



(415) 310-5109

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



botanybaye@gmail.com

MEMORANDUM

To: PEDRO POINT COMMUNITY ASSOCIATION (PPCA), attention: Joanne Gold

Cc: Brian Gaffney, Richard Grasseti

Date: March 7, 2022

SUBJECT: Draft Environmental Impact Report (DEIR) for the City of Pacifica General Plan Update (GPU) and Sharp Park Specific Plan SCH: 2020089010, January 7, 2022: Pedro Point special-status species, vegetation, and wetlands

1. Scope of review: I am providing critical review of sections of the Draft Environmental Impact Report (DEIR) for the City of Pacifica General Plan Update (GPU) and Sharp Park Specific Plan SCH: 2020089010, January 7, 2022. I am incorporating by reference and attaching my previous comments on the highly similar 2014 DEIR for the GPU. My current comments are updated with recent information about existing conditions since 2014, and address relevant sections of the DEIR that pertain to Pedro Point, with emphasis on coastal lowlands from San Pedro Creek to the Pedro Point Field bordering San Pedro Road. My review focuses on biology, ecology, and related physical environmental influences (hydrology, geomorphology) and land uses.

2. Summary of findings:

- The 2022 DEIR presents an inconsistent and inaccurate description of existing environmental conditions regarding environmentally sensitive endangered fish and wildlife species distributions, movements, and wetland habitats in the vicinity of Pedro Point.
- The substantial errors and omissions regarding existing environmental conditions, particularly occupied environmentally sensitive habitats (ESHA) of federally listed tidewater goby and California red-legged frog, and coastal seasonal and perennial wetlands connected to the mouth of San Pedro Creek, are apparently related to arbitrary conclusions that underestimate potential significant impacts that are neither identified nor mitigated.
- Programmatic mitigation measures in the GPU that claim to address endangered species and wetlands impacts are mere restatements of long-standing existing state and federal regulations and policies beyond City of Pacifica jurisdiction, and provide no additional or independent mitigation.
- The proposed GPU zoning for the Pedro Point Field is apparently inconsistent with Coastal Act policies that depend on accurate factual baseline information describing existing environmental conditions.

3. Existing Conditions and Impact Assessment: Significant Errors and Omissions

3.1. Tidewater Goby. The DEIR fails to disclose the presence of a federally listed fish that inhabits San Pedro Creek, the northern tidewater goby (*Eucyclogobius newberryi*). The DEIR impact assessment and GPU zoning proposals fail to account for potential significant indirect and cumulative impacts to the tidewater goby.

The northern tidewater goby is a small (< 6 cm total length), cryptic, annual fish that inhabit isolated lagoons, sloughs, and stream-mouth estuaries that are widely separated from each other. This federally listed species has experienced a reduction in the number of isolated estuarine sites it inhabits because of coastal development, droughts, and invasive non-native species (USFWS 2005).

Sutter (2018) used highly sensitive environmental DNA methods (eDNA) to monitor the presence or absence of an endangered tidewater goby species, the northern tidewater goby through its coastal range in California. He detected northern tidewater goby using eDNA methods at four sites where they have not previously been detected, including San Pedro Creek (Sutter and Kinzinger 2019). San Pedro Creek showed a strong signal of tidewater goby presence. No recent field detection survey records based on traditional methods (seining, trapping) are available for San Pedro Creek. San Pedro Creek had previously been listed by the U.S. Fish and Wildlife Service as potential re-introduction sites in the tidewater goby recovery plan, based on presumed absence (USFWS 2005).

The DEIR existing conditions descriptions in biological resources and hydrology sections fail to account for the presence of this federally listed endangered species in San Pedro Creek. The DEIR assessments of indirect and cumulative impacts fail to account for potential significant impacts of new development near the mouth of San Pedro Creek. Potential indirect and cumulative impacts of new development on Pedro Point may occur because of hydrologic linkage between Pedro Point Field and the mouth of San Pedro Creek, where a culvert drains the swale/ditch at the east end of the field into the small estuarine lagoon at the stream mouth.

The potential impacts of tidewater goby are not dependent on the distribution of federally listed critical habitat, which is a legal designation of a sub-set of sensitive habitats for the species made after considering economic factors. Figure 3.7-3 Sensitive and Critical habitat, does not represent any potential or likely habitat of tidewater goby in San Pedro Creek, especially near the estuarine mouth, the most likely location of resident populations. This figure is incomplete, inaccurate, and misleading regarding potential significant impacts of the GPU zoning proposals to tidewater goby.

The DEIR Hydrology section at 3.5-4 states that San Pedro Creek is a key coastal watershed because it contains federally listed anadromous steelhead trout. This description of existing hydrological conditions in context of federally listed aquatic species repeats and reinforces the significant omission of the other resident federally listed non-anadromous fish species, tidewater goby (*Eucyclogobius newberryi*) that has been conclusively been determined to be present in the watershed, by environmental DNA (eDNA) methods (Sutter and Kinsinger 2019).

New development runoff could transport sediment, pesticides, surfactants (detergents from automobile washing), spilled fuels, polycyclic aromatic hydrocarbons (PAHs), fertilizer runoff, and heavy metals, and point-discharge directly to the likely primary habitat of tidewater gobies at the mouth of San Pedro Creek. Adverse impacts to water quality in the lowest (estuarine lagoon) reach of the creek could significantly adversely affect growth, survivorship, and reproduction of the population of this listed fish species. This potentially significant impact was not identified or assessed in the DEIR at all. In addition, the potential impacts were not considered in policy evaluations of relevant proposed changes in land use and zoning (such as CRMU).

3.2. California red-legged frog. The California red-legged frog (*Rana draytonii*) inhabits the mouth of San Pedro Creek and neighboring wetlands and non-wetland foraging habitats. Since 2005, I have observed multiple adult California red-legged frogs basking on the banks of the roadside pool at the corner of San Pedro Avenue and the Pedro Point Field, and diving into the pool when disturbed. I first documented this locality and reported it to the U.S. Fish and Wildlife Service in 2005. This pool, which is perennial (standing water most of the year), is connected to the mouth of San Pedro Creek by a continuous wetland swale and channel, ending in culverts that discharge to the freshwater estuarine reach of San Pedro Creek. The wetland swale provides a continuous habitat movement corridor (dispersal, foraging) for adult California red-legged frogs. The pools also provide potential breeding habitat when they have standing water through at least early summer.

The main local (core) source population of California red-legged frogs is likely the restored freshwater marsh at the mouth of San Pedro Creek. In 2014, during construction of the Highway 1 bridge retrofit that required dewatering of the creek mouth and authorized capture and translocation of California red-legged frogs, I observed contract biologists capturing many dozens (total over 100) of adult California red-legged frogs from the path of excavator buckets, and from wetland soil in excavator buckets in marsh excavated from the mouth of San Pedro Creek. This main population is likely to provide adult frog colonizers of intermittently available habitats along the wetland swale corridor bordering San Pedro Field.

None of these known occupied habitats is shown in Figure 3.7-3 Sensitive and Critical habitat. The map omits all occupied existing California red-legged frog wetland habitats (marsh and willow wetland) at the mouth of San Pedro Creek, as well as the known occupied wetland swale at the east end of Pedro Point field. This is a significant omission. The description of existing conditions is not the same as the description of designated critical habitat, which is a federal listing (Federal Register) of lands with special legal status under the Endangered Species Act, not factual existing conditions about habitat and species distributions relevant to impact assessment. The map is incorrect and misleading in representing “sensitive” habitats, by omitting known occupied and suitable habitats that are not federally listed. As a CEQA (State) document, this is also inappropriate for state-listed species.

Sensitive habitats of California red-legged frogs are not limited to federally listed, legally designated “critical habitat”. In a CEQA and Coastal Act (ESHA) context, all breeding and adult

habitat, including terrestrial dispersal and foraging habitats (especially where “take” of the species may occur) must be considered “sensitive” habitat.

The habitat of California red-legged frogs is not limited to aquatic breeding habitat or perennial freshwater marsh, but includes nearby coastal terrestrial habitats that produce prey, regardless of habitat quality or cover. Nocturnal foraging of adult red-legged frogs occurs terrestrial, non-breeding habitats in moist, coastal climates. Telemetry study of California red-legged frogs on the Central coast has shown that 66% of female and 25% of male frogs moved 150 m (median; up to 1400 m) to nonbreeding terrestrial areas for foraging, even when the breeding site retained water. (Fellers and Kleeman 2007). Research findings of Fellers and Kleeman (2007) and Bulger *et al.* (2003) indicate that terrestrial habitats of California red-legged frog migration corridors do not have to be high quality or “pristine” riparian or upland habitats (e.g., closely grazed fields, plowed agricultural land).

The zoning proposals of the GPU fail to account for the California red-legged frog ESHA (Coastal Act) of the wetland swale and adjacent lowland grassland of Pedro Point Field. General, programmatic mitigation measures are inadequate, because they do not consider existing conditions of the species habitat and movements in the vicinity of San Pedro Creek and ecologically and hydrologically connected wetlands and adjacent lowlands .

3.3. Vegetation. The description of existing conditions for vegetation in the DEIR is inaccurate and misleading with regard to the distribution of northern coastal scrub, grasslands, and wetlands.

Figure 3.7-1 vegetation classification map represents the Pedro Point Field location color-coded mapped as “northern coastal scrub”. In fact, none of the dominant or associated plant species enumerated as northern coastal scrub species indicators in the DEIR occur in the Pedro Point field, which is dominated by herbaceous (not scrub) lowland non-native grassland species, and a minority of seasonal wetland plants occurring in poorly drained flats. The vegetation map representing the distinct polygon over Pedro Point field is incorrect, completely misrepresents existing conditions for vegetation.

The vegetation map of Figure 3.7-1 also omits the distinct perennial wetland swale (drainage trough containing native and nonnative marsh vegetation) at the east end of the field, which is significant as ESHA (environmentally sensitive habitat area) in itself, independent from its ESHA status as likely terrestrial foraging and migration habitat for federally listed California red-legged frogs.

The DEIR description of “wetlands” in Pacifica (3.7-10) does not accurately reflect any of the dominant wetland vegetation types that exist at the mouth of San Pedro Creek freshwater marshes and riparian areas, or the Pedro Point Field, though the depressional freshwater wetlands at the north end of Pacifica State Beach are described. The extensive perennial freshwater and estuarine-influenced restored marsh at the mouth of San Pedro Creek, which is known to support a large population of federally listed California red-legged frogs and many wetland wildlife species (including garter snakes, subspecies undetermined; Great blue herons,

Great Egrets) is not represented in the DEIR as a wetland, let alone an important one. The description of wetland existing conditions here is significantly erroneous and misleading.

The DEIR also fails to represent the wetland riparian corridor (willow scrub to sedge marsh and smartweed marsh) along the drainage swale connecting the culvert at San Pedro Creek to the east end of the Pedro Point Field along the eucalyptus grove, an area where the DEIR does propose a change in land use and zoning. Inexplicably, as the DEIR arbitrarily omits the important freshwater wetland complex of San Pedro Creek mouth and connected, adjacent lowlands, it emphasizes freshwater wetlands at the north end of Pacifica State Beach, where there is no proposed zoning change to analyze. This arbitrary inversion of DEIR focus, coupled with significant omissions of existing important wetlands of the San Pedro creek mouth complex, is profoundly misleading, and makes meaningful public comment impossible.

The DEIR treats erroneously classifies all grassland vegetation in Pacifica as “annual grasslands”, and describes “annual grassland” composition only in terms of dominant non-native herbaceous species of hillslope (foothill) grasslands, regardless of ecologically significant components of native perennial or annual plant species, or lowland (valley, alluvial) topography, soils, hydrology and drainage. Pacifica grasslands in fact include coastal prairie with subdominant to dominant (seasonally variable) native perennial and annual herbaceous vegetation, such as that of Rockaway Head and Pedro Point headlands.

At Pedro Point Field, the dominant vegetation is lowland valley grassland with significant local patches of native and non-native seasonal wetland vegetation. Pedro Point Field is seasonally saturated and flooded (intermittently during droughts), and has supported persistent inconspicuous (small and identifiable only in moist spring conditions) remnant populations of native wetland species including *Triglochin scilloides* (*Lilaea scilloides*; flowering-quillwort), *Juncus bufonius* complex (variety undetermined; toad rush), and (rarely) *Cicendia quadrangularis* (Oregon timwort) despite dominance in most seasons by introduced ryegrass (*Festuca perenne*, syn. *Lolium perenne*) and Mediterranean non-native annual grasses. The omission of the lowland, alluvial seasonal wetland character of the poorly drained valley grassland flats in the field, combined with their map misrepresentation as coastal scrub, and the general identification of all grasslands in Pacifica as non-native annual hillslope grasslands, is inaccurate and misleading as a description of existing conditions with potential significant impacts at stake for proposed zoning changes.

Other figures in the DEIR exacerbate the ecological misrepresentation of existing conditions for vegetation and habitats at the Pedro Point Field. Figure 2.1-2: General Plan Land Use represents “paper” non-existent streets through the Pedro Point Field lowland grassland, misrepresenting “existing conditions” as more developed with road infrastructure than actual existing conditions, and an expression of the novel zoning designation, “Coastal Residential Mixed Use”. Figure 3.6-3: Slope Failure and Coastal Erosion [459] shows the field separated from the ocean directly behind a shoreline marked “critical coastal erosion”, and “Severe Beach & Cliff Erosion” (potential tsunami, coastal flooding and erosion hazard). See 3.6-17, “.bluffs...projected to have eroded by 23-24 m by 2050”.. Figure 3.6-1: Seismic Hazard Zones shows the whole field as “Liquefaction zone”, in contrast with adjacent residential slopes, reflecting the siting of the field

on deep alluvium of historic marsh and swamp. Figure 3.5-1 Hydrology and flood zones [402] Shows the entire field mapped as “tsunami flood evacuation zone”. The context for existing conditions and future land uses of the field and its existing habitats should be made clear, combined with the indirect effects of accelerated sea level rise on flooding and groundwater elevations within the time-horizon of the GPU, in context of proposed zoning changes.

Groundwater elevations rise with rising sea levels, and coastal flooding risks during extreme rainfall events must increase as the base level of drainage (the culvert invert elevation at San Pedro Creek, relative to storm wave runup elevation) increases. This is pointedly relevant to the assessment of cumulative impacts to seasonal and perennial wetland habitats of Pedro Point Field and zoning changes, but it is not analyzed or disclosed at all in the DEIR. As flooding and groundwater levels increase with sea level rise, ESHA wetland habitats are likely to expand naturally, or set up conflicts with new development requiring increased flood protection, surface drainage, and sub-drainage (groundwater pumping that dewateres wetlands) in ESHA. The DEIR does not analyze this impact and policy conflict in terms of Coastal Act Section 30240 Environmentally sensitive habitat areas (ESHA); adjacent developments, which 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.

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

4. Programmatic mitigation is vague and ineffective for wetlands, ESHA and sea level rise.

Programmatic mitigation measures related to ESHA, wetlands, and special-status species are vague and redundant re-descriptions of existing state and Federal regulations or policies that provide no meaningful additional mitigation to potential significant impacts of proposed GPU actions, including location-specific zoning proposals for Pedro Point. For example, CO-1-4, “wetland preservation” establishes a meaningless and incomplete prohibition that establishes an exception that swallows the rule, providing any wetland development that is permitted by the Corps of Engineers (Clean Water Act Section 404) and Coastal Commission (Coastal Act). The Corps has no history of permit denial in Pacifica or San Mateo County, and the Coastal Commission has (a) limited geographic jurisdiction in Pacifica seaward of the first ridge, and (b) a history of “emergency” authorizations for coastal erosion that bypasses policies, including wetland and ESHA. The DEIR fails to explain any evidence or analysis demonstrating how this policy could possibly provide any substantive mitigation or protection to Pacifica wetlands in conflict with development. Similarly, impermissibly vague policy CO-I-7, “Maintain Functional Capacity of Wetlands, Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity” provides no substantive criteria to make it enforceable.

Similarly, policy SA-G-5, “Sea Level Rise and Best Available Science. Planning and development reviews shall use, as applicable, the best available science about projected sea level rise and

other climate change-related environmental changes when addressing coastal erosion, bluff failure, flooding, and other coastal hazards” is a vague exhortation with no substantive procedures or criteria that apply to any location-specific proposed zoning changes, such as CRMU for Pedro Point Field. In fact, the DEIR does not even refer to sea level rise and related indirect hydrologic changes (flooding and groundwater elevations), or apply this vague policy, in considering zoning for Pedro Point Field.

LITERATURE CITED

Bulger, J.B., N. J. Scott Jr., And R. B. Seymour. 2003. Terrestrial activity and conservation of adult California Red-legged Frogs *Rana aurora draytonii* in coastal forests and grasslands. *Biological Conservation* 110:85-95

Fellers, G. and P. Kleeman. 2007. California red-legged frog (*Rana draytonii*) movement and habitat use: implications for conservation. *Journal of Herpetology* 41((2): 276-286,

Sutter, M. 2018. Rangewide tidewater goby occupancy survey using Environmental DNA. Master’s thesis, Humboldt State University.

Sutter, M. & A.P. Kinziger. 2019. Rangewide tidewater goby occupancy survey using environmental DNA. *Conserv. Genet.* (2019) 20:597-613 DOI 10.1007/s10592-019-01161-9

U.S. Fish and Wildlife Service. 2005. Recovery plan for the tidewater goby (*Eucyclogobius newberryi*). U.S. Fish and Wildlife Service, Portland, Oregon

ATTACHMENT

July 2014 comments on Pacifica General Plan Update Project, SCH No. No. #2012022046

Lee Diaz
Associate Planner
City of Pacifica
Planning Department
1800 Francisco Boulevard
Pacifica, CA 94044
diazl@ci.pacifica.ca.us

July 7, 2014

SUBJECT: Draft Environmental Impact Report for The Pacifica General Plan Update Project – SCH No. No. #2012022046

Dear Mr. Diaz,

The comments below regarding the Draft Environmental Impact Report for the Pacifica General Plan Update Project (DEIR) are submitted on behalf of the **Pedro Point Community Association**, but represent my independent, best professional judgment.

I have reviewed the DEIR sections relevant to assessment of biological resources, land use policies, and selected relevant portions covering hydrology and geology for CEQA compliance and for LCP amendment compliance with the Coastal Act. I have also conducted site visits of the Pedro Point field (also “undeveloped San Pedro Ave site” and described as “vacant” in the DEIR, General Plan and Local Coastal Plan documents) in all seasons since 2000.

My qualifications to provide expert comments are based on nearly 35 years of professional work in coastal wetland and terrestrial ecology, with over 20 years in San Francisco Estuary wetlands, including long-term direct knowledge of the estuarine wetlands, special-status species, and diked baylands in the project area. A statement of my qualifications is attached hereto as Attachment A.

My comments focus on the potentially adverse environmental impacts of proposed changes in the land use designation of the Pedro Point neighborhood.

Summary of Comments

1. Environmental Baseline: The DEIR provides contradictory information about the vegetation of the Pedro Point field, asserting that it supports “northern coastal scrub”, an upland vegetation type absent in the grassy field, and that it supports wetlands. The field supports seasonal wetlands. The DEIR fails to disclose the importance of these wetlands in terms of the environmental setting of San Pedro Creek mouth wetlands in the Coastal Zone (the field is the last remaining historical floodplain of the lower San Pedro Creek Valley that has not been developed in the Coastal Zone) and the local distribution of ESHA (Environmentally Sensitive Habitat Areas) supporting California red-legged frogs.

2. Biological Impacts to Wetlands and Special-status Species: The DEIR fails to analyze any biological impacts caused by conversion of the existing Pedro Point field to a land use designation of “Coastal Residential Mixed Use development”. The DEIR fails to programmatically assess impacts at a neighborhood-specific level as it did in the 1980 General Plan, and it fails to consider general impacts of residential development on extensive seasonal wetlands and ESHA in and around the field. The proposed land use change for the field is likely to cause significant impacts to wetlands, wildlife, and special-status species for which no feasible mitigation has been identified, and for which no feasible mitigation probably exists.

3. Land Use Impacts. The DEIR fails to analyze land use impacts caused by changing the land use of the field from a general “Commercial” use (1980 General Plan) to a more specific and different “Coastal Residential Mixed Use” designation. This change for the field’s designated land use causes significant impacts (conflicts with) to the City’s own land use policies and numerous Coastal Commission land use policies that cannot be mitigated, and are not mitigated by the vague, programmatic mitigation measures cited in the DEIR.

4. Conclusion. The DEIR fails to disclose important biological resources, and their distribution and relationship to other biological resources and communities in the environmental setting of lower San Pedro Creek. This precludes meaningful public comment and DEIR analysis of significant impacts to biological resources and land use policies that are likely to occur. The DEIR should be recirculated to correct the flawed environmental baseline and defective impact analysis, and should identify reasonable alternatives that either lessen significant impacts, or are otherwise environmentally preferable.

1. Environmental Baseline

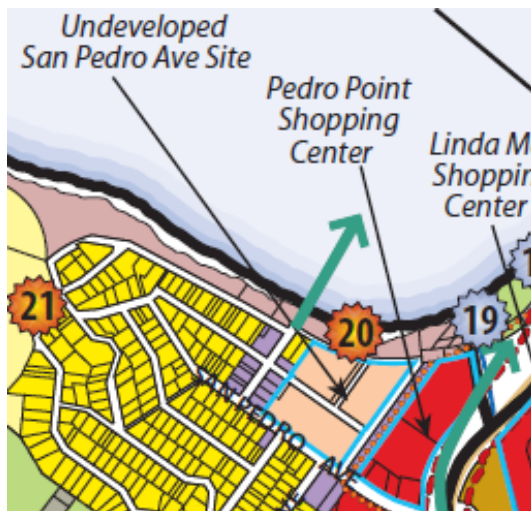
The DEIR presents inconsistent and erroneous biological baseline description of the existing conditions of the Pedro Point field and its vicinity. The errors, omissions, and contradictory environmental baseline description results in erroneous conclusions that the project (General Plan) will have no significant biological impacts. Neighborhood-specific assessments of proposed General Plan land use changes are lacking for Pedro Point, its field, and for the DEIR in general.

Assessment of biological and land use impacts to the Pedro Point neighborhood requires reference to existing *physical and biological* environmental conditions (2014; approximately the time of the EIR’s notice of preparation), and the existing *land use* designations from the 1980 General Plan. The existing biological conditions of the Pedro Point field – the last undeveloped lowland open space within the historical floodplain of San Pedro Creek – is inaccurately and

inconsistently represented in the DEIR’s figures and text. These errors result in underestimation of significant biological impacts, as discussed below.

1.1 Mapped DEIR Wetlands, Vegetation and Habitats – physical and biological baseline

The DEIR provides contradictory and confused (and confusing) information about the existing biological conditions of the Pedro Point field. Figure 3.7-1 (Vegetation; DEIR p. 3.7-3) maps most of the field in the color-code (pale olive green) corresponding with “Northern Coastal Scrub” (an upland vegetation type associated with coastal hillslopes and bluffs), and part of the field color-coded gray as “urban” land use but overlapping with the “wetlands” symbol. This is contradictory and erroneous environmental baseline information. There are in fact *no stands of northern coastal scrub vegetation* at all within or around the Pedro Point field. The shrubs on the railroad berm are ornamental non-native plantings. No part of the field is “urban” cover type, as misrepresented in the figure; *no paved or developed areas with structures exist in the field*. Figure 3.1-1 shows the “Existing land use” color-coded gray as “Vacant/Undeveloped”, which is also inconsistent with “urban” land use, but consistent with “wetlands”. The map also misrepresents mixed ornamental, non-native, and native coastal bluff scrub vegetation northwest of the field as “beach/intertidal” habitat. The two major color-coded map units for the Pedro Point field, “urban” and “northern coastal scrub” are incorrect.



- Annual Grassland
- Coastal Bluff Scrub
- Coastal Mixed Hardwood/Oak Woodland
- Eucalyptus
- Northern Coastal Scrub
- Monterey Cypress
- Riparian Mixed Hardwood
- Willow Riparian Scrub
- Beach/Intertidal
- Urban
- Wetlands

Excerpted section of Figure 3.7-1 of the DEIR “Vegetation” map (above) showing Pedro Point field with paper streets between Dannman and San Pedro Ave. The setting within the Draft Local Coastal Plan (2014) as represented as “Undeveloped San Pedro Ave Site”, is shown in a portion of Figure 4.8 (left).

Only one map symbol (pattern) for the vacant/undeveloped Pedro Point field in Figure 3.7-1 is accurate: “wetlands” classified by the U.S. Fish and Wildlife Service National Wetlands Inventory at coarse scale, as shown also in DEIR figure 3.7-2. The Pedro Point field itself is dominated by non-native grasses and herbaceous broadleaf plants, including seasonal wetland and non-wetland vegetation. Both maps omit the distinct seasonal and perennial wetlands of the drainage swale at the east end of the field, which drain to San Pedro Creek through a series of culverts. The drainage swale wetlands, the wetland connectivity to San Pedro Creek mouth, and the extensive perennial wetlands (Freshwater Marsh) of San Pedro Creek are entirely missing from the vegetation map of Figure 3.7-1.

Other errors describing habitat and vegetation are evident in the DEIR’s descriptions of existing conditions in the coastal zone. For example, the DEIR confuses coastal strand (beaches and dunes) with coastal bluff scrub, and states that the plant sea-rocket (*Cakile maritima*) is a dominant species of “coastal bluff scrub”. Sea-rocket is a non-native species common on sand beaches and low foredunes (like those of Pacifica State Beach), but does not occur at all in coastal bluff scrub in Pacifica or elsewhere, let alone as a dominant species. The description of coastal bluff scrub combines species that simply do not occur together in natural or disturbed environments of Pacifica.

1.2. Wetland classification of the Pedro Point field and vicinity: existing conditions

Based on my recent and past site visits, I know that the existing vegetation of the Pedro Point field consists of predominantly annual and perennial, herbaceous, non-native seasonal wetland and upland grassland vegetation. Seasonal wetland grassland occupies a mosaic of depressions, ditches, and swales. Mesic grassland (seasonally wet but lacking a prevalence of wetland indicator plants) occupies portions of the higher elevation zones of the site, primarily to the southwest corner. The wetland depressions are indicated by seasonally high density of toad rush (*Juncus bufonius*, FACW, facultative-wet indicator in arid west), co-occurring with European ryegrass (*Festuca perenne*; syn. *Lolium perenne*; FAC, facultative wetland indicator in arid west) and buck’s-horn plaintain (*Plantago coronopus*; FACW, facultative-wet indicator in arid west). Some of the wettest depressions support populations of *Lilaea scilloides* (flowering quillwort). Flowering quillwort is evident only in the wettest years when pools stay flooded for many weeks or months. Accurate wetland plant identification and measurement of the seasonal wetland patches at this site are possible only during winter to spring months. Desiccation, disturbance

(trampling, mowing, discing) eliminates or degrades wetland vegetation and precludes accurate identification in fall and summer. Similarly, accurate assessment of wetland hydrology is feasible only during the rainy season, during and within two weeks following major rainfall events.

The USFWS classification of Pedro Point Field wetlands shows wetlands distributed over approximately all of the site, as shown in DEIR Figures 3.7-1 and 3.7-2. Past and current National Wetland Inventory (“NWI”) maps consistently apply wetland classifications to approximately all of the field. Two current classifications of the field’s wetlands include the codes “PEMah” and “PUSCh”, both “palustrine” (freshwater emergent, non-tidal) seasonal, and consistent with the seasonally flooded hydrology associated with surrounding berms. The “U” (unconsolidated shore) probably is associated with intermittent unvegetated (disced, vegetation disturbed) conditions. The NWI wetland mapping of the field broad-brush treatment of prevailing past wetland distribution, but the precision of the NWI wetland *type* boundaries is not precise enough for the DEIR to represent as “existing conditions” in 2014 CEQA assessment. In my professional opinion, “wetlands” meeting the jurisdictional criteria for Coastal Commission (“Commission”) policies, and classification as “wetland” under the Cowardin (U.S. Fish and Wildlife Service, USFWS) system, are in fact present and widely distributed over the Pedro Point field today, despite past unauthorized ditching and drainage activities (see wetland history, below).

Despite DEIR’s inclusion of NWI mapped wetlands in some figures, the DEIR fails to apply the NWI wetland mapping and classification (as well any current field reconnaissance observations to update or verify them) to any meaningful biological assessment of potential wetland impacts of land use designation changes to the field, and assessment of alternatives. The DEIR fails to assess the extent and distribution of the field’s seasonal wetlands (meeting Cowardin/California Coastal Commission wetland criteria) in relation to land use changes proposed. The DEIR does not consider the accuracy or distribution of the (old) NWI wetland maps based on existing field conditions. Specifically, the DEIR does not analyze whether the field’s wetlands are localized or extensively distributed in the field, so it cannot analyze whether it is even feasible to designate a coastal residential mixed-use development without committing the City’s General Plan to significant wetland impacts, in conflict with its own land use policies and Coastal Act policies.

Further, because of the DEIR’s omissions about wetland impacts, comparison of alternatives will lack relevant information about feasible land use alternatives that may avoid or minimize wetland impacts, and which may be environmentally preferable. Examples of environmentally preferable alternatives consistent with City and Coastal Act policies include existing “Commercial” land use (with and without “Commercial-Recreation” zoning) compatible with low-intensity visitor-serving commercial recreation/tourism-promoting uses; or “Conservation” - all of which are consistent with City policies for tourism destination, avoidance of natural hazards, wetland conservation, and consistency with recreational, scenic values that Coastal Act policies give priority over residential development.

1.3. Wetland jurisdiction and CEQA

The DEIR cites multiple state and federal wetland jurisdictions. With respect to assessment of *biological* impacts to wetlands, USFWS (NWI, Cowardin wetland classification), California

Coastal Act, and California Department of Fish and Wildlife wetland policy definitions are applicable because these are fundamentally based on habitat, hydrogeomorphic features, and ecological functions. In contrast the narrowest federal definition (U.S. Army Corps of Engineers and Environmental Protection Agency; USACE/EPA) under the Clean Water Act is specifically limited to *legal* wetland definition for jurisdiction over authorization of discharges of earthen fill regulated under Section 404 of the Clean Water Act. The USACE/EPA wetland definition contains federal exemptions and policy disclaimers that are not relevant to biological impact assessment under CEQA, and it is a narrower and more exclusive definition that is likely to underestimate the extent of habitat-based or hydrogeomorphic definitions appropriate for impact assessment.

The California Coastal Act Section 30231 defines a wetland as:

...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.

Similarly, the Cowardin (USFWS, NWI) wetland classification uses a general broad definition of wetlands:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water.

California Coastal Act jurisdictional wetlands criteria in the California Code of Regulations at 14 CCR Section 13577 establish a “one-parameter definition” that only requires evidence of a single wetland parameter to establish wetland conditions, in contrast with federal wetlands criteria under the Clean Water Act:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts...

The Commission’s one-parameter definition is similar to the USFWS wetlands criteria, which state that wetlands must have one or more of the following three attributes:

(1) at least periodically the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

In contrast, the U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency use a three parameter definition for delineating wetlands under Clean Water Act jurisdiction, which is relevant *only in context of USACE permit authorization for discharges of fill in jurisdictional waters* of the United States. The USACE definition is narrower than those of the Coastal Commission (relevant to LCP) and USFWS (relevant to wetland impact assessment under CEQA, not limited to fill discharges and subject to federal exemptions irrelevant to CEQA).

The City's wetland policies (Land Use; DEIR p. 3.1-21) cite both USACE/EPA and Coastal Commission wetland definitions. CO-I-5, CO-I-6 cites both, and CO-I-8 cites State (CDFW/CCC) wetlands only. The narrower USACE/EPA definition is relevant only to those land use policy elements that specifically cite it in context of wetland fill permits. **The USACE/EPA jurisdictional wetlands are not the proper standard for determining consistency of GPU consistency with Coastal Act wetlands policies, or wetland impacts under CEQA.** This should be corrected in the EIR, or else the EIR will not provide accurate conclusions about Pedro Point field land use impacts regarding wetlands in context of CEQA or Coastal Act policies.

1.4. Special-status species and Environmentally Sensitive Habitat Areas (ESHA): California red-legged frogs (*Rana draytonii*) environmental baseline

California red-legged frogs (*Rana draytonii*; CRLF) occur in the freshwater marsh drainage swale bordering the Pedro Point Field along its eastern edge. I reported their presence to the U.S. Fish and Wildlife Service Sacramento Fish and Wildlife Office, Endangered Species Program in 2005. If the DEIR preparers had consulted properly with state and federal wildlife agencies, or local residents, about the local distribution of special-status or other wildlife species, this information would have been available to include in the DEIR. The DEIR, however, failed to disclose the local sub-population of CRLF in the drainage swale bordering the field, and its relationship with the population of the lower San Pedro Creek wetland complex.

I have observed adult red-legged frogs are most often observable basking along muddy or prostrate grass banks near the culverts draining San Pedro Avenue at the southeast corner of the field. The perennial moisture in this swale provides year-round hydration habitat for CRLF, as well as foraging and potential breeding habitat. CRLF breeding is indicated by intermittent local population increases in red-legged frogs here, most notably in 2010. Foraging activities of CRLF likely extend to adjacent non-wetland flats (rich in invertebrate prey) in the field during moist, foggy nighttime and early morning conditions. I am not aware of protocol nighttime surveys for California red-legged frog conducted either in the freshwater marsh swale adjacent to the field, or in the field itself. The vicinity of the freshwater marsh swale and field are a complex of foraging, basking, dispersal, and breeding wetland and upland habitat for California red-legged frogs. It thus also meets criteria for Environmentally Sensitive Habitat Areas (ESHA) under California Coastal Commission regulations. The DEIR fails to include this information about CRLF at and in proximity to the field.

In addition, the DEIR fails to analyze the potential adverse, significant impacts to CRLF from the proposed land use changes. Land use designations that would foreseeably increase the intensity of land use, such as the proposed redesignation to allow residential development or other substantial increases in the built environment, may have significant direct and indirect impacts on CRLF. The proposed residential mixed-use development of the field would likely (a) substantially reduce available nocturnal foraging habitat for CRLF (food and prey base impacts to growth and survival); (b) increase contaminant loads in the drainage swale due to runoff from driveways, roads, and backyard sources of pesticides, petroleum hydrocarbons, solvents, and detergents (reproductive impacts); (c) increase peak flow velocities in the swale during major storm runoff events (juvenile mortality impacts).

Not only has the DEIR not assessed such impacts, it has not identified feasible programmatic mitigation measures. Feasible mitigation for ESHA/California red-legged frog habitat and frog populations must include measures to (a) avoid and minimize “take” of individual frogs, (b) avoid and minimize impacts to CRLF habitat; and (c) provide adequate buffer zones to minimize adverse effects of incompatible adjacent land uses. The spatial structure of CRLF mitigation aligned with the freshwater marsh swale bordering the field may substantially constrain the feasibility of some incompatible land use designations, especially any that increase runoff, contaminants or pesticides, predator pressure on CRLF, or reduce the extent or quality of potential productive nighttime foraging habitat. The Bolsa Chica court decision [Bolsa Chica Land Trust v. Superior Court 71 Cal. Ap.4th 493, 507] confirmed that the Coastal Act requires that ESHA be avoided and buffered from development impacts and that providing compensatory mitigation alone is insufficient as ESHA mitigation.



Intermittent breeding habitat of California red-legged frogs in freshwater marsh swale bordering the southeast corner of the field, near roadside culverts. An adult CRLF is shown at the concrete base of foundation culvert on August 20, 2006, after the field ditch connections were breached to the swale north of this pool. CRLF frequently bask in the western muddy or grassy banks of this pool in wet (non-drought) years.

1.5. Wetland context and cumulative impacts: environmental setting of Pedro Point

The DEIR also omisrepresents the existing *environmental setting and context* of the wetlands of the Pedro Point field. The field’s wetlands are represented as completely *isolated* from any other significant wetlands or potential wetland-dependent endangered species habitats. See Figures 3.1-1, 3.7-1, 3.7-2, and 3.7-3, all of which fail to show the San Pedro Creek mouth wetlands and their riparian wetland habitat, vegetation and hydrological connections with Pedro Point field and its wetlands. The San Pedro Creek stream mouth wetlands, however, are shown as red-legged frog habitat (marsh, creek, and riparian vegetation) in Figure 3.7-1, but *without* their wetland connections to the Pedro Point field and drainage swale wetlands. The omission of the San Pedro Creek mouth wetlands in the Coastal Zone is either arbitrarily selective or at least inconsistent in

the DEIR: the riparian corridor and wetlands upstream of Highway 1, outside the coastal zone, are represented in Figure 3.7-1 and 3.7-4, but not in Figure 3.7-2.

This error of selective omission of wetlands in the project vicinity appears to be due to the DEIR's failure to critically interpret and update National Wetlands Inventory map with even cursory examination of readily available current aerial or satellite imagery of San Pedro Creek mouth (e.g., Google Earth), or field reconnaissance surveys of the conspicuous restored freshwater marsh there. Figure 3.7-2, "National Wetlands Inventory Wetlands", completely fails to represent the perennial freshwater emergent marsh and freshwater streams of San Pedro Creek mouth as they existed at the time of the DEIR's notice of preparation, and as they have existed for about a decade. The DEIR cannot uncritically transfer NWI map data without checking for errors of omission due to outdated data layers. The NWI wetland classification (Cowardin USFWS classification system) provides sufficient clear wetland criteria to identify the obvious wetlands (cattail and tule marsh vegetation 6 to over 10 feet tall with standing water) at the mouth of San Pedro Creek. This marsh is clearly known to the City of Pacifica, which was the local partner in the project that restored it.

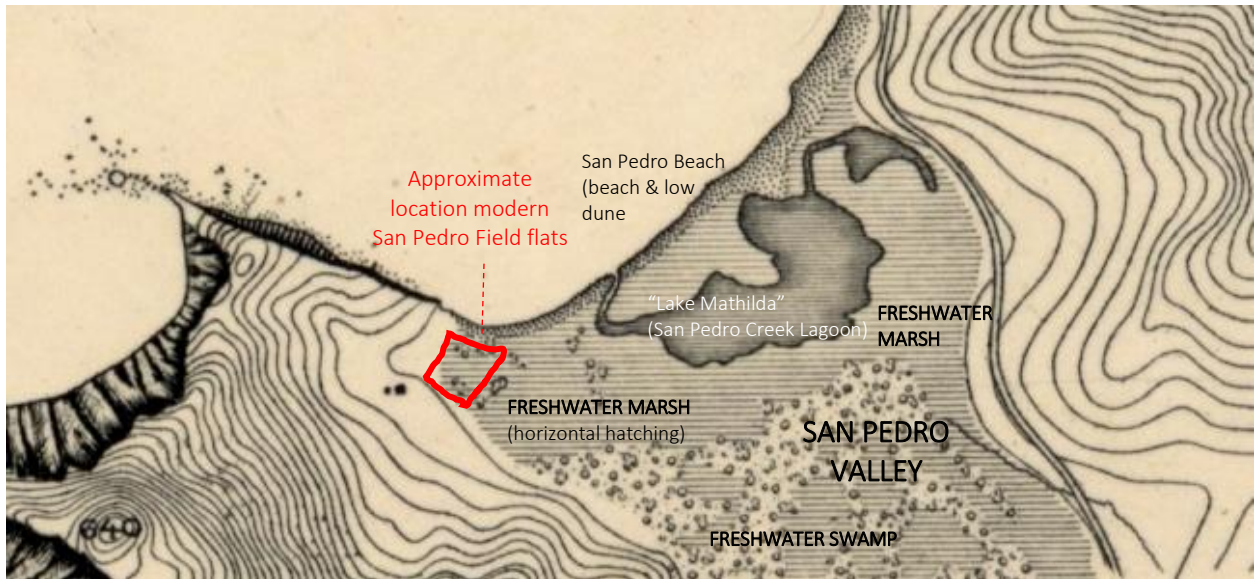
The adjacent San Pedro Creek mouth freshwater marsh is very significant as an environmental setting of the seasonal wetlands of the Pedro Point field. Ecological connectivity (wildlife corridors for wetland-dependent wildlife) exists between the creek mouth marsh and the field, provided by the drainage swale wetlands (not currently channelized; infilled with sediment and wetland vegetation) consisting of willow swamp (riparian scrub) and freshwater marsh dominated by broadleaf wetland forbs and grasses.

The environmental setting and potential Project and cumulative impacts to wetlands at the Pedro Point field are related to their hydrogeomorphic setting and historical origins and development. The pre-agricultural "natural" condition of the field was freshwater nontidal marsh within the floodplain of San Pedro Creek (San Pedro Valley lowlands). The modern field was part of complex of freshwater marsh and swamp (alder-willow) surrounding Lake Mathilda (the freshwater lagoon outlet of San Pedro Creek prior to channelization), behind the barrier beach (San Pedro Beach). The rich organic fine-grained alluvial soils were converted to agricultural cropland (artichoke fields) by draining and ditching in the late 19th century. The field apparently persisted with either low-intensity agricultural use (grazing, haying) into the 1950s or early 1960s when Linda Mar was extensively developed. Some fill was placed on at least portions of the field in recent decades, but differential subsidence in the flat to very gently sloping (<2%) field maintained depressional microtopography (shallow swales, pools) to the present day.

I have observed the Pedro Point field since the year 2000 in all seasons. Wet (saturated to seasonally flooded) depressions in the field persisted for weeks to months, supporting typical seasonal wetlands grasslands dominated by ryegrass, toad rush, buck's-horn plantain in winter-spring months. In addition, a regionally rare vernal pool/pond plant, the flowering quillwort (*Lilaea scilloides*) occurred in local abundance in several pools. In January, 2006, the current landowner and assistants manually excavated diagonal ditches and side-cast fill (ditch spoils) across the field, apparently with the intent of draining the field. In August 2006, mechanical equipment breached wide gaps in the berm between the field and the adjacent drainage swale

marsh. These drainage activities were apparently completed without benefit of a Coastal Development Permit or authorization from the U.S. Army Corps of Engineers.

Despite the 2006 drainage ditching and subsequent maintenance and repeated discing of the field, depressional wetlands have persisted and re-emerged (due in part to differential settlement and choking of ditches) in the field. The ditching appears to have reduced the duration and extent of wetland hydrology, but significant wetland areas remain widely distributed across most of the field, including the original seasonal wetland plant community.



Excerpt of U.S. Coast Survey map of San Francisco Peninsula, 1869, based on 1850s topography: San Pedro Creek Valley and beach, now Linda Mar. Approximate location of San Pedro Field (Calson/former Archdiocese property) in red shows the relationship of the modern field wetlands to the historical valley floodplain wetland complex. Parallel horizontal hatched lines indicate freshwater marsh. Stippled shoreline area indicates sandy beach, dune, washover. Fine horizontal hatching is open freshwater (Lake Mathilda; historical Pedro Creek Lagoon, drained for agriculture 19th century). Irregular circles/dots within marsh = wooded freshwater swamp (alder, willow). No scale.



Extensive seasonal flooding of the Pedro Point Field during the transition between the historical agricultural era (derelict or low-intensity agricultural use) and suburban development of Linda Mar in San Pedro Valley lowlands (background), likely 1950s-early 1960s. View to E/SE. The eucalyptus and

Monterey cypress trees at the fenceline correspond the mature trees present today along the drainage swale at the east end of the field. The extensive seasonal pond likely represents flooding patterns prior to partial filling of the wetlands.



Flooding patterns delineate undrained depressions of shallow open water in a matrix of saturated soils in San Pedro Field following heavy rainfall. December 26, 2005. View to N.



Shorebirds (likely sanderlings) forage in the seasonally saturated and flooded field during high tide and storm wave conditions that restrict foraging habitat availability on the adjacent San Pedro (Pacifica State) Beach. December 27, 2005, prior to unauthorized ditching of the field. Red-necked phalaropes also forage in the saturated to flooded field during winter storms.



January 19, 2006. Manual excavation of drainage ditches in flooded field at the east end of the field. Grass grows above water surface. Water in bare spots can be seen as reflected sunlight on the field; emergent unvegetated mud is dark brown.



During discing of the field in summer, the berm along the east end of the field was mechanically breached at multiple locations to connect new drainage ditches (excavated in seasonal wetlands of the field) to the large drainage swale occupied by California red-legged frogs, draining to San Pedro Creek through culverts at the northwest end. August 20, 2006.



Despite new unauthorized ditching and drainage connections of the field, ditches merely reduce the extent and duration of soil saturation and flooding; they do not eliminate wetland conditions in the winter following ditching. December 27, 2006

Today, wildlife in the seasonal wetlands of the Pedro Point field includes shorebirds, meadowlarks, black-tail deer, tree frogs, small mammals, and raptors, all of which move between the field wetlands, the adjacent drainage swale wetlands, uplands, and the mouth of San Pedro Creek. Sanderlings and red-necked phalaropes occur intermittently in the flooded to saturated fields, particularly during high tides and storm wave conditions that flood the beach.. In summer, meadowlarks inhabit the field some years, particularly when grass and forb vegetation cover is thick. Small mammals, including mice, pocket gophers, and voles, occur frequently in the field (indicated by burrows, runs) and provide a prey base for raptors, including great horned owls (roosting in eucalyptus trees near the field), and red-tail hawks. Deer browse in the field at night, and at times in the morning as well. The marsh swale bordering the east end of the field has supported a breeding population of tree frogs (*Pseudacris sierra*) and a population of federally listed threatened California red-legged frogs (*Rana draytonii*) most years at least since 2000 (see special-status species, below). The DEIR fails to disclose intermittent red-legged frog populations in the vicinity (and sometimes directly bordering) the field, and the existence of probably nocturnal foraging habitat (for this species spring-fall non-breeding adults) within in the field itself. The DEIR failed to identify these significant wildlife movement and habitat connections between the field and habitats in its wetland setting. The DEIR fails to analyze potentially significant impacts to red-legged frogs using the field that would be affected by proposed conversion to coastal residential mixed use development.

The DEIR's failure to correctly characterize the wetland environmental setting (the wetland complex comprising the San Pedro Creek mouth wetlands, the drainage swale wetlands, and the historical and existing condition of the Pedro Point field wetlands) prevents the DEIR from accurately analyzing potentially significant cumulative impacts caused by wetland habitat loss, degradation or fragmentation in the lower San Pedro Creek corridor, and the Pedro Point neighborhood.

Given the outstanding biological significance of the field as the *only open, level (flatland) space left in the Pedro Point neighborhood*, and despite years of being the focus of substantial public concern and comment in scoping and other public meetings, the DEIR's failure to provide even minimally accurate, consistent baseline environmental description of the field is a very serious defect in the DEIR. It precludes accurate assessment of potentially significant impacts that are not mitigated at the policy or site-specific level.

1.6. Biological Resource Impact Assessment and Mitigation in the DEIR

Despite identifying wetlands occurring potentially throughout the field, the DEIR fails to assess potential adverse, significant impacts to Coastal Act wetlands from the proposed land use designation changes at the Pedro Point Field. The DEIR provides no explanation why converting existing wetlands of the Pedro Point field to residential mixed use development would have no significant biological or land use policy impacts. The DEIR omits any specific reference at all to the Pedro Point field wetlands in discussion of biological impacts.

Further, the DEIR's cumulative impact analysis must consider that the extent of Coastal Act wetlands in the field was modified by ditching and drainage activities conducted by the landowner and assistants on January 19, 2006, during conditions of saturation and widespread flooding of the field. As far as I am aware, ditching and draining activities of these wetlands occurred without issuance of a Coastal Development Permit or analysis of environmental impacts. The apparently unauthorized drainage of the field probably results in underestimation of the actual extent of proper Coastal Commission jurisdictional wetlands in the field. See wetland history, below. The errors in the DEIR's environmental baseline, described above, contribute to basic errors in assessment of significant biological impacts and mitigation to wetlands and special-status species.

The DEIR identifies only two potential *general* city-wide biological impacts, without area-specific reference to Pedro Point neighborhood and the specific land use changes proposed in the revised General Plan. Both of these impacts are incorrectly assessed with respect to Pedro Point biological resources, and their proposed programmatic (policy-level) mitigation is infeasible applied to Pedro Point field.

Figure 3.1-2 of the DEIR (p. 3.1-9; "Existing General Plan Land Use") shows the majority of the Pedro Point field mapped in red ("Commercial"), and apparently one small lot in the northwest corner of the field mapped in light yellow-orange ("low density residential"). The biological impacts of this proposed land use change must be assessed at a programmatic level, commensurate with *the level of detail of land use designation change in the programmatic EIR at neighborhood-scale*. The DEIR, however, fails to assess biological impacts at this geographic scale even at a programmatic level. It merely assesses biological impacts at a sweeping, vague, city-wide, policy level, omitting neighborhood-level biological impacts of specific land use changes proposed (DEIR p. 3.7-48 Impact 3.7-1; p. 3.7-57, Impact 3.7-3). The DEIR also provides only vague, policy-level "mitigation" (pseudo-mitigation; purely speculative policy without reference to physical or biological conditions) for land use change impacts in the aggregate, city-wide:

Impact 3.7-1 Implementation of the proposed General Plan would not have a substantial adverse effect, either directly or through habitat modifications, on candidate, sensitive, or special status species identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (*Less than Significant*)

Impact 3.7-3 Implementation of the proposed General Plan would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (*Less than Significant*)

The DEIR provides no substantial evidence and no arguments for either impact findings or their level of significance. It is inconsistent with proposed land use changes (coastal residential mixed-use development) for the field, and the presence of extensive seasonal wetlands and adjacent special-status species populations.

Although the DEIR does not need to assess impacts of land use change at a project-specific level (*i.e.*, it cannot speculate about the design of specific project proposals or their impacts in site-specific detail), it must address biological impacts that are reasonably foreseeable for the type of land uses proposed in the environmental setting under existing conditions. There is only one major land use change proposed in Pedro Point, and the DEIR provides no biological impact or mitigation discussion about it at all – not even the cursory programmatic wetland discussion presented in the Draft Land Use plan itself (LUI-30, p. 4-36, Pacifica Draft Land Use Plan, March 2014). The boilerplate, standard wetland permit discussion in the DEIR at p. 3.7-42 has no substantial bearing on impact or mitigation analysis for wetlands at Pedro Point.

Potentially significant biological impacts of proposed residential land use (development) at the Pedro Point Field and adjacent habitats are enumerated below. These are based on a more adequate characterization of the Pedro Point field wetlands, their relationship to San Pedro Creek wetlands, and their wildlife and hydrological attributes described above. None of these potentially significant biological impacts were analyzed in the DEIR.

Coastal Zone Wetland impacts

- Direct filling (loss) of the last coastal zone seasonal wetlands in Pedro Point watershed due to residential development. Lack of available off-site compensatory mitigation area within the coastal zone of the San Pedro Creek watershed (no feasible compensatory mitigation).
- Degradation of remaining coastal zone wetlands (wetland swale east of field) the San Pedro Creek watershed due to hydrological changes; increased impermeable surfaced area, decreased groundwater infiltration, increased storm runoff from drained residential lots within basin (historic floodplain).
- Degradation of remaining wetlands (wetland swale east of field) due to increased contaminant loading from adjacent residential development: pesticides (residential pesticide use and pesticide loading from runoff and drainage), increased petroleum hydrocarbon contaminant loads from street and driveway

runoff; increased surfactant runoff to the drainage swale from residential car washing.

Wildlife and Special-status species impacts

- Loss of storm high tide refuge habitat for shorebirds
- Loss of meadowlark foraging habitat
- Loss of nocturnal deer browsing habitat
- Loss of raptor foraging habitat (Great Horned Owl, red-tail hawk, kestrel)
- Loss of terrestrial foraging habitat for California red-legged frogs
- Loss of flood refuge habitat for California red-legged frogs during peak flood events of San Pedro Creek.

2.0 Land Use Impacts – Coastal Zone

The DEIR proposes to change the land use designation of the Pedro Point field from “Commercial” (Pacifica General Plan, pp. 86 and 90; DEIR Figure 3.1-2) to “Coastal Residential Mixed Use” (CRMU; DEIR Figure 2.2-1). The DEIR inaccurately states that the new proposed CRMU designation corresponds with an existing “Mixed Use” land use category (Table 3.1-3), but no such independent or category or subcategory of “mixed use” exists in the 1980 General Plan; “mixed use” is simply described as a contingent allowable use of “commercial” land use in the original General Plan (1980 General Plan p. 32-33). The project description is inconsistent, incorrect, and confusing in terms of existing and proposed land uses.

The 2014 Draft General Plan Land Use element states the following with regard to the CRMU designation on p. 4-24: “The Plan retains flexibility for any future development on the vacant site west of the shopping center, which could have residential and small-scale commercial and visitor-oriented uses. Future development should include a small park and access to the berm and the beach beyond”. Table 4.1 of the Draft General Plan states that residential density with CRMU designation may range between 10-15 gross units per acre.

The DEIR, in contrast with the original 1980 General Plan, fails to assess even at a programmatic level the area-specific effects of proposed land use designations for the Pedro Point neighborhood, and specifically for the vacant Pedro Point field, in terms of land use impacts (*cf.* 1980 General Plan, pp. 84-89). The DEIR gives no reason why the level of specificity for impact assessment should be broader and more programmatic than the level of specificity for individual parcel land use designations like the Pedro Point field, or why the level of neighborhood-specific assessment should be significantly less than that of the 1980 General Plan’s treatment of Pedro Point, especially in the Coastal Zone.

The existing land use designation of the field, “commercial” is compatible with low-intensity, visitor-serving commercial recreational land uses that support coastal-dependent (beach and coastal scenic) recreation and associated economic uses, which matches the existing zoning (commercial-recreation) of the field. Low-intensity commercial land uses that do not involve

ditching, draining, filling, paving, or construction in the field (open-space and recreational uses, special events, coastal agriculture) are potentially compatible with conservation of wetlands, environmentally sensitive habitat areas, and special-status species, and relevant Coastal Act policies. Proposed Coastal Residential Mixed Use land uses, however, are likely to have significant impacts on **Coastal Act land use policies** (cited in Draft Pacifica Local Coastal Land Use Plan, March 2014, Appendix A) and Pacifica General Plan policies involving these elements, as discussed below.

The extensive distribution of Coastal Act jurisdictional wetlands in the Pedro Point field, and the presence of California red-legged frog habitat and population in the adjacent freshwater marsh swale, both indicate that land use designations for the field must be compatible with ESHA policies of the Coastal Commission. According to the Coastal Commission's LCP Update Guide: Sensitive Habitats and Natural Resources (April 3, 2007 update), the DEIR and LCP should clearly state that only "resource dependent" development, such as restoration or nature study, is allowed in ESHA, consistent with Coastal Act §30240. No ESHA assessment for the proposed changes in land use designation of the Pedro Point field has been provided in the DEIR, which is likely related to the DEIR's failure to accurately identify wetlands and special-status species at the site. The DEIR must be revised to include this analysis of potentially significant environmental impacts even at a programmatic level.

The 1980 Pacifica General Plan provided a programmatic analysis of consistency between proposed (commercial) land use designation of the Pedro Point Field and specific Coastal Act policies (1980 General Plan p. 86), including assessment of unimproved coastal access through foot trails (p. 88). The DEIR for the General Plan update has provided no such analysis for proposed changed land use designation of the field or coastal access impacts. It merely included the Coastal Act policies as an appendix, without analysis of proposed land use designation change impacts. The changed land use designation has potential significant land use policy conflicts (impacts) with Coastal Act land use policies, each of which affects ESHA (wetlands and special-status wetland-dependent wildlife). Some examples are provided below. *The DEIR should fully assess at a programmatic level all such potential significant land use impacts, and compare the compatibility (conflict) of existing, proposed and alternative land use designations for the field in terms of Coastal Act policies.*

Section 30212 New development projects

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

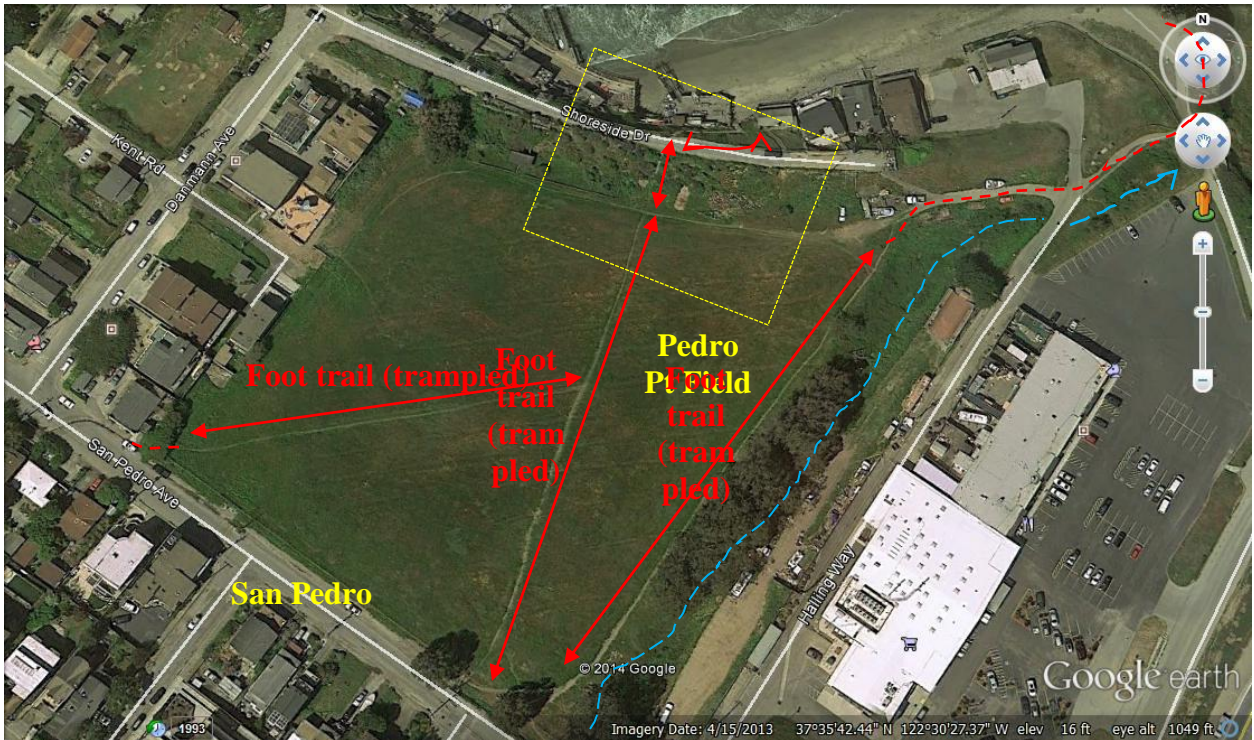
- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,**
- (2) adequate access exists nearby, or,**
- (3) agriculture would be adversely affected.**

Pedro Point field has three well-established and persistent foot trails that lead from San Pedro Avenue (the nearest public roadway to the shoreline) to a private beach with long-established open public access. The foot trails are visible in aerial photographs dating back to at least 1993 (Google Earth images) and re-emerge after being temporarily erased by discing, ditching, or

mowing. The foot trails are formed by trampling patterns established between physical points of access from the roadway to a stairway from the beach to the historic railroad berm, and to a public path to the beach at the mouth of San Pedro Creek. Foot trails are frequently used by beach visitors and surfers seeking minimal travel distances to the beach. The foot trails evidently established long before the current ownership of the property. The foot trails are the most efficient short cuts from San Pedro Avenue to the public shore; alternative routes along public roads would nearly double foot trail distance from the public roads to the shore from established access points.



Pedro Point field in relation to public and private ocean shores, and freshwater marsh and stream habitat of San Pedro Creek mouth. 2013 Google Earth image.



Foot trail network (2013) of Pedro Point Field, showing connections to levee trail access to private shore with long-established public access. Freshwater wetland drainage swale connecting to San Pedro Creek mouth is shown in dashed blue line. 2013 Google Earth image.



Detail of Pedro Point field foot trail connection to the public access walkway to privately owned beach (with public access) across the historic railroad berm. 2013 Google Earth image.

Proposed coastal residential mixed-use development may potentially eliminate or significantly impair existing long-established public access from San Pedro Avenue to the public shore. This could be mitigated by requirements to provide public access easements along existing trails or equivalent efficient alignments (similar travel distance, slopes, road access points), but the DEIR proposed no mitigation or policy that would ensure such mitigation. The impact and mitigation for this Coastal Act policy were not assessed in the DEIR. There are no military needs, fragile coastal resources, or existing agriculture to provide exemptions for this policy.

Section 30221 Oceanfront land; protection for recreational use and Development

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

The Pedro Point field is separated from the ocean only by the railroad berm, and in its original condition (backbarrier floodplain marsh) it was “oceanfront”, with line of sight to the ocean over the low barrier beach. According to Pedro Point long-term residents, the field has been used for recreation for years prior to and during the current land ownership. Recent recreational uses include children’s games, domestic animal feeding and observation (former llama and emu enclosure along the toe of the railroad berm), ball sports, playground activities extending from the adjacent Pedro Point firehouse playground, and dog walking. The field is suitable for these established recreational uses, and is suitable for other recreational uses as well.

Proposed Coastal Mixed Use Residential land use changes could eliminate, reduce, or substantially interfere with long-established recreational uses of the oceanfront land. This impact is not assessed in the DEIR. The feasibility of mitigation for this impact is not assessed, and no mitigation is proposed. Recreational uses that depend on extensive area or open scenic views may not be feasible to mitigate with small parks enclosed by development.

Section 30222 Private lands; priority of development purposes

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

The proposed change in land use from an open field (compatible with public access, coastal views, and recreation) to a mixed-use *private* residential development would conflict with this coastal act policy. This would be a significant impact that, by definition, could not be mitigated. General industrial or commercial development of the field would also conflict with this policy. Commercial development by agriculture including public access and visitor-serving commerce

(such as a coastal berry farm, pumpkin farm with visitor-serving amenities), in contrast, would not conflict with this policy. No mitigation is feasible for this conflict, by definition of “priority” of land uses cited in the policy.

Section 30240 Environmentally sensitive habitat areas (ESHA); adjacent developments

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

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

The field contains extensive seasonal wetlands (winter-saturated and temporarily flooded depressional wetlands and drainage swales, ditches). The perennial wetlands of the drainage swale at the east end of the field supports California red-legged frog habitat and is typically occupied by a population (see comments in this letter, above). The seasonal wetlands and the zone bordering the frog habitat of the swale meet the definition of ESHA. Residential and mixed use commercial development would likely eliminate, significantly reduce, or degrade existing wetlands and ESHA on the site. Since the field is the last undeveloped lowland floodplain of San Pedro Creek within the Coastal Zone that is available for wetland restoration and enhancement, it is infeasible to mitigate impacts to these wetlands off-site; compensatory mitigation is not available for the red-legged frog populations in lower San Pedro Creek in the coastal zone. The DEIR failed to assess impacts to this Coastal Act policy or propose any feasible mitigation for it. The only feasible mitigation for this policy impact would be avoidance of impacts by not applying the residential mixed use land use designation.

Section 30242. Lands suitable for agricultural use; conversion

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

The Pedro Point field was historically prime agricultural land, but was abandoned. Nonetheless, renewal of prime agricultural use of the field is potentially feasible (physically and economically) and could be integrated with visitor-serving recreational and economic development aligned with the new coastal trail to Devil’s Slide. The original prime agricultural soils are present beneath shallow fill. The site is suitable for coastal commercial visitor-oriented berry farm or produce farm and related recreational or visitor-serving uses (viz. Half Moon Bay to Davenport). Renewed agricultural use combined with tourism, some recreational uses, or eco-tourism may be compatible with conservation of seasonal wetlands and special-status wildlife if properly designed. The DEIR failed to consider feasible alternatives compatible with this section.

Section 30243 Productivity of soils and timberlands; conversions

The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.

The Pedro Point field is former prime agricultural land (historic artichoke farm) on rich alluvial soils (drained marshland). The soils have been degraded by placement of fill, but may be remediated by either removal of fill or addition of soil amendments to restore agricultural productivity similar to farms on the marine terraces and valleys along the San Mateo Coast south of Pacifica. There are no other potential highly productive historic farmland soils left in the Coastal Zone of Pacifica. Residential development of the field would conflict with this policy that requires the protection of long-term soil productivity. This impact was not assessed or mitigated in the DEIR.

Section 30251 Scenic and visual qualities

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.

The Pedro Point field is the last undeveloped lowland (floodplain) in the Coastal Zone of San Pedro Creek's watershed that retains the original overall floodplain topography and visual character of the historic farms that dominated the valley. All other valley lowlands have been developed in the Coastal Zone of Pacifica, including the Salada Valley (the historical Salada Valley farmland has been developed, drained and filled, with only the deepest lagoon bed remaining as a wetland). The visual character of the adjacent historic railroad berm is dependent on the contrast between the steep relief of the berm and the adjacent lowland flats of the field. Residential development (with or without "pocket parks") would not protect the scenic and visual qualities of the field and adjacent historic berm. Residential development of the field would fully fill the lowland open space visual character of Pedro Point. This would conflict with the policy.

Section 30253 Minimization of adverse impacts

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. [...]

Most of the Pedro Point field lies approximately 15-17 feet in elevation above Mean Sea Level (MSL), only about 3-5 feet above the marsh and high tide beach at the mouth of San Pedro Creek. In addition, the alluvial soils (historical wetland) of the field have the same relative liquefaction (earthquake shaking) potential as diked bay muds and marshes in San Francisco Bay, like those that underlie filled San Francisco peninsula baylands. (Witter, Robert C., Keith L. Knudsen, Janet M. Sowers, Carl M. Wentworth, Richard D. Koehler, and Carolyn E. Randolph. 2006. Maps of Quaternary deposits and liquefaction susceptibility, nine-county San Francisco Bay Area. U.S. Geological Survey Open-File Report 2006-1037 Version 1.1; shown in Draft Pacifica Coastal Land Use Plan 2014, Figure 5.1). This condition contrasts with relatively low risk of liquefaction affecting residential and commercial development in adjacent lands built over bedrock. Structural (residential or commercial) development of the field may cause significant conflicts (impacts) with this section. In contrast, this section would be potentially compatible with recreational or other low-intensity commercial development or agricultural redevelopment of the field. The DEIR failed to analyze alternative land use designations compatible with this section.

Similarly, placing additional residential development in the last undeveloped floodplain area within the coastal zone of San Pedro Valley – currently able to function as a flood detention and storage basin when San Pedro Creek is at extreme high flood stage during extreme high tides – would conflict with this land use policy (Draft Pacifica Coastal Land Use Plan 2014 p. 5-19). The intensity, frequency, and significance of this land use policy conflict would likely increase as sea level rises, and as intense storm frequency increases with climate change. In addition, the field lies within a Tsunami evacuation area of the Coastal Zone (Draft Pacifica Coastal Land Use Plan 2014, Figure 5.3). Flooding, liquefaction, sea level rise impacts, increasing over time as indicated by the draft Pacifica Coastal Land Use plan (2014) demonstrate the conflict between this Coastal Act policy and the proposed land use change for Pedro Point field.

Section 30255 Priority of coastal-dependent developments

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

Residential development itself is not fundamentally “coastal dependent”, even if the land use designation nomenclature is “Coastal Residential Mixed Use”. “Coastal” as a modifier does not denote any essential distinction in the nature of residential development, but merely describes its location in the coastal zone. Other types of commercial development based on recreational access to the shoreline or the distinctive coastal climate (*e.g.*, surfer recreational events, coastal agritourism like berry farm stands with berry farming) would have priority over residential development at this location. Residential development would conflict with this policy. In addition, development within wetlands as defined in the Coastal Act (whether or not they meet federal wetland criteria for fill authorization under the Clean Water Act) would conflict with this policy.

City of Pacifica Land Use Policy Impacts

The DEIR's proposed change in land use for the Pedro Point field also conflicts (and thus causes a significant land use policy impact) with the City's own policy on Wetlands Conservation:

p. 3.1-22 CO-I-8 **Maintain Functional Capacity of Wetlands.** Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity. *Any alteration of coastal wetlands identified by the Department of Fish and Game must be limited to very minor incidental public facilities, restorative measures, or nature study, according to the California Coastal Act.*

The “functional capacity” of the existing wetlands at the Pedro Point field and adjacent to them are dependent on their geographic setting and landscape position – their relationship to San Pedro Creek (off-channel flood velocity refuge; population buffer for California red-legged frogs; infiltration and groundwater recharge potential; flood detention and flood peak attenuation) and other hydrogeomorphic and ecological functions (red-legged frog nocturnal foraging habitat potential; shorebird storm refuge and roost sites). There are no other undeveloped historic floodplain locations within the lower San Pedro Creek valley, let alone the Coastal Zone, where loss or degradation of these functions could be compensated by wetland restoration. Residential development of the field would likely have a significant impact on existing wetlands of the site and its vicinity, and without any feasible mitigation identified.

This City policy is also vague and unenforceable as mitigation for wetland impacts because: (a) it does not cite or define the scope or meaning of the jargon of wetland “functional capacity”; (b) it does not identify any geographic setting within Pacifica for “functional capacity” (on-site or off-site/within-watershed) and (c) it fails to cite or provide any meaningful criteria for what constitutes maintenance or enhancement of “functional capacity”. Furthermore, the California Department of Fish and Wildlife does not delineate or identify coastal wetlands as a service to local governments. The Department and the Coastal Commission use approximately the same wetland indicator criteria for determination of wetlands, but the agencies themselves generally do not conduct wetland delineations. The policy is also misleading as proposed policy-level mitigation in the DEIR because potential wetland fill in context of proposed land use designation changes in the DEIR do not involve restoration, nature study, or public facilities. The DEIR identifies wetlands at the Pedro Point field exactly where it proposes private mixed use residential and commercial development as the new land use designation. This “alteration” does not meet the criteria cited in the policy, and does not involve “enhancement” of functional capacity if the wetlands must be filled or drained for residential or commercial development. The land use designation proposed basically conflicts with this policy, and appears to be an unmitigated significant impact, since no feasible mitigation is identified. Furthermore, the DEIR alleges that no mitigation is even required because it wrongly asserts that there is no impact.

3.0 Conclusions

The DEIR fails to provide adequate analysis of potential impacts and feasible mitigation measures for the proposed land use changes at the Pedro Point field, compared with (a) existing

conditions; (b) existing land use designations under the General Plan/LCP, and (c) alternatives that are environmentally superior and compatible with Coastal Act policies. Because the DEIR is fundamentally inadequate, after such revisions, the DEIR should be recirculated for further public review.

Thank you for considering these comments. Please contact me if you have any questions.



Peter Baye

Cc: Pedro Point Community Association

Law Offices of Brian Gaffney APC

Richard Grassetti

California Coastal Commission