CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863

Th12a

Prepared November 21, 2007 (for December 13, 2007 hearing)

To: Commissioners and Interested Persons

From: Charles Lester, Senior Deputy Director
Dan Carl, Coastal Program Analyst

Subject: UCSC Marine Science Campus Coastal Long Range Development Plan (CLRDP) Proposed CLRDP for the University of California at Santa Cruz'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 December 13, 2007 meeting to take place at San Francisco City Hall, Legislative Chamber Room 250, located at 1 Dr. Carlton B. Goodlett Place in San Francisco.

STAFF RECOMMENDATION

Summary of Staff Recommendation

The University of California at Santa Cruz (UCSC) is proposing a Coastal Long Range Development Plan (CLRDP) for a new Marine Science Campus at Terrace Point in the City of Santa Cruz. Staff has worked closely with the University over several years to address Coastal Act consistency issues, and the University has proposed a site plan, policies, standards, and other management measures that circumscribe the future type, kinds, and intensities of development largely consistent with the Coastal Act. In the last year, the University has made significant modifications to the plan in response to staff and Commission concerns. Staff and the University are mostly in agreement on the currently proposed CLRDP, including on staff suggested modifications to address the most current wetland delineation, and to modify the CLRDP's procedural chapter related to filing notices of impending development. The only remaining disagreement concerns public beach access. The University proposes limited (at least twice a month), docent-led access to the beach at the site in perpetuity. In contrast, while staff agrees that supervised access is appropriate, and that docent-led access for the first five years is also appropriate at this time, staff also believes that the degree of beach access should be re-evaluated every five years to respond to potentially changing conditions in public access demand, supply, and constraints in the area. Thus, staff is recommending modifications to more clearly address the manner in which supervised beach access will be allowed to Younger Lagoon beach, including requiring such access parameters to be defined through an adaptive management plan based on a five-year review cycle.

Staff recommends that the Commission certify the CLRDP only if it is modified to address these remaining issues. Motions and resolutions to implement this recommendation are on page 12 of this report, and the recommended suggested CLRDP modifications begin on page 13. The University's proposed CLRDP is attached in its entirety as a pdf document on a CD in Exhibit L.

CLRDP General Context

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 historically been known locally as Terrace Point and it 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 upcoast 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 it 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 (CDPs) approved by the Coastal 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 (including related NOAA development) and additional areas of related infrastructure on the 75-acre terrace portion of the site situated above YLR.

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 UCSC Terrace Point site and submit it to the Coastal Commission for certification. Once certified, and similar to an LCP, the University would be the primary entity responsible for ensuring that future development on the site was consistent with the certified LRDP, subject to ongoing Commission oversight. UCSC has now submitted such a proposed coastal LRDP (or CLRDP)[1] intended to govern coastal development at the Terrace Point property (now called the Marine Science Campus by the University). The proposed CLRDP would provide a blueprint for future development of the site that would, if fully realized at buildout, allow for an increase of about 600,000 square feet of new Campus facilities mostly within four distinct development zones (occupying about half of the terrace area) for an expanded Marine Science Campus. Roughly 340,000 gross square feet of the potential new facilities would be constructed within the development zones in new one and two story buildings up to 36 feet tall, with the remainder in outdoor research and support areas. Additional areas of roads, and some natural drainage ponds, would also be developed outside of the four development nodes. Overall, the Campus would potentially grow by about three times its current size at buildout under the proposed CLRDP. In addition to the building program, the proposed CLRDP 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 41 acres). Once the CLRDP is certified, the University would be responsible for direct review of most Campus development to ensure it is consistent with the certified plan; the Commission would be mainly responsible for confirming the University's decisions in that

[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.

respect.[2]

Previous CCC Issue Identification

In December of 2000, the Commission reviewed UCSC's CLRDP issue identification paper at a public hearing and provided comments to the University for their use in the preparation of a CLRDP for this site.[3] 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.

Proposed CLRDP

Following the Commission's issue identification hearing, UCSC spent several years refining a draft CLRDP and supporting information, including CEQA information, for the Commission's consideration. The University's efforts intensified in 2004-2005, ultimately resulting in their first proposed CLRDP submittal in 2005. That first submittal went through a series of Commission hearings and was last heard at a Commission hearing in April 2006. At that time, the University withdrew the proposed CLRDP in order to more fully respond to Commission and other concerns. Commission and University staff have continued to work closely together since that time in an attempt to resolve remaining issues, and the University resubmitted a revised proposed CLRDP in December of 2006. Considerable staff coordination followed and on July 20, 2007, the University submitted a further refinement of the CLRDP for Commission consideration. It is the July 2007 revised proposed CLRDP that is before the Commission at this time (again, see Exhibit L).

The CLRDP would provide a long-range blueprint[4] for a development expansion of the Terrace Point site designed to accommodate a full-fledged UCSC Marine Science Campus. Development would take place almost exclusively within the four identified development zones, and mostly within the center of the site (i.e., in the area located roughly between the existing CDFG and NOAA facilities). These development zones would be surrounded by areas of designated wetlands and grasslands, and would be connected by roads and trails. The general buildout outcome on the terrace would be expected to be a

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2 The Commission would continue to retain some direct coastal development review authority (e.g., over areas of the Campus located within the Commission's retained coastal permitting jurisdiction, over federal projects, over certain existing developments originally permitted by the Commission, etc.).

3 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 CLRDPs.

4 The University does not currently have development funding nor does it currently intend to start building in the near term. UCSC has described the CLRDP as having a roughly twenty-year horizon in that regard.

lightly developed Campus entrance area and an additional three areas within which structures would be more densely sited (a total of about 34 terrace acres where development would be focused), and a largely undeveloped (other than connecting roads and trails, and some drainage basins) open space area of about 41 terrace acres. An expanded system of significant public pathways and overlooks would be provided, as would some public access parking. Drainage would be accommodated through a mostly natural series of swales and vegetated drainage basins that would rely heavily on soft technologies (i.e., maximizing infiltration and using natural vegetated basins for detaining, filtering, and treating runoff). The 25-acre Younger Lagoon Reserve would remain undeveloped, and would be maintained as a research reserve. The CLRDP would allow for up to about 340,000 additional square feet of buildings and related structures and up to roughly 150,000 additional square feet of outdoor research and laydown area on the terrace. Roads, parking, pathways, patios, and other such facilities would also be commensurately increased. Based on the University's current best estimate as to the Campus layout at buildout, the CLRDP would ultimately provide for additional development that would result in a Campus roughly three times the scale of the existing Campus (including the NOAA facility) overall.

In addition to ongoing protection of the Younger Lagoon Reserve area, the CLRDP also proposes the permanent protection of the natural areas surrounding the proposed development zones; including permanent protection of the delineated wetland areas and their buffers, the designated wildlife corridors and their buffers, and the remaining open space and grasslands. Development would generally be prohibited in this natural area (other than connecting roads, pathways, and some drainage basins), and the University would commit to long-term resource restoration, enhancement, and management of this area in perpetuity. This natural areas habitat work would be guided by an by an independent scientific advisory committee that would assist in overall implementation, including serving as a sounding board to ensure that the natural areas are adaptively managed to ensure that these areas thrive in the long run. Initial implementation of such natural area resource enhancement would be timed over the first twenty years following CLRDP certification in three equal (temporal and spatial) phases.

In order to add a further level of protection to the Campus natural areas over time, the University also proposes to incorporate these areas into Younger Lagoon Reserve. Such Reserve designation would serve to further indicate that these natural areas are meant to be preserved as natural areas for all time. All told, the Reserve would nearly triple in size (up to approximately 66 acres) with the addition of the natural areas to it. Overall, the CLRDP natural areas commitment reflects the University's intent to cluster development in less sensitive portions of the site and to ensure that the surrounding more sensitive areas are enhanced and protected in perpetuity.

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 marine science 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 protecting the resources of the site and its surroundings, including avoiding and buffering delineated wetland and

ESHA areas. Nonetheless, several 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 little question that the proposed campus, with its coastal dependent and related uses, is a high Coastal Act priority. The University's CLRDP 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. The UCSC site already serves this function, albeit on a smaller scale, and has successfully provided a marine research physical plant with accessible public programs that have served to educate and inspire thousands of visitors. The intent of the CLRDP is to expand this concept, including through more integrated researcher collaboration, and to elevate the Campus and its programs to a new and enhanced level. 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 co-location with one another and with the existing (and potentially expanded) seawater system. Potential buildings would include laboratories, classrooms, and other support infrastructure, including a limited number of overnight rooms and other short-term accommodations integrated into the Campus. In terms of the latter, the University intends to provide up to thirty researcher accommodation rooms (limited to a maximum of one-year length of stay); the University no longer proposes longer-term housing for the site.[5] The researcher rooms would provide on-site accommodations for a limited number of visiting scientists and researchers, graduate and undergraduate students, K-12 educators and students, and new faculty and researchers whose on-site presence is necessary for the success of individual labs as well as the Campus and its programs overall. In this respect, the short-term accommodations are integral to the success of the overarching coastal-related land uses contemplated by the CLRDP.

In addition to the marine science building program, the CLRDP also anticipates other high priority land uses in the form of significant public access improvements and natural resource management, including wetland and grassland restoration.

Intensity of Development/Public Views

Beyond the proposed use of land, the primary issues with the proposed CLRDP 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 (downcoast)[6] and significant rural areas to the west (upcoast).[7]

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5 In addition to the 30 researcher rooms and the 10 overnight rooms, the previously proposed CLRDP also envisioned up to 80 apartment units. These apartment units are no longer a part of the currently proposed CLRDP. The CLRDP continues to include up to two small housing units designed to accommodate on-site Campus caretakers.

6 The shoreline at this location is oriented in such a way that the Pacific Ocean is due south as opposed to a more directly westerly direction. As a result, north is directly inland, east is directly downcoast, and west is directly upcoast.

With respect to public views and related urban-rural transition issues, the proposed CLRDP at buildout would result in a significant amount of new building and other related structural development. However, CLRDP development parameters will limit the perceived visual impact of the building program. In particular, the University has developed a siting and design palette meant to evoke an agricultural built environment (clusters of buildings, barn-like structures, natural weathered materials, planted windrow trees, etc.). Although the site will change over time and the built environment will evolve into a more prominent component of it, the visual/urban-rural transitional impacts from the proposed plan have been reduced to an acceptable level, particularly when considered in the context of other existing development at this urban edge, 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 (including further defining and strengthening the urban-rural boundary at this location) and public access and recreation.

Wetland and Other Habitat Protection

With respect to wetland and other habitat protection, the Campus site supports a variety of sensitive species and habitat resources, including significant wetland areas, Younger Lagoon Reserve, raptor foraging areas, and wildlife connections in relation to resource areas up and down coast from the site (including for California red-legged frog). Some of these areas constitute ESHA under the Coastal Act. The CLRDP is premised on avoiding and buffering all ESHA, delineated wetlands, bluff areas, wildlife corridors (including for California red-legged frog), portions of the intervening grasslands and other open space, and Younger Lagoon Reserve. The University made significant efforts to identify all such habitat constraints and the CLRDP places these areas off-limits to future development in perpetuity (including incorporating the terrace portion of such areas into Younger Lagoon Reserve). To address the dynamic natural of such habitat resources, the CLRDP also includes provisions to reevaluate (at the time of proposed development) potential development sites located within development zones; to avoid and buffer any new wetlands or ESHA then identified; and to amend the CLRDP to add these areas to the natural areas protected by the CLRDP, including incorporating them too into Younger Lagoon Reserve. Further, the CLRDP includes significant siting and design criteria to ensure that the Campus building program does not adversely effect such designated habitat areas (including requiring noise, lights, and activity areas to be adequately attenuated and/or entirely screened from view), and includes the aforementioned enhancement, restoration, and management component of all areas outside of development zones. Thus, in general, the CLRDP avoids, protects, and where feasible restores such resources consistent with the Act, and represents a significant University commitment to enhance and manage such habitat resources in perpetuity.

With respect to wetlands protection, there has long been controversy over the extent of delineated wetlands on the Campus site. The terrace area is a difficult area in which to conduct a wetland delineation because of the way various potential wetland parameters express themselves on the ground.

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[7] Given its location at the urban-rural boundary between the City of Santa Cruz to the east and the rural Santa Cruz County north coast to the west, the Campus site has had a long history of conflict concerning appropriate types, scale, and intensity of development (including its ongoing status as an area where for which the LCP was never certified).

For example, some have argued that much of if not most of the 75-acre terrace portion of the site should be considered wetland pursuant to the Coastal Act because of the presence of certain plants that often are found growing under wetland conditions. In light of this controversy, the University embarked on and completed a multiple year wetland delineation effort for the Campus. This delineation effort was completed in consultation with the Commission's staff ecologist, and was based on the wetlands definitions found in the Coastal Act and the Commission's regulations. In addition, in the time since the Commission last reviewed the CLRDP in April 2006, additional independent wetland information has been provided by experts from the U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA). The outcome of this independent assessment was that additional areas were identified that should be considered wetlands under the ACOE three-parameter model (and thus by extension wetlands under the Coastal Act's single-parameter model). Also, the ACOE and EPA experts identified other areas that didn't meet federal criteria, but that may meet Coastal Act criteria, and referred these to the Commission's staff ecologist for review. The Commission's staff ecologist ultimately concluded that there were more areas of wetland at the site than had been delineated previously, and recommended that these areas too be considered wetland, avoided, and buffered. Suggested modifications are included to designate these areas as wetland and to limit development in or near them consistent with the Coastal Act.

In summary, it is clear that Terrace Point presents a challenging set of circumstances with respect to the various field indicators of soils, vegetation, and hydrology that may typically indicate the presence of wetlands. Over the course of CLRDP development, opinions have ranged from there being very few terrace wetlands to nearly all of the terrace being wetland. As a means to resolve these issues, the University contracted for one of the most involved wetland delineations ever undertaken in the coastal zone. The Commission's staff ecologist reviewed and concurred with the methodological approach used by the University's wetland consultants and periodically participated in field activities. When delineation based on that work was still challenged (most recently when this issue was last before the Commission in April 2006), wetland experts from ACOE and EPA were asked to review the documentation and the site for the presence of wetlands in both a federal and Coastal Act context.[8] Those reviewers found that wetlands on the site were mostly appropriately identified from a federal perspective, but that the boundaries of ACOE wetlands needed to be significantly expanded in some areas, particularly north of Delaware Avenue Extension. It appears that that area has gotten wetter in recent years as a result of sedimentation in the drainage that directs runoff to Younger Lagoon. They also identified some areas that may be Coastal Act wetlands and should be given a closer review by Commission staff. However, most of the areas originally deemed upland by the University delineation, including areas supporting wetland indicator species, were also judged to be uplands by the experts from ACOE and EPA. The Commission's staff ecologist concluded that the additional ACOE and several of the potential Coastal Act wetland areas should be considered wetland. Thus, the site has been reviewed and re-reviewed by acknowledged experts in the field, including by federal delineators specifically requested by groups who did not concur on the original delineation. In conclusion, Commission staff believe that the site has been adequately analyzed, and that, as modified, Coastal Act wetlands are

[8] Although the peer reviewers were fulfilling their federal oversight role under the Clean Water Act to verify a federal delineation, they were also asked by the Commission's Executive Director to evaluate the site applying a Coastal Act "one-parameter" test.

protected as directed by the Act, and that there is no need for additional delineation at this time, particularly given that the CLRDP is structured to require additional delineation at the time of proposed development.

Public Access

As previously described, the CLRDP includes development and provision of significant public access amenities, including a trail system throughout the site, developed overlooks at the ocean and Younger Lagoon, and designated public access parking areas spread throughout the Campus near to primary access attractions. The Campus would be open to the general public to make use of such public access facilities during all daylight hours (i.e., one-hour before sunrise to one-hour after sunset). In this respect, the CLRDP recognizes the public nature of this University Campus while at the same time balancing maximum public access use per the Act against the specialized needs and requirements of working marine science and research laboratories. For the most part, the CLRDP achieves an effective balance in this respect, and the welcoming public access system and related amenities appear destined to become a defining element of this Campus.

The one area where there is a question as to whether the CLRDP appropriately accounts for access is with respect to public beach access to the pocket beach fronting Younger Lagoon, and by extension to the surfing areas directly offshore. Although the sandy beach here was historically a popular and well-used beach area, for the last 26 years the public has officially been prevented from accessing the beach by a beach closure intended to protect Younger Lagoon and related habitat resources and research, and to provide lab security more generally.[9] Although some unauthorized access has continued to occur, including primarily surfing and skimboarding use across the wet sandy forebeach, the University continues to prevent access to the beach area and the remainder of Younger Lagoon reserve other than for University researchers and authorized University personnel. The CLRDP proposes to designate the beach as ESHA and ESHA buffer,[10] and to make the general beach access closure permanent as part of the plan. Instead of allowing for more general public access, the CLRDP proposes docent guided educational tours of the beach area at least two times per month.

Although the CLRDP has not explicitly tracked the Commission's 2001 beach access reevaluation requirements, the CLRDP and its documentation provide adequate information with which to reevaluate this previous temporary beach closure decision as previously required by the Commission. In summary, staff, including the Commission's staff ecologist, is recommending that the sandy beach not be considered ESHA, and therefore is further recommending that it is not consistent with the Coastal Act

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[9] This general public access closure was reviewed and allowed by the Commission on a temporary basis in 1981, and again on a temporary basis in 2001. The temporary nature of the closure was based on the premise that the Commission would continue to reevaluate the beach access issue 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. The required re-review of the 2001 temporary closure was to occur in 2004 (and every three years after), but that re-review never occurred. The CLRDP has become the de facto re-review vehicle.

[10] The ESHA buffer designation would apply to most of the wet sandy beach area nearest the ocean, and the ESHA designation would apply to the remainder of the sandy beach extending inland another 75 feet or so to the beginning of a denser accumulation of coastal strand vegetation (the remainder of YLR would also be designated ESHA).

that it otherwise be off-limits to public access (i.e., past the proposed decent-led access) forever. The beach area here is not unlike other pocket beaches that include lagoon and brackish features inland of them. Although it is clear that prohibiting general public access would lead to less beach area impacts (on birds, etc.), the same could be said for prohibiting such beach access to almost any beach with similar characteristics. The beach area here is already used by University classes, researchers, and others sanctioned by the University (and the aforementioned surfers and others who aren't sanctioned but ignore the closure), so it is not untouched. In fact, stairs have been installed by the University to facilitate access to the beach. Although the beach is relatively unimpacted by general public use, and borders on habitat areas inland of it, the sandy beach itself does not meet the ESHA criteria, and it is not otherwise so fragile as to dictate that the public be barred from using it.

Therefore, staff recommends that public access to the sandy beach be allowed, while the areas inland of the beach remain off-limits, consistent with the Coastal Act mandate to maximize public access consistent with resource protection. However, to address YLR resource and research concerns, staff recommends that such access be supervised access subject to a management plan that is reevaluated on a five-year cycle. The management plan would be based on the capacity of the beach area to sustain use and the level of intensity of such use when considered in light of the fragility of beach area and adjacent resources and ongoing research. For the first five-year cycle (i.e., until five years post-CLRDP certification), staff recommends that the entire beach area and its access trails be recognized as appropriate for the supervised tours only (and not be open to any kind of general public access, essentially as proposed by the University). This limitation would be applied in order to both protect beach area and adjacent resources within the Reserve, to allow for implementation of an applied research program within the Reserve, and to allow baseline data and monitoring to occur over five-years to help determine the level of supervised access that is appropriate for the beach area. The CLRDP would thus then recognize that different access supervision parameters, whether more or less restrictive, may be the outcome of any subsequent required five-year review. Modifications are recommended accordingly.

Procedures

Finally, the manner in which the CLRDP would be implemented over time is central to the overall objective of effective resource protection. Staff is well aware of the difficulties – small and large – associated with delegation of coastal development decision making, including provisions for Commission oversight. The CLRDP raises procedural issues requiring modifications to conform it with the specifications for CLRDPs that are found in the Coastal Act and the Commission's regulations and, more broadly, to ensure smooth and effective implementation over time. Given the nature of CLRDPs, procedural efficiency and clarity is particularly important, and the lack thereof may lead directly to unforeseen coastal resource impacts.

Conclusion/Staff Recommendation

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 site. Overall, if modified as suggested in this staff recommendation, the specific kinds, locations and intensities of development contemplated by the CLRDP are consistent with the Coastal Act. In addition, the modified CLRDP should function effectively to protect coastal resources consistent with the Coastal Act, and provide the University with an expanded marine science campus that meets their goals and objectives. The modified CLRDP should also over time allow the expanded Campus to integrate effectively into its surroundings, provide for significant public access use and recreation, including use of Campus access facilities and features, and protect and enhance the natural habitats that surround Campus developed areas. The resultant Marine Science Campus should be well positioned to be able to effectively educate the public and foster a broader appreciation of marine and coastal resources, and to provide significant contributions to our understanding of the marine environment, ultimately contributing to improved coastal resource management.

As modified, staff recommends approval of the UCSC Marine Science Campus CLRDP.

STAFF REPORT CONTENTS

Click on the links at left to go to the exhibits.

Please note that the second part of Exhibit I is grouped with Exhibits J and K.

I. STAFF RECOMMENDATION

Staff recommends that the Commission, after public hearing, certify the proposed UCSC CLRDP only if

[11] Exhibit C consists of photos over which are superimposed depictions of potential Campus facilities at buildout under the CLRDP if it were to develop pursuant to the originally proposed (i.e., in the University's previous submittal to the Commission that was withdrawn) CLRDP Figure 7.2. The photosimulations must be understood relative to that context. Specifically, the version of the CLRDP that is currently before the Commission has changed – including Figure 7.2 – in the time since the photosimulations were developed. As a result, some facilities shown in the photosimulations are no longer contained in the CLRDP and thus will not be built (such as the previously proposed apartment units). Other facilities have moved and development zone boundaries have changed (such as the upper terrace zone, the size of which has been reduced by half as compared to that previously proposed). Thus, the photosimulations do not strictly match to Figure 7.2, and slightly overstate the degree of potential buildout. In addition, note that Figure 7.2 was and is an illustrative example, and thus only represents one way that the Campus could develop pursuant to the proposed CLRDP.

[12] The proposed CLRDP is included in digital form on the attached CD, including a complete pdf document of the entire CLRDP as well as individual pdf documents representing each chapter and appendix.

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.

B.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 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 June 13, 2008), 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. **Wetlands – Updated Wetlands and Wetland Buffers.** The University shall submit to the Executive Director for review and approval modified CLRDP text and figures that account for the following changes. All wetland and wetland buffer areas shown on Exhibit K, shall: (a) be described and delineated as wetland and wetland buffer areas; (b) be described and designated as ESHA and Resource Protection (for wetlands) and as Resource Protection Buffer (for wetland buffer areas); and (c) be removed from all development zones. Such modified CLRDP text and figures shall be otherwise consistent with all other approved CLRDP provisions, and with the Commission ecologist's memos in Exhibit I.

2. **Wetlands – Wetland W4 Buffer.** Add the following new bullet to the list of allowed uses and development in the Resource Protection Buffer land use designation in CLRDP Section 5.2.2: "If is infeasible to provide reasonable access to the southeastern corner of the Middle Terrace development zone (within the development zone boundary and/or through a portion of the NOAA Fisheries inholding), then the minimum amount of development incursion into the buffer that is necessary to provide such reasonable access provided such development includes measures to commensurately offset and buffer such incursion from Wetland W4 at least as well as the 100-foot buffer distance alone (e.g., including berming, vegetative screening, etc.).

3. **Wetlands – Campus Entrance Development Zone.** The Campus Entrance Development Zone shall be modified so that its northern boundary is coterminous with the edge of the wetland buffer as shown on Exhibit K.

4. **Beach Access – Modify CLRDP Depiction of Beach Area.** The University shall submit to the Executive Director for review and approval updated CLRDP text (as necessary) and figures that identify the Younger Lagoon Beach area (Beach Area) to which supervised access would be allowed. The Beach Area's northern 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 (see Exhibit K). All areas south of this northern Beach Area boundary shall be considered Beach Area. All applicable figures, including Figures 3.11, 3.16, 5.2, 5.6, A3, and A5), shall be modified to show the Beach Area as ESHA buffer (including Figures 3.11 and 3.16), Resource Protection Buffer (including Figures 5.2 A3 and A5), or Younger Lagoon Beach (including Figure 5.6) as applicable.

5. **Beach Access – Identify Beach Access Trails on Figures 5.6 and 9.1.** CLRDP Figures 5.6 and 9.1 shall be modified to include the additional beach access area trails depicted on Exhibit K as "Controlled Access Trails."

6. **Beach Access – Modify CLRDP Chapter 4 text (Chapter 4, Page 10 – see Exhibit L).** CLRDP text shall be modified as follows:

   Another important program component envisioned for the Marine Science Campus is public access, recreation, and education. These activities complement the public service and education aspects of the Marine Science Campus mission and maintain historic access opportunities to coastal resources as mandated by the California Coastal Act. Recreational activities are also important for the health and productivity of scientists, faculty, and students who work long hours. This CLRDP envisions an expanded network of public trails and controlled access trails on the Marine Science Campus that allow visitors and other site users to walk to overlook points at the ocean, Younger Lagoon Reserve, and other natural resource areas on the site. The plan also accommodates controlled access into natural resource areas for research, nature study, and habitat restoration work. The plan also includes providing supervised access to the Younger Lagoon beach area, and ongoing evaluation over time of the appropriate level of access to that area. Finally, the plan envisions the development of approximately 8,000 square feet of paved and non-paved sport courts integrated into developed areas of the Marine Science Campus. This is sufficient to provide two courts (e.g., one volleyball court and one basketball court) for campus users and visitors.

7. **Beach Access – Modify CLRDP Chapter 5 text (Chapter 5, Page 17 – see Exhibit L).** CLRDP text shall be modified as follows:

   …CLRDP preparation have substantially changed in a manner that would necessitate further protections for these resources.

   It is also clear that there are certain designated resource and resource buffer areas in which the CLRDP envisions some amount of public access, and it will be important to appropriately balance such public access with resource protection. These include such areas as the realigned main Campus road area, the YLR and wetland overlooks, the trails extending through such areas, and the Younger Lagoon beach area. With respect to the latter specifically, the CLRDP provides for supervised access to this area, subject to an approved set of access parameters that are established through a development project review process on a five-year renewal cycle ~~by Younger Lagoon staff and Seymour Center docents subsequent to a development project review process to be submitted within six months of CLRDP certification~~. The Younger Lagoon 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. Any five-year plan, including any use protocols or guidelines, shall consider the entirety of the beach area, whether it ultimately allows or disallows certain types of access to certain areas of it. The location of trail access to the beach area is shown in Figure 5.6. At the time of CLRDP certification, the entire beach area and its access trails were recognized as appropriate for supervised tours only (and it would not be open to any kind of general

public access). This limitation was applied at that time in order to both protect beach area and adjacent resources within the Reserve and to allow for implementation of an applied research program within the Reserve. At the same time, the CLRDP recognizes that different access supervision parameters, whether more or less restrictive, may be the outcome of any subsequent required five-year review.

8. Beach Access – Modify CLRDP Implementation Measure 3.6.3 (Chapter 5, Pages 25 and 26 – see Exhibit L). CLRDP text shall be modified as follows:

Implementation Measure 3.6.3 - Public Beach Access within YLR. Supervised beach access to Younger Lagoon beach shall be provided to the general public consistent with and pursuant to a management plan for such access that is ~~the following guidelines, which are~~ based on the best possible assessment of the capacity of the beach area to sustain use and the level of intensity of such use when considered in light of the fragility of the beach area and ~~the significant risk to~~ adjacent resources and ongoing research. Within six months of CLRDP certification, and at five year intervals post-certification after that, the University shall submit a Notice of Impending Development to the Coastal Commission with all necessary supporting information for a development project to implement such a beach access management plan for the next five years. Each such management plan shall at a minimum include:

- *~~UC shall provide a~~ A regular schedule of guided, educational tours to the beach area that is coordinated with and similar to other Marine Science Campus education and docent programs and designed to introduce visitors to the special aspects of beach ecology without causing deterioration of that ecology or loss of opportunity for feeding or breeding of beach dependent species. These tours may be weekly weather permitting, but shall be offered a minimum of two times per month.*

- *Identification of all parameters for beach access, including a clear depiction of the area within which such access is allowed, and a clear description of all related implementing measures (e.g., trail alignments, trail design, barriers/fencing, signage, timing restrictions, supervision requirements, etc.). Access shall be by way of ~~existing~~ controlled access trails shown on Figure 5.6 ~~Coastal Access and Recreation Diagram~~. Trails shall be maintained, marked, and signed for safety and interpretation of YLR ecology.*

- ~~*Within six months of CLRDP certification, the University shall submit a Notice of Impending Development to the Coastal Commission identifying the parameters related to controlled access to the Younger Lagoon beach, including a clear depiction of the area where such access is allowed and a description of all related implementation measures (e.g., path alignments, path design, barriers/fencing, signage, timing restrictions, supervision requirements, etc.).*~~

- *A monitoring program that evaluates t~~T~~rends in beach area conditions ~~shall be monitored~~. ~~Specific parameters shall be monitored to provide data for assessment as to whether the access has been conducted in a manner that avoids deterioration of the beach, its flora and fauna, and its overall physical condition. Monitoring~~ ,where at a minimum such program shall include ~~(but~~*

~~may not be limited to~~): user data (including identification of all user types and specific data on size and composition of beach tour groups); a selected set of repeatable photo points to be taken seasonally to show all major areas of the beach; presence/absence of tidewater goby and evidence of breeding activity; species composition and coverage of beach dune vegetation from the lowest (nearest to the mean high tide line) occurring terrestrial plant to 10 meters inland into the strand vegetation; evidence of seed production by beach strand species in this zone; species composition and abundance of animal tracks (vertebrate and invertebrate) on the beach and adjacent beach dune area; and regular counts of feeding shorebirds on the beach.

- *An assessment of beach area resources and the effect of beach area use and activities (including authorized and unauthorized uses, research use, YLR activities, etc.) on such resources in the time since the last five-year review and overall in the time since at least CLRDP certification;*

- *~~Monitoring reports shall be submitted with the annual CLRDP report and shall explain all underlying assumptions, methodologies, and other information pertinent to the monitoring program. The annual report shall include a~~ A description of existing public access opportunities on the Campus, and the way in which such opportunities relate to the amount and type of supervised access provided to the beach area.*

9. Beach Access – Modify CLRDP Chapter 5 Text (Chapter 5, Page 49 – see Exhibit L). CLRDP text shall be modified as follows:

Controlled Access Areas

The primary purpose of this designation is to provide pedestrian access to scenic and coastal resource areas of the Marine Science Campus in a manner consistent with safety, security, and protection of sensitive coastal resources and research areas. Controlled access areas may be accessed only by authorized personnel for scientific or educational purposes; by authorized personnel for the construction, repair, or maintenance of facilities; by authorized visitors; by members of the public as part of a supervised tour; and, where Public Trails extend through Controlled Access Areas as shown on Figure 5.6, by the general public. For the Younger Lagoon beach area specifically, supervised access shall be allowed within this controlled access area consistent with and pursuant to a management plan for such access ~~as described in Implementation Measure 3.6.3~~. The Controlled Access Area designation applies to portions of the Marine Science Campus that contain environmentally sensitive habitat and/or resource buffers or within which sensitive outdoor research activity is undertaken.

10. Beach Access – Modify CLRDP Chapter 5 Text (Chapter 5, Page 49 – see Exhibit L). CLRDP text shall be modified as follows:

Controlled Access Trails

The primary purpose of this public access designation is to provide pedestrian access to overlooks and the Younger lagoon beach area that are located in Controlled Access Areas of the Marine Science Campus. Because the overlooks exist or are to be sited in areas that include sensitive

coastal resources, research facilities and activities, and steep ocean cliffs, use of the overlook trails shall be limited to authorized personnel for scientific or educational purposes or for the construction, repair, or maintenance of facilities. Because a~~A~~ccess to the Younger Lagoon beach area is only allowed consistent with and pursuant to a management plan for such access, use of the beach access trails shall be subject to the provisions of such management plan ~~the provisions of Implementation Measure 3.6.3~~. These areas may also be accessed by members of the public as part of a supervised tour or education program (e.g., those conducted by Seymour Marine Discovery Center, or Younger Lagoon Reserve staff of the terrace areas and Younger Lagoon beach). Controlled Access Trails shall be ADA compliant (unless topography and/or sensitive natural resources preclude compliance) and constructed of compacted decomposed granite or similar materials.

11. Beach Access – Modify CLRDP Implementation Measure 6.2.13 (Chapter 5, Page 54 – see Exhibit L). CLRDP text shall be modified as follows:

Implementation Measure 6.2.13 – Public Access to Younger Lagoon Beach. The University shall provide public access to the Younger Lagoon Beach area consistent with and pursuant to an approved management plan pursuant to ~~the provisions of~~ Implementation Measure 3.6.3.

12. Procedures – Modify CLRDP Section 8.4.1 (Chapter 8, Page 11 – see Exhibit L). CLRDP text shall be modified as follows:

8.4.1 Filing the Notice of Impending Development

Within ten days of receipt of the Notice of Impending Development and all applicable supporting information (as described in Section 8.2, above) for a proposed development project, the Executive Director of the Coastal Commission shall review the submittal and shall determine whether additional information is necessary to determine if the proposed development project is consistent with the CLRDP, and if additional information is deemed necessary, shall request such information from the Director of Campus Planning. The Notice of Impending Development shall be deemed filed as follows:

1. *If the Executive Director does not respond to the Notice of Impending Development or any subsequent information submittal within ten days following its receipt, the Notice shall be deemed filed on the tenth day following the Executive Director's receipt of the Notice or the subsequent information submittal ~~its receipt by the Executive Director~~, or*

2. *The Notice shall be deemed filed when all necessary information requested has been received by the Executive Director. ~~Any request by the Executive Director for additional information must be for specific information needed to determine consistency with the CLRDP and must be transmitted within ten days of receipt of the NOID. In the event there is disagreement concerning the adequacy of submitted information to enable the Commission to determine consistency with the CLRDP, either the Executive Director or the Planning Director may submit the disagreement to the Commission for resolution.~~*

In the event of disagreement concerning the need for additional information or the adequacy of the subsequent information submitted to enable the Commission to determine consistency with the certified CLRDP, the Executive Director or Director of Campus Planning may submit the disagreement to the Commission for resolution. The Executive Director shall schedule the matter for hearing and resolution at the next Commission meeting or as soon thereafter as practicable, but in no event later than sixty (60) calendar days after the Executive Director's receipt of written notice by the Director of Campus Planning that the University disagrees that the Executive Director's request for information is necessary to determine if the proposed development is consistent with the certified CLRDP.

The matter shall be scheduled and heard by the Commission in accordance, to the extent practicable, with the procedures set forth in 14 California Code of Regulations Section 13056(d).

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:

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 (UCSC) has submitted an LRDP to the Commission which it has termed a "Coastal" LRDP (or CLRDP)[13] to distinguish it from the LRDP for the main campus that is located mostly inland of the coastal zone about two-miles to the north (see CLRDP Figure 2.4 in Exhibit L). As defined in the Commission's regulations, this CLRDP is similar to a Local Coastal Program (LCP). 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.

[13] 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 Coastal Act and the Commission's regulations.

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, 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 (or a "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.[14] Pursuant to Coastal Act Sections 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.

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

[14] 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 13549 provides that a NOID is only filed following Executive Director review of the NOID and any supporting materials to ensure there is sufficient information for making the consistency determination. CCR Section 13548 requires that the Commission take action on the notice within 30 working days of filing of the NOID. 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.

1. Marine Science Campus Location[15]

UCSC's Marine Science Campus site 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 also 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 rural 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 along the coast, and Bonny Doon in the mountains) in these mostly pastoral areas, this north coast area is part of the stretch of largely agricultural and undeveloped coastal lands extending nearly 50 miles to Half 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.[16]

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. A sandy beach area fronts Younger Lagoon below the terrace. 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 Antonelli Pond (above, or north of, Delaware Avenue) and the densely packed De Anza Mobile Home Park (residential) (below Delaware Avenue) beyond which is Natural Bridges State Park and past that West Cliff Drive in the City of Santa Cruz.

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15 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 xxx).

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

2. Marine Science Campus Existing Development[17]

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.[18] 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. All told, the Campus currently contains about 140,000 square feet of buildings and related facilities (including the NOAA lab), and about 185,000 square feet of roads, parking areas, and outdoor research and related development.

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 (where it becomes McAllister Way) then 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),[19] 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 acquisition,[20] 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.[21]

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17 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 L).

18 The storage yard is not permitted and the greenhouses were authorized by the Commission on a temporary basis only (until 2004). The CLRDP provides for a phased transition that ensures that either these structures are removed and the areas restored, or development there is made consistent with the CLRDP, within 5 years.

19 About half the trail loop is on Delaware Avenue Extension/McAllister Way, and about half is on a well worn footpath along the bluff and connecting back inland at the Campus entrance at the intersection of Shaffer Road and Delaware Avenue.

20 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.

21 See Exhibit B for time series air photos from 1972 to 2004 showing incremental development over time (and the steady transition from agricultural production to the current UCSC/NOAA development pattern) on the land that now makes up the current Campus.

C.Development of the UCSC CLRDP

1. Background Context

As evidenced 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 for this area. This and subsequent Terrace Point development proposals,[22] 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 at 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, and similar time series photos in CLRDP Figure 4.1 in Exhibit L).

2. Preliminary Development of CLRDP

Most of the Campus site was 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.[23] 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 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, 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;

[22] 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.

[23] See CLRDP Figure 3.2 in Exhibit L for boundaries showing UCSC's original land holding and subsequent additions to it.

- 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[24] and other supporting documentation. Commission staff provided comments during this time, including identifying many of the issues that have become a central focus of discussions with the University since that time. In late 2004 and early 2005, and prior to the University's first CLRDP 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

Following the Commission's issue identification hearing, UCSC spent several years refining a draft CLRDP and supporting information for the Commission's consideration. The University's efforts intensified in 2004-2005, ultimately resulting in their first proposed CLRDP submittal in 2005. That first submittal went through a series of Commission hearings and was last heard at a Commission hearing in April 2006. At that time, the University withdrew the proposed CLRDP in order to more fully respond to Commission and other concerns. Commission and University staff have continued to work closely together since that time in an attempt to resolve remaining issues, and the University resubmitted a revised proposed CLRDP in December of 2006. Considerable staff coordination followed and on July 20, 2007, the University submitted a further refinement of the CLRDP for Commission consideration. It is the July 2007 revised proposed CLRDP that is before the Commission at this time (see full version of the proposed CLRDP in Exhibit L).

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 and related

[24] See also CEQA findings at the end of this report.

text 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.[25] Chapter 8 is the CLRDP's procedural chapter and it describes the process for University and Coastal Commission review of proposed Campus 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 is attached in its entirety as a CD in Exhibit L, and selected CLRDP Figures (i.e., Figures 5.2, 5.4, 5.6, and 7.2) are included as Exhibit D.

2. Marine Science Campus Objectives[26]

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

The CLRDP is premised on avoiding and mitigating the potential adverse resource impacts of the proposed CLRDP building program and associated land uses. 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 and/or overlapping resource and site constraints being avoided (such as geologic hazards, identified public view corridors, etc.).[27] 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 or Resource Protection), and "Open Space" (see the proposed

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[25] 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.

[26] See also Chapter 4 of the proposed CLRDP for further description of the University's Marine Science Campus objectives (see Exhibit L).

[27] See also proposed CLRDP Chapter 3 that describes the University's site constraint analysis exercise (see Exhibit L).

CLRDP land use diagram with these designations noted in CLRDP Figure 5.2 in Exhibit D). These CLRDP mapped depictions are supported by information regarding the extent of Campus ESHA, wetland, and other resources. These resource and buffer areas occupy about 66 acres of the Campus (including about 41 acres on the terrace 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 by complementary CLRDP policies and requirements. Exceptions to this general development prohibition are provided for certain cases, such as roads connecting development nodes, certain public access trails and related amenities, seawater system components, and drainage ponds in certain circumstances. Otherwise, allowed uses and development in these areas are required to be resource-dependent (see, for example, proposed CLRDP Land Use provisions in CLRDP Section 5.2 starting on page 3 of CLRDP Chapter 5 in Exhibit L).

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 to avoid potential conflicts (ranging from 200- to 300-foot setbacks generally, to 500-foot setbacks for caretaker accommodations specifically); 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 L).

The CLRDP also commits the University to a series of coastal resource improvements including 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 L). More specifically with respect to the non-development areas, the CLRDP includes a commitment on the part of the University to restore, enhance, and manage all Campus natural areas (i.e., all areas outside of defined development zones) in three phases (temporal and spatial) over the first twenty years that the CLRDP is in place, and to continue to ensure the success of such efforts in perpetuity. Such efforts are to be guided by both the CLRDP Resource Management Plan (i.e., CLRDP Appendix A) which provides a general framework, as well as by a scientific advisory committee that will help oversee the adaptive restoration and management of the Campus natural areas. In addition, under the CLRDP, the terrace natural areas outside of development zones, some 41 acres, would be added to Younger Lagoon Reserve to provide a greater level of protection to them. In sum, the CLRDP commits the University to enhancing, managing and maintaining the natural areas as high quality open space and habitat in perpetuity.

4. CLRDP Development Framework

To address coastal resource constraints, the CLRDP development framework establishes four distinct areas of the terrace within which development is to be clustered. The four development zones are called

the Campus Entrance, 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 (see, for example, CLRDP Figure 5.2 in Exhibit D).

The Campus Entrance development zone is about a third of an acre and is located at the entrance to the Campus at the intersection of Shaffer Road and Delaware Avenue. The Upper Terrace development zone is less than 2 acres in size and is located in the northeastern part of the Campus adjacent to Shaffer Road and near the Union Pacific Railroad tracks; this area 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,[28] 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. Even so, it too is currently predominantly undeveloped. 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. Together, these four development zones occupy about 34 acres of the Campus.

The CLRDP land use designation for the four development zones is "Research and Education Mixed Use" (see CLRDP Section 5.2.2 and Figure 5.2 in Exhibit L). 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, equipment storage and maintenance, short-term accommodations, etc.).[29] 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. Any short-term accommodations (researcher and overnight rooms) would be located within the central portion of the Middle Terrace development zone, and caretaker units would be located there or in the Lower Terrace development zone (i.e., where such units currently exist). 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 in Exhibit L).

The bulk of new Campus development allowed by the CLRDP would be located within the Middle Terrace development zone (see, for example CLRDP Figures 5.2 and 7.2 in Exhibit D). This zone is the largest of the four development zones (about 70 percent of the overall Campus development area under the CLRDP is in the Middle Terrace zone), and is the area within which the majority of Campus development could be sited. Development allowed within the Upper Terrace zone would be primarily

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[28] Technically, the NOAA site is owned by the federal government and it is not part of the Campus. It is shown as a "white hole" that is outside of the Middle Terrace zone. That said, the area is physically connected to the Middle Terrace zone, and the CLRDP plan is for it to be seamlessly integrated as a part of this area, even if the CLRDP does not explicitly govern it.

[29] See CLRDP Section 5.2.1 (Exhibit L, starting on page 3 of Chapter 5) for a detailed description of the CLRDP building program, and Section 5.2.2 (Exhibit L, starting on page 8 of Chapter 5) for a detailed description of the land use designations.

warehouse and equipment maintenance, while development allowed within the Lower Terrace zone would be limited to additional LML facilities (up to at most 50,000 gsf of buildings, 10,000 square feet of outdoor research space, two caretakers quarters) and seawater system expansion (limited to 12,000 gsf total).

The CLRDP includes provisions for re-routing the main internal street of the Campus so that the portion north of the NOAA facility is moved to the south and east (see, for example, CLRDP Section 5.5 and Figure 5.5 in Exhibit L). The Delaware Avenue Extension portion of the main access street and the northernmost extent of McAllister Way would be abandoned when the new road alignment goes in. This existing road section traverses along the edge of much of the delineated wetland area on the site, and along the upper edge of YLR at the location where it physically transitions to the terrace (and where wildlife is know to move back and forth from YLR). It is also located within the CLRDP-established buffers for these areas. The majority of the existing pavement along this existing road alignment would be removed except for a curvilinear portion of it that would be retained to become a public access and interpretive path. The roadbed fill would be retained to maintain terrace wetland hydrology, and the disturbed areas would be replanted with wetland and wetland buffer plant species appropriate to the surrounding resources. Constructing a new access road and abandoning the old road section in this manner will serve to better protect these resources by moving Campus activity (and noise and lights and attendant impacts) away from the upper end of YLR and the resource areas along the road, while still providing for public access.

The CLRDP also includes significant new and improved public trail development throughout the Campus, and public overlook development that provides stopping, viewing, and related access amenities at several locations along the trails (see, for example, CLRDP Section 5.6 and Figure 5.6 in Exhibit L, and Figure 5.6 alone in Exhibit D). The trails would be located both along road alignments (but separated from them by at least 5 feet) and in other areas of the Campus where there are no roads, and would provide for both general internal circulation and for general public access throughout the site and connecting to offsite trail systems.

Campus drainage systems would be guided by a drainage concept plan premised primarily on using natural water quality BMPs applied in series (see CLRDP Section 5.7 and Appendix B (i.e., the CLRDP's Drainage Concept Plan) in Exhibit L). 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 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 Regional Water Quality Control Board (RWQCB) Central Coast Region Basin Plan). Natural infiltration would be maximized, and drainage would be filtered and treated by a series of natural swales, filter strips, and ultimately minimally constructed vegetated basins partially in the open space zones (where any basins would be created through soil berming, up to 18 inches high, and minimal grading, and would be made to integrate with the natural areas aesthetic and function). 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 targeted to individual pollutants expected, 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, portions of the vegetated stormwater 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 Exhibit L).

In summary, Campus development would be mostly located within the four development zones, and primarily in the Middle and Lower Terrace zones, where the zones would be connected by Campus roads and trails. The result at maximum buildout under the CLRDP would be expected to 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 (up to roughly double LML's current gsf), and a completely new area of large buildings and outdoor laydown space nearer to the railroad tracks. CLRDP Figure 5.4 shows in more detail the anticipated maximum development in each of sixteen designated subareas on the Campus (see Exhibit D). The chart associated with CLRDP Figure 5.4 indicates the size of each subarea and the maximum allowed number of stories, height, footprint, and coverage for buildings 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.

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

UCSC Marine Science Campus	**Existing Development At Site**	**Increase Allowed By CLRDP[30]**	**Potential Development At Buildout**
Buildings and related structures	140,000 gsf	339,000 gsf	479,000 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**	**599,000 gsf**	**923,000 gsf**

Overall, Campus development at maximum buildout would be roughly three times the scope of Campus development currently (including the NOAA facility). Given that there would be some additional development outside of the four development zones (roads, parking, stormwater ponds, etc.), the

[30] The "increase allowed" category is based on the amount of new development gsf allowed minus the amount of existing development that would be removed to accommodate it (i.e., there would be more development overall because replaced gsf is not specifically counted). In addition, proposed natural drainage facilities (i.e., vegetated filter strips, swales, and vegetated stormwater basins) are not counted in the increased development category. Thus, these figures somewhat underestimate the total amount of new development that might be present on the Campus at buildout. That said, they are provide a useful (albeit general) gauge for understanding the extent of development possible under the CLRDP at maximum buildout.

potential full extent of maximum 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 maximum buildout that help articulate this concept (see Exhibit C).[31]

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.), and including provisions to maximize public participation. These procedures are generally summarized below; see CLRDP Chapter 8 for the full procedural chapter (Exhibit L).

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, the actual 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 case of the latter, the Commission could then require conditions to make it consistent. As discussed above, denial of a proposed development project is not provided for 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 in Exhibit L); 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, and provisions for extensions (CLRDP Section 8.6); details regarding the Commission's retained coastal permit and other 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

[31] Id (see footnote 11).

8.10); and standards for non-conforming uses and structures (CLRDP Section 8.11).

Finally, as a means to facilitate the Commission's post-certification activities, the University's CLRDP submittal includes a commitment to develop a new CLRDP figure (i.e., a new Figure 8.1,) showing the various jurisdictional boundaries applicable to the site and the way they intersect on the Campus,[32] and also a commitment to provide full-scale versions of certain CLRDP Figures (i.e., Figures 5.2, 5.4, 5.5, 5.6, 6.6 , 7.2, 9.1, A-6, B-1, new Figure 8.1, etc.) as part of the certification process. In addition, the University's CLRDP submittal includes a separate commitment to fix any minor typographical-type of errors (typos, cross-reference fixes, table of contents updates, page number updates, etc.) as part of the final certification process.

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.[33]

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:

> ***Section 30001.5:*** *The Legislature further finds and declares that the basic goals of the state for the coastal zone are to: …(d) Assure priority for coastal-dependent and coastal-related*

[32] The new figure would show: (a) the Campus boundary; (b) to the extent the Campus boundary differs from the boundary of the property owned by the University, the boundary of the property area owned by the University; (c) the boundary of all tidelands, submerged lands, and/or public trust lands, whether filled or unfilled, on the Campus; (d) the Coastal Commission's area of retained jurisdiction within the Campus boundary and adjacent to it, including the areas in subsection (c); and (e) the area to which the CLRDP applies as the standard of review for development projects (i.e., CLRDP jurisdiction).

[33] In this case, the certified LCPs that apply would be those that are applicable to the areas surrounding the site; namely certified LCPs for the City of Santa Cruz and for Santa Cruz County.

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 that are 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.

Coastal Act 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 Coastal Act 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 Coastal Act Section 30113:

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.*

The section of the Government Code cited by Coastal Act Section 30113 (i.e., Government Code Section 51201) defines such lands as:

1. *All land that qualifies for rating as class I of 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 (where applicability is limited to buffers from such lands because these LCPs do not apply to the Campus site), 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-foot 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 l 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. For example, 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 concentrating new development in existing developed areas able to accommodate it.

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).[34] 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 are purposefully limited to that necessary to serve only anticipated Campus development and not for any

[34] The only exceptions apply to the existing greenhouse structures that are allowed to be maintained temporarily for up to 7 years post-CLRDP certification, and a desalination test facility that was recently permitted on a temporary basis by the Commission.

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 also includes requirements: to cluster development within the defined development nodes; to site and design development in response to wind patterns; to require 500-foot agricultural setbacks for any caretaker units (up to two are allowed), and to require 200-foot to 300-foot setbacks for all other development and uses (where the 200/300-foot setbacks is a combination of 200-foot setbacks from the western property line and 300-foot setbacks from established crop lines on the neighboring agricultural property, whichever is greater) except for pre-CLRDP certification uses and development, minor expansion at the CDFG facility, and public access and recreation facilities and features contemplated by the CLRDP; and to include hold-harmless and indemnification agreements between UCSC and adjacent agricultural operators (again, see proposed CLRDP Section 5.2.3, and see, for example, Policies 2.2 et seq and 3.8 et seq in Exhibit L).

C. Coastal Act Consistency Analysis

1. Priority Uses

Bracketing the question of the 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.

The CLRDP addresses Coastal Act priorities by limiting the bulk of development to marine research and education uses, including supporting facilities. While many of these facilities are difficult to separate from the seawater-based research they support (such as offices, food service, conference and meeting space, etc.), the connection between marine research and the proposed short-term accommodations and caretaker units bears some discussion.

Specifically, the CLRDP allows for up to 30 short-term (up to one year maximum length of stay) researcher accommodation rooms, up to 10 short-term (up to 30-day maximum stay) overnight rooms, and up to 2 caretaker quarters (see Section 5.2.1). In terms of the caretaker units, the University and CLRDP make a compelling case these units are necessary to ensure that the University has an on-site presence 24-hours a day, including in relation to equipment problems such as have occurred in the past with the seawater utility that require direct and immediate action. The University has long maintained two caretaker units on the site, and the CLRDP would continue this practice. Such units would be limited to a maximum of 1,600 square feet total for both, and would be required to blend seamlessly into

marine science and education facilities.[35] These two units would be an integral part of the marine research function of the Campus.

In terms of the other short-term accommodations, the University and CLRDP likewise make a compelling case that such accommodations may be needed to accommodate persons directly related to Campus marine research programs that require their on-site presence much of the time and/or temporarily (e.g., certain researchers, visiting scientists, etc.). As described in CLRDP Section 4.2.3, the University has made the case that short-term and temporary accommodations for visiting scientists and researchers, graduate and undergraduate students, educators, and new faculty and researchers are needed to assure that the Marine Science campus and programs are as successful as possible (see Exhibit L). 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 providing for some short-term accommodations for those persons who need to be on-site for concentrated periods of time, albeit for limited overall duration. In this sense, the short-term accommodations are integral to the success of the overarching coastal-related land uses contemplated by the CLRDP.

The University also has committed to only developing such short-term accommodations as demand warrants up to a maximum of 30 researcher rooms (up to 12,000 square feet total) and a maximum of 10 overnight rooms (up to 2,500 square feet total), and limiting such accommodations to those who are directly involved with marine research programs on the Campus that require their on-site presence on a regular and substantial basis (see, for example, CLRDP Policy 2.4 et seq in Exhibit L). Such accommodations will only be allowed in the Middle Terrace development zone, and only within the core of that zone, with overnight rooms further limited to the area east of McAllister Way and south of the Campus access road (see, for example, CLRDP Figures 5.3 and 5.4). Although the overnight rooms would be developed in one location along with other complementary support facilities (i.e., food service, etc.), the researcher rooms may be spread out among a number of buildings or they may be developed in a central location, or possibly a combination of both depending on what makes the most sense for the site and such accommodations. The researcher rooms would for all outward appearances be indistinguishable from surrounding lab and related structures as they would be integrated within them.

Because of these policy commitments, the Commission can find the CLRDP's short-term and caretaker accommodation provisions generally consistent with the land use priorities of the Coastal Act inasmuch as these accommodations are directly related to the effectiveness of the coastal-dependent/related use they support.

2. Agricultural Conversion

The Campus site 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

[35] The two existing caretaker units don't currently conform to the proposed CLRDP design parameters that would apply to them, but per the proposed CLRDP would be required to be made to conform within five years or when development occurs in the caretaker unit footprint, whichever comes first.

agricultural use to marine laboratory use, some with an agricultural component.[36] The remainder of the property (east of McAllister Way and north of Delaware Avenue Extension) was in active brussel sprout production until 1988.

The Environmental Impact Report (EIR)[37] 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.[38]

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*

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

37 Pursuant to the California Environmental Quality Act (or CEQA); see also CEQA findings at end of this report.

38 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 agricultural 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.

> *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 agriculture due to high water-related costs.*

The EIR for the CLRDP also summarizes points in the above-referenced 1995 "Final Agricultural Suitability Study."[39] 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 NOAA and Discovery Center cases, though, the Commission recognized that agriculture might continue on lands adjacent to these facilities.[40] 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

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[39] By Sage Associates.

[40] See CDP 3-97-050 (Marine Discovery Center) and federal consistency determination (CD) CD-50-98 (NMFS-NOAA Fisheries Lab).

previously found that the existing residential neighborhood (De Anza MHP) is a complete neighborhood (a 4-foot concrete block wall separates it from the campus), and that an urban-rural boundary existed along the wall and Shaffer Road, and that the site itself served as a transition zone between more urban development and uses to the east and more rural development and uses to the west. Subsequent incremental permit approvals for isolated, high-priority development have not determined otherwise, and the question of the ultimate land use for 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. 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 for this marine research development itself as well as for 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.[41] 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 restoration[42] 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 this larger habitat complex (that includes the site at a landscape scale). Indeed, since farming of the property ceased in 1988, over 7 acres of wetlands have been identified by the University on the terrace portion of the site that should be protected under Coastal Act Sections 30233 and 30240.[43] 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

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

42 See also habitat findings that follow.

43 See also wetland delineation findings that follow.

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 development was limited in the future 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.[44]

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 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 into question its value as agricultural land. Significant wetland and related habitat resources have been identified on the site[45] that likely would go unprotected, and certainly not enhanced, absent the CLRDP, likewise bringing in to question its value as agricultural land. 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 to the Campus to the west outside of the City of Santa Cruz city limits (in the unincorporated County). Brussel sprouts are a one crop per year

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44 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.

45 Including additional wetland areas recently identified that are not shown in the proposed CLRDP; see wetland delineation findings that follow.

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 of sorts, though not a complete screen. 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 feet[46]

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, etc.) 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.[47] Santa Cruz City LUP Policy LU 3.1.3 does

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[46] The NOAA lab itself is located 700 feet from adjacent agricultural operations, and the utilities serving it are located 500 feet from these same agricultural operations. The utility lines for the lab were originally to be located further west and closer to the agricultural operations, but NOAA agreed at that time to relocate the utility easement to be at least 500 feet to the east of the agricultural land (through CD-50-98) in the event that a future LCP or LRDP planning process indicated that a 500-foot agricultural buffer was appropriate. Historically, and at that time, the 500-foot buffer width was the distance recommended by the owners of adjacent Younger Ranch with respect to development proposals on the Campus.

[47] 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. As might be expected, the results of this survey were highly

state support for "County policies and programs aimed at preservation of agricultural/grazing uses on the North Coast." Within Santa Cruz County jurisdiction (adjacent agricultural operations at Younger Ranch are located within unincorporated County land 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 protections for 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 concluded that the CLRDP's variable 200/300/500-foot buffer distance described above is an adequate buffer width, and the Commission concurs. Measures to landscape the buffer, including the windbreak trees proposed to be planted in rows within development zones and the hold harmless/indemnification agreement requirements (see, for example, CLRDP Figure 6.6 and Policy 3.8 et seq) 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 currently proposed, the CLRDP does not include such 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

Extension of Services/Urban-Rural Boundary

Public service provision to the Campus has been incrementally cautious since 1976 to avoid growth inducement and agricultural conversion at this transition zone at the urban-rural boundary (as described

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.

above).[48] 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 UCSC and related marine lab demand, and special conditions have been imposed which do not allow for non-UCSC and related 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 including it that extends 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 in the rural north coast 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. 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. 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 and transitional buffer is enhanced. Thus, the site remains an intentionally isolated "island" of facilities acting as a transition zone, the CLRDP effectively serves to limit development to the west, and it can be found consistent with

[48] It is important to note that other than Commission CDP findings over the years, there isn't any formal designation of an urban-rural boundary at this location. Although not the standards of review, City and County LCPs provide only limited guidance on this point for this site. The City's LCP recognizes and designates lands as "Open Space" that serve as boundaries of sorts (and within which development is discouraged to avoid sprawl and its attendant resource impacts), but not urban-rural boundaries per se. At the Terrace Point site, YLR is designated by the City's General Plan (not the LCP because it is not certified for this location) as open space, but the remainder of the site is not. In other words, the City-designated open space area (and urban-rural "boundary") is roughly the eastern edge of YLR. Similarly, the County's LCP recognizes urban and rural service lines (within which utilities can and are provided, and outside of which areas are generally considered "rural," etc.), but they don't apply within the City (the entire Marine Science Campus site is within City limits) and they don't apply at the City-County boundary inasmuch as adjacent agricultural operations are outside of any urban or rural service areas. Even if they did, and even though they can and do act as a proxy of sorts for identifying an urban-rural boundary, it isn't their purpose per se. Thus, the Commission has recognized a boundary through CDP findings along the eastern side of the Marine Science Campus site, and allowed urban style development west of this line recognizing that the site acts as a transition zone between rural areas to the west and urban areas to the east. In other words, the site itself serves as a transition zone between more urban development and uses to the east and more rural development and uses to the west.

the Act in this respect.

Water, Wastewater, and Traffic

In terms of public service supply, the CLRDP details the level of certain public services that may be needed at full buildout (see CLRDP Sections 5.5 and 5.8 in Exhibit L). Perhaps most critical under the Coastal Act are the areas of water, wastewater, and traffic.

In terms of water, the University estimates that full build-out under the CLRDP would require about 16 million gallons per year (mgy) of water beyond that currently provided to the site.[49] The water provider in this case is the City of Santa Cruz. The City has indicated that there is some 300 mgy of remaining capacity in the system at this time, that the additional water needed to supply the Campus at buildout is not a significant increase in water demand, and has not indicated that there is any problem with providing such water to the Campus over time.[50]

The terms of wastewater, the University estimates that full build-out under the CLRDP would generate about 12.8 million gallons per year (mgy) of wastewater beyond that currently generated at the site.[51] As with water, the wastewater service provider is the City of Santa Cruz, and wastewater is treated at the City's wastewater treatment plant near Neary Lagoon. The plant currently has an average dry-weather capacity of 17 million gallons per day (mgd) and it can accommodate peak wet weather flows of up to 81 mgd.[52] The City has indicated that there is ample wastewater treatment capacity to serve the Campus, and, as with water, has not indicated that there is any problem with providing such water to the Campus over time.[53]

In addition, and as a means to offset any uncertainty about such public service capacities, the University has committed through the CLRDP to construct and/or contribute a fair share payment towards any public service upgrades (including water and wastewater upgrades) attributable to University development impacts on such public infrastructure in the City of Santa Cruz on a project by project basis based on the impacts of any particular project and cumulatively over time (see, for example, CLRDP Policy 8.4 in Exhibit L). In addition, the CLRDP now includes significant water conservation requirements that were added in the time since the water demand calculations were applied (see CLRDP Policy 8.3), and includes significant on-site infiltration requirements (see CLRDP Section 5.7), that together will help offset new water demand to some degree. In sum, the water and wastewater provider

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49 CLRDP EIR page 4.16-13 and 14, and Table 4.16-3, and University letter dated November 14, 2007 (see Exhibit E).

50 Id. In addition, Commission staff have coordinated with City staff on this question for the past decade, and have been consistently informed that water supply (and wastewater treatment capacity; see below) for the expanded Marine Science Campus is not an issue from the City's perspective.

51 The CLRDP EIR estimates 17.8 mgy of additional wastewater generation (CLRDP EIR page 4.16-14). Since that time, the CLRDP has been modified and the water demand decreased by 5.6 mgy in terms of wastewater generating water demand (i.e., the overall water demand reduction is 2.8 mgy due to corresponding increases in irrigation for habitat restoration purposes) (University letter dated November 14, 2007 – see Exhibit E). Using the methodology of the EIR, namely where future wastewater generation is estimated by multiplying estimated water demand by 0.9, the 5.6 mgy reduction of water demand translates to a 5 mgy reduction in wastewater generation.

52 CLRDP EIR page 4.16-3 and 4.

53 Id.

here, the City of Santa Cruz, has indicated that there is adequate water and wastewater services for development under the CLRDP at buildout, and has not indicated that there are any significant issues with serving the site in this respect, including with respect to the future upgrade/fair share arrangement.[54]

In terms of traffic, there would be additional trips generated as a result of CLRDP development. At full buildout, local streets near the Campus (e.g., Delaware Avenue) are not currently oversubscribed and additional CLRDP traffic would not be expected to result in traffic related impacts (such as to public access users, etc.). However, streets further inland (e.g., Mission Street, Bay Avenue, etc.) would be more burdened and several intersections that are already taxed would be pushed to a level of service of E or F during peak times.[55] The majority of these streets and intersections are outside of the coastal zone, but they obviously serve to transport people to the coastal zone. The CLRDP would offset any such impacts through the same fair share arrangement in place for potential water and wastewater upgrades. As with water and wastewater, this seems a reasonable approach in this case, and allows the Commission to ensure that these impacts do not adversely affect coastal zone resources.

The one continuing public service issue area for the City of Santa Cruz is with respect to emergency secondary access to the Campus site. The City has stated its concern that emergency road access to and from the site may be inadequate in the future as the site build outs (see City's April 6, 2006 letter in Exhibit F). In particular, the City has indicated its concern that Shaffer Road should be connected through to the north (it is currently not a through road access, ending in a dead end at the railroad tracks and at the elevated berm on which the tracks are located) to provide an alternative to Delaware Avenue as a way into and out of the Campus should Delaware Avenue be blocked (see, for example, CLRDP Figure 5.5 in Exhibit L). The University has not indicated that such expansion or development of Shaffer Road is necessary to provide for public safety at the proposed campus.

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54 Some of the comments received by the Commission have also implicitly raised concerns that if City of Santa Cruz water supply augmentation were necessary in the future to serve the CLRDP, it could have its own impacts, and these need to be understood now and in relation to the CLRDP. As indicated, the water supplier indicates that there is adequate water from current supplies to serve the Marine Science Campus. The Commission sees no reason nor compelling evidence to discount that claim. Even to the extent water supply is limited, coastal-dependent and coastal-related development at the Campus also represents a high priority use under the Coastal Act. As such, there is not a significant Coastal Act issue raised by the CLRDP. Moreover, it is an oversimplification to say that CLRDP growth, as distinct from other growth within the City of Santa Cruz water supply area (which extends outside of coastal zone and outside the City of Santa Cruz) is the only or even the primary driver of the need for future water supply projects. Although the City is contemplating pursuing a seawater desalination plant to supplement existing supplies (and the Commission recently permitted a temporary desalination test facility at Terrace Point related to this), it is a much more complicated service area equation to pinpoint drivers for this need, and asserting that the impacts from that future project (or some other future water supply projects) should be attributed at this time to potential development under the CLRDP is not appropriate. Rather, and as is the case in the CLRDP (see CLRDP Policy 8.4), the degree to which University development under the CLRDP impacts the need for water infrastructure upgrades (including augmentation) will be determined as projects are developed and come online, and the University is required by the CLRDP to contribute their fair share, as estimated by actual project impacts at that time individual development projects are proposed. This is an appropriate mechanism in this case, particularly in light of the City of Santa Cruz's stated position (see above). In terms of any future water infrastructure projects, including any potential desalination facilities, in the coastal zone, applicable LCP policies (City of Santa Cruz and Santa Cruz County) and the Coastal Act will continue to apply and are designed to ensure that any such projects do not adversely impact coastal zone resources.

55 CLRDP EIR Impacts 4.15-1 through 6.

Shaffer Road is on the outskirts of the City and it has historically been closed at the railroad tracks. The portion of it adjacent to the Campus is only rarely used because the properties adjacent to it (including that portion of the Campus) are not developed. As a result of this and its location between just upcoast Wilder Creek/Lagoon, YLR on Campus, and Antonelli Pond/Moore Creek, and the berm on which the tracks are located, this portion of Shaffer Road currently acts as a significant wildlife corridor, including for the California red legged frog (see also habitat findings). The CLRDP recognizes this context, and anticipates that future development along Shaffer Road to serve the Upper Terrace development zone would be limited to that that is necessary to serve the Upper zone, and would also entail restoration and/or improvements to the portion of Shaffer Road above the Upper zone to facilitate wildlife protection and movement across the Shaffer corridor to Antonelli Pond/Moore Creek, including potentially permanent closure (see, for example, CLRDP Section 5.5 and Implementation Measures 5.1.3 – 5.1.5 in Exhibit L). Thus, one vision is that the upper part of Shaffer Road adjacent to the Campus 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. In addition, long term plans for the railroad corridor at this location include development of a recreational trail through Santa Cruz along the corridor, and the value of such a trail is enhanced when it is continuous and not broken up by road crossings (as would be the case if Shaffer Road were extended across the railroad corridor).

In response to City of Santa Cruz concerns, the University modified the CLRDP and the currently proposed CLRDP includes a provision for the University to collaborate with the City to develop an emergency grade crossing of the railroad tracks at Shaffer Road should this be deemed necessary. Such crossing would only be used in the event of an emergency when access to the Campus via Delaware was blocked for some reason, and it would consist of installing a roadway surface between the tracks to allow vehicular access across the tracks (e.g., as is typically the case for through streets that cross railroad tracks, but is not currently the case here), and removable bollards to prevent all but emergency access. Such a project to address Campus emergency ingress and egress issues if necessary may strike an appropriate balance between the competing visions for this stretch of Shaffer Road. That said, the CLRDP does not directly govern development along this portion of Shaffer Road because this area is outside of Campus boundaries on a City-owned right-of-way. Likewise, the City LCP does not govern this stretch of Shaffer as it is part of the area of deferred LCP certification previously described. The process through which the question of the manner in which Shaffer Road should or should not be improved as the Campus builds out would be either through a future coastal development permit application to the Commission or through a City of Santa Cruz LCP amendment to bring this area under the auspices of the City's LCP (and its coastal permitting authority). In any case, development on Shaffer Road would necessarily have to be authorized through a coastal permit process (and possibly a preceding LCP amendment process), and not a CLRDP NOID process. As the Campus develops over time, those processes provide a suitable mechanism for addressing the City's concern in the future were some sort of railroad crossing be shown to be necessary from a public safety standpoint.[56]

D. Land Use Conclusion

[56] See also Shaffer Road discussion in the habitat findings that follow.

As detailed in the findings above, the CLRDP proposes an appropriate coastal-dependent/related type of land use for the site that is consistent with Coastal Act land use priorities. In addition, the CLRDP is consistent with Coastal Act policies for protecting agricultural lands and for appropriately siting development, including those policies that address protecting and strengthening the urban-rural boundary and limiting public services to protect against inappropriate sprawl and growth inducement. There are adequate public service capacities to serve Campus development, and any impacts associated with development on the campus in this respect will be offset as part of the development review process. The only outstanding concern in terms of Coastal Act land use consistency is related to issues with wetland delineation and public beach access, and these issues (and means to address them) are detailed in the findings that follow. If the CLRDP is modified to address these wetland delineation and public beach access issues (see findings that follow and see suggested modifications), 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

Coastal Act Section 30240 protects environmentally sensitive habitat areas (ESHAs):

> ***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.*
>
> *(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.*

Coastal Act Section 30107.5 defines environmentally sensitive area:

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

The Coastal Act thus establishes a high standard for protection of areas that are identified as environmentally sensitive. Only resource-dependent uses, such as habitat restoration, are allowed within an ESHA, and all development within or adjacent to an ESHA must be sited and designed to prevent significant disruption of ESHA.

The Coastal Act protections for ESHA differ in approach than certain other environmental laws. For example, the California Endangered Species Act, administered by the California Department of Fish and Game, allows the "incidental take" of state-listed species if the impacts of the take are minimized, fully mitigated, and would not result in jeopardy to the species.[57] Similarly, the U.S. Fish and Wildlife Service may issue incidental take permits under the federal Endangered Species Act for a sensitive species if the impacts are offset through a Habitat Conservation Plan.[58] The Coastal Act, though, does not allow avoidable impacts to ESHAs, even with mitigation. If an ESHA is identified, it must be avoided unless the proposed development is dependent on the resource. This fundamental requirement of the Act was confirmed in the *Bolsa Chica* case, wherein the Court found:

> *Importantly, while the obvious goal of section 30240 is to protect habitat values, the express terms of the statute do not provide that protection by treating those values as intangibles which can be moved from place to place to suit the needs of development. Rather, the terms of the statute protect habitat values by placing strict limits on the uses which may occur in an ESHA...."* [59]

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.*

Coastal Act Section 30121 defines wetlands generally:

> ***Section 30121.*** *"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater*

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57 California Fish and Game Code 2081.

58 Federal Endangered Species Act, Section 10.

59 *Bolsa Chica Land Trust v. Superior Court* 71 Cal.App.4th 493, 507. A limited exception to this rule potentially lies in Coastal Act Sections 30200(b) and 30007.5, which allow the resolution of conflicts between Coastal Act Chapter 3 policies in a manner which on balance is most protective of significant coastal resources.

marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

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 states, in applicable part:

> ***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 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.*
>
> *(4) 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.*
>
> *(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
>
> *(6) Restoration purposes.*
>
> *(7) 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…*
>
> ***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.*

As with the Coastal Act's ESHA policies, California courts have also upheld the high Coastal Act

standards for protecting wetlands. Thus, similar to the requirements of Section 30240, the requirements of Section 30233 cannot be met through off-site mitigation or conservation of wetlands unless a proposed use in a wetland is one of the allowed enumerated uses, and if the policy is otherwise met.[60]

Finally, Coastal Act Section 30250 requires that development be sited in areas where it would not have significant adverse effects on coastal resources more generally, such as biological resources that do not necessarily meet the definition of ESHA but that do have a significant habitat function and value. Section 30250(a) states, in applicable part:

> ***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. …*

B. Applicable Provisions of Proposed CLRDP

As described above, the CLRDP maps all of YLR, all University-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 CLRDP also designates a subset of these natural habitat resource areas as ESHA (see CLRDP Section 3.7 and Appendix A in Exhibit L). Most 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.[61] The CLRDP almost exclusively relies on these ESHA designations to justify the CLRDP land use designations applied above. The CLRDP also requires that potential development areas be evaluated for the presence of wetlands and ESHA at the time of development (as a means of evaluating changed circumstances), and further requires that any so identified areas be avoided and buffered, and subsequently removed from the designated development zone areas (i.e., added to the natural areas and designated with one of the natural habitat resource area land use designations), and finally added to YLR (see proposed CLRDP Policies 3.3 et seq, 3.4 et seq, and 3.14 et seq in Exhibit L).

In addition to requiring avoidance of these natural habitat resource areas, CLRDP resource requirements are also designed to ensure that Campus development does not adversely impact these natural habitat

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60 Id: *Bolsa Chica Land Trust v. Superior Court* (1999) 71 Cal.App.4th 493.

61 The one wetland not designated as ESHA is a small wetland area (delineated at approximately 43 square feet) located in the northeast part of the site that would still be avoided and buffered by virtue of the fact that it is located within the northernmost wildlife corridor/buffer.

resource areas through requiring appropriate siting and design (including by requiring adequate setbacks, 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 cleansed runoff to natural habitat resource areas to ensure and enhance their hydrologic (and related) productivity.

Finally, the CLRDP commits the University to habitat restoration, enhancement, and management of all areas outside of development zones, at least partially to offset some of the impacts from Campus facility development. Specifically, the CLRDP includes restoration/enhancement of such natural areas directly (including terrace wetland, wildlife, and grassland areas) as well as a series of improvements designed to better protect and improve habitat values overall (such as public access trail and overlook improvements, road and parking improvements, and drainage/water quality improvements). More specifically with respect to the non-development areas, the CLRDP includes a commitment on the part of the University to restore, enhance, and manage all Campus natural areas (i.e., all areas outside of defined development zones) in three phases (temporal and spatial) over the first twenty years that the CLRDP is in place, and to continue to ensure the success of such efforts in perpetuity. Such efforts are to be guided by both the CLRDP Resource Management Plan (CLRDP Appendix A, see Exhibit L) which provides a general framework, as well as by a scientific advisory committee that will help oversee the adaptive restoration and management of the Campus natural areas (see, for example, Implementation Measure 3.2.10 in Exhibit L, and as cited later in these findings). In addition, under the CLRDP, the terrace natural areas outside of development zones, some 41 acres, would be added to Younger Lagoon Reserve, effectively more than doubling the size of the Reserve (up to 66 acres), to provide a greater level of protection to these terrace areas. In summary, the CLRDP commits the University to enhancing, managing and maintaining Campus natural areas as high quality open space and habitat in perpetuity.

C. Coastal Act Consistency Analysis

1. Habitat Resource Background

Although there has clearly been significant development to date, the Campus site remains mostly undeveloped and home to substantial natural habitat resource areas. Most obvious among these is Younger Lagoon 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 and past habitat assessment, 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.[62]

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

[62] See proposed CLRDP Section 3.7 and CLRDP Appendix A in Exhibit L for detailed information on species observed in YLR and their status.

has the federally listed Threatened 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 (and Natural Bridges State Park) 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.[63]

To date, through it coastal permit and related actions over the years applicable to Terrace Point 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). The areas of the Campus that the proposed CLRDP now delineates and describes as wetlands and other habitat areas have not been before the Commission in the time since agricultural use of the site was terminated, and thus their ESHA status has not been evaluated and determined by the Commission before now.

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 University delineated wetlands, foraging habitat, and other natural resources (about 60 terrace acres). The CLRDP generally identifies known ESHA, wetlands, wildlife use areas, and related grasslands; prohibits most all development within these areas through resource protection land use designations (including resource protection, wildlife corridor, buffer, and open space categories); applies buffers from resource protection and wildlife corridor areas; provides for clean hydrologic inputs; and includes specific siting and design criteria to ensure 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 and otherwise respect them appropriately. In fact, all told, about 66 acres of the Campus site, or about two-thirds of the Campus, would be made off-limits to most development (including all major facility development) by the CLRDP provisions described in the preceding section. Nonetheless, a number of Coastal Act habitat resource consistency issues remain as described in the following sections.

3. CLRDP Wetland Identification

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, including with respect to the previous iteration of the proposed CLRDP that was last before the Commission in April 2006 (when it

[63] Id (see also proposed CLRDP Section 3.7 and CLRDP Appendix A in Exhibit L).

was withdrawn by the University). At least part of this controversy has been based on the extent to which certain wetland indicator species, most notably perennial rye grass (FAC) and Douglas's baccharis (OBL),[64] are found throughout the site in areas that were not delineated by the University as wetland. In fact, Terrace Point presents a challenging set of circumstances with respect to the various field 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 I, the soils at Terrace Point are mollisols, which are problematic for wetland delineations because their coloration is not necessarily an indicator of wetland soils. In addition, the most common wetland indicator species on this site – rye grass and Douglas's baccharis – do not correlate with soil moisture. Therefore, wetland delineation requires a thoughtful analysis of all pertinent data, especially ground inundation and shallow soil saturation.

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 I). In light of these issues, the University embarked on and completed a multiple year wetland delineation effort for the Campus. As described in the CLRDP (again, see CLRDP Section 3.7.1), the University's delineation is explicitly based on the wetlands definitions found in Coastal Act and the Commission's regulations (Coastal Act Section 30121 and CCR Section 13577(b)). The University's delineation identified approximately 7½ acres of wetlands at ten locations on the terrace in addition to 5½ acres at Younger Lagoon (see, for example, CLRDP Section 3.7.1 and Figures 3.10 and 3.11 in Exhibit L).

The University's delineation, however, remained controversial, and the size and location wetlands at the site was one of the primary points of contention when the previous CLRDP was withdrawn by the University in April 2006. In light of the ongoing controversy regarding the extent of wetlands on the site, and as requested by certain groups that did not agree with the University's wetland delineation, Commission staff requested an independent assessment by respected wetland delineators from the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (ACOE). Thus, in 2007 wetland delineation experts from ACOE and EPA conducted a federal jurisdictional determination, and also identified areas that did not meet Corps criteria, but which were potentially wetlands based on Commission criteria; see ACOE/EPA letter report in Exhibit H.[65] The jurisdictional determination resulted in additional areas being delineated under the ACOE three-parameter model (and thus by extension wetlands under the Coastal Acts single-parameter model).[66] Also, ACOE and EPA experts

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64 An estimated 33% to 66% of occurrences of FAC species are in wetlands. The occurrence of OBL species in wetlands is estimated to be >99% under natural conditions.

65 Although ACOE and EPA delineators were fulfilling their federal oversight role under the Clean Water Act to verify a federal delineation, they were also asked by the Commission's Executive Director to identify areas where wetland indicator species were growing as hydrophytes. The federal delineators chose not to make that determination for areas that did not have evidence of wetland hydrology based on the 1987 Wetland Delineation Manual, but they did identify several areas where topography or the presence of a shallow aquitard suggested the possibility that the vegetation was sufficiently influenced by water to meet the definition of wetlands under the Coastal Act and the Commission's regulations.

66 These wetlands will be a part of the ACOE Clean Water Act certification process independent from the Coastal Act review.

identified other areas that didn't meet the federal three-parameter criteria, but that may meet Coastal Act criteria, and referred these to the Commission's staff ecologist. The Commission's staff ecologist reviewed ACOE and EPA's conclusions and supporting data and concluded that there were additional areas of Coastal Act wetland at the site that had not been delineated to date, and recommended that these areas too be considered wetland, avoided, and buffered (see Exhibit I). He also identified an area of "potential wetlands" (in an area where the CLRDP does not propose development but rather provides an Open Space designation; see Map 4 of August 10, 2007 memo in Exhibit I), and to err on the conservative side these areas should be considered wetlands too. Suggested modifications are included to designate these areas identified by the Commission's staff ecologist as wetland and to limit development in or near them (i.e., within 100-feet) consistent with the Act (see suggested modification 1 and Exhibit K).

In summary, it is clear that 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. Over the course of CLRDP development, opinions have ranged from there being relatively small areas of terrace wetlands to nearly all of the terrace being wetland. As a means to resolve these issues, the University contracted for one of the most involved wetland delineations ever undertaken in the coastal zone. That effort directly involved the Commission's staff ecologist. When those conclusions were still challenged (most recently when this issue was last before the Commission in April 2006), independent experts from ACOE and EPA were asked to review the documentation and the site for the presence of wetlands in both a federal and Coastal Act context. Those reviewers found that the general location of wetlands was accurate from a federal perspective, but that the boundaries needed to be expanded in some areas, and that some areas that may be Coastal Act wetlands should be given a closer review by Commission staff. Significantly, most of the areas originally deemed upland by the University delineation did not change in that respect. The Commission's staff ecologist concluded that the additional ACOE and some of the potential Coastal Act wetland areas should be considered wetland. Thus, the site has been reviewed and re-reviewed by acknowledged experts in the field, including by federal delineators explicitly requested by groups who did not concur on the original delineation. In that respect, the site has been adequately (and extensively) analyzed and, as modified, Coastal Act wetlands are protected as directed by the Act. As such, there is no need for additional delineation at this time, particularly given that the CLRDP is structured to require additional delineation at the time of proposed development. Such wetlands are all (or will all be by suggested modification) designated by the CLRDP as "Resource Protection" and thus protected against inappropriate development and uses (as previously described in relation to the proposed CLRDP's land use designations).

4. CLRDP ESHA Designation and Public Access Prohibition for Younger Beach

The CLRDP designates most of the sandy beach fronting Younger Lagoon as ESHA, and applies a resource protection land use designation overlay to this ESHA area (see CLRDP Section 3.7 and Figures 3.11 and 5.2 in Exhibit L). The CLRDP does not identify any general public access trails or use provisions for the beach, and considers the beach off-limits to general public access. As a result, the CLRDP prohibits general public access to Younger Beach, and by extension prohibits direct surfing access through the site to the surf break immediately offshore. The lack of public access to this beach

and the surfing area offshore has long been an issue at the site ever since the University was allowed by the Commission in 1981 to limit general access to the YLR area (including the beach), subject to periodic reevaluation. In 2001 (the only time the YLR closure issue was re-evaluated by the Commission to date since 1981),[67] the Commission allowed this limitation to continue on a temporary basis, subject to a three-year Commission review, including the requirement for explicit analysis of the option of leaving the majority of YLR off-limits, but allowing public access to just the beach and ocean.[68]

Although YLR is a protected natural system by virtue of the resources present there, its Reserve status, and the University's closure policy to date, and its habitat value is generally high as a result, the sandy beach area of YLR 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 different habitat values and different public access and recreation benefits as a result.[69] The Commission is not aware of evidence showing that Younger 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 federally-listed threatened species), the University indicates that snowy plover have been observed on the beach here over twenty years ago (in 1983), "but the narrowness of the beach and the lack of subsequent observations suggest mainly non-breeding and occasional use."[70] In contrast, Wilder Ranch State Beach just upcoast of this location (i.e., the next beach along the coast located about ½ mile away on the other side of Younger Ranch) is a much more significant snowy plover beach, and is off limits to general public access for this reason. Other beaches at Wilder Ranch State Park and along Santa Cruz County's north coast that are similar to the Younger Lagoon Beach are not closed to access though, including other known plover beaches such as those at Laguna Creek and Scott Creek.

In fact, the beach area here is not unlike other pocket beaches that include lagoon and brackish features inland of them. Although it seems clear that prohibiting general beach access would probably generally

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67 The YLR closure was reviewed and allowed by the Commission on a temporary basis in 1981, and again on a temporary basis in 2001. The temporary nature of the closure was based on the premise that the Commission would continue to reevaluate the YLR access prohibition, including the beach access issue, 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. The required re-review of the 2001 temporary closure was to occur in 2004 (and every three years after), but that re-review never occurred.

68 CDP condition compliance matter 3-83-076-A13-C (July 2001). Although the CLRDP has not explicitly tracked the Commission's 2001 beach access reevaluation requirements, the CLRDP and its documentation provide adequate information with which to reevaluate this previous temporary YLR (including beach access) closure decision as previously required by the Commission. The CLRDP has become the de facto re-review vehicle in that sense. See also public access and recreation findings.

69 Santa Cruz County's north coast is home to a series of discrete and mostly smaller "pocket" beaches (other than larger stretches of beach at Waddell and Scott Creeks) that are well known for being more remote and less used than their counterparts in the more urban area downcoast of the Campus site. These north coast beaches have long provided the public with a different type of beach experience than can be found in the northern Monterey Bay urban core, and they are quite popular – albeit on a smaller scale given their relative remoteness and general lack of developed facilities. With State Parks' recent acquisition of the Coast Dairies shoreline adjacent to these north coast beaches (approximately 5 miles of shoreline and over 400 acres west of Highway One surrounding the coastal enclave of Davenport), facilities to enhance such north coast beach access may soon come to fruition.

70 CLRDP EIR 4.4-41.

lead to less beach area impacts (on birds, etc.), the same could be said for prohibiting beach access to almost any beach with similar characteristics. The beach area here is already used by University classes, researchers, and others sanctioned by the University (and the aforementioned surfers and others who aren't sanctioned but ignore the closure), so it is not untouched. In fact, stairs have been installed by the University to facilitate such ongoing University-sanctioned access to the beach. And although it is relatively protected from the impacts of human use, and borders on inland habitat areas requiring appropriate management, the sandy beach itself does not meet the ESHA criteria, and it is not otherwise so fragile as to dictate that the public be barred from using it. To prohibit public access to this beach is not appropriate under the Coastal Act, and to do so may raise questions with respect to public access use of beaches in general statewide where a case can almost always be made that public use impacts non-ESHA plant and animal life and associated habitats. The distinction, and the question before the Commission in this and other such non-ESHA beach cases, is whether the beach area otherwise is so vulnerable as to completely override the Coastal Act's mandate for maximizing public access by requiring it be off-limits. Questions about carrying capacity and a level of use intensity may be appropriate (see also below), but to permanently close the beach (past docent-led tours) cannot be found consistent with the Act.

In sum, the Commission finds that the sandy beach should not be considered ESHA, and that it is not consistent with the Coastal Act that it otherwise be off-limits to other than docent-led public access for all time. 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 reserve, including the lagoon. For example, symbolic fencing, signage, the use of docents, etc. are all available measures to provide protection and buffering of ESHA inland from and 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.

Accordingly, the proposed ESHA and resource protection land use designations applicable to portions of the beach area cannot be found consistent with the Coastal Act. Modifications are suggested to clearly distinguish the sandy beach area by designating it all as "ESHA buffer" with a land use designation of "Resource Protection Buffer" in the CLRDP (i.e., as proposed by the University, almost half of the sandy beach area is already proposed for designation as buffer, thus the modification would extend this buffer designation throughout the sandy beach area), and identifying the beach area itself explicitly; see suggested modification 4 and Exhibit K.

Furthermore, the CLRDP must be modified to allow public access use of the sandy beach area. In recognition of the University's objectives with respect to the beach area and the value of YLR overall (and the habitat areas inland of the beach), though, such public access in the immediate future shall not be general unlimited public access. On the contrary, the Commission finds that an appropriate balance can be found that recognizes that there may be an appropriate balance between access and resource

protection that applies to this beach. Although the Commission is unaware of systematic (as opposed to anecdotal) evidence and analysis modeling this beach system and/or systems that share its characteristics,[71] it is reasonable and appropriate to be cautious with re-opening the beach to some amount of public use after over twenty-five years without it.

Thus, in terms of the level of access appropriate in light of the resources present there, the Commission finds that such beach access should be supervised access subject to a management plan that is reevaluated on a five-year cycle. The management plan would be based on the capacity of the beach area to sustain use and the level of intensity of such use when considered in light of the fragility of beach area and adjacent resources and ongoing research. For the first five-year cycle (i.e., until five years post-CLRDP certification), the Commission finds that the entire beach area and its access trails are recognized as appropriate for supervised tours only (and it would not be open to any kind of general public access). This limitation would be applied in order to both protect beach area and adjacent resources within the Reserve, to allow for implementation of an applied research program within the Reserve, and to allow baseline data and monitoring to occur over five-years to help determine the appropriate level of supervised access that is appropriate for the beach area. The CLRDP would thus then recognize that different access supervision parameters, whether more or less restrictive, may be the outcome of any subsequent required five-year review. See suggested modifications 4 through 11 and Exhibit K.

At the same time, the Commission recognizes that the area inland of the beach should be considered ESHA and general public access there (and into the heart of YLR itself) should be disallowed as proposed. 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. Supervised 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 the central lagoon by about 300 feet of vegetated dune field area.

The Commission finds this amount of public access to the sandy beach at Younger Beach to be consistent with the Coastal Act mandate for habitat protection and for maximizing access and recreational opportunities (see also public access and recreation findings); see suggested modifications 4 through 11 and Exhibit K.

5. CLRDP ESHA Designations

In addition to the issues regarding the Younger Beach area discussed above, the CLRDP's ESHA designations for other areas involve the following concerns:

A. YLR Overall

The CLRDP designates most of YLR (other than the part of the beach area that is designated buffer as described above) as ESHA and designates it as "Resource Protection." As described above, it is clear that YLR has a high abundance and diversity of wildlife use, and its protected status as a University

[71] And the University has likewise indicated that they not aware of such evidence and analysis.

Reserve fosters this. It is clear that areas within the Reserve provide significant habitat. Younger Lagoon itself is an important, relatively undisturbed coastal lagoon. The lagoon is surrounded by upland habitat areas that again, are relatively undisturbed, other than the researcher, interpretive, and restoration activity that occurs there. 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 and Natural Bridges State Parks. 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 is proposed by the CLRDP.

B. Terrace Wetlands

Other than wetland W7, the CLRDP designates all of the University-delineated terrace wetlands as ESHA. Wetland W7 is an isolated and small (43 square feet) wetland in the northern portion of the site. Given the characteristics and values of the University identified wetlands, the University has reasonably concluded that all but W7 should be designated as ESHA. However, as discussed above, there exist additional areas of wetland on the site that must be identified by the CLRDP. These wetlands may meet ESHA criteria as well. Given that the ESHA designation is almost exclusively used by the CLRDP to justify the CLRDP's Resource Protection land use designation, the ESHA question need not be answered explicitly. However, to err on the conservative side, the Commission considers these areas to be ESHA too, and requires them to be designated with the CLRDP's Resource Protection land use designation (see suggested modification 1 and Exhibit K). In fact, notwithstanding the ESHA versus non-ESHA wetland categorization, all of the wetlands are designated by the CLRDP as "Resource Protection," including wetland W7. 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.

C. Raptor Use of Terrace

As described above, the terrace portion of the site is used by raptors as foraging habitat (see also CLRDP Section 3.7 and Appendix A for detailed descriptions of species and their use of the site). Although several raptor species (including California fully protected species and California species of special concern) have been known to forage there, the University has concluded that the terrace portion of the site should not be considered ESHA for this reason alone, and the Commission's staff ecologist concurs.[72] Specifically, this conclusion means that the only terrace areas designated by the CLRDP as ESHA are areas that are delineated wetlands. Of the remaining terrace not designated ESHA, a portion would be designated for development (i.e., would be located within the four proposed development zones), and the remainder (other than ESHA/wetland buffer areas) would be designated by the CLRDP as "Open Space" to which the previously described CLRDP commitment to natural areas protection, enhancement, and management would also apply. All told, 66 acres of the Campus site (i.e., about two-

[72] As distinct from other reasons supporting a finding that portions of the terrace do constitute ESHA.

thirds of the Campus), including the majority of the terrace area (about 41 acres), would remain as undeveloped natural habitat area under the proposed CLRDP, and an additional acre or so would be added by virtue of the Commission's wetland and wetland buffer suggested modifications.

With respect to protection of raptor foraging habitat, even if it is not considered ESHA such habitat is an important coastal resource. In such cases, the Commission has typically followed CDFG's general recommendation of requiring that at least 1/2 acre of raptor foraging habitat be preserved for every acre of such habitat that is taken up by development.[73] In this case, the CDFG methodology would require that at least 17 acres of foraging habitat be preserved to offset the 34 acres of proposed development area. As seen above, 66 Campus acres, including 41 terrace acres,[74] would remain outside of development zones and continue to be available for foraging habitat use. This is well over the one-third minimum threshold that would apply using CDFG's methodology. 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, the CLRDP can be found consistent with the habitat protection policies of the Coastal Act with respect to raptor use of the terrace.

D. 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 [Ranch] State Park located west of the site and the lower end of the Moore Creek Watershed to the east of the site.*[75]

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73 For example, CDP amendment 5-97-367-A1 (Hellman Properties LLC, 2000) and CDP 5-05-020 (Hearthside Homes/Signal Landmark, 2005).

74 With the additional acre that would be added by virtue of the Commission's wetland and wetland buffer suggested modifications, a total of 67 acres, of which 42 acres are terrace acres.

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

In sum, the Campus site is located between two source populations for CRLF in this area; one in the area within the Moore Creek watershed to the north and east, and a second in and around Wilder Ranch to the west, including Wilder Creek.[76] CRLF are known to breed nearby in the Wilder Creek system (less than a mile to the west), in a pond within the Moore Creek drainage (at the UCSC Arboretum about 2 miles north of the Campus site) feeding into Antonelli Pond (where Antonelli Pond is located immediately to the east of the Campus), and within Natural Bridges State Park (about a third of a mile or so to the east). CRLF habitat also exists in Antonelli Pond (just opposite Shaffer Road from the Campus). All told, CRLF have been documented at over twenty locations within 5 miles of the Campus site, and some of these locations have been identified as breeding locations; suitable habitat with the potential to support CRLF has been identified at another 25 locations within 5 miles (including within the northern arm of YLR and extending just north of Delaware Avenue Extension on site); and the northern portion of the site appears to act as a relatively barrier-free habitat dispersal corridor between these areas. In other words, there is a significant mosaic of known and potential CRLF habitats and dispersal corridors surrounding the site and including at least the upper portion of it.[77]

The critical Coastal Act 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 such areas.[78] USFWS indicates that "dispersal of individual California red-legged frogs plays an important role in metapopulation dynamics and therefore the persistence of populations."[79] USFWS has in the past typically recommended a minimum 300-foot width for CRLF corridors suitable between breeding sites. 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.*[80]

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76 From "Terrace Point California Red-Legged Frog Assessment, Santa Cruz, California," Bryan Mori Biological Consulting Services (April 1997 as amended June 1997), as corroborated by EcoSystems West (July 2002)

77 Id; Mori (1997) and EcoSystems West (2002).

78 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.

79 USFWS December 8, 2005 comment letter on the CLRDP.

80 Federal Register Vol. 69, No. 71, April 13, 2004, Proposed Rules, Department of Interior, Fish and Wildlife Service, 50 CFR Part 17. Note that USFWS has subsequently 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

Applying a 300-foot corridor to the straight-line movement phenomenon might mean that CRLF would potentially traverse a wide swath from the "point" locations of the known occupied aquatic and/or breeding habitats on and off the Campus to the various known and potential points along Antonelli Pond/Moore Creek complex to the north and east, to the Wilder Ranch State park occurrences, including along Wilder Creek, to the west, and to the upper arm of YLR. Coupled with identified wetlands and buffers, such a measure would preclude all non-resource dependent development on the Campus above at least Delaware Avenue Extension, and would mean that the University's proposed Upper Terrace development zone would need to be removed from the CLRDP. As stated by USFWS in 2005 in relation to the then proposed CLRDP:

> *Many studies have attempted to elucidate the value and adequate size of dispersal routes or corridors as a means of maintaining ecological connectivity between areas of suitable habitat while avoiding negatively influencing individuals of various species (Beier and Noss 1998, Bulger et al 2003, Fahrig and Merriam 1994, Haddad 1999, Pope et al 2000, Semlitsch 1998, Semlitsch 2000, Semlitsch 2003, Vos and Chardon 1998). Designating or creating movement corridors to avoid adverse effects to California red-legged frog habitat in areas scheduled for development is problematic. However, when an obvious corridor exists between two aquatic sites, California red-legged frogs are likely to use that route (Bulger et al 2003).*[81]

Arguably the northern portion of the site (roughly above Delaware Avenue Extension) provides an overlapping series of such "obvious corridors" inasmuch as it is relatively barrier free and connects to similarly barrier free areas west and east of the Campus that extend towards aquatic sites, as well as to YLR's upper arm and the area above Delaware Avenue Extension on Campus. That said, USFWS has indicated support for the University's proposed corridor and buffer concept. Specifically, the Service previously weighed in on the prior version of the CLRDP that was previously before the Commission (by letter dated December 8, 2005). In that letter, the Service indicated that it was concerned with the amount of development contemplated in the northern portion of the site, and in particular, development located within 100 meters (328 feet) of the site where CRLF were found at the Campus boundary (so called "occupied aquatic habitat") because USFWS considered take of the species possible if development were to occur within the 100 meter area. The Service did express support for and encouraged the University's proposal to maintain a wildlife corridor north of the upper terrace development node, and also supported measures to provide enhanced connectivity across Shaffer Road if and when this area gets redeveloped.

In response to USFWS and Commission concerns regarding CRLF, the University abandoned proposed development within the northern half of the previously proposed Upper Terrace development zone in this current iteration of the CLRDP. The effect of this reduction is that the Upper Terrace zone is now

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dispersal habitat (Federal Register, Vol. 70, No. 212, November 3, 2005, Proposed Rules, Department of Interior, Fish and Wildlife Service, 50 CFR Part 17). That said, the recently proposed revised rule, which no longer cites a distance, does not conflict with this previous 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 certain nearby cases in San Mateo County (e.g., Lee (A-2-SMC-99-066); and Ailanto (A-1-HMB-022)).

81 Id; USFWS December 8, 2005 comment letter on the CLRDP.

located further than 100 meters from the CRLF pond along the northern boundary of the Campus, and the wildlife corridor above the proposed Upper Terrace zone has been increased to 300 feet in width (see, for example, Figure 5.2 in Exhibit D).[82] As now proposed, and with the exception of the approximately 2-acre Upper Terrace development zone (reduced to about 1.5 acres by virtue of the additional wetland and wetland buffer to be applied per suggested modification), the majority of the northern portion of the terrace (the area within about 900 feet of the northern Campus boundary), including the connection to and from the upper arm of YLR, would be maintained as a habitat resource with the CLRDP (see, for example, Figure 5.2 in Exhibit D as adjusted by suggested modifications shown in Exhibit K). In addition, the areas north and south of the Upper Terrace zone would be designated as wildlife corridors, these corridors would be buffered, development adjacent to them would be designed to avoid wildlife impacts, and the corridors and buffer areas would be 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 would 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.

In sum, the evidence is not sufficiently compelling to preclude all non-resource dependent development in the northern portion of the site. And given the current understanding of CRLF on and off-site, USFWS's 2005 recommendations, and the CLRDP commitment to (1) enhancing the natural habitat and wildlife corridor areas in the northern portion of the site (including wetland restoration in favor of CRLF habitat needs, and realignment of the Campus access road to pull development south and away from the natural areas of the northern portion of the site); (2) requiring future USFWS consultation; and (3) requiring siting and design requirements for development in the proposed upper terrace zone, including those specific to facilitating wildlife movement, and specifically CRLF movement, the upper terrace development zone should not adversely impact CRLF, and the CLRDP can be found consistent with the habitat protection policies of the Coastal Act with respect to CRLF.

E. 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.

6. Future Wetland/ESHA Identification

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

[82] Note that the proposed CLRDP refers to "Wildlife Corridors" as 20 feet in width, to which buffers are applied. Figure 5.2 shows two 20-foot areas designated as "Wildlife Corridor" (one at the northern boundary of the site and one south of the Upper Terrace development zone) with an area designated as "Resource Protection Buffer" adjacent to them, where the buffer measures 280 feet and 100 feet wide (on either side for the latter) respectively. That said, the area designated Wildlife Corridor and Resource Protection Buffer together serve and function as a wildlife corridor as that term is commonly understood, and the CLRDP requires this entire area to be enhanced for same. Thus, the entire area north of the Upper Terrace zone is really a wildlife corridor, as is the entire area south of the zone and north of the Campus Entrance development zone (in the latter case, including an area designated as "Open Space"). In sum, the "corridors" that are between the developed or proposed to be developed areas are a minimum of 300 feet wide to the north and close to 400 feet wide to the south (with the Commission's suggested modifications; see also Exhibit K) of the Upper Terrace development zone.

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 Coastal Act. As proposed, the CLRDP accounts for this concern. Specifically, the CLRDP includes implementation measures that: require wetland and ESHA delineation and identification in the vicinity of any proposed development, including explicit reliance on the Coastal Act wetland definition and on appropriately inclusive standards for determining ESHA (see CLRDP Section 5.3.1 in Exhibit L); require that such areas be avoided by non-resource dependent development; require buffers be put in place around any identified ESHA and/or wetland resources whose size is dependent on the nature of the resources being buffered; require that the CLRDP subsequently be updated by CLRDP amendment to reflect the newly identified wetland/ESHA areas and their buffers; and further require that such areas be added to Younger Lagoon Reserve, including as part of the CLRDP's natural areas restoration, enhancement, and management commitment (see, for example, Implementation Measures 3.3.1, 3.3.2, 3.4.4, 3.4.5, and 3.14.1 in Exhibit L).

Thus, to the extent there may be concern that the proposed campus site is dynamic, and that existing wetland and ESHA resources may expand, or that new wetlands may form or new ESHA be determined, 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, the CLRDP allows for future delineation work, evaluation, and public review of the potential impacts to wetland resources.

Related to this point, it is important to note that the CLRDP envisions the creation of a state of the art water quality treatment train system, including predominantly through the use of created natural features (such as vegetated filter strips, swales, and basins) to filter and treat all runoff and other site drainage (see also further water quality description in section below). It is possible, if not likely, that some of these created natural features could exhibit wetland and/or habitat characteristics over time. However, their primary function under the CLRDP is for water quality filtration and treatment, flow control, and infiltration, and some amount of maintenance within them is expected over time. There will be relatively more maintenance within filter strips and swales, and there is expected to be very little within vegetated stormwater basins (other than their forebays where sediment and related buildup is expected to be concentrated). Towards this end the CLRDP recognizes these created natural features as water quality features, distinguishes them from other wetlands/ESHA that may be newly discovered at a future time, and allows maintenance within in them for water quality purposes (see, for example, Implementation Measure 7.2.2 in Exhibit L). Such maintenance is only allowed pursuant to an approved plan that includes biotic evaluation and monitoring to ensure that any sensitive species that may be present are not adversely impacted, and includes vegetation restoration as a component (see, for example, water quality maintenance provisions in CLRDP Appendix B, beginning on page 32 of Appendix B, in Exhibit L). By BMP design, the vegetated stormwater basins are likely to require little to no active maintenance that would disrupt these features, so it is unlikely that there will be any habitat/maintenance conflicts

issue in this respect. In addition, for those portions of the vegetated stormwater basins that may be located in the natural open space areas, any maintenance must also be consistent with the CLRDP's overall natural area enhancement, restoration, and management requirements and parameters. Depending on the characteristics of the drainage areas, mitigation measures may be required for design and construction of development adjacent to such areas, but such drainage features are designed to be fairly self-functioning, fairly small, and without significant maintenance, other than perhaps with respect to established forebay areas within which regular maintenance will be likely be necessary. In other words with respect to the vegetated stormwater basins specifically, provided they work as expected, the majority of them will be mostly left alone for many years at a time.

7. Wetland/ESHA Buffers

For the most part, the CLRDP provides buffers to all University identified wetland and ESHA areas (see, for example, Figures 3.11 and 5.2 of the CLRDP in Exhibit L, and Figure 5.2 alone in Exhibit D). These buffers are generally a minimum of 100-feet, with some greater distances where resource values and buffer needs dictate (such as the 150-foot buffer for wetland W5) and some lesser distances where topography or other features help to contribute to appropriate buffer function in a smaller buffer space (such as buffers adjacent to Younger Lagoon Reserve in some places where the earthen berm provides a barrier function). As discussed above, additional areas of wetland exist at the site that have yet to be shown and buffered by the proposed CLRDP. These areas must also be buffered with 100-foot buffers to adequately protect their value and function (see suggested modification 1 and Exhibit K).

Although the additional wetland areas recently identified (and required to be added to the CLRDP by suggested modification – see above findings) are not in any areas proposed by the CLRDP for development, the required wetland buffers do extend into proposed development zones (see Exhibit K). Such revised buffer areas will result in removal of developable areas from each of the proposed development zones to different degrees. For the Upper Terrace zone, this will result in a lesser amount of potential development area. For the Campus Entrance zone, this will also result in a lesser amount of developable area, and this would limit the amount of public parking that can be provided in this area (only a kiosk and designated public coastal access parking (15 spaces) are allowed in this area). Accordingly, this approval includes a modification to allow for a slight reconfiguration of the Campus Entrance zone to ensure that adequate space exists to provide the required parking in an area that is outside of the required wetland buffer at the Campus entrance (see suggested modification 3). For the Lower Terrace zone, the required reconfiguration will provide for some rectification of the northeastern boundary, and will remove a portion of the northern "tip" of this area. In this northern tip area, the existing Ocean Health building parking lot already exists and would remain, and thus its effect would be limited. In the Middle Terrace zone, the buffer for Wetland W11 would take out a portion of the zone that includes the existing roadway and an area within which overlook improvements are proposed (and would be allowed outside of the zone), and thus the impact in this area is also limited. In the case of the Wetland W4 buffer in the Middle Terrace zone (located just northeast of the NOAA Fisheries building) however, the 100-foot wetland buffer may impact development located within that portion of the zone located immediately east of the NOAA building because the buffer will nearly close off potential access to this area (see Exhibit K). The University has raised concern with regard to this limitation with respect

to being able to provide road access to this area. It appears that there would be inadequate space outside of the buffer area within which to site a road without using a portion of the NOAA inholding or otherwise gaining access to this area through NOAA's existing parking lot area. In recognition of these feasibility issues, this approval is conditioned for the University to gain reasonable access to this area without impacting the buffer if it is feasible (i.e., whether through the development zone area or some arrangement with NOAA Fisheries or both), and for the minimum incursion into the buffer if it is not (UCSC has estimated a potential incursion on the order of about ten feet for road access), and only if said incursion includes measures to ensure adequate buffering of Wetland W4 (where adequate means the same or better buffer function as the 100-foot buffer would have provided) (see suggested modification 2).

The CLRDP buffers (i.e., as proposed by the University and as augmented by those required by Commission suggested modifications) are adequate to protect the identified resources in each case, particularly when considered in tandem with the CLRDP's siting and design criteria that provide additional buffering protection to such resources. In addition, and as described above, the CLRDP also requires that any wetland and ESHA resources newly identified in the future also be appropriately buffered, where the buffer distance and design will depend on resource value and buffer needs. In sum, the proposed buffers and associated siting and design requirements can be found consistent with the habitat protection policies of the Coastal Act with respect to allowing development adjacent to ESHA and wetland resources.

8. CLRDP Water Quality Provisions

The governing plan for hydrology and water quality on the Campus is the CLRDP's Drainage Concept Plan (proposed CLRDP Appendix B, see Exhibit L). 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 using natural systems and maximizing infiltration. More specifically, it identifies a range of BMPs to be applied to protect water quality, including an explicit suite of twelve BMPs required for all development, and it includes clear and explicit maintenance parameters for all drainage components. Related CLRDP provisions amplify the DCP requirements (see, for example, Section 5.7 in Exhibit L), including setting specific limits on the amount of impervious surface allowed, and including through the use of permeable materials (e.g., permeable materials are required for all parking lot areas). The Commission's water quality staff have concluded that anticipated flows from the proposed development zones will be able to be handled effectively through the proposed BMP treatment trains, including through the dispersed system of forebays connected to larger vegetated basin areas, and that minimal alteration of natural areas surrounding development zones will be necessary for any basins created outside of such zones. This includes recognition that all components of the treatment trains, except for possibly non-forebay portions of vegetated stormwater basins, will be located within development zones, and that the basins will be maintained and enhanced as natural areas consistent with the Resource Management Plan and the CLRDP commitment to natural areas enhancement and management. 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 and grading that might define a basin. As described previously, maintenance in the non-forebay portions of the basins is expected to be minimal.

It is expected that DCP implementation will result in enhanced water quality. As a means of verification, the DCP also includes a comprehensive water quality monitoring program that includes an extensive three- to five-year research phase for each new treatment train constructed, and ongoing monitoring after that time (see Appendix B Section B.6, starting on page 32 of Appendix B in Exhibit L). Explicit performance standards, patterned after other applicable water quality criteria (including the requirements set forth in "California's Management Measures for Polluted Runoff," Section 6217 (g) of the Coastal Zone Amendment and Reauthorization Act, and the Central Coast Region Basin Plan), for individual constituent elements potentially present in the drainage are defined in the CLRDP and must be met.

In sum, there is no doubt that impacts to existing drainage, hydrology, and water quality will be significant under the CLRDP's proposed development program without a comprehensive water quality program. The DCP and related CLRDP provisions represent just such a program, and will not only address such issues adequately at this site, but the drainage and water quality concept also represents a large-scale application of what the Commission has learned in recent years regarding water quality BMPs. The CLRDP's water quality program, with its use of natural feature BMPs, its focus on infiltration and appropriate site design, its use of engineered filtration/treatment and diversion as appropriate, its use of filtered/treated drainage for hydrological enhancement of resource areas (such as site wetlands), and its comprehensive water quality monitoring program, is one of the most thorough and well-thought programs developed in recent years and its application should result in not only enhanced water quality at this site, but also result in an example of how to address drainage and water quality at this scale in the coastal zone more broadly. In sum, the CLRDP's water quality provisions should assure protection of water quality consistent with the Coastal Act.

9. Relationship of Younger Lagoon Reserve Management Plan to CLRDP

Although the CLRDP contains a series of explicit parameters for protecting YLR (see, for example, CLRDP Section 5.3 and Policy 3.5 et seq), it is lacking explicit provisions applicable to enhancement, restoration, and management akin to what is provided in the CLRDP's Resource Management Plan for the terrace natural areas. The RMP is squarely focused on terrace resources in this sense, and it contains fairly detailed prescriptions for the protection, enhancement, restoration, and management of the terrace resources (outside of development zones), but it does not include complementary detail in this respect for YLR.[83] 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. The University could have chosen to expand the RMP to account more explicitly for YLR, or could have chosen to include a specific YLR Management Plan (YLRMP) as part of the proposed CLRDP (whether the existing NRS YLRMP or an update of it that addressed proposed CLRDP provisions), but chose not to at this juncture. Several points regarding this context related to YLR and such measures need be made.

With respect to the relationship of the existing 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.

With respect to the lack of RMP provisions specific to YLR, this is not a Coastal Act consistency concern: the CLRDP protects YLR regardless of whether the YLRMP is part of it or not, and regardless of whether the RMP includes specific enhancement/restoration direction for it or not. While it would be preferable if the CLRDP included a similar level of detail with respect to YLR enhancement,

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

restoration, and management as the CLRDP provides through the RMP for the terrace habitats, it is not absolutely required for Coastal Act consistency. Rather, it means that YLR will be protected, including as a Resource Protection and Resource Protection Buffer area per the CLRDP, but the CLRDP RMP won't provide explicit enhancement guidance related to it.

More importantly perhaps, as Campus natural areas (outside of development zones) are added to the Reserve and the CLRDP is updated to reflect these additions (pursuant to the CLRDP provisions requiring same), the University will have ample opportunity to identify and propose appropriate CLRDP revisions to better account for YLR resources that by then will include areas of the terrace (which isn't the case currently). This is especially true given that these added areas will be subject to ongoing enhancement and restoration pursuant to the University's natural areas commitment and the RMP, and it will be an opportune time to account for those provisions both in light of a newly configured YLR, and in terms of how these activities could or should be extended into YLR as it is configured today. Also, since a revised YLR configuration will also trigger a revised YLRMP, it will be an appropriate juncture to reconsider whether a closer integration of the YLRMP to the CLRDP is necessary or desirable. Such integration would appear to better serve resources in the now existing YLR over the long run, including the manner in which they relate to terrace habitats, and provide a context for the funding of such efforts. These issues need not be resolved now, however, and the Commission finds that the two and half years allotted by the CLRDP for the University to incorporate the natural areas into YLR and submit a CLRDP amendment to the Commission (per CLRDP Implementation Measure 3.14.1, see Exhibit L) reflecting those additions is an appropriate time frame, and that the University and the Commission will be in a better position to appropriately integrate YLR (as then configured) enhancement, restoration, and management issues into the CLRDP at that amendment stage.

10. Development Adjacent to YLR

The CLRDP building program allows for substantial development within the three primary development nodes (and the fourth smaller node at the Campus entrance). With respect to YLR, the Middle and Lower Terrace development 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. CLRDP Figure 5.4 identifies several subareas for potential development adjacent to YLR, and also sets the maximum stories and heights allowed in these subareas (see Exhibit D). For example, in subarea 7, immediately adjacent to YLR, only fencing, drainage, and landscaping are allowed; and in subarea 6, immediately east of subarea 7, the first 50 feet may not be used for buildings. The CLRDP also includes 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 Reserve, so as to minimize disturbance of wildlife. For example, CLRDP implementation measures 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 6.6) 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 3.5.8 – Protective Measures for YLR in Middle Terrace. In conjunction with building construction west of McAllister Way in the Middle Terrace development zone, the University shall construct and/or plant protective barriers along the eastern edge of YLR in Development Subarea #7 and, if feasible and appropriate, extending south to connect to the existing berm. Such barriers may include fencing, dense vegetation, and/or an earthen berm. If an earthen berm is developed, it shall be sized so that no soil importation is required from outside the Marine Science Campus (i.e., the soil required to construct it would be less than or equal to the amount of soil that becomes available within the campus as a result of grading to prepare development sites), unless importation of additional soil is necessary to ensure proper berm function/configuration; such soil is demonstrably clean and free of contaminants (including foreign seed stock); and its importation is feasible. Any such berm shall be planted with native grasses and herbaceous shrubs consistent with CLRDP Appendix B, Resource Management Plan.

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 and B). 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 beneficial, although not necessary for Coastal Act consistency, 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. That said, 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. As proposed by the University, the CLRDP allows 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 (and away from YLR), must be limited in height in the area nearest the delineated Lagoon and associated stream/riparian resource of its eastern arm. CLRDP provisions account for this (see, for example, CLRDP Implementation Measures 4.2.13, 4.2.14, and 4.2.15 in Exhibit L). In addition, the proposed CLRDP includes series of measures to protect YLR from inappropriate development, including potentially an extension of the earthen berm in the Middle Terrace area (see cited implementation measures above). In identifying this lower intensity development area west of McAllister Way, including by virtue of the siting and design criteria that apply there, the Commission finds that the specific measures included in the CLRDP for YLR will provide adequate protection and buffering of YLR (including Younger Lagoon itself) resources.

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 D). 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.[84] 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 from within the Reserve, provided they met all other CLRDP criteria.

11. Development Adjacent to Other Habitats

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 the Upper Terrace development zone, development must be sited and designed sensitive explicitly to wildlife movement corridors on three sides of this zone. 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 in Exhibit D), development is not appropriate at all (the current iteration of the CLRDP reflects this

[84] Most recently with the Center for Ocean Health project (CDP 3-83-076-A13, August 1999).

assessment, and designates this area for open space and habitat enhancement).[85] The CLRDP includes a series of parameters to effectuate such measures (see, for example, CLRDP Policies 3.2 and 3.4 et seq, and Implementation Measure 4.3.2 in Exhibit L).

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 in Exhibit D), 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 in a sensitive location from a habitat perspective. However, the Commission recognizes that the other modifications described will lessen CLRDP building program development intensity in various ways, and that this area may be kept in the development zone to provide the University with development siting flexibility. CLRDP provisions that require lower development intensity, and clustering to the south of the subarea, should also help to address any such issues at this location. Similarly, allowing for the path use (along the to be abandoned roadway corridor) allows for maximum public access, including potential future connections to off site areas, and such low intensity public access use should be able to be accommodated consistent with habitat protection needs.

12. Shaffer Road

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

[85] This area is currently undeveloped grassland that is located along the shoreline edge of the Campus between two proposed 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.

line up with habitat corridors on the other side of Shaffer. In terms of the latter, the Commission is aware that the owner of the other portion of deferred certification located between Shaffer Road and Antonelli Pond has long been pursuing a potential multi-family 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 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 Campus development is cognizant of the connection between such areas on each side of Shaffer Road (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 (see Exhibit F). The City maintains that Shaffer Road needs to be extended at least partly to allow for emergency access to the Campus should Delaware Avenue be blocked or impassable. As the University and CLRDP indicate, Campus development does not require Shaffer Road to be extended north across the railroad tracks. The University has agreed to collaborate with the City on developing an emergency grade crossing of Shaffer Road, blocked off by removable bollards, to address the City's concerns. 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. In any case, any development within Shaffer Road will be subject to its own CDP process, and the CLRDP will not be the standard of review in that process.

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 (and habitat areas within Natural Bridges State Park). Given that Campus development will funnel such wildlife movement to either side of the Upper Terrace zone, given that these areas surrounding the Upper Terrace will be enhanced and managed for habitat purposes, and explicitly to facilitate wildlife movement, 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.

Per the CLRDP, improvements to Shaffer Road must 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, again 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, Antonelli Pond, and Natural Bridges, 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; USFWS, in commenting on the CLRDP, supports measures to provide enhanced connectivity across Shaffer Road, including potentially abandonment and reconfiguration of the road as a habitat corridor, including for CRLF, as described above; 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 adjacent area, 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 can become an attractive nuisance for vehicular misuse (i.e., used as a ramp); and it does not appear necessary to serve development, including that it does not appear that emergency access is necessary across the railroad tracks because of the width of Delaware Avenue and the unlikelihood of its complete blockage in this regard.

13. 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 University delineated wetlands and their buffers, and the ESHAs that the University identified in the marine intertidal and YLR. It does not illustrate the more general wildlife values in the northern terrace or the significant raptor foraging areas throughout the site that are discussed above. 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 CLRDP Figure 3.11 (or Figure 3.16 that is related to it).

14. Seawater System and Entrainment

Part of the base premise for the Marine Science Campus is to make use of LML's existing seawater intake and seawater utility. This system was approved by the Commission, originally as part of the initial LML approvals in the mid-1970s, and upgraded as recently as 2001 as part of the Commission's consistency determination for the NOAA lab at the site. Its current maximum permitted intake capacity is 2,000 gallons per minute per the recent NOAA-related upgrade. There have been more recently concerns over potential adverse impacts of entrainment and impingement from such a system, including in terms of impacts due to potential expansion to serve Campus development under the CLRDP. The CLRDP estimates that full buildout could require as much as 6,000 gallons per minute of seawater to serve site users. Although the intake pipes themselves are located in the Commission's retained permit jurisdiction and subject to Coastal Act review, the majority of the storage and distribution system would

be subject to the CLRDP. As a means to address potential entrainment and impingement issues through the CLRDP (and to the degree applicable as guidance in a Coastal Act review given the potential for overlap), the CLRDP includes the following requirements:

> *Implementation Measure 3.1.1 – Seawater System. The Campus seawater system may be maintained and may be expanded consistent with Subsection 5.2.1 to supply the Marine Science Campus with fresh seawater for research and education uses, provided such maintenance/expansion is consistent otherwise with the CLRDP and proceeds in a manner that maintains, enhances, and where feasible restores marine resources. Entrainment and impingement shall be avoided to the maximum extent feasible, and all development that increases the seawater intake flow rate beyond that that existed at the time of CLRDP certification shall include all feasible measures to avoid entrainment and impingement. In addition, any proposed expansion of the seawater system that increases the seawater intake flow rate capability beyond 2,000 gallons per minute or that requires new ocean intake pipelines shall include a comprehensive entrainment/impingement study necessary to determine the extent of entrainment/impingement caused by the intake. Such study shall include an evaluation of methods (including alternative projects and/or project designs) that could be used to avoid or minimize entrainment and impingement, and shall identify all underlying study assumptions and methodologies. Any entrainment or impingement that cannot feasibly be avoided shall be mitigated at levels necessary to minimize adverse impacts.*

Thus, entrainment and impingement are to be avoided to the maximum extent feasible, including through future evaluation of alternative projects and/or project designs in order to avoid such impacts in the event of a proposed expansion to serve site users. The CLRDP adequately protects marine resources in this respect pursuant to Coastal Act requirements.

15. Natural Areas Protection

One of the more significant resource protection features of the proposed CLRDP is the framework for enhancing, protecting, and managing all natural areas outside of development zones. Specifically, the CLRDP includes restoration/enhancement of such natural areas directly (including terrace wetland, wildlife, and grassland areas) as well as a series of improvements designed to better protect and improve habitat values overall (such as public access trail and overlook improvements, road and parking improvements, and drainage/water quality improvements). More specifically with respect to the non-development areas, the CLRDP includes a commitment on the part of the University to restore, enhance, and manage all Campus natural areas (i.e., all areas outside of defined development zones) in three phases (temporal and spatial) over the first twenty years that the CLRDP is in place, and to continue to ensure the success of such efforts in perpetuity. CLRDP Implementation Measure 3.2.10 states:

> *Implementation Measure 3.2.10 – Natural Areas Habitat Management. Within six (6) months of CLRDP certification, the University in consultation with the Executive Director of the California Coastal Commission shall convene a scientific advisory committee (SAC) to guide the*

restoration, enhancement, 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). Natural areas restoration, enhancement, and management may be completed in up to three phases corresponding to dividing the natural area into thirds (i.e., where Phase 1 accounts for at least one-third of the natural area, Phase 1 plus Phase 2 accounts for at least two-thirds, and all of the three phases together account for all of the natural area). All restoration, enhancement, and management activities shall be guided by Specific Resource Plans developed by the University in accordance with the SAC and the criteria contained in the Resource Management Plan (Appendix A) and current professional standards for such plans. The SAC shall be responsible for guiding development of Specific Resource Plans and shall complete its work on the Specific Resource Plan for Phase I restoration and enhancement 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 CLRDP certification. All natural areas restoration and enhancement shall be completed within 20 years of CLRDP certification, with interim benchmarks that at least one-third of the restoration and enhancement shall be completed within seven years of CLRDP certification and that at least two-thirds shall be completed within 14 years of CLRDP certification.

As described in Implementation Measure 3.2.10, such resource protection efforts are to be guided by both the CLRDP Resource Management Plan (CLRDP Appendix A), which provides a general framework, as well as by a scientific advisory committee that will help guide the adaptive restoration and management of the Campus natural areas. All enhancement activities will be by and through specific resource plans that will be implemented through the CLRDP's development review process allowing the University and the Commission to weigh in on their specific content (see, for example, the "Implementation of the RMP" section of the CLRDP RMP starting on page 70 of Appendix A in Exhibit L).

In addition, under the CLRDP, the terrace natural areas outside of development zones, some 41 acres (plus the additional acre or so added by the Commission's suggested modifications), would be added to Younger Lagoon Reserve, effectively more than doubling the size of the Reserve (up to 66 acres),[86] to provide a greater level of protection to these terrace areas. As previously described, any wetland and/or ESHA areas newly identified in the future would also be added to Younger Lagoon Reserve and offered the same level of protection. CLRDP Implementation Measure 3.14.1 states:

Implementation Measure 3.14.1 – Natural Areas Protection. Within two years of CLRDP certification, all Campus natural areas (i.e. all areas outside of the four designated development zones, except for Younger Lagoon Reserve) shall be incorporated into the University of California Natural Reserve System as an integral part of Younger Lagoon Reserve. Within two years and six months of CLRDP certification, the University shall submit to the Coastal

[86] Or about 67 acres with the additional wetland and wetland buffer acreage added by Commission suggested modification.

Commission an amendment to the CLRDP to update it with respect to the revised configuration of Younger Lagoon Reserve and the natural areas. In addition, if any area within the four designated development zones as they are configured at the time of CLRDP certification is subsequently excluded from the designated development zones in the future (pursuant to Implementation Measures 3.3.1, 3.3.2, 3.4.4, and 3.4.5), then such area shall likewise be incorporated into Younger Lagoon Reserve within the same time frames and pursuant to the same parameters identified above with respect to the initial Reserve incorporation, but timed from the date that the required CLRDP amendment (required pursuant to Implementation Measures 3.3.2 and 3.4.5) is certified by the Coastal Commission.

More broadly, the University is committing through the CLRDP to limiting most all development, and certainly all building and related structural development, to the designated development zones. Such development would be prohibited in perpetuity outside of those zones. In other words, although future resource evaluations (as described in previous "Future Wetland/ESHA Identification" section) could remove additional areas from development zones, they could not take areas that are now outside of development zones and put them into development zones; these areas outside of CLRDP development zones are off-limits in perpetuity. The CLRDP states as follows:

Policy 3.14 Permanent Protection

The University hereby establishes as a guiding CLRDP principle its intent to protect, in perpetuity, Campus natural areas (i.e., all areas outside of development zones) from development other than the low-intensity uses and development allowed in the Resource Protection, Resource Protection Buffer, Open Space, or Wildlife Corridor land use designations. Designation of these natural areas to a Research and Education Mixed Use land use designation (or any subsequent and similar future CLRDP land use designation) shall be prohibited.

In sum, the CLRDP commits the University to enhancing, managing, and maintaining Campus natural areas as high quality open space and habitat, and only expanding these natural areas, in perpetuity. Although there has in the past been some discussion about whether these natural areas should be subject to some kind of third-party conservation easement to assure their long-term protection, the Commission finds such an easement is not needed in this case. Here, the CLRDP commitments, including the additional level of protection offered through the UC natural reserve designation for this area, adequately protect these areas from inappropriate development in the future. The only way that development could proceed in these protected areas would be for the University to propose and the Commission to approve a CLRDP amendment to allow same, and for the UC Natural Reserve System (a semi-autonomous entity within the University) to allow the area to be removed from the reserve system. Both scenarios seem highly unlikely. In terms of the latter specifically, the University indicates that it appears that this has only happened two times in the history of the reserve system, and both times the removed land remained protected as part of the removal.[87] As proposed, the CLRDP provides adequate

[87] One time when approximately 5 reserve acres surrounded by urban development was allowed to be removed from a reserve, where the 5 acres were set aside as a non-developable area as part of that process. And a second time where about 1,000 acres surrounded by National Forest Service lands was given over to the National Forest Service as part of overall forest management.

long-term protection for the non-development zone lands and can be found consistent with the Coastal Act policies cited above in this regard.

D. ESHA, Wetlands, and Associated Habitat Resources Conclusion

The CLRDP takes seriously the Coastal Act mandate to protect ESHA, wetlands, and associated habitat resources. The CLRDP is premised on avoiding and buffering resources, 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. In conclusion, as modified to recognize the additional wetland and wetland buffer areas, the CLRDP can be found 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. *Oceanfront 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 CLRDP[88]

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 would be 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). Public access to the site would be free, except that modest fees could be charged for developed educational and/or visitor-oriented programs (see CLRDP Implementation Measure 6.1.1 in Exhibit L), and potentially for some public access parking in the future (see below). Access areas, including trails, are designated as either controlled (where only supervised access is allowed)[89] 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 coastal access-only parking areas (a total of 30 spaces) and designated public dual-use parking areas (a total of 40 spaces, designated for both public coastal access and Discovery Center access). During non-holiday weekdays between 8am and 5pm, the University may choose to use permits, meters, or other similar methods for managing these public use spaces (except for fifteen public access-only spaces to be located nearest the Campus entrance which will be provided without any such encumbrances). At all other times (i.e., weekends, holidays, before 8am and after 5pm on weekdays), all Campus parking spaces (including public access spaces) are to be available on a first-come, first-serve basis without restriction. The CLRDP provides that public coastal access parking is to be free, unless a parking program is established in the future that requires a nominal fee (see CLRDP Implementation Measure 5.3.8 in Exhibit L). See Sections 5.5 and 5.6 in the CLRDP (Exhibit L).

C. Coastal Act Consistency Analysis

1. Public Access Historic Context

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.[90] 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 encountered 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

88 See primarily CLRDP Sections 5.5 and 5.6, including Figure 5.6, and Chapters 6 and 9 in Exhibit L.

89 Except where public trails extend through controlled access areas. In such cases, supervision is not required.

90 These historic trail locations generally still exist along the margins of the terrace portion of the site, including at the bluff edge, and they are actively used by the general public.

Lagoon and its fronting 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 the beach between 1981 and present). At the 2001 reevaluation, the Commission agreed to allow the University to temporarily extend the general closure for another three years (subject to Commission reevaluation at the end of that time (i.e., in 2004), and subject to specific criteria for the reevaluation) provided the previously required (in 1981) overlooks and 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.[91] The CLRDP submittal does not propose to open general public access to the beach. Nor does it provide specific reevaluation of the issues identified in the Commission's 2001 action (i.e., the University has not submitted the reevaluation justification beyond the CLRDP submittal itself). In addition, the required opening of three access overlooks has not occurred. For practical purposes, though, this CLRDP review and action accomplishes the reevaluation contemplated by the Commission.

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 at that time that Younger Beach was officially closed to general public access and the University wished to maintain such closure, that 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

[91] Commission staff also indicated to the University that a formal submittal pursuant to conditions of the base permit (CDP P-1859 and 3-83-076 as amended) would still be needed to formally close the file on the permit oversight responsibilities of the Commission, and to incorporate any future access management provisions into the CLRDP implementation process.

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 would be 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 mostly 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, CLRDP 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 Younger Beach as off-limits to general public access for over 25 years. Nevertheless, public recreational 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"), and by skimboarders using the wet sandy forebeach. 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 in two locations, including one where the University has installed stairs to the beach (see Exhibits A, B, and K).[92]

In this case it is inconsistent with the Coastal Act public access and recreation policies cited above to prohibit public access to the beach and the area offshore. Questions about carrying capacity and a level of use intensity may be appropriate, but to close off the Younger Lagoon beach to public access for all time (other than two docent led tours per month) cannot be found consistent with the Act. As described earlier, the sandy beach area is not ESHA and the Commission finds that allowing for supervised access subject to a management plan that is reevaluated on an every five year cycle is appropriate (see also previous finding titled "CLRDP ESHA Designation and Public Access Prohibition for Younger Beach" that is incorporated herein in its entirety by reference). For the first five-year cycle (i.e., until five years post-CLRDP certification), the Commission finds that the entire beach area and its access trails are to be recognized as appropriate for supervised tours only (and not open to any kind of general public access).

[92] Note that as part of the Commission's 2001 review of the seawater system expansion near the path area, the Commission explicitly required that adequate space be left available for this path, whether it was to be used for some type of general public access or whether it was to be used for some other form of controlled or supervised access.

The Commission finds this amount of public access to the sandy beach at Younger Beach to be consistent with the Coastal Act mandate for habitat protection and for maximizing access and recreational opportunities; see suggested modifications 4 through 11 and Exhibit K.[93]

Parking

Currently, all 191 parking spaces existing and formally approved at the Campus are free, and 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. The CLRDP at buildout would include up to a maximum of 795 parking spaces distributed throughout the site, where 30 of these spaces would be identified for public coastal access use specifically, and another 40 would be for dual public coastal access use and Discovery Center use. As stated in CLRDP Section 5.5:

> *Parking for Campus Use and Public Access*
>
> *Another key feature of the circulation plan is the development of parking for campus use and public coastal access. Parking on the Marine Science Campus is limited at buildout under this CLRDP to a total of up to 795 spaces, and the University may control almost all of this parking through programmatic means (e.g., including possibly parking permits and/or parking meters) to ensure that spaces are available for high-priority users such as visitors seeking coastal access and campus teachers, researchers, and staff. Without such controls, demand for parking by students could overwhelm capacity and result in parking shortages for higher priority users.*
>
> *Parking to be provided on the Campus is purposefully limited so as to avoid covering large portions of the Campus with parking areas (thus better protecting on-site resources) and to reduce Campus reliance on automobile transportation (thus reducing its attendant adverse impacts on and off-site). Because of this parking space limitation, and because all Campus parking demand is to be accommodated on-site, the CLRDP includes aggressive transportation demand management programs designed to bring Campus users to the Campus by means other than automobiles, and if by automobile, by alternatives to the single-occupant vehicle automobile. To ensure that parking controls and parking space limitations have the minimum impact on public coastal access, the CLRDP policies in Section 5.5.3 below also include provisions for dedicated and shared public coastal access parking areas.*

Thus, parking to be provided on the Campus will be 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

[93] The Commission notes here that approval of the CLRDP as so modified thus effectively transfers ongoing reevaluation requirements associated with public access to YLR under the base coastal permits to the required CLRDP access management plan process. As such, the Commission further notes that those coastal permit reevaluation requirements are no longer relevant so long as the University meets its CLRDP commitments under the CLRDP's five-year access management plan reevaluation cycle.

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 measures to protect against this, including requiring the University to satisfy parking 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.), through a schedule of parking improvements (see CLRDP Chapter 9), and through aggressive TDM programs (including ridesharing; bike parking, lockers, showers, etc.; see, for example, CLRDP Policies 5.2 and 5.6-5.8 et seq). Several things should be noted in this regard.

First, in terms of supply, and as described above, the CLRDP provides for 30 designated public coastal access-only parking areas (15 in the Campus entrance zone, 5 in the Middle Terrace zone, and 10 in the Lower Terrace), and 40 dual use (public access and Discovery Center) spaces (all in the Lower Terrace). Although this is a reduction from the amount of public spaces currently provided on the site, management of them to ensure that these spaces are available for public access use specifically should help to offset that reduction and alleviate any access issues associated with it. Also, on weekends, holidays, and before 8am and after 5pm on weekdays, all Campus parking spaces (including public access spaces) are to be available on a first-come, first-serve basis without restriction. This level of parking should adequately serve public access needs while not detracting from University needs otherwise, including the manner in which such needs can be met through TDM means.

Second, in terms of the cost and ease of use of public access parking areas, all existing parking on the Campus is free. The CLRDP reflects this same concept by specifying that all such parking is to be free post-CLRDP certification. However, it also allows for the possibility that a nominal fee may be charged in the future if authorized by a CLRDP development project (reviewable by the Commission), provided such fee does not negatively impact public access (see CLRDP Implementation Measure 5.3.8 in Exhibit L). This seems a reasonable approach, and one that allows the University and the Commission to further evaluate any potential parking fees in the future. As to ease of use, the CLRDP explicitly envisions the use of permits, and potentially meters, or other similar methods, for managing parking on the Campus. In terms of public access parking, the CLRDP explicitly requires such management measures to be easily understood and accessed by coastal access users, including accounting for public access users who may be parked in such spaces prior to 8am when such requirements may start (see CLRDP Implementation Measure 5.3.2 in Exhibit L).[94]

In sum, the CLRDP public coastal access parking provisions (and other parking provisions) are adequately designed to address site use as the Campus builds out, including in relation to access facilities that may be attractions, and can be found consistent with the Coastal Act's access and recreation policies.

[94] Public access users who accessed the site before 8am during daylight hours.

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 (see CLRDP Figures 5.6 and 9.1, and Figure 5.6 alone in Exhibit D). Two of the six are existing developed overlooks (Overlooks C and B), one is partially developed (Overlook D), and the remaining 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 (i.e., the University committed to developing all of the subject overlooks except for Overlook F that is a new overlook proposed through the CLRDP process), there are only two operational overlooks at this time. The Commission notes this, but also does not require that all of the other overlooks 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 supervised beach access) such overlook development is most appropriately provided for as development progresses at the site. Specifically, the CLRDP timing provides for such overlooks to be developed at the latest within one year of CLRDP certification for the inland overlooks, and within two years of CLRDP certification for the ocean overlooks.[95] This finding is also made in recognition of the fact that the CLRDP also provides significant siting and design detail past that articulated in terms of previous overlook requirements, and that this additional specificity should help ensure that such overlooks are developed in such a way as to maximize their public access and recreational benefit. This is perhaps most relevant in terms of the significant overlook enhancements planned for Overlook B, the ocean overlook near the seawater intake facilities. This overlook is to be expanded and improved inland through to the whale skeleton near the main Discovery Center parking areas, and improvements are designed to develop this area as a primary access destination on the Campus (including through replacing pavement with decomposed granite and landscaping, adding benches, picnic tables, and interpretive facilities, allowing only limited and long-term parking, etc. – see CLRDP Section 7.2.4).

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, CLRDP modifications are necessary to ensure maximum public access and recreation opportunities consistent with the Act related to beach access (see suggested modifications 4 through 11 and Exhibit K). 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

[95] Overlooks may be completed earlier if Campus development proceeds more rapidly; see CLRDP Figure 9.3.

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 that are all nearby) 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 polices 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. Likewise, policies that protect environmentally sensitive habitat areas from degradation also tend to preserve scenic resources since these habitat areas, including as associated with 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.[96]

B. Applicable Provisions of Proposed CLRDP

The proposed CLRDP proposes to protect public viewsheds generally in two primary 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 University-identified 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 CLRDP Figure 3.16 and Section 4.3 in Exhibit L). Second, it sets design standards for 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 Marine Discovery Center and the Center for Ocean Health buildings (in the main LML development area) are relevant examples of what the University means in this respect (see CLRDP Figures 2.14 through 2.18 in Exhibit L for photos of these buildings). 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 rural 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, from the City's Moore Creek Preserve directly inland of Highway One from the site, from Natural Bridges State Park downcoast (including in particular its blufftop overlook and parking area immediately adjacent to West Cliff Drive), and from offshore. There are also

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

additional public 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, some from more distant vantage points and others right on and adjacent to the site.[97] 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,[98] and as was the original operating premise for siting LML in the first place as an "intentionally isolated facility." The expected build out under the CLRDP 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 nearer the railroad tracks and north of Delaware Avenue Extension. All told, the CLRDP would allow for up to about 340,000 additional square feet of buildings and related structures and up to roughly 150,000 additional square feet of outdoor research and laydown 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 ultimately provide for a Campus roughly three times the scale of the existing Campus (including the NOAA facility) overall. Given that there would be additional development outside of the designated development zones (i.e., 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 maximum buildout that help articulate this concept (see Exhibit C).[99]

The Commission raised concerns with the appropriateness of such potential buildout at the Terrace Point site since at least 1999 when the last major development proposed by UCSC 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.*

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97 See also CLRDP Section 3.8.

98 1999's Ocean Health project, CDP 3-83-076-A13.

99 Id (see footnote 11).

In other words, notwithstanding its visual compatibility as a complementary project adjacent to 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 in Exhibit L, and Figure 7.2 alone in Exhibit D). At two stories and 34 feet tall, this represents a building footprint of about an acre, a height nearly 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.[100] 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

[100] 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.

example site plan of Figure 7.2) is helpful to understanding the magnitude of the development 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. Specifically, 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 5 feet above building height maximums themselves would also be allowed in certain circumstances for rooftop venting and other mechanical equipment (provided such equipment is screened and does not exceed 25% of the aggregated roof line or aggregated horizontal footprint). Thus, there is a potential for numerous large buildings that, depending on the design, may be perceived essentially as 41 foot tall buildings – larger than most existing buildings (such as the 24-foot tall Discovery Center).

Although significant new development in the viewshed is proposed, the CLRDP also 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, structural tapering near perimeters of development zones, landscape screening, etc.). These measures will help to de-emphasize the scope and scale of development contemplated. The CLRDP also includes Figure 5.4 (see Exhibit D), which provides specific height limitations and other restrictions for discrete subareas 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 W5. Design guidelines requiring stepping down at the edge of development areas complement this approach, as does required landscaping.

As it was in terms of habitat issues (see previous findings), the uppermost portion of the Middle Terrace zone roughly north of CDFG is within a particularly sensitive portion of the zone for public viewshed reasons as well. In this area, the existing Campus access road is to be reconfigured to the south (see Figures 5.4 and 7.2 in Exhibit D), 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. The public viewshed that opens up of the upcoast rural agricultural fields as one enters the Campus on the realigned Campus entrance could be blocked somewhat by development in subarea 2, and the views from the public trail to be developed along the current alignment of Delaware Avenue Extension could also be impacted. However, CLRDP provisions that require that public view impacts be minimized in subarea 2 should help to address any such issues at this location (see, for example, CLRDP Implementation Measure

4.2.12 in Exhibit L). Likewise, CLRDP policies relevant to the Campus Entrance development zone itself, including those limiting development there to a small-scale parking area and an entrance kiosk, should effectively address entrance area view issues.

In the area roughly between the Middle and Lower Terrace development zones, an informal parking area (about a car length deep perpendicular to the road) has sprung up west of McAllister Way. However, this parking area has never been formally recognized by the Commission. The CLRDP recognizes that 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/spatial 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,[101] and within 150 feet of W5,[102] and this area is best called out for resource protection buffering as opposed to parking as a means to protect habitat.[103] Instead, the CLRDP commits the University to the removal of this parking area and restoration of it to a natural state within one-year of CLRDP certification (see CLRDP Section 9.2).[104]

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 as much as possible 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 are sited and designed in such a way as to recognize the wildlife movement areas that surround the zone. In addition, development in this area will be reduced from that proposed by virtue of the fact that a portion of this area must be removed from the development zone because of the current wetland delineation (see preceding habitat findings), further limiting such potential impacts (see Exhibit K).

For the Lower Terrace development zone, buildings will be limited to a maximum of 20,000 gsf, and the

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[101] Where 300 feet has been deemed the presumptive minimum appropriate buffer distance from the Lagoon, barring factors that may allow a lesser distance (such as berming, sound-proofing, fencing, vegetation, etc.), by the Commission's staff ecologist.

[102] The appropriate buffer distance applied to Wetland W5 by the CLRDP is 150 feet.

[103] See also habitat findings preceding this one.

[104] Likewise an informal parking area has also been developed on the Federal inholding along the west side of the NOAA Fisheries building along McAllister Way. This area was supposed to have been landscaped as part of the Commission's authorization for the NOAA Fisheries building, and it was not authorized for parking. The landscaping that is supposed to be present in this area would serve to soften the impact of this facility, including by helping to screen it from YLR, and would be more in keeping with the proposed CLRDP policies with respect to building frontages along Campus roadways. This area is also located partially within 100-feet of a recently identified wetland area (see Exhibit K), and thus within an area that is meant for wetland buffering, and not appropriate for parking. For these reasons, this area needs to be returned to its authorized landscape state. Because this area is outside of the University's direct control (and outside of the CLRDP for that reason), Commission staff has been working with NOAA Fisheries to ensure that this is the case.

resulting development there is expected to be of the infill variety. The CLRDP includes requirements to limit development in the LML node to that that is integrally related to existing LML development and related research activities there, to avoid development nearest the bluff edge, and to avoid development that will impact public views (see, for example, Implementation Measures 4.2.13 and 4.2.14 in Exhibit L).

As previously described in the habitat findings, the area closest to Younger Lagoon would be limited to the lowest intensity uses and lower height limits. 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.

Finally, with the removal of the wetland and wetland buffer areas as required by the Commission's suggested modifications (see previous findings), the effect will be to further reduce the potential CLRDP building program and to further reduce the perceived sense of scale from it as the Campus develops over time. This will be perhaps most apparent in the Upper Terrace development zone where additional area to be removed will limit potential CLRDP building program development there, as well as at the southeast corner of the Middle Terrace zone (see Exhibit K). In other words, the reduction in developable area to meet Coastal Act wetland requirements also helps to reduce the intensity of development overall and this helps to further address Coastal Act public viewshed issues.

D. Public Viewshed Conclusion

In the context of the importance of using the Campus location for strengthening the critical urban-rural boundary adjacent to the Santa Cruz County north coast area (including in terms of finally concluding in various respects on the appropriate level of buildout for this transitional site as a means of providing certainty to the University, the Commission, and other interested parties), visual resources will be protected. In addition, the reduction in the CLRDP proposed building program due to removal of certain areas from development zones to address wetland protection requirements provides complementary development intensity reductions, and the significant CLRDP provisions designed to address potential viewshed issues through meaningful siting and design criteria and related measures, will act to minimize impacts on public views. Therefore, the Commission finds that the Coastal Act can allow for the CLRDP development program and the CLRDP, as modified to address other Coastal Act issues, can be found consistent with the Coastal Act's public viewshed policies. The Campus at buildout will certainly provide for a different public viewshed than now exists, but it should still 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 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 proposed projects assure structural stability without protective devices.

B. Applicable Provisions of Proposed CLRDP[105]

The CLRDP requires that new development be sited and designed to avoid the need for shoreline armoring over its lifetime, including requiring 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 bluff species (see, for example, CLRDP RMP Management Measure 7 and Table A.4 in Exhibit L). Blufftop access facilities, like paths and overlooks, are to be relocated from time to time as necessary to ensure their proper function without reliance on armoring. All development is to be sited and designed to minimize the alteration of natural landforms (see, for example, CLRDP Implementation Measure 4.2.2 in Exhibit L).

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.[106] 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.[107] 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 80 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, the public access overlook near the bluff edge, and the southeast corner of the Marine Discovery Center, 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

[105] See CLRDP Policy 3.7 and related implementation measures in Exhibit L.

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

[107] Foxx, Nielsen, 1992.

facilities site plan; Figure 2.13 in Exhibit L). 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.

However, 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 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 CLRDP 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.[108]

In addition, the Commission has generally interpreted Section 30235 to apply only to existing principal 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.[109] 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 near 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.

[108] CDP 3-83-076-A13.
[109] Id.

Namely, the CLRDP 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. 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 in Exhibit L). The CLRDP also requires the blufftop area to be restored to native bluff species. In sum, 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 L).

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 shoreline-water interface (such as the seawater intake lines) will be located along the shoreline. The Commission finds the CLRDP, as modified to address other Coastal Act issues, 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 CLRDP 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.[110]

[110] CLRDP Section 3.9; see Exhibit L.

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….*[111]

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 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 manner 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 that assures that potential impacts to cultural resources are reduced to a less than significant level, and this requirement is incorporated into the policies and implementation measure of the CLRDP (see CLRDP Policy 3.9 et seq in Exhibit L).

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, as modified to address other Coastal Act issues, 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 with respect to the Commission's oversight responsibilities.

[111] CLRDP EIR pages 4.5-7 and 4.5-8.

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:[112]

> ***Section 30607.*** *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.*

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. CCR 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.*

[112] 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.

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:

> ***CCR 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 Coastal 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. Such development projects are then subject to a different noticing and review procedure than the Coastal Act's coastal development permit procedure, including that the Commission's review is generally more limited than with coastal permits. The CLRDP 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., including identifying types, locations, and intensities of development, etc.), 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 Coastal 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 (or their authorized representatives) 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.[113] As previously detailed, the Commission's review at that point is limited to imposing conditions on such development project proposals if it finds them inconsistent with the certified CLRDP (where the conditions are designed to make such projects consistent).

[113] See CLRDP Sections 8.1, 8.2, and 8.4 in Exhibit L.

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

In general, the CLRDP is clear with respect to procedures. It provides a clear process that will apply to review of development projects, and it includes multiple University-Commission coordination loops that should effectively help to shape CLRDP-consistent projects. However, there remains one procedural issue that presents implementation, and by extension potentially coastal resource impact, issues: the CLRDP's proposed NOID filing determination methodology. Suggested modifications necessary to find consistency with the Coastal Act are included to address this issue (and the University has indicated that they agree with the modifications), and it is discussed more fully below.

1. Filing a NOID

A critical step in the development project review loop in terms of the Commission's overview authority is with respect to the manner in which a NOID is submitted to the Commission for review and that NOID is deemed filed. Once a NOID is deemed filed, the Commission must act within thirty working days; if the Commission has not acted in that time frame, then the subject development project is deemed consistent with the certified CLRDP.[114] The thirty working days after filing provides scant time within which to agendize an item for Commission review (including required noticing and staff report production several weeks before an agenda date), particularly given that the Commission meets one time per month. As such there is heightened concern that a NOID and all necessary supporting information for determining its consistency with the CLRDP is timely provided, and that it provides adequate detail, before a NOID is deemed filed.

The relevant proposed section of the CLRDP, Section 8.4.1, states:

> *Within ten days of receipt of the Notice of Impending Development and all applicable supporting information (as described in Section 8.2, above) for a proposed development project, the Executive Director of the Coastal Commission shall review the submittal and shall determine whether additional information is necessary to determine if the proposed development project is consistent with the CLRDP, and if additional information is deemed necessary, shall request such information from the Director of Campus Planning. The Notice of Impending Development*

[114] See CLRDP Section 8.4 in Exhibit L, and the relevant statutory sections cited above, including Coastal Act Sections 30605 and 30606, and CCR Sections 13548-13550.

shall be deemed filed as follows:

1. *If the Executive Director does not respond to the Notice of Impending Development within ten days following its receipt, the Notice shall be deemed filed on the tenth day following its receipt by the Executive Director, or*

2. *Any request by the Executive Director for additional information must be for specific information needed to determine consistency with the CLRDP and must be transmitted within ten days of receipt of the NOID. In the event there is disagreement concerning the adequacy of submitted information to enable the Commission to determine consistency with the CLRDP, either the Executive Director or the Planning Director may submit the disagreement to the Commission for resolution.*

As proposed by the University, there are two ways a NOID may be filed; (1) if the Executive Director has not responded to it in 10 days; or (2) if the Executive Director has responded and requested additional information and that information has been received.[115] The first part of that filing equation is clear and straight-forward and readily verified: if the Executive Director has not responded to the University in the time frame allotted, then the NOID is considered filed and the Commission's action deadline clock is ticking. There is little interpretation in such a standard, and it emanates directly from the Commission's regulations.

The second part of the filing equation also emanates directly from the regulations. However, questions have been raised regarding how it is determined whether all necessary information requested by the Executive Director to determine CLRDP consistency[116] has been received pursuant to CCR Section 13549 (and thus a NOID deemed filed in that circumstance). The University has opined that the Commission's regulations do not give the Executive Director the authority to determine whether adequate information has been provided to respond to the Executive Director's request for information. Rather, the University position has been that submittal of the materials themselves is sufficient to file a NOID, and that any disagreement between the University and the Executive Director as to the adequacy of such submitted materials is implicitly subject to dispute resolution, ultimately through judicial challenge.

The Commission does not concur with the University's interpretation of a NOID filing itself simply by virtue of the University indicating that the materials requested by the Executive Director have been submitted (without the Executive Director weighing in on their adequacy). Rather, the Commission

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115 The second part of the filing equation question is implicit in the text of this current iteration of the University's proposed Section 8.4.1. Namely, different from past University proposals, this one doesn't explicitly state when a NOID would be filed if the Executive Director requests additional information. Rather, it articulates the premise that information may be requested, and that there may be disagreement between the Executive Director and the University regarding the adequacy of said information. In such case, either the Executive Director or the University may submit such disagreement to the Commission. Implicit in this potential disagreement framework is the University's articulated position that their submittal of any information requested triggers NOID filing (without review or concurrence by the Executive Director, or by the Commission if voluntarily submitted for dispute resolution).

116 Inherent to the filing question is also the Coastal Act Section 30605 requirement that the development project be "contained in" the CLRDP. See also findings that follow in this respect.

believes that it is inherent in CCR Section 13549 that it is the Executive Director who would be in the position to determine whether the materials requested adequately respond to his/her request for same. In particular, as contemplated by the regulations, it is the Executive Director who requested the information, and it is the Executive Director who would be in the best position to determine whether the information submitted is the information requested.[117] To understand the regulation differently would not be sound policy, including because it would leave such a fundamental decision (including in relation to the Commission's action deadline emanating from it) ambiguous, and because it also would imply that the regulations do not provide for a dispute resolution mechanism; thus the judicial challenge assertion of the University.

The potential effect of Section 8.4.1 as proposed is that the University may consider a NOID to be deemed filed through submission of materials (thus establishing one filing date), and the Executive Director may consider the same NOID to not yet be filed due to the Executive Director's belief that the necessary materials have not been submitted.[118] Such scenario could immediately set up a high stakes game where the clock is ticking on the Commission's review window, as argued by the University, versus the Executive Director's insistence that additional materials are necessary. Such a process is inherently unpredictable, contentious, and lacking clear resolution parameters. In sum, such a procedural outcome is unwieldy at best, an inappropriate use of Commission time and resources, inherently unpredictable and unclear in its application over time, and not adequately protective of coastal resources pursuant to Chapter 3 overall, including to the extent such procedural lack of clarity ultimately leads to avoidable resource impacts.

To address these concerns, the Commission suggests the following modification, developed through discussions between Commission staff and the University, and agreeable to the University, to revise proposed CLRDP Section 8.4.1 as follows:

8.4.1 Filing the Notice of Impending Development

Within ten days of receipt of the Notice of Impending Development and all applicable supporting information (as described in Section 8.2, above) for a proposed development project, the Executive Director of the Coastal Commission shall review the submittal and shall determine whether additional information is necessary to determine if the proposed development project is consistent with the CLRDP, and if additional information is deemed necessary, shall request such information

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[117] Note that CCR Section 13003 supports such a construct when it states as follows: "Use and Effect. Each of these regulations shall be interpreted and liberally construed to accomplish the purposes and carry out the objectives of the California Coastal Act of 1976." It is clear that this interpretation more clearly reflects the Coastal Act understood as a whole in this sense, as opposed to a narrow reading and/or a myopic interpretation of CCR Section 13549 read by itself.

[118] It has commonly been the Commission's experience that there are often filing disputes over the content of subsequent material submittals when these are requested for filing purposes. Sometimes this is with respect to certain items that aren't submitted at all when they are requested, other times it is with respect to items that are submitted but that are inadequate (e.g., a request for a comprehensive biological assessment that is responded to with a one line statement that there are no biological resources present), and other times it is with respect to items that are submitted that raise related questions (e.g., in the biological assessment request example, where the submitted assessment indicated that a wetland was present on the site, but the assessment did not show where the wetland was located and didn't provide the data – including the definitions, methodology, and assumptions – supporting the determination that the area was a wetland).

from the Director of Campus Planning. The Notice of Impending Development shall be deemed filed as follows:

1. *If the Executive Director does not respond to the Notice of Impending Development or any subsequent information submittal within ten days following its receipt, the Notice shall be deemed filed on the tenth day following the Executive Director's receipt of the Notice or the subsequent information submittal ~~its receipt by the Executive Director~~, or*

2. *The Notice shall be deemed filed when all necessary information requested has been received by the Executive Director. ~~Any request by the Executive Director for additional information must be for specific information needed to determine consistency with the CLRDP and must be transmitted within ten days of receipt of the NOID. In the event there is disagreement concerning the adequacy of submitted information to enable the Commission to determine consistency with the CLRDP, either the Executive Director or the Planning Director may submit the disagreement to the Commission for resolution.~~*

In the event of disagreement concerning the need for additional information or the adequacy of the subsequent information submitted to enable the Commission to determine consistency with the certified CLRDP, the Executive Director or Director of Campus Planning may submit the disagreement to the Commission for resolution. The Executive Director shall schedule the matter for hearing and resolution at the next Commission meeting or as soon thereafter as practicable, but in no event later than sixty (60) calendar days after the Executive Director's receipt of written notice by the Director of Campus Planning that the University disagrees that the Executive Director's request for information is necessary to determine if the proposed development is consistent with the certified CLRDP.

The matter shall be scheduled and heard by the Commission in accordance, to the extent practicable, with the procedures set forth in 14 California Code of Regulations Section 13056(d).

See suggested modification 12.

The so modified Section 8.4.1 conforms the filing determination to the applicable CCR language, the effect of which is to ensure that the Executive Director appropriately weighs in on the adequacy of material submitted (as described above) while also providing the University with a clear, effective and definitive dispute resolution mechanism. As modified, replacement Section 8.4.1 provides a clear process for filing review as opposed to what has been proposed, and represents an appropriate balancing of competing points of view and interpretations, resulting in a process appropriate for development review consistent with the Coastal Act.

2. General Buildout Certainty Observations

Finally, to the extent that the University is seeking certainty that the potential buildout contemplated by the CLRDP will be achievable, some general observations are warranted to correctly frame certain CLRDP procedural issues. As referenced above, 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, lighting, drainage, 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, changing circumstances on the ground, etc.

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 conditionally approve development projects authorized by the University pursuant to the CLRDP. Denial of project is not an option. This highlights the importance of being clear that 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 CLRDP, but not include whether the development should be approved at all. In this case, the CLRDP provides a specific enumeration of the types, locations, and maximum intensities of development potentially allowed by the plan, and provides an explicit definition for what "contained in" means in that context. As stated in Chapter 8:

> *"Contained in" means that a proposed development is of a kind contemplated by the CLRDP and is within the parameters of the CLRDP, including but not limited to the size, location, type, and intensity of the proposed development.*

Thus, it is clear, for example, that general commercial development, or typical residential development is simply not allowed by (i.e., not contained in) 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 that only those development projects contained in the CLRDP may be reviewed by the Commission.

D. CLRDP Procedures Conclusion

The CLRDP generally provides for a well articulated set of procedures for development review on the Campus. These procedures have resulted from painstaking collaboration between Commission and University staffs over time that has significantly narrowed potential issues. As modified to clearly describe the NOID filing process, the procedures should be adequate to carry out the CLRDP over the long term, and by extension to protect coastal resources consistent with the Coastal Act.

F. California Environmental Quality Act (CEQA)

Pursuant to Section 21080.5 of the CEQA, the Secretary of Resources has certified the Coastal Commission's review process for LCPs and LRDPs (and amendments thereto) as being the functional equivalent of the environmental review required by CEQA. Furthermore, pursuant to Section 21080.9 of

the CEQA, 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, in Section 21080.5(d)(2)(A), that a proposed project not be approved if there is a feasible alternative that would substantially lessen a significant effect that the project may have on the environment.

CEQA Documents

The University, as the lead agency under CEQA, issued a Notice of Preparation (NOP) for a draft EIR (DEIR) for the CLRDP in November 2001.[119] On December 4, 2001, Commission staff responded to the NOP and provided detailed comments on it to the University, including identifying a series of issues emanating from the previously discussed Coastal Commission issue identification hearing (held in December 2000), in order to focus subsequent EIR and CLRDP preparation. In January 2004, the University subsequently distributed a DEIR analyzing both the overall effect of implementation of the draft CLRDP over time, as well as five specific projects then contemplated by the University as potential projects that potentially would be pursued in the early phases of CLRDP development (i.e., the five projects then evaluated included the three projects so identified in proposed CLRDP Chapter 7, as well as two projects that have since been abandoned by the University).[120] In April 2004, Commission staff provided the University with comments on both the DEIR and the draft CLRDP.[121] These comments were very detailed, building upon the 2001 NOP comments and 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 certified a final EIR (FEIR) for the project. In November 2006, the University certified an addendum to the FEIR to respond to changes in the CLRDP in the time since the original FEIR certification, including changes stemming from Commission review and ongoing discussions with Commission staff.[122] These CLRDP changes were designed to reduce potential environmental impacts from development pursuant to the CLRDP over time, with perhaps the most significant change being the elimination of 80 potential residential units from the plan.

Alternatives

The University's FEIR, as amended, evaluates a series of alternatives to the CLRDP as then proposed. Alternatives evaluated in detail included five main alternatives overall, as well as a series of alternatives

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[119] The NOP and DEIR and subsequent related CEQA documents are all referenced by State Clearinghouse (SCH) number 2001112014.

[120] The now abandoned projects are the previously proposed 42 apartment units, and the previously proposed Monterey Bay Aquarium Sea Otter Research and Conservation Center.

[121] Letter of April 19, 2004 identifying 99 major points in 16 major categories.

[122] FEIR Addendum Number 1, dated certified November 29, 2006.

specific to each near-term project then included (17 additional sub-alternatives overall).[123] The alternatives and the permutations evaluated can be generally distilled into the five main categories evaluated in detail: a reduced impact alternative that would reduce the amount of development allowed by the plan; an alternative impact alternative that would shift impacts from one location and/or resource area to another (e.g., by shifting development intensity from one location within the site to another location, etc.); an increased impact alternative that would increase the amount of development allowed by the plan; a no project alternative (evaluated by the University as an alternative that would result in no future development outside of existing developed areas); and a variation on the no project alternative that would represent the current status quo where projects would continue to be evaluated by the Commission on a project by project basis. Ultimately, the University found the no project alternative to be the environmentally superior alternative under CEQA, and the next most environmentally sound to be the reduced impact alternative. However, the University also found that neither of these alternatives would meet their objectives for creating an integrated world class marine research campus because reducing the amount of additional facilities planned for the site (or eliminating any possibility of additional future facilities, per the no project alternative) would correspondingly reduce overall program effectiveness (including that there would be fewer disciplines/institutions represented, fewer scientists on site, fewer opportunities for collaboration among scientists and institutions, reduced potential to attract funding, reduction in public educational opportunities, etc.), more so for the true 'no future project at all' alternative.

Ultimately, the University chose to pursue their CLRDP and the development program therein as opposed to the no project or reduced project alternatives (or some other alternative). In the time since that FEIR decision, and as discussed in the previous findings, the University has reduced the scope of development that would be allowed under the CLRDP both in terms of overall square footage and developable areas overall, and has significantly improved the CLRDP in terms of its ability to protect coastal resources as compared to the CLRDP then considered by the FEIR. Commission suggested modifications adding wetland and wetland buffer areas (and correspondingly reducing developable areas) have further reduced the amount of allowable development area. Although not strictly the same as the reduced project alternative evaluated under the FEIR, the currently proposed and as modified CLRDP should be considered a reduced project alternative permutation in that sense.

There are a variety of ways that one could potentially consider CLRDP alternatives and alternative permutations, but the question of which alternative is the most appropriate for the site really boils down to a fundamental premise: if the Campus is to become a higher level integrated marine research facility where researchers, faculty, students, and the public can interact and participate in a comprehensive marine and coastal science research program (and as a result make a more significant contribution to on-going efforts to understand, learn, and educate society about the marine and coastal environment), then a certain amount of facilities are necessary to foster such an overall program. In this sense, the CLRDP's

[123] In addition to the alternatives evaluated in detail, the University also evaluated a series of alternatives that weren't carried forward through the FEIR for detailed analysis because they either didn't meet the University's objectives or were found by the University to increase (or not reduce) impacts (e.g., including such options as developing the Marine Science Campus at a different location altogether).

objectives require a certain minimum scale of development program and expanded facilities for the Campus as a whole to be successful. Obviously, such development and facilities cannot be allowed to significantly and adversely impact coastal resources contrary to the Coastal Act, and thus optimum facility needs (from the University's perspective) must be understood in the context of coastal resource protection needs. The Commission finds that, as modified, the University draws reasonable conclusions in the CLRDP this respect.

Relation to 2300 Delaware Avenue Site

On this note, the Commission has received public comments regarding the ability of the University's other satellite property nearby at 2300 Delaware Avenue (just east of Antonelli Pond and Moore Creek, about 1,000 feet east of the Campus – the former Texas Instruments property acquired by the University in 2004) to satisfy some of the development program and related development intensity associated with the Marine Science Campus concept. This nearby property is currently built out with three large buildings (totaling approximately 240,000 gross square feet), two parking lots, and related facilities. The University acquired the property with the intent to use it to consolidate Campus administrative and other functions that are currently distributed among scattered leased spaces off-campus in Santa Cruz, and to alleviate crowding in facilities on the main UCSC Campus. The University is currently considering a project to remodel the interior of the buildings to accommodate such consolidation (reconfigured office, laboratory, computer, and related space).[124]

It is clear that some of the CLRDP's facility needs could be accommodated at the 2300 Delaware Avenue property, particularly administrative and office functions. It is also clear that redevelopment of the property could possibly also accommodate more specialized CLRDP needs, such as warehousing and laydown yard needs associated with marine research instrumentation and equipment (e.g., ocean going vessels, etc.). Likewise, it is even possible, in a physical and engineering sense, to extend the seawater utility to 2300 Delaware in order to accommodate some seawater-related research and other functions.[125] However, even though the 2300 Delaware site is relatively close to the Campus site, it is separated by that distance, intervening development, and City streets such that it could not function as an integrated part of the Campus, but rather would be at best a satellite to it. To varying degrees depending on which Campus functions were accommodated there, this satellite set up would reduce the effectiveness of the Campus to serve its objective of bringing Campus users together as part of one integrated whole that fosters collaboration and the exchange of ideas, and would reduce the effectiveness of the Marine Science Campus concept overall. In addition, it is clear that the University has other plans for the 2300 Delaware site, and moving Marine Science Campus facilities there would displace other uses for the site as well as confine other options for it. The Commission finds that

[124] As part of the overall UCSC Campus 2005-2020 LRDP update currently ongoing; SCH number 2005012113.

[125] Such lines and any necessary pump facilities could be engineered and installed, but the feasibility otherwise is somewhat challenging. In particular, in addition to the significant cost for installation and maintenance, particularly given the distance such lines would have to be extended (i.e., at least twice as far again as they would be extended on Campus at buildout under the CLRDP), the University would also have to acquire City of Santa Cruz permission and approval to install this private utility infrastructure in the City right-of-way between the Campus site and the 2300 Delaware site along Delaware Avenue. It is not clear whether the University could even obtain such permission and approval.

although it would be feasible to use all or some of the 2300 Delaware site for Marine Science Campus facilities, to do so would reduce the potential effectiveness of the Marine Science Campus program overall, and does not make sense from a programmatic perspective. In addition, it is clear, as articulated earlier, that the Campus site offers the opportunity to stabilize the urban-rural boundary through its use as an intentionally isolated facility on the outskirts of town that completes a viable marine research "neighborhood." Extending the Campus to 2300 Delaware would dilute this effect, and would lead to a more disjointed and sprawling Campus overall.

In terms of the University's plans for the 2300 Delaware site specifically, the Commission has also received comments observing that the University may be piecemealing environmental review under CEQA because it is considering the 2300 Delaware site separate from the Campus site. The University has responded on this issue, concluding that there is no basis for the 2300 Delaware project to be considered part of the CLRDP project, that there is no connection between the two projects other than their common linkage to the University and their location in the same general area of the City, and the CLRDP (and its EIR) have met CEQA requirements for avoiding segmentation of projects and piecemealing of environmental impact analysis.[126] The Commission concurs. On this point, the Commission also notes that only portions of UCSC's academic campus lands are in the coastal zone: the Terrace Point and 2300 Delaware sites entirely, and small portions within the main Campus boundary that are located west of Empire Grade. The main Campus LRDP covers the 2300 Delaware site and the area of the main Campus located west of Empire Grade, while this CLRDP covers the Terrace Point site. The University has indicated that it does not intend to submit the coastal zone portion of the main Campus LRDP (or even smaller pieces of the coastal zone portion) to the Commission for certification, but rather will pursue individual coastal development permits for any development proposed west of Empire Grade or at 2300 Delaware Avenue.[127] To date, the Commission has not received any University applications for development at the 2300 Delaware site nor for the area west of Empire Grade.[128]

Although it would probably be preferable in a larger planning context to plan for both the Terrace Point and 2300 Delaware sites at the same time to the extent there was some beneficial overlap, it is not absolutely necessary from a Coastal Act perspective. As discussed, although there is the potential for some cross-pollination between the two sites, simultaneous review is not required for Chapter 3 purposes. It may turn out that the 2300 Delaware site would be appropriate for some marine research-related adjunct functions or even facilities, and it may be that these functions or facilities may be connected to the Marine Science Campus in some way, but that remains to be seen, and it would be the subject of future Coastal Commission review in any case. Each of the two sites will have their own individual and cumulative (including in relation to one another) CEQA impacts that must be addressed, but to do so at different times is reasonable given the different acquisition and planning timelines for

[126] Letter from Mary Hudson to Charles Lester dated July 23, 2007 (see Exhibit E).

[127] Absent a Commission-certified LRDP for these areas, all such development would be subject to Coastal Commission review, where the Coastal Act would be the standard of review.

[128] In terms of the property west of Empire Grade, it is located about two miles north of the Terrace Point site and is not slated for development by the University, but rather has been generally designated for resource-protection by the main Campus LRDP in light of its resource sensitivity. As such, the connection between potential development at Terrace Point and potential development (or lack thereof) at this location is minimal.

each (with 2300 Delaware acquired in 2004, and the CLRDP in process for the better part of the last decade), and there isn't a compelling Coastal Act coastal resource reason to do so. The important thing to note at this juncture is that the outcome for 2300 Delaware need not be established at this point to be able to approve the CLRDP as modified.

Water Supply, Traffic, and Housing Impacts Comments

The Commission has also received public comments asserting that the CLRDP CEQA documents are deficient in terms of water supply, traffic impacts, and housing impacts (see Exhibit G). The same public commenters have raised questions regarding using "fair share" mitigation to address infrastructure concerns, most notably with respect to traffic. The University has responded to these comments (see Exhibit E).

In sum, these comments are grounded in the premise that: (1) there is currently a general lack of supply (water and housing) and/or capacity (traffic) and/or a concern that there soon will be in the City of Santa Cruz and surrounding areas; (2) such lack of supply is leading to or will lead to resource and other problems, both in terms of the existing baseline and in relation to potential growth (e.g., the potential for water restrictions, the need to pursue water augmentation projects (with attendant impacts), the lack of affordable housing, the increase in commutes (and traffic), worsening LOS, etc.); (3) CLRDP development will exacerbate such problems (through increased water demand, increased housing demand, and increased traffic); and (4) the CLRDP doesn't adequately recognize, plan, and respond to such potential impacts, including because "fair share" in respect to water and traffic is a nebulous concept that cannot adequately be enforced.

First, it is important to note that the University is not required by CEQA to prepare CEQA documents for CLRDPs submitted to the Coastal Commission. As a result, the question regarding the adequacy or inadequacy of the CLRDP EIR is really moot. More important to the Commission are the substantive issues inherent in the questions regarding adequacy versus inadequacy as they relate to the information and analysis in the CLRDP EIR with respect to the issues identified.

With respect to water supply, it is clear that development under the CLRDP will require more water than is currently delivered to the site (see previous Land Use/Public Services findings, incorporated herein by reference, for detail). The Commission notes that the water provider in this case is the City of Santa Cruz. Commission staff have coordinated with City staff on this question for the past decade, and have been consistently informed that there is adequate water for development of an expanded Marine Science Campus, and water supply with respect to the CLRDP is not an issue from the City's perspective. This is borne out by the CLRDP EIR, and other City documents (see also UCSC's November 14, 2007 letter; Exhibit E). That said, adequate water supply to support existing development and potential future growth in the City of Santa Cruz and the surrounding areas is a growing concern. In fact, the City is contemplating pursuing a seawater desalination plant to supplement existing supplies, and the Commission recently permitted a temporary desalination test facility at Terrace Point to evaluate the feasibility of this concept. While it is not clear at this time to what degree desalination or other water supply projects (including water conservation projects as water supply projects) may be required and/or may come to fruition in the future, it is clear to the Commission that water supply issues will be a

continuing theme for this area. However, it is an oversimplification to say that CLRDP growth, as distinct from other growth within the City of Santa Cruz water supply area (which extends outside of coastal zone and outside the City of Santa Cruz) is the only or even the primary driver of the need for future water supply projects. The CLRDP method identified, where the University is required by the CLRDP to contribute their fair share to water infrastructure upgrades (including augmentation) as estimated by actual project impacts at that time individual development projects are proposed is an appropriate mechanism to address such water supply issues in terms of the CLRDP before the Commission, particularly in light of the City of Santa Cruz's stated position (see above).

Similarly, in terms of traffic impacts, the same type of fair share contribution methodology is employed by the CLRDP to address traffic impacts attributable to Campus development that may come to fruition under the CLRDP. Again, the Commission believes this to be a reasonable method for addressing any impacts that are attributable to development per the CLRDP.

With respect to the concept of fair share itself (again, see CLRDP Policies 5.9 and 8.4 for the CLRDP "fair share" methodology related to potential traffic, water, and wastewater impacts associated with development under the CLRDP), and contrary to certain assertions, the Commission finds this method to be appropriate, binding, and enforceable. If a development project is pursued under the CLRDP, and that project has certain traffic and water infrastructure impacts, then the University is required by the CLRDP to offset such impacts, including through consultation with the City in terms of appropriate fair share fees and/or actual upgrade projects. Although the City and the University will be the primary entities defining an appropriate fair share in the development review process, any resultant arrangement will be reviewed by the Commission as part of the previously described NOID process, and the Commission will decide what the appropriate fair share offset is required to be in any case. Whether UCSC and the City come to an agreement or not on fair share and commensurate impact offsets on infrastructure in any particular case or overall (e.g., through an MOU or equivalent),[129] it will be the Commission who will decide, the Commission's decision is binding on the University, and that decision can be enforced under the Coastal Act and the CLRDP.

As to housing, this issue is a little more esoteric than water and traffic. Development under the CLRDP will result in additional Campus population, and by extension additional population within the City of Santa Cruz or Santa Cruz County or other nearby communities (i.e., not counting people already residing there who would be part of the new Campus population). UCSC conservatively (i.e., assuming all such persons would be new to the area) estimated this new population as 728 persons at full buildout over time under the CLRDP. Any such additional residents will require additional housing, and some of this new housing stock may or may not end up in the coastal zone. To the extent it does, it would have to be consistent with existing LCP and Coastal Act policies, and thus its impacts would be appropriately

[129] Santa Cruz County Superior Court has ordered UCSC to develop criteria for determining "fair share", and UCSC has developed a mechanism for this purpose as it relates to traffic (see UCSC November 14, 2007 letter). It is not clear at this time whether the "fair share arrangement will be UCSC's current proposal or some other mechanism, but it is immaterial to the Commission's charge. In other words, although the Commission believes it to be in the City and University's best interest to come to a mutual agreement on the concept of fair share impact assessment, and to apply that agreement to future cases (such as would be the case under the CLRDP), it is also immaterial in terms of the Commission's role as a final arbiter in the NOID process.

addressed through a coastal development review process. Given that, and further given that such growth would be incremental as projects come online over time, and the amount of growth to accommodate such a Campus population is well within expected growth rates for the area,[130] the Commission does not find this to be a compelling Coastal Act issue.

Although it is clear that there are affordable housing issues in the Santa Cruz area, as there are in many coastal communities statewide, in-fill residential development in the coastal zone consistent with certified LCPs and the Coastal Act (as would have to be the case) and outside of the coastal zone otherwise over this time frame does not raise a significant Coastal Act issue. Although it is clear that the further Campus users have to travel from housing to the Campus, the more the potential for transportation related impacts (including vehicular emissions, etc.), it is speculative at this point to know where such users will live, including in relation to new housing stock.[131] In addition, although providing live-work housing on the Marine Science Campus could limit some of those potential impacts, it is not appropriate for this site under the Coastal Act given existing resource constraints. The Commission believes that development on this site must be high Coastal Act priority development, and not residential development. In fact, the University removed 80 potential apartment units from the current version of the CLRDP based on previous Commission feedback in this respect, including feedback that such development wasn't appropriate at this location given its lack of relative priority under the Coastal Act, and particularly in relation to the pattern of and type of development to date at Terrace Point.

In sum, the Commission concurs with UCSC that the CLRDP will have an insignificant effect on housing (see also UCSC's November 14, 2007 letter; Exhibit E). It is clear to the Commission that many of the comments received that are focused on CEQA-specific questions appear to be raising questions related to the impacts of development that may or may not occur not on the Marine Science Campus, but rather on the main UCSC Campus outside of the coastal zone. That non-coastal LRDP for the main Campus proposes significantly more growth and development on the main Campus than is contemplated for the Marine Science Campus. It has proven very controversial in the area, including conflicts between the City and the University, and including between the Coalition for Limiting University Expansion (CLUE) and the University (see, for example, CLUE's November 9, 2007 letter; Exhibit G). Many of the primary issues are similar in nature to those raised in recent comments on the CLRDP related to infrastructure (i.e., water, wastewater, traffic, etc.) and impacts, and are focused on ensuring that the University clearly acknowledges and takes responsibility for such impacts.

CEQA Mitigation Measures

The FEIR includes a series of mitigation measures meant to offset potential adverse impacts associated with CLRDP implementation. As such, where the University commits in the CLRDP to CEQA compliance and incorporation of CEQA mitigation measures into proposed development projects

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130 Santa Cruz County as a whole is projected to increase by over 30,000 residents over the same 20-year planning horizon (see UCSC November 14, 2007 letter).

131 The question of who is drawn to this work and this school and who is not and where they live is really much more of a socio-economic and lifestyle question. It would be an oversimplification and inaccurate to presume that all Campus users will live in new housing stock that is developed very far away.

(including CLRDP Section 8.1, see Exhibit L), the Commission expects that such compliance means compliance with the base FEIR as well,[132] including all identified mitigation measures that are applicable either based on individual project impacts, cumulative impacts, or other base FEIR reasons, but only to the extent such compliance with the base FEIR is not inconsistent with some aspect of the CLRDP. In other words, in the event that a requirement in the base FEIR is inconsistent with the CLRDP, then the CLRDP provisions shall prevail.[133] The Commission's certification of the CLRDP with respect to CEQA is based on this understanding.

CEQA Conclusion

This report has discussed the relevant coastal resource issues with the proposal, and has identified appropriate suggested modifications to avoid and/or lessen any potential for adverse impacts to said resources. All relevant public comments received to date have been addressed in the findings in this report above. All above Coastal Act consistency 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 that have not been lessened to a level of insignificance by mitigation measures identified herein consistent with CEQA Section 21080.5(d)(2)(A).

[132] Id; SCH number 2001112014.

[133] Note that a base FEIR 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 FEIR requirement itself is inconsistent with the CLRDP.