

Appendix A

Huntington Beach LCPA 1-06 Parkside

Findings for Denial of the Land Use Plan Amendment as Submitted

The Commission denied the Land Use Plan portion of LCP Amendment 1-06 as submitted at the May 10, 2007 hearing and continued action on question of approval LUPA if modified and on the Implementation Plan Portion of the LCPA. This appendix includes the findings for denial as they appeared at the May 10, 2007 Coastal Commission hearing.

E. Denial of the Land Use Plan Amendment as Submitted

1. Wetland

Wetlands often provide critical habitat, nesting sites, and foraging areas for many species, some of which are threatened or endangered. In addition, wetlands can serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands can serve as natural flood retention areas.

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

Section 30121 of the Coastal Act states:

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

The Commission has further specified how wetlands are to be identified through regulations and guidance documents. Section 13577(b)(1) of the Commission's regulations states, in pertinent part:

Wetlands shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes ... For purposes of this section, the upland limit of a wetland shall be defined as:

- (A) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover;*
- (B) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or*
- (C) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not*

Section 30231 of the Coastal Act states, in pertinent part:

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The biological productivity and the quality of ... wetlands ... 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, ... preventing depletion of ground water supplies and substantial interference with surface water flow, maintaining natural vegetation buffer areas that protect riparian habitats, ...

Section 30233(a) of the Coastal Act states:

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 30250 of the Coastal Act states, in pertinent part:

(a) New residential ... development ... shall be located ... where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

In addition, the City's LUP includes Policy C 6.1.20, which limits filling of wetlands to the specific activities outlined in Section 30233 of the Coastal Act. And LUP policy C 7.1.4 states, in pertinent part: *"Require that new development contiguous to wetlands or environmentally sensitive habitat areas include buffer*

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zones.”

The proposed amendment includes an Open Space Conservation designation on a 3.3 acre area within the former County parcel. The 3.3 acre area includes an undisputed wetland area (see exhibit H). The proposed Conservation designation is appropriate for this area. However, additional wetland areas exist at the subject site that would not be protected with the Conservation designation.

The Coastal Commission staff ecologist has reviewed considerable amounts of information regarding the extent of wetlands at the site, all of which are listed in his memorandum which is attached as Exhibit K to these findings and is hereby incorporated into these findings in its entirety. The property owner has submitted numerous documents intended to demonstrate that there are no wetlands on site, beyond the wetlands recognized on the former County parcel (i.e. the CP wetlands). Local citizens have submitted documents intended to demonstrate that there are significant wetlands on site. These citizens are concerned by the prospect that development may be allowed at the site if the LUP amendment were approved as submitted (and as reflected in the related coastal development permit application 5-06-327, Shea Homes, and appeal A-5-HNB-02-376). All these submissions have been reviewed by the staff ecologist. In addition, the staff ecologist has reviewed historical information regarding the subject site and surrounding area. Based on his review of the available data, the Commission's staff ecologist determined that additional wetland areas exist at the subject site (see exhibit K). For the reasons listed in that memorandum and below, the Commission concurs and adopts its ecologist's conclusions. The additional wetland areas at the site are referred to as the Wintersburg Pond or WP, which is adjacent to the EGGWFCC levee along the southern edge of the site; and the Agricultural Pond or AP, located near the base of the bluff along the western edge of the property. Additional wetland area, impacted by unpermitted fill, also exists in the area formerly known as the County Parcel, adjacent to the wetland already recognized there (see 'Filled CP wetland' on Exhibit NN). The proposed LUP amendment would designate these wetland areas Low Density Residential and Open Space Parks. These land use designations allow grading, and the construction of houses, roads, and active parks, which would necessitate the dredging and filling of the wetlands. Such uses within wetlands are inconsistent with Section 30233 of the Coastal Act.

The memorandum dated July 27, 2006 from the Commission's staff ecologist states: "The available data suggest that portions of the agricultural field ... are inundated or saturated at a frequency and duration sufficient to support a preponderance of wetland plant species." Such areas meet the definition of wetlands under the Coastal Act and the Commission's Regulations."

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There are three factors or “parameters” that are used to determine whether or not a wetland exists: the presence of hydrophytic vegetation, the presence of hydric soils, and the presence of wetland hydrology. The Commission finds an area to be wetland if any one of the three parameters is present. Usually, the presence or absence of hydrophytes or hydric soils is sufficient to determine whether a wetland exists. However, those two indicators are not necessary, as they do not actually define a wetland. Rather, an area is defined as a wetland based on whether it is wet enough long enough that it would support either of those two indicators. Therefore, the removal of vegetation by permitted activities does not change a wetland to upland.

Section 30121 of the Coastal Act provides the statutory definition of wetlands: “...lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes ...” Section 13577(b)(1) of the California Code of Regulations provides the regulatory definition of wetlands: “... land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes” Thus, the Coastal Act and the Regulations provide that a determination of the presence of wetlands may be made based on whether an area demonstrates the presence of sufficient water to promote hydric soils or to support hydrophytes, whether or not the soils and vegetation are present under existing conditions.

Because this area was historically a salt marsh and because the site has been historically farmed and continues to be farmed as of the adoption of these findings, the typically used field indicators cannot be relied upon. The repeated discing and plowing associated with the existing agricultural use destroys hydric soil features and prevents the development of natural vegetation. Nevertheless, the evidence presented in the ecologist’s memo and summarized below indicates that the site is wet enough long enough to “support the growth” of hydrophytes. Thus, the site meets the definition of wetlands contained in the Commission’s regulations. Furthermore, the site also meets the Coastal Act definition of wetlands in that it is “periodically covered in shallow water.”

The wetland conclusion is based on two lines of evidence: (1) an examination of the vegetation at a nearby location that is similar in history, physical characteristics, and hydrology to the depressions in the agricultural field,¹ and (2)

¹ In the second to last footnote in Dr. Dixon’s memo, he notes that the topography of the reference site is actually similar to that of WP as it existed in 2003, not at present. More recently a box plough was used to fill area WP, which is apparent in 2006 topographic maps. The box plough fill is under investigation by Commission staff as an alleged violation. Accordingly, relying on the topography prior to the alleged violation yields the appropriate comparison. Additionally, the hydrology section of Dr. Dixon’s memo states that LSA biologists stated that WP didn’t pond until after about 1973. However, if this is due to

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an informed estimate of the frequency of continuous inundation for long duration (at least 7 days) at various sites.

Areas WP and AP were matched by the Commission's staff ecologist, with wetland areas on the County parcel that were similar in elevation and topography. Inundation in the agricultural areas and at the reference wetlands was similar in pattern, further suggesting that the latter is a good proxy for the former. Therefore, since the dominant vegetation at the reference areas is mostly comprised of wetland species, it is reasonable to expect that the agricultural areas WP and AP would also support a predominance of hydrophytes in the absence of farming (i.e. that they are wet enough to support such vegetation).

Establishing the extent of wetlands at the site, given its history of farming and disturbance, is not straightforward. The best approach for this site known to the Commission at this time is to base the wetland boundary on current conditions as inferred from recent topography and the available photographs of recent inundation.

Prior to about 1990, it appears from aerial photographs that significant inundation was generally confined to the area delineated as wetland by the EPA in 1989 (generally in the area of the AP). Based on analysis of aerial photographs dating from 1958 to 1985, the applicant's biological consultant concluded that inundation in that area tended to have a different footprint in different years and, based on this observation, he argues that no particular area should be identified as a wetland. However, all his estimated wetland polygons in the western portion of the agricultural field appear to fall within the area delineated by the EPA. In the absence of wetland vegetation, the drawing of wetland boundaries is an approximate exercise based on a small and haphazard collection of aerial photographs or ground observations and estimates of topography. Given the approximate nature of such delineations, it appears the consultant's results are actually additional evidence that the EPA delineation was both reasonable and accurate at the time it was made. Although, prior to about 1990, wetlands hadn't been delineated in the depression adjacent to the EGGWFCC (WP area) and inundation occurred there less frequently than in the area of the AP, in recent years, ample evidence exists to show that WP is inundated for long duration following significant rainfall.

Moreover, the entire area was originally deferred certification due to the historic

changes in topography that occurred before 1973, it is again appropriate to focus on the post-1973 topography, as that represents current conditions. Conditions prior to 1973 may be irrelevant if topographical conditions changed prior to 1973, as such changes were pre-Coastal Act and therefore not Coastal Act violations.

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presence of wetland on site. In deferring certification originally, the Commission found:

*North Properties of the Bolsa Chica (Between Wintersburg Channel & base of Bluffs)
(MWD Site #1 [virtually identical to the subject site of current LCP amendment²])*

The LUP designates this site for low density residential uses. No modifications were made in the LUP from the previous denial by the Commission.

The Commission found in its “Preliminary Wetlands Determination for the Bolsa Chica Local Coastal Plan, March 11, 1980, that all available information demonstrated that the vast majority of the Bolsa Chica low lands exhibit all the characteristics set forth for the identification of wetlands pursuant to Section 30121 of the Coastal Act and concluded that the information supported a preliminary determination that areas identified on Exhibit J of the “Preliminary Determination” are wetland for the purposes of the Coastal Act. The Commission had also previously found in its denial of the City’s LUP that this area contained wetland resources.

Since that action and the previous review of the City’s LUP, the Commission and staff have examined additional information concerning the Bolsa Chica wetlands system. As part of the review of the Bolsa Chica LUP the Dept. of Fish and Game in the document “Determination of the Status of Bolsa Chica wetlands (as amended April 16, 1982) identified this area as “severely degraded Historic wetland – Not Presently Functioning as Wetland” and considered it within the context of the entire Bolsa Chica wetland system. The DFG determined that this area is part of a 1,000 acre degraded wetland system in the area outside State ownership which is capable of being restored. The DFG report noted:

“The 440 acres of historic wetland which no longer function viably as wetland consists of approximately 250 acres of roads, and pads, 70 acres of agricultural land [including the subject site], and about 120 acres of viably functioning upland habitat. The roads and fill areas presently function as resting substrate for wetland-associated

² As indicated in footnote 1, the boundaries of the MWD site at the time of the 1982 staff report were not entirely clear. However, the site clearly covered what is now the 40-acre ADC and may have covered the former County parcel and some of the 5-acre certified area as well. Moreover, it did not extend south of the flood control channel, so the observations recounted here are definitely applicable to the site that is the subject of the current application.

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wildlife, and form narrow ecotones which add to and enhance the diversity of habitat available to wildlife. The 120 acres of upland habitat, considered in union, may be considered environmentally sensitive because of their special role in the Bolsa Chica wetland ecosystem. Were it not for the involvement of dikes, roads and relatively shallow fills, these 440 acres would be viably functioning wetlands.

The entire 1,324 acre study area, including 1,292 acres of historic wetland (in which 852 acres still function viably as wetlands [sic] constitutes a fundamentally inseparable wetland system of exceptional value to wildlife.”

The DFG also discussed potential restoration of these areas and noted that the amount of acreage and location of wetlands to be restored will be dependant on the amount of fill and existing wetlands which could be consolidated to allow some development in the lowlands.

Thus, when the Commission originally deferred certification of the subject site, it did so based on the presence of wetlands. The Commission found that the site contained wetlands, even though the wetland functions were impaired, as is the case today. In addition, the Commission recognized that the site was an integral part of the overall Bolsa Chica wetland system and could feasibly be restored. If the site were to be restored it would be a valuable addition to the Bolsa Chica wetlands restoration project. Sources to feed a restored wetland at the site would come from rainfall and possibly from the adjacent EGGWFCC, as well as urban runoff. In any case, restoration of the site as a freshwater wetland would be consistent with the historic wetland system which would typically have included a freshwater component, albeit significantly inland of the subject site. The addition of freshwater habitat to the Bolsa Chica wetlands restoration would greatly increase the biodiversity of the overall restoration project. In addition, taken with the preservation of the eucalyptus grove, described below, the area would provide significant habitat benefits. However, there is no proposal for restoration at this time. Nevertheless, the Coastal Act requires protection of any areas that continue to qualify as wetlands.

Section 30233 of the Coastal Act requires that only the uses specified therein may be allowed within wetlands and even then only if the use is the least environmentally damaging alternative, and only when adequate mitigation is provided. The subject site was deferred certification due to the presence of wetlands on site. Substantial evidence exists that demonstrates the presence of wetlands at the subject site extends beyond the 3.3 acre area proposed to be designated Open Space Conservation in the proposed LUP amendment to the

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areas referred to as AP and WP herein. As proposed, those two areas would be land use designated Low Density Residential and Open Space Parks.

A third additional wetland area is located within the area formerly known as the County Parcel, adjacent to the recognized wetland area (see 'Filled CP Wetland' on Exhibit NN). This wetland area was filled without authorization from the Commission. In a letter dated 9/7/82 from the Department of Fish and Game (DFG) to Coastal Commission staff, the DFG determined the area, prior to placement of the unpermitted fill, to be wetlands, and recommended removal of the fill and revegetation (see Exhibit BBB, page 9 & 10). Pursuant to Coastal Development Permit No. 5-82-278 the unpermitted fill was to have been removed and the area revegetated.

Based on comparison of topographic (1980) and vegetation maps (Vegetation Communities, Exhibit 26 of the Bolsa Chica Land Use Plan, dated January, 1982) created before the unpermitted fill was placed, with topographic (1986 and 1996) maps created subsequent to the time the fill was placed, the elevation of the subject area was increased by at least 2 feet. Because of the unpermitted fill, the pickleweed within the filled area was no longer viable. Development approved pursuant to Coastal Development Permit 5-82-278 included removal of the unpermitted fill to an elevation of approximately three inches below the grade of the existing adjacent pickleweed stand and revegetation of the area with one or more of the following species: pickleweed, spiny rush, frankenia, sea lavender and shoregrass. However, elevations in the fill area are not consistent with pre-fill elevations. Rather, topographic maps prepared subsequent to the unpermitted fill depict the fill area at an elevation at least two feet above the adjacent CP wetland. Leading to the conclusion that removal of the fill and revegetation never occurred. Were it not for this unpermitted development, the area would have remained wetland area. Unpermitted development cannot be used as a basis to justify development in areas where, were it not for the unpermitted development, such development would not be allowed. Thus, consideration of appropriate land use designations must consider site conditions as if the unpermitted development had not occurred. Therefore, this area is considered a wetland. As proposed, the amendment would allow land uses such as residential and related uses such as roads. The proposed land use designation would allow uses that are not consistent with Section 30233 of the Coastal Act.

As proposed, the land use plan amendment would designate these three wetland areas for residential development and for use as active parks, inconsistent with Section 30233 of the Coastal Act, which allows only the seven enumerated uses in wetlands. Residential and active park are not uses allowed under Section 30233. Therefore, the Commission finds that the proposed amendment is

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inconsistent with the Coastal Act and must be denied.

In addition to protecting the wetland area itself, it is important to establish buffer areas between the wetland and development. Buffers, by separating development from wetlands, minimize the adverse effects of development on wetlands, thereby avoiding significant adverse effects to resources. Buffers also provide transitional habitat and upland area necessary for survival of various animal species. The Commission has typically found that a minimum 100-foot wetland buffer, or larger, is necessary to protect wetlands. Without the establishment of a minimum buffer size, projects could be approved with an inadequate buffer, jeopardizing the continuing viability of the wetland. Section 30250 of the Coastal Act requires that new development be located where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. Wetlands constitute a coastal resource. In addition, Section 30231 of the Coastal Act requires that all wetlands be maintained by providing natural vegetation buffer areas. The City's certified LUP includes Policy C 7.1.4, which requires buffers around wetlands. This policy would apply to the subject site, but it allows a lesser buffer area if existing development or site configuration preclude a full 100 feet. In this case, such circumstances do not apply because the site is 50 acres in size and is not constrained by the site configuration or by existing development. A buffer less than 100 feet from all on-site wetlands is not adequately protective of the wetland. The proposed amendment does not recognize all wetland areas present on site and does not provide any buffer requirements specific to the site. Thus, as proposed, the amendment could result in locating development too close to the wetland, threatening the survival of the resource, inconsistent with Section 30250 which requires that the location of development avoid significant adverse effects on coastal resources such as wetlands and Section 30231 which requires natural vegetation buffer areas.

Furthermore, Section 30250 of the Coastal Act requires that new development be located where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. Wetlands are coastal resources. In addition, Section 30231 requires that all wetlands be maintained and where feasible restored, by preventing depletion of ground water supplies and substantial interference with surface water flow. Based on information submitted with the related Coastal Development Permit application, a significant amount of earthwork would be necessary to prepare the site for residential development. It is anticipated that earthwork on the order of 400,000 cubic yards of cut and 600,000 cubic yards of fill (including 260,000 cubic yards that will be imported from off-site), with over-excavation to depths of up to 17 feet below sea level, will be necessary to eliminate potential hazards due to liquefaction, provide adequate structural support, and to raise the site above base flood elevation. It is essential that any earthwork undertaken on the site not interfere with the continuance of all

on-site wetlands. No grading is allowed within the wetland under the Coastal Act (unless the grading is for the express purpose of wetland restoration). Grading outside of the wetland and necessary buffers, could only be considered if no adverse impacts to the wetlands resulted. If grading redirected groundwater and/or surface water flow such that water from the site no longer fed the wetlands, the development activity could have a significant adverse effect on the coastal resource (wetland) and thus would be inconsistent with Sections 30231 and 30250 of the Coastal Act. However, the proposed amendment does not include any requirements that other site development, including earthwork, assure that no significant adverse effects on the wetlands will result. Thus, even if no grading were to occur within the wetlands and buffer areas, adverse impacts to the quality of on-site wetlands might result from the LUP amendment as proposed.

Further, when invasive and/or non-native species are planted within the buffer areas or within areas adjacent to the buffer, those species can displace the plants within the buffer and wetland. Introduction of non-native and invasive plants within the wetland and buffer, resulting in displacement of the wetland plants, degrades the wetland and creates significant adverse effects on the wetland, which is a coastal resource, inconsistent with the requirements of Section 30250 of the Coastal Act. In order to protect the wetlands and increase the likelihood of continuation of the wetland, only non-invasive, native plants should be allowed within the buffer.

In sum, as submitted, the LUP amendment does not adequately protect wetland resources as required by Coastal Act Sections 30231, 30233 and 30250. It therefore does not meet the requirements of, and is not in conformity with, these policies and therefore must be denied.

2. Eucalyptus ESHA

Section 30107.5 of the Coastal Act states:

“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.

Section 30240 of the Coastal Act states:

(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

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(b) Development in areas adjacent to environmentally sensitive habitat area 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.

In addition, the City's certified LUP includes the following policies:

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.

In the event that development is permitted in an ESHA pursuant to other provisions of this LCP, a "no-net-loss" policy (at a minimum) shall be utilized.

And

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.

The City's certified LUP also includes policy C 7.1.4, which requires that new development contiguous to wetlands or environmentally sensitive habitat areas include buffer zones.

The subject site contains environmentally sensitive habitat area (ESHA). The trees in the "eucalyptus grove" within and adjacent to the subject site's southwestern boundary (south grove) have been previously recognized as ESHA due to the important ecosystem functions they provide to a suite of raptor species. The trees are used for perching, roosting, or nesting by at least 12 of the 17 species of raptors that are known to occur at Bolsa Chica. Although it is known as the "eucalyptus grove", the grove also includes several palm trees and pine trees that are also used by raptors and herons. None of the trees are part of a native plant community. Nevertheless, this eucalyptus grove has been recognized as ESHA for over 25 years (USFWS, 1979; CDFG 1982, 1985) not because it is part of a native ecosystem, or because the trees in and of themselves warrant protection, but because of the important ecosystem functions it provides. Some of the raptors found to be using the grove included the white tailed kite, sharp-shinned hawk, Cooper's hawk, and osprey.

Many of these species are dependent on both the Bolsa Chica wetlands and the nearby upland areas for their food. The trees in the southwestern grove have

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also been recognized by the Coastal Commission as ESHA as defined in Section 30107.5 of the Coastal Act in previous Commission actions. The Commission first recognized the ESHA status of the southwestern grove many years ago, and the California appellate court in 1999 did not question the designation of the Eucalyptus grove as an ESHA protected by the Coastal Act when, in 1995, the County of Orange, on behalf of the predecessor applicant, Koll Real Estate Group, attempted to relocate that portion of the Eucalyptus grove within their property, through the LCP process, to the Huntington Mesa, in order to make room for full development of the upper and lower benches of the Bolsa Chica Mesa.

It should be noted that the Eucalyptus grove ESHA mapped by DFG in 1982, stops abruptly along the extension of Bolsa Chica Street. However, the grove continues east from there along the base of the bluff at the western edge of the subject property (see exhibit L). There is, however, no functional distinction between the area of the grove to the west of the Bolsa Chica Street extension and the rest of the grove. Raptors and other wildlife use and benefit from the entire grove. The abrupt truncation is not consistent with actual wildlife use and the habitat function of the entire grove. Thus, there is no justification for treating only the western end of the grove as ESHA and not the entire grove. For these reasons, in 2005 the Commission found that the trees throughout the entire Eucalyptus grove along the southern edge of the mesa constitute ESHA that must be protected (see coastal development permit 5-05-020, Hearthside Homes/Signal Landmark – Brightwater Project).

The Commission has not previously considered the status of the portion of the Eucalyptus grove at the base of the mesa in the northwest corner of the Parkside site (north grove). The north grove is separated from the south grove by a gap of about 650 feet (see exhibit L). The trees in the north grove of the site provide the same type of ecological services as do the rest of the trees bordering the mesa. The following species have been observed in the north grove: white-tailed kite, merlin, red-shouldered hawk, turkey vulture, great horned owl, barn owl, peregrine falcon, Cooper's hawk, red-tailed hawk, and osprey. Of these, red-tailed hawk, Cooper's hawk, osprey, barn owl, and turkey vulture have been recently observed perching or roosting and Cooper's hawks, a California Species of Special Concern, were observed to nest there in 2005 and 2006. In addition, paired great horned owls have been regularly observed within the northern grove over the last 20 years by local raptor biologist (P. Bloom, personal communication to J. Dixon 01-31-07). The presence of an old nest suggests that the grove has probably supported nesting birds of prey in previous years. Like the rest of the Eucalyptus grove, these trees provide opportunities to raptors for perching, roosting and nesting and for hunting and safe movement corridors. In recognition of the important ecosystem functions provided by Eucalyptus trees in

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the north grove, and in conjunction with the fact that the trees could be easily disturbed, degraded, or entirely destroyed by development, the Commission finds that they meet the definition of ESHA under the Coastal Act.

Section 30240 requires that ESHA be protected from significant disruption of habitat values and only uses dependent on those resources are allowed within ESHA. Development adjacent to ESHA must be sited and designed to prevent impacts which would significantly degrade those areas. Section 30240 further requires that development be compatible with the continuance of those habitat and recreation areas. This policy is carried over into the City's certified LUP in the policies cited above. Although the area of the Eucalyptus ESHA in the southwest corner of the site is appropriately proposed to be designated Open Space Conservation, the area of the Eucalyptus ESHA located in the northwest corner of the site is proposed to be land use designated Open Space Parks. The Eucalyptus ESHA in the northwest corner is known to have supported a nesting pair of Cooper's hawks in the spring of 2005 and 2006. In addition to the nesting kites, this area of the Eucalyptus ESHA provides similar roosting and perching opportunities for the suite of raptor species. The Open Space Parks designation allows uses such as tot lots, playing fields and bike paths. Such uses are not resource dependant and, as such, allowing these uses within the ESHA is inconsistent with Section 30240 of the Coastal Act. In addition, these active uses within the ESHA would likely cause significant disruption, also inconsistent with Section 30240. Therefore, as proposed, the amendment is inconsistent with the resource protection policies of the Coastal Act, and therefore must be denied as submitted.

Section 30240(b) of the Coastal Act requires development in areas adjacent to environmentally sensitive habitat area be sited and designed to prevent impacts which would significantly degrade those areas, and to be compatible with the continuance of those habitat areas. In order to assure the ESHA is not significantly degraded and is protected and remains viable, in addition to precluding non-resource dependent development within the ESHA, a buffer zone around the ESHA must be established. A buffer zone would require that development adjacent to the ESHA be set back an appropriate distance from the ESHA. The setback is intended to move the development far enough away from the ESHA so as to reduce any impacts that may otherwise accrue from the development upon the ESHA and that would significantly degrade the ESHA or be incompatible with its continuance. The distance between the ESHA and development, the buffer zone, must be wide enough to assure that the development would not degrade the ESHA and also would be compatible with the continuance of the ESHA.

For purposes of establishing protective buffers, the eucalyptus grove ESHA

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boundary should be considered to fall along the drip line of the outermost trees of the grove (see exhibit L). The specific area of an appropriate buffer is more difficult to quantify.

There is, to some degree, a subjective approximation element in assigning dimensions to protective habitat buffers or development setbacks. For example, it probably would not be possible to distinguish the different biological effects of a 100-foot buffer compared to a 110-foot buffer or those of a 300-foot-buffer from a 100-meter (328-foot) buffer. We tend to choose round numbers in whatever units we are using. However, the difference between a 100-foot buffer and a 100-meter buffer would provide discernable benefits to wildlife. Commenting on a proposed development that borders the eucalyptus grove ESHA on its western side (coastal development permit application number 5-05-020, Brightwater), wildlife agencies recommended a buffer width of 100 meters. However, the applicant's consultants for that project (who are also the consultants for Shea Homes) recommended a 100-foot buffer. These large differences reflect differing opinions concerning the sensitivity of raptor species to disturbance and differences in opinion concerning the acceptable risk of disturbance impacts to raptors, especially raptors that have the potential for nesting at Bolsa Chica.

In an urban environment, development setbacks are usually inadequate to protect all individuals of wildlife species of concern from significant impacts. In an urban setting a buffer is usually no more than one to several hundred meters, and usually less, whereas in a natural setting, a buffer of two kilometers has been found to be significantly more protective. For example, Findlay and Houlihan (1997) found a negative correlation between species richness in wetlands and the density of roads on land up to 2000 meters from the wetland and concluded that narrow buffer zones were unlikely to protect biodiversity.

Development must be separated from ESHAs by buffers in order to prevent impacts that would significantly degrade those areas. Again, with regard to the Brightwater development, buffer recommendations from the same ESHA included a 150-meter buffer recommendation by Dr. Findlay, of the University of Ottawa. CDFG and USFWS previously recommended the establishment of a 100-meter buffer on the Bolsa Chica Mesa in the 1980's. The Coastal Commission staff ecologist recommended a minimum 100-meter buffer around the eucalyptus ESHA. In further studying the appropriate buffer for the Eucalyptus ESHA, Dr. Dixon (staff ecologist) stated:

The buffer around the Eucalyptus tree ESHA is particularly important if those trees are to continue to function as nesting habitat for a variety of raptors. The California Department of Fish and Game and the U.S. Fish and Wildlife Service recommended a 100-m buffer. A literature review

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found that raptor biologists recommended buffers for various species of nesting raptors from 200m to 1500 m in width, with the exception of 50-m buffers from visual disturbance for kestrels and prairie falcons ... In an independent review concerning a prior development proposal at Bolsa Chica with 100-foot (30-m) buffers, raptor expert Brian Walton opined that developers "...often rely on buffers that I find largely ineffective for reducing raptor fright/flight response." [and] "[t]hey describe unusual tolerance, habituated individuals or exceptions to normal raptor behavior rather than the more common behavior of wild birds."

The 100-meter buffer recommended by USFWS (1979), CDFG (1982), and by staff is necessary to prevent disturbance to raptors that utilize the eucalyptus ESHA, and, based on raptor expert Peter Bloom's estimates of foraging distances, is also large enough to provide significant foraging opportunities close to the nest. This is particularly important because distant foraging increases the risk of nest predation. White-tailed kites, a fully protected species in California, have frequently nested at Bolsa Chica, and are generally considered relatively sensitive to human disturbance. Therefore, buffers that are adequate to protect nesting white-tailed kites should be adequate for most of the other species that are likely to nest in the eucalyptus ESHA. The following minimum spatial buffers have been recently recommended for nesting white-tailed kites: 100m (Bloom, 2002); 100m (Holmgren, 6.7.2002); 50m (J. Dunk (raptor researcher) in person communication to M. Holmgren, 2002); 46-61m (with "low-frequency and non-disruptive activities"; Froke, 2002). These estimates suggest that a 100-m buffer is probably adequate, but not overly conservative. Thus, the Commission finds that a buffer zone from the eucalyptus ESHA that is 100 meters wide would be appropriate to allow continuance of the ESHA and not cause significant disruption to it. However, no uniform buffer zone from the Eucalyptus ESHA is proposed as part of the LUP amendment. In fact, active park area would be allowed immediately adjacent to the trees under the LUP amendment as proposed. In addition, residential development would be allowed immediately adjacent to the ESHA, even though it cannot be considered compatible with the continuance of the ESHA.

Buffers should not be used for activities that have negative effects on the resources that are being protected.

Under the proposed LUP amendment, uses appurtenant to low density development such as roads would be allowed as close as 100 feet from the ESHA. The Open Space Park designation is proposed within and adjacent to the trees in the northwest corner of the site. Both of these uses within the locations proposed would not be consistent with the requirements of Section 30240 of the Coastal Act to protect ESHA. The land use designations that are acceptable

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within the ESHA are limited to only those designations whose uses are dependent upon the ESHA. In addition, an appropriate buffer zone must be established. As proposed the LUP amendment would land use designate areas within and adjacent to the ESHA with designations that would allow uses that are not dependent upon the ESHA, and that could significantly degrade the ESHA. The proposed amendment is not consistent with Section 30240 of the Coastal Act and therefore must be denied.

It is also worth noting that California gnatcatchers (*Poliioptila californica californica*), a species listed as “threatened” under the Endangered Species Act, are known to frequent the subject site, especially the western portion. Also, Southern tarplant (*Centromedia parryi* ssp. *Australis*), a California Native Plant Society “1b.1” species (seriously endangered in California), also exists at the site.

The primary purposes of the buffer around the eucalyptus ESHA is to keep disturbance (activity, lights, noise, pets, etc.) at a distance such that it will not disturb raptors or prevent nesting by the more sensitive species such as white-tailed kites, and to provide foraging habitat for the raptors. Uses allowed within the ESHA buffer may only be allowed if they are consistent with the purposes of the buffer.

Passive recreation uses (e.g. trails, viewing areas, interpretive signage, and benches) may be acceptable within the outer 100 feet of the buffer when included as part of an overall management plan for the ESHA. Neither passive nor active recreation is a compatible use any closer to the ESHA. Even within the outer 100 feet of the ESHA buffer, acceptable passive recreational use should be limited to the 10 meters closest to development, where feasible. It appears, from plans submitted with the related coastal development permit application, that limiting passive recreational use to the outer 30 feet of the buffer area and as close as possible to developed area is feasible at the subject site. Consequently, any trails or other passive recreational use that are appropriate within the buffer area (i.e. would not significantly degrade the ESHA area) should be restricted to only the outer 30 feet of the ESHA buffer area and, more specifically, as close to developed areas as possible.

Notwithstanding the above, formalization of an existing passive nature trail along the northern property line and adjacent to the existing multi-family residential development (Cabo del Mar), would be considered acceptable if there is no biologically superior alternative. It is acceptable because it is a passive nature trail and will not require disturbance to the habitat to formalize it, and it would afford a natural/educational experience. As it currently exists, it is immediately adjacent to the multi-family residential development just to the north of the

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subject site; thus, it is located as close as possible to existing developed area.

Portions of a Natural Treatment System (NTS) or equivalent, would be appropriate within the ESHA buffer. However, any NTS within the ESHA buffer would need to be at least 100 feet from the ESHA. Furthermore, due to the potential for disturbance that could adversely impact the ESHA if located any closer, any portion of the NTS that requires periodic maintenance or that contains roadways must be limited to the outer third of the buffer area and be located as close as feasible to developed area. An NTS within the ESHA buffer, subject to the constraints above, would be acceptable because it would occupy only a very small portion of the overall buffer area. Furthermore, the NTS itself will provide habitat value. The shallow water habitat will increase the variety of habitats within the buffer area. For these reasons, allowing an NTS type system within the ESHA buffer would not be expected to degrade the ESHA and would be compatible with its continuance.

As proposed, the amendment would allow uses other than those outlined above within the ESHA and ESHA buffer. Thus, the proposed Open Space Park designation within the ESHA and buffer zone is also inconsistent with Section 30240. Therefore, the Commission finds that the proposed amendment is inconsistent with Section 30240 which requires that ESHA be protected and so the LUP amendment as proposed must be denied.

3. Water Quality

Section 30230 of the Coastal Act states:

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 of the Coastal Act states:

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

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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.

Section 30230 of the Coastal Act requires that marine resources be maintained, enhanced, and where feasible, restored. Section 30231 of the Coastal Act requires that the biological productivity and quality of coastal waters be protected and, where feasible, restored. Section 30231 further requires that the quality of coastal waters be adequate to maintain healthy populations of marine organisms. Section 30231 also requires the use of various means, including managing wastewater discharges, controlling runoff, protecting groundwater and surface water, encouraging wastewater reclamation, and protecting streams, to maintain and enhance water quality.

Development has the potential to adversely impact coastal water quality through the increase of impervious surfaces; increase of runoff, erosion, and sedimentation; and introduction of pollutants such as petroleum, cleaning products, pesticides, and other pollutants.

When development increases impervious surface area, the infiltrative function and capacity of the project site is decreased. The reduction in permeable surface therefore leads to an increase in the volume and velocity of runoff that can be expected to leave the site. The cumulative effect of increased impervious surface is that the peak discharge rate is increased and the peak occurs much sooner after precipitation events. Additionally, runoff from impervious surfaces results in increased erosion and sedimentation.

Further, pollutants commonly found in runoff associated with new development include:

- petroleum hydrocarbons such as oil and grease from vehicles;
- heavy metals;
- synthetic organic chemicals including paint and household cleaners;
- soap and dirt from washing vehicles;
- dirt and vegetation from yard maintenance;
- litter and organic matter;
- fertilizers, herbicides, and pesticides from household gardening;
- nutrients from wastewater discharge, and animal waste;
- bacteria and pathogens from wastewater discharge and animal waste.

The discharge of these pollutants to coastal waters can cause cumulative impacts such as:

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- eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size;
- excess nutrients causing algae blooms and sedimentation increasing turbidity, which both reduce the penetration of sunlight needed by aquatic vegetation that provide food and cover for aquatic species;
- disruptions to the reproductive cycle of aquatic species;
- acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior; and
- human diseases such as hepatitis and dysentery.

These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes, reduce optimum populations of marine organisms and have adverse impacts on human health. Also where streams outlet on to recreational sandy beach areas, adverse impacts to public beach access can result.

The 50 acre project site is currently undeveloped, with the exception of farming activities. Under existing conditions, due to the site's topography and elevation, little or no runoff leaves the site during most rainfall events. The majority of the site (38.5/50 acres or 77% of the site) is proposed to be land use designated low density residential. The remaining area is proposed to be designated Open Space Parks (8.2 acres) and Open Space Conservation (3.3 acres). According to the Water Quality Management Plan (WQMP) prepared for the related coastal development permit (5-06-327) for the subject site, "[t]here are no pre-existing water quality problems with the project site."

However, installation of impervious surfaces and activities associated with residential development and related hardscape represent a potentially significant impact to water quality downstream of the project, including the Inner and Outer Bolsa Bay, Muted Tidal Pocket wetlands, Huntington Harbor and ocean waters. Because under current conditions little or no runoff leaves the site, residential development that would be allowed under the proposed amendment would create new adverse impacts where none currently exist. In addition, water bodies immediately downstream of the subject site, such as the Inner and Outer Bolsa Bay, Muted Tidal Pocket wetlands, Huntington Harbour, and Anaheim Bay Wildlife Refuge, are likely to suffer increases in water quality impairment when site development produces greater volumes and velocities of runoff as well as introducing increased pollutant loads.

In addition, although the existing LUP includes policies that require projects to incorporate water quality BMPs, none of the existing LUP policies express a preference for types of treatment control BMPs. A treatment control BMP is a

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system designed to remove pollutants from the runoff including the use of gravity settling, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

The preferred option for treatment control BMPs is, first, vegetative (or natural) treatment (e.g. bio-swales, vegetative buffers, constructed or artificial wetlands), then, second, a combination of vegetative and mechanical systems or BMPs, and last, use of mechanical treatment systems or BMPs alone (e.g. site-specific water quality treatment plants, storm drain filters and inserts). There are a number of reasons for this hierarchy of preference including the often multiple benefits from non-mechanical BMPs such as pollutant removal, groundwater recharge, habitat creation, and aesthetics. Incorporation of artificial wetland between the housing and the eucalyptus ESHA would provide additional buffer for wildlife by restricting access. Furthermore, maintenance needs are typically more apparent and less frequent with vegetative treatment systems and thus are more likely to remain effective than mechanical systems such as storm drain inserts and the like which can become clogged and otherwise suffer mechanical difficulties. If mechanical treatment control BMPs are not continually maintained they will cease to be effective, and consequently water quality protection would not be maximized. In addition, a natural treatment system would have an environmental benefit by allowing dry weather flow to infiltrate into the wetland soil or evaporate, thus keeping excess irrigation water and other sources of dry weather flow generated by site development from discharging into Bolsa Bay waters. Although mechanical systems remove pollutants, they still discharge the treated freshwater into an environment that would be naturally dominated by saltwater during dry weather.

Incorporating vegetative treatment systems becomes more and more feasible when site design and source control BMPs are implemented. The area of land necessary to implement the preferred non-mechanical treatment systems can be minimized by incorporating site design and source control features into new development in the early planning stages. A site design BMP is a project design feature that reduces the generation of pollutants or reduces the alteration of the natural drainage features, such as minimizing impervious surfaces and the direct connectivity of impervious surfaces, as well as using permeable pavement. In addition, use of source control BMPs can also help to reduce the amount of land committed to a non-mechanical treatment system. A source control BMP is a practice that minimizes the introduction of pollutants and, thus, the release of pollutants into areas where they may be carried by runoff. Source control BMPs include: covering work areas and trash receptacles, practicing good housekeeping, and minimizing the use of irrigation and garden chemicals. One of the benefits of incorporating site design and source control BMPs into a development is that it becomes easier for a developer to incorporate natural

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treatment systems because, among other things, the use of site design and source control BMPs results in significantly less runoff needing to be treated and, thus, reducing the area needed to accommodate a natural treatment system.

The subject site represents an excellent opportunity to incorporate a natural treatment system, such as wetland detention ponds. There are multiple benefits from natural treatment systems such as pollutant removal, groundwater recharge, habitat creation, and aesthetics. Furthermore, maintenance needs are typically more apparent and less frequent with natural/vegetative treatment systems and thus are more likely to remain effective than mechanical systems such as storm drain inserts and the like which can become clogged and otherwise suffer mechanical difficulties. If mechanical treatment control BMPs are not continually maintained they will cease to be effective, and consequently water quality protection would not be maximized.

Incorporating a natural treatment system, such as wetland detention ponds, is feasible at the site. The site is an appropriate candidate for a natural treatment system because it is a large site unconstrained by existing development, limited lot size or limited by topography. There is plenty of space on the site to accommodate a wetland detention or similar type system while still allowing a reasonable development footprint. Moreover, because little or no drainage currently leaves the site, it is important that development of the site not result in creation of new adverse water quality impacts such as would result from increased runoff leaving the site. In order to achieve the goal of not creating new adverse water quality impacts, all dry weather flow would need to be retained on site to the maximum extent practicable. In the case where large volumes of nonpoint source runoff are imported to the site for treatment, it may not be possible to infiltrate or evaporate all dry weather flow on site. Nevertheless the benefits of treating dry weather runoff from offsite (with a residence time of at least 48 hours and seven days where practicable) may provide a benefit that outweighs the potential adverse impacts of returning the treated water to flood control channels. The best way to accomplish retention of dry weather flow on site typically is some type of natural treatment system. Furthermore, in order to protect water quality year round it is appropriate to impose a standard that any runoff that leaves the site must meet. The generally accepted standard for stormwater runoff is a requirement to treat at least the 85th percentile storm event, with at least a 24-hour detention time. If dry weather runoff cannot be retained on site, it should be treated (e.g., detained for at least 48 hours and where practicable for seven days in a natural treatment system). The current LUP amendment does not require these site-specific water quality measures and standards. Therefore, there is no assurance that water quality will be protected. Consequently the amendment is not consistent with the water quality policies of the Coastal Act and must be denied.

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Once development of the site occurs, run-off, along with the inherent impacts, will enter the EGGWFCC and downstream water bodies. Downstream water bodies include the Inner and Outer Bolsa Bay, Muted Tidal Pocket wetlands, Huntington Harbour, and Anaheim Bay Wildlife Refuge. Thus, all practicable efforts to mimic existing site conditions should be employed including minimizing or avoiding the discharge of runoff from the developed site. As proposed, the LUP amendment does not identify site specific water quality standards. Consequently the amendment is not consistent with the water quality policies of the Coastal Act and must be denied.

The use of permeable materials for paved areas in new developments is a site design and source control measure which can reduce the rate and volume of the first flush of stormwater runoff and can help to minimize or eliminate dry weather flow. This type of BMP is becoming more common in new developments, so that costs of permeable pavements are approaching the costs of traditional pavements. By maintaining permeability on-site, a development can be designed to more closely retain the pre-development hydrologic functions of the site. And reducing the amount of runoff generated by a development reduces the volume and flow rate of runoff that may require a treatment control BMP. Use of permeable materials can help minimize impacts associated with the creation of impervious surface such as the increase in stormwater runoff, and corresponding reduction in infiltration. However, the proposed amendment does not include any discussion on the benefits of incorporating permeable materials into the design of future projects. Consequently the amendment is not consistent with the water quality policies of the Coastal Act and must be denied.

Although the City of Huntington Beach has an LUP policy to encourage the Orange County Sanitation District to capture and treat dry weather flows, it does not address the other mitigation measure for dry weather flow which is to minimize or eliminate dry weather flow from new development sites. Many sources of dry weather flow can be eliminated by site design and source control BMPs, such as efficient irrigation, permeable pavement and natural treatment systems. The Commission finds dry weather flow in the arid climate of Southern California has the potential to adversely impact marine resources, even if the runoff is clean or treated to the maximum extent practicable and that new development should minimize or eliminate those flows. As proposed, the amendment does not include any requirements to minimize or eliminate dry weather flows generated by site development through the use of site design and source control BMPs. Consequently, adverse water quality impacts due to dry weather flows are not minimized. The amendment is therefore not consistent with the water quality policies of the Coastal Act and must be denied.

While the Commission recognizes that the City's existing policies address water quality protection and improvement within the City, it also recognizes that there are additional, more specific steps that could be taken to further protect, restore and/or enhance the water quality of drainage generated at the subject site, and thus, the marine resources, biological productivity, and water quality of the ultimate receiving waters to which this project's effluent will flow. For that reason, the proposed amendment cannot be found consistent with Sections 30230 and 30231 of the Coastal Act. The Commission's standard of review, which requires the preservation, protection, and enhancement of coastal resources including water quality, necessitates that the additional measures, outlined above, be imposed. Thus, the Commission finds that, as proposed, the amendment is inconsistent with Sections 30230 and 30231 of the Coastal Act regarding water quality.

4. Public Access and Recreation

Section 30210 of the Coastal Act states:

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 30252 of the Coastal Act states, in pertinent part:

The location and amount of new development should maintain and enhance public access to the coast by ... (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, ... (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 30212.5 states:

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

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Coastal Act Section 30213 states, in pertinent part:

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

Coastal Act Section 30223 states:

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

In addition, the City's certified LUP contains the following policies regarding public access:

Provide coastal resource access opportunities for the public where feasible and in accordance with the California Coastal Act requirements.

Encourage the use of City and State beaches as a destination point for bicyclists, pedestrians, shuttle systems and other non-auto oriented transport.

*Encourage the utilization of easements and/or rights-of-way along **flood control channels**, public utilities, railroads and streets, wherever practical, for the use of bicycles and/or pedestrian (emphasis added).*

*Maintain existing pedestrian facilities and **require new development** to provide pedestrian walkways and bicycle routes between developments (emphasis added).*

Link bicycle routes with pedestrian trails and bus routes to promote an interconnected system.

Develop a riding and hiking trail network and support facilities that provide linkages within the Coastal Zone where feasible and appropriate.

Balance the supply of parking with the demand for parking.

Maintain an adequate supply of parking that supports the present level of demand and allow for the expected increase in private transportation use.

Maintain and enhance, where feasible, existing shoreline and coastal resource access sites.

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Promote and provide, where feasible, additional public access, including handicap access, to the shoreline and other coastal resources.

Promote public access to coastal wetlands for limited nature study, passive recreation and other low intensity uses that are compatible with the sensitive nature of these areas.

Maintain and enhance, where necessary, the coastal resource signing program that identifies public access points, bikeways, recreation areas and vista points throughout the Coastal Zone.

Preserve, protect and enhance, where feasible, existing public recreation sites in the Coastal Zone.

Ensure that new development and uses provide a variety of recreational facilities for a range of income groups, including low cost facilities and activities.

Encourage, where feasible, facilities, programs and services that increase and enhance public recreational opportunities in the Coastal Zone.

Promote and support the implementation of the proposed Wintersburg Channel Class I Bikeway.

The provision of public access in new development proposals is one of the main tenets of the Coastal Act. This emphasis has been carried over into the City's certified LUP. In certifying the LUP, the Commission recognized, via the approved LUP policies, the importance of including measures such as providing and enhancing public access to the sea and other coastal resources, adequate parking and alternate means of transportation, low cost recreational uses, and public access signage, with new development.

The 50-acre site is located in close proximity to the Bolsa Chica wetlands restoration area (see exhibit G). The Bolsa Chica Wetlands, at approximately 1,000 acres, is the largest remaining wetland in Southern California. Following the 1997 State acquisition of most of the remaining wetlands that were under private ownership, a comprehensive Bolsa Chica wetlands restoration effort is now underway. In addition, because it is tidally influenced, the Bolsa Chica wetlands constitute "sea" according to the Coastal Act definition (Section 30115). Because there is no public road between the subject site and the Bolsa Chica wetlands, the site is between the sea and the first public road. As such, the area is given special significance with regard to the requirement for the provision of public access. Given the prominence of the adjacent Bolsa Chica wetlands,

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appropriate public access and passive recreational opportunities must be provided and conspicuously posted. Further, the Coastal Act gives priority to land uses that provide opportunities for enhanced public access, public recreation and lower cost visitor recreational uses.

Beyond the Bolsa Chica wetlands restoration area is the Pacific Ocean and its sandy public beaches. Thus, public access to the Bolsa Chica area would, in turn, facilitate public access, via alternate means of transportation (bicycle and pedestrian), to the ocean beach beyond.

Although the certified LUP includes (as listed above) strong public access policies, the proposed LUP amendment does not include any public access language specifically addressing public access needs appropriate for the site, taking into consideration the recreational needs of both the new residents and other users of the adjacent public recreational resources. In order to assure that access is maximized at the time of future site development, as described previously, specific language addressing access in the site specific section of the LUP is necessary. As proposed, no such language is included in the LUP amendment.

a) Bicycle Path

The subject site is immediately adjacent to the north levee of the East Garden Grove Wintersburg Flood Control Channel (EGGWFC). The County's Commuter Bikeways Strategic Plan (the regional bikeways plan for Orange County) identifies a Class I bikeway along the flood control channel. This is also reflected in the City's certified LUP. Figure C-14, Trails and Bikeways Map in the certified LUP identifies a proposed bikeway along the EGGWFCC adjacent to the site. A letter from the County's Public Facilities & Resources Department dated January 8, 1998 (see exhibit J) states:

"Regarding the City's proposal to continue the Class I bikeway northerly along the Wintersburg Channel to Graham Street: The County supports this. It would provide an excellent bikeway connection between the City's road system and the off-road wetlands perimeter route. (We suggest referring to this entire route – between Graham Street and PCH – as the Bolsa Chica Bikeway)."

In addition, a letter from the County's Public Facilities & Resources Department, dated February 13, 1998 (see exhibit J) commenting on a proposed tentative tract map for the subject site, states:

"A bicycle trail along the CO5 [East Garden Grove-Wintersburg Channel]

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north levee maintenance road will be required.”

A bike route in this area would provide substantial public access benefits. It is encouraged in existing LUP policies. It would provide a connection between existing inland routes and the Bolsa Chica area and is expected to be extended in the future along the remainder of the EGGWFCC levee adjacent to the Bolsa Chica Restoration area. When such an extension occurs (as is anticipated in the City’s LUP and by the County Public Facilities & Resources Department), the bike route would eventually link to the coast. An off road bicycle path already exists along the entire length of the City’s ocean fronting beach. A bike path at the subject site and along the remainder of the EGGWFCC would provide a new connection from inland bicycle paths to this coastal path. Not only would such a bicycle path provide substantial public recreational benefits, but it would also improve public access opportunities by providing alternate means of transportation to get to the coast and to the trails within the Bolsa Chica area. The City and the County have both indicated that a bicycle path in this location is desirable and appropriate. However, the proposed LUP amendment does not include any language specific to this site assuring that implementation of the bicycle trail will occur prior to or concurrent with sited development. Current LUP policy merely states “promote” and “encourage” the bicycle path’s implementation. Therefore there is no assurance that it will be built in a timely manner, or perhaps that it will be built at all. Thus, the amendment as proposed cannot be found to be consistent with Sections 30210, 30213 and 30252 of the Coastal Act regarding maximizing public access, and therefore, must be denied.

b) Public Streets and Parking

In addition, if the residential development that the proposed land use designation would allow were to be a private and/or gated development, public access would not be maximized or enhanced, inconsistent with Sections 30210, 30212.5, 30223 and 30252 of the Coastal Act. All public entry controls such as gates, gate/guard houses or other guarded entry, signage that discourages access and any other restrictions on the general public’s entry by and use of any streets or parking areas (e.g. private streets, preferential parking districts, resident-only parking periods/permits, etc.) would constrain the public’s ability to access the area proposed as public park as well as the public’s ability to access the public bike path along the EGGWFCC levee. In turn, public access to the Bolsa Chica area and ocean beyond would also not be provided. As stated previously, the site is between the first public road and the sea (in this case the Bolsa Chica wetlands). The provision of public parking within the area would allow visitors to begin a bike ride or walk along the levee, through the Bolsa Chica area, and on to the ocean front, that might otherwise not be feasible. Public streets and public parking within the residential area would not only support public recreational use

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in the vicinity of the subject site but also allow visitors from beyond the immediate vicinity to use the park area, and public recreational and open space resources in the Bolsa Chica area.

In addition, ungated public streets would facilitate the use of interior public trails within the development. Interior trails would further maximize, support and enhance public access opportunities. Public trails could be established leading from Graham Street to the area proposed to be designated Open Space Parks, and from within the development back onto the bike way along the EGGWFCC. Also, public trails along the edge of the wetland and ESHA buffers would provide an excellent public access experience consistent with the requirements of Sections 30210, 30212.5, 30213, 30223 and 30252 to maximize and enhance lower cost public recreational and public access opportunity with new development and assure adequate support facilities are provided. The provision of interior trails within a future development at the site would be especially consistent with Section 30252's requirement that nonautomobile circulation be provided within the new development.

In order to assure that this aspect of public access (the provision of public parking within an ungated residential area with public streets and interior trails) is provided at the time the site is developed, language reflecting this must be incorporated into the LUP. However, no such language is proposed as part of the LUP amendment. Thus the amendment cannot be found to be consistent with Sections 30210, 30212.5, 30213, 30223 and 30252 of the Coastal Act regarding maximizing and enhancing public access, and therefore must be denied.

c) Provision of Recreation and Public Access Benefits

Residential development of the subject site that would occur pursuant to the proposed amendment would have adverse impacts on public access and recreation unless the above described measures are incorporated into the design of a future project. In order to assure maximum public benefit, the public recreation and access measures would need to be provided in a timely manner. However, nothing in the proposed amendment or in the City's LUP currently requires that lower priority developments (such as residential) be phased to assure the provision of those uses that are a higher priority under the Coastal Act (such as public trails, parks, and parking) occur prior to or concurrent with the lower priority development. Without such a phasing requirement, it is difficult to assure that necessary public benefits would occur in a timely manner, or possibly even at all. Thus, as proposed, the amendment is inconsistent with Sections 30210, 30212.5, 30213 and 30252 of the Coastal Act regarding maximizing and enhancing public recreation and access and therefore must be denied.

5. Visual Resources

Section 30251 of the Coastal Act states:

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.

In addition, the City's certified LUP contains the following policies:

C 4.2.1

Ensure that the following minimum standards are met by new development in the Coastal Zone as feasible and appropriate:

- a) *Preservation of public views to and from the bluffs, to the shoreline and ocean and to the wetlands.*
- b) *Adequate landscaping and vegetation.*
- c) *Evaluation of project design regarding visual impact and compatibility.*
- d) ...

C 4.7.1

Promote the use of landscaping material to screen uses that detract from the scenic quality of the coast along public rights-of way and within public view.

The subject site offers the opportunity to provide public views from the site to the Bolsa Chica wetlands area and toward the ocean beyond. The related coastal development permit application (5-06-327) proposes a public viewing area in the southwest corner of the site. The southwest corner of the site is an excellent location for providing public views to and along the coast and scenic areas, as required by Section 30251. The location also works well with the anticipated bikeway along the EGGWFCC. However, the proposed LUP amendment does not include any discussion regarding provision of public view points in

association with development of the site.

In addition, based on information submitted for the related coastal development permit application, it appears that elevations of the subject site may be raised in conjunction with any development of the subject site, such that future elevations may be similar to the elevation of the top of the EGGWFCC. The project described in the related coastal development permit application, includes a solid wall separating the rear yard area of future residences proposed under that application and the public bike path. The solid wall, proposed in the permit application to be ten feet high, immediately adjacent to the public bike path could have adverse visual impacts on public use of the bike path. However, adverse impacts could be minimized by incorporating measures such as reduced wall height, open fencing/wall, landscaped screening, use of an undulating or off-set wall footprint, or decorative wall features (such as artistic imprints, etc.), or a combination of these measures. The proposed amendment does not address this issue and does not assure that potential visual impacts of the development as viewed from the surrounding public recreational and open space areas will be addressed at the time the site is proposed for development. Therefore the proposed amendment is inconsistent with Section 30251 of the Coastal Act regarding protection of visual resources within the coastal zone and must be denied.

6. Archaeological Resources

Coastal Act Section 30244 states:

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

In addition, the City's certified LUP includes the following policies regarding Historic and cultural Resources:

Coordinate with the State Of California Historic Preservation Office to ensure that archaeological, paleontologic and historically significant resources within the Coastal Zone are identified.

Where new development would adversely impact archeological or paleontological resources within the Coastal Zone, reasonable mitigation measures to minimize impacts shall be required.

In the event that any Native American human remains are uncovered, the County Coroner, the Native American Heritage Commission, and the Most

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Likely Descendants, as designated by the California Native American Heritage Commission, shall be notified. The recommendations of the Most Likely Descendants shall be obtained prior to the disposition of any prehistoric Native American human remains.

A completed archeological research design shall be submitted along with any application for a coastal development permit for development within any area containing archeological or paleontological resources. The research design shall determine the significance of any artifacts uncovered and make recommendations for preservation. Significance will be based on the requirements of the California Register of Historical Resources criteria, and prepared based on the following criteria:

- a) Contain a discussion of important research topics that can be addressed; and*
- b) Be reviewed by at least three (3) county-certified archeologists (peer review committee).*
- c) The State Office of Historic Preservation and the Native American Heritage Commission shall review the research design.*
- d) The research design shall be developed in conjunction with affected Native American groups.*
- e) The permittee shall comply with the requirements of the peer review committee to assure compliance with the mitigation measures required by the archeological research design.*

A County-certified paleontologist/archeologist, shall monitor all grading operations where there is a potential to affect cultural or paleontological resources based on the required research design. A Native American monitor shall also monitor grading operations. If grading operations uncover paleontological/archeological resources, the paleontologist/archeologist or Native American monitor shall suspend all development activity to avoid destruction of resources until a determination can be made as to the significance of the paleontological/archeological resources. If found to be significant, the site(s) shall be tested and preserved until a recovery plan is completed to assure the protection of the paleontological/archeological resources.

In conjunction with the Environmental Impact Report (EIR) prepared for the related development project for the subject site, an Archaeological Assessment was prepared (Appendix H to the EIR, titled Archaeological Assessment of the SHEA Homes Project Tentative 15377 and Tentative Tract 15419, March 1997). A number of archaeological sites are believed to be present on the subject site.

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These include CA-ORA-83 (known as the Cogstone site), CA-ORA-1308 and 1309. The majority of CA-ORA-83 is located off-site, but three areas of CA-ORA-83 are believed to be located within the subject site. CA-ORA 1308 and 1309 were discovered and recorded in 1991. They are described as “possible” or “potential” archaeological sites. In any case, the extent and significance of the archaeological resources on the site has not been conclusively determined. Thus, it is important that any future site development include a careful assessment of the presence and extent of archaeological resources. Although the LUP policies cited above outline procedures for sites that potentially contain archaeological resources, nothing in the proposed amendment identifies this site as one with the potential for archaeological resources. Consequently, there is no assurance that the potential for archaeological resources to occur on the site will be recognized in conjunction with future development proposals. If the potential for archaeological resources at the site is not recognized in the proposed LUP amendment for the site, application of the policies cited above may be overlooked. The proposed LUP amendment, which specifically addresses the subject site, provides the appropriate opportunity to make clear that archaeological resources may be present on this site, and therefore these specific policies must be applied. Without such language within the LUP amendment, it cannot be found consistent with Section 30244 of the Coastal Act, and so it must be denied.

7. Hazards

Section 30236 of the Coastal Act states:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Coastal Act Section 30253 states, in pertinent part:

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

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contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed LUP amendment would designate much of the subject site for residential development land use. Other than farming activities, the site is currently undeveloped. Thus the suitability of the site for residential development must be considered.

Most of the site, except the bluff area on the site's western boundary, is comprised of lowlands that were once a part of the historic, extensive Bolsa Chica wetlands system. Historically the site functioned as a floodplain. However, with development of the East Garden Grove Wintersburg Flood Control Channel (EGGWFC) in the 1960s, the site has ceased serving that function. The northwestern corner of the site is crossed by a bluff, approximately 40 to 50 feet high, carved by the ancestral Santa Ana River. The portion of the site that is proposed to be land use designated residential is a very flat surface at an elevation of one to two feet below sea level.

The Commission's staff geologist has reviewed a great deal of technical information submitted in conjunction with the proposed LUP amendment and related coastal development permit application. The staff geologist has prepared three memos regarding the subject site, which are attached as exhibits I, P, and Q and are hereby incorporated as though fully set forth herein. The Commission concurs with and adopts the conclusions stated in the staff geologist's memos.

Potential geotechnical issues associated with residential development at the subject site include: ground shaking during a major earthquake on a nearby fault, possible surface rupture of the hypothesized Bolsa-Fairview Fault, liquefaction during such an earthquake, inadequate foundation support, and the stability of both natural and temporarily excavated slopes. In addition, development of the site raises certain hydrological issues. Following is a discussion in the staff geologist's memo of the potential issues:

"Reference (8) indicates that the soils at the subject site are subject to liquefaction during a major earthquake. In addition, the presence of peat could lead to settlement problems, because organic materials such as peat are subject to decay and volume loss with time. In order to mitigate for these hazards, Shea Homes proposes to overexcavate the entire site to depths as great as 17 feet below sea level, involving approximately 400,000 cubic yards of cut. Unsuitable fill material such as peat would be exported, and the remainder of the material – as well as approximately

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260,000 cubic yards of imported fill, would be compacted to suitable densities to provide structural support and to be invulnerable to liquefaction.”

The magnitude of over-excavation and recompaction in themselves raise some concerns. Since the over-excavation would extend well below sea level, dewatering will be necessary. The dewatering has the potential to lower ground water levels off-site, which could lead to settlement problems. In order to avoid settlement issues, the property owner’s consultants have indicated that the excavation will take place in stages, with only narrow excavations open at any one time. In addition, a monitoring program to detect settlement would be in place. The property owner’s consultants have indicated that water produced by the dewatering operations will be discharged into the storm water drainage system. Information submitted by the property owner’s consultants indicates that the water is suitable for disposal into the ocean.

Regarding slope stability, the Memo prepared by the Commission’s staff geologist states:

“The backcuts of the excavations undertaken to mitigate the liquefaction hazard will extend to the base of the north levee of the East Garden Grove Wintersburg Flood Control Channel. The loss of lateral support for the levee, especially if high pore water pressures persist due to the rapid removal of material in the cut, has the potential to destabilize the levees. Reference (12) contains slope stability calculations that demonstrate that even with the persistence of high pore pressures and loss of lateral support, the slope supporting the levee will have a factor of safety against sliding of 1.28, which is considered adequate for temporary excavations.

No slope stability calculations have been performed on the bluff in the northwestern corner of the site, and it is likely that it is only marginally stable. This area is planned for open space, however, so slope stability is this area is not a concern.”

In 1968 the California Department of Water Resources mapped a strand of the Newport-Inglewood fault across the site and dubbed it the Bolsa Fairview fault. Apparently the fault was located only indirectly on the basis of topographic expression, vertical offset of the base of the Bolsa aquifer, abrupt water quality changes between closely spaced wells, limited sea water intrusion northeast of the fault, and pumping data. However, more recent studies by the California Division of Mines and Geology concluded that there was insufficient evidence to indicate that the fault was either active, or, in fact, even that it exists, and the State Geologist accordingly de-listed the fault under the Alquist-Priolo Act.

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Based on the more recent studies, it appears there is insufficient evidence to warrant inclusion of the fault as an identified hazard.

The subject site is, geomorphologically, an historical flood plain, however, the floodplain has been channelized. Construction of the levees associated with the EGGWFCC has already functionally isolated the river channel from the flood plain, in this particular case. Moreover, the site lies at elevations of 1 to 2 feet below sea level. Areas of the surrounding neighborhoods lie at elevations of as low as 5 feet below sea level. Low berms in the Bolsa Chica lowlands, in addition to the EGGWFCC levees, protect these neighborhoods from tidal flooding. Storm water must be collected through a series of storm drains lying well below sea level, and pumped up into the EGGWFCC through a forebay at the Slater pump station, which is on the south side of the flood control channel adjacent to the subject site.

However, the capacity of the existing EGGWFCC is insufficient to carry the 100-year flood event. The channel will carry only about 4,200 cubic feet per second and will overflow in a 100 year event. Because the south levee is mostly lower than the north, more water would overflow to the south, and into the Bolsa Chica wetlands, than to the north. Nevertheless a total of about 52 acre feet would overtop the north levee in a 100-year flood event. In fact, overtopping of the levees will likely result in their complete failure, with a resultant loss of capacity of the EGGWFCC and inundation by ocean waters. The subject site and much of the surrounding area are susceptible to tidal flooding. Tidal flooding could occur when extreme high tides occur concurrently with storm surge events. According to some studies, the existing tidal flooding risk was increased with the opening of the ocean inlet into the Bolsa Chica Restoration area. Regardless of the cause of the flooding, high tides and storm surge will create tidal flooding. The worst case scenario would occur when high tide and storm surge occurs during failure of the levees of the lower reaches of the East Garden Grove Wintersburg Flood Control Channel (EGGWFCC) (which is possible as the levees are not FEMA certified). Under these scenarios, up to 170 acres of existing development, excluding the subject site, would be flooded. Therefore, contemplation of any development of the subject site must address potential flooding of existing inland development, as well as any proposed development of the subject site, during the 100-year flood event.

Section 30236 of the Coastal Act addresses channelization and other substantial alterations of rivers and streams and requires such work incorporate the best mitigation measures feasible. In addition, if flood control measures are permitted, the Commission must find there are no other feasible methods for protecting existing structures in the floodplain, and that such protection is necessary for public safety and to protect existing development.

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In studies designed to determine appropriate base flood elevations for future residential development at the subject site, the property owner's consultants have made use of many diverse hydrologic models that included complete failure of the EGGWFCC levees, failure of the pumps, and variations in timing of the failures of both levees and pumps. Based on these studies, the property owner's consultants have demonstrated to the satisfaction of the Commission's staff geologist and to the satisfaction of the Commission that the 100-year Base Flood Elevations derived for the site are the worst case ponding elevations of all the hydrologic models considered and assure the safety of the site during a 100-year flood event.

The property owner has indicated, in documents submitted with the related coastal development permit application, that a vegetated flood protection feature (herein referred to as the "VFPF", essentially a vegetated flood protection levee) is proposed in the southwestern part of the site. In this area, the EGGWFCC is approximately 11 feet above sea level and the bluff at the western site boundary raises some 40 feet above sea level. There is a gap in elevation between the EGGWFCC levee and the bluff in the area of the former county parcel. A flood protection levee in this location could effectively capture tidal floods if it is constructed to an elevation above the expected flood flow. The existing EGGWFCC levee in the area adjacent to the subject site is expected to be reconstructed to meet FEMA certification standards and would have an elevation of 11 feet above sea level (the existing levee's elevation is also 11 feet above sea level). If a flood protection levee were constructed to the same elevation, flood waters would be prevented from flooding the subject site as well as the additional 170 inland acres.

As stated, the subject site and much of the surrounding area (an estimated 170 acres) is susceptible to flooding caused by a tidal surge and/or a 100-year storm event. Regarding the potential for the site and surrounding area to flood, the Commission's staff geologist states:

"In summary, I concur with the applicant [of the related coastal development permit application] and his hydrologic consultants that some combination of reinforcement of the EGGWFCC levee and an additional levee/floodwall between the northern levee of the EGGWFCC and the river bluff to the northwest is a necessary component of flood control protection to assure that the Parkside Estates [subject] site will be free of flood hazards in a 100-year flood event. A byproduct of these improvements will be protection of some 800 homes currently at risk."

Regarding tsunami hazard the Memo states:

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“The Huntington Beach lowlands are quite vulnerable to a major tsunami. A tsunami that overtopped the low berms associated with the Pacific Coast Highway and the oil field roads in the Bolsa Chica wetlands could inundate a large area of the lowlands, much of which lies below sea level. The proposed “vegetated flood protection feature” and the improvements to the north levee of the East Garden Grove Wintersburg Flood Control Channel [proposed under the coastal permit application, not part of the LUP amendment], together with the increased pad elevation, will lower the vulnerability of the Parkside Estates site. Although the placement of fill on the site would displace flood waters into the surrounding neighborhood during a major tsunami, the “vegetated flood protection feature” does lower the susceptibility of this area to smaller tsunamis.”

Regarding suitability of the subject site for development, the Memo concludes:

“In summary, the Parkside Estates is not suitable for residential development without fairly extensive mitigation measures, especially for the liquefaction and flood hazards. Shea Homes’ planned method of remediation involves extensive landform alteration in the form of adding fill to raise the site above Base Flood Elevation. Although this is not a generally recommended method of mitigating a flooding hazard due to the effects it can have on adjacent areas, the planned drainage system improvements more than mitigate for these effects. The necessary excavations and dewatering operations have the capacity to induce subsidence or other instability in adjacent sites, but these effects will be mitigated by doing the excavation in stages and by careful monitoring. The site will experience strong ground shaking during a major earthquake. Early reports that an active fault crosses the site cannot, however, be supported by the data currently available.”

In order to raise pads above base flood elevations, significant amounts of fill material will be imported onto the site, raising the site elevations from the existing 1 to 2 feet below sea level to 5.5 to 11.4 feet above sea level. This raises the question of whether such fill would result in flood waters being displaced to neighboring areas. However, the subject site as it currently exists is already at a higher elevation (1 to 2 feet below sea level) than the surrounding areas (as low as 5 feet below sea level). Flooding of these neighborhoods would occur even without site development, although it would be exacerbated by the addition of fill at the subject site, if mitigation is not undertaken.

The related coastal development permit application proposes to make several improvements to the area drainage system including improving the capacity and

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stability of the EGGWFCC, increasing the capacity of the storm drains under Kenilworth Drive and Graham Street, adding two new pumps to the Slater pump station, and constructing a Federal Emergency Management Agency (FEMA) certifiable “vegetated flood protection feature” at elevation 11 feet above sea level between the bluff along the western site boundary and the north levee of the EGGWFCC. If all these improvements were implemented they would more than mitigate for the exacerbated flood condition caused by the addition of fill necessary to protect existing development in any event, and it is in the least environmentally damaging location.

In summary, information submitted relative to the related coastal development permit application indicates some level of flood control is necessary to protect existing development and there are feasible mitigation measures available consistent with the requirements of Section 30246. However, there is no specific requirement in the proposed amendment to assure that measures necessary for risk reduction would be incorporated into future site development. Without such requirements in the amendment, there is no assurance that mitigation measures will be required and risks minimized as required by Sections 30236 and 30253 of the Coastal Act. Therefore the amendment must be denied as submitted.

8. Conclusion – Consistency with Chapter 3 Policies of the Coastal Act

As proposed, the Land Use Plan amendment contains significant deficiencies with regard to consistency with the Coastal Act. As proposed, the amendment cannot be found consistent with Coastal Act Sections 30210 and 30252 regarding maximizing access, 30251 regarding protection of public views, 30233 and 30250 regarding wetlands, 30240 regarding ESHA, 30244 regarding archaeological resources, and 30230 and 30231 regarding water quality. In sum, the proposed changes to the LUP do not meet the requirements of and are not in conformity with the policies in chapter 3 of the Coastal Act. Therefore, the amendment request must be denied as submitted.