam #132. This soil type is considered to be Class I, but only if irrigated as defined by the USDA Soil Survey. If not irrigated, the soil is considered to be Class III (non-prime). No irrigation water sources have existed on the property since 1988 when the irrigation water well collapsed. Because of drainage constraints this soil has a non-prime Storie Index of 73. Since no agriculture irrigation water source exists on the site, the soil is considered by definition to be non-prime.

About 8 acres of the terrace is Elkhorn sandy loam #133. This soil type is considered to be Class IIIe non-prime with or without irrigation. Soil erosion potential is a limiting factor to crop production. The Storie Index is a non-prime 66.

Another 26 acres of the terrace is Watsonville loam #178. This soil type is considered Class IIIw non-prime with or without irrigation. Soil wetness is a limiting factor to crop production. The Storie Index is also a non-prime 50. Soil testing of soil textures conducted in 1995 indicated that soil capability was non-prime in all but two locations. Two tests along the western portion of the 60-acre property showed two areas to have prime soil textural characteristics. However, because irrigation water was not available, the entire 60-acre site was determined to be non-prime farmland.



agriculture due to high water-related costs.

The EIR for the CLRDP also summarizes points in the above-referenced 1995 “Final Agricultural Suitability Study.”²⁶ Although some of the points do not support a conversion pursuant to the Coastal Act criteria, relevant points that do include that the site has poor drainage and poor irrigation water quality.

With regard to the 16 acres of middle terrace land west of McAllister Way (consisting of Elkhorn sandy loam, that is prime if irrigated) currently containing greenhouses, the EIR determines that reestablishment of field agriculture on this land is considered infeasible because of a number of factors including the presence of both permanent structures such as the California Department Fish and Game (CDFG) Marine Wildlife Center and temporary structures such as trailers and greenhouses; the fragmented nature and irregular shape of the land parcel flanked on the one side by marine lab buildings and on the other by McAllister Way; and the lack of irrigation water since the on-site irrigation water well collapsed in 1988 and is no longer available. The EIR indicates that the loss of the greenhouse agriculture would be insignificant and does not discuss the feasibility of maintaining it.

The Commission agrees that agricultural viability has been compromised. Previous actions allowing for coastal-dependent development on portions of the Campus have reduced the area available for renewed agriculture, especially if these newer uses would require buffering. According to the EIR, “the [NOAA Fisheries Lab] and the Seymour Discovery Center were constructed on those portions of the 60-acre Terrace Point site that had the best soil suitability for farming, and the presence and public use of these facilities further limits the agricultural suitability of the remaining 54.5 acres of the terrace land.” In both of these cases, though, the Commission recognized that agriculture might continue on lands adjacent to these facilities.²⁷ And, bracketing the desirability of farming in wetland and related habitat areas that have become more evident since farming of Terrace Point ceased in 1988, agriculture may still be feasible on lands surrounding the existing approved nodes of development (LML, NOAA, and CDFG facilities). The University could, for example, potentially reestablish agriculture on the site through its agroecology program, albeit admittedly not at the industrial scale and intensity of former years.

Another Coastal Act test allows conversion where it would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development. The Commission has previously found that the existing residential neighborhood (De Anza MHP) is a complete neighborhood (a wall separates it from the campus) and that an urban-rural boundary existed along the wall and Shaffer Road. Subsequent incremental permit approvals for isolated, high priority development have not determined otherwise, and the question of the ultimate land use of the remainder of Terrace Point that was a sticking point in the original 1981 LCP review, including with respect to questions of agricultural conversion, has remained unresolved. The proposed CLRDP does not result in the completion of a traditional neighborhood as that term is typically understood for purposes of Coastal Act section 30241.

²⁶ By Sage Associates.

²⁷ See 3-97-050 (Marine Discovery Center); and CD-50-98 (NMFS-NOAA Fisheries Lab).



It does result, however, in the completion of a coastal-dependent/coastal-related marine science campus, in a location uniquely suited for such development, and a potentially stable limit to this marine research development and urban development to the east, as discussed in the next part of this finding. In other words, it does result in the completion of a marine research “neighborhood” that can, if structured properly, help strengthen the urban-rural boundary.

In conclusion, the Commission finds that this agricultural land at the City’s edge does not automatically qualify for conversion to non-agricultural uses, even if the agricultural use has been abandoned. The Commission previously found that the majority of the Campus site (before it was owned by the University) was not appropriate to be fully converted to residential uses.²⁸ Nonetheless, the Commission now finds that with changed circumstances, conversion to the uses specified in the CLRDP is appropriate for the following reasons.

Coastal Act policies clearly support the habitat protection and restoration²⁹ and coastal-dependent/related marine research and education uses that would occur through implementation of the CLRDP. By virtue of having a seawater system, the Campus site presents a rare and significant opportunity for expansion of coastal-dependent/related uses, which are also priority uses for oceanfront locations under Section 30255 (see also public services finding below). Also, if new development on the site were limited to renewed agriculture, Section 30255 use priorities would not be met. Similarly, with Younger Lagoon, YLR, terrace wetlands and related habitats (including foraging habitat, movement corridors, etc.), and with the Wilder Creek and Moore Creek/Antonelli Pond systems nearby, the Campus site also presents a significant opportunity for wetland and other habitat enhancement and protection both on-Campus and in relation to the overall area. Indeed, since farming of the property ceased in 1988, over seven acres of wetlands have been identified on the site that should be protected under Coastal Act sections 30233 and 30240. Without these lands in agriculture, though, and applying even 100-foot buffers to them, there remains limited land available for farming (about 20 acres or so), and these land areas are also both a part of related habitats (movement corridors, foraging habitat, etc. – see also habitat findings) as well as being penned in by these habitat areas and by residential uses and coastal-dependent/related development. In other words, agricultural use would not be without significant issues, and if the Commission does not allow conversion of the agricultural soils on the property (and use of the site beyond existing developments was limited to agriculture), the habitat protection requirements of the Coastal Act would not be met. The Commission has a history of supporting similar habitat protection and restoration on former agricultural land.³⁰

As discussed, the Coastal Act does allow for agricultural conversions in some cases. While the criteria of Section 30241 may not be strictly satisfied in this case, the Commission agrees that the significance of the agricultural resource of the Campus has been compromised and the likelihood and desirability of

²⁸ Commission findings on the Westside Lands Area of Deferred Certification. In these findings, the Commission identified the eastern boundary, not the western boundary, of Terrace Point as the urban-rural boundary, and LML was identified as an intentionally isolated resource-dependent facility.

²⁹ See also habitat findings that follow.

³⁰ See, for example, City of Watsonville LCP amendment 1-99 and related coastal permits for the PVUSD high school that also resulted in former agricultural lands being restored for habitat purposes in light of the significance of the habitat function of these lands.



returning it to agricultural use is low, even if the CLRDP is not certified. Agricultural use no longer exists at the site. Further, although much of the land remains open and could be returned to agricultural use and the University, especially through its agroecology program, could be in a position to do so, there is no mechanism for the Commission to require that the University resume agricultural uses. Nor is it clear that this would be the best use of this land in light of existing conditions. Existing development limits the full agricultural potential of the site, bringing in to question its value as agricultural land. Significant wetland and related habitat resources have been identified on the site that likely would go unprotected, and certainly not enhanced, absent the CLRDP. While the conversion to marine-related uses does not literally complete a traditional neighborhood, it does serve to concentrate a priority type of urban-level development that requires urban services in close proximity to urban Santa Cruz City, completing a marine research “neighborhood.” In light of the reality of diminished agricultural value at the site, the unique opportunity for completion of a coastal-dependent/related marine research campus “neighborhood,” the manner in which such a completed Campus (and CLRDP) can contribute to the establishment of a stable urban-rural boundary (see also finding below, and other findings of this report), the significance and importance of protecting and enhancing on-site habitat and its relation to surrounding habitat resources, and when considered together in relation to this unique site, the proposed use designations of the CLRDP, as modified herein, are more protective of significant coastal resources than would be renewed agricultural use. Given the unique opportunity to complete a marine research campus (“neighborhood”) in such a way as to finally stabilize the urban-rural boundary of the Westside of Santa Cruz, and given the limited potential of renewed agriculture on the site, conversion from agricultural use to non-agricultural use is consistent with the above-cited agricultural conversion requirements of the Coastal Act. The Commission notes that the CLRDP’s commitment to habitat restoration is an important component of this finding.

3. Protection of Adjacent Agriculture

Row crop agriculture, primarily brussel sprouts, exists adjacent the Campus to the west outside of the City of Santa Cruz. Brussel sprouts are a one crop per year growing operation with an approximate eight-month growing cycle. Dust generating activities (for field preparation) usually occur a few times per year with fertilizer application taking place over the course of the growing season and pesticide application taking place every few weeks. High prevailing westerly winds sweep across a relatively treeless area to the east towards the Campus, typically bringing noise, dust, and odors from the farming operations to the Campus site. A 12-foot berm along the western side of the lower Campus does act as a wind barrier. The existing minimum buffer distance between buildings on Campus and the farmland to the west is approximately 150 feet; as shown below:

Approximate Distance Between Coastal Commission-Approved Development at the Campus and Adjacent Agricultural Operations

Long Marine Lab (1976 – 1999).....	400 feet
CDFG (1994 - 2005).....	150 feet



NOAA Fisheries (1998)..... 700 feet³¹

The Commission's 2000 Issue Identification comments found that the primary agricultural issue raised by a potential CLRDP at this site would be ensuring adequate buffers and legal mechanisms to avoid or reduce any potential impacts to, or conflicts with, adjacent agricultural lands and uses. Related to this issue, the Commission was also concerned about establishing appropriate allowable uses within buffers areas, and including legal mechanisms to assure buffer effectiveness.

Buffers are necessary to ensure that continued agricultural cultivation is not threatened by proximity to non-agricultural uses should standard agricultural practices (such as chemical spraying and fertilizing) or ongoing agricultural by-products (such as dust and noise from machine operations – cultivating, spraying, harvesting, et al) be seen as incompatible and/or a threat to the non-agricultural uses. Appropriate buffers are particularly relevant for the Terrace Point area because of the high prevailing westerly winds that typically sweep across this relatively treeless area bringing noise, dust, and odors from adjacent farming operations to this site.

The Coastal Act does not provide for specific buffer distances; these are appropriately determined through localized planning processes such as LCPs and CLRDPs. The City of Santa Cruz LCP, although not the standard of review in this case, could provide some guidance for this uncertified portion of the City. The City's LCP, however, provides little specificity in terms of required buffer distances. Rather, buffers are required to be "appropriate" to the case at hand.³² Santa Cruz City LUP Policy LU 3.1.3 does state support for "County policies and programs aimed at preservation of agricultural/grazing uses on the North Coast." Within Santa Cruz County jurisdiction (Younger Ranch is located within the County directly abutting the City limits) the required agricultural buffer distance is 200 feet. This 200-foot buffer can be reduced if site specific analyses support a lesser buffer.

The proposed CLRDP contains adequate concepts to protect adjacent agriculture, both directly in terms of minimizing the potential for Campus site use to impact the adjacent agricultural operations and indirectly in terms of not encouraging additional conversion of agricultural land off-site. The CLRDP buffers have been developed based on a site-specific analysis of the buffering requirements of the current adjacent agricultural operation. Included in this analysis is the adjacent agricultural operator's permit to use a pesticide (Telone II) that cannot be sprayed within 300 feet of occupied structures when applied in consecutive years. Based on such factors the University and the EIR preparers concluded that the CLRDP's variable 200/300/500 feet described above is an adequate buffer width, and the

³¹ The associated utility lines were located 500 feet from agricultural operations to the west. At that time, NOAA agreed to relocate the utility easement to be outside of the 500-foot buffer (through CD-50-98) in the event that a future LCP or LRDP planning process indicated that a 500-foot buffer was appropriate.

³² In attempting to determine the appropriate buffer distance for this site in 1998, the City contracted out for a study on the topic. For this 1998 research (Mintier & Associates, Terrace Point – Survey Re: Passive Uses Within Buffers, 1998), a survey was conducted of 16 counties and 4 cities in the State to determine agricultural buffer policies. The results were highly variable. For those jurisdictions where a specific buffer distance was specified, row crop (e.g., brussel sprouts) buffers ranged from 25 feet to 500 feet. In almost every case, buffer distance requirements could vary from the specified distance (both increase and decrease) depending upon site-specific conditions.



Commission concurs.³³ Measures to landscape the buffer and the hold harmless/indemnification agreement requirements will help reduce any instances of Campus users intruding on the farmlands and instances of dust, noise, pesticide drift, and the like intruding onto occupied Campus lands and causing complaints about the adjacent operation.

In addition, CLRDP provisions to ensure that utilities and services do not extend into, and are not sized to serve, the adjacent agricultural land also help to ensure that implementation of the CLRDP does not induce conversion of nearby agricultural lands (see also public services discussion below). Although fencing is an added measure recommended in the EIR, it is redundant given the buffer distances, the siting and design requirements, the landscaping provisions, and the legal protections. Moreover, such fencing is counterproductive to protecting the public viewshed and habitat areas along that margin of the site (i.e., the area along the property line interface with western agricultural lands is all ESHA and ESHA buffer). As recently proposed, the CLRDP does not include problematic fencing but rather, limits proposed fencing to that necessary to provide protection of YLR, or to manage access in and around the site, consistent with visual resource and public access protection.

4. Public Services/Urban-Rural Boundary

Public service provision to the Campus has been incrementally cautious since 1976 to avoid growth inducement and agricultural conversion outside of the urban-rural boundary (as described above, historically found by the Commission to be the eastern edge of the current Campus boundary). The Commission has been careful to ensure that permitted utility infrastructure for LML would not be growth inducing and would not frustrate any future LCP/CLRDP planning efforts for the LML site and Terrace Point. Towards this end, the Commission has been careful to limit public services to those necessary to serve the coastal-dependent/related facilities authorized. Specifically, projects have been designed to only meet LML demand, and special conditions have been imposed which do not allow for non-LML users to utilize these facilities.

As described above, the Campus site is located at the transition from the urbanized portion of northern Monterey Bay into Santa Cruz County's rural and agricultural north coast, and an area of rural coast extending roughly to Half Moon Bay. This transitional location is a fundamental reason that the development of LML and related marine lab facilities have been allowed at this site over its development history. This transitional location has allowed for, and continues to provide, a relatively isolated location within which marine research can successfully take place relatively buffered from urban uses. At the same time, the site is close enough to necessary urban services (water, sewer, etc.) that it has not – particularly as structured and conditioned over time – induced inappropriate growth as might occur with a relatively more isolated site that requires such services to be extended a long ways through rural areas. As such, the site is uniquely situated for the types of uses developed to date, and those proposed in the CLRDP.

The CLRDP will result in the completion of a coastal-dependent/coastal-related marine science campus.

³³ Note that the 500-foot buffer width has been the distance historically recommended by the owners of Younger Ranch during the course of previous UCSC development proposals for the site.



Such completion is premised on maintaining the relative isolation of the facility while still benefiting from its proximity to the City and urban services. As such, the CLRDP maintains and strengthens the urban-rural boundary along the east of the site. This is particularly the case due to the elimination of the possibility that water and sewer facilities could be extended west of the site (pursuant to the CLRDP's utility prohibition zone), and the fact that utilities to the site are purposefully limited to that necessary to serve only anticipated Campus development and not for any additional urban development on or off-site. In addition, the agricultural buffers and agricultural protection provisions described above will also help stabilize the boundary between urban Santa Cruz and the rural north coast even more. Also, as structured to protect established habitat resources, the effectiveness of the site itself as an urban-rural buffer is enhanced. Thus, although the site remains just outside of the urban-rural boundary as an intentionally isolated "island" of facilities, the CLRDP effectively serves to limit development to the west, and it can be found consistent with the Act in this respect.

In terms of public service supply, the CLRDP details the level of services needed (see CLRDP Section 5.8), and requires that the University shall contribute a fair share portion of any necessary utility upgrades in the City of Santa Cruz. The City has not indicated that there are significant issues with serving the site in this respect. However, the City of Santa Cruz has recently stated its concern that emergency road access to and from the site may be inadequate in the future as the site build outs. In particular, the City has indicated its concern that Shafer Road should be connected through to the north (it is currently not a through road access) to provide an alternative to Delaware Avenue as a way into and out of the campus. The University has not indicated that such expansion or development of Shafer Road is necessary to provide for public safety at the proposed campus. Nor has the City provided any analysis to date of the need to anticipate such development of Shafer Road, although it has recently indicated its intent to submit such analysis to the Commission.³⁴

Currently, the CLRDP anticipates that future development along Shafer Road to serve the upper development zone would also entail potential restoration or improvements to the portion of Shafer Road above the upper zone that would facilitate wildlife protection and movement across the Shafer corridor to Antonelli Pond. Thus, one vision is that the upper part of Shafer will not only not be developed to be a through public road, but that it might even be removed or redeveloped to emphasize protection of existing habitat values. However, to the extent that the provision of adequate emergency services to the campus site may be an issue in the future, the Commission notes that Shafer Road is currently in an area of deferred certification, i.e., there is no LCP for this area. Thus, an LCP amendment proposed by the City of Santa Cruz would be a suitable mechanism for addressing this concern in the future were it shown to be necessary from a public safety standpoint.

D. Land Use Conclusion

As introduced above, the CLRDP is mostly consistent with the land use policies of the Coastal Act. Minor modifications are needed to assure adequate protection of proposed resource protection areas; and modifications are suggested to provide for the potential transfer of development potential from the upper

³⁴ Personal Communication, Ken Thomas, City of Santa Cruz to Charles Lester, Commission staff, March 27, 2006.



terrace to the middle terrace (see below). If so modified, then the CLRDP as modified is certified as being consistent with the land use provisions of the Coastal Act.

2. ESHA, Wetlands, and Associated Habitat Resources

This section analyzes habitat-related issues, including those related to ESHA, wetlands, and water quality.

A. Applicable Policies

Section 30107.5 of the Coastal Act defines environmentally sensitive areas as follows:

30107.5: *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

The term ESHA, or environmentally sensitive habitat area, comes from the Section 30107.5 definition as it applies to habitat areas. The Act prohibits almost all development within ESHAs, and requires that adjacent development be sited and designed so as to maintain the productivity of such natural systems. In particular, Coastal Act Section 30240 states:

Section 30240(a). *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.*

Section 30240(b). *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Also, Section 30250, cited previously, requires that development be sited in areas where it would not have significant adverse effects on coastal resources, such as biological resources that do not necessarily meet the definition of ESHA but that do have a significant habitat function and value.

Article 4 of Chapter 3 of the Coastal Act also describes protective policies for the marine environment, including water quality, and specifically calls out wetland resources. Coastal Act Sections 30230 and 30231 provide:

Section 30230. *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.*



Section 30231. *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

In addition, Coastal Act Section 30233(a), 30233(c) and 30233(d) specifically address wetlands protection. In particular, Coastal Act Section 30233 limits development in wetlands to a few limited categories where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects:

Section 30233(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 30233(c). *In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division....*

Section 30233(d). *Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.*

B. Applicable Provisions of Proposed CLRDP

As described above, the CLRDP maps all of YLR, all delineated wetlands, all wildlife corridors, all of the rock shelf shoreline (fronting the terrace) and all buffers to YLR, wetlands, wildlife corridors, and rocky shoreline as natural habitat resource areas to which are applied the CLRDP land use designations of "Resource Protection," "Wildlife Corridor," and "Resource Protection Buffer." In addition, all grassland areas outside of identified development zones and buffers are designated as natural habitat resource areas and given a land use designation of "Open Space." Together, these designations essentially preclude non-resource dependent development within them (see also previous description of the CLRDP resource protection framework above). The University has also recently clarified its intent that these areas remain as such in perpetuity (see Policy 3.14, Exhibit F, pp 4-5).

Likewise, as detailed previously, in addition to requiring avoidance of these natural habitat resource areas by virtue of these land use designations, CLRDP resource requirements are designed to ensure that Campus development does not adversely impact these natural habitat resource areas through requiring appropriate siting and design (including by requiring adequate screening, noise and light attenuation, etc.). The CLRDP also includes a commitment to water quality BMPs in series for filtering and treating Campus drainage and runoff to meet water quality standards, and directing that cleansed runoff to natural habitat resource areas to ensure and enhance their hydrologic (and related) productivity. Finally, the CLRDP commits the University to vegetation restoration and hydrology enhancement of these natural habitat resource areas, other than within YLR,³⁵ at least partially to offset some of the impacts from Campus facility development. Most notably, the proposed Resource Management Plan would

³⁵ See also finding below regarding the relationship of the Younger Lagoon Reserve Management Plan to the CLRDP.



result in the restoration and protection of these areas, through a phased adaptive management framework overseen by an independent scientific advisory committee. Applicable provisions in this regard are found primarily in Chapter 5, Chapter 9, and Appendix A (see Exhibit E).

The CLRDP also designates a subset of these natural habitat resource areas as ESHA (see proposed CLRDP Section 3.7 and Appendix B). All of YLR is so designated, as is the rock shelf area seaward of the terrace, and as are all of the terrace wetlands with the exception of one.³⁶ The CLRDP almost exclusively relies on these ESHA designations to justify the land use designations applied above. The CLRDP also requires that potential development areas be evaluated for the presence of ESHA at the time of development (as a means of evaluating changed circumstances).

C. Coastal Act Consistency Analysis

1. Habitat Resource Background

Although there has clearly been significant development to date, the Campus site is mostly undeveloped and home to substantial natural habitat resource areas. Most obvious among these is Younger Lagoon proper located within YLR. In addition to the Lagoon itself, the Reserve overall serves as a wildlife refuge and provides for research and teaching in the field sciences. According to the Reserve Manager, more than 200 species of birds have been identified at the Reserve, including nearly two dozen that are State and/or Federally listed. The endangered Tidewater Goby has also been found in the brackish waters of the Lagoon.³⁷

On the undeveloped terrace portion of the site, ruderal grassland and wetlands dominate the landscape. The undeveloped terrace area has been known to be used by a wide variety of wildlife, including amphibians and reptile species, rodents, larger mammals, and an abundance of bird species – including raptors. Eight listed bird species, including several raptor species, have been identified on the terrace, as has the listed California red-legged frog (CRLF) near the Campus boundary at the railroad tracks. The undeveloped upper portion to the site, particularly that located along the railroad tracks, provides an area for wildlife movement between the Moore Creek/Antonelli Pond system to the east, other habitat systems to the west (such as Wilder Creek and Wilder Creek Lagoon), and YLR. It appears that the undeveloped terrace portion of the site currently provides significant foraging and dispersal habitat for various species, but not breeding or nesting habitat.³⁸

To date, the Commission has deemed only two discrete portions of the Campus site ESHA: Younger Lagoon itself (but not YLR overall) and the wetland nearest the LML complex (called Wetland W5 by the CLRDP). Areas containing the remaining terrace wetlands and other habitat areas now delineated in the CLRDP have not been before the Commission since agricultural use of the site was terminated, and thus their ESHA status has not been evaluated before now.

³⁶ The one wetland not designated as ESHA is a small wetland area in the northeast part of the site that would be avoided by virtue of the fact that it is located within the northernmost wildlife corridor/buffer.

³⁷ See proposed CLRDP Section 3.7 and CLRDP Appendix A for detailed information on species observed in YLR and their status.

³⁸ Again, see proposed CLRDP Section 3.7 and CLRDP Appendix A for detailed information on species observed on the terrace portion of the site and their status.



2. Relation of CLRDP to Habitat Protection Generally

The Coastal Act protects ESHA, wetlands (including wetlands that are also ESHA), and other natural habitat resources, and only allows very limited development either in or adjacent to these areas. The Campus has significant natural resources, including wetland areas and ESHAs, wetlands that are ESHA, and other areas used by listed and non-listed species (for nesting, foraging, movement corridors, etc.). Over a quarter of the Campus is occupied by YLR itself, and the remaining terrace area includes substantial area of delineated wetlands, foraging habitat, and other natural resources (about 40 acres). The CLRDP generally identifies known ESHA, wetlands, wildlife use areas, and related grasslands; prohibits non-resource development within these areas through resource protection land use designations; applies buffers from these areas; provides for clean hydrologic inputs; and includes specific siting and design criteria to ensure that other than the natural areas where development would be occur, that Campus development does not adversely impact these resources. Thus, the proposed CLRDP mostly protects ESHA, wetlands, and related natural habitat resource areas as directed by the Coastal Act. The University has gone to great lengths to identify such natural habitat resources, and has taken seriously the mandate to avoid and buffer them appropriately. In fact, all told, about 65 acres of the Campus site, or nearly two-thirds of the Campus, have been made off-limit to most development (including all major facility development) by the CLRDP provisions described in the preceding section. Nonetheless, there are a series of Coastal Act habitat resource consistency issues raised by the CLRDP as proposed as described in the following sections.

3. CLRDP ESHA Designation for Younger Beach

The CLRDP designates the sandy beach fronting Younger Lagoon as ESHA, and applies a resource protection land use designation overlay to this area. As a result, the CLRDP prohibits general public access to Younger Beach, and by extension direct surfing access to the surf break immediately offshore. The lack of public access to this beach area has long been an issue at the site. The University has been allowed to limit general access to it since 1981, subject to periodic reevaluation. In 2001 (the only time the issue was re-evaluated to date) the Commission allowed this limitation to continue on a temporary basis.³⁹

Although it is clear that YLR is a protected natural system by virtue of the resources present there and the University's closure policy to date, and that its habitat value is high as a result, the sandy beach area does not meet the ESHA threshold. This beach area is not unlike beaches extending further west along the rural north Santa Cruz County coast that are less frequently accessed than more urban beaches, and that provide additional wildlife habitat (in addition to public access and recreation benefits) as a result. The Commission is not aware of evidence showing that the beach provides an "area in which plant or animal life or their habitats are either rare or especially valuable" as is required for an ESHA designation. For example, species observations relative to the sandy beach area do not support an ESHA designation. With respect to snowy plover (a California Species of Special Concern and a federal Threatened species), the University indicates that snowy plover have been observed on the beach here some twenty years ago (in 1983), "but the narrowness of the beach and the lack of subsequent

³⁹ See also public access and recreation findings.



observations suggest mainly non-breeding and occasional use.”⁴⁰ In contrast, Wilder State Beach just upcoast of this location is a much more significant snowy plover beach, and is off limits to public access for this reason. Other beaches at Wilder State Park similar to the Younger Lagoon Beach are not closed though.

YLR clearly provides protected habitat overall, and portions of it should be considered ESHA (see also below). But, given the biological evidence, the sandy beach area does not meet the threshold necessary for ESHA delineation, and it needs to be distinguished from the remainder of YLR. To the extent that areas of YLR inland of the beach are ESHA that require higher levels of protection, management measures are available to keep people out of these more sensitive areas of the lagoon. For example, symbolic fencing, signage, the use of docents, etc. are available measures to provide protection and buffering of ESHA adjacent to the beach area. As also discussed below in the public access and recreation finding, in light of this, public access, albeit low-intensity and managed, must be provided to the beach area as required by the Coastal Act mandate to maximize public access, including surfing access. Modifications are suggested to clearly distinguish the beach area in this respect, and to allow low intensity use of it, including disallowing access inland of the beach and into the heart of YLR itself. Access inland of the sandy beach would be into areas where resources become more and more sensitive the further inland one goes, and allowing access there would not be appropriate for resource protection purposes. Access to the beach area nearest the ocean, however, will be far enough removed from this more inland “core” habitat area, including being mostly separated from central lagoon by about 300 feet of vegetated dune field area. The intent here is not to require a substantially different beach access to be developed and advertised, but rather to acknowledge the historic and current use (notwithstanding the University closure) of the beach area, primarily for surfing access, and to accommodate such use. It is expected that use of the beach will remain extremely limited, in part because the existing access path to the beach is uneven, narrow, and includes a “goat trail” descent/ascent where it meets the beach itself. Such sandy beach area use would be adequately buffered (by distance) from more sensitive portions of the reserve. Improvements to this accessway would only be required if demand and public safety warrants. Modifications to the discussion of ESHA and public access opportunities on the campus site, and the policies and measures to implement such changes to the CLRDP, are found throughout the document, including Sections 3.1.1, 3.7.3, 3.7.5, 4.2.4, 4.4.1, 4.4.2, 5.3, and 5.6 (see Exhibit E).

4. Other CLRDP ESHA Designations

In addition to the issues regarding the beach area, the CLRDP’s ESHA designations for other areas involve the following concerns:

YLR Overall

The CLRDP designates all of YLR as ESHA. As described above, it is clear that YLR has a high abundance and diversity of wildlife use, and its protected status as a University Reserve fosters this. It is clear that the Reserve provides significant habitat. Younger Lagoon itself is an important, relatively undisturbed coastal lagoon. The lagoon is surrounded by upland habitat areas that again, are relatively

⁴⁰ CLRDP EIR 4.4-41



undisturbed, other than the researcher, interpretive, and restoration activity that occurs. The lagoon and surrounding area are also an important piece of a patchwork of remaining habitat areas in the vicinity of Terrace Point, including Moore Creek Preserve and Antonelli Pond, and habitat areas at Wilder Ranch State Park. As discussed below, this heightens the need to provide adequate protection of wildlife values in the upper terrace. Protecting such habitat resources, particularly in the context of the amount of development contemplated on the terrace, is important. Given the biological resources, it is reasonable to conclude that this area (other than the beach area as described above) be called out as ESHA and protected as such, as in proposed by the CLRDP.

All Terrace Wetlands Except One

Other than Wetland W7, the CLRDP designates all of the terrace wetlands as ESHA. As discussed below, the Commission's staff ecologist participated directly in the identification and delineation of wetlands on the site (see also delineation findings below). Given the characteristics and values of the identified wetlands the University has reasonably concluded that all but one should be designated as ESHA. The CLRDP accordingly does not allow development in these areas, and the University has committed through the CLRDP to their long-term protection, enhancement, and management. As discussed below, there are also undelineated wetland resources at data point 59 (see Exhibit G) that may constitute ESHA. The CLRDP provides for future delineation, habitat evaluation, and identification of appropriate buffering at the time of proposed development in this area.

Rock Shelf Area

The CLRDP appropriately designates the rock shelf seaward of the terrace as ESHA. This rock shelf area is not that accessible, and is relatively undisturbed.

5. CLRDP Wetland/ESHA Identification

Current Wetland Delineation

There has been significant controversy over the past several years regarding the extent to which the site supports wetlands that should be delineated as such under the Coastal Act. At least part of this controversy has been based on the extent to which certain wetland indicator species, most notably the obligate wetland species Douglas' baccharis (i.e., a species that occurs almost always in wetlands), are found throughout the site in areas that were not delineated by the University as wetland. In this respect it should be noted that the University contracted for one of the most comprehensive wetland evaluations performed in the coastal zone.

In particular, the University has completed a wetlands delineation for the site in consultation with the Commission's staff ecologist, who participated in both identifying the study methodology and ultimately peer reviewing its findings and conclusions. As a result, approximately 7 acres of wetlands at eight distinct locations on the terrace have been delineated in addition to the 25 acres at Younger Lagoon (see Exhibit E, p. 56). In addition, a wetland area of approximately 400 square feet has been identified at a ninth location that have not been formally delineated yet (data point 59). In consulting with the University and reviewing the wetland delineation for the site, the Commission staff has applied the wetlands definitions found in Coastal Act section 30121 and section 13577(b) of the Commission's



regulations. This is specifically acknowledged on page 13 of Chapter 3 of the CLRDP (Exhibit E, p. 54). However, Terrace Point presents a challenging set of circumstances with respect to the various indicators of hydric soils and vegetation that may typically indicate the presence of wetlands. In particular, the entire site has what are termed “problem soils”. As detailed by the Commission’s ecologist in Exhibit H, the soils at Terrace Point are mollisols, which are problematic for wetland delineations because their coloration is not necessarily an indicator of wetland soils. Further, because soil coloration is not a useful indicator at Terrace Point, wetlands delineations must rely on hydrology and wetland indicator plants. However, the prevalent indicator on this site – rye grass and Douglas’ baccharis – do not correlate with soil moisture. Thus, vegetation is also problematic for delineating wetlands at the site.

Because of the problematic character of the site, the University developed a methodology, in consultation with the Commission’s ecologist, Dr. John Dixon, to evaluate soil moisture on the site. As discussed in a memorandum from Dr. Dixon, soil saturation was an important criteria used to identify wetlands on the site (see Exhibit H). In fact, as discussed in the memo, the methodology was conservative in its assumptions and thus, the overall conclusions of the delineation are themselves conservative, i.e., they err on the side of identifying more wetland not less.

Because of the extensive delineation work completed on the site to date, as well as the rigorous field and laboratory work completed to evaluate a highly problematic site, the wetland delineation adequately identifies wetlands on the site as defined by the Coastal Act. There is one update to the delineation that has recently been discussed with the University, and that is reflected in the most recent version of the CLRDP as addended on March 28. This concerns an area surrounding data point 59 shown in Attachment 5 of the HBG wetland delineation that, upon further evaluation, warrants identification as a wetland area. In response, the University has proposed additional measures to require a complete delineation of the wetland at data point 59 for any development proposed within 150 feet of this point, and identification of a 100-foot buffer at this location, unless biological review indicates that a smaller buffer would be appropriate, prior to development in this area. The general location of this undelineated wetland has also been shown on updated figures of the CLRDP, and described in all relevant text. Otherwise, the location of delineated wetlands, and their associated buffers are shown in Figures 3.11 and 5.2 of the CRLRP, as well as in the Resource Management Plan. In general, buffers of 100 feet or more are proposed for the wetlands, other than Wetland 7, which is a very small wetland with less wetland value and function.

With the additional identification of wetlands at data point 59, the Commission finds that the wetland delineation for the site is adequate to address Coastal Act requirements for wetlands protection. Further, with the proposed wetland buffers, which are generally 100 feet but up to 150 feet for a more significant seasonal pond (wetland 5), and with proposed measures for protecting any additional wetlands that may be identified at the time of proposed development (see below), the CLRDP is consistent with Coastal Act 30233, which requires the protection of wetland resources.

Future Wetland/ESHA Identification

ESHA and wetlands and related habitat resources are dynamic and subject to change over time.



Although the CLRDP identifies what is known today, the maps that correspond with these designations cannot be relied upon as the only indicator for future resource identification, particularly given the possibility that some contemplated development may not occur for many years. Rather, information known at the time of proposed development projects must be considered as well, and any resources that might be newly identified at that time should be protected as directed by the Act. As recently revised, the CLRDP accounts for this concern. In particular, the University has recently modified IM 3.3.2 of the CLRDP to make explicit the requirement to future wetland delineations in the vicinity of any proposed development, in consultation with the Executive and pursuant to the Coastal Act definition of wetlands:

Implementation Measure 3.3.1 -- Pre-development Evaluation of Wetland Conditions. An evaluation of the development area shall be conducted prior to each development project. The evaluation shall include any changed site conditions that could affect wetland values protected by this CLRDP. A wetland evaluation shall be completed in the proposed development area (i.e., the proposed development footprint and a surrounding 200-foot buffer area) in consultation with the Executive Director, using the Coastal Act 30121 wetland definition. To the extent wetland areas are identified during this process that are not already designated Resource Protection on Figure 5.2, the Resource Protection designation shall be applied to the newly identified wetland area and uses and development limited in accordance with that designation (see section 5.2.2, Resource Protection). For any newly identified wetland area, an appropriate buffer shall be established, based upon site-specific conditions in accordance with Implementation Measure 3.2.9.

Thus, to the extent there may be concern that the proposed campus site is dynamic, and that existing wetland resources may expand, or that new wetlands may form, the CLRDP provides protection for these potential resources. In addition, to the extent there may be outstanding concerns that the current delineation of wetlands did not adequately capture all wetlands on the site, this proposed IM allows for future delineation work, evaluation, and public review of the potential impacts to wetland resources.

Related to this point, as discussed elsewhere, it is not the Commission's intention that any drainage areas that may take on wetland characteristics in the future, necessarily be treated as wetlands in the same way as currently delineated wetland areas. Toward this end, the CLRDP provides as follows:

Implementation Measure 7.2.2 – Stormwater System Natural Features Maintenance. The vegetated drainage basins, vegetated filter strips, vegetated swales, and other natural drainage features to be created per the Drainage Concept Plan may exhibit wetland and/or habitat characteristics over time, but their primary function is for water quality filtration and treatment, flow control, and infiltration. As such, maintenance within them on a regular basis is expected and necessary in this respect, and is allowed per this CLRDP (see maintenance parameters in the Drainage Concept Plan).

The CLRDP Drainage Concept Plan (CLRDP Appendix B) then articulates a comprehensive maintenance program. However, it should be observed that the most recent iteration of the DCP describes a program that likely will not require, and in fact does not allow, any sediment removal from the vegetated basins that may be located at the end of a treatment train (as opposed to necessary and



regular maintenance of the sediment fore bays located within development zones). The University's addendum to the CLRDP will require that IM 7.2.2 be update accordingly to reflect this fact. Apart from this concern, though, depending on the characteristics of drainage areas, mitigation measures may be required for design and construction of development adjacent to such areas. In any case, as discussed, such drainage features are designed to be fairly self-functioning, fairly small, and without significant maintenance, other than to an established forebay within which regular maintenance is required. In other words, provided the ponds work as expected, the majority of them will be mostly left alone for many years at a time.

6. Raptor Use of Terrace

As described above, the terrace portion of the site is used by raptors as foraging habitat (see also CLRDP Sections 3.7 and Appendix A for detailed description of species and their use of the site in this respect). About 65 acres of the Campus site, or nearly two-thirds of the Campus, will remain as undeveloped natural habitat area. Although several raptor species (including California fully protected species and California Species of Special Concern) forage there, the Commission's staff ecologist has concluded that the terrace portion of the site should not be considered ESHA. Nevertheless, such foraging habitat is an important coastal resource and the Commission has followed CDFG's policy under CEQA of requiring that at least 0.5 acre of raptor foraging habitat be preserved for every acre of such habitat that is destroyed by development. In this case, nearly two-thirds of the Campus (well over the one-third minimum threshold that would apply using CDFG's methodology) would remain outside of development zones and continue to be available for foraging habitat use. CLRDP measures that commit the University to enhancing the grasslands, wetlands, and wildlife corridors of the terrace for habitat purposes will also increase the productivity of this remaining area for raptor and other species foraging. For these reasons, and based on the suite of modifications necessary overall, the CLRDP as modified can be found consistent with the habitat protection policies of the Coastal Act with respect to raptor use of the terrace.

7. California Red-Legged Frog

As described above, California red-legged frog (CRLF), a federally listed threatened species and a state species of special concern, has been observed along the northernmost portion of the Campus boundary near the railroad tracks. The CLRDP's CRLF assessment concludes as follows:

There is a small transient or resident population (at least 1 individual) of non-reproductive CRLF at the site. The site is not within a designated CRLF Critical Habitat (USFWS 2001a). Potential CRLF habitats occur on the northern portion of the site and include described upland areas, temporary hydration points, a possible movement corridor, and aquatic foraging habitats for non-reproductive frogs. All freshwater habitats at the site are too ephemeral for successful CRLF reproduction or rearing. In addition, both the lower and upper reaches of Younger Lagoon are too saline to provide potential reproductive or other CRLF habitat. The lagoon is a saltwater barrier for CRLF. All potential CRLF habitats...are located in the north and western margins of the upland terrace portion of the site within either designated wetlands or the proposed wildlife corridor, which will not be developed with the proposed project. The purpose



of the proposed wildlife corridor is to maintain both aquatic habitats and vegetation cover for animals dispersing between the YLR, the adjacent agricultural ponds, and Wilder State Park located west of the site and the lower end of the Moore Creek Watershed to the east of the site.⁴¹

With the notable exception of the 3-acre Upper Terrace development zone, the majority of the northern portion of the terrace, and its western connection to YLR, will be maintained as a habitat resource with the CLRDP (see, for example, Figure 5.2 in Exhibit E). In addition, the areas north and south of the Upper Terrace zone will be designated as wildlife corridors, these corridors will be buffered, development adjacent to them designed to avoid wildlife impacts, and the corridors and buffer areas enhanced for continued wildlife movement, including for CRLF and other wildlife. The pond near the railroad tracks within which CRLF were observed at the Campus will also be enhanced in favor of CRLF habitat needs. All of these measures should help to protect any CRLF moving along the northern portion of the site.

That said, USFWS has, in the past, typically recommended a minimum 300-foot width for CRLF corridors, whereas the CLRDP wildlife corridor/buffer on the north of the site ranges from 125 feet to 200 feet (from the northwest corner to the northeast corner of the Upper Terrace development zone). This general guidance was published in the Service's April 2004 proposed critical habitat regulations for CRLF, stating:

In summary, the primary constituent elements for the California red-legged frog consist of three components: (1) Aquatic habitat with a permanent water source with pools (i.e., water bodies) having a minimum depth of 0.5 m (20 in) for breeding and which can maintain water during the entire tadpole rearing season; (2) Upland areas up to 90 m (300 ft) from the water's edge associated with the above aquatic habitat that will provide for shelter, forage, maintenance of the water quality of the aquatic habitat, and dispersal; and (3) Upland barrier-free dispersal habitat that is at least 90 m (300 ft) in width that connect at least two (or more) suitable breeding locations defined by the aquatic habitat above, all within 2 km (1.25 miles) of one another.⁴²

USFWS has recently proposed to revise this guidance, and in the November 3, 2005 proposed revised rule has changed the 300 foot upland habitat area recommendation to 200 feet, and has removed any specific reference to an appropriate width of dispersal habitat.⁴³ With respect the CLRDP, the Service has recently indicated to the University that the Service is concerned with the amount of development in the northern portion of the site (see attached letter). In particular, the Service is concerned that development within 100 meters (328 feet) of the site where CRLF were found (so called "occupied aquatic habitat") may cause take of the species. The Service does express support for and encourages the

⁴¹ From "Final California Red-Legged Frog Assessment for the Proposed University of California Santa Cruz Marine Science Campus," EcoSystems West Consulting Group, July 2002, p. 16.

⁴² (Federal Register Vol. 69, No. 71, April 13, 2004, Proposed Rules, Department of Interior, Fish and Wildlife Service, 50 CFR Part 17.

⁴³ Federal Register, Vol. 70, No. 212, November 3, 2005, Proposed Rules, Department of Interior, Fish and Wildlife Service, 50 CFR Part 17.



University's proposal to maintain a wildlife corridor north of the upper development node, but they do not specifically identify a preferred width for this northern corridor or conclude definitively that the proposed corridor would be sufficiently protective of the CRLF. The Service also supports measures to provide enhanced connectivity across Shaffer Road if and when this area gets redeveloped.

The adequacy of the proposed wildlife corridor for the protection of CRLF raises concerns under sections 30240 and 30250 of the Coastal Act. The EIR documents, and the USFWS conclude, that a location at the northern edge of the site is "occupied aquatic habitat" for CRLF, based on sightings of the frog. Antonelli Pond, which is approximately ¼ mile away from this location, is also a site where CRLF have been historically sighted. Currently, there is a relatively barrier-free connection between these locations that would qualify as potential dispersal habitat. The critical question is how much of this area should be protected as potential habitat for CRLF. Evidence to date suggests CRLF tend to travel in straight lines between suitable locations; that is, they do not necessarily follow riparian corridors or other obvious wetland areas that may connect areas.⁴⁴ Applying this observation to this case, this might mean that CRLF would potentially traverse a wide triangular swath from the "point" location of the occupied aquatic habitat on the Campus, to the various points along Antonelli Pond/Moore Creek complex to the east. Protecting this entire area from development would be the most conservative measure for protecting potential CRLF dispersal habitat. Coupled with identified wetlands and buffers, such a measure would preclude all non-resource development on the Campus above McAlister Road. On the other hand, there have only been a few sightings of CRLF at the northern edge of the campus in recent years, and the USFWS has indicated support for the University's proposed corridor and buffer that is as narrow as 40 meters in some locations. They have observed, though, that development within 100 meters of this location could result in take of the species. In addition, the Service has apparently indicated concern to the University that future bicycle traffic along the current alignment of McAlister Road, which would be converted to a non-automobile public access route in the future, could be a problem for CRLF (hence the University's recommendation at one time to preclude bicycle use from this corridor in the future). The University's biological assessment also concludes that two wetland areas above and below this road corridor are potential CRLF habitat (non-breeding). This location is approximately 700 feet away from the occupied aquatic habitat, suggesting that the Service is concerned about the potential for CRLF over a much larger area.

As summarized above, the previous USFWS guidance on widths for dispersal habitat was that such corridors should be at least 90 meters (c. 300 feet). The recently proposed revised rule, which no longer cites a distance, does not conflict with this guidance, and affirms the importance of dispersal habitat as a primary constituent element of CRLF critical habitat. The Commission has, in fact, applied the 300 foot width dispersal habitat guidance in at least one instance in San Mateo County.⁴⁵ Given the potential significance of the northern portion of the Campus to provide dispersal habitat for the CRLF, the Commission finds that a wildlife corridor with a width of at least 90 meters is necessary to assure

⁴⁴ Bulger et al. *Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands*, Biological Conservation 110 (2003) 85-95..

⁴⁵ See, Lee (A-2-SMC-99-066); and Ailanto, A-1-HMB-022.



protection of the CRLF and to find that the CLRDP is consistent with Coastal Act sections 30240 and 30250 with respect to the protection of sensitive habitat areas. Although there is some indication that perhaps a larger area of the northern portion of the Campus should be protected, this evidence is not compelling enough to preclude all non-resource dependent development in this area. Were such concerns to be significant and warranted, it could argue for further reducing the amount of development in the northern portion of the site, increasing wildlife corridor widths, further decreasing Shaffer Road improvements, and/or some combination of all of these.

However, the Commission also recognizes University concerns that CRLF have not been sited consistently in the upper terrace, and that it may be valuable to collect additional data before finally concluding that no development should occur within the 90-meter dispersal corridor. It may be reasonable to conduct such survey work, as proposed by the University in its most recent addendum, and to address the need appropriate width for a CRLF dispersal corridor in future consultations.

In addition to the 90-meter dispersal corridor, though, protection of the aquatic site is needed. As discussed above, the Service has also indicated more firmly a concern for any development within 100 meters of the documented occupied aquatic habitat site. The Commission finds that prohibiting non-resource dependent development within this area, therefore, is necessary to protect sensitive habitat consistent with the Coastal Act.

In summary, modifications to the CLRDP are necessary to require protection of upland CRLF habitat within 100 meters of the occupied habitat at the northern boundary. This will result in an approximate 25% reduction in the size of the proposed upper development zone. With respect to the dispersal corridor, modifications are needed to require a 90 meter corridor overlay zone along the northern edge of the Campus extending from this occupied habitat to the east and Shafer Road, that would prohibit future development to protect CRLF dispersal habitat. However, this overlay may reduced, removed, or perhaps even be expanded if after evaluation of subsequent annual CRLF surveys and consultations with the Resource agencies in the future, including the Commission, it is concluded that there is substantial evidence to warrant such changes in the overlay. Other measures are needed as well, such as restrictions on timing, barriers to passage around development areas, etc (see Modification 6).

In the event that the required 90-meter corridor continues to be necessary, it will significantly reduce areas with development potential in the upper node of the campus (approximately by half), leaving approximately 70,000 square feet for development.⁴⁶ This would be a significant impact on the University's proposed building program. In recognition of this potential impact, it is reasonable to consider a different locational balance between development and open space/natural areas, that would both protect coastal resources and provide for the desired building program. Therefore, as discussed above, modifications are suggested to provide for the transfer of development potential from the upper terrace to the middle terrace, should the University decide that this would better meet their programmatic needs.

⁴⁶ Table 5.4 anticipates a maximum allowed footprint of 42,000 sf in this area.



8. CLRDP Water Quality Provisions

The governing plan for hydrology and water quality on the Campus is the Drainage Concept Plan (proposed CLRDP Appendix B). As stated in the CLRDP, Chapter 5:

The Drainage Concept Plan recognizes that stormwater and other runoff from the Marine Science Campus ultimately enters important natural resource areas on and adjacent to the site, including Younger Lagoon Reserve, terrace wetlands, and the Monterey Bay National Marine Sanctuary. Stormwater runoff is vital to the maintenance of habitat values in wet areas on Campus, but with development of the site there is also potential for harm caused by increased energy flows, altered flow regimes, and urban pollutants.

Overall, the implementation of the Drainage Concept Plan should be a significant improvement over the existing (at the time of CLRDP certification) drainage system for the Marine Science Campus. First, the plan calls for the correction of various then existing drainage deficiencies on the Marine Science Campus (e.g., the deposition of eroded soil caused by historical erosion problems on the bluffs of Younger Lagoon Reserve adjacent to the NOAA inholding) early in the implementation of this CLRDP.

Second, the plan protects sensitive habitat areas from the effects of future development by using a combination of natural drainage systems and engineered filtration systems. The natural systems, which are referred to as Best Management Practices (or BMPs) will be used in series, where possible, connecting vegetated filter strips to grassy swales that are in turn connected to vegetated stormwater basins. Each of these mechanisms serves to filter and treat stormwater and other runoff so the quality of water leaving the system should be of relatively high quality. In addition to providing a high level of water quality, these natural systems will augment groundwater supplies by providing ample opportunities for groundwater recharge. Natural systems will be supplemented with engineered filtration system BMPs that will be used in parking lot and other vehicular use areas, and in maintenance/laydown areas, to ensure cleansing of runoff prior to it entering the natural systems in series, including ultimately the vegetated stormwater basins. The “in ground” natural and engineered treatment and filtration systems will also be supplemented by source control (such as a Campus-wide stormwater educational program, use of less polluting materials, etc.) and operational BMPs (such as regular maintenance, street sweeping/vacuuming, etc.). Thus, the Drainage Concept Plan represents a state of the art “treatment train” BMP approach that is both sensitive to the site design aesthetic and designed to produce the highest possible quality of site runoff possible.

In general, the CLRDP Drainage Concept Plan (DCP) represents a state of the water quality art effort to address the effects of pollutants in drainage and runoff. In large measure, the Plan succeeds. The University has provided important updates to the general outlines of the plan in its recent addendum (see Exhibit F, p. 7). Discussions with the Commission’s water quality staff have resulted in conclusions that



anticipated flows from the proposed development zones will be able to be handled effectively through a dispersed system of fore bays, and distributed flows to vegetated basins, that will result in minimal alteration of natural areas surrounding development zones. This includes recognition that all components of the treatment trains except for vegetated storm water basins, will be located within development zones, and that these basins will be maintained and enhanced as natural areas consistent with the Resource Management Plan. Thus, there will not be any significant alteration of open space natural areas surrounding development zones to provide water quality protection, except for minor berming that might define a basin. As summarized in the University's proposed modified language on page one of the DCP:

The purpose of this drainage concept plan is to outline parameters for collecting, detaining, filtering, and treating storm water and other runoff at the Marine Science Campus. The approach is a hybrid that combines naturalistic Best-Management-Practice (BMP) features such as vegetated filter strips, vegetated swales, and vegetated storm water basins with conventional BMP features such as engineered storm water treatment systems and oil and grease traps, into a drainage management system that captures, detains, filters, and treats storm water and other runoff. Cleansed runoff that doesn't naturally percolate through the naturalistic BMPs would then be directed to wetland and open space areas of the Campus. During periods of unusually heavy storm activity, storm water basins could hold standing water for as long as 10 days, but since most storm events in the Santa Cruz area occur from October through April, it is expected that basins will be dry by May. BMP features will be vegetated with native perennial grasses and other appropriate plant species, which will be maintained periodically, and when necessary, sediment buildup will be removed from those components of the system located within development zones (and sediment buildup) outside of development zones will be left in place. All maintenance and repair activities, except emergency repairs during storm events, will occur during dry months when strips, swales, and basins are free of standing water.

It is expected that DCP implementation will result in enhanced water quality. That said, there are several issues with the Drainage Concept Plan and by extension the related water quality sections within the body of the CLRDP that affect consistency with the Coastal Act (including Section 5.7, Hydrology and Water Quality, Section 5.2, Land Use, and Section 5.3 Natural Resource Protection). First, the Commission does not anticipate a need for any new storm water apparatus to be located directly in any resource protection areas (i.e. wetlands). There are some pre-existing facilities, such as an existing drainage facility near the NOAA building that drains into Younger Lagoon, that could be repaired under the CLRDP. However, language in Chapter 5 that would allow new structures, must be deleted (see Exhibit E, p. 6).

Second, to be effective, it will be important that any filter strips and swales include adequate permeability. Therefore, the DCP text should be modified to indicate that such features shall include adequate permeability in their soil beds, including through adjusting the soil bed composition, in order to maximize infiltration capabilities (Modification 5a).



Third, the University has proposed a comprehensive water quality monitoring program that includes an extensive three year research phase for every new treatment train constructed. But, the DCP allows monitoring for pollutants and other water to be ended if they do not present in two storm events following the initial research phase. Subsequently, more comprehensive monitoring would occur only every five years. This may be okay, depending on the circumstances of the “treatment train” being evaluated. However, it may not be adequate to address circumstances where significant new development occurs that may involve directing drainage to an existing treatment train or other drainage facility. In addition, sampling for just two storm events, albeit one would be a first flush, may not provide an adequately robust sampling time period to warrant dropping out a pollutant. Thus, modifications are suggested that would clarify that a pollutants may be dropped from a monitoring regime for a treatment train if they do not present for two consecutive storm seasons, which may include monitoring in year three of the research monitoring phase; and that research monitoring must begin again with any significant new inputs to the treatment train. With such a modification in the monitoring program, the University’s proposed five year comprehensive check makes sense (Modification 5c).

Finally, the CLRDP anticipates a number of specific drainage projects to address current drainage and water quality issues. However, it is unclear to what extent some of the existing facilities that are proposed for enhancement are constructed consistent with original expectations for required water quality measures. Thus, it is necessary to modify the DCP and the CRLDP generally to assure that such projects meet both original and current expectations with respect to maximizing protection of coastal water quality (Modification 5b). There is no doubt that impacts to existing drainage, hydrology, and water quality will be significant without a comprehensive water quality program. Although mostly adequate, the suggested modifications are necessary to assure protection of water quality consistent with the Coastal Act.

9. Relationship of Younger Lagoon Reserve Management Plan to CLRDP

A specific YLR Management Plan (YLRMP) is not part of the proposed CLRDP. While the RMP does contain fairly detailed provisions for the protection, enhancement, restoration, and management of the terrace resources (outside of development zones), it does not include complementary provisions for YLR.⁴⁷ In some ways this makes the RMP unbalanced inasmuch as the RMP is mostly silent with respect to protection and enhancement of YLR, an area that could be considered the primary habitat area of the Campus.

With respect to the relationship of the YLRMP to the CLRDP, the YLRMP has no particular CLRDP or other Coastal Act status. The YLRMP has not been submitted, reviewed, analyzed, or approved in any way by the Commission. It is the Commission’s understanding that NRS is currently updating the YLRMP, and it is possible that this document may be proposed as an amendment to the CLRDP in the future. At this time, however, it is not a part of the CLRDP and cannot be used as the CLRDP standard of review for any development proposed in or adjacent to YLR.

⁴⁷ Notwithstanding this RMP omission, there do remain, in both the case of YLR and terrace resources, substantial resource protection direction in CLRDP Chapter 5 and elsewhere.



With respect to the lack of RMP provisions specific to YLR, this is not a Coastal Act consistency flaw per se: the CLRDP protects YLR regardless of whether the YLRMP is part of it or not. While it would be preferable if the CLRDP included a similar level of detail with respect to YLR management as the CLRDP provides through the RMP for terrace habitat management, it is not absolutely required for Coastal Act consistency. Rather, it means that YLR, other than access to the sandy beach portion of it (see above), will be protected as a Resource Protection Area, and will not be the subject of any active resource management within it per the CLRDP RMP. This means that the University may need to approach YLR management (including funding for enhancement and other measures emanating from it) outside of the CLRDP development project and resource management framework. Although this somewhat artificially separates YLR from the Campus at one level, particularly with respect to potential funding sources for YLR enhancement and management measures, this is how the University has chosen to frame this relationship and the Commission sees no compelling reason to undo that. The Commission does note, however, that it would make sense for an updated YLRMP to be either amended into the CLRDP in whole or in part (e.g., encapsulated in its own RMP section), including similar levels of detail for measures to be implemented over time to protect, enhance, restore, and manage its resources through the CLRDP. Such integration would appear to better serve YLR resources over the long run, including the manner in which they relate to terrace habitats, and provide a context for the funding of such efforts. The Commission further notes, however, that any such proposed CLRDP amendment would need to be developed so that it was consistent with, and integrated seamlessly into, the certified CLRDP – particularly with respect to beach access.

10. Development Adjacent to YLR

The CLRDP building program allows for substantial development within the three development nodes. With respect to YLR, the Middle and Lower Terrace zones are immediately adjacent to the Reserve. The CLRDP includes significant siting and design criteria for avoiding conflicts with habitat resources of the Reserve, including more specific criteria at the Reserve/terrace interface. Figure 5.4 identifies several sub areas for potential development adjacent to YLR. This Figure also sets the maximum stories and heights allowed in these sub areas. For example, in sub area 7, immediately adjacent to the lagoon, no buildings are allowed, and the maximum allowed height for other development, such as outdoor research tanks, is 12 feet. The CLRDP also includes, though, policies and implementation measures to assure that new development does not result in light, noise, or movement associated with development being visible from within the lagoon, so as to minimize disturbance of wildlife. Thus, protective Implementation Measures incorporated into the CLRDP include:

Implementation Measure 3.4.3, Noise Intrusion into YLR. *YLR shall not be exposed to noise generated by human activity on the terrace portion of the Marine Science Campus in excess of 60 dBA CNEL, as measured at the boundary of the YLR. For the purposes of this measure, “dBA CNEL” means a 24-hour energy equivalent level derived from a variety of single noise events, with weighting factors of 5 and 10 dBA applied to the evening (7pm to 10pm) and nighttime (10pm to 7am) periods, respectively, to allow for the greater sensitivity to noise during these hours.*



Implementation Measure 3.5.5 – Siting of Windbreak/Screening Trees. *The windbreak/screening trees required by this CLRDP in connection with new development in the terrace portion of the site (see for example Section 6.5 and Figure 6.7) shall be sited to maximize their ability to screen terrace development as seen from Younger Lagoon Reserve.*

Implementation Measure 3.5.7 – Movement Not Visible From YLR. *Movement associated with development (including within outdoor activity/research areas and buildings, and including all windows in buildings) shall not be visible from within YLR.*

Implementation Measure 4.3.1 – Visual Intrusion into YLR. *Development adjacent to YLR shall be sited and designed so that activity and direct light will not be visible from within YLR.*

These measures are particularly critical in the Middle Terrace development zone in the area overlooking the Lagoon (between McAllister Way the CDFG facility and YLR) that is currently occupied by the unpermitted storage yard and greenhouses (see photos in Exhibit A). As the Commission indicated in its Issue Identification comments regarding this area in December 2000:

The Commission notes that each alternative proposes a large “storage-maintenance lay-down yard” atop a western bluff overlooking Younger Lagoon. This area does not appear to be appropriate for the mass, scale and intensity of use shown in each of the proposed alternatives. In fact, this is an area on the site that might best be considered for exclusive habitat protection purposes, including the potential for restoration as upland habitat. Furthermore, it is unclear from the plans what, if any, buffers are proposed here. Appropriate buffers between Younger Lagoon and any proposed development are critical for its continued protection, and the forthcoming draft [C]LRDP and CEQA document should address this.

It would be preferable biologically if this area were left undeveloped and restored as functional habitat and buffer, as identified as a potential outcome for this area in the Commission’s comment above. However, to do so would remove about 3 acres of developable area from the Middle Terrace development zone, and further confine the University in terms of the level of Campus buildout. It is possible that this area would have been treated differently and evaluated for its habitat potential (and potentially identified as habitat and/or buffer) had the greenhouses and storage yard not been present, but the fact that there were present precluded any such analysis in that respect. As such, its habitat potential is somewhat unknown. That said, it is clear that this area is directly adjacent and overlooking the Lagoon, and is lacking a berm as is present in the Lower Terrace area. Thus, it presents the potential for different treatment, vis-à-vis protection and buffering of the lagoon than do further removed areas east of McAllister Way.

In a larger sense the entire area west of McAllister Road in the Middle Terrace zone, an area that includes the CDFG and related Avian facility, would not be the preferred alternative for development on



the Campus had the Campus site been at its current size and configuration when these developments were proposed. On the contrary, had the University owned all of the Campus site prior to development being propped in this area west of McAllister Way, it would probably be the least preferable portion of the terrace within the current Campus boundaries for development (except for delineated wetland areas and CRLF habitat resources). But, the University only owned the area west of McAllister Way when that development was proposed, and thus options for siting additional marine research development were extremely limited. That is no longer the case, but the fact that the CDFG facility exists in this area must now be taken into account.⁴⁸ A similar situation exists for the Lower Terrace, where the initial Long Marine Lab facilities were constructed adjacent to the YLR on the only property that the University owned in the area at that time.

As opposed to restoring this entire upper area west of McAllister to wetland upland and buffer, the Commission chooses to strike a balance between the competing priorities of habitat restoration/protection and marine research development, and to allow some additional limited marine research development in this area to complement the CDFG and marine lab facilities. Such development, however, must be low intensity and clustered to the east, must be limited in height in the area nearest the delineated Lagoon and associated stream/riparian resource of its eastern arm. Commission staff has previously focused on a buffer area of approximately 300 feet within which increased protection of the lagoon was needed. However, in identifying this lower intensity area west of McAllister, the Commission further finds that the specific measures included in the CLRDP for YLR will provide adequate protection and buffering of lagoon resources. It is noted that the area of the 12-foot height limit (sub area 7) is less than 300 feet from YLR wet resources in portions of areas adjacent to the CDFG facility. This is to accommodate the proposed developed core of the Campus and is part of the balance being struck by the Commission for this area.

With respect to the Lower Terrace area, although the 12-foot berm effectively buffers YLR in many respects, new development should also be located away from YLR as much as possible. Figure 5.4 clusters development within the core of the zone (see Exhibit E). Beyond siting, the proposed implementation measures cited above, particularly those concerning no visibility of movement or light within the lagoon, will ensure that new development close to YLR will not result in impacts to YLR resources (notwithstanding the berm). This approach is consistent with the Commission's recent practice with respect to development at LML that has been required to demonstrate that such movement areas will not be visible from Reserve habitat receptors.⁴⁹ Such a standard does not mean that buildings themselves cannot be visible from within the Reserve, rather that windows and other movement areas associated with development cannot be visible. Inanimate portions of buildings (e.g., roofs) could be visible, provided they met all other CLRDP criteria.

11. Development Adjacent to Other Habitats

⁴⁸ The temporary greenhouses (that were supposed to have been removed by now), the unpermitted storage yard, and the temporary office trailers and parking/activity area associated with the Avian facility do not need to be taken into account in the same way as CDFG's permanent major facility.

⁴⁹ Most recently with the Center for Ocean Health project.



The same CLRDP issue applicable to YLR and its resources also applies to the terrace habitats where they intersect development zones. In both Middle Terrace and Lower Terrace cases, development intensity nearest the terrace wetlands is best kept low to protect these resources. For that portion of the Lower Terrace development zone located east of the Marine Discovery Center and seaward of Wetland W5 (see, for example, Figures 5.2 and 7.2), development is not appropriate at all.⁵⁰ Residential development would be confined to the area nearest the Campus entrance between the realigned Campus Road and Wetland W4 and its buffer area (i.e., in the location shown on Figure 7.2). This location clusters residential development as close to urban and residential Santa Cruz as possible (as near to De Anza MHP within the zone as possible), thus reserving areas within the Campus core and nearer the ocean for relatively higher priority development, and avoiding residential development in the Upper Terrace where residential noise, lights, and bustle of activity would negatively impact the wildlife corridors along the north and south boundaries of the zone.

Finally, the uppermost portion of the Middle Terrace zone north of CDFG is within a particularly sensitive portion of the zone. In this area, the existing Campus access road is to be reconfigured to the south (see Figures 5.4 and 7.2), the old campus access road is to be abandoned, and this area is to be restored with a trail and habitat enhancements (between CDFG and the intersection of Delaware Avenue and Shaffer Road), including enhanced wildlife connectivity from and to YLR. As such, this area on the northern margin of the Middle Terrace zone is a sensitive location from a habitat perspective (as well as in relation to public views when entering the site and along the public trails – see also public viewshed finding). It could reasonably be argued that the area north of CDFG should be removed from the development zone altogether and designated a habitat area (i.e., resource protection buffer, wildlife corridor, open space, etc.), and/or that the road and path area be completely restored as functioning habitat/buffer within which trail activity would be precluded. In this case, however, the Commission finds that it is better to strike a balance that recognizes that the other modifications described will lessen CLRDP building program development intensity in various ways, including through an increased dispersal corridor for CRLF to the north, and that this area may be kept in the development zone to provide the University with development siting flexibility. Similarly, allowing for the path use allows for maximum public access, including potential future connections to off site areas.

12. YLR and Wetland Buffers Between Middle and Lower Terraces

The University's most recent addendum recognizes that areas designated as "Resource Protection Buffer" between the Middle and Lower Terrace development zones along McAllister Way have previously been truncated. This seems to emanate from the presence of McAllister Way, and the fact that an informal parking area has sprung up in this area on the west side of McAllister Way.

In terms of the road, the existing road has long bisected this area. The new Campus access road would

⁵⁰ This area is currently undeveloped grassland that is located along the shoreline edge of the Campus between two designated Resource Protection Buffers and is part of the undeveloped shoreline portion of the Campus extending between the Discovery Center and De Anza MHP. As the Commission previously found regarding this area in 1999: "It is unlikely that additional development should or could take place seaward of Wetland [W5] as lands not committed to the LML campus and the Discovery Center are constrained by the presence of the wetland and the coastal bluff." See also public viewshed and coastal hazard findings.



likewise be located along this same alignment and in the same configuration. Given that alternative road alignments through to the Lower Terrace would lead to additional habitat and other resource impacts if the road were to be moved to the east, it is appropriate to maintain this road footprint and keep this road area in the Resource Buffer designation (that allows for repair and maintenance of existing facilities).

In terms of the areas on either side of the road, the recently modified CLRDP indicates that the areas on either side of the road in this area are located inside of an area within 100 feet of both Wetland W5 and YLR, and within 150 feet of W5. The existing parking area is also no longer shown in the CLRDP, and will be removed with certification of the CLRDP. The 100-foot YLR buffer in this area is minimal, and its utility depends on the presence of the earthen berm. Similarly, this area is within 300 feet of Younger Lagoon itself, where 300 feet has been previously deemed an appropriate setback from this wetland by the Commission's staff ecologist, absent other mitigating measures. The Commission's ecologist (and the CLRDP) also determined that 150 feet was the appropriate setback from Wetland W5.

13. Wildlife Corridors

The CLRDP makes a distinction between wildlife corridors and their buffers, going so far as to delineate the area that is designated "Wildlife Corridor" at 20 feet in width, and then adding variable width buffers to that and designating these variable widths as "Resource Protection Buffer" (see, for example, Figure 5.2). Although the University has made a distinction between "Wildlife Corridor" and "Buffer," it is the Commission staff ecologist's opinion that they are functionally equivalent and should be treated as a single unit for management purposes. Most important, the dispersal corridor for CRLF needs to be at least 90 meters wide, until such time as evidence may show otherwise, and designated as wildlife corridor (see above).

Given existing wildlife resource conditions, the University appropriately is proposing to formally establish a "wildlife corridor" designation in the CLRDP. Minor modifications are needed, though, to correctly characterize the biological evidence that the northern portion of the site appears to have been used as a movement corridor for wildlife for some time. For example, CRLF have been observed on the site near the railroad tracks. According to the University's biological reports, the pond there (and wet areas elsewhere on the site) do not contain reproductive habitat, only transient habitat, for CRLF (e.g., EcoSystems West, 2002)). As a result, those CRLF had to have traveled to the pond from off-site along some corridor. Known CRLF habitats exist both east and west of the site, and CRLF are known to move in straight lines between such locations (such as along the railroad track berm). EcoSystems West concluded:

CRLF are most likely to move onto or across the site along the northern margin of the property. It is reasonably likely that the temporary aquatic environment along the northern margin provides either foraging or dispersal habitat for a limited number of frogs.⁵¹

Thus, by definition, a wildlife corridor has existed on the northern terrace at times, at the least for CRLF. More broadly, the site has been well studied during the course of previous development

⁵¹ EcoSystems West, August, 2002, 23.



proposals, and these studies confirm that the northern portion of the site, at the least, is part of a wildlife movement area between the Moore Creek/Antonelli Pond system to the east and Wilder Creek and Lagoon to the west. EcoSystems West's CRLF reports (July and August 2002) indicate that "movement onto or across the site is most likely to occur at or along the northern margin of the property," and indicates that the purpose of the proposed designated wildlife corridor is to "**maintain** both aquatic habitats and vegetative cover for animals dispersing between the YLR, the adjacent agricultural ponds, and Wilder State Park located west of the site and the lower end of the Moore Creek Watershed to the east of the site" (emphasis added). Previous biologic reports have similarly concluded (including Mori (1997) and the Habitat Restoration Group (1993 and 1994)) that the northern portion of the site is an important movement corridor, perhaps summed up best as follows:

The Terrace Point site forms an important undeveloped connection between the riparian and wetland habitats of the YLNR and Antonelli Pond, with Antonelli Pond in turn providing a critical habitat link to inland areas in the Moore Creek watershed.... Field observations have repeatedly demonstrated that wildlife species using the YLNR and Antonelli Pond also utilize the Terrace Point site, with movement between sites occurring regularly for some species groups (e.g., amphibians, raptors, and waterbirds).⁵²

A 1993 Biotic Assessment for the Long Marine Lab also concluded that "[r]uderal habitat also connects Antonelli Pond and the [Younger Lagoon] Reserve, providing a movement corridor for wide-ranging wildlife and minimizing the adverse effects of habitat fragmentation."⁵³ In light of this evidence, slight modification to the descriptive text of the CLRDP is necessary (see Modification to text in Exhibit E, p. 19).

Finally, given the evidence of wildlife usage, including by CRLF, as well as the significant wetland resources, there is some support for avoiding any development in the upper terrace. However, the CLRDP partially offsets its proposed building program in the upper node by enhancing wildlife corridor and buffer areas in the northern portion of the site, including that surrounding the Upper Terrace development zone and, to the extent that development may occur in the upper terrace, across Shaffer Road to promote wildlife movement. The plan also includes measures to promote CRLF habitat in the pool nearest the railroad tracks specifically. It may also turn out that transferring development potential from the upper node to the middle node is the better course of action in order to both provide for the University's development program, and to protect habitat/wildlife values in the upper terrace. As discussed previously, Modification 4 is recommended above to provide for such transfer of development potential. If exercised by the University, this would result in the extinguishment of all development potential in the upper terrace.

14. Shaffer Road

Shaffer Road adjacent to the Campus is a narrow paved road section that ends at the railroad track right-of-way at the northwestern corner of the Campus. On the opposite side of the railroad tracks, Shaffer

⁵² Biotic Assessment, Terrace Point Specific Plan, The Habitat Restoration Group, March 1994, pp. 10-11.

⁵³ Habitat Restoration Group, 1993, p. 31



Road begins again and extends a short ways to Highway One. In other words, Shaffer Road is bisected by the railroad right-of-way and the raised tracks located in it. Shaffer Road is also outside of the Campus boundaries and not explicitly covered by the CLRDP. The road remains part of the aforementioned area of deferred LCP certification that extends to Antonelli Pond to the east. Per the CLRDP, improvements to Shaffer Road would be limited to intersection improvements at the Campus entrance (at the Shaffer Road/Delaware Avenue Intersection) in order to improve its function and safety, to improvements to that portion of it extending from the intersection to the entrance to the Upper Terrace development zone, and to improvements to facilitate wildlife movements across Shaffer Road (see CLRDP Section 5.5).

The ultimate disposition of that portion of Shaffer Road north of the entrance to the Upper Terrace development zone has raised some issues during the preparation of the CLRDP. There are three related primary issues: (1) whether Shaffer Road should ultimately be connected from one side of the railroad right-of-way to the other; (2) the extent of modifications necessary to Shaffer Road to accommodate wildlife movement across the road area; and (3) ensuring that habitat corridors on one side of Shaffer line up with habitat corridors on the other side of Shaffer. On the latter, the Commission is aware that the owner of the other portion of deferred certification located between Shaffer and Antonelli Pond has long been pursuing a residential development project. Although it is not clear at this time what, if any, improvements to Shaffer Road may be required for such a project, or even whether such a project could be found consistent with the Coastal Act, preliminary biologic review indicates that this adjacent property contains wetland and wildlife movement and habitat areas that roughly match up to similar areas on the Campus. The CLRDP also contains provisions to ensure that this is the case (see CLRDP Policy 5.1 et seq).

With respect to the extent of improvements and the potential connection of the road across the railroad tracks, as discussed earlier, the City of Santa Cruz has indicated that it would prefer that Shaffer Road were connected from one side of the railroad right-of-way to the other. Because Shaffer Road is outside of the Campus boundaries, such issues can only be partially addressed in the CLRDP, and the City has indicated that it may pursue an LCP amendment to certify at least Shaffer Road.

As the University and CLRDP indicate, Campus development does not require Shaffer Road to be extended north across the railroad tracks. The Commission notes that Shaffer Road appears to be used for wildlife traveling from the upper portion of the Campus site to Antonelli Pond/Moore Creek (see also previous finding). Given that Campus development will funnel such wildlife movement to either side of the Upper Terrace zone, and given that increased use of Shaffer (for access to the Upper Terrace) will make it more difficult for wildlife to safely traverse the road, it is appropriate that the CLRDP include provisions to limit Shaffer Road improvements to that necessary to serve Campus development and to include in such improvements offsetting wildlife movement improvements.

Inherent in improvements to Shaffer Road per the CLRDP is to include adequate habitat corridor connectivity enhancements. The CLRDP also references the potential for the abandonment of the paved roadway section between the Upper Terrace entrance and the railroad track and reconfiguration of this road area as a habitat corridor (i.e., removing pavement and grading/vegetating for habitat movement).



On the latter, the Commission notes that a future CDP and/or LCP amendment package will need to address this area as it is outside of the Campus boundaries. That said, the Commission further notes that based on the available information at this time, this portion of Shaffer Road appears best suited to be left disconnected from the road section inland of the railroad tracks, and reconfigured and enhanced for habitat corridor functions. Reasons supporting this at this time include that: the habitat corridor here is an important piece of a patchwork of remaining habitat areas in the vicinity of the Campus (including Moore Creek Preserve and Antonelli Pond, and habitat areas at Wilder Ranch State Park), including for CRLF, and protecting and enhancing it, particularly in the context of the amount of Campus development contemplated through the CLRDP, is important; this area, if provided for habitat movement and not road purposes, will better allow the Campus to function as an important transition area between urban and rural uses (as previously discussed in the land use findings) as it helps to provide a clearer physical separation from urban uses (as opposed to an expanded and connected road that would serve to “connect” the Campus more fully to the urban portion, and bring more related urban activity to the Campus-urban interface, as well as to the inland portion of Shaffer Road where similar boundary issues exist); the County is in negotiations to acquire the railroad corridor and install a pedestrian recreational trail within it, and such a trail, particularly where it transitions to the rural north coast, is enhanced to the degree it is not bisected by road crossings; new road crossings of railroad tracks are typically opposed by railroad operators due to the increased potential for conflicts between rail and road users; road crossings of raised rail sections often become an attractive nuisance for persons attempting to use the crossing as a ramp to launch their vehicles airborne (leading to increased conflicts, as well as public safety concerns overall, and increased potential for wildlife impacts); and it does not appear necessary to serve development.

15. Other Habitat Issues

As detailed above, Terrace Point and YLR are rich in sensitive habitat, wetlands, and other biological resources. It is worth observing that Figure 3.11 in Chapter 3, while titled “Biotic Resources,” does not show all of the significant biotic resources on the site. Rather, it primarily illustrates the location of delineated wetlands and their buffers, and the ESHAs that have been identified in the marine intertidal and YLR. It does not illustrate the more general wildlife values in the northern terrace or that significant raptor foraging areas throughout the site that are discussed above. Thus, the title of the figure is not quite correct. However, given that the text of the CLRDP, as well as the supporting environmental documentation for the plan, does discuss these biotic resources in some detail, it is not necessary to modify Figure 3.11.

Certain modifications are also suggested that would achieve the following: ensuring that allowed uses within areas in which ESHAs occur, generally designated as “Resource Protection,” are only those dependent on and compatible with resource protection (e.g., modification to Section 5.2.2 “Resource Protection”); and ensuring that wildlife is not adversely impacted, even when outside a defined ESHA (e.g., modification to Policy 4.3).

16. Resource Management Plan

One of the more significant resource protection features of the proposed CRLDP is the proposed



Management Plan (RMP) (see proposed CLRDP Appendix A). This plan provides a detailed description of existing Campus habitat resources, and measures to enhance and manage them over time. The CLRDP envisions the restoration and protection of the natural areas on the campus, pursuant to the RMP, but guided by a Scientific Advisory Committee:

Implementation Measure 3.2.10. – Natural Areas Habitat Management. Within six (6) months of the date this CLRDP becomes effective, the University in consultation with the Executive Director of the California Coastal Commission shall convene a scientific advisory committee (SAC) to oversee the restoration and management of natural areas (i.e., all areas outside defined development zones, except for Younger Lagoon Reserve) on the Marine Science Campus (see Appendix A). The SAC shall be responsible for developing Specific Resource Plans as described in Appendix A, and shall complete its work on the Specific Resource Plan for Phase I restoration efforts within four (4) months of convening. The content of Specific Resource Plans shall be consistent with the performance standards set forth in Appendix A, which may be adapted periodically based on findings from ongoing restoration work. The University shall file a Notice of Impending Development for Phase I work within one (1) year of the date this CLRDP becomes effective. The timing for subsequent phases shall insure completion of the entire natural areas restoration within 20 years of beginning Phase 1 work as specified in Appendix A.

Although the RMP sets forth a general framework of parameters to guide the restoration of natural areas, it is also anticipated by this IM that the resource management will be adaptive over time, guided by the SAC. This is appropriate given the state of restoration knowledge for natural areas such as are found at Terrace Point. The University also has recently submitted a revised RMP to reflect the idea of SAC oversight and adaptive management with respect to management goals and performance measures. In addition, the University's recent addendum to the CLRDP makes the following clarifications to the overarching purposes of the RMP (see Exhibit F) that will be incorporated into the final RMP:

- a. All areas located outside of defined Campus development zones, except for the paved section of roads connecting development zones, shall be restored, enhanced, and managed as high quality open space and natural habitat area.*
- b. All natural open space area restoration, enhancement, and management shall be guided by a Scientific Advisory Committee (SAC) that is made up of independent professionals and academicians experienced in and knowledgeable about the habitats of the Campus natural open space area that are to be restored, enhanced, and managed (e.g., native grassland, coastal scrub, wetlands, etc.). The SAC shall meet on a regular basis and provide overall direction for restoration, enhancement, and management.*
- c. All restoration, enhancement, and management of the Campus' natural open space area shall be provided for by Resource Plans developed according to the criteria in the Resource Management Plan and current professional standards for such plans.*



- d. *All Campus natural open space areas shall be restored and enhanced within 20 years following the date of Coastal Commission certification of the CLRDP, with interim benchmarks that at least one-third of this area be restored and enhanced within 7 years, and at least two-thirds of this area be restored and enhanced within 14 years. All such areas restored and enhanced shall be managed as high quality open space and natural habitat area in perpetuity consistent with Policy 3.14.*
- e. *The RMP goals and performance standards may be adjusted as directed by the SAC in coordination with the Executive Director to ensure the success of Campus restoration, enhancement, and management efforts. As such, the RMP goals and performance standards are not static requirements per se so much as initial guidelines that may be refined during the SAC process so long as such refinement is consistent with current professional restoration, enhancement, and management goals and standards, and with achieving high quality open space and natural habitat area in perpetuity consistent with Policy 3.14. RMP adjustments in this respect may require a CLRDP amendment, unless the Executive Director determines that an amendment is not necessary.*

These commitments will result in the restoration, protection, and maintenance of all natural areas outside of development zones, in perpetuity.

D. ESHA, Wetlands, and Associated Habitat Resources Conclusion

Overall, the CLRDP takes seriously the Coastal Act mandate to protect ESHA, wetlands, and associated habitat resources. Resources are avoided and buffered, and siting and design criteria are applied to ensure habitat resources are not adversely affected. In addition, water quality should be enhanced through implementation of the DCP. Nevertheless, there are a series of CLRDP modifications that are necessary for the Commission to be able to find the proposed CLRDP consistent with the Coastal Act policies cited above, as well as Section 30250 concerning coastal resources generally, with respect to such habitat resources (see suggested modifications, including those in Exhibit E). Most important, the dispersal corridor for CRLF at the northern boundary of the site needs to be expanded to 90 meters in width; and a 100 meter buffer for existing CRLF aquatic habitat needs to be provided. In conclusion, if so modified in all of the ways outlined here according to the cited modification texts, then the CLRDP as modified, is certified as being consistent with the ESHA, wetlands, and associated habitat resource provisions of the Coastal Act.

3. Public Access and Recreation

This section details public access and recreation issues. Public access to the sandy beach area of YLR vis-à-vis ESHA concerns is also discussed in the previous section.

A. Applicable Policies

Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access



and recreation. In particular:

Section 30210. *In carrying out the requirement of Section 4 of Article X of the California Constitution, 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 overuse.*

Section 30211. *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212(a). *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. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

Section 30212.5. *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30213. *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...*

Section 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:*

- (1) Topographic and geologic site characteristics.*
- (2) The capacity of the site to sustain use and at what level of intensity.*
- (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 uses.*
- (4) The need to provide for the management of access areas so as to protect the privacy of*



adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

Section 30220. *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Section 30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Section 30222.5. *Ocean front land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.*

Section 30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Coastal Act Section 30240(b), previously cited, also protects parks and recreation areas. Section 30240(b) states, in applicable part:

Section 30240(b). *Development in areas adjacent to ... parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those ... recreation areas.*

B. Applicable Provisions of Proposed CLRDP⁵⁴

In addition to developed University programs that provide a public access function (such as the Marine Discovery Center), the CLRDP provides for general public access to the site and surrounding area during daylight hours. Such access is primarily by means of a public path system that loops and connects around the site, and a series of overlook areas built along the pathways that provide areas for viewing coastal resources (like Younger Lagoon and the Pacific Ocean). Access areas, including paths, are designated as either controlled (where only supervised access is allowed) or public (where supervision is not required). Controlled access areas include all areas designated natural habitat resource areas (as described previously) as well as almost all Campus development areas located west of McAllister Way. The CLRDP also provides for designated public access-only parking areas (a total of 30 spaces, 15 of which would be metered) and designated dual use parking areas (for general access and Discovery Center access – a total of 40 spaces), and unrestricted parking within Campus parking areas on weekends and holidays.

C. Coastal Act Consistency Analysis

1. Public Access Historic Context

⁵⁴ See primarily CLRDP Sections 5.5 and 5.6, including Figure 5.5, and Chapters 6 and 9.



Historically, public access to and along the Campus site, including access to Younger Lagoon and its sandy beach, occurred on an informal basis. Prior to and during the early years of University partial site ownership in the mid 1970s, there were no overt restrictions on public access. The public generally accessed the site from the Shaffer Road/Delaware Avenue intersection and from the railroad tracks before making their way along well-worn paths and farm roads on the site to the bluffs and to the beach. The Younger Lagoon beach area in particular was quite popular, particularly with UCSC students, at least partially due to the fact that it was the first remote-type beach as one ventured north from urbanized Santa Cruz. Similarly, the surf break offshore was popular, particularly during larger swells. Paths to the beach are evident in time series in all air photos going back to before the Coastal Act (see Exhibit B).

In 1981, the Coastal Commission allowed the University to limit general public access to Younger Lagoon and its beach in favor of University-controlled access, including docent-led access to the overlook behind the main LML buildings. This decision was partially due to the nature of the resources present there, partially because the University indicated that it would be pursuing research studies within this area that would provide information directly relevant to the Commission for making coastal development decisions elsewhere, partially because the University committed to developing additional Lagoon overlooks, and partially because the Commission would continue to re-evaluate the general access closure on a regular basis to ensure that the access closure and associated trade-offs were justified in light of the requirements of Coastal Act to maximize public access to and along the shoreline.

Re-evaluation of the appropriateness of a public access closure, though, did not occur until twenty years later when in 2001 the Commission reexamined the closure. Notwithstanding the closure, and as noted by the Commission at that time, some unsupervised access to the beach and the surf break offshore had continued during the course of the time that the area was “closed” (again, see Exhibit B for air photos showing worn trails to beach between 1981 and present). At the 2001 reevaluation, the Commission agreed to allow the University to temporarily extend the closure for another three years (subject to Commission reevaluation at the end of that time, and subject to specific criteria for the reevaluation) provided additional overlooks were developed to offset some of the impacts on public access due to such a closure. In subsequent discussions with the University it was understood that the next reevaluation would take place in the context of the CLRDP submittal and review so that the question of public access and Younger Lagoon could be integrated into the CLRDP. The CLRDP submittal does not propose to open public access to the beach. Nor does it provide specific reevaluation of the issues identified in the Commission’s 2001 action. Commission staff has previously indicated to the University that a formal submittal pursuant to conditions of the base permit⁵⁵ is needed to formally close the file on the permit oversight responsibilities of the Commission, and incorporate future access management into the CLRDP implementation process. The University has not submitted the reevaluation justification (beyond the CLRDP submittal itself). In addition, the required opening of three access overlooks had not occurred. For practical purposes, though, this CLRDP review and action accomplishes the reevaluation contemplated by the Commission.

⁵⁵ Coastal development permit P-1859 and 3-83-076 as amended.



In a separate, but related action, in 1999, the Coastal Commission approved an interim public access plan for the terrace portion of the Campus (the Interim Access Plan for the Marine Science Campus). This interim plan was a response to the facts that Younger Lagoon beach was officially closed and the University wished to maintain such closure, the University had acquired the 57 acres of terrace land between the original LML holding and Shaffer Road/De Anza MHP, and that University facility expansion was further limiting general public access. The “interim” nature of the plan was premised on the University developing this CLRDP to provide for permanent access provisions. This previous interim plan designated free public access trails through the terrace portion of the site and to designated overlook areas (for viewing Younger Lagoon Reserve and the Pacific Ocean), ensured free public parking, and confirmed the significance of the docent-led tours by the Seymour Marine Discovery Center as important public access elements. As articulated in this previous access plan, the majority of the terrace portion of the site is open to free public access during daylight hours on designated trails, including nearly 1,000 feet of bluff-top trail at the southern edge of the site. As provided for by the Commission’s approval of Interim Access Plan, the provisions of the Interim Plan are superseded by the CLRDP which, among other things, is meant to embody the principles and concepts of the interim plan.

2. Public Access and Recreation Issues

The CLRDP generally provides for clear access and recreation parameters. The University has clearly embraced the fact that this is a public University Campus and the coastal resources of the Campus should be available to the public to the maximum degree feasible. Thus, the proposed CLRDP mostly protects and provides for public recreation and access as directed by the Coastal Act. This includes significant public trail and overlook enhancements that the University has committed to (see, for example, Chapter 9) and that will provide for an enjoyable and comprehensive public access trail and overlook experience to the terrace portion of the site. Nevertheless, there are a series of Coastal Act consistency issues with the CLRDP as proposed. These issues, including those that require CLRDP modifications, include the following:

Beach and Surfing Access

As previously described, the University has maintained Younger Lagoon Reserve and the beach there as off-limits to general public access for almost 25 years. Nevertheless, use of the sandy beach area by the general public has continued. Such access has predominantly been by surfers accessing the surf break seaward of Younger Beach (known locally as “Marine Labs” or “Younger”). The surf access from the Younger Beach area is much more direct than the over half-mile paddle (and even further to the associated surf breaks slightly further upcoast from Marine Labs) that is necessary if accessed from the State Park at Natural Bridges downcoast. There exists a well worn path from the ocean overlook at the end of McAllister Way along the bluff edge and down to the beach (see Exhibits A and B).⁵⁶

It is inconsistent with the Coastal Act public access and recreation policies cited above to prohibit access to the beach and the area offshore. As described earlier, the sandy beach area is not ESHA.

⁵⁶ Note that the Commission specifically ensured that adequate space for the continuation of this path remained as a provision of allowing the University and NOAA to expand the seawater system in the blufftop area in 2001.



Although the beach and its surroundings are sensitive, it is not unlike other more rural stretches of sandy beach extending upcoast. Accordingly, allowing some surf and low-intensity recreational beach access to it is appropriate and required by the Coastal Act. Specifically, it is reasonable to recognize that this publicly-owned beach and the beach access path to it provide for some access now (notwithstanding the fact that the University actively attempts to keep people out of this area currently), and to accommodate a similar level of access in the future. In other words, a balance can be struck (as provided for by the Act) between the level of access to the beach and offshore and the fact that the beach is located within a University Reserve. The balance would be that the accessway be opened, and the sandy beach made available, but that formal access improvements (such as developing the path to a designated width, new access stairway to the beach, etc.) would not be required unless and until documented demand and public safety concerns warranted such accessway improvements. It is expected that the accessway (and beach use in general in this respect) would be self-limiting to surfers and persons otherwise willing to walk along the “goat trail” to the beach and thus would be of a fairly low intensity. The back beach dune scrub area closer to the Lagoon proper, and the Lagoon itself, would be allowed to be kept closed (and signed and delineated in this way) as it is not conducive to nor necessary for such general beach use, and access to this more inland area could result in habitat problems (see also preceding habitat findings). This seems an appropriate level of use for this particular beach. See suggested modifications that ensure that public access to Younger Beach is provided for in a manner consistent with resource protection (e.g., modifications to Implementation Measures 3.6.4 and 3.6.5; Sections 4.2.4, 5.6.1, 7.2.6; Figure 9.2; etc.) and that related trail and access improvements are appropriately provided (e.g., see modifications to Figure 9.2, Section 9.1.2). In terms of timing for signing and opening the trail specifically, six months is ample time for the University to do such minor improvements, and is in recognition of the fact that the accessway is open as of certification of the CLRDP (see also procedural findings), and that six months to have signs catch up to that opening is perhaps overly reasonable (e.g., modifications to Figure 9.2).

Parking

Parking to be provided on the Campus is purposefully limited to avoid devoting large areas of the Campus to pavement and automobiles, and to reduce Campus reliance on automobile transportation (thus reducing its attendant adverse impacts on and off-site). Because of this purposeful supply limitation, there is concern that demand for scarce parking spaces may inordinately impact general public parking spaces (no matter how they are designated) that provide access to visitors to Campus coastal resources (including paths, overlooks, beach, etc.). This same concern applies to off-site parking areas on adjacent public streets that provide for access to coastal resources as well (such as parking along Delaware Avenue that provides access into Natural Bridges State Park downcoast). It seems likely that Campus users, including students, may overwhelm parking supply and that the general public may be the most affected in this regard. The CLRDP includes some measures to protect against this, including requiring the University to satisfy demand associated with development on-site in such a way that does not affect general public users (including through providing alternatives to vehicles like shuttles, etc.), but there remains a lack of certainty that the public would not be left without adequate parking.

Currently, all 191 parking spaces existing and formally approved at the Campus are free; available on a



first-come, first-serve basis. This is consistent with previous Commission permit approvals, which did not allow restrictions on new parking. Much of the existing parking is used by current employees of existing facilities, visitors to the Marine Discovery Center, and the general public, although no systematic parking surveys of actual use patterns are available. Under the CLRDP parking scheme, the general public would be provided 10 metered spaces in the Lower Terrace, 5 metered spaces in the Middle Terrace, and 15 near the Campus entrance: a total of 30 spaces. An additional 40 spaces would be provided for dual use between the general public and users of the Marine Discovery Center. Parking before 8 and after 5 and all day on weekends and holidays would be first-come, first-served, and free. Although no specific public parking demand analysis is available, on its face the CLRDP would result in a reduction in the availability of first-come, first-serve, free parking spaces, even more so as competition for spaces intensifies as the Campus is built out. To the extent that fees were charged, as is suggested by the proposed metered parking, public parking access would be further reduced. Such impacts are not consistent with the Coastal Act.

In order to find the CLRDP consistent with respect to public parking, modifications are included to ensure that parking is adequate, convenient, and free for visitors to Campus who wish to view the shoreline, hike on the trails, go to the beach, or otherwise enjoy coastal resources.⁵⁷ In addition, the timing for the improvements related to the public access parking spaces in Chapter 9 have been modified to be timed to be completed within six months of certification of the CLRDP. The purpose of this timing modification is to recognize that there will be an immediate impact to public access parking inasmuch as the entire parking paradigm for the site is shifting and it is inappropriate for that to result in an impact to these public parking spaces. Six months is a reasonable amount of time for the University to put a parking program into place that satisfies the CLRDP requirements related to public access parking. Such modifications are particularly necessary because (1) the University's building program will impact existing public access; (2), these impacts are only partially offset by providing public parking; and (3) this is a public University, and the Marine Science Campus is public land. The Coastal Act requires that existing public access be protected, and that *maximum* public access be provided, consistent with resource protection, public safety, etc. New development should also provide low-cost public access and recreational opportunities. Thus, the suggested modifications are necessary to find the CLRDP fully consistent with the Coastal Act.

Overlooks

The CLRDP provides for six overlooks: two requiring docent supervision on the YLR side of the berm, and four that would provide unsupervised access. Two of the six are existing developed overlooks, one is partially developed, and three would be developed in the future. Although the University committed to developing a series of overlooks to offset public access impacts both when YLR was allowed to be put off-limits in 1981, and in 2001 when the Commission allowed the closure to continue temporarily, there are only two operational overlooks at this time. The Commission notes this, but also does not

⁵⁷ The Commission expects that the University's parking programs will account for the fact that some public access parking may occur before 8 am (i.e., between the Campus public access opening hour of one-hour before sunrise and 8am), and that these coastal access visitors are provided an easy means of continuing their parking within public access parking spaces without being penalized for arriving prior to 8am.



require that all of the other overlooks all be developed and opened immediately with this action. Rather, the Commission acknowledges that in the context of the development envisioned by the CLRDP, and the access provided through its action (including beach access, and including the timing associated with access improvements) such overlook development is most appropriately provided for as development progresses at the site.

Nevertheless, there remain several specific changes that are necessary to ensure both that the existing overlooks continue to provide maximum public access benefit, and that changes to them and development of new overlooks do the same, including in a timely fashion. Toward this end, modifications are included to ensure that this is the case (see suggested modifications, particularly to Chapter 9 and Chapter 7). In terms of the existing ocean overlook at the end of McAllister Way, very detailed modifications are provided. This is due to the fact that this overlook is the primary publicly accessible overlook on the Campus, and it is perhaps the most potentially threatened by inappropriate development encroaching on it. This area seaward of the existing marine mammal pools provides an excellent opportunity for the general public to see the facilities associated with a working lab (like the seawater facilities) and the ocean vista. This area needs to balance marine research development against the objective of maintaining and enhancing the feeling of openness and the coastal views. Toward this end, modifications are designed to ensure that this area maintains that balance, including limiting development there, and requiring specific enhancements in recognition of its public access use value (see, for example, modifications to Section 7.2.6 and the new height figure previously referenced). In addition, and related to beach access, very specific parameters are also identified related to providing for access to the beach from the ocean overlook (see, for example, modifications Chapter 9).

Access to Resource Protection and Buffer Areas

The “Resource Protection” and “Resource Protection Buffer” land use designations are not intended to preclude public access. On the contrary, the CLRDP identifies an access system that goes into and out of these areas (including, as modified herein, the sandy beach area). Modifications are included to ensure that it is clear that the “Resource Protection” and “Resource Protection Buffer” overlays are not meant to absolutely preclude public access, and so it is clear that these accessways, including access improvements pursuant to Chapter 9, are allowed and contemplated within these areas (see, for example, modifications to Sections 3.1.1, 4.4.2, 5.2.2 “Resource Protection,” 7.2.6).

D. Public Access and Recreation Conclusion

Overall, the CLRDP provides for substantial access and recreation opportunities, including committing the University to a series of access improvements over time. That said, as described in the discussion above, there are a series of CLRDP modifications that are necessary for the Commission to be able to find the proposed CLRDP consistent with the policies cited above with respect to such public access and recreation (see suggested modifications, including those in Exhibit E). In conclusion, if modified in all of the ways outlined here according to the cited modification texts, then the CLRDP is certified as being consistent with the public access and recreation provisions of the Coastal Act.



4. Public Viewshed

This section describes public viewshed issues, including an analysis of the scale and scope of development contemplated by the CLRDP. Such issues overlap significantly with habitat protection issues previously described as well as issues pertaining to the urban-rural boundary and the type and scale of development appropriate in such a transition zone.

A. Applicable Policies

Coastal zone scenic resources are afforded a high level of protection by the Coastal Act. The Act protects such resources through a number of complementary policies. Some of these policies speak directly to view corridors, others to landform alteration, yet others to maintaining the character of special coastal zone resource areas. The Coastal Act states:

***Section 30001(b).** The Legislature hereby finds and declares that the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation.*

***Section 30251.** The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted 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, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

Coastal Act Section 30240(b), previously cited, also protects adjacent park and recreation areas (such as Wilder Ranch State Park, Moore Creek Preserve, and Natural Bridges State Park) against significant visual degradation. Section 30240(b) states, in applicable part:

***Section 30240(b).** Development in areas adjacent to ... parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those ... recreation areas.*

In addition to the landform alteration reference in Section 30251, Coastal Act Section 30253 also directs new development to avoid alteration of the natural landform. Section 30253 states, in applicable part:

***Section 30253(2).** New development shall 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.*

Coastal Act Section 30253(5) protects community character. Section 30253(5) states:

***Section 30253(5).** New development shall where appropriate, protect special communities and*



neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Visual access to and along the coast is also considered a form of public access. As such, the Coastal Act's previously cited access policies are also relevant.

In sum, the Coastal Act requires that development be sited and designed to protect views of and along scenic coastal areas, minimize the alteration of natural landforms, be visually compatible with the character of surrounding areas, and, where feasible, restore and enhance visual quality in visually degraded areas. New development in highly scenic areas is required to be subordinate to the character of its setting. The Coastal Act's visual policies are also related to other previously identified resource protective policies. For example, policies that protect agricultural lands from conversion to urban uses likewise protect the rural open-space character of the coastal zone. Also, policies that protect environmentally sensitive habitat areas from degradation, preserve scenic resources since these habitat areas, and more specifically their health and vitality, also contribute to the visual character of the coastal zone. These policies are reinforced by and reflected in LCP policies applicable to views in Santa Cruz County, including views from the rural north coast.⁵⁸

B. Applicable Provisions of Proposed CLRDP

The proposed CLRDP proposes to protect public viewsheds generally in two ways. First, it clusters structural development in three main development zones, generally preserving the natural terrain and open space views over the remainder of the site. The boundaries of the development zones were at least partially created based on mapping and avoiding certain view corridors, including that from southbound Highway One (one reason why the area between the Middle and Lower Terraces is to be left open) (see Figure 3.16 and Section 4.3). Second, it sets design standards for structural development, generally to be in keeping with a coastal rural and agriculture structural motif. For example, buildings, though large forms, are limited to two stories and construction materials are to "relate strongly to the vernacular style of coastal architecture." The CLRDP also includes design standards for parking lots, trails, fencing, signs, lighting, and other Campus features (see, for example, the design principles of Section 4.3 and the design guidelines of Chapter 6).

C. Coastal Act Consistency Analysis

As described in previous sections, the Campus site is located at a land use transition zone between urban Santa Cruz and Santa Cruz County's rural north coast. By extension, and partially as a result of the land use, it is also located at a visual transition zone. In fact, the Campus is in a highly scenic location, being visible from Highway 1 and located at the entryway to the City for southbound travelers from rural Santa Cruz County. Portions of the site are also visible from trails and other public areas of Wilder Ranch State Park upcoast and inland, the City's Moore Creek Preserve directly inland of Highway One from the site, Natural Bridges State Park downcoast (including in particular its blufftop overlook and parking area immediately adjacent to West Cliff Drive), and offshore. There are also additional public

⁵⁸ Including Santa Cruz County LCP Sections 5.10 et seq, 5.11, 7.7.1 and Chapter 13.20.



viewing locations closer to and on the site (at the Campus entrance, the public trails, etc). In sum, the site is located within a series of significant and important public viewsheds,⁵⁹ some from more distant vantage points and others right on and adjacent to the site. Therefore, the degree to which Campus development over time minimizes public viewshed impacts is important.

There is no doubt that development of the magnitude envisioned by the proposed CLRDP will alter the setting and the overall scenic aspects of the public viewshed at the site. The site would no longer be evocative of “a scattered research outpost along the coastal bluff” as it was previously described by the Commission at the time of the last major development project for the Campus,⁶⁰ and as was the original operating premise for siting LML in the first place as an “intentionally isolated facility.” The expected build out would result in an array of large buildings located in the center of the site, a major expansion of the main LML complex nearest the ocean (roughly double LML’s current gsf), and a completely new area of large buildings and developed outdoor laydown space near the railroad tracks and north of Delaware Avenue. All told Campus development at buildout would be roughly three times the scope of Campus development currently, and roughly four times the amount of existing permitted gsf at the site (totaling some 560,000 gsf of building and related structures compared with roughly 140,000 gsf currently). Given that there would be additional development outside of the three development zones (roads, parking, wet ponds, etc.), the scope of Campus expansion would be somewhat higher overall than this. UCSC has prepared photo simulations representative of the scale and scope of the Campus at buildout that help articulate this concept (see Exhibit D).⁶¹

The Commission had raised concerns with the appropriateness of such potential buildout at the Terrace Point site at least since 1999 when the last major development proposed was reviewed:

The Commission also finds that with the completed construction of the proposed Ocean Health Building, along with the Marine Discovery Center (nearing completion), the NMFS [NOAA] facility (under construction), the CDFG facility and the remainder of the developed LML campus site, a significant cumulative visual impact from building scale and site coverage may well occur. Note that the NMFS facility authorized by the Commission in 1998 and currently under construction will be a 36 feet tall, 2 story, 53,400 square foot building mass at the center of the Terrace Point site. With the exception of these facilities, the surrounding Terrace Point area is primarily open space, and nearby structures to the east are of low heights (i.e., the De Anza Mobile Home Park with structures 12 feet in height or less). A continued development pattern of the intensity and height of the existing and proposed [Ocean Health building] facilities across the Terrace Point parcel would substantially transform the visual character of the Westside Lands, particularly its open coastal bluff setting and natural resource areas.

In other words, notwithstanding its visual compatibility as a complementary project adjacent to

⁵⁹ See also CLRDP Section 3.8.

⁶⁰ 1999’s Ocean Health project, CDP 3-83-076-A13.

⁶¹ Again, these are based on proposed CLRDP Figure 7.2 and must be understood as an example of one potential buildout scenario, and not necessarily how the site would develop over time. These figures also do not portray any of the vegetated drainage basins.



existing similar uses, the proposed Ocean Health building and the resulting density of the LML node, will affect the visual character of the overall Terrace Point area. If the Center for Ocean Health is approved as envisioned, these impacts can only be accounted for through future planning efforts for Terrace Point. The Commission observes, therefore, that future development proposals for Terrace Point will need to be evaluated within the context of the entire site, including the partial commitment to development on the western fringe of Terrace Point that the LML campus represents.

With the completion of the Ocean Health Building, the LML campus on the southern terrace of the LML parcel should be viewed as a tight cluster of grouped uses appropriate to maintaining the campus perimeter. Such a facility should be viewed as a developed node on the otherwise undeveloped coastal meadow. The Commission considers the density, scale and mass of this primary LML campus development as unique to this specific site within the overall Terrace Point area, and does not view this permitted development as indicative of the general scale of development appropriate for the vacant Terrace Point lands. Moreover, by allowing such a mass, scale, and density of development at the LML campus site, the Commission expects that large undeveloped open space areas which separate developed areas of the property will be observed should other development be contemplated for the overall vacant Terrace Point parcel.

In fact, a general pattern of “node” development has already partially been established as a result of permitted development at Terrace Point. This nodal development is characterized by larger blocks of open space and wetlands between built portions of the landscape. The main LML campus and the Marine Discovery Center form such a node while the general NMFS/CDFG area form a second node on the property. Such nodal development has come about partially in recognition of Terrace Point site wetland resources which act to separate development. Future development scenarios will likewise be shaped by the developed nodes and the site resources.

The development allowed by the CLRDP will clearly result in public viewshed impacts on the order of magnitude specifically identified by the Commission in the above findings as raising concerns for the site overall in 1999. There is no avoiding such impacts completely with the degree of development articulated in the CLRDP building program. In particular, buildings being proposed are large. For example, the two USGS buildings identified in Chapter 7 would be nearly 80,000 square feet total (see Figures 7.2, 7.5, and 7.6). At two stories and 36 feet tall, this represents a building footprint of about an acre, a height as tall as anything now on the site, and a gsf massing that is roughly the same as all of the current UCSC facilities currently existing on the site combined.⁶² Such a facility would be considerably larger than the NOAA Fisheries Lab – currently the largest and most visually imposing development at the site. Although such a building would not necessarily be developed in the future (it is a maximum under the CLRDP), this example (and the example site plan of Figure 7.2) is helpful to understanding the magnitude of the development possible under the CLRDP.

⁶² Note that, as previously described, Chapter 7 building studies are just examples of how development may turn out and must be understood in this way. Even so, this type of exercise is helpful in understanding just what types of buildings and development would be possible under the CLRDP.



Another concern is that the CLRDP provides for exceptions to the general 30 foot height limit to allow for specialized laboratory facilities. First, such buildings may be allowed to be up to 36 feet as necessary to provide for ductwork and other facility design requirements for laboratories. Further exceptions up to 41 feet would also be allowed for rooftop venting and other mechanical equipment, provided such equipment is screened and does not exceed 25% of the linear roof line. Thus, there is a potential for numerous large buildings that, depending on the design, may be perceived essentially as 41 foot tall buildings – considerably larger than some existing buildings, such as the 24 foot tall Discovery Center.

This viewshed impact of the proposed development in the CLRDP must be understood in relation to the priority coastal-dependent/related use provided for by the CLRDP. Avoiding (or even reducing) additional development visible in surrounding public viewsheds would directly impact the ability of the site to function as a world-class marine research institute. Because of the Coastal Act priority use, and because of the importance and potential for this site to strengthen the boundary between significant rural resources to the west and urbanized north Monterey Bay to the east, the Commission finds that the Coastal Act can allow for the CLRDP development program, provided other measures are required to minimize its impacts on public views, including reinforcing the sense of “tight clusters” of “developed nodes on an undeveloped coastal meadow” “separated by large undeveloped open space areas” as articulated in the findings above (and not a developed area with smaller patches of coastal meadow between them).⁶³

In this context, the CLRDP as proposed contains important development themes for minimizing such impacts (including clustering masses in defined development zones, and requiring building articulation and design, vernacular forms and materials, tapering near perimeters, landscape screening, etc.). These measures will help to de-emphasize the scope and scale of development contemplated. The CLRDP also includes Figure 5.4, which provides specific height limitations and other restrictions for discrete sub areas of the development nodes. This figure establishes a development pattern of taller, larger buildings in the core of the middle zone, with lower, smaller structures on the perimeter of development areas. Towards this end, the core of the Middle Terrace zone will have a maximum 30-foot height limit (i.e., approximately the height of the tallest roof peaks at the existing CDFG facility – though the majority of this facility is about 20 feet tall); lab buildings could be as high as 36 feet in the core of this zone to the extent it is shown to be infeasible to maintain a 30-foot height due to the vertical clearance necessary for specialized laboratory requirements (for mechanical systems, ductwork, etc.) (note that 36 feet is the height of the NOAA facility, the tallest in this zone). These measures also complement policies designed to protect adjacent wetland and habitat resources, such as YLR and Wetland 5. Design guidelines requiring stepping down at the edge of development areas complement this approach. As proposed the CLRDP

⁶³ Note that this balancing of priority uses against their impacts is consistent with the manner in which the Commission has previously evaluated UCSC development proposals at Terrace Point. For example, in the case of the Ocean Health building project in 1999, the Commission found as follows regarding the LML core: “although the local site vicinity would be altered by the new building, such a building, and the marine research educational mission it serves, represents a Coastal Act priority use. The proposed building would be similar in size and mass to the Marine Discovery Center and would serve to consolidate and expand LML marine research activities. On balance, the Commission finds that the proposed building is compatible with the existing LML development and will not adversely impact the public viewshed at this location.”



Residential development would be confined to the area nearest the Campus entrance between the realigned Campus Road and Wetland W4 (i.e., in the location shown on Figure 7.2). This location serves to cluster residential development as close to urban and residential Santa Cruz as possible (as near to De Anza MHP within the zone as possible), thus preserving locations within the Campus core and nearer to the ocean for higher relative priority development (and development requiring larger forms, like lab buildings), and avoids residential development in the Upper Terrace altogether.⁶⁴

As previously described in the habitat findings, the area closest to Younger Lagoon would be limited to the lowest intensity uses and a 12-foot height limit. Along with complementary CLRDP provisions (for ramping down development, keeping movement areas not visible from YLR, siting and design criteria otherwise for development adjacent to YLR and habitat resources, etc.), this will serve a habitat purpose (as previously described), and also a viewshed purpose inasmuch as the development will taper along this western edge, again reducing the perceived sense of scale associated with the CLRDP building program as viewed from on and off site.

In the area between the Middle and Lower Terrace development zones, an informal parking area has sprung up west of McAllister Way. This area is about a car length deep perpendicular to the road; however it has never been formally recognized by the Commission. In any case, allowing parking in this area is not appropriate for a variety of reasons including that: areas outside of development zones are not meant to be developed in order to protect habitat, views, and other coastal resources consistent with the overall CLRDP framework, and allowing parking here would be inconsistent with this framework and it would make the two development zones appear to meld into one, negating the ability of the zone concept to provide for adequate visual separation between zones; it appears that there is insufficient space in this area to accommodate a parking area that could be found consistent with the CLRDP policies applicable to such parking development (in terms of size, screening, location, adjacency to road, etc.); and finally, this area is located inside of an area within 100 feet of both Wetland W5 and YLR, within 300 feet of Younger Lagoon,⁶⁵ and within 150 feet of W5,⁶⁶ and this area is best called out for resource protection buffering than parking to protect habitat.⁶⁷ The University's revised CLRDP does not show parking in this area.

For the Upper Terrace development zone, a 30-foot height limit along with the other related siting and design criteria should help this area to meld better into the public viewshed. The CLRDP does provide for a significant amount of large-scale development here, but that scale can be offset by its relatively isolated location, particularly as buildings and related structures are designed to ramp down at the perimeter of the development zone, and to be articulated in such a way as to recognize the wildlife movement areas that surround the zone. Of course, with the suggested modification to limit development in the area of the dispersal corridor for the CRLF, less development could occur in this area, which would potentially reduce visual impacts from those anticipated in the submitted CLRDP.

⁶⁴ Where such residential noise, lights, and bustle of activity would negatively impact wildlife corridors (again, see also habitat findings).

⁶⁵ Where 300 feet has been deemed the minimum appropriate buffer distance from the Lagoon by the Commission's staff ecologist.

⁶⁶ The appropriate buffer distance applied to Wetland W5 by the CLRDP is 150 feet.

⁶⁷ See also habitat findings preceding this one.



Finally, as discussed previously, suggested modification 4 would allow for the transfer of development potential from the upper terrace to an open space area in the middle terrace between De Anza Mobile Home park and subarea 8 (see Exhibit G). Although this transfer would impact identified view protections provided by the open space in the middle terrace here, it would also completely eliminate view impacts in the upper terrace development zone. Given the other potential benefits of such a development transfer, such as increased habitat protection in the upper terrace, striking this different balance is another reasonable configuration of the site to protect resources and provide for the University's proposed building program.

D. Public Viewshed Conclusion

The proposed CLRDP viewshed protection policies are mostly adequate to protect the public viewshed consistent with the cited Coastal Act policies in light of the CLRDP building program envisioned. Minor modifications, though, are necessary to assure that the cumulative visual impacts of the anticipated development pattern are not excessive. For example, reasonable limits on accessory structures on top of lab buildings, which are allowed to exceed maximum building heights, are needed so that these buildings do not read as 41-foot tall buildings rather than 36-foot tall buildings. If modified as suggested, then the perceived scale and intensity of CLRDP development will be more reasonable, and the site can more closely approximate the intentionally isolated research institute that framed the decision to originally allow any development at Terrace Point consistent with its location and utility as a transition zone, and, to the extent feasible given the scope of the building program, can also more closely approximate the concept of clustered development zones within a coastal meadow that will allow the site to integrate into the established public viewshed.

5. Coastal Hazards

A. Applicable Policies

Coastal Act Section 30253 addresses the need to ensure long-term stability and structural integrity, minimize risk, and avoid landform-altering devices. Section 30253 provides, in applicable part:

Section 30253. 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.*

Coastal Act Section 30235 addresses certain hazard response development (such as shoreline protective devices). Section 30235 states:

Section 30235. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted



when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Coastal Act Section 30235 acknowledges that certain types of development (such as seawalls, revetments, retaining walls, groins and other such structural or “hard” methods designed to forestall erosion) alter natural shoreline processes. Accordingly, with the exception of new coastal-dependent uses, Section 30235 limits such construction to that that is “required to protect existing structures or public beaches in danger from erosion.” The Coastal Act provides this limitation because shoreline protection structures and similar development can have a variety of on and off site negative impacts on coastal resources including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics.

Coastal Act Section 30253 requires that risks be minimized, long-term stability and structural integrity be provided, and that new development be sited, designed, and built to allow for natural shoreline processes to occur without shoreline altering protective devices. Coastal development permittees for new shorefront development thus are essentially making a commitment to the public (through the approved action of the Commission) that, in return for building their project, the public will not lose public beach access, sand supply, ESHA, visual resources, and natural landforms, and that the public will not be exposed to hazardous structures or be held responsible for any future stability problems that may affect the development. Coastal Act Section 30253 requires that the proposed project assure structural stability without protective devices.

B. Applicable Provisions of Proposed CLRDP⁶⁸

The CLRDP requires that new development be sited and designed to avoid the need for shoreline armoring over its lifetime, including requiring include enforceable provisions for addressing any future bluff retreat/erosion danger to the development without shoreline armoring (e.g., moving the development, removing the development, etc.). Other than existing streets, existing and proposed access and recreation amenities (see Section 5.6 and Figure 5.5), infrastructure improvements requiring a near bluff edge location (i.e., seawater system facilities), habitat restoration/enhancement, and directly related minor structures (such as irrigation, public safety fencing, etc.), development is also prohibited within 100 feet of the blufftop edge. Shoreline armoring is only allowed as a last resort to protect structures existing at the time of CLRDP certification that are proven to be in danger from erosion, and only if: (a) less-environmentally damaging alternatives to armoring are not feasible (including relocation of endangered structures); and (b) the armoring has been sited, designed, and accompanied by feasible measures to proportionately mitigate any unavoidable negative coastal resource impacts (on views, sand supply, public access, etc.). The area within 100 feet of the blufftop edge is to be protected and enhanced through removal of non-natives and invasives (like iceplant) and revegetation with native

⁶⁸ Note see CLRDP Policy 3.7 and related implementation measures.



bluff species.⁶⁹ Blufftop access facilities, like paths and overlooks, are to be relocated from time to time as necessary to ensure their proper function. All development is to be sited and designed to minimize the alteration of natural landforms.⁷⁰

C. Coastal Act Consistency Analysis

1. Coastal Hazard Context

The terrace portion of the site, within which development is currently sited and within which development pursuant to the CLRDP is envisioned, is a relatively flat marine terrace that slopes almost imperceptibly to the south (towards the ocean) where it drops sharply about forty feet to the rocky intertidal area and the Pacific Ocean at the blufftop's edge. The Campus site is currently unarmored. According to the University's geotechnical analysis, the estimated average long-term rate of retreat is estimated to be less than 0.5 feet/year.⁷¹ The University also points to the barometer established by the mast of the La Feliz, a ship that wrecked just offshore in 1924. According to the University, the mast has been leaning against the cliff edge in a near vertical position directly in front of the Discovery Center location for over 75 years. A resistant bedrock platform at the base of the bluffs appears to have provided significant protection to the Campus over the years.

Other than the Campus seawater facilities and the public access overlook near the bluff edge, all Campus facilities are at least 100 feet inland from the coastal bluff edge at this time – and most are significantly further inland than that (see existing facilities site plan in Exhibit E). Using the University's 0.5 feet per year of estimated rate of long term retreat, these (other than immediate shoreline) Campus facilities would not be initially undermined for an estimated 200 years.

Although bluff retreat is often expressed in feet or centimeters per year, erosion usually occurs in episodes that correspond with significant coastal storm events. Estimated long-term average annual erosion rates are thus most useful when they are based on reliable historical data over long periods of time; time frames of adequate length so as to “correct” and account for such episodic events. Even then, they are of limited use for quantifying the degree of safety for a site, and not well-suited to estimate erosion over short time intervals. Rather, such erosion rate figures must be understood in relation to the geologic structure and configuration of the bluff, and the potential for failure of portions of the bluff in episodic events as well as more steadily over the long term. Oftentimes, episodic erosion and the degree to which development at certain locations may be at risk are best understood by evaluating the largest potential episodic bluff failure events, the likelihood of such events, and the proximity of structures to areas likely to experience such events. In other cases (or in tandem), a quantitative slope stability analysis can help describe risks in terms of bluff stability, potential failure planes, and minimum factors of safety.

In sum, there is a certain amount of risk in maintaining development along a California coastline that is

⁶⁹ See also Appendix A, Resource Management Plan, for blufftop enhancement provisions.

⁷⁰ See also Implementation Measure 4.2.2.

⁷¹ Foxx, Nielsen, 1992.



actively eroding and can be directly subject to violent storms, large waves, flooding, earthquakes, and other hazards. These risks can be exacerbated by such factors as sea level rise and localized geography that can focus storm energy at particular stretches of coastline. As a result, some would say that all development along the immediate California coastline is in a certain amount of “danger,” and includes a certain amount of “risk.” Campus development is mostly well inland from the bluff edge, other than the Marine Discovery Center that is about 100 feet inland of the bluff edge and the seawater system that is at the bluff/ocean interface (see Figure 3.9). It will likely be some time before Campus development currently present on the site is threatened by shoreline erosion, but that is not a certainty.

2. Currently Existing Structures

For the purposes of shoreline protective structures, the Coastal Act distinguishes between development that is allowed shoreline armoring, and development that is not. Under Section 30253, new development is to be designed, sited, and built to allow the natural process of erosion to occur without creating a need for a shoreline protective device. Coastal development permittees for new shorefront development are thus making a commitment to the public (through the approved action of the Commission, and its local government counterparts) that, in return for building their project, the public will not lose public beach access, offshore recreational access, sand supply, visual resources, and natural landforms, and that the public will not be held responsible for any future stability problems. Coastal zone development approved and constructed since the Coastal Act should not require shoreline protection in order to “assure stability and structural integrity” because it was constructed with adequate setbacks and/or other measures in order to negate the need for future armoring.

Related to Section 30253, Coastal Act Section 30235 allows for shoreline protection in certain circumstances (if warranted and otherwise consistent with Coastal Act policies) for “existing” structures. One class of “existing structures” refers to those structures in place prior to the effective date of the Coastal Act. Coastal zone development approved and constructed prior to when the Coastal Act went into effect was not subject to Section 30253 requirements. Although some local hazard policies may have been in effect prior to the Coastal Act, these pre-Coastal Act structures have not necessarily been built in such a way as to avoid the future need for shoreline protection (in contrast to those evaluated pursuant to Section 30253). Accordingly, Coastal Act 30235 allows for shoreline protection to be considered for these types of existing structures, where “existing” means it was permitted development prior to the Coastal Act.

In a limited number of cases, the Commission has required applicants for new blufftop structures to waive any right to a seawall that may exist pursuant to Section 30235. In other words, applicants have stipulated that future armoring is prohibited, notwithstanding 30235, because the structures have been sited and designed to not need shoreline armoring in the future (pursuant to Section 30253). Such was the case at the Marine Science Campus in relation to the Ocean Heath building approved by the Commission in 1999.⁷²

In addition, the Commission has generally interpreted Section 30235 to apply only to existing principal

⁷² CDP 3-83-076-A13



structures. The Commission must always consider the specifics of each individual project, but has generally found that accessory structures (such as patios, decks, gazebos, stairways, etc.) are not required to be protected under Section 30235, or can be protected from erosion by relocation or other means that do not involve shoreline armoring. The Commission has generally historically permitted at grade structures within geologic setback areas recognizing that they are expendable and capable of being removed rather than requiring a protective device that would alter natural landforms and processes along bluffs, cliffs, and beaches.

All structures at the Campus have been approved and permitted in the time since the Coastal Act has been in effect. In each case, development was found consistent with Section 30253 inasmuch as no further shoreline protection would be required in the future. To date, there have been no requests for major shoreline armoring at the Campus.⁷³ The CLRDP provides that shoreline armoring can only be considered to protect currently existing structures (at the time of CLRDP certification) at the site, and can only be allowed if: (a) less-environmentally damaging alternatives to armoring are not feasible (including relocation of endangered structures); and (b) the armoring has been sited, designed, and accompanied by feasible measures to proportionately mitigate any unavoidable negative coastal resource impacts (on views, sand supply, public access, etc.) (see CLRDP Implementation Measure 3.7.3). These policies should serve to severely limit, if not outright avoid, the need for armoring in the immediate future, and can be found consistent with Coastal Act Section 30235.

3. Potential New Structures

In terms of potential new structures to be constructed post-CLRDP certification, the CLRDP effectively addresses the coastal hazard uncertainty associated with development along a shoreline location. In this case, it prohibits most all development within 100 feet of the bluff edge, requires new development to be sited and designed to negate the need for armoring over its lifetime, including requiring movement to a more inland location as an alternative to shoreline armoring. It also requires the blufftop area to be restored to native bluff species. In other words, any development authorized by the CLRDP will, by CLRDP requirement, not require shoreline armoring in the future (see CLRDP Implementation Measures 3.7.1 and 3.7.2). CLRDP requirements should effectively implement the Coastal Act in this respect. Although not a hazards policy, it is worth mentioning that public access Implementation Measure 6.2.2 requires that the University maintain the continuity of the proposed public trail system, including through relocation of the bluff trail inland if necessary to avoid erosion threats (see Exhibit E, p. 152).

D. Hazards Conclusion

The CLRDP effectively translates Coastal Act coastal hazards provisions to the Campus site. The effect should be that development is sited and designed to respect coastal hazard constraints, and to not need shoreline armoring in the future. The end result is expected to be that the unarmored natural shoreline at the Campus will largely remain in its natural state, that natural landforms will be left alone, that structures will be moved inland as erosion dictates, and that only structures which must be in the

⁷³ Other than to the extent that seawater system components and overlook retaining walls are considered armoring.



shoreline-water interface (such as the seawater intake lines) will be located along the shoreline. The Commission finds the CLRDP, if modified, consistent with Sections 30235 and 30253 of the Coastal Act.

6. Cultural Resources

This section details the manner in which cultural resources would be protected, including detailing the CLRDP requirements for consultation and mitigation requirements.

A. Applicable Policies

Coastal Act Section 30244 states:

***Section 30244.** Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

B. Applicable Provisions of Proposed CLRDP

CLRDP Policy 3.9, Conservation of Cultural Resources states:

Reasonable mitigation measures shall be required, including those that may be identified through consultation with appropriate Native American representatives, where development would adversely impact archaeological and/or paleontological resources.

Implementation Measure 3.9.1 states:

Implementation Measure 3.9.1 -- Construction Monitoring. Should archaeological and/or paleontological resources be encountered during any construction on the Marine Science Campus, all activity that could damage or destroy these resources shall be temporarily suspended until qualified archaeologist/paleontologists and Native American representatives have examined the site and mitigation measures have been developed that address and proportionately offset the impacts of the project on archaeological and/or paleontological resources. Development shall incorporate measures to address issues and impacts identified through any archaeologist/paleontologist and/or Native American consultation.

Thus, the CLRDP requires consultation with qualified archaeologist/paleontologists and Native American representatives, and requires mitigation if any archaeological and/or paleontological resources are encountered during any construction on the Campus.

C. Coastal Act Consistency Analysis

As summarized in the project EIR, the project site lies within the ethnographic territory of the Ohlone Indians and the currently recognized ethnographic territory of the Costanoan linguistic group. According to the University, though, the proposed Marine Science Campus site has “low archeological sensitivity” and thus proposed development is not “constrained in this regard.” As described in the CLRDP:



An archaeological study and field reconnaissance conducted on the site in conjunction with the previously proposed Westside Lands Plan found no indications of cultural resources on the Marine Science Campus (ACRS, 1985) although a potential prehistoric resource was identified on the upper terrace area. Subsequent surveys found no indications of prehistoric or other cultural resources. In 2000 an updated records search of the entire property and a field reconnaissance of the Younger Lagoon Reserve also found no prehistoric or historic archaeological resources on the site. Comments in the public record have noted a 1924 shipwreck, the La Feliz, lies offshore of the site. The Seymour Marine Discovery Center has incorporated an interpretive display that includes the ship mast of the La Feliz.

Sensitive paleontological resources are identified along the coastline, from Younger Lagoon to approximately Monterey Street near Cowell Beach. The Santa Cruz mudstone that composes the majority of the seacliff face on the Marine Science Campus, however, contains few fossils. (Strelow, 1997).

There are no known cultural resources on the Marine Science Campus, and therefore development is not constrained in this regard. Nonetheless, La Feliz ship mast should continue to be preserved for the education and enjoyment of future generations. If currently unknown cultural resources are discovered during the course of developing the terrace portion of the site, development activity will have to be regulated to ensure no adverse impacts on any such resources.⁷⁴

Notwithstanding the stated low potential for adverse impacts to cultural resources, there is still a potential for discovery of cultural resources as new developments move forward in areas that have not previously been developed beyond agricultural activities. As described in the EIR for the CLRDP:

Although some of the native soils and subsoils on the project site have been disturbed by excavation and earth moving during previous development, . . . areas of undisturbed native soils and rock are present on the site. Construction of the proposed project could result in disruption or adverse effects to unknown archeological resources or human remains due to land alteration activities such as land clearing, grading, driving heavy vehicles, soil compacting, excavation, and landscaping....

Archeological surveys and previous construction projects on the project site and vicinity have not resulted in the discovery of any human remains. Nevertheless, during the construction phase of the any development project under the CLRDP, it is possible that previously undiscovered human remains could be unearthed. The development program has the potential to result in a significant adverse impact on previously undiscovered human remains....⁷⁵

Construction monitoring, followed by identification of mitigation measures if resources are found, is a standard approach for addressing the need to protect cultural resources. In recent years, though, it has

⁷⁴ CLRDP, III-21.

⁷⁵ CLRDP EIR pp. 4.5-7 - 4.5-8.



become clear to the Commission and others that consultation with qualified archaeologists needs to be supplemented with consultation with appropriate Native American representatives to assure the identification of reasonable mitigation measures that will adequately protect cultural resources in a matter more sensitive to the associated Native American communities than might otherwise be the case. This is particularly true where there is a potential for the discovery of human remains. To address this concern, the EIR for the CLRDP identifies consultation with Native Americans, through the established processes of the Native American Heritage Commission, as a project-specific mitigation measure to assure that potential impacts to cultural resources are reduced to a less than significant level and is incorporated into the policies and implementation measure of the CLRDP.

The CLRDP has accounted for appropriate cultural resource consultation and mitigation requirements through construction monitoring. Such monitoring (and associated consultation etc.) should ensure that any impacts to cultural resources, if found, are mitigated consistent with the Coastal Act. The Commission finds the CLRDP consistent with Section 30244 of the Coastal Act.

7. CLRDP Procedures

This section describes the way in which the CLRDP would be applied overall and to specific proposed development projects, including the Commission's oversight responsibilities.

A. Applicable Policies

Coastal Act Sections 30605 and 30606 describe CLRDPs and outline the procedures for implementing the CLRDP. The pertinent provisions follow:

***Section 30605.** ...Where a [CLRDP]...has been certified by the commission, any subsequent review by the commission of a specific project contained in the certified plan shall be limited to imposing conditions consistent with Sections 30607 and 30607.1.*

***Section 30606.** Prior to the commencement of any development pursuant to Section 30605, the ...state university..., shall notify the commission and other interested persons, organizations, and governmental agencies of the impending development and provide data to show that it is consistent with the certified [CLRDP]. No development shall take place within 30 working days after the notice.*

Section 30607, cited by Section 30605, indicates that CLRDP development projects may be subject to terms and conditions. Section 30607 states as follows:⁷⁶

Any permit that is issued or any development or action approved on appeal, pursuant to this chapter, shall be subject to reasonable terms and conditions in order to ensure that such development or action will be in accordance with the provisions of this division.

⁷⁶ Coastal Act Section 30607.1, also cited by Section 30605, specifically describes parameters for filling wetlands if in conformity to the allowed fill purposes specified in the Act (e.g., Section 30233). However, the CLRDP does not allow for wetland fill, and this Section is not explicitly applicable to it.



In addition to these Coastal Act sections, several sections of the Commission's regulations (i.e., Title 14, Division 5.5 of the California Code of Regulations) (CCR) amplify these basic requirements. Section 13548 identifies that coastal development permits are not required for CLRDP development pursuant to a certified plan, and identifies the University noticing requirements in this respect:

CCR Section 13548. Effect of Final Certification of [C]LRDP. *After certification of the [C]LRDP for an educational facility has become final, the governing authority may undertake or authorize any development project for such educational facility within the coastal zone without a coastal development permit obtained pursuant to Sections 13050 to 13173 if:*

- (1) the governing authority provides timely notice of the impending development as provided in Section 13549, and*
- (2) the proposed development is found to be consistent with the certified LRDP pursuant to Section 13550.*

If the Commission fails to act upon the notice of the impending development within thirty (30) days after the notice is filed in the office of the Commission, the development is deemed consistent with the certified [C]LRDP.

CCR Section 13549 identifies the basic parameters that apply to Commission review of such noticed CLRDP development projects. CCR Section 13549 states:

CCR Section 13549. Notice of the Impending Development.

(a) At least thirty (30) days prior to beginning construction for any development, the governing authority shall notify in writing the following parties of the nature and location of the impending development: the Commission, contiguous local governments, owners of each parcel of record within 100 feet of the proposed development, persons residing within 100 feet of the proposed development, and all other interested persons and agencies who have requested such notice. The governing authority shall post conspicuous notice of such impending development at the proposed site. Notice to the Commission, and interested persons and agencies who have so requested shall be accompanied by sufficient supporting information to allow determination of whether such development is consistent with the certified [C]LRDP.

(b) Within ten (10) days of the receipt of a notice of the impending development, the executive director shall review the notice. If there is insufficient supporting information to determine whether the proposed development is consistent with the certified [C]LRDP, the executive director shall inform the governing authority of what further information is needed to make such determination. The notice shall be deemed filed when all necessary supporting information has been received by the executive director.

(c) No construction shall commence until at least thirty (30) days after the notice is filed in the office of the Commission.



(d) This section shall not apply to those development projects defined pursuant to Section 13511(g).

CCR Section 13511(g), referenced above in terms of those developments for which the Commission review procedures won't apply, states:

Section 13511(g). *With regard to [C]LRDPs, the governing authority may propose in the [C]LRDP those categories of development for which no coastal development permit is required pursuant to Public Resources Code Section 30610, and those categories of development within specifically defined geographic areas for which there is no potential for adverse effects, either individually or cumulatively, on coastal resources or on public access to or along the coast. After certification of the [C]LRDP, categories of development defined pursuant to this subsection will not be subject to the procedures specified in Sections 13549 and 13550 requiring notice of the impending development and allowing Commission review of such proposed development projects.*

Section 30610 of the Coastal Act, referenced by CCR Section 13511(g), identifies the types of development for which coastal development permits aren't required pursuant to the Act. Section 30610:

Section 30610. *Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas:*

(a) Improvements to existing single-family residences; provided, however, that the commission shall specify, by regulation, those classes of development which involve a risk of adverse environmental effect and shall require that a coastal development permit be obtained pursuant to this chapter.

(b) Improvements to any structure other than a single-family residence or a public works facility; provided, however, that the commission shall specify, by regulation, those types of improvements which (1) involve a risk of adverse environmental effect, (2) adversely affect public access, or (3) involve a change in use contrary to any policy of this division. Any improvement so specified by the commission shall require a coastal development permit.

(c) Maintenance dredging of existing navigation channels or moving dredged material from those channels to a disposal area outside the coastal zone, pursuant to a permit from the United States Army Corps of Engineers.

(d) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter.

(e) Any category of development, or any category of development within a specifically defined



geographic area, that the commission, after public hearing, and by two-thirds vote of its appointed members, has described or identified and with respect to which the commission has found that there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast and, where the exclusion precedes certification of the applicable local coastal program, that the exclusion will not impair the ability of local government to prepare a local coastal program.

(f) The installation, testing, and placement in service or the replacement of any necessary utility connection between an existing service facility and any development approved pursuant to this division; provided, however, that the commission may, where necessary, require reasonable conditions to mitigate any adverse impacts on coastal resources, including scenic resources.

(g) (1) The replacement of any structure, other than a public works facility, destroyed by a disaster. The replacement structure shall conform to applicable existing zoning requirements, shall be for the same use as the destroyed structure, shall not exceed either the floor area, height, or bulk of the destroyed structure by more than 10 percent, and shall be sited in the same location on the affected property as the destroyed structure.

(2) As used in this subdivision: (A) "Disaster" means any situation in which the force or forces which destroyed the structure to be replaced were beyond the control of its owner. (B) "Bulk" means total interior cubic volume as measured from the exterior surface of the structure. (C) "Structure" includes landscaping and any erosion control structure or device which is similar to that which existed prior to the occurrence of the disaster.

(h) Any activity anywhere in the coastal zone that involves the conversion of any existing multiple-unit residential structure to a time-share project, estate, or use, as defined in Section 11003.5 of the Business and Professions Code. If any improvement to an existing structure is otherwise exempt from the permit requirements of this division, no coastal development permit shall be required for that improvement on the basis that it is to be made in connection with any conversion exempt pursuant to this subdivision. The division of a multiple-unit residential structure into condominiums, as defined in Section 783 of the Civil Code, shall not be considered a time-share project, estate, or use for purposes of this subdivision.

(i) (1) Any proposed development which the executive director finds to be a temporary event which does not have any significant adverse impact upon coastal resources within the meaning of guidelines adopted pursuant to this subdivision by the commission. The commission shall, after public hearing, adopt guidelines to implement this subdivision to assist local governments and persons planning temporary events in complying with this division by specifying the standards which the executive director shall use in determining whether a temporary event is excluded from permit requirements pursuant to this subdivision. The guidelines adopted pursuant to this subdivision shall be exempt from the review of the Office of Administrative Law and from the requirements of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.



(2) Exclusion or waiver from the coastal development permit requirements of this division pursuant to this subdivision does not diminish, waive, or otherwise prevent the commission from asserting and exercising its coastal development permit jurisdiction over any temporary event at any time if the commission determines that the exercise of its jurisdiction is necessary to implement the coastal resource protection policies of Chapter 3 (commencing with Section 30200).

Several of the development types identified in Section 30610 are further elaborated by the regulations, as contemplated by Section 30610, including CCR Sections 13250 (Improvements to Existing Single-Family Residences), 13252 (Repair and Maintenance Activities Requiring a Permit), and 13253 ((Improvements to Structures other than Single-Family Residences and Public Works Facilities that Require Permits). These CCR sections identify the subset of the types of development listed in Section 30610 that do require a permit notwithstanding the general direction of Section 30610.

Finally, CCR Section 13550 identifies the provisions for Commission review of CLRDP development. CCR Section 13550 states:

CCR Section 13550. Commission Review of Development Projects.

(a) Categories of development defined in a certified [C]LRDP pursuant to Section 13511(g) shall not be reviewable by the Commission.

(b) Within thirty (30) days after the filing of the notice of the impending development, the executive director shall report in writing to the Commission the pendency of the proposed development. The report shall include a description sufficient to allow the Commission to understand the location, nature, and extent of the proposed development, and a discussion and recommendation regarding the consistency of the proposed development with the certified [C]LRDP. Copies of the report shall be available at the meeting and, if possible within the time available, shall have been mailed to the Commission, the governing authority and those persons known by the executive director to be interested in receiving such notification.

(c) Proposed developments which in the opinion of the executive director of the Commission are de minimis with respect to the purposes and provisions of the certified [C]LRDP may be scheduled for Commission review at one public hearing during which all such items may be taken up as a single matter. This procedure shall be known as the Consent Calendar. The procedures governing such Consent Calendar shall be comparable to the procedures set forth in Sections 13101-13103.

(d) Within thirty (30) days of the filing of the notice and after a public hearing the Commission shall, by a majority of its membership present, determine whether the proposed development is consistent with the certified [C]LRDP and whether conditions are required in accordance with the provisions of Public Resources Code Sections 30605-30607 and 30607.1. If the Commission determines that conditions are required to render the proposed development consistent with the certified [C]LRDP, the Commission shall schedule a public hearing on the proposed conditions



no later than twenty-one (21) days after the close of the hearing that determined consistency with the [C]LRDP. No construction shall commence until after the Commission votes to impose any condition necessary to render the proposed development consistent with the certified [C]LRDP. The hearing procedures governing the Commission's determinations pursuant to this subsection shall be in conformance with Section 13064-13096.

In sum, and as detailed in the beginning of this report, the Act and the Commission's regulations contemplate that state universities like UCSC may propose and the Commission may certify CLRDPs that provide for development of Campus educational facilities. Development of such projects is then subject to a different noticing and review procedure than coastal development permits, including that the Commission's review is generally more limited than with coastal permits. The concept is to frontload review of potential Campus development in an overall plan that then allows for streamlined review of individual projects for consistency with the development parameters identified in the plan. Toward this end, Coastal Act Section 30605 explicitly refers not to development more generally, but rather to "review by the commission of a specific project contained in the certified plan." In other words, the streamlined review is in part due to the certainty to be certified into the plan, including detailed specifications on projects as opposed to development more generally per se. That said, the Commission's regulations also define a coastal LRDP as akin to a Land Use Plan of an LCP – i.e., identifying types, locations, and intensities of development, albeit with certain specific requirements. Thus, CCR Section 13511(b) states:

With regard to [C]LRDPs, the level and pattern of development selected by the governing authority shall be reflected in a long range land use development plan. The [C]LRDP shall include measures necessary to achieve conformity with the policies of Chapter 3 of the California Coastal Act of 1976. Any plan submitted pursuant to this subchapter shall contain sufficient information regarding the kind, size, intensity and location of development activity intended to be undertaken pursuant to the plan to determine conformity with the policies of Chapter 3 of the Coastal Act. Such information shall include, but is not limited to the following: (1) the specific type of development activity or activities proposed to be undertaken; (2) the maximum and minimum intensity of such activity or activities (e.g., number of residents, capacity and service area of public works facility, etc.); (3) the proposed and alternative locations considered by any development activities to be undertaken pursuant to the [C]LRDP; (4) a capital improvement program or other scheduling or implementing devices that govern the implementation of the [C]LRDP; and (5) other information deemed necessary by the executive director of the Commission.

Finally, certain categories of development projects can be excluded from the noticing and Commission review parameters that typically apply by virtue of CCR Section 13511(g). In sum, both the Act and the implementing sections of the Code of Regulations must be read together to ensure CLRDP procedural consistency.

B. Applicable Provisions of Proposed CLRDP

The CLRDP's procedural parameters are mostly contained in Chapter 8. Chapter 8 is supplemented by



procedures in Chapter 5 in places (such as Section 5.1, Application of the Long Range Land Use Development Plan), Chapter 9 (Capital Improvement Program) overall, and by other provisions throughout the CLRDP that include procedural components. In sum, the CLRDP procedures identify a process whereby the Campus Planning Director will prepare project reports on proposed development projects for consideration by the UC Regents who can authorize such projects subject to certain authorization criteria. Once authorized by the Regents, the University will notice various parties, including the Commission, of the impending development by means of the previously described “Notice of Impending Development” (or NOID). The Commission will then have an opportunity to review the proposed development project for consistency with the certified CLRDP.⁷⁷

The CLRDP also includes a series of development project categories that would be excluded from the typical NOID development review process, including certain types of repairs, maintenance, and improvements on the Campus (see proposed CLRDP Section 8.3); standards for amendments to previously approved (both pre- and post-CLRDP certification) Campus development (CLRDP Section 8.5); identification of expiration and effective dates for CLRDP authorizations (CLRDP Section 8.6); details regarding the Commission’s retained coastal permitting jurisdiction (CLRDP Section 8.7); specifications for University monitoring of CLRDP development over time (CLRDP Section 8.8); a description of enforcement parameters (CLRDP Section 8.9); parameters for emergency CLRDP authorizations (CLRDP Section 8.10); and standards for non-conforming uses and structures (8.11).

C. Coastal Act Consistency Analysis

As summarized below, the CLRDP is generally clear with respect to its content and procedures, and no modifications are suggested in order to find consistency with the Coastal Act.

1. Determining Development Consistency

First, with respect to the standard of review for development contemplated by the CLRDP, Policy 1.1 requires that all development be consistent with Chapters 5-9 and the Appendices, which contain the essential substantive policies, standards, guidance, etc. of the CLRDP. In addition, Implementation Measure 1.1.1, which implements this policy, clearly states that Figures 5.1, 5.2, 5.3, and 5.4 define the general universe of projects allowable under the CLRDP:

Implementation Measure 1.1.1 – Figures of Chapter 5. Figures 5.1, 5.2, 5.3, and 5.4 show the kinds, locations, and maximum size and intensity of development allowed by this plan if such development is otherwise consistent with Chapters 5, 6, 7, 8, 9, and Appendices A and B. Development shall not be authorized unless it is of a type and location contemplated by Section 5.2. The locations of potential development and the maximum heights shown in Figure 5.4 shall be presumed consistent with Policy 4.1 and IM 4.1.1 with respect to protection of distant, non-campus public views, if such development is otherwise consistent with the LRDP.

⁷⁷ See CLRDP Sections 8.1 and 8.2.



The consistency of the CLRDP with the Coastal Act is a function of the totality of its anticipated kinds, locations, and intensities of land uses; and its policies, implementation measures, guidelines, etc. as they might be applied to future development. Figures 5.1, 5.2, 5.3 and 5.4 are a part of this totality, but in no means are they adequate by themselves to address the Chapter 3 policies of the Coastal Act. IM 1.1.1 adequately articulates this by framing out the specifically “allowable” maximum development defined in Figures 5.1-4, if such development is otherwise consistent with the CLRDP.

Related to this, to the extent that the University is seeking certainty that the potential buildout contemplated by the CLRDP will be achievable, two observations should be made. The policies of the plan provide for addressing changed circumstances with respect to wetlands and habitat resources; and other resources such as public access, parking, hazards, etc. through the requirement of various on-going surveys, reevaluation and adaptive response to resources identified on the ground as development projects are approved. Although these adaptive components of the CLRDP may necessitate changes, including reductions, to the currently anticipated maximum buildout, they are necessary to assure consistency with Chapter 3 of the Coastal Act over time. There is no question that the proposed campus site is dynamic, and the CLRDP must provide for the learning of new information, changed circumstances on the ground, etc.

Second, to the extent that the University may be concerned with the more difficult policy area of visual resource protection, there is a valid concern that some certainty be provided with respect to the consistency of the proposed development nodes and maximum heights within these nodes, and consistency with the Coastal Act requirements to protect public views of the site from outside the campus. The consistency of the CLRDP with respect to visual resources is evaluated above. IM 1.1.1 contains clarification that the Commission’s finding of consistency of the plan with Chapter 3 for purposes of protecting distant views of the campus (i.e. views of the campus from public viewing points further away from the immediate campus environs, such as Highway One, Wilder State Park, Moore Creek Preserve, and Natural Bridges State Park) is presumed over time with respect to the general locations, patterns, and intensities of development anticipated by the CLRDP.

With respect to the specific content of the CLRDP, as described, Coastal Act Section 30605 contemplates a process wherein the Commission may only approve or conditional approve development projects authorized by the University pursuant to the LRDP. Denial of project is not an option. This highlights the importance of being clear that the authorizations can only be granted for development that is specifically contemplated or contained in the plan, such that the issues that may be presented to the Commission through the review of a NOID would be limited to concerns about *how* a development project may need to be modified to meet the terms of the LRDP, but not include *whether* the development should be approved at all. In this case, Figures 5.1, 5.2, 5.3, and 5.4 provide a specific enumeration of the types, locations, and maximum intensities of development potentially allowed by the plan. It is clear, for example, that general commercial development, or residential development not necessary to support individuals working on the campus, is simply not allowed (i.e. not contained in) by the CLRDP. Similarly, it is clear that building development outside of the identified development zones, or in violation of the height requirements is not allowed. Inasmuch as Coastal Act Section 30605 articulates a premise that CLRDPs identify a certain universe of specific projects for which future



consistency may be determined (subject to notice and Commission oversight), Chapter 8 states in section 8.4 that only those development projects contained in the CLRDP may be reviewed by the Commission.

Although not exclusively a procedural issue, the figures of the CLRDP may require “clean up” modifications to assure consistency throughout the documents in inaccuracy, in internal inconsistency and confusion, and a lack of CLRDP effectiveness overall. In some cases it is noted that such figure modifications necessitate changes to figures in other chapters as well. Although the Commission has attempted to identify all such cases of overlap, there may be some figures to which modifications overlap. Whether explicitly identified in the modifications in this respect or not, the intent is that all figure modifications must be applied to all figures consistently. These figure modifications primarily focus on making factual corrections and conforming the figures to the as modified CLRDP text, and are required to be able to find the CLRDP consistent with the Coastal Act.

Finally, and in order to most effectively perform its oversight role, larger scale copies of the some of the key final figures need to be provided to the Commission for its use in relation to development project and other review emanating from the CLRDP (see suggested modifications). Without such figures, the Commission’s post-certification review ability would be hampered by the 8½” x 11” figures that can be difficult to use, particularly with respect to locations along the perimeter of defined features, and particularly in relation to measurements.

F. California Environmental Quality Act (CEQA)

The Coastal Commission’s review process for LCPs and LRDPs (and amendments thereto) has been certified by the Secretary of Resources as being the functional equivalent of the environmental review required by CEQA. Therefore, local governments and State universities are not required to undertake environmental analysis of proposed LCPs or LRDPs, although the Commission can and does use any environmental information that local governments and State universities have developed. CEQA requires that alternatives to the proposed action be reviewed and considered for their potential impact on the environment and that the least damaging feasible alternative be chosen as the alternative to undertake.

In January 2004, the University distributed a draft EIR analyzing both the overall effect of implementation of the then draft CLRDP over time, as well as five specific projects contemplated by the University (i.e., the five projects identified in CLRDP Chapter 7).⁷⁸ In April 2004, Commission staff provided the University with detailed comments on both the draft EIR and the draft CLRDP.⁷⁹ These comments were very detailed, covering many of the same issues still relevant and discussed in this report, including areas of potential Coastal Act inconsistency and recommendations for changes to address them. In September 2004, the University responded to comments and subsequently certified a final EIR for the project. Included in that final EIR are a series of mitigation measures meant to offset

⁷⁸ UCSC Marine Science Campus Draft EIR (SCH # 2001112014).

⁷⁹ Letter of April 19, 2004 identifying 99 major points in 16 major categories.



potential adverse impacts associated with CLRDP implementation. As such, where the University commits in the CLRDP to CEQA compliance (including Section 8.1.D), the Commission expects that such compliance means compliance with the base EIR as well,⁸⁰ including all identified mitigation measures that are applicable either based on individual project impacts, cumulative impacts, or other base EIR reasons, but only to the extent such compliance with the base EIR is not inconsistent with some aspect of the CLRDP. In other words, in the event that a requirement in the base EIR is inconsistent with the CLRDP, then the CLRDP provisions shall prevail.⁸¹ The Commission's certification of the CLRDP with respect to CEQA is based on this understanding.

In sum, this staff report has discussed the relevant coastal resource issues with the proposal, and has recommended appropriate suggested modifications to avoid and/or lessen any potential for adverse impacts to said resources. All public comments received to date have been addressed in the findings above. All above Coastal Act findings are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the CLRDP, as modified, would have on the environment within the meaning of CEQA. Thus, if so modified, the proposed CLRDP will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

⁸⁰ Ibid, SCH # 2001112014.

⁸¹ Note that a base EIR requirement that provides a different mitigation than that identified in the CLRDP is not categorically an inconsistency of itself; rather there is an inconsistency to the extent the base EIR requirement itself is inconsistent with the CLRDP.

